

1985

NUT MOUNTAIN
HERD MANAGEMENT AREA PLAN

Surprise Resource Area
Susanville District
1985

INTRODUCTION

A. Location

The Nut Mountain Herd Management Area (HMA) is located approximately 40 miles east of Cedarville, California in Washoe County, Nevada (see Map #1). The HMA is within the boundary of the Nut Mountain Grazing Allotment and encompasses 40,680 acres of which 38,840 acres are BLM and 1,840 acres are private.

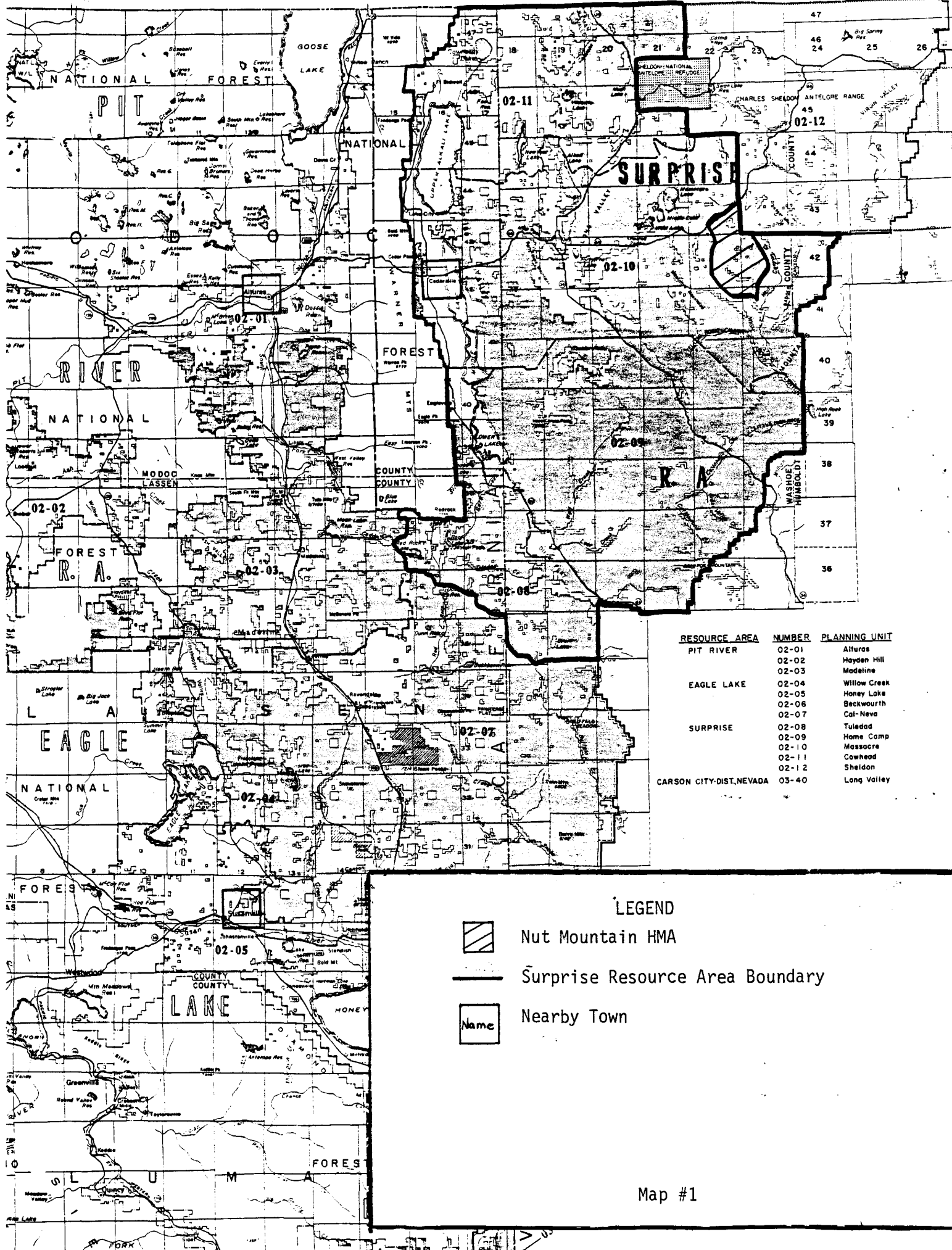
The northern boundary is Nevada Highway 8A (southern boundary for Bitner HMA), the eastern boundary is the Sheldon National Wildlife Refuge and the Wall Canyon HMA, the southern boundary is the High Rock HMA, the western boundary consists of the Massacre Mountain Allotment, Cavalry Camp Seeding fence in Nut Mountain Allotment (see Map #2). The entire area is surrounded by fence except for a small section on the northern boundary.

B. Wild Horse Use History

The Nut Mountain Herd Management Area encompassed the old Massacre Lakes HMA and the old High Rock HMA boundaries (see Map #3). The HMA is separated from other HMA's by fence for the most part, however, part of the boundary between Bitner HMA and Nut Mountain is only Nevada Highway 8A. Historically there has been no movement of horses back and forth in this area.




An estimate of wild horse numbers based on past inventories has been summarized in Appendix A.

The Susanville District Wild Horse and Burro Plan provides a general history of wild horses in the Susanville District.



RESOURCE AREA	NUMBER	PLANNING UNIT
PIT RIVER	02-01	Alturas
	02-02	Hayden Hill
	02-03	Madeline
EAGLE LAKE	02-04	Willow Creek
	02-05	Honey Lake
	02-06	Backworth
	02-07	Cal-Neva
	02-08	Tuledas
SURPRISE	02-09	Home Camp
	02-10	Massacre
	02-11	Cowhead
	02-12	Sheldon
CARSON CITY-DIST, NEVADA	03-40	Long Valley

LEGEND

-  Nut Mountain HMA
-  Surprise Resource Area Boundary
-  Nearby Town

Map #1

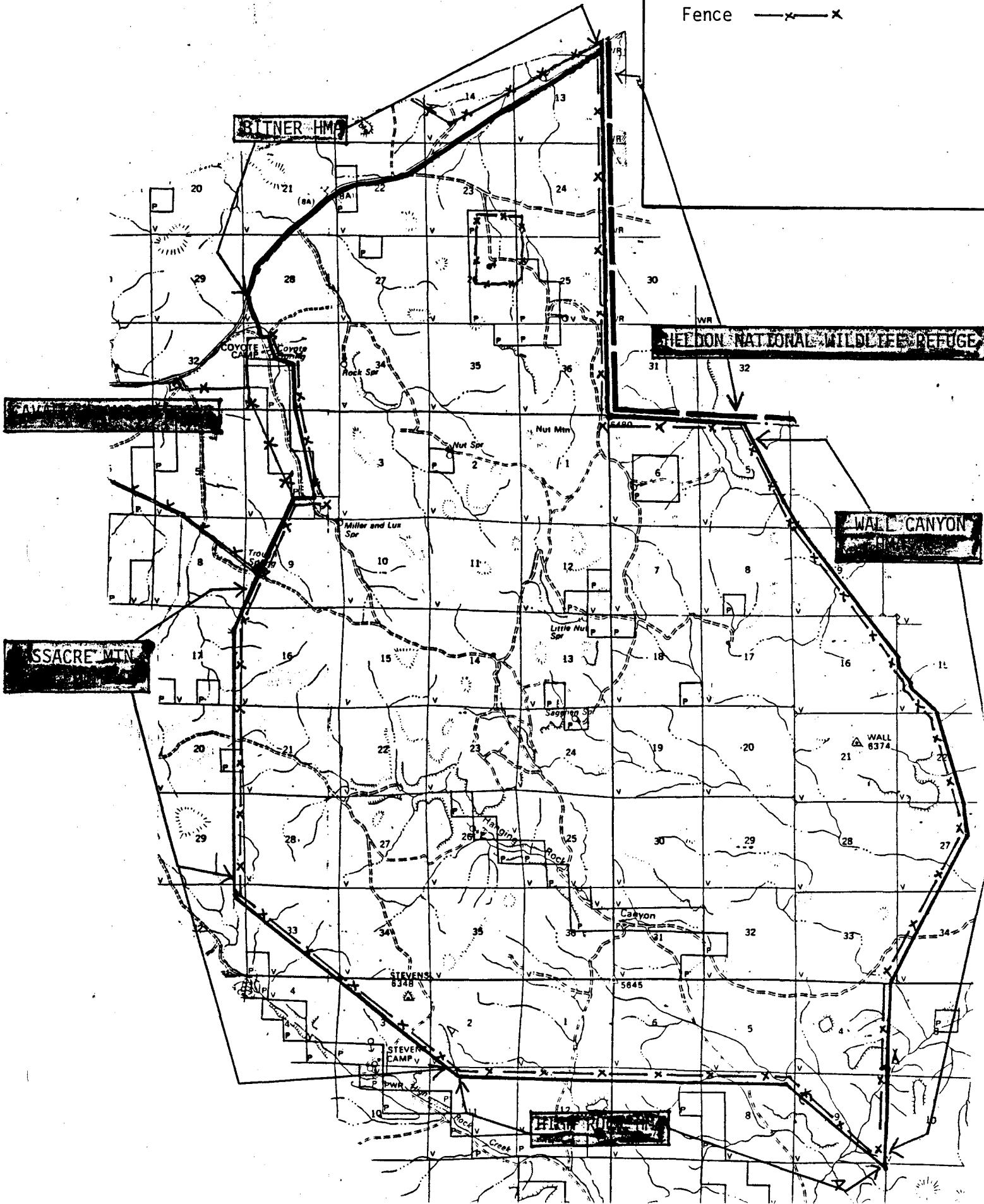
Nut Mountain HMA

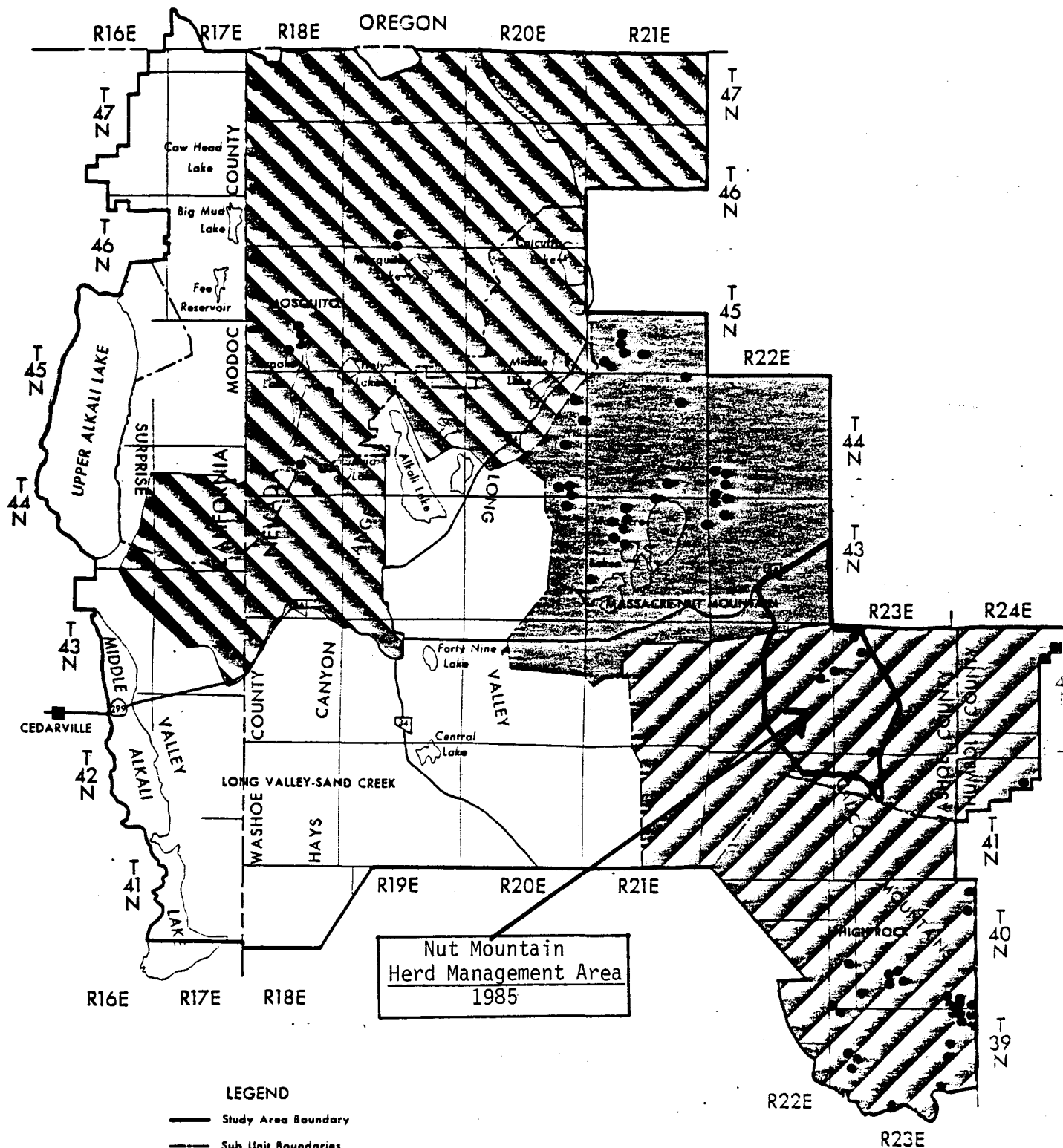
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Map #2

HMA Boundary ———

Fence —x—x—





COWHEAD/MASSACRE
 STUDY AREA
 GRAZING ENVIRONMENTAL STUDY
 WILD HORSES

RESOURCE INFORMATION

A. Land Use Plan

The Cowhead/Massacre Environmental Impact Statement was completed in 1980. Land use decisions were formed from this ES and documented in the Cowhead/Massacre Management Framework Plan (MFP) in 1981. The MFP established a minimum of 30 wild horses and maximum of 55 wild horses for the Nut Mountain HMA.

Due to the small size of this herd any decreases in AUMs as a result of vegetative trend would be absorbed by livestock. Any subsequent increases would be given to livestock up to total preference. Any increases over total preference would be shared proportionately by livestock and wild horses.

B. Wild Horses

The Nut Mountain HMA provides sufficient yearlong range for herd management levels specified in the MFP. Summer and winter range areas overlap to some degree in this HMA. Most of the winter use occurs in the southeastern part of the HMA adjacent to Wall Canyon (see Map #4). To date wild horses have not moved from the Nut Mountain HMA north into the Bitner HMA to winter.

Although some interaction between wild horses in this HMA and the three surrounding HMA's is suspected, the occurrence is not significant enough to warrant concern.

C. Other Resources

The Nut Mountain HMA encompasses a large portion of the Nut Mountain Grazing Allotment. This Allotment is being managed under deferred rotation grazing system developed in the Allotment Management Plan. This provides spring, summer and early fall use for approximately 815 cattle.

The HMA also provides habitat for typical Great Basin wildlife species. In particular, this area has high concentrations of both deer and antelope.

In addition, the south half of the HMA provides a significant amount of base for the High Rock watershed. The vegetation in the upper elevation areas of this watershed are in mid to late seral status. The lower elevation areas on the extreme south end of the HMA are in a early seral condition (low vegetative cover).

The southeastern part of this HMA is part of Wilderness Study Area 914. This area is presently being evaluated under an Environmental Impact Statement to determine suitability for wilderness.

Appendix B provides additional resource information.

Nut Mountain HMA

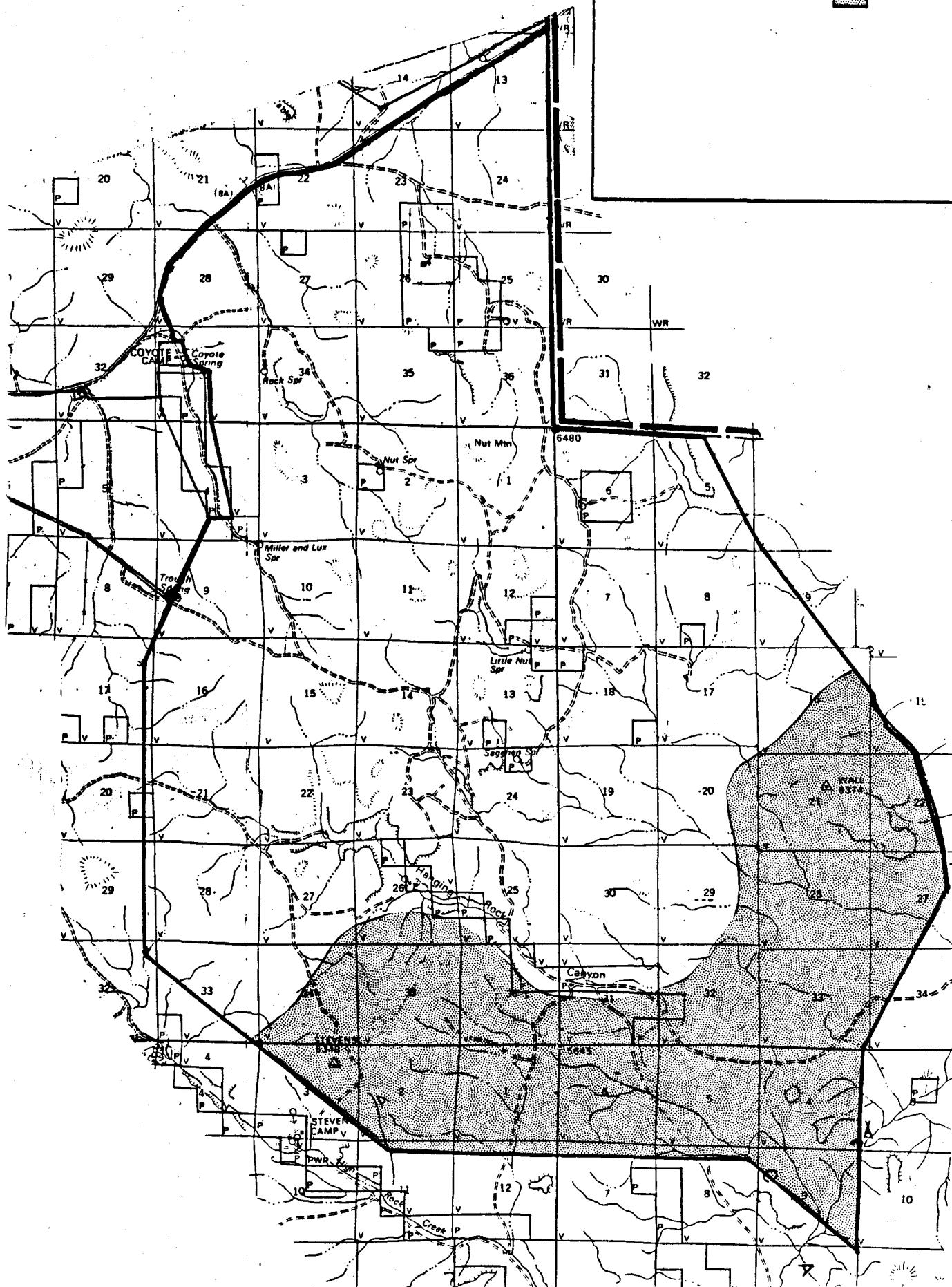
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Map #4

Summer Range



Winter Range



OBJECTIVES

1. Maintain a healthy and viable wild, free-roaming horse herd in the Nut Mountain HMA.

Method: Control herd numbers and implement the Nut Mountain AMP so as to maintain the vegetative base in a healthy and stable condition.

Monitor: Herd reproduction levels will be used as an indicator of health and viability. A rate of increase at or below 10% will be an indicator of low herd health and viability. In addition, vegetative trend will be monitored to evaluate vegetative condition.

2. Maintain a minimum of 30 head and maximum of 55 head of wild horses.

Method: Periodic removal of horses through accepted gathering methods.

Monitor: Bi-annual inventory of the herd will be made to determine herd size.

3. Assess the amount of interchange between the Nut Mountain HMA wild horses and the surrounding HMA's in the Surprise R.A.

Method: Visual observations through the use of marker horses and known reproductive rates for the Nut Mountain Herd. Marker horses will be collared for easy identification from the air.

Monitor: Bi-annual inventory of wild horses in the HMA. Track the rate of increase.

4. Develop a highly adoptable horse through the selection of desirable breeding animals.

Method: Gather additional (greater than the excess) horses when gathering this herd. Select wild horses with desirable characteristics for adoption for return to the breeding population.

Monitor: Adoptability will be based on number of attempts required to adopt a horse compared with other HMA horses.

5. Reduce the incidence of inbreeding in the Nut Mountain Herd.

Method: Periodically introduce new horses into the herd from other wild, free-roaming horse herds.

Monitor: Viability as determined by rate of increase will be the primary indicator. Visual observations of conformation may also indicate inbreeding problems.

MANAGEMENT METHODS

Removal

Wild hroses will be gathered when adult horse numbers reach or exceed 55 head. The herd will be reduced to the minimum management level of 30 horses, including foals selected for retention. (Foals do not count as part of the maximum herd number until January 1 following the spring in which they were born).

Horses in addition to the excess will be gathered when possible to allow for the selection of animals based on size, color, sex, conformation and age.

The maintenance of horses at this stocking rate level will assist in maintaining the vegetative sites in a healthy condition.

Wild horses will be gathered during the summer or the fall once foals are old enough to keep up with the herd. Trap site locations can be seen on the trap site map (see Map #5).

Selection

Wild horses in addition to the excess will be gathered to facilitate the selection process. This will allow the manager to up grade the herd in an orderly manner. Those horses meeting the selection criteria will be returned to the breeding population.

Criteria

1. Quality

Quality will be based on the commonly accepted conformation standards for a light horse type, without regard to a particular breed.

2. Color

All colors will be acceptable in this herd. Dark or black hooves will be preferred over light or white hooves.

3. Size

A fifteen hand or taller horse is preferred.

Selection criteria will be applied in order to quality, color and size.

It is assumed, the use of specific conformation, color and size selection criteria will allow for the development of a more adoptable horse.

Sex Ratio

The commonly accepted natural sex ratio of 50% male and 50% female will be managed for in the Nut Mountain HMA herds. When gathering an equal number of males and females will be removed from the herd.

In a herd of this size a 50/50 sex ratio should reduce potential inbreeding problems in this herd.

Age Structure

An exact age structure will not be managed for in this HMA. However, when possible those horses which are less adoptable due to old age will be left on the HMA to live out their natural life.

Project Development

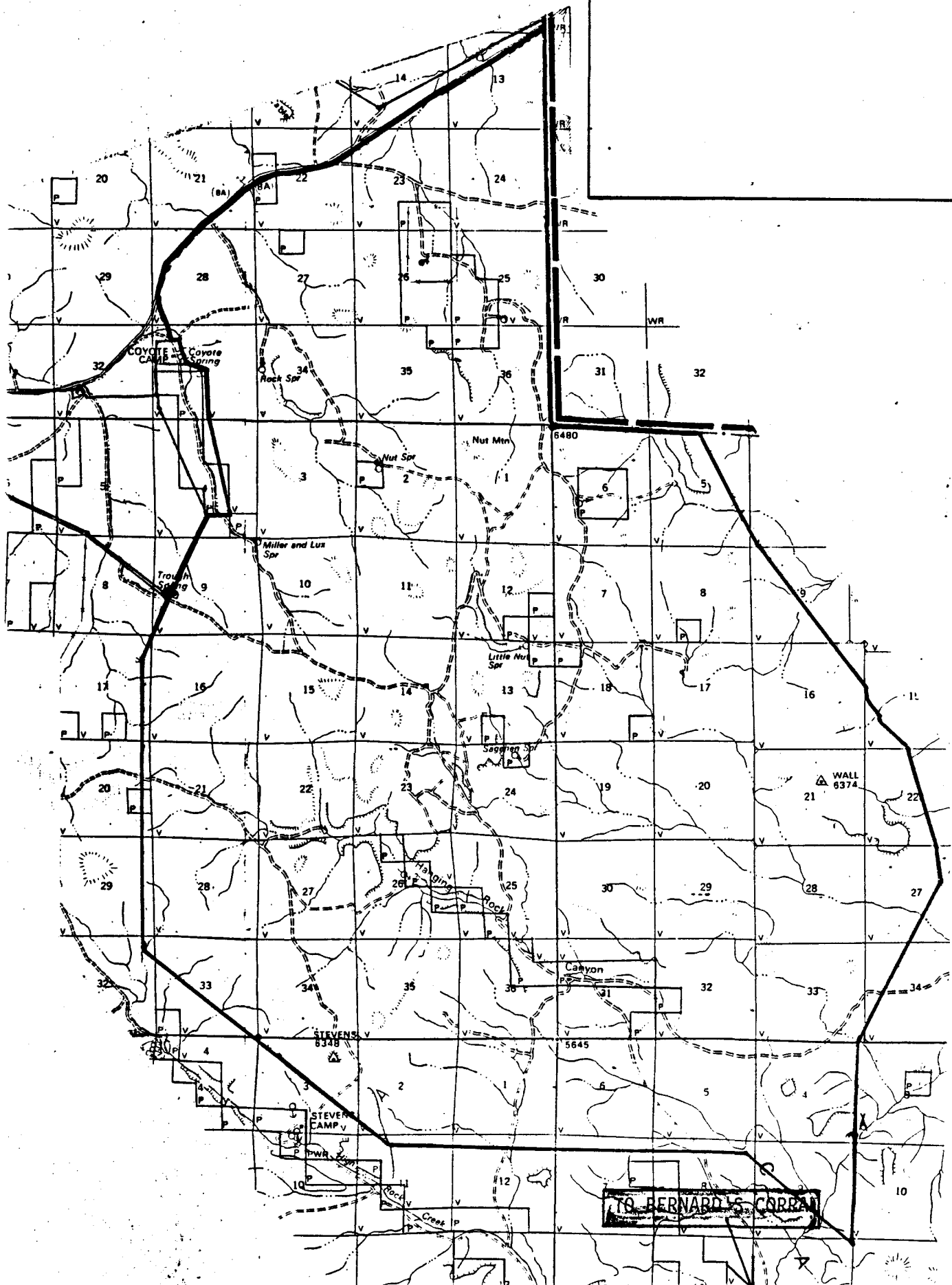
Specific improvement projects for wild horses have not been proposed for the implementation of this Plan. Wild horses in this area have access to water developments such as reservoirs and springs yearlong. In addition, perennial stream water is available in the Hanging Rock drainage. Existing projects are identified on Map #6.

Nut Mountain HMA

Legend

Map #5





Trap Site location is in the of Bernard's Corral in the High Rock HMA.

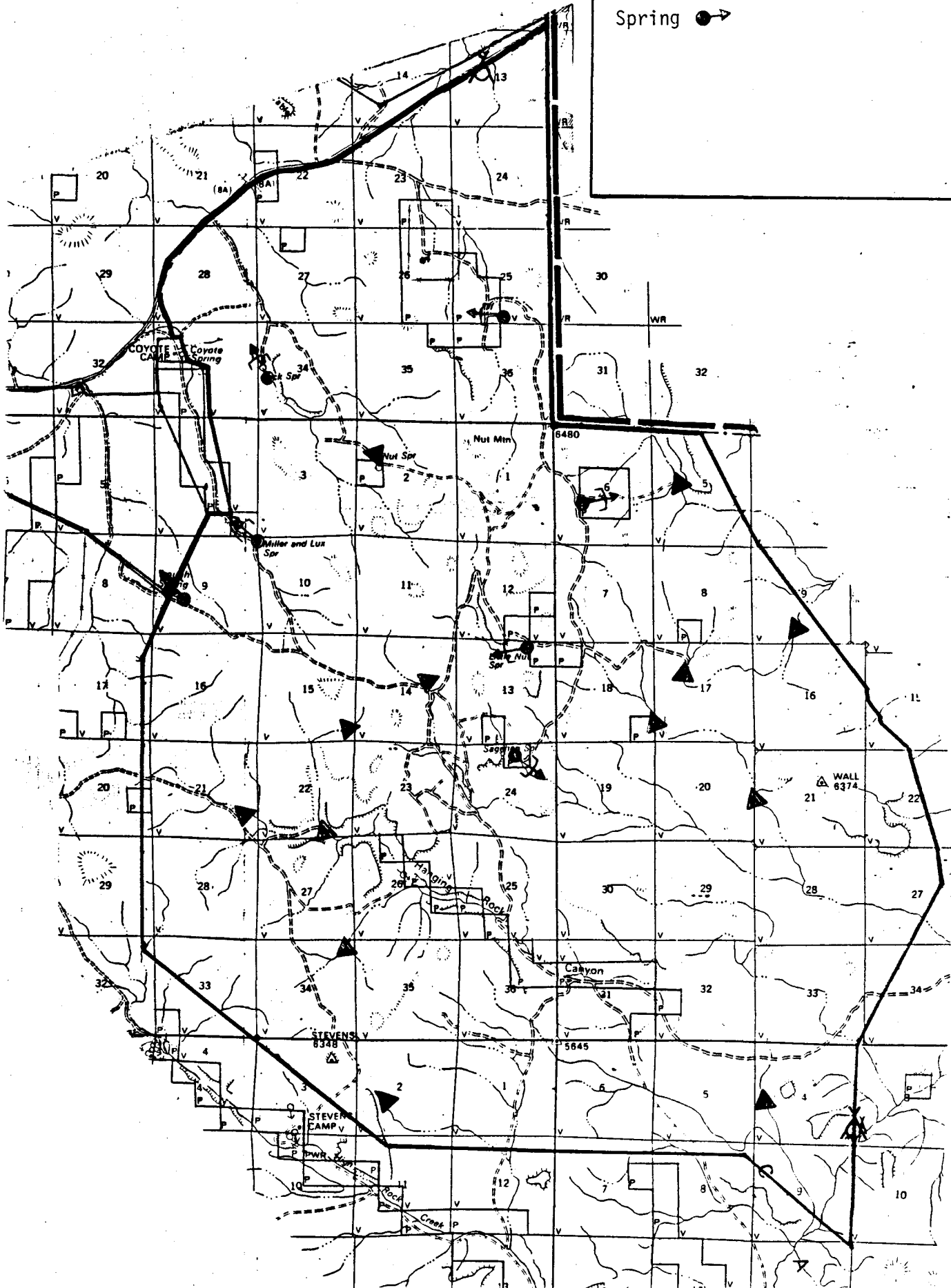


Nut Mountain HMA

Legend

Map #6

- Reservoir 
- Well 
- Spring Development 
- Spring 



EVALUATION AND REVISION

A. Evaluation

Management methods as they relate to achieving the HMA's objectives will be evaluated based on the following monitoring techniques.

1. Rate of increase will be measured on the gather years. Reproduction information can best be gathered at this time. Bi-annual aerial counts of herds will assist in achieving an accurate rate of increase for the herd.
2. Visual observations of horses in the field, trap site or the corrals. These observations will enable observers to evaluate whether selection criteria is achieving conformation, color and size objectives. In addition, these observations may indicate inbreeding problems.
3. The tracking of horses through the adoption program by HMA will allow for the evaluation of selection criteria for the improvement of adoptability.
4. Bi-annual aerial counts and observations will allow for the evaluation of wild horse interaction between HMA boundaries. An aerial count in the winter and in the summer will be necessary to evaluate this problem.

Information will be recorded in Appendix C of this document.

B. Revisions

Upon completion of annual evaluations minor revisions may be made to simplify the Plan or correct specific problems. Major revisions will be necessary if the Plan is not working as written or if reasonable progress towards objectives is not being made.

COOPERATION IN MANAGEMENT

Evaluation and revisions of all resource management plan (Wildlife Habitat, Cultural Resource, Allotment and Herd Management Plans) in this area will be coordinated to ascertain the effects on each resource. This coordination process must take place prior to finalizing revisions to any of the plans.

IMPLEMENTATION COSTS

The following specific actions and costs will be required to implement the Nut Mountain HMAP. Specific actions will be broken into three categories; project development, annual costs and every three year costs.

1.	<u>Project Development</u>	<u>\$ Cost</u>
	Offset Fence Panels (1 - @ 147/each)	147.00
	TOTAL	\$ 147.00
2.	<u>Annual Monitoring</u>	
	2 Hours of flight time (@ \$150/hour)	300.00
	.15 WM to record data track adoptability	525.00
	TOTAL	\$ 825.00
3.	<u>Every Three Years</u> ^{1/}	
	Selection, Adoption	
	Capture 40 horses (@ \$250/each)	10,000.00
	Select 10 horses for return to HMA (@ \$50/each)	500.00
	Adoption of 30 horses	
	Processing (@ \$38/each)	1,140.00
	Adoption (@ \$180/each)	5,400.00
	Fixed & Overhead (@ \$145/each)	4,350.00
	TOTAL	\$21,390.00

1/ It is anticipated this herd will be gathered every three years based on the current rate of increase of wild horses in this area.

APPROVAL

I, the undersigned, have reviewed this Herd Management Area Plan and agree it meets the elements of the Land Use Plan Decisions for wild, free-roaming horses in the Surprise Resource Area. This Plan is consistent with and subject to all provisions of the Code of Federal Regulations (43 CFR 4700).



Area Manager

9/25/85

Date