



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Ely District Office
HC33 Box 150
Ely, Nevada 89301-9408



IN REPLY REFER TO:

4400.3
(NV-047)

JUN 07 1991

Commission For The Preservation
of Wild Horses
Stewart Facility
Capitol Complex
Carson City, NV 89710

Dear Participant:

We appreciate your interest in being involved in the allotment evaluation consultation process and enclosed for your information and review are the Cold Creek, Horse Haven and North Cove allotment monitoring evaluation(s). This is your opportunity again to (provide allotment specific information) and also provide comments to the evaluation which will be incorporated into Section VII, Management Action Selection Report. We would appreciate receiving your information and/or comments by July 12, 1991, 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,

Gene L. Drais, Manager
Egan Resource Area

3 Enclosure

1. Cold Creek (28 pp)
2. Horse Haven (10 pp)
3. North Cove (14 pp)

7/1991 ✓

NORTH COVE ALLOTMENT
EVALUATION SUMMARY

I. INTRODUCTION

The North Cove Allotment (0816) is comprised of approximately 25,446 publicland acres and 640 acres of private land. This allotment is in the "I" category and does not have an approved activity plan. The current permittee is Steven Carter of Carter Cattle Co.

II. INITIAL STOCKING LEVEL

A. Livestock Use

The preference for the allotment is 732 AUMS for cattle use, with a season of use from March 1 to April 30. The three year average listed in the Egan Resource Management Plan (RMP) and Rangeland Program Summary (RPS) is 732 AUMS per year of cattle use (calculated for 1979-81). Sheep are trailed through this allotment (Preston-Lund Driveway) in late fall and early spring. Use by sheep is minimal.

B. Wild Horse Use

This allotment is part of the White River Herd Management Area (HMA). There has been no known historical wild horse use on the allotment. The latest wild horse census of March 15, 1991 shows the same results. Also, past aerial census (March 14, 1989; March 21, 1988; and May 27, 1983), as well as field observations, shows no wild horses using the allotment. (see appendix 1 for census maps and memoranda) The allotment has fenced boundaries on the north, south, and east indicating the only wild horse access is through the horse range to the west. Evidently, wild horses have not trailed through this mountain range from the Currant-Duckwater area. The South Boundary Cove Fence, built in 1965, prevents the movement of wild horses into this allotment from the Cove Allotment. (The Egan RPS, printed in 1988, estimates wild horse use of 27 AUMS.) There is no data to substantiate this forage use. The RPS "existing horse AUMS" amount was based on the proportion the North Cove Allotment makes up of the HMA acreage. Wild horse use does occur in the adjacent allotments to the south and west.

C. Wildlife Use

The RPS objective for this allotment is to provide forage and habitat for reasonable numbers of wildlife, i.e. 232 AUMS for mule deer and 5 AUMS for antelope. According to the Nevada Department of Wildlife, "The allotment is on a large migration route for the deer in Management Area 13 with no resident deer using the allotment yearlong. The allotment is half way between the summer range to the north and winter range to the south.

Deer use would be for a 2 month period with deer moving through the allotment for 1 month in the fall and 1 month in the spring. The estimated deer numbers for the last 3 years are: 1988=1,800, 1989=1,800, 1990=1,200." Antelope numbers reported from the Nevada Department of Wildlife are "estimated between 30 and 50 animals". Antelope use is partial to year long. Historically, shrub-browse utilization has been slight in the west pasture. Use by deer and antelope is not a present concern.

No known sage grouse leks or ferruginous hawk nest territories are located within this allotment.

III. ALLOTMENT PROFILE

A. Description

The North Cove allotment is located approximately 8 miles southwest of Lund on the west side of the White River Valley and north of the Welis Station Summit Road (see appendix 1 for map). Private land totals approximately 640 acres. There are no riparian areas within this allotment. The Current Canyon Seeding in the western portion of the allotment was established in 1966. Crested wheatgrass plants within this seeding are frequent in the interspaces between the sagebrush. The annual production from this seeding enhances the forage potential in this portion of the allotment.

The following wells are located on public land and are the only water sources for livestock, wild horses, and wildlife:

- 1) Cabin Well located in T10N, R61E, Sec.24, SW $\frac{1}{4}$, NW $\frac{1}{4}$.
Operating status: functional
- 2) Unnamed Well located in T10N, R60E, Sec.22, SW $\frac{1}{4}$, SW $\frac{1}{4}$.
Operating status: non-functional
- 3) Slough Well located in T10N, R61E, Sec.22, SW $\frac{1}{4}$, SE $\frac{1}{4}$.
Operating status: non-functional
- 4) Black Brush Well (Carter Well) located in T10N, R61E, Sec.5, SW $\frac{1}{4}$, SW $\frac{1}{4}$. Operating status: non-functional
- 5) Poleline Road Windmill/Well located in T10N, R61E, Sec.21, NE $\frac{1}{4}$, NW $\frac{1}{4}$. Operating status: functional
- 6) Unnamed Well located in T10N, R60E, Sec.7, NW $\frac{1}{4}$, NW $\frac{1}{4}$.
Operating status: functional (referred to as the "Section 7" Well).

B. Allotment Specific Objectives

1. Land Use Plan 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 (ROD), 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 systems, and aesthetic values." (Egan ROD, p.44)

2. Rangeland Program Summary Objectives

a. "Provide forage for up to 732 AUMs of livestock forage. Maintain the seeding in good or better condition. Improve livestock distribution on the allotment. Maintain or enhance native vegetation with utilization not to exceed Nevada Rangeland Monitoring Handbook (NRMH) levels on key species. Maintain or improve current ecological condition of native range." Utilization will not exceed 50% on native key species and 60% on crested wheatgrass seedings.

b. "Maintain or improve mule deer spring habitat and antelope yearlong habitat in good or better condition. Manage rangeland habitat and forage condition to support reasonable numbers of wildlife, as follows: 232 AUMS for mule deer, and 5 AUMS for antelope." This is accomplished by not exceeding utilization levels on native species as recommended in the Nevada Rangeland Monitoring Handbook (NRMH).

c. "Initially manage rangeland habitat to support an Appropriate Management Level (AML) of 2 horses in the North Cove Allotment as part of the White River HMA. Provide for up to 27 AUMS of wild horse use." 

(Note: The 27 AUMS (2 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" (Dahl vs. Clark, Supra at 595). The IBLA further rules that AML must be established through monitoring " in terms of the optimum number which results in a thriving natural ecological balance and avoids a deterioration of the range."

3. Key Species Identification

The primary key plant species for cattle and wild horse use are winterfat (Eurotia lanata), Indian ricegrass (Oryzopsis hymenoides), bottlebrush squirreltail (Sitanion hystrix), and crested wheatgrass (Agropyron cristatum). Deer and antelope will also utilize these species to a limited extent depending on the season and availability of preferred browse species. Primary key species for deer and antelope are black sagebrush (Artemisia nova), bud sagebrush (Artemisia spinecens), and shadscale Atriplex confertifolia. Forbs are important for spring/early summer deer and antelope use but no particular species is found in quantities sufficient enough to be considered a key species.

There are no riparian areas in this allotment and no aspen stands exist.

IV. MANAGEMENT EVALUATION

A. Purpose

The purpose of this evaluation is to assess whether or not current multiple use management practices are meeting the multiple use objectives for the allotment and to determine the appropriate stocking level and management system for all grazing animals on the allotment.

B. Summary of Studies Data

Utilization patterns were mapped in early spring 1988, and late spring of 1989 and 1990. The data collected from these years reflects the grazing use made by all users up to the point of the mapping. See tables 1 and 2 below.

Total annual precipitation in eastern Nevada (as measured at the Lund monitoring station) was above normal in 1988 and below normal in 1989 and 1990. It is the "crop year" precipitation that is used to compute yield indices (see section VI for indices). The crop year precipitation is measured from September of the previous year through June of the growth year. The Lund weather station information is used due to its relatively close proximity to the allotment.

Table 1: Use Pattern Mapping Summary - acres and percent of the allotment by use category (differences in total acres due to digitizing variation):

Year	Slight (1-20%)	Light (21-40%)	Moderate (41-60%)	Heavy (61-80%)	Severe (81-100%)
1988	23,224 (91%)	757 (3%)	1,461 (6%)	0	0
1989	17,835 (70%)	3,903 (15%)	3,596 (14%)	103 (1%)	0
1990	15,932 (62%)	5,782 (23%)	3,727 (15%)	0	0

Table 2: Estimated Actual Use Summary (AUMS)

Year	Livestock	Wild Horses	Wildlife	
	Cattle		Antelope	Deer
1988	669	0	60	710
1989	537	0	80	592
1990	695	0	120	473

Use pattern mapping from 1988, 1989, and 1990 indicates that utilization levels on the average are below maximum allowable use levels throughout the allotment. The following is a summary of the estimated carrying capacity for the allotment based on the use pattern maps from 1988, 1989, and 1990.

Table 3: Livestock Estimated Carrying Capacity

Year	Total Actual Use(AUMS)	Measured Util.(%)	Yield Index	Adjusted Util.(%)	Desired Use %	Desired AUMS
1988	669	50%	120%	60%	50%	558
1989	537	50%	59%	29.5%	50%	910
1990	695	50%	96%	48%	50%	724

Desired AUM 3 year average is 731

The "Desired AUMS" are calculated using the following formula:

$$\frac{\text{Actual Use (AUMS)}}{\text{Adjusted Utilization*}} = \frac{\text{Desired Use (AUMS)}}{\text{Desired Utilization**}}$$

*From utilization pattern mapping, adjusted by yield index.

** 50% on native grasses and shrubs and 60% on crested wheatgrass seeding.

Wildlife use (i.e. deer and antelope) is unpredictable both as to quantity and location in a given year. This use was not calculated into the formula as wildlife utilization (i.e. deer and antelope) is not considered a present concern.

On July 13, 1983 a frequency trend transect was established and read within a key area of deer use in the western portion of the allotment. This transect was re-read on July 20, 1988. Results indicate no significant difference in trend (i.e. static trend) of key plant species between the two years.

On April 3, 1991 a condition transect was established in a winterfat vegetation type in the northeast corner of the west pasture. From the analysis of the data, the ecological status rated at 79%, or potential natural community (PNC). The vegetation was considered the appropriate mix of plant species. On the same day ecological status was also read on a black sagebrush dominated wildlife key area in the western portion of the west pasture. The condition rating was 54%, or late seral. Non-use to slight use by cattle or wildlife (i.e. deer) was apparent. This site's vegetation was considered also to have the desired mix of plant species and was in the appropriate condition.

V. CONCLUSIONS

A. LAND USE PLAN OBJECTIVES

III.,B.,1.,(a) - Met

Rationale: Existing vegetation is in appropriate seral stages. Heavy use is occurring on insignificant acreage and confined to one water source area. The use throughout the allotment is mostly moderate to slight.

III.,B.,1.,(b) - Met

Rationale: Areas used by wildlife species are in appropriate seral stages and allowable use levels in predominantly mule deer and antelope areas are not being exceeded.

III.,B.,1.,(c) - Met

Rationale: Allowable use levels have been exceeded in 1989 on an estimated .4% of the allotment. However, this percentage of heavy use is insignificant (i.e., use mapping shows heavy use around one water source). During 1988 and 1990 use mapping shows moderate or less use.

B. RANGELAND PROGRAM SUMMARY OBJECTIVES

III.,B.,2.,(a) - Met

Rationale: Utilization levels have exceeded 50% on grasses and winterfat in an insignificant 0.4% of the allotment in 1989. This heavy use area is located exclusively around one water source. Utilization on the majority of the allotment is light or less.

III.,B.,2.,(b) - Met

Rationale: Mule deer and antelope use levels do not exceed 50% utilization on grasses and browse species. Utilization levels in predominately mule deer and antelope areas are within acceptable limits. There is little dietary overlap and limited spatial overlap with cattle.

III.,B.,2.,(c) - Met

Rationale: Forage is available, although not used by horses.

VI. TECHNICAL RECOMMENDATIONS

A. Problem

Presently, no immediate grazing problems exist either on the upland browse species sites or the valley grass-winterfat sites. There is a lack of water in the western portion of the allotment for cattle. This constraint limits cattle use.

B. Solutions

1. Short Term Solutions/Options

Option #1:

The 3 year average carrying capacity for livestock, for the 12/15-04/01 season of use, adjusted using the yield index, is 731 AUMS (Table 3). This affirms the current preference of 732 AUMS since all the objectives are being met. This current preference is based on the assumption that the existing water sources continue to function.

Option #2:

Water hauling to the underutilized western portion of the allotment could allow the preference to be increased. An additional increase in preference could be allowed if the Section 7 well is operating. Monitoring data (i.e. use mapping) indicates an average of 85% of the allotment is lightly or less used in the past three years.

In order to adequately account for the vast low utilization areas the Uniform Production Levels formula was employed. (BLM, Rangeland Monitoring Manual, TR 4401-7, Analysis, Interpretation, and Evaluation). Where production levels are fairly uniform (or if production levels are unknown) and utilization patterns have been mapped, the weighted average utilization may be calculated on the basis of acreages found in each utilization zone.

In the following "Adjusted Estimated Carrying Capacity", Table 4, the weighted average utilization of use zones (approximately 45% of the allotment) is expressed as "Measured Utilization". Based on use mapping the remaining 55% of the allotment consists of the non-use portion in the west pasture that is inaccessible to cattle use and a slightly used portion in the east pasture that has poor forage production. This formula method is judged to be suitable for calculating a stocking level because large areas of underutilized, good productivity vegetation is easily accessible by cattle from the existing functional wells.

(Note: The repairing or redeveloping of the non-functional wells would not provide for improved distribution because these wells are located in the eastern portion of the allotment. Therefore, even if all six wells were functioning, water hauling to the western portion of the allotment would still be required for improved distribution.)

It is also estimated that use of the weighted average formula will push little, if any, of the existing "moderate use" acres into the heavy use zone.

Table 4: Adjusted Estimated Carrying Capacity

<u>Year</u>	<u>Total Actual Use(AUMS)</u>	<u>Measured Util.(%)</u>	<u>Yield Index</u>	<u>Adjusted Util.(%)</u>	<u>Desired Use(%)</u>	<u>Desired AUMS</u>
1988	669	54.7%	120%	66%	50%	507
1989	537	28.6%	59%	17%	50%	1,579
1990	695	27.4%	96%	26%	50%	1,337

Desired AUM 3 year average is 1,141

With this option the additional maximum preference which could be activated is 409 AUMS, or a 56% increase. This preference increase would be licensed separately as two pastures, with specific conditions, and apportioned as follows:

1) The underutilized western portion of the allotment would be allowed 209 AUMS if water is hauled. Two specific water haul sites would be required:

Haul Site

1. T10N, R60E, Sec. 8
(Currant Canyon area)
2. T10N, R60E, Sec. 20

These specific water haul sites would be included in terms and conditions of the permit, but additional locations would be encouraged.

2) The northeastern portion of the west pasture and the northwestern portion of the east pasture would be allocated the additional 200 AUMS. However, these AUMS would be activated only if the Section 7 Well is operating.

Additional future use mapping would fine tune the stocking levels, if needed, to the adjusted carrying capacity over the 5 year implementation period.

2. Long Term Solutions

The additional preference calculated in the short term is based on the assumption that the patterns of use observed will not create significant areas of overuse. Regardless of which short term option or combination of options is selected, BLM will continue to monitor the grazing use on the allotment to determine whether further adjustments in livestock and/or wildlife use are necessary.

Currently, wildlife numbers are not considered a resource problem on the allotment. However, the Nevada Department of Wildlife indicates a lack of available water for antelope during the critical summer months. A suggestion for solving this problem could be to install a "guzzler".

3. Additional Monitoring Data Required

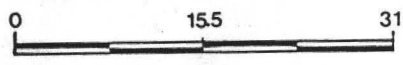
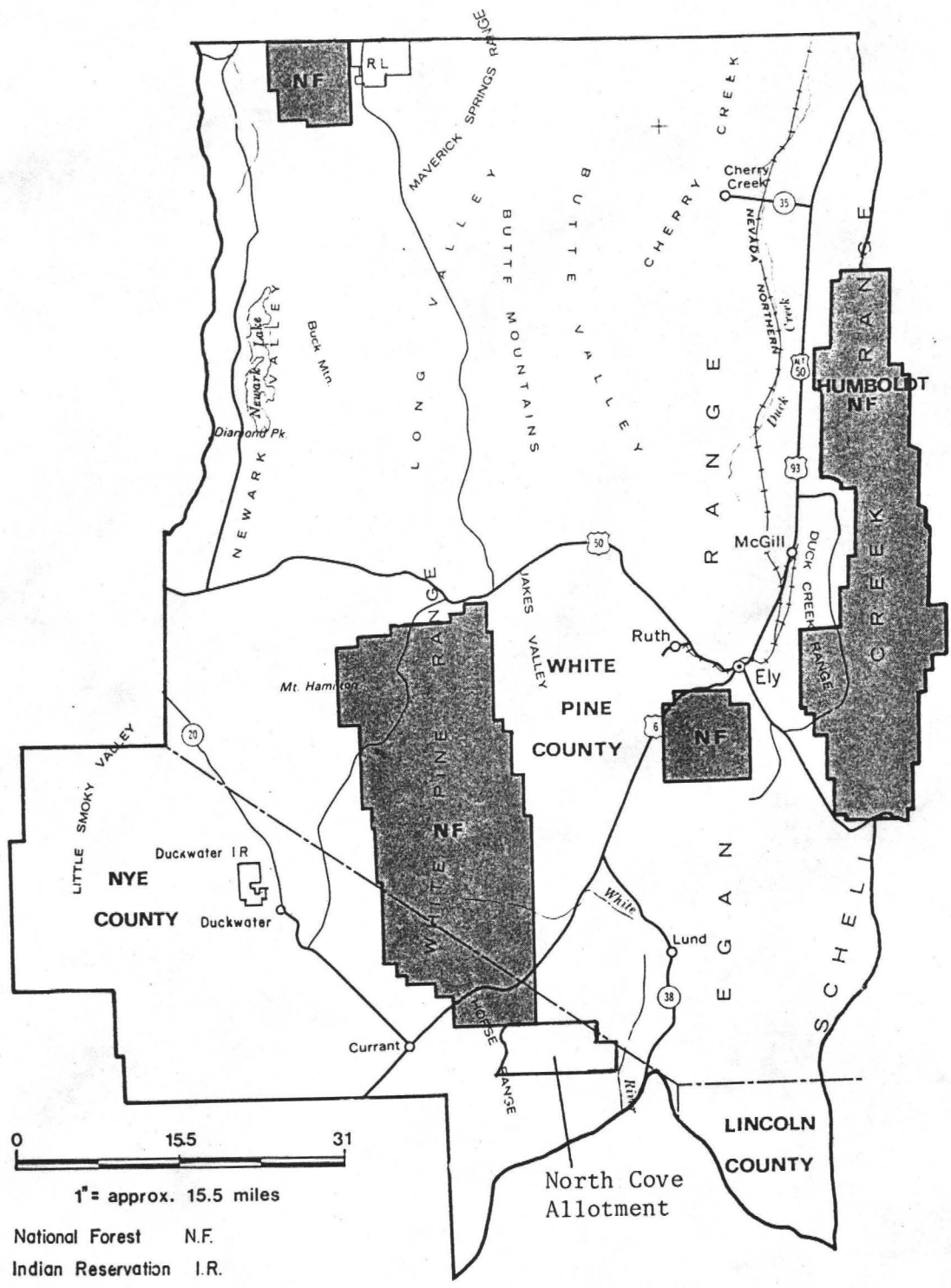
Continue to conduct use pattern mapping.

Continue to monitor cattle, wild horse, and wildlife actual use, by use area.

Map ecological status for the allotment based on the completed third order soil survey and range site information.

VII. CONSULTATIONS

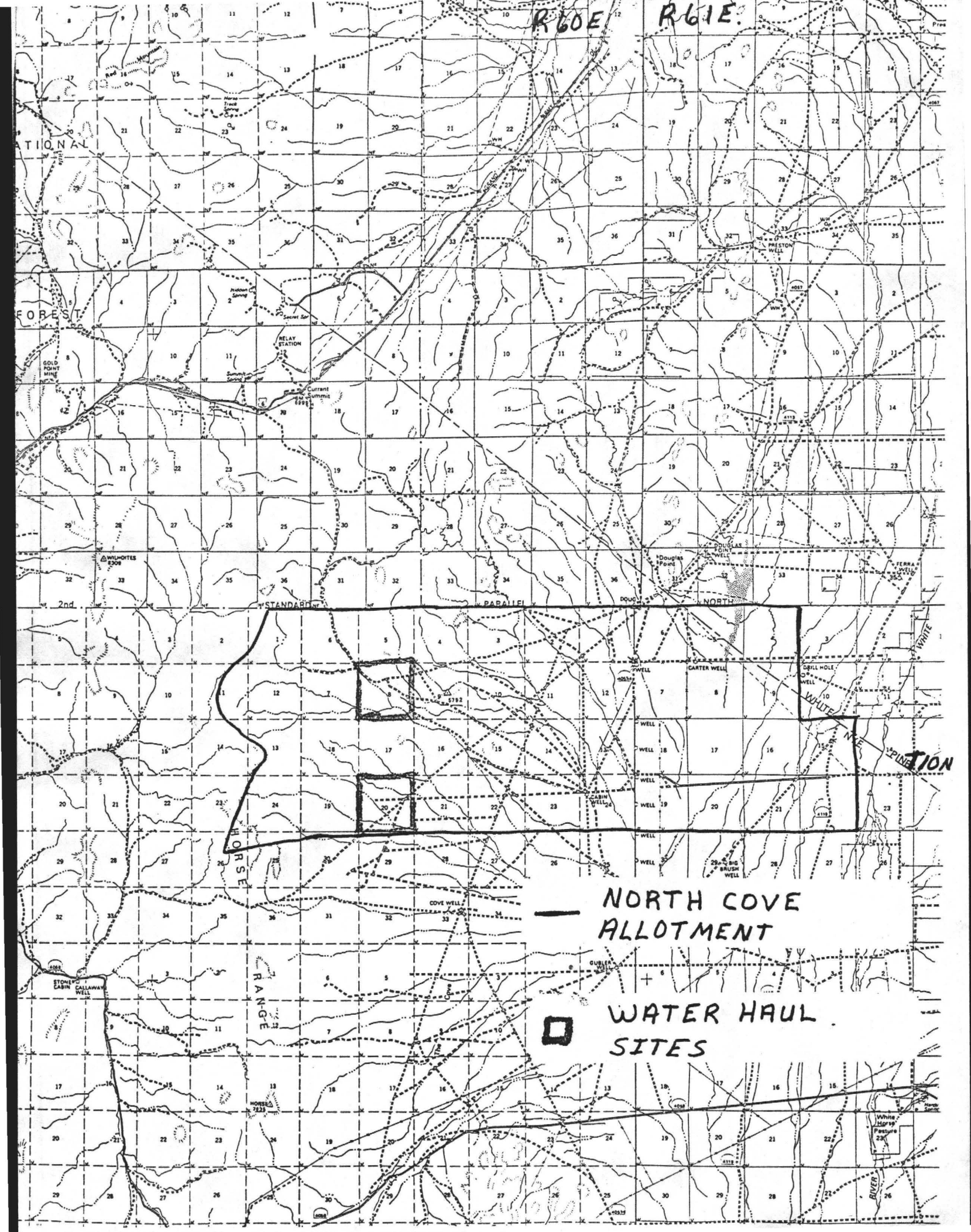
APPENDIX 1



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



R60E R61E

NATIONAL

FOREST

2nd

STANDARD

HORSE

RANGE

HORSE

PARALLEL

DOUG

CARTER WELL

WELL

WELL

WELL

WELL

WELL

WELL

WELL

WELL

WELL

WELL

WELL

WELL

WELL

WELL

WELL

NORTH COVE ALLOTMENT

WATER HAUL SITES

White Horse Pasture

RIVER

WHITE RIVER HMA - CENSUS MAP

4/15/91

Egan R. A.

Adults - 49

Foals - 3

Subtotal - 52

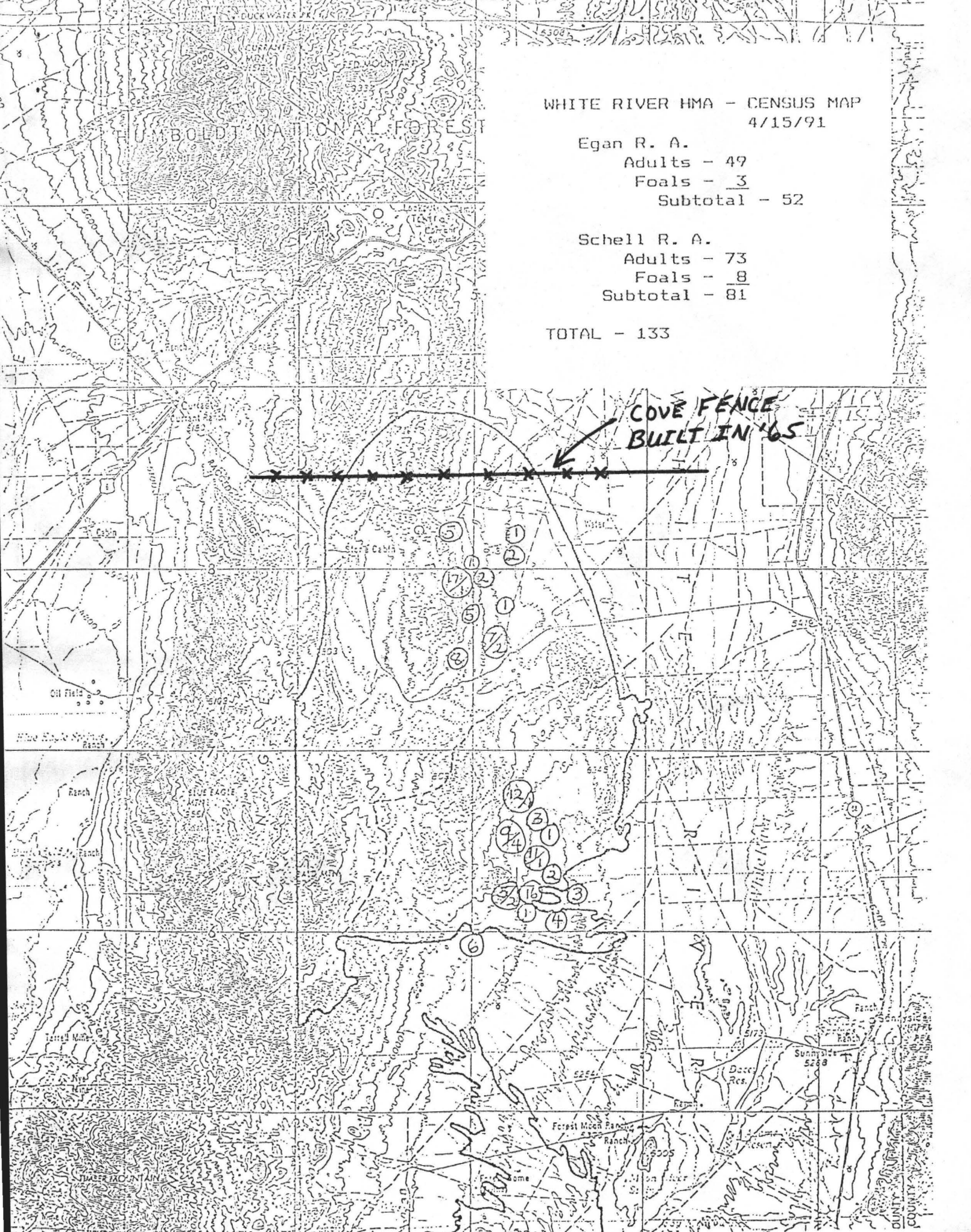
Schell R. A.

Adults - 73

Foals - 8

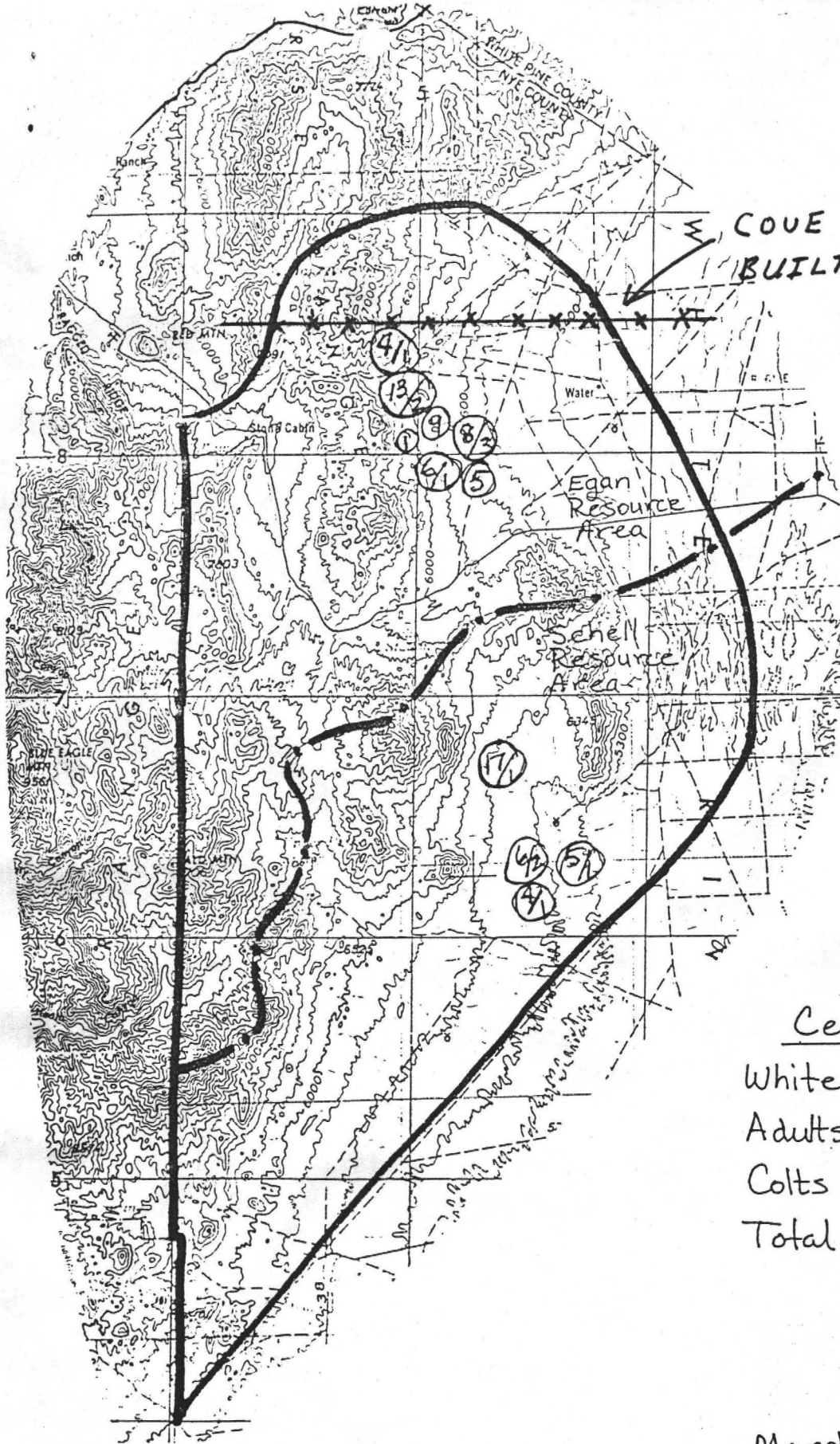
Subtotal - 81

TOTAL - 133



COVE FENCE
BUILT IN '65

5
1
2
17
2
5
1
12
3
9
4
1
2
3
1
4
6



COVE FENCE
BUILT IN '65

Census Map

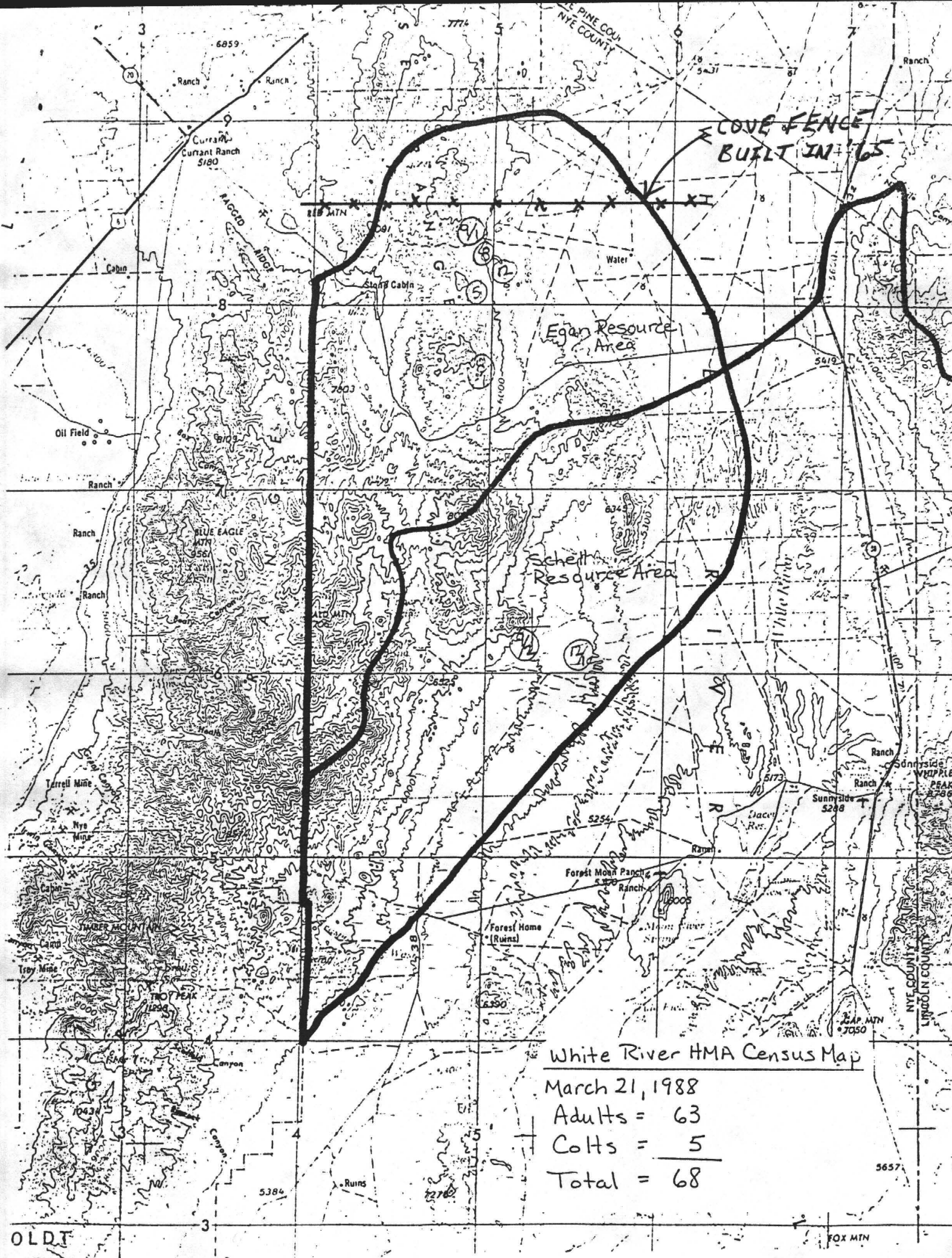
White River HMA

Adults = 78

Colts = 12

Total = 90

March 14, 1989



White River HMA Census Map

March 21, 1988

Adults = 63

Colts = 5

Total = 68

OLDT

FOX MTN

BOB MILLER
Governor

STATE OF NEVADA

FAXED 7/17/91

CATHERINE BARCOMB
Executive Director



**COMMISSION FOR THE
PRESERVATION OF WILD HORSES**

**Stewart Facility
Capitol Complex
Carson City, Nevada 89710
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July 12, 1991

Gene L. Drais, Manager
Egan Resource Area
Ely district Office
HC33 Box 150
Ely, Nevada 89301-9408

Dear Mr. Drais,

Thank you for the opportunity to comment on the Cold Creek, Horse Haven, and North Cove allotment monitoring evaluations.

COLD CREEK

I need clarification of some of the statements presented. On page 14 you presented that fences were down and in disrepair by the permittee allowing for movement of livestock in various pastures. Were the horses contained in their HMA by this boundary? You had also mentioned removal of any horses outside of their HMA? Has the disrepair of the fencing allowed the horses to leave their HMA thus causing a potential removal of those animals? When will the fences be repaired?

On page 12 you state "actual use AUM's for these pastures includes estimates of wild horse use...based on field observations and professional judgement." I am not quite sure what you mean by this statement, how does this compare to helicopter census data for accuracy? How can this be documented for census?

NORTH COVE & HORSE HAVEN

Thank you for the receipt of these monitoring evaluations. At this time I have no comments or need for clarification on these documents. Please continue to include me in any correspondence in the future concerning these allotments.

I would appreciate a written response to my questions. If you have any questions, please feel free to call me.

Sincerely,

A handwritten signature in cursive script that reads "Cathy Barcomb".

CATHY BARCOMB
Executive Director