m 6-2-92

# United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Ely District Office
HC 33 Box 33500
Ely, Nevada 89301-9408

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

4400.3 (NV-047)

MAY 2 8 1992

received June 2, 1992

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 allotment monitoring evalulation(s), listed below. 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 June 19, 1992, 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

Gene L. Drais, Manager
Egan Resource Area

4 Enclosures
1. Badger Springs
2. Wells Station
3. North Steptoe
4. South Butte

WELLS STATION
ALLOTMENT EVALUATION SUMMARY

## I. INTRODUCTION

The Wells Station Allotment (0819) is comprised of approximately 15,019 public land acres. 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 312 AUMs for cattle use, with a current permitted season of use from November 1 to May 1. The three year average listed in the Egan Resource Management Plan (RMP) and Rangeland Program Summary (RPS) is 217 AUMs per year of cattle use (calculated for 1979-81).

### B. Wild Horse Use

This allotment is part of the White River Herd Management Area (HMA). There has been historical wild horse use on the allotment. The latest wild horse census of March 15, 1991 showed 17 wild horses on this allotment. Censuses of March 14, 1989 and March 21, 1988 showed 0 wild horses within this allotment. On May 27, 1983 the aerial census showed 1 wild horse within the allotment(see Appendix 1 for census maps and memoranda). The allotment has fenced boundaries on the east and north indicating the wild horse access is through the mountain ranges to the west and south. The 1988 Egan RPS estimates wild horse use of 67 AUMs. The RPS "existing horse AUMs" amount was based on the proportion that the Wells Station Allotment makes up of the total White River HMA acreage.

### C. Wildlife Use

The RPS objective for this allotment is to provide forage and habitat for reasonable numbers of wildlife, i.e. 39 AUMs for mule deer and 6 AUMs for antelope. (Note: Antelope have not been observed within this allotment.) Existing wildlife use listed in the RPS is 30 AUMs for mule deer and no use for antelope. According to a Nevada Department of Wildlife letter dated April 3, 1991 from Region II wildlife biologist Mike Podborny,"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 approximately half way between the summer range to the north and winter range to the south."

The letter continued and said, "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=1,500, 1990=1,200." Historically, utilization by mule deer has been slight in this allotment.

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

## III. ALLOTMENT PROFILE

### A. Description

The Wells Station Allotment is located approximately 16 miles southwest of Lund on the west side of White River Valley. A portion of the Wells Station Summit Road passes through the allotment in a northeast-southwest direction. (see Appendix 1 for map). There are no riparian areas within this allotment.

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

1) A.G. Well located in T9N, R60E, Sec.28, SE¼, SW¼.
   Operating status: functional
2) Wells Station Well located in T10N, R61E, Sec.36, NW¼, SE¼.
   Operating status: functional

### 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 system and aesthetic values." (Egan ROD, p.44)

d. Wild Horses - "Wild horses will be managed at 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.8) (Note: The 20 horses identified above , as well as the 67 AUMs (6 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 ruled that the 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.")

2. Rangeland Program Summary Objectives

a. "Provide forage for up to 217 AUMS of livestock use. 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.

b. "Maintain mule deer yearlong habitat in good or better condition. Manage rangeland habitat and forage condition to support reasonable numbers of wildlife, as follows: 39 AUMS for mule deer, and 6 AUMS for antelope." This is accomplished by not exceeding utilization levels on native species as listed in a. above.

c. "Initially manage rangeland habitat to support an Appropriate Management Level (AML) of 6 horses in the Wells Station Allotment as part of the White River HMA. Provide for up to 67 AUMS of wild horse use." Actual wild horse numbers will be determined by this evaluation in conjunction with monitoring data to maintain a thriving natural ecological balance and prevent deterioration of the rangeland. (See note above under III.B.1.d.)

3. Key Species Identification

The primary key plant species for cattle and wild horse use are winterfat (Eurotia lanata), Indian ricegrass (Oryzopsis hymenoides), needleandthread (Stipa comata), bottlebrush squirreltail (Sitanion hystrix), and Sandberg bluegrass (Poa secunda). Deer will also utilize these species to a limited extent depending on the season and availability of preferred browse species. Primary key species for deer are black sagebrush (Artemisia nova), Wyoming big sagebrush (Artemisia tridentata var. wyomingensis), fourwing saltbush (Atriplex canescens), little leaf mahogany (Cercocarpus intricatus), and Mexican cliffrose (Cowania mexicana). Forbs are important for spring/early summer deer use but

no particular species is found in quantities sufficient enough to be considered a key species.

There are no riparian areas or aspen stands in this allotment.

## IV. MANAGEMENT EVALUATION

### A. Purpose

The purpose of this evaluation is to assess whether 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 late spring of 1988 and early spring of 1989 and 1991. The data collected from these years reflects the grazing use made by all users on the previous years growth. 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 1991. It is the "crop year" precipitation that is used to compute yield indices (see Table 3 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.

Lund Crop Year Precipitation & Yield

| Year | Crop Year Precip.(inches) | Precip. Index | Yield Index |
|---|---|---|---|
| 87/88 | 10.08 | 1.16 | 1.20 |
| 88/89 | 5.80 | .67 | .59 |
| 90/91 | 7.15 | .82 | .79 |

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 | 8,356 (56%) | 1,104 (8%) | 2,875 (19%) | 2,526 (17%) | 0 |
| 1989 | 4,462 (29%) | 5,946 (39%) | 2,937 (19%) | 1,878 (13%) | 0 |
| 1991 | 5,301 (35%) | 3,751 (25%) | 3,272 (22%) | 2,648 (18%) | 0 |

Table 2: Estimated Actual Use Summary (AUMs)

| Year | Livestock Cattle | Wild Horses |
|---|---|---|
| 1983 | No use information | 12 |
| 1988 | 187 | 0 |
| 1989 | 314 | 0 |
| 1991 | 311 | 204 |

Note: Deer use according to NDOW's letter of April 3, 1991 from Region II wildlife biologist Mike Podborny listed deer numbers for 1988, 1989, and 1990. Although these numbers pertain to the North Cove Allotment, a portion of these same deer migrate through the Wells Station Allotment. However, the 2 months use is only an estimate. Field observations by BLM employees show a shorter use period (in fact, only a portion of the herd spends a few days, up to a week) in the Wells Station Allotment. Use is presently not a problem.

Use pattern mapping from 1988, 1989, and 1991 indicates the highest utilization level is heavy. Measured utilization percent is based on the average heavy use of key forage plants observed from 4 key forage plant transects in the use year 1988, from 4 key forage plant transects in 1989, and from 7 key forage plant transects in 1991. The following is a summary of the calculated carrying capacity for the allotment based on the use pattern maps from 1988, 1989, and 1991.

Table 3: Livestock/Wild Horse Carrying Capacity

| Year | Total Actual Use(AUMs) | Measured Util.(%) | Yield Index | Adjusted Util.(%) | Desired Use % | Desired AUMs |
|---|---|---|---|---|---|---|
| 1988 | 295 | 71% | 1.20 | 85% | 50% | 174 |
| 1989 | 458 | 63% | .59 | 37% | 50% | 619 |
| 1991 | 515 | 67% | .79 | 53% | 50% | 486 |

Desired Average AUMs is 426

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.

Wildlife use (i.e. deer) 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) is not considered a concern.

On June 5, 1984 a frequency trend transect was established and read within a black sagebrush vegetation type, a key area of deer spring use in the northeast 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 June 18, 1991 a condition transect was established along the above mentioned frequency transect. From the analysis of the data, the ecological status rated at 40%, or mid-seral. On the same day a condition transect was also read on a winterfat vegetation type, a key livestock use area, located in the northeast portion of the allotment. The ecological status for this site was rated at 65%, or late seral.

These plant communities are considered to be in the desired condition classes and with the desired mix of plant species. In other words, the current vegetation is not out of balance. In the winterfat sites the common invader species, halogeton, is not yet an apparent problem, even in the heavy use areas. A third order soil survey has been completed on the allotment. The survey includes information such as soil productivity potentials, soil limitations, and suitabilities. The soil types are correlated to range site and woodland site data (complete information is on file in the Ely District office).

## V. CONCLUSIONS

### A. LAND USE PLAN OBJECTIVES

III.,B.,1.,(a) - Not Met

Rationale: Although existing vegetation is in the appropriate seral stages short term utilization levels in portions of the pasture exceed allowable use levels, jeopardizing the continuance of desirable ecological condition. Heavy use has occurred on an average of 16% of the allotment as indicated in the three years of use mapping. This percent of heavy use by cattle and wild horses is significant since the accessible/usable portion of the allotment utilized by cattle and wild horses is estimated to be less than 60 percent.

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

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

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

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

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

Rationale: Allowable use levels for wild horses have been exceeded on portions of the allotment. Heavy use has occurred on an average of 16% of the allotment used by cattle and wild horses.

B. RANGELAND PROGRAM SUMMARY OBJECTIVES

III.,B.,2.,(a) - Not Met

Rationale: Although existing vegetation is in the appropriate seral stages, short term utilization levels have exceeded 50% on grasses and winterfat on significant portions of the allotment. Continuation of this overutilization would jeopardize the maintenance of desirable ecological condition.

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

Rationale: Use levels of key browse species in deer use areas (i.e. black sagebrush, big sagebrush, fourwing saltbush, Mexican cliffrose and little leaf mahogany) are within proper use levels, indicating a continuation of suitable habitat conditions.

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

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

VI. TECHNICAL RECOMMENDATIONS

A. Problem

Proper utilization levels have been exceeded on an average of 16% of the allotment used by cattle and wild horses. This level of use is based on 3 years of utilization mapping data. There is a lack of water in the southwest portion of the allotment. This constraint limits cattle distribution. However, heavy use by wild horses is evident in this portion of the allotment. These wild horses trail to and from several springs located to the south and west of the allotment boundary.

B. Solutions

1. Short Term Solutions/Options

Cattle reductions from active preference and wild horse reductions from current use are proposed. The current total demand for cattle and wild horses is 516 AUMs. This includes the cattle preference of 312 AUMs and the current wild horse actual use of 204 AUMs. The 312 cattle AUMs is 60.5% of the total demand. Therefore, the desired AUM cattle preference is 258 AUMs (.605 x 426 AUMs). This is a reduction of 54 AUMs or a 17% reduction from active preference. The 204 wild horse AUMs are calculated to be 39.5% of the total demand. The desired wild horse use is 168 AUMs (.395 x 426 AUMs). This equates to an AML of 14 wild horses yearlong. This

is a reduction of 36 AUMs or a 17% reduction from current use.

Cattle distribution could be improved somewhat through herding, salting, and water hauling. However, a significant portion of the allotment is rugged terrain covered with pinyon-juniper trees and opportunities for enhanced distribution is limited. Understory forage (i.e. native grasses) in the pinyon-juniper areas is infrequent. In addition, water sources are lacking in the southwest portion of the allotment.

2. Long Term Solutions

Monitoring the grazing use on the allotment will determine whether further adjustments in cattle, wild horses, and/or wildlife use are necessary. Currently, deer use is not considered a resource problem since use varies from year to year depending on migrating numbers.

3. Additional Monitoring Data Required

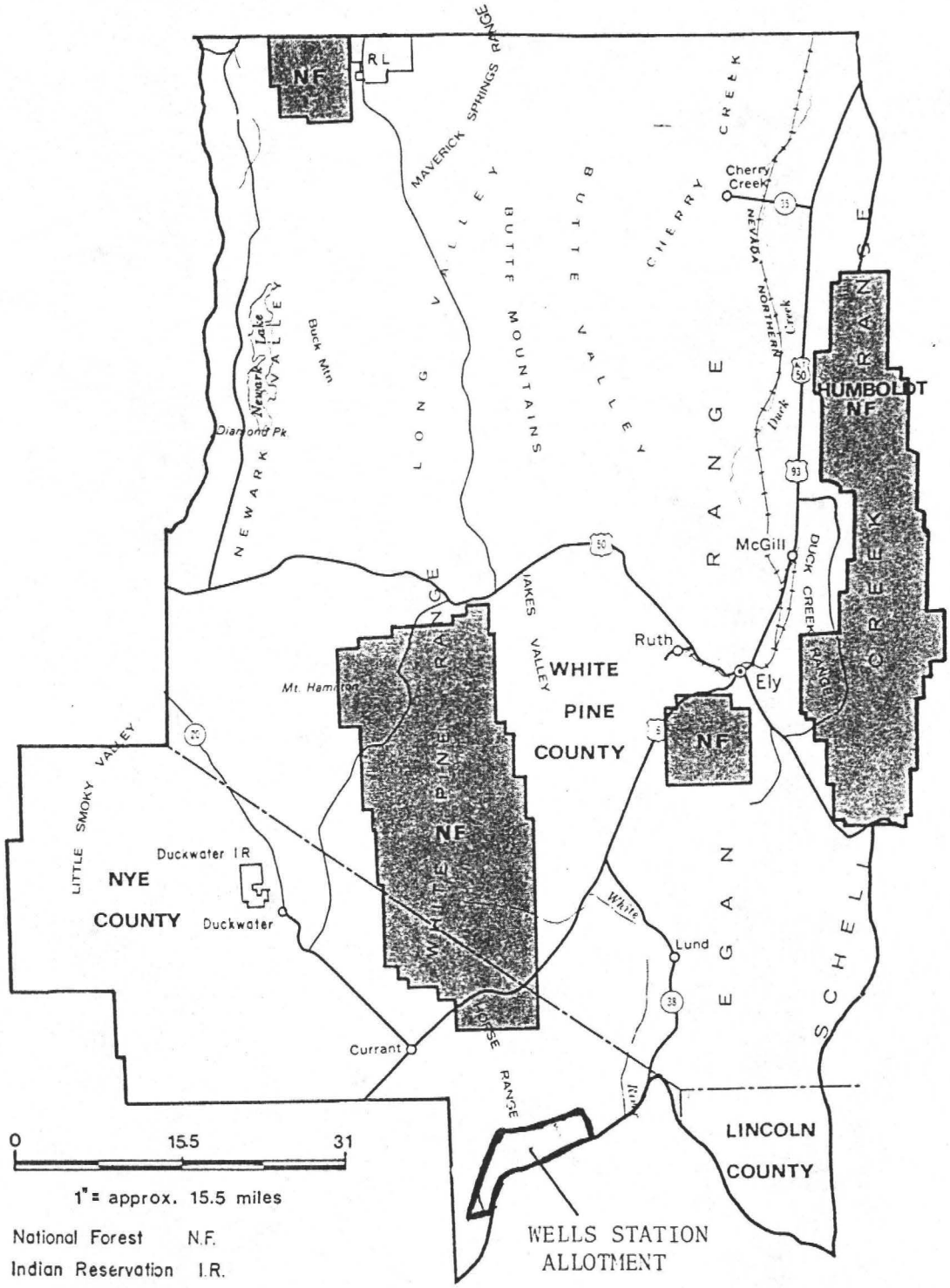
Continue to conduct use pattern mapping, re-read trend studies, and evaluate key management area locations.

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.

Determine and/or re-evaluate ecological condition on key areas particularly where statistically significant changes in frequency of key species have occurred.

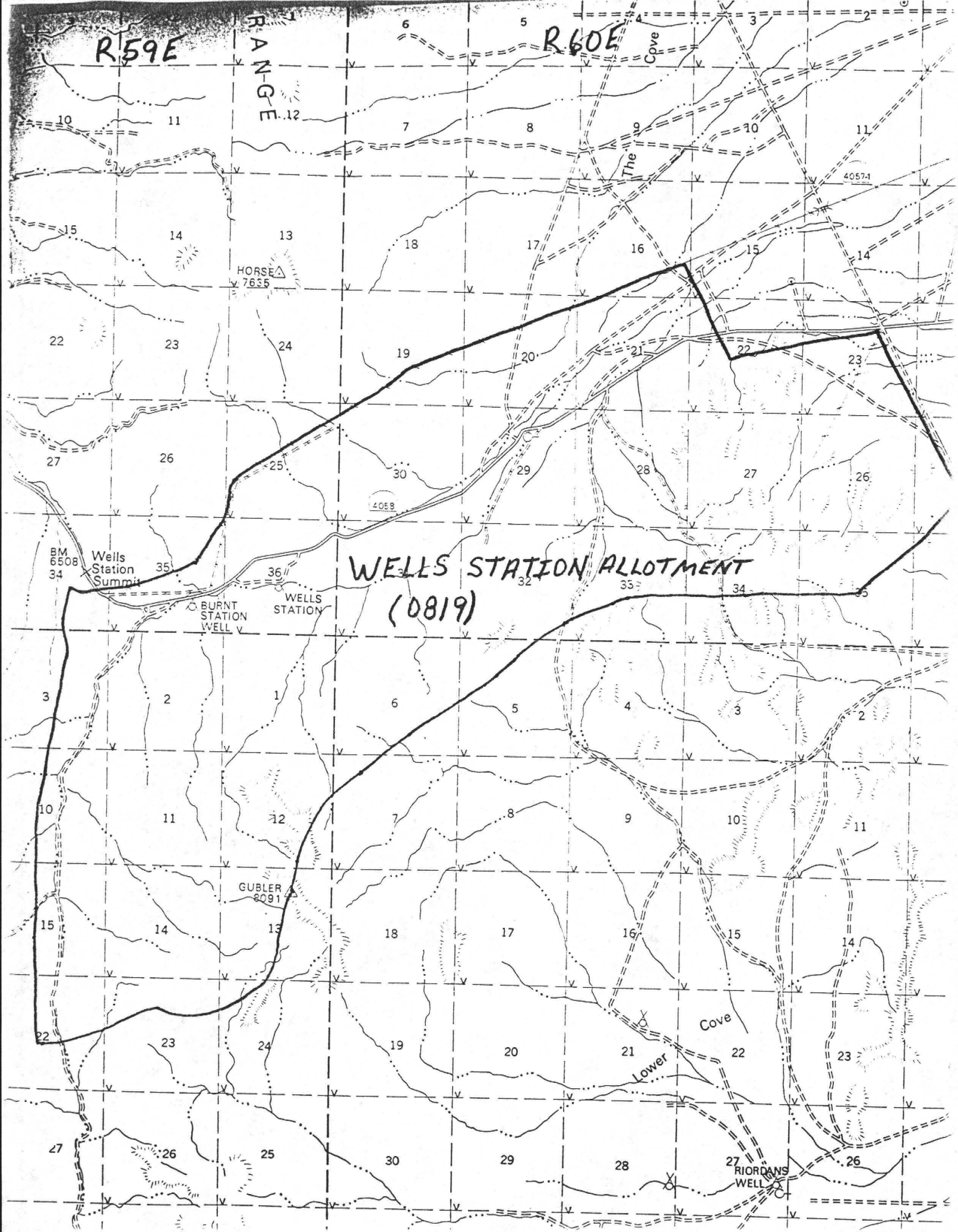
APPENDIX 1

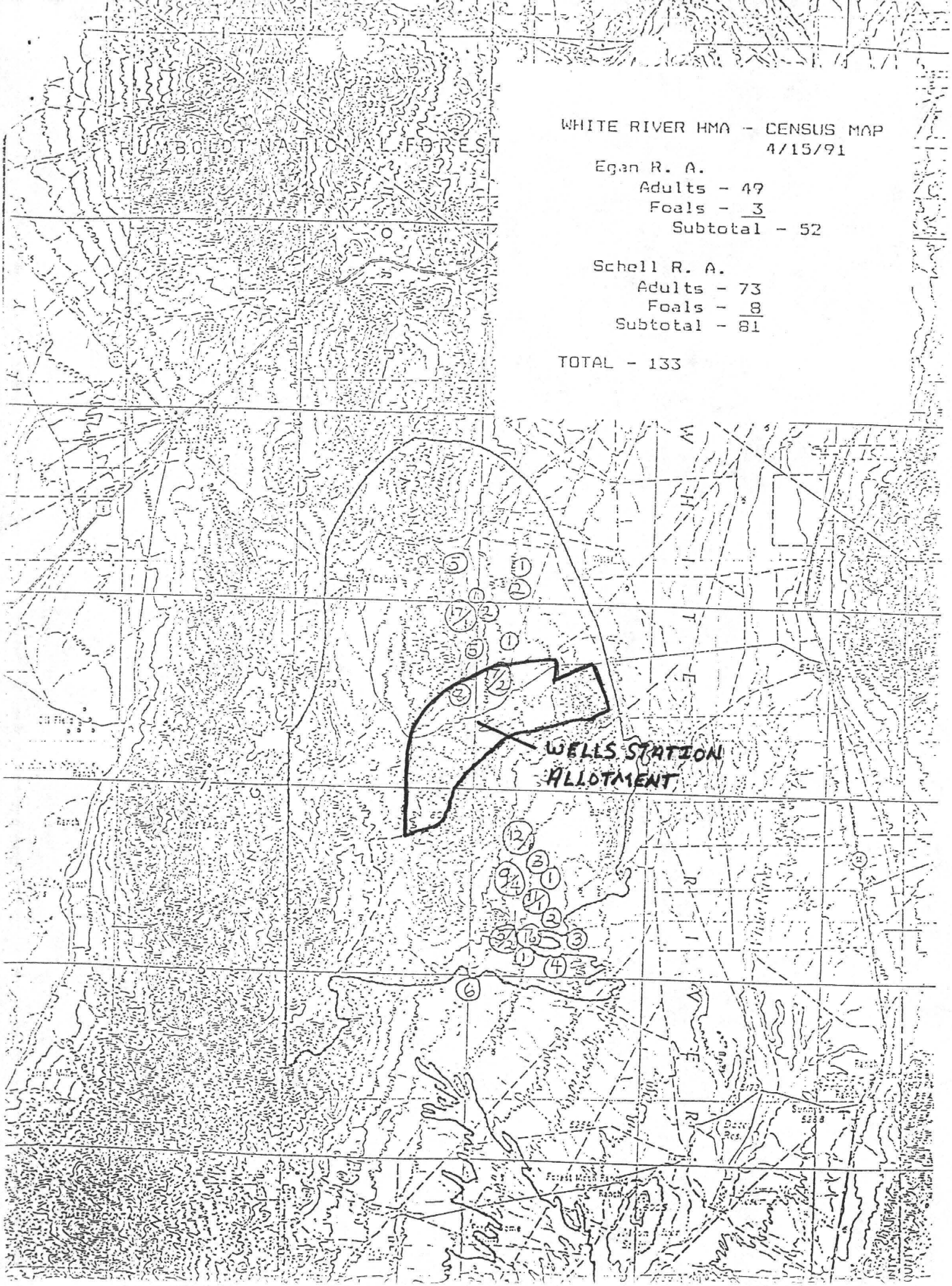



# EGAN R.A.

## ELY DISTRICT

BUREAU OF LAND MANAGEMENT
U. S. DEPARTMENT OF THE INTERIOR


R59E
RANGE
R60E
Cove
The
4057-1
HORSE
7635
4058
BM
6508
Wells
Station
Summit
BURNT
STATION
WELL
WELLS
STATION
WELLS STATION ALLOTMENT
(0819)
GUBLER
8091
Cove
Lower
RIORDANS
WELL

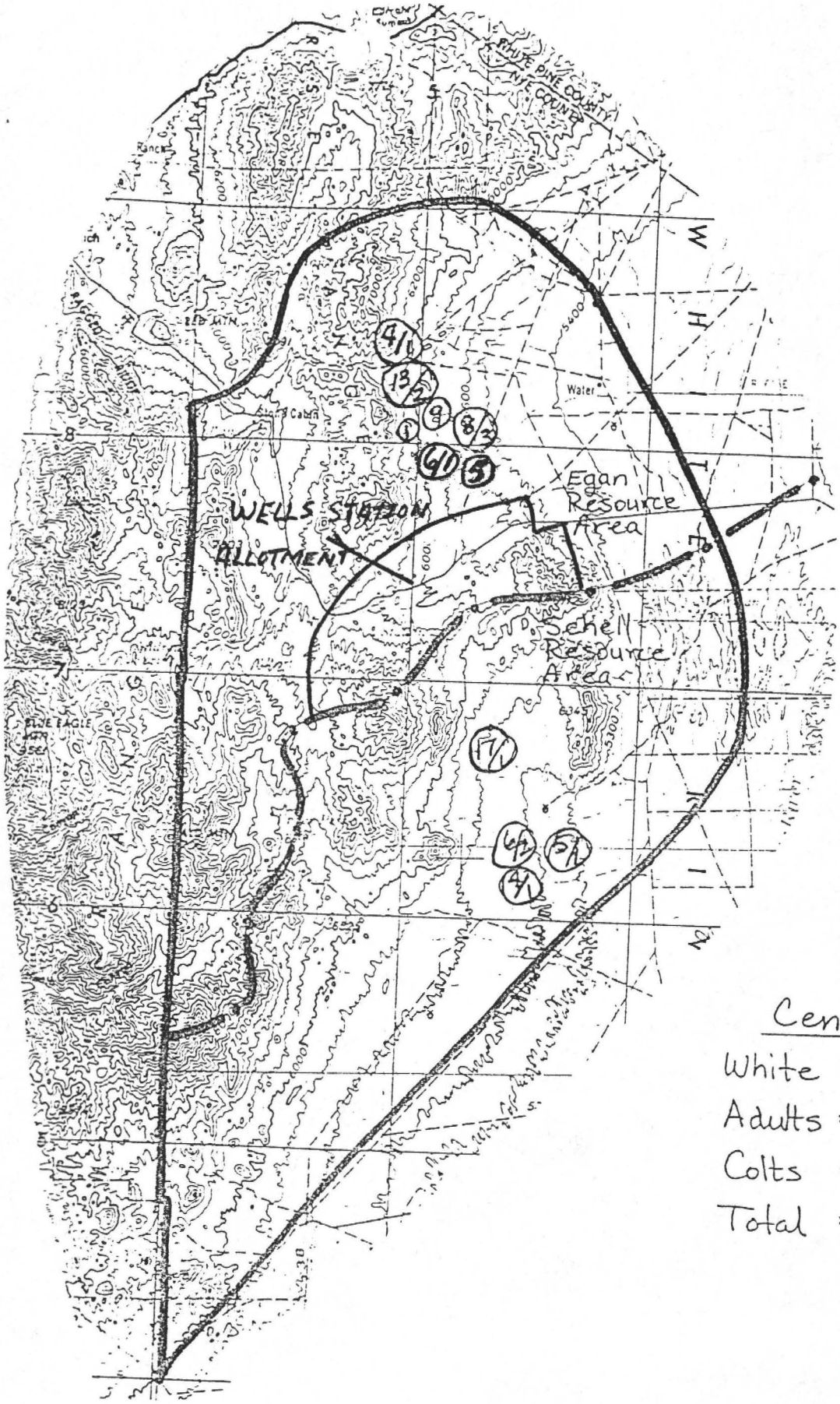



WHITE RIVER HMA - CENSUS MAP
4/15/91

Egan R. A.
Adults - 49
Foals - 3
Subtotal - 52

Schell R. A.
Adults - 73
Foals - 8
Subtotal - 81

TOTAL - 133




## Census Map

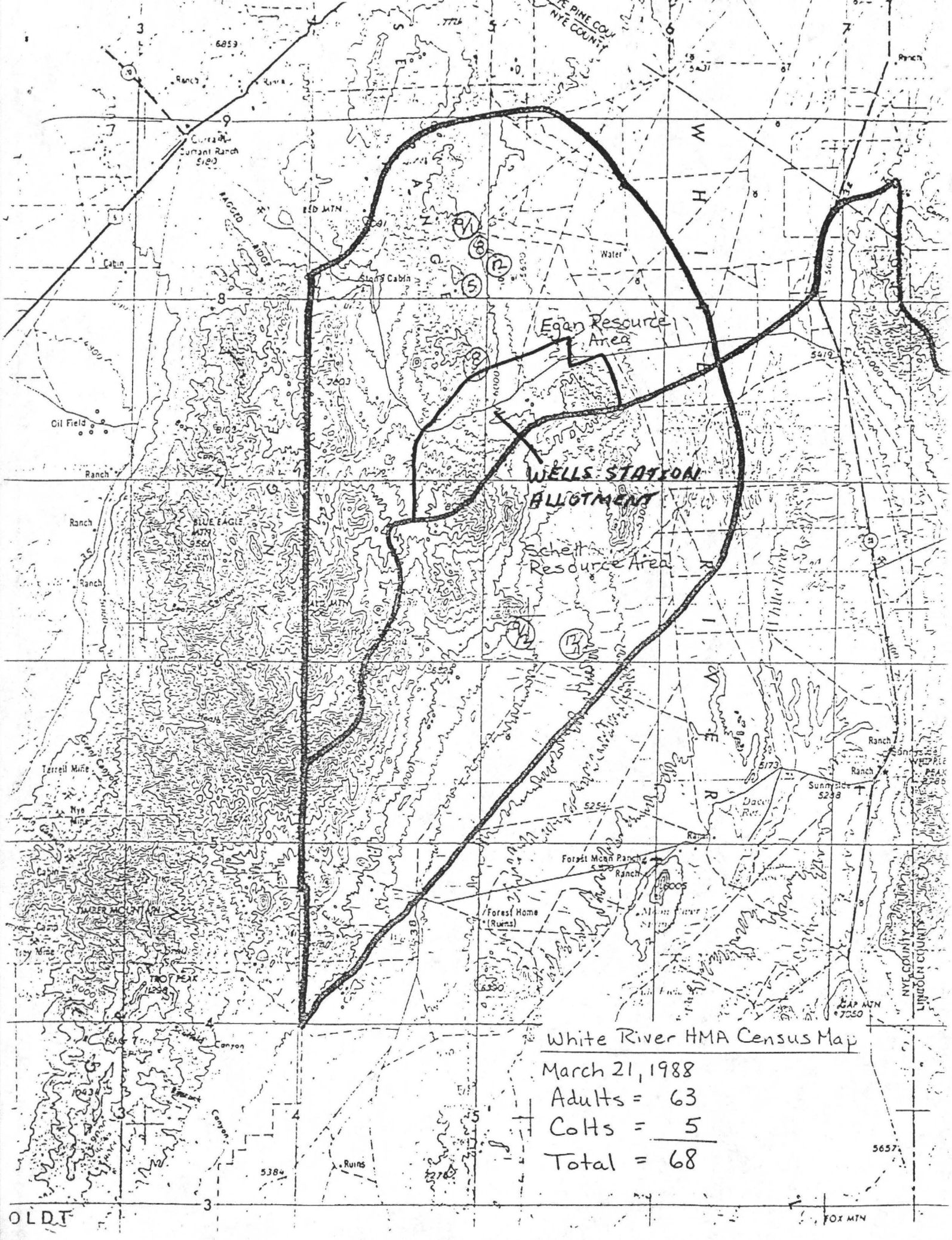
White River HMA

Adults = 78

Colts = 12

Total = 90

March 14, 1989




White River HMA Census Map

March 21, 1988

Adults = 63

Colts = 5

Total = 68

UNITED STATES GOVERNMENT

# memorandum

DATE: June 9, 1983

REPLY TO ATTN OF: Wild Horse and Burro Specialist 4700 (NV-043)

SUBJECT: Wild Horse Census-White River Herd Use Area

TO: The Files-White River Herd

On May 27, 1983 an Aerial Census was conducted using an El Aero B-2 Helicopter.

Hal Bybee Wild Horse Specialist-Resource Staff and A. Wayne Stevens-Range Conservationist-Schell Resource Area conducted the census.

The area was flowen in north-south transects, and was intended to be as complete as count as possible.

Weather conditions were ideal with clear skies, light winds and excellent visability.

Previous Wild Horse Sightings have been reported in the area, but only one horse was sighted in the area.

Census Results

Wells Station Area
1 white stud