

2-13-96



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:

4400.5 (NV-047)

FEB 13 1996

Dear Interested Public:

Enclosed for your information and review as an interested public is the Cove Allotment Evaluation. We appreciate your interest in being involved in the consultation process and encourage your written or verbal response to this evaluation. This is another opportunity for you to provide allotment specific information and comments to the evaluation. We would appreciate receiving your information and /or comments by Friday, March 15, 1996, to allow BLM adequate time to review all input and adhere to our schedule. All of the information received will be considered prior to the development of the Management Action Selection Report and Proposed Multiple Use Decision.

We appreciate your participation and solicit your continued involvement in the consultation process. If you have any questions, please contact Mark Lowrie of my staff at (702) 289-1888.

Please forward your written comments to:

Mark Lowrie, Range Conservationist
Bureau of Land Management
Egan Resource Area
HC 33 Box 33500
Ely, NV 89301

Sincerely,

Gene L. Drais, Manager
Egan Resource Area

2 Enclosures

1. Cove Allotment Evaluation (with 4 maps)
2. Interested Public Mailing List

MLowrie:ml

COVE ALLOTMENT (0817) EVALUATION SUMMARY

I. Introduction

The Cove Allotment (0817) is a category "M" allotment encompassing 26,538 federal acres and 320 private acres for 26,858 acres total. The allotment is situated in the southern portion of the Egan Resource Area, in Nye County, approximately 50 air miles southwest of Ely, Nevada. Main access to the allotment is via State Highway 318 south of Lund, Nevada. The permittee of record is Ernest Gubler, Incorporated. Lou Willfong is the authorized representative and runs the cattle operation. An allotment management plan has not been initiated for the allotment. The evaluation period covered nine years, from 1987 to 1995.

II. Initial Stocking Level

A. Livestock Use

Active preference for the allotment is 1,038 AUMs, with 2,423 AUMs held in suspended non-use for a total preference of 3,461 AUMs (See Table I). The kind and class of livestock is cattle (cow/calf). The period of use is 2/01 - 5/31. The existing operation grazes up to 350 head of cattle during this period.

Table I. Cove Allotment Preference

<u>Total Preference</u>	<u>Suspended Non-Use</u>	<u>Active Preference</u>
3,461 AUMs	2,423 AUMs	1,038 AUMs

This most recent adjudication of native forage is based upon an Ely District Grazing Decision of 1966 which reduced the active preference in the Preston - Lund Unit by 70%. The first year the full reduction was imposed was 1969 - 1970. The three year average stocking rate (1979 - 1981) used in the Egan Resource Area Resource Management Plan (RMP) is 1,038 AUMs.

The Preston - Lund Sheep Trail runs north - south for approximately four miles through the central portion of the allotment, near Government Well and Gubler Well. Gracian Uhalde and Triple E Livestock are the two sheep operations which utilize the sheep trail. These two operations normally trail south through the allotment in late October or November and return north through the allotment in March or April. The operations do not camp in the allotment. Each operation trails the four miles south or north in less than one day.

B. Wild Horse Use

Approximately the western one half of the Cove Allotment (about 13,000 acres) is within the Egan Resource Area portion of the White River Wild Horse Herd Management Area (HMA) (Map C). The Rangeland Program Summary (RPS) objective for this allotment is to provide habitat and forage for five wild horses (55 AUMs) within the White River HMA.* Wild horses use approximately half of the allotment. Wild horse census data together with on the ground wild horse sightings indicate animals somewhat favor grazing in the black sagebrush/perennial grass range on the eastern slopes of the Horse Mountain Range (Range site - 028BY011NV), and in the winterfat/perennial grass range in the central and west central portions of the allotment (Range site - 028BY013NV). Census data also indicates that wild horses are generally grazing the allotment from December through June. Wild horses often use the Cove Well trough in the north central portion of the allotment. When the trough is dry or the water frozen, wild horses winter on snow or find another water source. Approximately 10 wild horses that use the Red Mountain Use Area of the Duckwater Allotment for nine months use the Cove Allotment for three months during winter.

More specific information on wild horse use of the allotment is provided in the Wild Horse actual use section beginning on page 8 of this evaluation.

* The 5 wild horses yearlong in the White River HMA 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."

C. Wildlife Use

The RPS objective for this allotment is to provide forage and habitat for reasonable numbers of wildlife, i.e., 159 AUMs for mule deer and 6 AUMs for antelope. Estimated existing wildlife use is as follows:

Mule Deer

Mule deer use on the allotment is all migratory use. Mule deer that summer on Forest Service administered lands on the White Pine Range to the north of the Cove allotment migrate through the allotment during the fall migration period and back north in the spring. Mike Podborny, Nevada Division of Wildlife (NDOW)

biologist estimates that between 400-600 deer migrate through the allotment for one month in the fall (100 AUMs) and once again in the spring (100 AUMs). There are no key or crucial areas identified for mule deer on the allotment.

Pronghorn Antelope

The pronghorn population in this area of White River Valley has been slowly building since initial augmentations of antelope that took place in the Schell Resource Area to the south of the allotment. It is estimated by NDOW that approximately 35-50 pronghorns utilize this area of the "Cove" for approximately 6 months (50 AUMs). There are no key or crucial areas identified for antelope on the allotment.

Threatened and Endangered Species

The Bald Eagle winters in White River Valley and may forage on the allotment. No documented sightings on the allotment have been made. The peregrine falcon can be observed in any month of the year on the allotment. Category 2 species listed by the United States Fish and Wildlife Service that can be found on the allotment during periods of migration include the least bittern, black tern and spotted bat. The ferruginous hawk nests on the allotment. There are 5 documented nest sites on the allotment. On last inspection of these nest sites in 1994, only one nest site was determined occupied.

Threatened and Endangered Plants

There are no known threatened or endangered plant species on the allotment.

III. Allotment Profile

A. Description

The Cove Allotment (0817), a category "M" allotment encompassing 26,538 federal acres, is located in Nye County, Nevada, approximately 50 air miles southwest of Ely in the southern portion of the Ely District (Map A). The allotment is situated on the west side of the White River Valley. The Horse Mountain Range traverses the western portion of the allotment in a north - south direction. The western boundary of the allotment in the Horse Range is an unfenced boundary. The north boundary of the allotment is fenced and borders the North Cove Allotment (0816). The south boundary is also fenced and borders the Wells Station (0819), Maybe Seeding (0828), East Wells (0834), and Sorensen Well (0818) allotments. The east boundary is also fenced and borders private land along the White River Wash. Map B shows the allotment boundaries. The general aspect of the allotment is a gradual eastward slope into the White River Valley

from the Horse Range. Elevations range from 5,340 feet at valley bottom to 7,000 feet in the Horse Range. An old unsuccessful Siberian wheatgrass seeding of approximately 1,000 acres is located in the northeast portion of the allotment.

There are several vegetation types within the Cove Allotment. The three main types are salt desert shrub, northern desert shrub (big sagebrush types), and pinyon - juniper. Four major range sites and vegetation types are within the allotment. These are as follows:

1. **028BY028NV** - Sodic Terrace range site occurring on the alluvial flat in the eastern portion of the allotment.
2. **028BY013NV** - Silty range site occurring on the alluvial plains in the central portion of the allotment.
3. **029XY046NV** - Sandy loam range site occurring on the inset fans of the lower piedmont slopes of the Horse Mountain Range in the western and west central portions of the allotment.
4. **029XY028NV** - Shallow calcareous slope range site occurring on the mountain side slopes and summits in the western portions of the allotment.

Additional information on these range sites in the Cove Allotment may be found in Appendix I to this evaluation beginning on page 20.

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 (ROD), p. 3)

b. Wild horses and burros - Wild horses will be managed at a total of 20 animals within the White River 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). Actual wild horse numbers will be determined by this evaluation based upon monitoring data in order to maintain a thriving natural ecological balance and prevent deterioration of the range.

* The 20 wild horses yearlong in the White River HMA 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 Division of Wildlife" (Egan ROD, p. 6)

"Reintroductions of big game species will be accomplished in cooperation with the Nevada Division of Wildlife, where such reintroductions would not conflict with existing uses and if sufficient forage is available." (Egan ROD, p. 6)

"Forage will be provided for "reasonable numbers" of big game as determined by the Nevada Division 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 systems and aesthetic values." (Egan ROD, p. 44)

2. Rangeland Program Summary Objectives

Range

a. Provide forage for up to 1,038 AUMs of livestock use.

b. Maintain the seeding in the current condition or better. Maintain or enhance native vegetation with utilization not to exceed Nevada Rangeland Monitoring Handbook (NRMH) levels on key species. Maintain or improve the current ecological condition of the native range.

Wild Horses

c. "Initially manage rangeland habitat to support an Appropriate Management Level (AML) of 5 wild horses in the Cove Allotment as part of the White River HMA. Provide forage for up to 55 AUMs of wild horse use." (The AML of 5 wild horses identified in the RPS is no longer a valid AML - See asterisk note on page 6 for reasons why).

Wildlife/Riparian

d. "Manage rangeland habitat and forage condition to support reasonable numbers of wildlife, as follows: Mule deer 159 AUMs, Pronghorn antelope 6 AUMs."

e. "Maintain mule deer spring habitat in good or better condition."

In addition to the above objectives the RPS identified the Cove Allotment as a potential antelope reintroduction area.

C. Key Species Identification

Key forage plants for cattle and wild horses for the native range of this allotment are as follows:

Grasses

ORHY (Oryzopsis hymenoides), Indian ricegrass
SIHY (Sitanion hystrix), Bottlebrush squirreltail
STCO (Stipa comata), Needle-and-thread

ELCI (Elymus cinereus), Basin wildrye

Shrubs

EULA (Eurotia lanata), Winterfat
ATCA (Atriplex canescens), Fourwing saltbush
SAVE (Sarcobatus vermiculatus), Black greasewood
PUTR (Purshia tridentata), Bitterbrush

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 and management system for domestic livestock and appropriate management level for wild horses.

B. Summary of Studies Data

1. Livestock actual use

The following actual cattle use was reported by Lou Willfong for the Cove Allotment for the calendar years 1988 through 1995. No actual use was reported for 1987.

<u>Year</u>	<u>Total AUMs</u>
1988	1,338
1989	1,197
1990	1,065
1991	1,185
1992	944
1993	866
1994	981
1995	1,086

Reported actual cattle use averaged 1,083 AUMs for the eight year period.

2. Livestock licensed use

Licensed use for cattle in the Cove Allotment for the years 1987 - 1995 is illustrated in Table II. Cattle which were licensed for the Duckwater and Blue Eagle Allotments actually grazed in the Cove Allotment; thus, the total AUMs grazed in the Cove Allotment is a summation of the licenses for all three allotments. According to a conversation record dated 11/19/91, Lou Willfong stated that over approximately the last twenty years licensed Duckwater AUMs have been used in the Cove Allotment. Licensed Blue Eagle AUMs have also been used in the Cove Allotment. The license record in Ernest Gubler's BLM case file confirms this use.

Table II. - Licensed Use (AUMs) for Cattle in the Cove Allotment From 1987 to 1995

<u>YEAR</u>	<u>COVE</u>	<u>DUCKWATER</u>	<u>BLUE EAGLE</u>	<u>TOTAL (COVE)</u>	<u>NON-USE</u>
1987	1,038	209	70	1,317	<0>
1988	1,038	209	70	1,317	<0>
1989	848	138	69	1,055	190
1990	1,113	206	69	1,388	<0>
1991	716	138	105	959	322
1992	716	138	105	959	322
1993	879			879	159
1994	1,082			1,082	<0>
1995	1,109			1,109	<0>

An average of 1,118 AUMs per year were licensed for the nine year period (all three allotments). An average of 110 AUMs of non-use were taken for the nine year period (Cove Allotment only).

3. Wild Horse actual use

Wild horse concentrations in the Cove Allotment have been noted by BLM personnel primarily from December through May or June. Normally cattle are removed from the allotment in late May after which the waters of the allotment are shut down. In May or June wild horses move south or move west over the Horse Range into the areas of Albert Springs or Callaway Well in the Red Mountain Use Area of the Duckwater Allotment. Wild horse trails through the Horse Range to these areas have been noted by BLM personnel on several occasions.

The following wild horse sightings in the Cove Allotment have been reported by Ely District BLM resource specialists:

March 31, 1992 - 14 head of wild horses were observed in the western portion of the allotment.

February 24, 1994 - 70 head of wild horses were observed just south of Cove Well.

April 22, 1994 - 15 head of wild horses were observed in the allotment. 9 head were southwest of Cove Well while 6 head were in the southeast portion of the allotment towards Wells Station.

June 20, 1995 - 88 head of wild horses were observed in the allotment approximately two miles southwest of Cove Well.

June 21, 1995 - 56 head of wild horses were observed in the allotment scattered on the benches south of Cove Well.

Censused wild horse numbers for that portion of the White River HMA within the boundaries of the Cove Allotment are shown in Table II. The total HMA census is also shown. Both adult and foal wild horses were counted during each census.

Table II. - Wild Horse Census Data, Cove Allotment

<u>Date</u>	<u>Source</u>	<u>Number of Wild Horses</u>		
		<u>Cove</u>	<u>Entire HMA</u>	<u>Cove AUMs*</u>
1987	Estimate**	19	50	133
03/88	Census	29	68	203
03/89	Census	48	90	336
1990	Estimate**	42	111	294
04/91	Census	17	133	119
08/92	Census	12	167	12***
1992	Estimate**	63	167	441
05/93	Census	68	204	476
09/94	Census	0	162	0
12/94	Census	83	222	581
03/95	Census	103	254	721

Wild horse actual use in the Cove Allotment averaged 396 AUMs per year in the Cove Allotment, or 33 wild horses yearlong, for the eight year period 1988 to 1995.

* The number of AUMs utilized by wild horses in the Cove Allotment for the grazing year represents use for a seven month period from December through June. Wild horses in the White River HMA utilize other areas from July through November.

** The estimates for 1987, 1990, and 1992 were determined as follows:

The entire herd increased 22 head from 1988 to 1989. The entire herd increased 43 head from 1989 to 1991. Thus, the entire herd most likely increased 18 head from 1987 to 1988 and 21 head from 1989 to 1990. The data shows that 29 of 68 wild horses, or approximately 43% of the entire herd, used the allotment in 1988. Similarly, 53% of the herd used the allotment in 1989, 13% in 1991, 33% in 1993, and 37% in 1994. Eliminating the high and low percentages, we have 43% of the use in Cove in 1988, 33% in 1993, and 37% in 1994. Averaging these three figures, approximately 38% of the entire herd is using the allotment. This equates to 19 head in 1987, 42 head in 1990 and 63 head in 1992.

*** The 08/1992 census reveals an unusual pattern of 12 wild horses moving into the Cove Allotment for one month, probably due to temporary water caused by summer thunderstorms.

4. Combined Livestock and Wild Horse Actual Use

Cove Allotment Actual Use Summary (AUMs)

<u>Year</u>	<u>Cattle</u>	<u>Wild Horses</u>	<u>Total</u>
1987	1,317*	133	1,450
1988	1,338	203	1,541
1989	1,197	336	1,533
1990	1,065	294	1,359
1991	1,185	119	1,304
1992	944	441	1,385
1993	866	476	1,342
1994	981	581	1,562
1995	1,086	721	1,807

* No actual use form was submitted for 1987. Licensed use was for 1,317 AUMs.

5. Precipitation Data

Data from the precipitation recording station at Lund, Nevada, approximately 15 miles northeast of the Cove Allotment, is being used for this evaluation. This data is reported to and summarized by the Office of the State Climatologist, University of Nevada, Reno. Data from the National Oceanic and Atmospheric Administration weather station located at Ely, Nevada 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 from September through June. The crop yield is then divided by the normal crop yield (average of six median years of 24 total years of data at the Lund station) 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 3 shows the yield indices for the Lund station for the evaluation years.

Table III. - Yield Indices, Lund Station

<u>Year</u>	<u>Crop Yield</u>	<u>Precip Index</u>	<u>Yield Index</u>
1987	6.67	0.75	0.69
1988	10.08	1.14	1.17
1989	5.80	0.66	0.58
1990	8.85	1.00	1.00
1991	7.15	0.81	0.77
1992	8.08	0.91	0.89
1993	9.98	1.13	1.16
1994	7.70	0.87	0.84
1995	14.13	1.60	1.74

6. Utilization

a. Key Area utilization

Key forage plant method utilization transects have been completed on various portions of the allotment since 1987. Currently there are four utilization cages established at key areas in the allotment to reflect current grazing year's growth of key forage species (Map D). Utilization transect studies have been conducted at the key area utilization cage locations and other key area locations throughout the allotment.

b. Utilization Pattern Mapping

Use patterns were mapped for the allotment in summer of 1987, 1988, 1989, and 1992. A very general use pattern map was drawn for the allotment in 1993.

Use patterns were mapped for use by wild horses and seasonal use by cattle from January or February through May. Results by use class, acres, and percent of total acres mapped are listed by year in Table IV.

Table IV. - Use Pattern Mapping Summary - Acres and (Percent of Mapped Acres) by Use Class for the Cove Allotment.

<u>Year</u>	<u>Slight</u> <u>(0 - 20%)</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>	<u>Not</u> <u>Mapped</u>
1987	3680(19%)	12036(63%)	2970(16%)	320(02%)	<0>	7532
1988	3291(17%)	10239(54%)	4366(23%)	1193(06%)*	<0>	7449
1989	3979(17%)	4607(19%)	6114(25%)	7785(32%)	1587(7%)	2466
1992	7325(30%)	4928(21%)	11358(47%)	432(02%)	<0>	2495

* Only the Siberian crested wheatgrass seeding was mapped as heavy.

In 1993, eleven key forage plant method utilization transects were conducted in the allotment. Every transect documented slight or light use of key species. A general use pattern map was drawn showing approximately 80% of the allotment used lightly and 20% used slightly.

7. Frequency Trend

One frequency trend study was established on the allotment in July of 1993. It was placed approximately 1/2 miles south of Cove Well in an area of Indian ricegrass and winterfat (Key area C 01 - 28BY013NV range site. This study will be read again in 1996 and 1998, during the re-evaluation period, to determine a forage trend for the range site.

A second frequency trend study was established on the allotment in June of 1995. It was placed approximately 1 mile southwest of Cove Well in the same area of Indian ricegrass and winterfat as C 01 (Key area C 02 - 28BY013NV range site. This second study will be read again in 1998 and 2000, during the re-evaluation period, to better determine a forage trend for the range site.

8. Observed Apparent Trend

An observed apparent trend study was conducted at key area C-01 on 06/20/95. The apparent trend was rated as static, with abundant undesirable annual plant species noted on site. The winterfat on this site was in a vigorous, very productive condition.

An observed apparent trend study was conducted at key area C-02 on 06/21/95. The apparent trend was rated as static also, again with abundant undesirable annuals on site. Again winterfat was in a vigorous and very productive condition. Little to no available ricegrass, bottlebrush squirreltail, or bluegrass was also noted.

9. Ecological Status

Ecological status (condition) studies were conducted in the Cove Allotment at key areas C-01 and C-02 in June, 1995. Ecological status estimates the stage of succession at a given range site, by measuring plant species composition and comparing it to composition of the Potential Natural Community (PNC) or climax for that site. This is estimated as a percentage of PNC; Classifications include Early Seral, or poor, (0 - 25%); Mid Seral, or fair, (26 - 50%); Late Seral, or good, (51 - 75%); And Potential Natural Community (PNC), or excellent, (76 - 100%).

The results of the ecological status studies are listed in Table V.

Table V. **Ecological Condition Status for Two Native Key Areas, Cove Allotment.**

<u>Key Area</u>	<u>Range Site</u>	<u>Vegetation Type</u>	<u>Ecological Status</u>
C-01	28BY013NV	EULA5/ORHY	Mid Seral (Fair)
C-02	28BY013NV	EULA5/ORHY	Mid Seral (Fair)

The livestock objectives related to ecological condition are listed in Appendix III on page 24.

10. Riparian Data

There are no riparian areas, and thus no riparian studies, on the Cove Allotment.

V. Conclusions

A. Land Use Plan Objectives

III. B. 1. (a) - Partially met

Rationale: Portions of the allotment are in an unacceptable seral stage, being in mid seral (fair) ecological condition. The key area of winterfat (28BY013NV range site) is also in fair condition and will be managed to maintain mid seral condition because there is little potential to improve the plant community. Observed apparent trend studies show static trend. Although winterfat is generally in a vigorous, healthy condition, key areas of the allotment show limited production of perennial grasses, particularly Indian ricegrass. Native forbs are also very infrequent.

III. B. 1. (b) - A determination of "Met" or "Not Met" cannot be made for this objective. As stated on page 7, the 20 wild horses yearlong in the White River HMA is no longer a valid Appropriate Management Level (AML). This evaluation will determine a new optimum number of wild horses which results in a thriving natural ecological balance and avoids deterioration of the range.

III. B. 1. (c) - Met

Rationale: Field inspection by the wildlife biologist indicates the habitat in the Horse Mountain Range commonly used seasonally by migratory mule deer is believed to be in an acceptable seral stage and has been in the slight use category throughout the years of the evaluation. Antelope yearlong habitat is in fair or better condition. Desert shrubs and forbs commonly grazed by

antelope are productive and vigorous.

III. B. 1. (d) - Met

Rationale: Allowable use levels have generally not been exceeded in this allotment.

B. Rangeland Program Summary Objectives

Range

III. B. 2. (a) - Met

Rationale: Studies show there is currently 1,038 AUMs available for livestock. Key species utilization objectives are being met with light or less use documented over most of the allotment during the evaluation years.

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

Rationale: The Siberian wheatgrass/crested wheatgrass seeding planted in 1970 was never a successful seeding. Use pattern mapping of the seeding has shown very poor forage availability. In native range, utilization levels on key species generally have not exceeded Nevada Rangeland Monitoring Handbook (NRMH) recommended levels. Key areas of the allotment are in a mid seral (fair) seral stage.

Wild Horses

III. B. 2. (c) - This management objective is no longer appropriate due to a legal ruling (See p. 7 of this evaluation). This evaluation will recommend a new appropriate management level of wild horses for the Cove Allotment.

Wildlife/Riparian

III. B. 2. (d) - Met

Rationale - Allowable use levels on mule deer habitat have not been exceeded. The allotment is currently supporting 200 AUMs of deer use. The allotment is currently supporting 50 AUMs per year of antelope use. Antelope are in good condition and increasing because 1) over-winter survival of young has been excellent due to recently snow free winters and 2) because of abundant big sagebrush, black sagebrush, budsage, and shadscale.

III. B. 2. (e) - Met

Rationale - Field inspection by the wildlife biologist and slight use pattern mapping during the evaluation years indicate that mule deer spring habitat is being maintained in good or

better condition.

VI. Technical Recommendations

A. Problems

Ecological condition is in an unacceptable seral stage in portions of the allotment. In the key area of winterfat, the desired condition that can practically be managed for is mid seral (fair) ecological condition. Perennial grasses and native forbs are very infrequent throughout this key area. Many species of increasing undesirable annual species are prevalent throughout the allotment. Soils are generally stable throughout the allotment, without significant wind or water erosion. Livestock distribution is a problem, with much of the key winterfat area being underutilized.

Five of nine land use plan objectives are being met. Two objectives are partially met. Two objectives are no longer appropriate. Allowable use levels for perennial grasses and winterfat have generally not been exceeded. The winterfat component of the allotment is healthy, vigorous, and underutilized. Increasing use to a more moderate level would stimulate new plant growth and cause winterfat to be in a better competitive position with annual species. Mule deer and pronghorn antelope objectives are being met.

B. Utilization and Stocking Rate Calculations by Use Area

Data will be analyzed and proper stocking levels calculated for the allotment. Appropriate stocking levels will be based on monitoring information, specifically key forage plant method transects. The appropriate stocking level is calculated using the following formula:

$$\frac{\text{Actual use (AUMs)}}{\text{Corrected Utilization (\%)*}} = \frac{\text{Desired use (AUMs)}}{\text{Desired Utilization (\%)**}}$$

* Value from use pattern mapping, adjusted using yield index

** Value from Nevada Rangeland Monitoring Handbook - Native perennial grasses 50%; Winterfat 50%

The Desired Utilization (proper use factor) used in the stocking rate calculations for the Cove Allotment is 50% allowable use for perennial grasses. Throughout the evaluation years, most of the key forage plant method transects have been read for perennial grasses (Indian ricegrass and bottlebrush squirreltail). The allowable use factor of 50% is supported by current range literature. Land Use Plan Objectives are expected to be accomplished using the "take half - leave half" benchmark for livestock grazing.

A complete summary of utilization information for the Cove Allotment for the evaluation years is covered in Appendix III beginning on page 22.

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>
1987	37%	0.69	25.5%	1,450	2,843
1988	50%	1.17	58.5%	1,541	1,317
1989	69%	0.58	40.0%	1,533	1,916
1992	55%	0.89	49.0%	1,385	1,413
1993	18%	1.16	20.9%	1,342	3,211
1995	30%	1.74	52.2%	1,807	1,731

* No use pattern mapping or key forage plant transects were conducted on the allotment in 1990, 1991, and 1994.

The average proper stocking level is 2,072 AUMs. Since this is combined use, the stocking level will be proportioned to cattle and wild horses based on preference demand for livestock and six year average actual use by wild horses.

1. Forage Demand

Cattle Permitted Use.....	1,038 AUMs	(59.0%)
Wild Horses (3/95 census).....	<u>721 AUMs</u>	<u>(41.0%)</u>
Total.....	1,759 AUMs	100.0%

2. Average Actual Use - Based on those six years for which there is utilization data

Cattle (six year average).....	1,125 AUMs	(74.5%)
Wild horses (six year average)....	<u>385 AUMs</u>	<u>(25.5%)</u>
Total.....	1,510 AUMs	100.0%

3. Stocking Rate Adjustments

Wild horses have been allowed to increase from one censused wild horse in the entire White River Herd Management Area (HMA) in 1983 to approximately 300 wild horses currently (9/95 census). No gather of the White River Herd has ever occurred. From 1987 to 1995, for nine years of reported actual use, cattle use remained constant in the Cove Allotment, averaging 1,109 AUMs annually.

Wild horses made approximately 25.5% of the actual forage use during the six years for which there is utilization data. By allocating 25.5% of the proper stocking level of 2,072 AUMs to wild horses, 528 AUMs are allocated to wild horses. Ten wild horses that use the Red Mountain Use Area of the Duckwater

Allotment for nine months use the Cove Allotment for three months during winter. This accounts for 30 AUMs of the total allocation of 528 AUMs. The remaining allocation of 498 AUMs allows for 42 wild horses yearlong in the allotment. This is considered a large number of wild horses for a pasture area of only 13,000 acres.

The remaining 74.5% of the proper stocking level, or 1,544 AUMs, are allocated to cattle. This is a 506 AUM increase to the current active preference of 1,038 AUMs. The cattle operation thus picks up 506 of 2,423 AUMs that were placed in suspended non-use as a result of a 70% reduction in the late 1960's.

- a. Allocation by user - Based upon six year actual use and proper stocking level of 2,072 AUMs

Cattle	2,072 AUMs	X	.745	=	1,544 AUMs
Wild horses	2,072 AUMs	X	.245	=	528 AUMs
	528 AUMs	=	42 wild horses yearlong		
			10 wild horses for 3 months		

- b. New livestock preference by permittee

<u>Permittee</u>	<u>Permitted Use</u> +	<u>Increase</u> =	<u>New Permitted Use</u>
Ernest Gubler, Incorporated	1,038 AUMs	+ 506 AUMs	= 1,544 AUMs

- c. New livestock preference summary

<u>Permittee</u>	<u>Permitted Use</u>	<u>Historical Suspended Use</u>
Ernest Gubler, Incorporated	1,544 AUMs	1,917 AUMs

- d. Total use authorizations (AUMs) and Wild horse AML

Adjusted demand = authorization

Cattle	1,038	+	506	=	1,544 AUMs
Wild horses	721	-	193	=	528 AUMs AML
	1,759	+	313	=	2,072 AUMs Total use

- e. Permitted use in the Duckwater and Blue Eagle Allotments will not be allowed to be activated in the Cove Allotment.

C. Short term solutions

a) Set the stocking rate at 1,544 AUMs for cattle, as indicated by monitoring studies. When cattle are authorized to graze the native range, the gates to the Siberian crested wheatgrass seeding will be kept closed.

b) Establish a wild horse AML of 528 AUMs (42 wild horses yearlong and 10 wild horses for three months) as indicated by monitoring studies.

c) Establish a cattle season of use as winter/spring (1/01 - 4/30). Because cattle are being increased in the allotment, more dormant season use is necessary and less use needs to be made during the critical growing period of spring. Cattle grazing may be allowed during the month of May if allowable use levels have not been exceeded and it has been determined by the authorized officer that sufficient excess forage is available.

d) The increase in cattle AUMs will be used only in the winterfat areas of the allotment (028BY013NV and 029XY046NV range sites). Water hauling will be **required** to a minimum of two locations in these areas. No additional use will be made in the saline meadow east of the Siberian wheatgrass seeding. The authorized officer may require a specific well to be shutdown to facilitate livestock distribution.

e) Each of the three sheep operations permitted to trail in the allotment will trail north or south through the allotment in one day (24 hours) or less. No sheep camping will be allowed in the allotment.

f) Salt and supplements will not be allowed within 1/4 mile of stock waters.

D. Long term solutions

The following long term solution should be implemented. The recommended project will be initiated when time, funding, and manpower allows.

Construct an east/west fence in cooperation with Ernest Gubler, Inc. dividing the allotment into two main pastures. Water at Gubler Well would be available for both pastures. This would facilitate better livestock control and thus healthier plant communities.

E. Additional monitoring data required

Continue to conduct use pattern mapping, key forage plant utilization, and ecological condition studies. Frequency trend studies will be re-read to insure correct stocking rates.

Continue to monitor livestock, wild horse, and wildlife actual use. Continue to conduct aerial census of wild horses to monitor movements and actual use. Document wild horse observations.

Appendix I. - Range Sites within the Cove Allotment

1. 028BY028NV - Sodic Terrace 8-10" Precip. Zone
- SAVE4-ARTR2/ELCI2

This range site occurs on the alluvial flat in the eastern portions of the allotment. Soils in this area are typically loams or sandy loams. The potential native plant community is dominated by black greasewood, basin big sagebrush and basin wildrye. The potential vegetative composition is about 20% grasses, 5% forbs and 75% shrubs. Other native plants that may be found in this type include Indian ricegrass, bottlebrush squirreltail, princesplume, globemallow, rubber rabbitbrush, shadscale, winterfat, and budsage.

2. 028BY013NV - Silty 8-10" Precip. Zone
- EULA5/ORHY

This range site occurs on the alluvial plains in the central portion of the allotment. The main key grazing areas of the allotment are located in this site. Soils in this area are typically very fine sandy loams or gravelly sandy loams. The potential native plant community is dominated by winterfat and Indian ricegrass. The potential vegetative composition is about 30% grasses, 5% forbs, and 65% shrubs. Other native plants that may be found in this type include bottlebrush squirreltail, Sandberg bluegrass, globemallow, phlox, budsage, fourwing saltbush, and shadscale.

3. 029XY046NV - Sandy Loam 5-8" Precip. Zone
- ATCA2-EULA5/ORHY

This range site occurs on the inset fans of the lower piedmont slopes of the Horse Mountain Range in the western and west central portions of the allotment. Soils in this area are typically gravelly fine sands or sandy loams. The potential native plant community is dominated by fourwing saltbush, winterfat, and Indian ricegrass. The potential vegetative composition is about 45% grasses, 5% forbs, and 50% shrubs. Other native plants that may be found in this type include galleta grass, sand dropseed, globemallow, budsage, spiny hopsage, Douglas rabbitbrush, and shadscale.

4. 029XY028NV - Shallow Calcareous Slope 12-14" Precip. Zone
- ARARN/AGSPI

This range site occurs on the mountain sideslopes and summits in the western portions of the allotment. Soils in this area are typically gravelly fine sandy loams or stony loams. The potential native plant community is dominated by black sagebrush and beardless wheatgrass. The potential vegetative composition is about 60% grasses, 5% forbs, and 35% shrubs. Other native plants that may be found in this type include Indian ricegrass, Sandberg bluegrass, galleta grass, phlox, aster, ephedra, Douglas rabbitbrush, winterfat, and fourwing saltbush.

Appendix III - Utilization Summary for Cove Allotment
Native Range Only

1987

- Perennial grasses - 1 key forage plant transect in the moderate use class
- 4 transects in the light use class
- 4 transects in the slight use class
- Winterfat.....- 1 transect in the moderate use class
- 3 transects in the light use class

The use pattern map for 1987 indicates a majority of the key area mapped as light use. Moderate use is not significant.

Averaging the five transects conducted in the key area for use of perennial grass, an overall utilization of 37% was determined for the allotment.

1988

- Perennial grasses - 1 key forage plant transect in the heavy use class
- 2 transects in the moderate use class
- 1 transect in the light use class
- 2 transects in the slight use class
- Winterfat.....- 2 transects in the light use class

The use pattern map for 1988 also indicates a majority of the key area mapped as light. No native range was mapped as heavy.

Averaging the four transects conducted in the key area for use of perennial grass, an overall utilization of 50% was determined for the allotment.

1989

- Perennial grasses - 2 key forage plant transects in the severe use class
- 3 transects in the heavy use class
- 3 transects in the moderate use class
- 2 transects in the light use class
- 2 transects in the slight use class
- Winterfat.....- 2 transects in the severe use class
- 1 transect in the heavy use class
- 1 transect in the moderate use class
- 2 transects in the slight use class

The use pattern map for 1989 indicates a significant portion of the key area mapped as heavy.

Averaging the eight transects conducted in the key area for use of perennial grass, an overall utilization of 69% was determined for the allotment.

1992

Perennial grasses - 2 key forage plant transects in the heavy use class
- 6 transects in the moderate use class
- 2 transects in the light use class
Winterfat.....- 4 transects in the light use class
- 1 transect in the slight use class

The use pattern map for 1992 indicates a significant portion of the key area mapped as moderate.

Averaging the eight transects conducted in the key area for use of perennial grass, an overall utilization of 55% was determined for the allotment.

1993

Perennial grasses - 6 key forage plant transects in the light use class
Winterfat.....- 6 transects in the slight use class

The general use pattern map for 1993 indicates light use throughout the key area.

Averaging the two transects conducted in the key area showing the highest use of perennial grass, an overall utilization of 18% was determined for the allotment.

1995

Perennial grasses - 1 key forage plant transect in the moderate use class
- 3 transects in the light use class
- 4 transects in the slight use class
Winterfat.....- 6 transects in the light use class
- 9 transects in the slight use class

Averaging the five transects conducted in the key area for use of perennial grass, a utilization of 30% was determined.

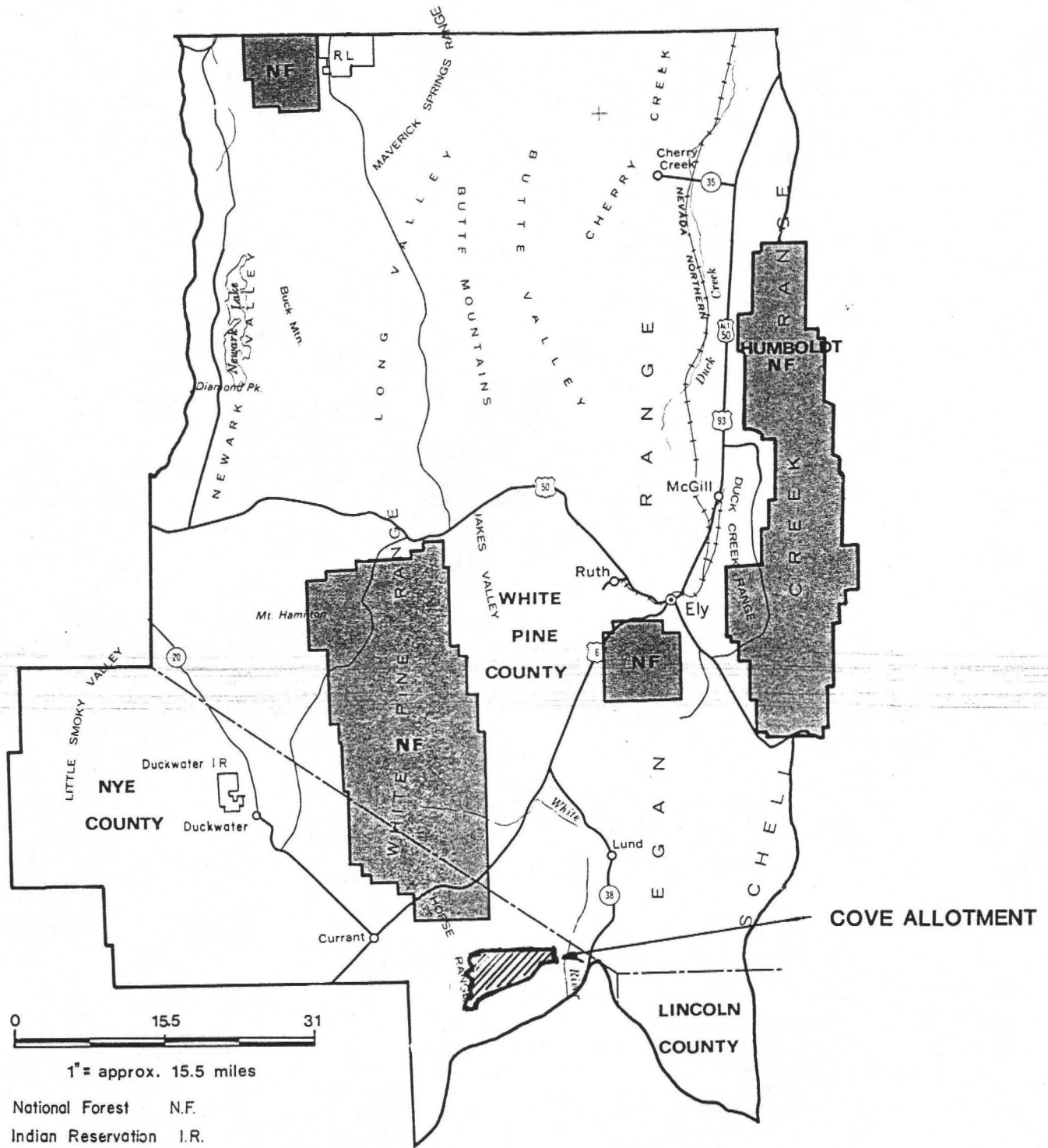
Appendix III. - Ecological Condition Information

Allotment: Cove - Livestock Objectives (Native range)

STUDY NO.	KEY AREA LOCATION	ECOLOGICAL SITE NO.	KEY SPECIES	PRESENT SITUATION			LONG TERM OBJECTIVE			SHORT TERM OBJECTIVE			RATIONALE
				KEY SPP % COMP BY WEIGHT	SERAL STAGE (% OF PNC)	MAINTAIN OR IMPROVE	KEY SPP % COMP BY WEIGHT	SERAL STAGE (% OF PNC)	ALLOWABLE USE LEVEL	SEASON OF USE	MET OR NOT MET		
C-01	T. 9 N., R. 60 E., SEC 4 SESW	28BY013NV	ORHY SIHY EULA5 ATCA2	0 0 92 4	MID* 56	MAINTAIN	2 2 <92 3	MID 50-60	50% 50% 50%	1/01 TO 4/30	MET	KEY SPECIES ARE MISSING**	
C-02	T. 9 N., R. 60 E., SEC 4 SENW	28BY013NV	ORHY SIHY EULA5 ATCA2	0 0 93 0	MID* 51	MAINTAIN	2 2 <93 3	MID 50-60	50% 50% 50%	1/01 TO 4/30	MET	KEY SPECIES ARE MISSING***	

* SPECIES DIVERSITY RATED AS FAIR; APPARENT TREND DECLINING
 ** ORHY, SPHAE (GLOBEMALLOW), AND ARSP5 (BUDSAGE) ARE MISSING
 *** SPHAE, ARSP5, AND ATCA2 (FOURWING SALT BUSH) ARE MISSING

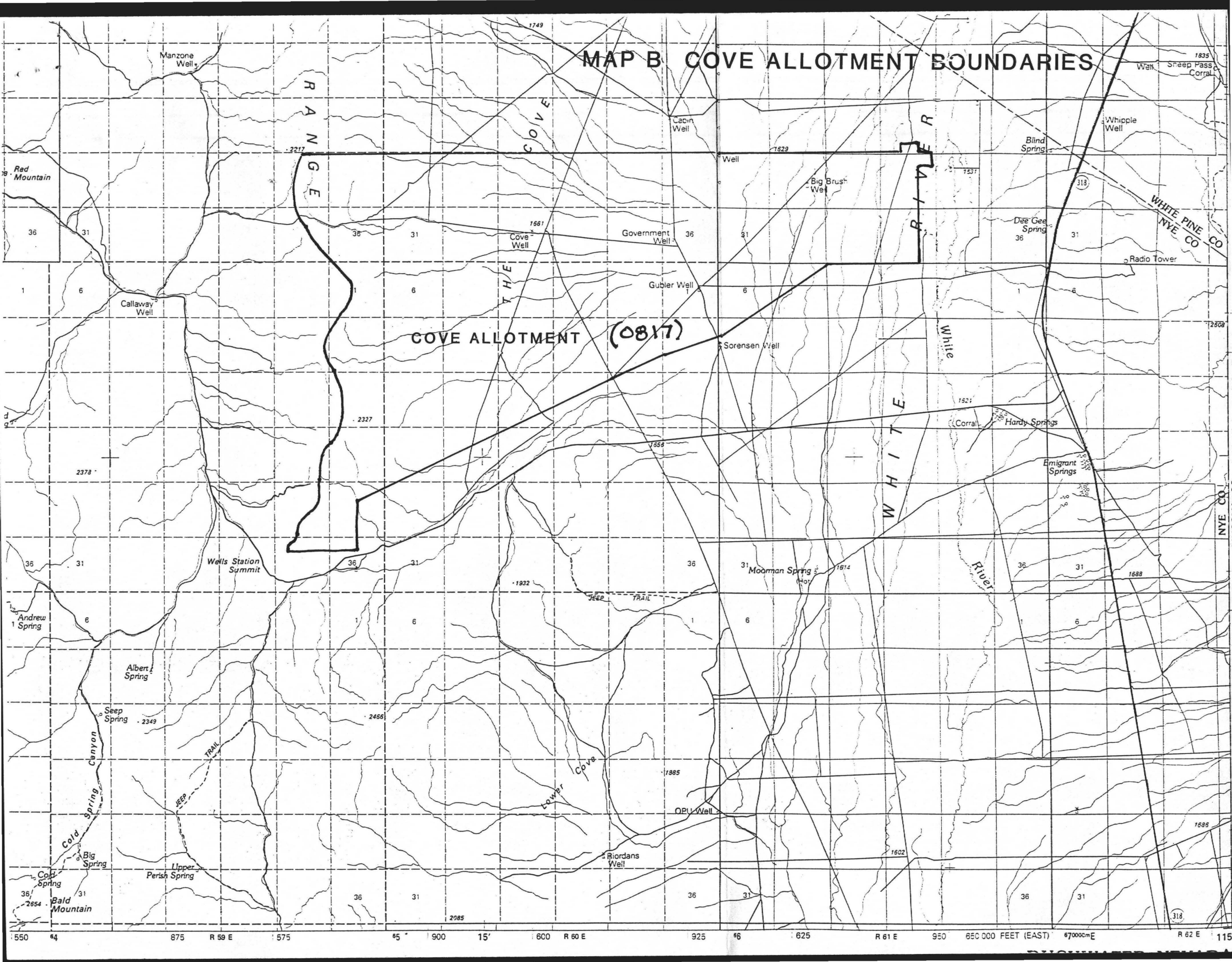
MAP A ALLOTMENT LOCATION WITHIN THE RESOURCE AREA



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

MAP B COVE ALLOTMENT BOUNDARIES



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COVE ALLOTMENT (0817)

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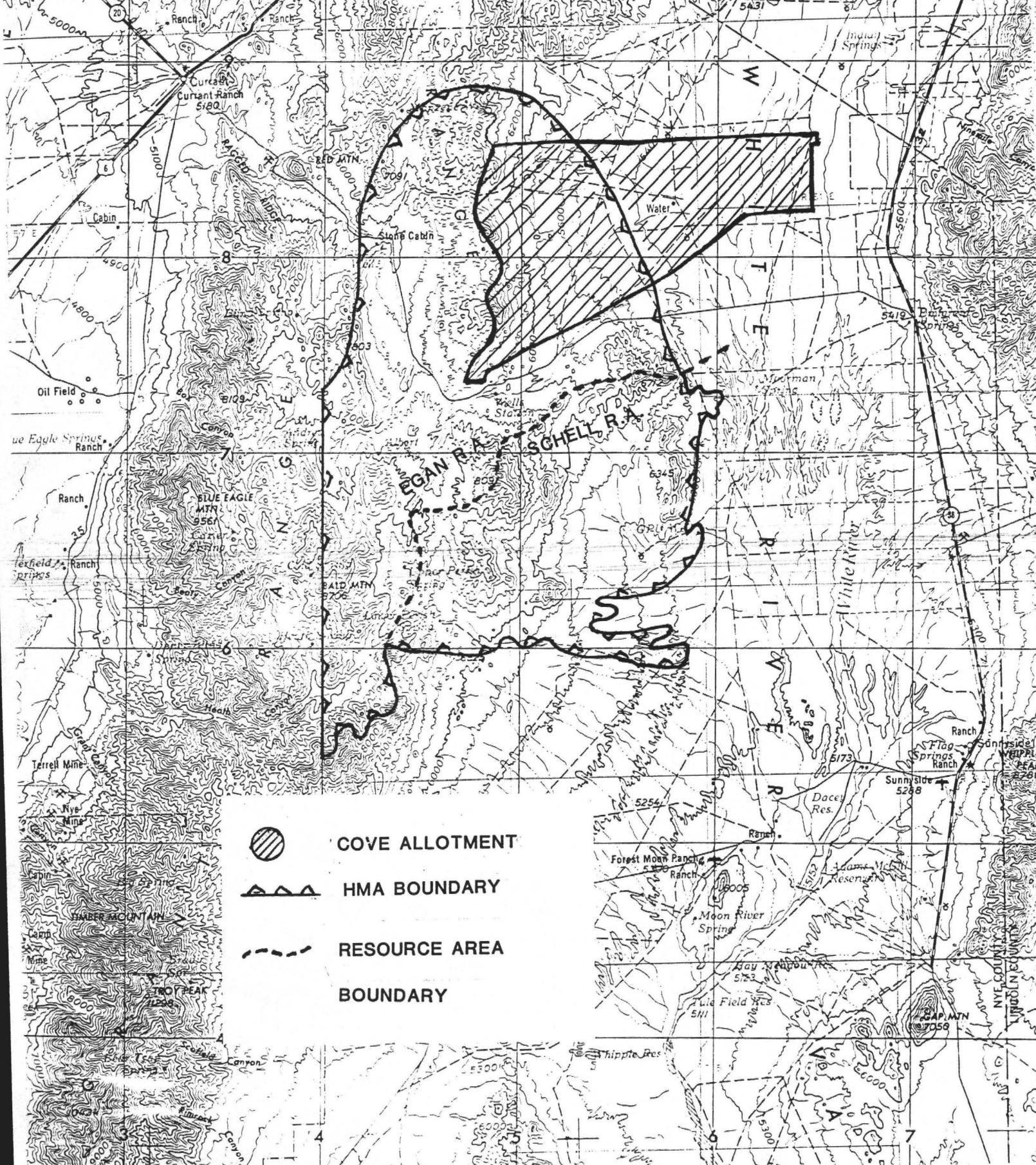
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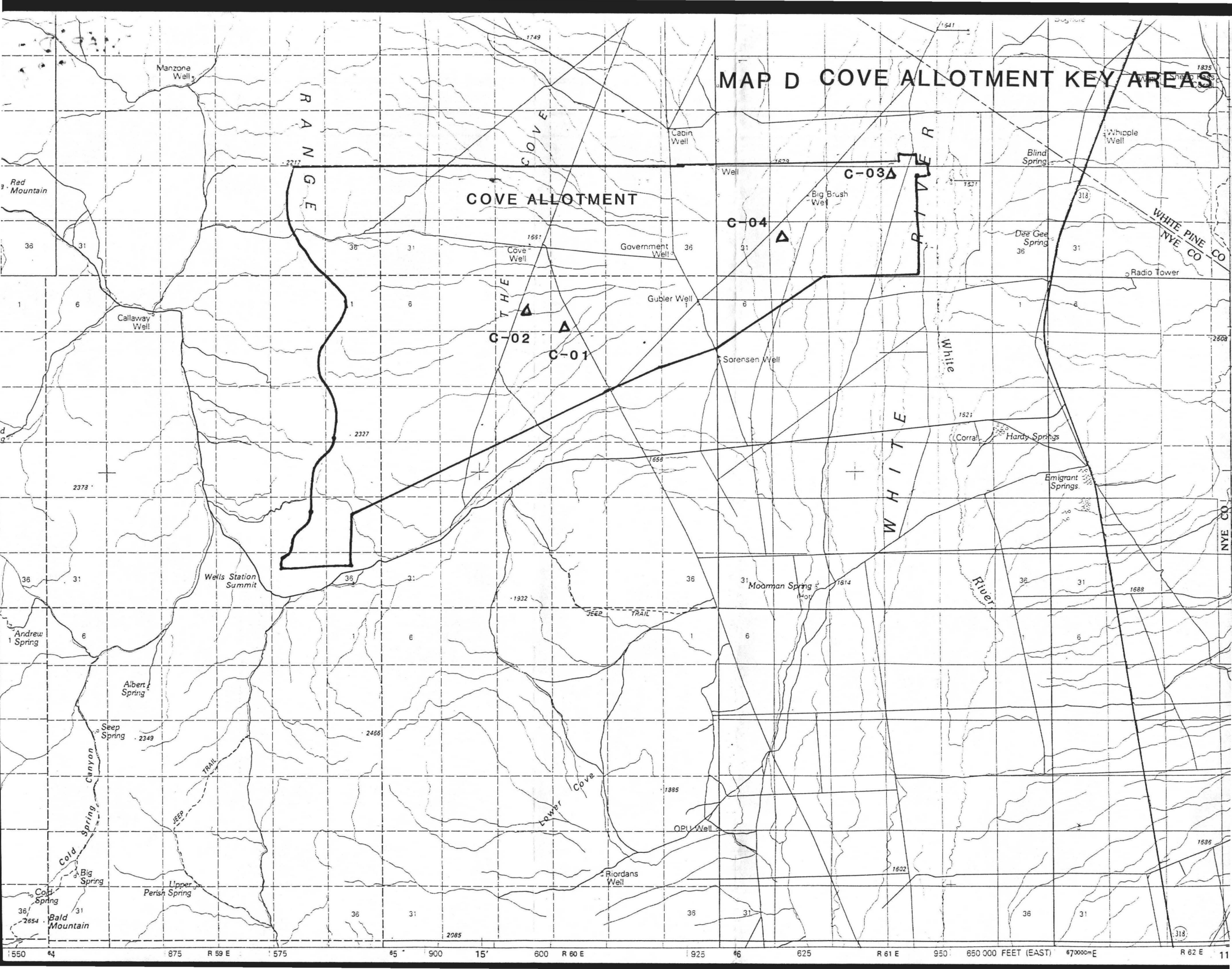
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MAP C COVE ALLOTMENT IN RELATION TO WHITE RIVER WILD HORSE HERD MANAGEMENT AREA



-  COVE ALLOTMENT
-  HMA BOUNDARY
-  RESOURCE AREA BOUNDARY

MAP D COVE ALLOTMENT KEY AREAS





COMMISSION FOR THE
PRESERVATION OF WILD HORSES

255 W. Moana Lane

Suite 207A

Reno, Nevada 89509

(702) 688-2626

March 4, 1996

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

Subject: Cove Allotment Evaluation - White River Herd

Dear Mr. Drais:

Thank you for this opportunity to review and comment on the Cove Allotment Evaluation. This allotment, as well as others, directly affect the determination of an appropriate management level for the White River Wild Horse Herd. Your partial approach to determine the appropriate management level is confusing and difficult for the affected interests.

Please consider the following comments:

Page 9, Wild Horse Actual Use

Foals were considered as an adult for the determination of an animal unit month. The evaluation provides no rationale for this assumption.

Page 10, Precipitation Data

Yield index calculations alter the computations of proper stocking rates or carrying capacity for this allotment. Annual computations must correspond with the monitoring data conclusions.

Page 16, Utilization/Stocking Rate

Though not specifically mentioned, weight averaging use pattern mapping data can significantly alter the affect of using raw utilization data in the proper stocking level computations. Again, computation results must concur with monitoring conclusions of the evaluation.

Mr. Gene Drais
March 4, 1996
Page 2

In review of the average raw utilization data, it appears that objectives are being met with current total actual use.

Page 16, Forage Allocation

Proportional adjustments should consider the number of wild horses to sustain a genetic viable population within the herd's appropriate management level. This cannot be done without considering other allotments within the herd area.

We look forward to the selected management alternative analysis for the multiple use decision. We request that an alternative be developed addressing our concerns for future documents.

Sincerely,



CATHERINE BARCOMB
Executive Director