

CARTER RESERVOIR  
HERD MANAGEMENT AREA PLAN

Bureau of Land Management  
Surprise Resource Area  
Susanville District  
1985

## INTRODUCTION

### A. Location

The Carter Reservoir Herd Management Area (HMA) is located approximately ten (10) miles east of Cedarville, California mostly in Washoe County, Nevada. (see Map #1)

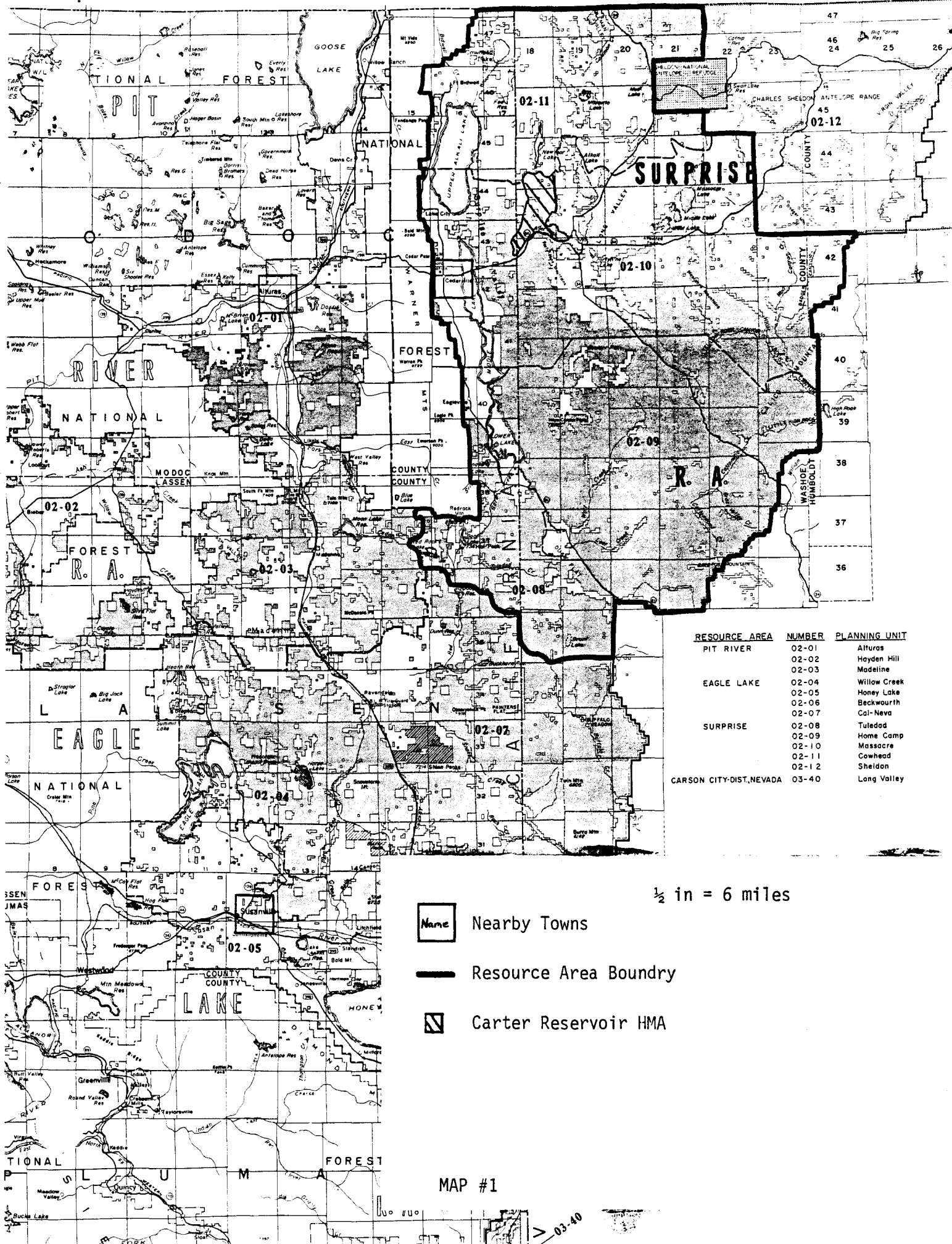
The HMA consists of 23,200 acres of which 1,320 acres are private and 21,880 acres are BLM. Elevation ranges from 4900 to 6600 feet with the higher elevations being to the east. The topography is diverse and ranges from gently rolling hills to steep rocky slopes.

The Carter Reservoir HMA is bordered by three (3) different allotment fences. The Boggs fence to the north and west, the Crooks Lake fence to the north and the Long Valley fence and rim to the east. The southern boundary is Nevada Highway 8A. There are no interior fences with the exception of Parman's private field. This is an established fence which horses are accustomed. (see Map #2)

### B. Wild Horse Use History

The Carter Reservoir HMA is a portion of the old New Years Lake HMA which was established by the Susanville District in 1973. Wild horses were removed from most of the New Years Lake HMA in 1980. The Carter Reservoir HMA is the only HMA remaining within the old New Years Lake HMA boundaries. (see Map #3)

The Susanville District Wild Horse and Burro Plan provides a general history of the wild horses in the District. Appendix A provides a brief summary of past and present wild horse numbers in the Carter Reservoir HMA.



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

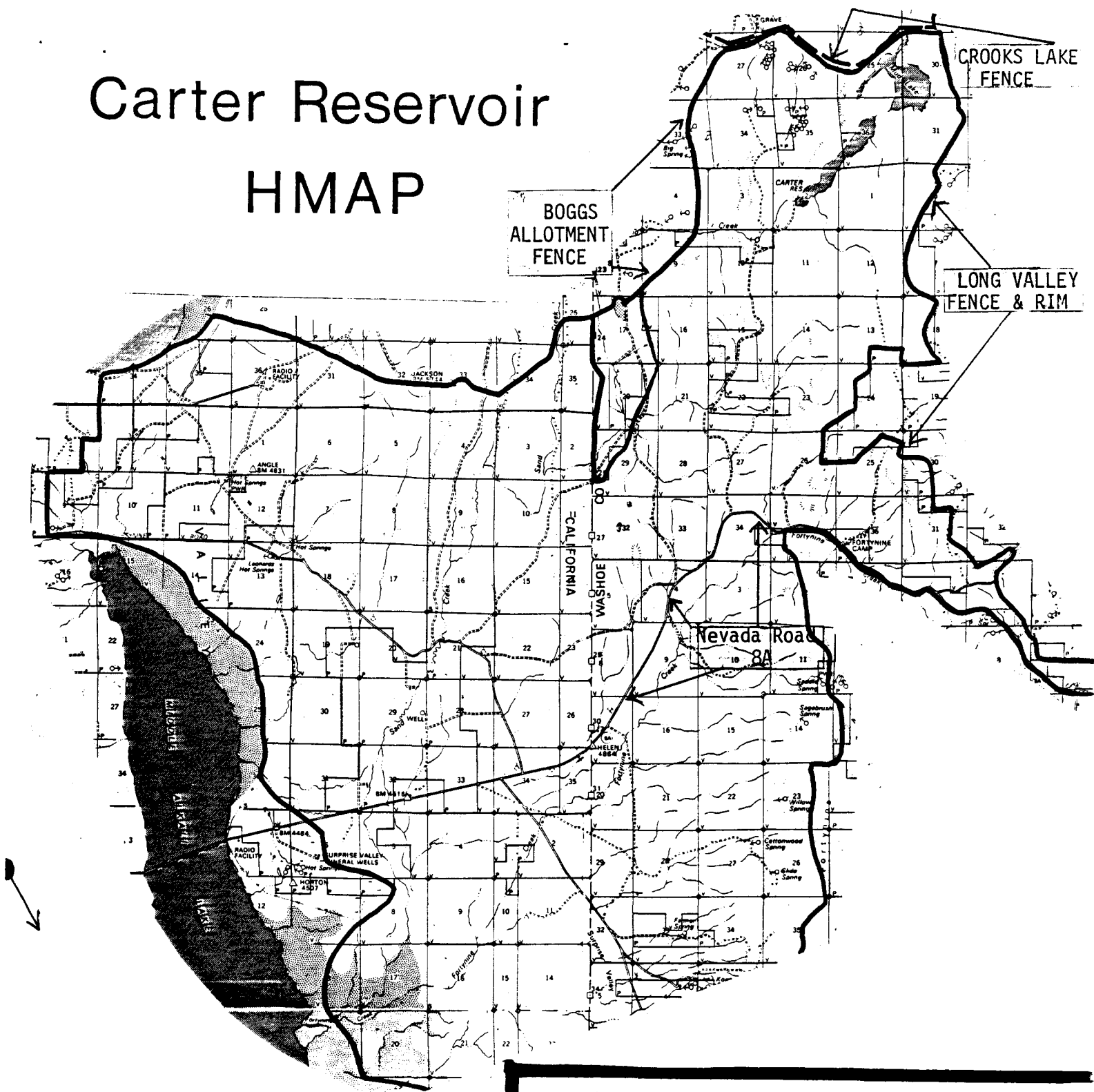
1/2 in = 6 miles

- Name Nearby Towns
- Resource Area Boundry
- Carter Reservoir HMA

MAP #1

03-40

# Carter Reservoir HMAP



BOGGS  
ALLOTMENT  
FENCE

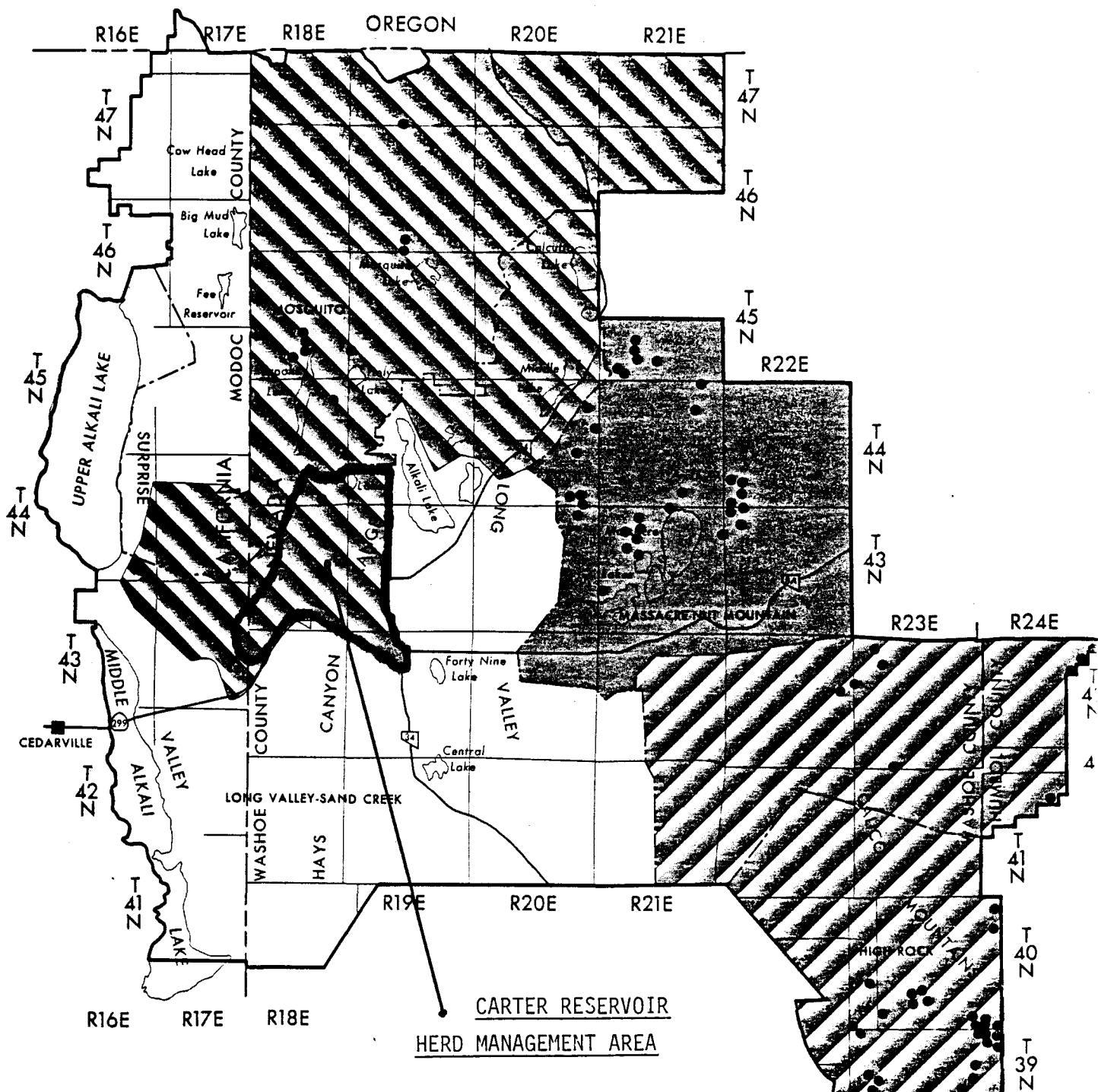
CROOKS LAKE  
FENCE

LONG VALLEY  
FENCE & RIM

Nevada Road  
8A

1/2 in = 1 mile

Carter Reservoir HMA Boundary



- LEGEND**
- Study Area Boundary
  - Sub Unit Boundaries
  - Herd Management Areas**
    - New Years Lake
    - Massacre Lakes
    - High Rock
  - Band Locations  
September 1977

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 Environmental Statement through the Cowhead/Massacre Management Framework Plan (MFP) in April 1981. The MFP established a minimum herd number of 20 and a maximum of 30.

Due to the small size of this herd, any stocking rate reductions determined through monitoring in the Carter Reservoir area would be taken by livestock. Any increases in stocking rate would be given to livestock up to the total preference for livestock. Any increases above total preference would be shared proportionately between wild horses and livestock.

### B. Wild Horses

The Carter Reservoir Herd Management Area is a small isolated area. This isolation presents an opportunity to preserve a specific herd characteristic such as color and markings. It also creates a potential for inbreeding problems to occur.

Presently there are 22 wild horses in the HMA. Thirteen horses are dun color with dorsal stripes. The remaining nine (9) consist of bay, sorrel and yellow colors. This herd was gathered in February of 1985.

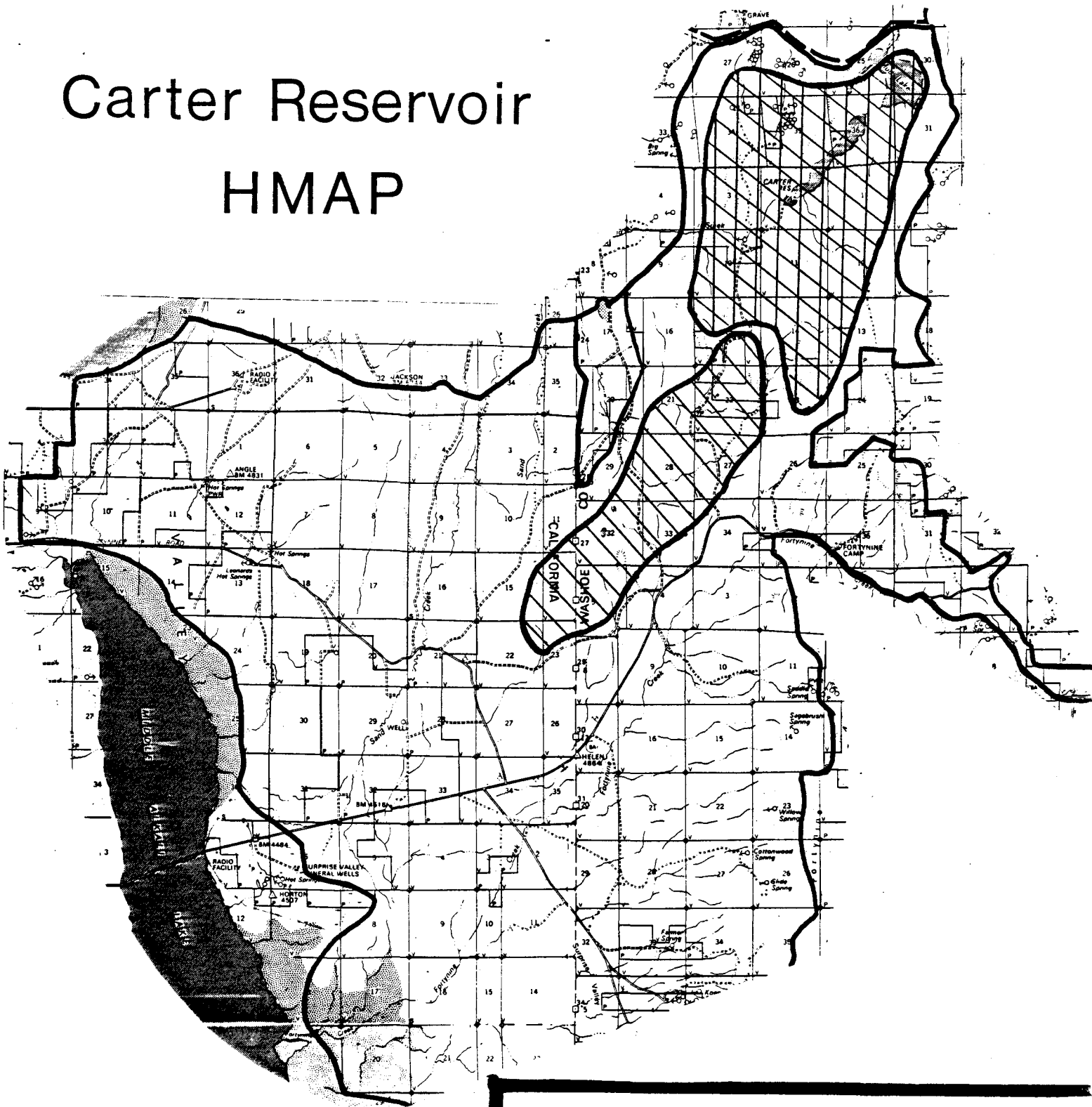
Wild horses in this area tend to summer on the higher elevation slopes and plateaus in the northern most part of the HMA. During the colder and wetter parts of the year (winter) horses will move to the lower elevation south slopes in the southwestern part of the HMA (see Map #4).



### C. Other Resources

The Carter Reservoir HMA is within the boundary of the Sand Creek Grazing Allotment. This Allotment provides forage for cattle and habitat for typical Great Basin wildlife species. A detailed resource description of the Carter Reservoir area can be found in the Sand Creek Allotment Management Plan (AMP) (Appendix B). Additional information regarding resources is available in the Sand Creek Habitat Management Plan (HMP).

Wild horses, cattle, deer and antelope are prevalent to the Carter Reservoir Area. Proper use of the vegetative base by wild horses and cattle can be managed through stocking rate control. Since the vegetation is the primary resource supporting the grazing animals, the major monitoring effort will be directed toward trend and utilization studies on the key vegetative sites.

# Carter Reservoir HMAP



-  HMA Winter Range
-  HMA Summer Range

OBJECTIVES

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

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

Remove animals with obvious defects during the selection of animals to be retained in the breeding herd.

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

2. Reduce the incidence of inbreeding problems in the Carter Reservoir HMA.

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

Monitor: Viability as determined by annual rate of increase will be the primary indicator. Visual observations of horse conformation will also be used to indicate if inbreeding problems are occurring.

3. Maintain a minimum of 20 head and a maximum of 30 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 population.

4. Develop a highly adoptable horse for the BLM's Wild Horse and Burro Adoption Program. Excess horses should move through the adoption program with ease.<sup>1/</sup>

Method: Gather the entire herd when making reductions. Select horses with adoptable characteristics for return into the breeding population to be retained on the range.

Monitor: Adoptability will be based on the number of attempts required to adopt a horse.

1/ Refer to Susanville District's "Wild Free Roaming Horse and Burro Program"; Chapters XXV and XXVII, Objective 6.



5. Maintain and enhance the primitive color and marking characteristics in the Carter Reservoir Herd. Specifically, select wild horses with dorsal stripes, barred or striped legs, dark points and dun, blue corn or grulla color.

Method: Gather entire herd and select horses having the desired characteristics.

Monitor: Bi-annual inventory and observation.

## MANAGEMENT METHODS

### A. Removal

The Carter Reservoir HMA will be gathered when adult horse numbers reach or exceed 30 head. At this time all horses in the Herd Management Area will be gathered to the extent possible. Horses to be retained in the breeding herd will be selected and returned to the Herd Management Area. The herd will be reduced to minimum management level of 20 horses including foals selected for retention. (Foals will not count as part of the maximum adult herd number until January 1, following the spring in which they were born.)

Horses retained for the minimum management level of 20 will consist mostly of adult horses with only a very few foals and yearlings. The only foals and yearlings retained will be those necessary for replacement purposes.

Any horses selected from other wild herds to be added to the herd will be added at this time.

The optimum time to capture horses in this area is in late fall and winter (November to February). During this time, the horses have moved to their lower elevation winter range. Their accessibility for capture is significantly better during this time period than in the summer. Trap locations are depicted on Map #5.

### B. Selection

The Carter Reservoir HMA has historically had dun or buckskin colored horses associated with the area. In order to maintain this color character the following criteria will be used for selection of breeding animals to remain in the HMA.

#### 1. Color

The preferred color horse in this herd will be dun, buckskin, grulla or blue corn. All of these colors will appear in horse herds where primitive color characteristics begin to appear. These color characteristics include barred or striped legs and prominent dorsal stripes. Dark or black hooves will be preferred over light or white hooves.

#### 2. Conformation

The conformation of horses selected for retention in the breeding herd will be based on commonly accepted conformation standards for the light horse type. A particular breed of horse will not be used as a selection criteria.

3. Height

A fifteen hand or taller horse is preferred.

4. Defects

Horses with obvious defects will be removed at the time of selection.

C. Age Structure

An exact age structure will not be managed for the Carter Reservoir 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. This will allow the younger animals to be placed in the regular Adoption Program and leave the older animals capable of producing highly adoptable off-springs in the breeding herd.

D. Inbreeding

The fact that this herd is small and isolated has led to the development of a dun or buckskin dominate herd with the primitive dorsal stripes. To maintain this characteristic while insuring a healthy and viable horse herd will require the periodic introduction of wild horses from outside this HMA. This will add to the diversity in the gene pool and offset potential inbreeding problems.

Introduced wild horses will meet the selection criteria specified in this Plan. New horses should be of breeding age.

E. Sex Ratio

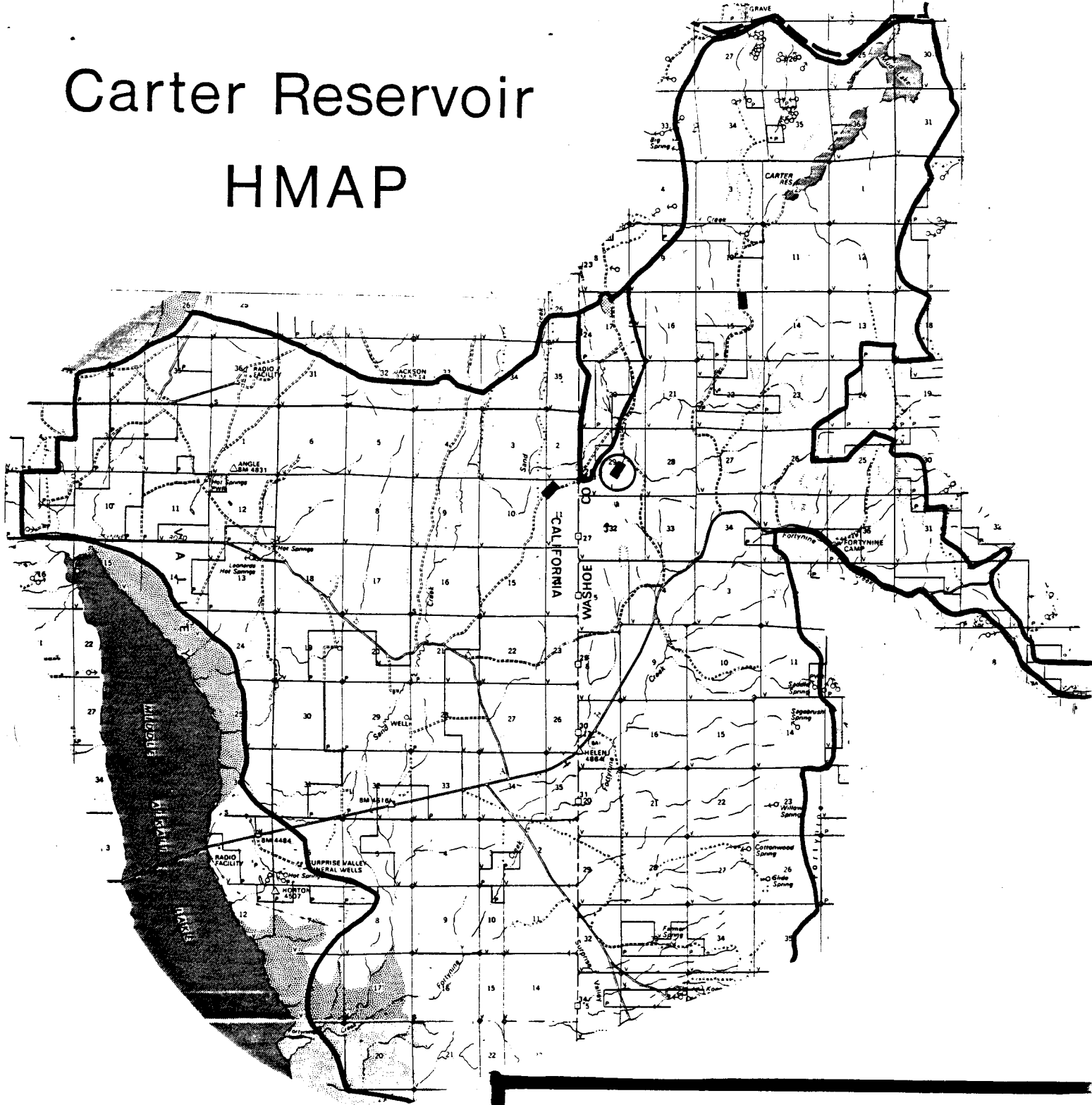
A sex ratio of 50 percent male and 50 percent female will be maintained in this HMA. This is the commonly accepted ratio which occurs naturally in a wild horse population.

Some variations in the ratios will occur. However, the objective will be to stay within  $\pm 10$  percent of the 50/50 ratio.

F. Project Development

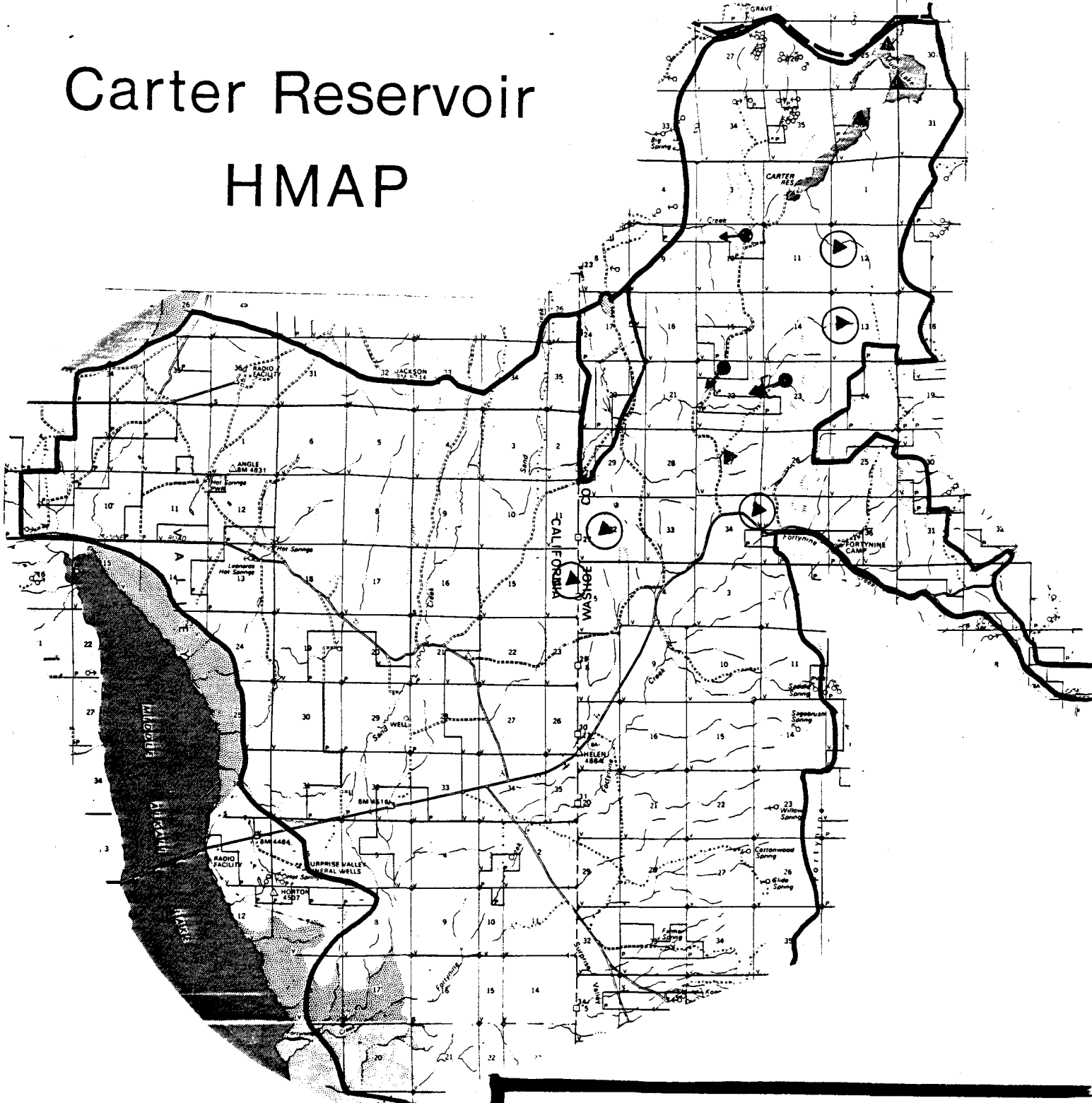
Specific projects have not been identified for this wild horse herd. Wild horses do however, have access to all available water in the HMA, in the form of livestock reservoirs, spring developments and natural lakes. The area has adequate water for wild horses at this time. Existing and proposed water development locations are shown on Map #6.

# Carter Reservoir HMAP



- Trap Sites
- ◻ Trap Sites (Potential)

# Carter Reservoir HMAP



Proposed Reservoir	
Existing Reservoir	
Spring Development	
Spring	

MAP #6

## 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 helicopter counts of herds will assist in achieving an accurate rate of increase for the herd as well as accurate description of summer and winter range. Aerial counts must be made in the winter and the summer.
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 height 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. Monitoring information will be recorded in the Appendix C of this document.

### B. Revisions

Upon completion of annual evaluations, minor revisions maybe 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 are not being made.

### COOPERATION IN MANAGEMENT

During the evaluation of the Carter Reservoir HMAP, additional data collected from the Sand Creek Allotment Management Plan will be incorporated into the HMAP evaluation. Similarly, data gathered for the HMAP will be used in the evaluation process for the Sand Creek AMP.

The specific data will be numbers of wild horses and livestock in the HMA on an annual basis and its effect on use levels and on long term vegetative trend.

Proposed revisions on either Plan will be analyzed as to their effect on each of the respective plans before finalizing a decision.

IMPLEMENTATION COSTS

The following specific actions and costs will be required to implement the Carter Reservoir 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>
	None	TOTAL	-0-
2.	<u>Annual Monitoring</u>		
	2 Hours of flight time (@ \$205/hour)		410.00
	.15 WM to record data track adoptability		525.00
		TOTAL	\$ 825.00
3.	<u>Every Three Years</u> <sup>1/</sup>		
	Selection, Adoption		
	Capture 32 horses (@ \$150/each)		4,800.00
	Select 20 horses for return to HMA (@ \$50/each)		1,000.00
	Adoption of 12 horses		
	Processing (@ \$30/each)		360.00
	Adoption (@ \$180/each)		2,160.00
	Fixed & Overhead (@ \$145/each)		1,740.00
		TOTAL	\$10,060.00

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).

  
\_\_\_\_\_  
Surprise Resource Area Manager

9/25/80  
\_\_\_\_\_  
Date