9/21/92

United States Department of the Interior

TAKE PRIDE IN AMERICA

BUREAU OF LAND MANAGEMENT
[redacted] RESOURCE AREA
P.O. BOX 460
CEDARVILLE, CALIFORNIA 96104-0460

IN REPLY REFER TO:
1792 (CA-028)
CA-028-92-15

RECORD OF DECISION

~~Bitner, Carter Reservoir, East High Rock, Massacre Lakes, Nut Mountain and Wall Canyon Herd Management Areas~~

Maintenance of Wild Horses at Planned Management Levels

I. WILD HORSE REMOVAL

A. Alternative 1

The proposed or recommended action in the EA is Alternative 1. This action would result in:

Capture of approximately 23 head of horses in the Bitner Herd Management Area (HMA). Release of approximately 11 horses on the Bitner HMA. Removal of 12 horses from the range.

Capture of approximately 28 head of horses in the Carter Reservoir HMA. Release of approximately 12 horses on the Carter Reservoir HMA. Removal of 16 head from the range.

Capture of approximately 69 head of horses in the High Rock HMA east of High Rock Canyon. Release of approximately 27 horses on the eastern part of the High Rock HMA. Removal of 42 horses from the range.

Capture of approximately 20 head of horses in the Massacre Lakes HMA. Release of approximately 6 horses on the Massacre Lakes HMA. Removal of 14 head from the range.

Capture of approximately 52 head of horses in the Nut Mountain HMA. Release of approximately 21 horses on the Nut Mountain HMA. Removal of 31 head from the range.

Capture of approximately 34 head of horses in the Wall Canyon HMA. Release of approximately 9 horses on the Wall Canyon HMA. Removal of 25 horses from the range.

B. **ALTERNATIVE 2**

Gather wild horses from the six HMAs after monitoring has documented that wild horses have caused deterioration of the public range, and their removal is necessary for restoration of the rangeland resource.

II. DECISION AND RATIONALE

A. DECISION

Alternative 1, as amended below, is selected.

1. Bitner HMA; alternative 1 is selected.

2. Carter Reservoir HMA will not be gathered at this time.

3. High Rock HMA (East High Rock); alternative 1 is selected.

4. Massacre Lakes HMA will not be gathered at this time.

5. Nut Mountain HMA; alternative 1 is selected.

6. Wall Canyon HMA; alternative 1 is selected.

B. RATIONALE

Excess wild horses on the Bitner, High Rock (east), Nut Mountain, and Wall Canyon HMAs will be removed to maintain a thriving ecological balance between wild horses and the other resources and uses on these HMAs.

There are excess horses on the Bitner, High Rock (east), and Wall Canyon HMAs, because there is inadequate drinking water. Wild horses are damaging some riparian areas. And wild horses from the Winnemucca District and the Sheldon Antelope Refuge drift onto the HMAs. There are excess wild horses on the Nut Mountain HMA, because of drift from the Wall Canyon HMA and the Winnemucca District. In addition there are excess wild horses on the Bitner and High Rock (east) HMAs, because preservation of cultural resources on the Massacre Bench and in High Rock Canyon have been given priority over wild horse use.

These herds will be reduced to the minimum herd management numbers in each HMAP. This action is in compliance with Cowhead/Massacre MFP 3, the four HMAPs, and the Susanville District's objectives and policies for managing wild horses.

The Carter Reservoir HMA will not be gathered, because wild horses use the area to the north, Crooks Lake, much more than the HMA. Before further action is taken on this herd the following will be decided; whether Carter Reservoir and Crooks Lake are suitable wild horse habitat, if the HMA should be enlarged, reasons for using the area to the north. The boundaries of the HMA may be changed.

The Massacre Lakes HMA will not be gathered, because a multiple use analysis of the HMA is in progress. Further wild horse management will be delayed pending completion of the analysis.

An evaluation of the two HMAs which will not be gathered at this time, Carter Reservoir and Massacre Lakes, will be completed prior to any future gather. The four HMAs that will be gathered will be reevaluated prior to future gathers using the most current information available.

The proposed action requires no additional mitigation.

This Decision is in the public interest, there will be no significant adverse impacts and an Environmental Impact Statement is not required.

J. Anthony Danna
Surprise Resource Area Manager

Sept. 21, 1992
Date

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
SURPRISE RESOURCE AREA
P.O. BOX 460
CEDARVILLE, CALIFORNIA 96104-0460

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

1792 (CA-028)
CA-028-92-15

ENVIRONMENTAL ASSESSMENT

Bitner, Carter Reservoir, High Rock, Massacre Lakes, Nut Mountain and Wall Canyon Wild Horse Herd Management Areas

Maintenance of Wild Horses at Planned Management Levels

I. INTRODUCTION

A. Purpose/Need

The purpose of this Environmental Assessment is to compare and analyze the impacts of:

1. Returning wild horses to the minimum numbers specified by the Cowhead/Massacre Management Framework Plan and Herd Management Area Plans (HMAP) for the Bitner, Carter Reservoir, East High Rock, Massacre Lakes, Nut Mountain and Wall Canyon Herd Management Areas (HMAs) to keep them in ecological balance with the other, existing resource values which occur on the HMAs.

2. Allowing wild horse numbers to continue to increase until rangeland resource deterioration occurs due to overpopulation of wild horses, document that deterioration, and then gather the wild horses.

B. Need for Proposed Action

1. Reduce the horse populations on the six HMAs to keep wild horses in balance with their forage and habitat and the forage and habitat requirements of all the herbivores on the HMAs.

2. Six consecutive years of drought have impacted all of the biological resources on the resource area. The drought has had two results that influence wild horse habitat:

   a. Wild horse numbers are exceeding the drinking water supplies in some HMAs.

   b. As a result of less drinking water being available at fewer locations, wild horse use is being concentrated at the few remaining water holes. When there is a riparian area associated with the water hole, it is also being severely impacted.

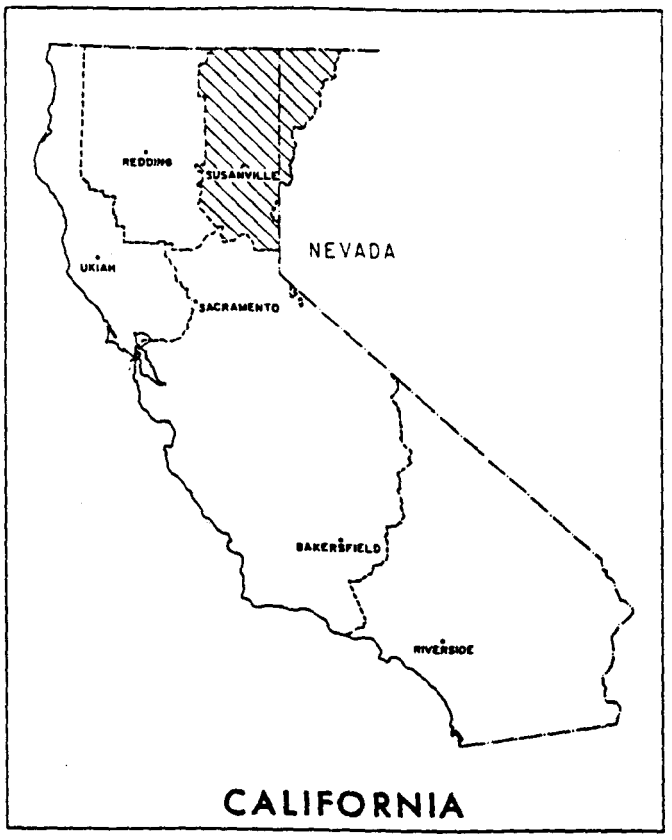
3. Provision for removal of horses from the range are contained in Section 3 of Public Law 92-195, of 1971 the Wild, Free Roaming Horse and Burro Act; Section 14 of the Public Law 95-514, the Public Rangelands Improvement Act of 1978 and in Section 4740.1 of the Code of Federal Regulations.

4. The management alternatives for these six HMAs were analyzed in the Cowhead/Massacre EIS. The Record of Decision was the Cowhead/Massacre Management Framework Plan (MFP) 3, which contained the management decisions for these HMAs.

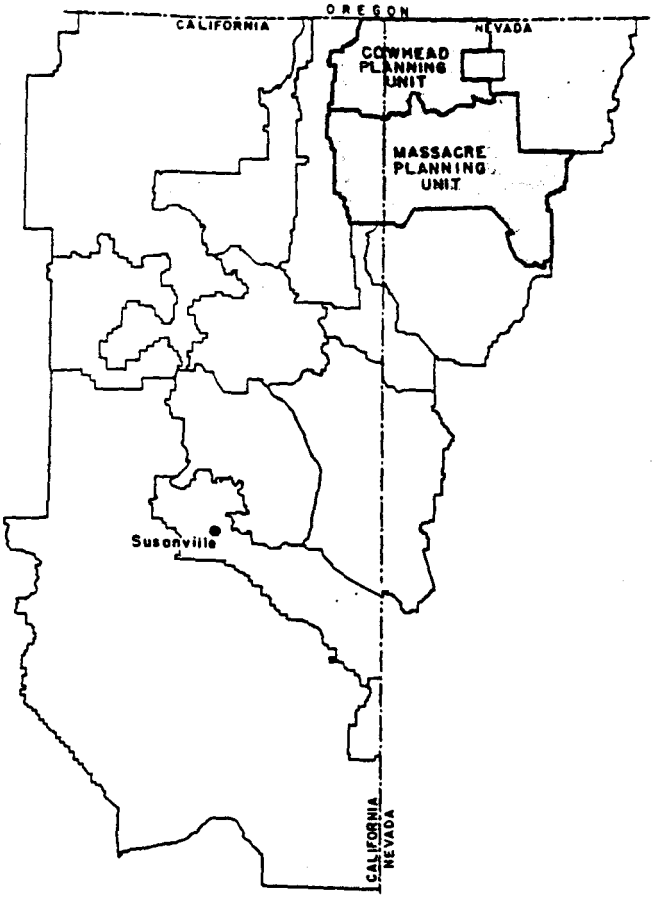
   An internal review of the EIS and MFP 3 found that they were in compliance with the provisions of the June 7, 1989, IBLA decision pertaining to gathering wild horses on BLM lands. The minimum and maximum herd population numbers were not arbitrarily set. They were determined by allocating the available vegetation resource, from current inventory and utilization data, to nine uses including wild horses habitat. Monitoring of the HMAs produced the current data used in this EA.

C. Location

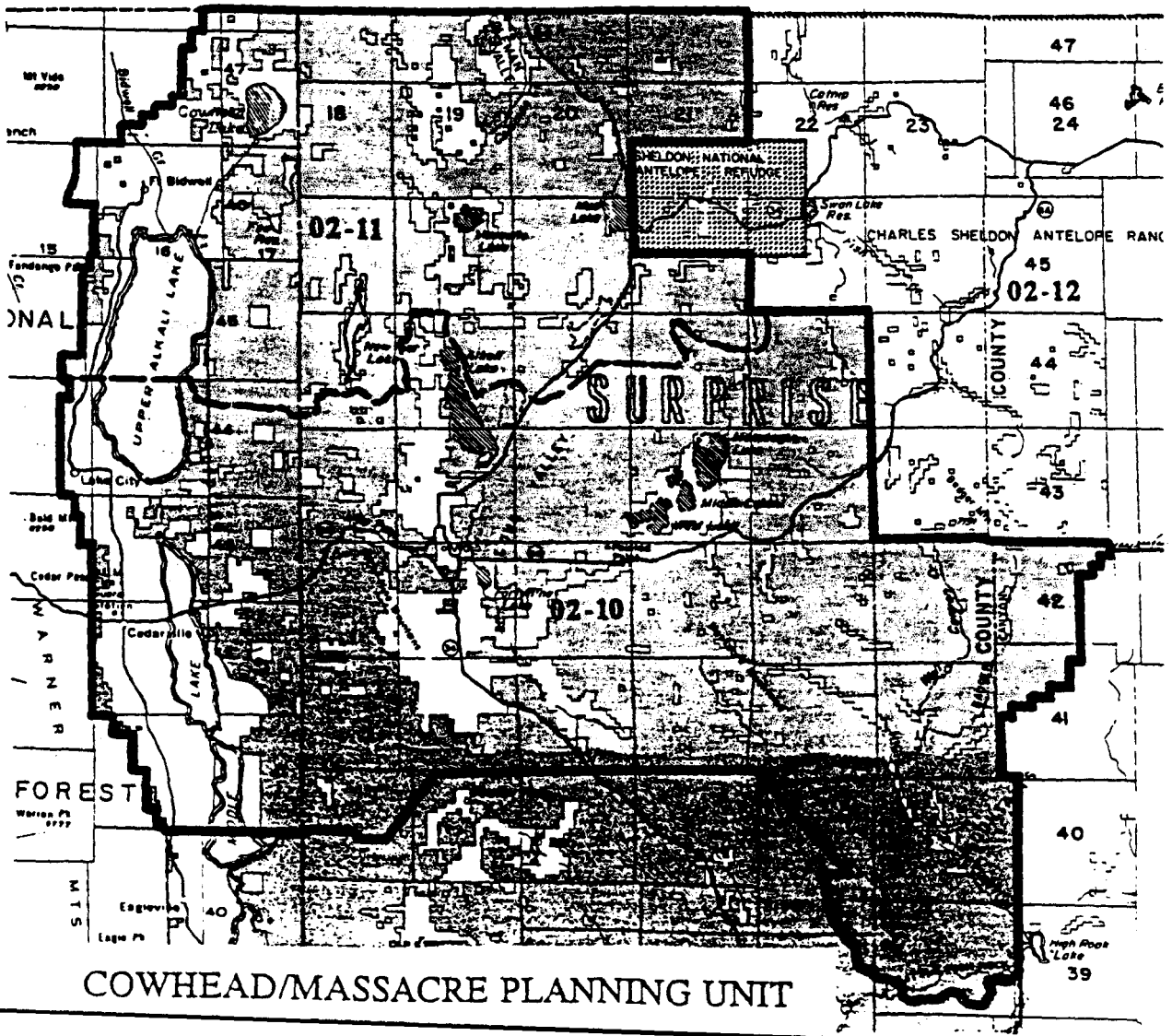
The proposed horse removal areas are six HMAs in the Cowhead/Massacre Planning Unit on the Surprise Resource Area (see Maps 1 and 2).



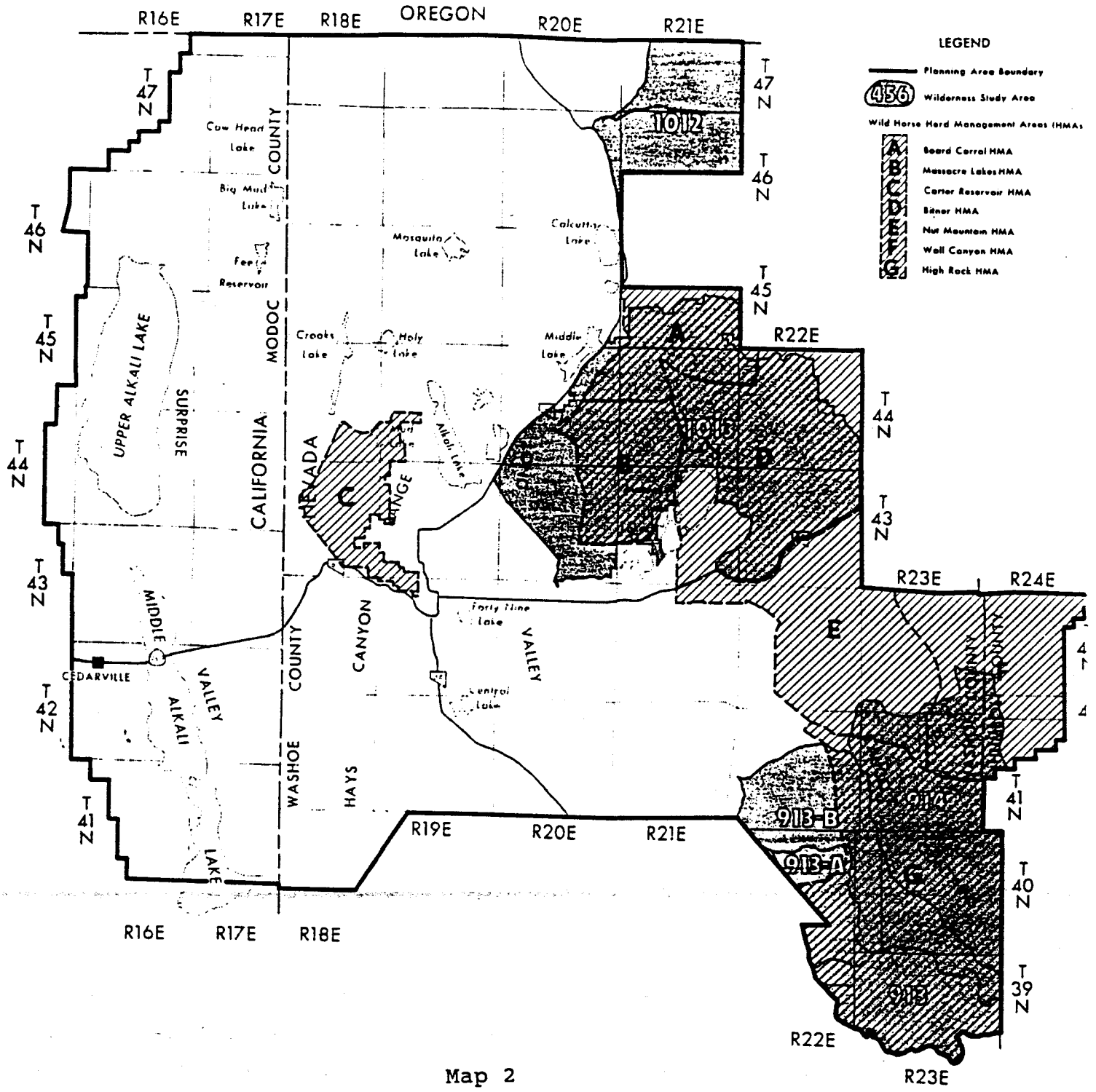
CALIFORNIA



SUSANVILLE DISTRICT



COWHEAD/MASSACRE PLANNING UNIT



Map 2

COWHEAD/MASSACRE
PLANNING AREA
MFP 3

WILDERNESS STUDY AREAS
&
WILD HORSE
HERD MANAGEMENT AREAS

D. **Susanville District Objectives and Policies**

The Susanville District wild horse management objectives and policies were adopted after consultation with interested parties.

1. **Objectives**

a. Maintain the numbers of all herds within the population ranges established in the Land Use Plans (for these HMAs, Cowhead/Massacre MFP 3).

b. Perpetuate healthy, viable wild horse populations for future generations.

c. Strive to achieve 100 percent adoptability of excess animals that are removed in order to stop contributing animals to the unfortunate and costly pool of unadoptable animals gathered from public lands.

d. Achieve a strong and effective California Adoption Program for excess animals removed from California herds.

e. Maintain the habitat within the Herd Management Areas in the Susanville District.

2. **Policies**

a. District Land Use Plans will allocate sufficient forage to properly maintain the planned population levels established for each HMA.

b. Animals will be gathered in a safe and minimal stress manner.

c. Animals will be handled, transported, fed and processed in a manner so they will be protected against injury and disease and receive proper nutrition to keep them in top condition while in BLM holding facilities.

d. Because horses older than four years of age are more difficult to adopt, the Susanville District, to the extent practical, will work

toward placing all excess progeny of the Susanville herds into the regular adoption program at four years of age and younger.

e. The base herd horses for each Herd Management Area will consist of horses that are selected on the basis of their apparent ability to propagate adoptable progeny. The base herd is the breeding herd selected and left on the range to achieve the herd objectives.

f. Once selected for the base herd, horses will remain in the base herd until they die. When they die they will be replaced by younger horses (four years of age and younger) selected from the herd or from other Herd Management Areas.

g. When selecting base herd horses, consideration will be given to maintaining herd integrity. Animals selected for the base herd will posses size, conformation, and coloration traits which were characteristic of that herd.

E. Background Information

The Cowhead/Massacre Environmental Impact Statement (EIS), a court ordered EIS as defined in section 2 of the Public Range Lands Improvement Act of 1976, was completed in 1980.

Pursuant to section 202 of the Federal Land Policy and Management Act of 1976, the Cowhead/Massacre EIS was written. The Record of Decision for the EIS was the Cowhead/Massacre Management Framework Plan (MFP) 3. The specific ways in which the Cowhead/Massacre MFP 3 complied with section 202 part c are cited below. The multiple uses that were considered included watershed, soil stability, wildlife, livestock, and wild horses (part (c)(1)). Technical Review Teams were used to develop the land use plan and subsequent HMAPs (part (c)(2)). High Rock Canyon and the Lassen-Applegate Trail were designated as areas of critical environmental concern (part (c)(3)). The stocking rates for the herbivores were set using utilization information and a 1977 vegetation condition inventory (part (c)(4)).

Among the resulting land use decisions were initial minimum and maximum wild horse numbers for each HMA, which were to be evaluated and adjusted in response to monitoring data. An HMAP was developed for each herd which incorporated these initial minimum and maximum herd numbers. In 1985 all six

HMAPs were revised to include the Susanville District policies for wild horse management. The goals of the plans were to maintain healthy, thrifty wild horse populations that were compatible with and in balance with the other multiple uses. Public comment and affected interest comment were incorporated through the entire process of developing these documents and procedures by the use of Technical Review Teams and communication with the public and affected interests.

The initial wild horse numbers for each HMA were determined by allocating the annual vegetative production among nine identified uses, watershed, wildlife cover, soil stabilization, mule deer, antelope, bighorn sheep, cattle, domestic sheep, and wild horses. The permitted numbers for all the herbivores combined were set to be within the carrying capacity of the range. The stocking rates were set to accommodate fluctuations in rangeland production resulting from weather variations and to be compatible with the objectives of the land use plan.

F. **Documentation**

Public Law 92-195 (amended), the Wild Free Roaming Horse and Burro Act of 1971, Section 3(b)(2). "Where the Secretary determines on the basis of ... (ii) information contained in any land use planning completed pursuant to section 202 of the Federal Land Policy and Management Act of 1976; (iii) information contained in court ordered environmental impact statements as defined in section 2 of the Public Range Lands Improvement Act of 1978; and (iv) such additional information as becomes available to him from time to time... that an overpopulation exists on a given area of the public lands and that action is necessary to remove excess animals, he shall immediately remove excess animals from the range so as to achieve appropriate management levels."

Public Law 95-514, the Public Rangelands Improvement Act of 1978, Section 14

Code of Federal Regulations 4740.1

Cowhead/Massacre Final Environmental Impact Statement (EIS), 1980

Cowhead/Massacre Management Framework Plan (MFP), 1981, which is the Record of Decision for the alternatives chosen through the EIS process.

Bitner Herd Management Area Plan, 1985

Carter Reservoir Herd Management Area Plan, 1985

High Rock Herd Management Area Plan, 1985

Massacre Lakes Herd Management Area Plan, 1985

Nut Mountain Herd Management Area Plan, 1985

Wall Canyon Herd Management Area Plan, 1985

Susanville District Policy Statement, June 15, 1989

II. DESCRIPTIONS OF THE PROPOSED ACTION AND ALTERNATIVES

A. Preferred Alternative

The preferred alternative and proposed action is to gather all the horses that can be safely and practically gathered from the Bitner, Carter Reservoir, High Rock, Massacre Lakes, Nut Mountain, and Wall Canyon HMAs. The horses selected as base herd horses, and horses that are five years old and older will be returned to their respective HMAs. Horses under five years old will also be returned to the range to replace any death loss and bring the herds to the minimum management levels.

Horses will be gathered beginning October 1992. There is a narrow time frame when wild horses can be gathered. Gathering is done as late as possible, but before the weather turns to winter, which normally happens in November in the areas being gathered. By October the foals have developed enough to keep up with their mothers during the gather and are old enough to be removed from the mares and adopted separately.

Gathering will be by helicopter. The gather will last at least two weeks. Horses will not be herded more than 10 miles to a trap, most traps will be within five miles of the horses.

Gathering will be under direct supervision of a duly authorized employee of the Department of Interior. All gathering, handling, sorting and hauling will be by employees of the Susanville District, who have been trained to use maximum

care. Humane procedures prescribed by the Secretary of Interior, in accordance with Section 404 of the Federal Land Policy and Management Act of 1976 will be used.

The traps will be setup and removed by vehicle using existing roads and ways. Off road travel will be kept to the absolute minimum necessary. It will occur in the immediate vicinity of the traps to setup and remove the traps and turn the semi around. On the same day that gathering is finished, the trap will be removed and the site rehabilitated.

B. **Alternative 2.**

Gather wild horses from the Bitner, Carter Reservoir, High Rock, Massacre Lakes, Nut Mountain, and Wall Canyon HMAs after monitoring has documented that wild horses have caused deterioration of the public range, and their removal is necessary for restoration of the rangeland resource.

The gather would be conducted as described in the preferred alternative. To generalize, gathering is done in a manner that leaves the lightest impact on the land, exposes the horses to the least amount of stress or danger, and is the most cost effective. The horses are treated humanely and provided with ample feed and water while under BLM control. The horses that are removed from the HMA will be four years old or younger, because younger horses are more easily adopted.

C. **Description of the Environment**

There are many resource values on the public lands included in the six HMAs.

1. **Public Interest Area**

High Rock Canyon is one of the most popular parts of the Surprise R.A. High Rock Canyon has scenic, wilderness, and historical values. Activity plans for High Rock include an Area of Critical Environmental Concern, National Conservation Area, Wildlife Habitat Management Plan, and a Cultural Resources Management Plan.

2. Water

1992 is the sixth consecutive year of drought in northwest Nevada. Perennial stream flow within the six HMAs, which was not much, has been greatly reduced. Water for wild horses, wildlife, livestock, and the maintenance of aquatic and water dependent habitats has been severely reduced.

The current wild horse distributions on the various HMAs have become a function of available drinking water. Some examples are, all the horses have moved off the Carter Reservoir HMA onto the Crooks Lake Allotment and into Mosquito Valley, which are better watered. In mid-July over 40 horses were seen at one time on Cherry Spring on the High Rock HMA. One third of the horses in the HMA were at one water hole at the same time. The spring is a hole in the rocks about two feet in diameter.

Water shortage has become the critical concern for all biological resources on the resource area. As the drought continues the situation becomes more severe.

3. Soil and Vegetation

The six HMAs cover a large area along the east side of the Surprise RA. The soils are desert and volcanic influenced soils typical of this region. Sagebrush grassland is the dominant vegetative community. There are large areas of low sagebrush. Big sagebrush is abundant in areas with deeper soils. Areas with higher salinity are dominated by greasewood. At higher elevations and in some areas with better moisture regimes, mountain brush species enter the plant communities. Western juniper is expanding in the Carter Reservoir and Massacre Lakes HMAs. Grasses and grass-like plants make up about 15% of the total vegetation. Riparian areas occupy about 1% of the total area.

The plant communities on the six HMAs range from early to late seral successional stages. Trend is generally up, due to the current livestock management, removal of livestock from the East High Rock area, and maintenance of wild horses within planned management levels. The exception is that many riparian areas remain in poor condition.

4. **Wildlife**

The six HMAs provide habitat for a large variety of wildlife species commonly found within the region. The most common species are pronghorn antelope, mule deer, sage grouse, black-tailed jackrabbit, Brewer's sparrow, deer mouse, coyotes, bobcats and an occasional mountain lion.

Riparian plant communities, which occupy about 1% of the total area, are a special concern. Over half of all wildlife species in the area are dependant upon riparian communities for habitat during some portion of the year. Many of the less common wildlife including voles, killdeer and amphibians would not occur in the area without riparian habitats. Almost all wildlife species depend on the riparian areas as a source of drinking water.

5. **Threatened and Endangered Species**

No federally threatened or endangered plants or animals have been found, but several sensitive plants occur in the six HMAs, Cryptantha schoolcraftti, no listing yet, Eriognum crosbei, no listing yet, Ivesia rhypara, BLM sensitive, and Trifolium andersonnii ssp. beatleyae, CNPS-List 5,.

6. **Wild Horses**

Generally these six herds appear to be in good health and good condition, in spite of the six years of drought. This can be partially attributed to adherence to the HMAPs, specifically proper stocking rates, which allow the horses on the range to thrive. The average reproductive rate for the herds on the Surprise Resource Area, all structured herds, is 20% per year. The average reproductive rate for unstructured herds is 17%. Wild horse populations are summarized in Table 1.

The horses in the Massacre Lakes HMA are in the best condition. This has resulted from the good range condition and favorable horse habitat arising from the grazing management that has been in affect on the Massacre Lakes Allotment since 1966, as well as compliance with the wild horse stocking rates specified in the HMAP.

In 1980 there were only three HMAs in the Cowhead/Massacre Planning Unit. As the BLM's concern for wild horses increased, and as the various range improvements specified in the Cowhead/Massacre MFP were implemented, horse use patterns were identified or changed, resulting in

WILD HORSE

HERD MANAGEMENT AREAS

HMA	ACRES	MINIMUM NUMBER	MAXIMUM NUMBER	CURRENT NUMBER (estimated)
BITNER	50,660	15 horses	25 horses	27 horses
CARTER RESERVOIR	23,200	20	30	32
EAST HIGH ROCK	115,000	40	60	84
MASSACRE LAKES	40,730	10	20	24
NUT MOUNTAIN	40,680	30	55	61
WALL CANYON	49,277	15	25	40

Table 1. Wild horse population levels for six Herd Management Areas on the Surprise Resource Area.

more HMAs. In 1980, the Bitner and Massacre Lakes HMAs were part of a larger HMA called Massacre Lakes HMA. Before that it was called Cat Nip Mountain HMA and included adjacent land on the Sheldon Antelope Range. In 1980, the High Rock, Nut Mountain, and Wall Canyon HMAs were all one HMA called the High Rock HMA. These five HMAs form a large contiguous wild horse use area along the eastern edge of the resource area. There has been mixing of these horses for many years. Now wild horses are more confined due to allotment fences, but there is still interchange, especially in the winter and spring when the gates are open. As a result these herds are similar. The Carter Reservoir HMA is in the Hays Canyon Range, separated from the other five by Long Valley.

a. **Bitner Herd Management Area (CA-267)**

This HMA (Map 3) is located approximately 40 miles east of Cedarville, CA. The HMA contains the entire Bitner Allotment and the northwest edge of the Nut Mountain Allotment. This HMA contains 50,660 acres, 43,550 acres BLM and 7,110 acres private.

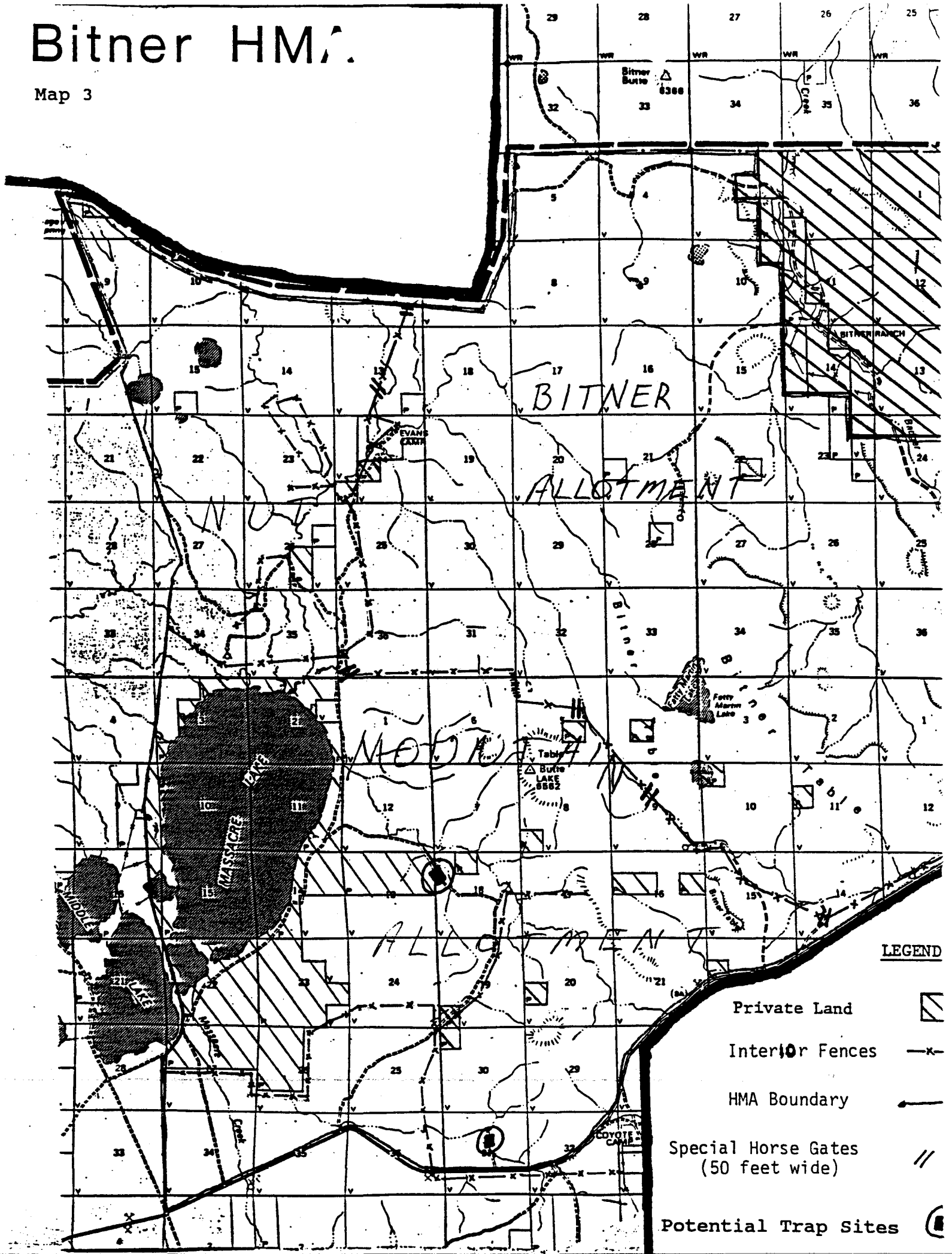
The Bitner area was first separated in 1964, when a boundary fence was built separating the Massacre Lakes Allotment from the Nut Mountain Allotment. The Bitner Herd has a minimum planned management level of 15 horses and a maximum of 25 horses. The horses are believed to be descended from feral ranch stock. They are light horses. There are some paints. Some paint horse coloration was retained in the base herd.

Horses from the Bitner herd mix with horses from the Massacre Lakes herd and the Bitner Butte herd on the Sheldon Antelope Range. This mainly happens in the winter when the gates are opened. In 1982 the Nut Mountain Allotment was divided into the Nut Mountain and Bitner Allotments. The boundary fence split the Bitner HMA. Five "wild horse" gates were placed in the boundary fence. So far these long gates have been successful.

In February 1973, 116 horses were counted on the Catnip Mountain HMA (Massacre Lakes-21, Board Corral-46, and Bitner-49, horses). In August 1973, this HMA was counted again. One hundred and twenty seven horses were found (Massacre Lakes-15, Board Corral-64, and Bitner-48 horses).

Bitner HMA

Map 3



In August 1984, 138 horses were removed from this area, and 15 horses were returned to the Bitner HMA. In the fall of 1988, 33 horses were gathered from the Bitner HMA. This was a 21% increase per year from 1984 to 1988. Thirteen horses were returned to the HMA. This HMA was placed under structured management at that time. It is estimated that there will be 27 horses by October 1, 1992.

b. **Carter Reservoir Herd Management Area (CA-269)**

This HMA (Map 4) is located approximately 10 miles east of Cedarville, CA. The HMA contains the northeastern part of the Sand Creek Allotment. This HMA contains 23,200 acres, 21,880 acres BLM and 1,320 acres private.

The Carter Reservoir Herd has a minimum planned management level of 20 horses and a maximum of 30 horses. Carter Reservoir horses are characteristically dun, buckskin, grulla, or blue corn colored with barred or striped legs and a prominent dorsal stripe. They are light horses. The "mustang" characteristics were retained in the base herd.

In August 1973, 60 horses were counted on the New Years Lake HMA. Most of the horses were removed from the New Years Lake HMA in 1980. Carter Reservoir HMA is a portion of the former New Years Lake HMA.

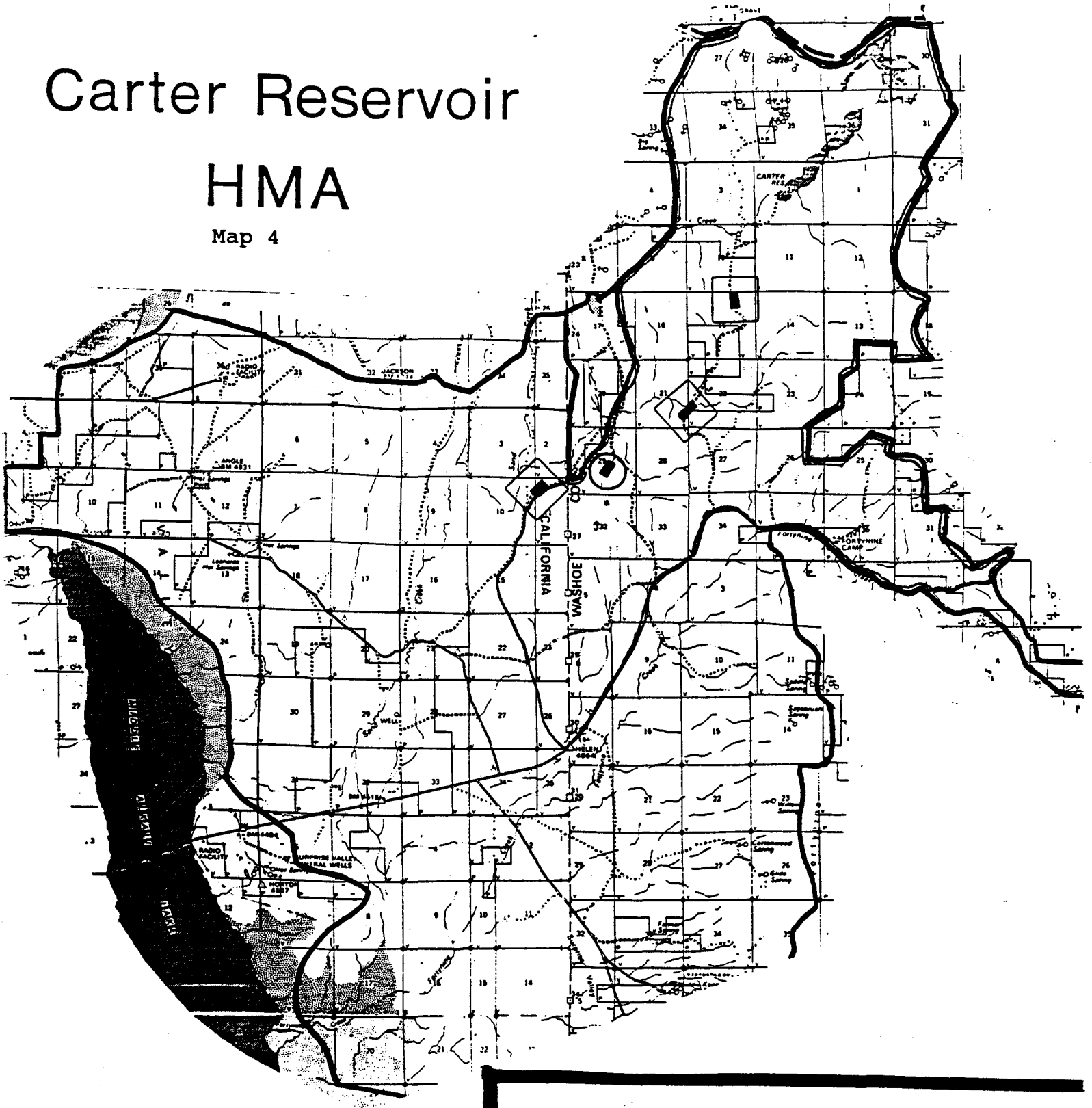
In February 1985, 32 horses were captured, and 13 with mustang characteristics were returned to the range. Eight horses could not be captured. This area was last gathered in the fall of 1988, when 35 horses were captured in the HMA. An additional 19 horses were captured on the Crooks Lake Allotment, the adjacent allotment to the north which is not in a HMA. This was a 40% increase per year from 1985 to 1988. Nineteen animals were returned to the HMA. This HMA was placed under structured management at that time. It is estimated that there will be approximately 32 head in the HMA on October 1, 1992.

c. **High Rock (East of Canyon)** (CA-264)

This HMA (Map 5) is located approximately 40 miles southeast of Cedarville, CA. in the southeastern part of the Massacre Mountain Allotment. It contains 115,000 acres, 114,447 acres BLM and 653 acres private. The HMA is split by High Rock Canyon. The

Carter Reservoir HMA

Map 4



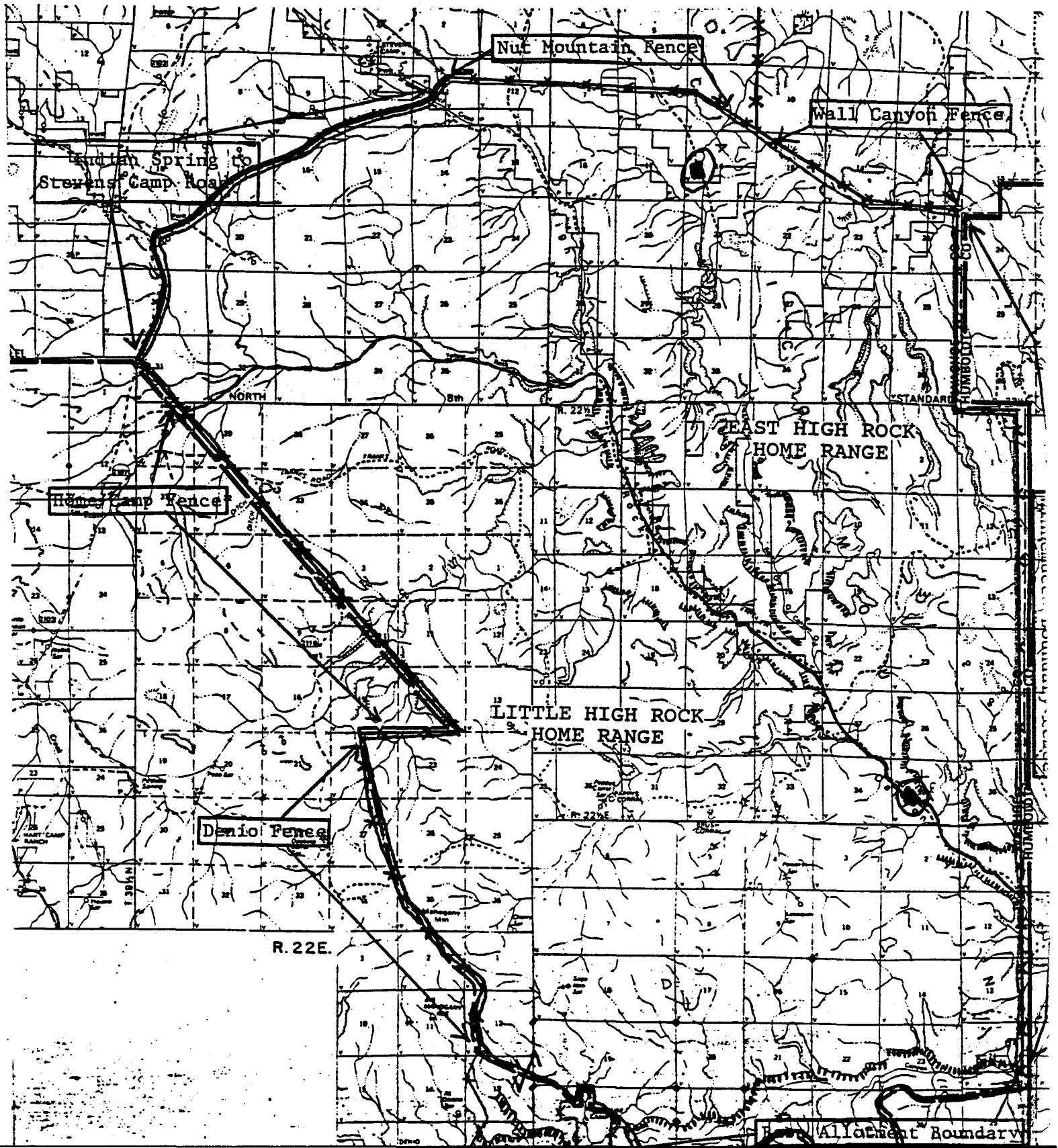
HIGH ROCK

HERD MANAGEMENT AREA

Map 5

Legend:

- HMA Boundry
- Prominent Rims & Canyon Faces
- Fences
- Potential Trap Sites



eastern portion, the part to be gathered, is called East High Rock Home Range. The western part, which will not be gathered at this time, is called Little High Rock Home Range.

The planned minimum and maximum management levels for the High Rock Herd are 70 and 100 horses. East High Rock Home Range has a minimum of 40 horses and a maximum of 60 horses. Little High Rock Home Range has a minimum of 30 horses and a maximum of 40 horses. Horses from the two summer ranges mix on the winter range. Horses from this HMA also mix with horses from Winnemucca and the Fox Hog, Wall Canyon, and Nut Mountain HMAs.

Some mustang characteristics appear in this herd, dorsal stripe and barred or striped legs. These traits have been retained in the base herd. Sorrel and palomino pintos are more typical colors for this HMA. These are light horses.

In 1973 there were about 136 horses in the High Rock HMA (now the High Rock HMA, Wall Canyon HMA, and Nut Mountain HMA). In October 1981, 25 horses were removed from East High Rock.

In 1985, there were about 235 horses in the High Rock HMA. One hundred and two horses were trapped at Bernard's Corral in the East High Rock home range in July 1985. Forty five horses were known to still be on the range after this gather. Among the horses returned were one buckskin and three pinto studs.

In 1986 there were about 50 horses in the East High Rock herd.

The High Rock herd was gathered again in the fall of 1988. Fifty three horses were gathered; 20 were removed and 33 returned to the range. Four horses were known to have been missed. Several of the gathered horses looked in poor condition, probably due to lack of water. Horses gathered from Pole Canyon, where there was water, did not show the same stress. The base herd was established at this gather. Poor condition horses were removed. A variety of colors were retained in the base herd, black, buckskin, sorrel, bay, chestnut, and paint. The horses were turned out at Steven's Camp, which had better water than the south end of the HMA. East High Rock Home Range was reduced to 40 horses and placed under structured management at this time.

In November 1990, horses were gathered from the Little High Rock area. One of the horses was an albino, and many were blue eyed. The horses with these albino traits were removed from the herd. In addition there appeared to be distemper among some of the horses. The horses were not thrifty due to lack of water.

It is estimated that the population of the East High Rock herd will be 84 animals by October 1, 1992.

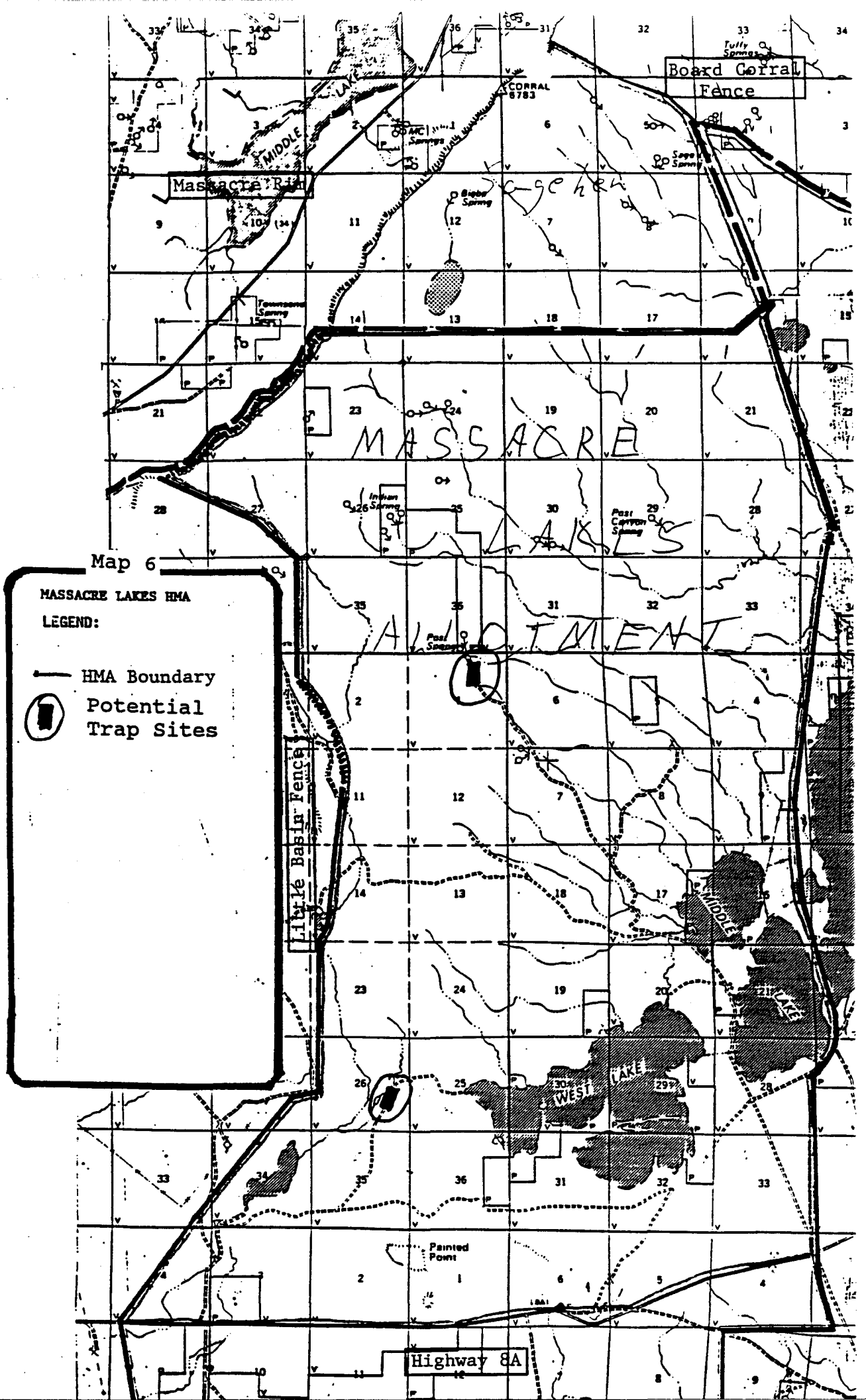
d. **Massacre Lakes Herd Management Area (CA-268)**

This HMA (Map 6) is located approximately 30 miles east of Cedarville, CA. It contains the portion of the Massacre Lakes Allotment north of highway 8A. This HMA contains 40,730 acres, 39,959 acres BLM, 471 acres private, and 300 acres Washoe County.

The Massacre Lakes herd has a minimum planned management level of 10 horses and a maximum of 20 horses. Horses from the Bitner HMA and the Sheldon Antelope Range are thought to winter at Massacre Lakes on the Massacre Lakes HMA. These horses probably are the offspring of feral ranch horses. They are light horses of many colors. Some paint horses were retained in the base herd.

The Massacre Lakes herd area was first identified in 1964. In 1973, 116 horses were counted on the old Massacre Lakes HMA (now the Massacre Lakes HMA, Bitner HMA, and Board Corral HMA). In 1984, 138 horses were removed from the Board Corral and Massacre Lakes HMAs. Ten horses were returned to this HMA.

This area was last gathered in the fall of 1988; 25 horses were trapped, and 14 were removed, leaving a population of 11 animals. These horses were increasing at about 25% per year between 1984 and 1988. The HMA was placed under structured management at that time. It is estimated that there will be 24 horses by October 1, 1992.


Map 6
MASSACRE LAKES HMA
LEGEND:
HMA Boundary
Potential Trap Sites
Board Corral Fence
Massacre Rim
Little Basin Fence
Highway 8A
MASSACRE LAKES ALLOTMENT
MIDDLE LAKE
WEST LAKE
Painted Point

e. **Nut Mountain Herd Management Area (CA-266)**

This HMA (Map 7) is located approximately 40 miles east of Cedarville, CA. The HMA contains the portion of the Nut Mountain Allotment south of highway 8A and east of Coyote Camp and is 40,680 acres, 38,840 acres BLM and 1,840 acres private.

The Nut Mountain Herd has a minimum planned management level of 30 horses and a maximum of 55 horses. These horses descended from feral ranch stock. They are light horses. Blacks and bays are abundant colors with some piebald animals. These colors were retained in the base herd.

In 1973, 136 horses and 9 burros were counted in the High Rock HMA (now High Rock HMA, Nut Mountain HMA, and Wall Canyon HMA).

This area was last gathered in the fall of 1988, 70 horses were gathered, 40 were removed leaving a population of 30 animals. The HMA was placed under structured management at that time. It is estimated that there will be 61 horses by October 1, 1992.

f. **Wall Canyon** (CA-265)

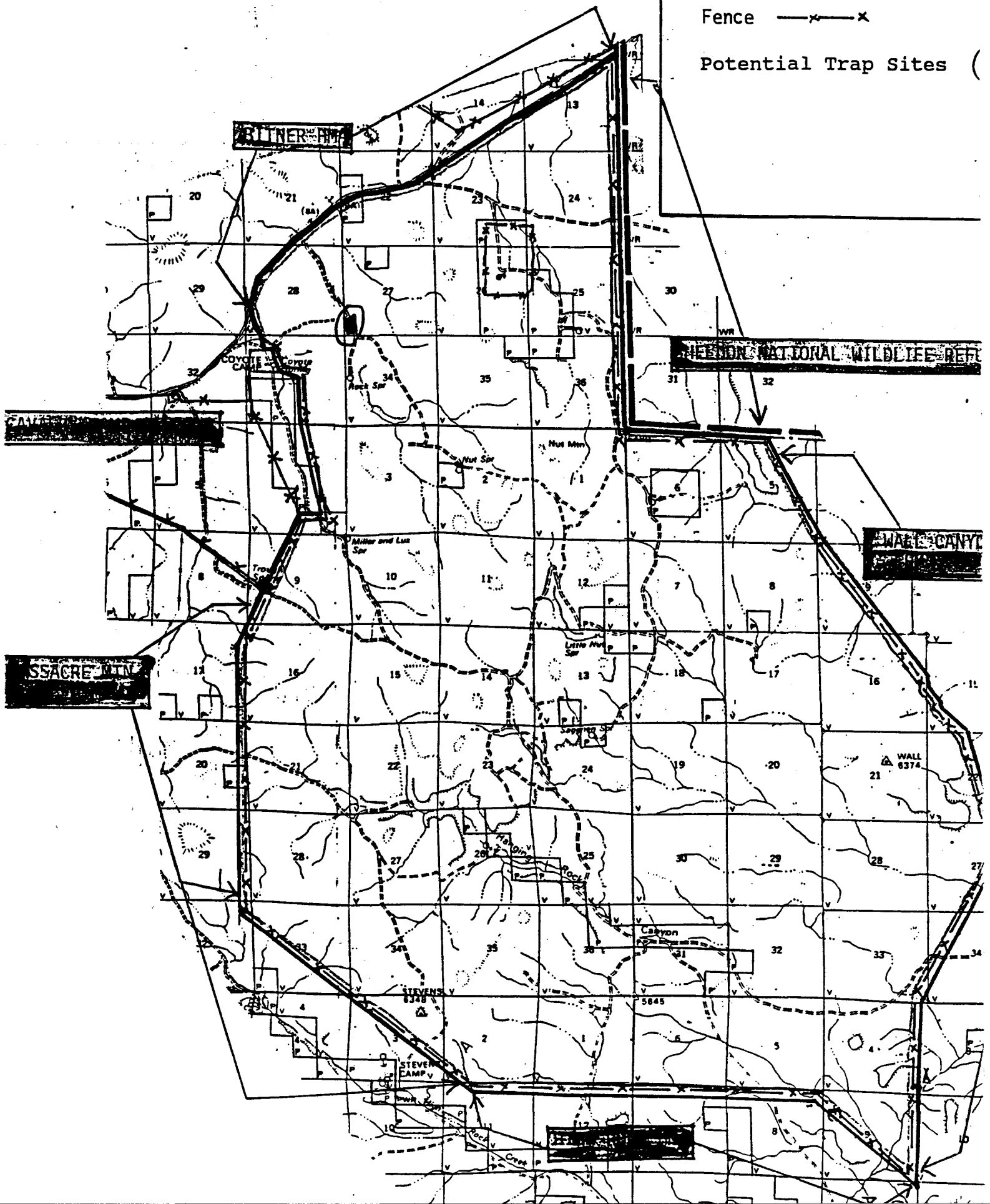
This HMA (Map 8) is located approximately 46 miles east of Cedarville, CA. It is the same area as the Wall Canyon (east) Allotment. This HMA contains 49,277 acres, 47,877 acres BLM and 1,400 acres private.

The Wall Canyon Herd has a minimum planned management level of 15 horses and a maximum of 25 horses. These horses descended from feral ranch stock. They are light horses. Blacks and bays are common, and there are some piebald horses. All of these colors were retained in the base herd. This HMA borders the Sheldon Antelope Range, the Winnemucca District, and two other HMAs. It is likely that there is mixing of horses among these five areas. At the time of the 1988 gather some of the Wall Canyon horses were found watering on Winnemucca.

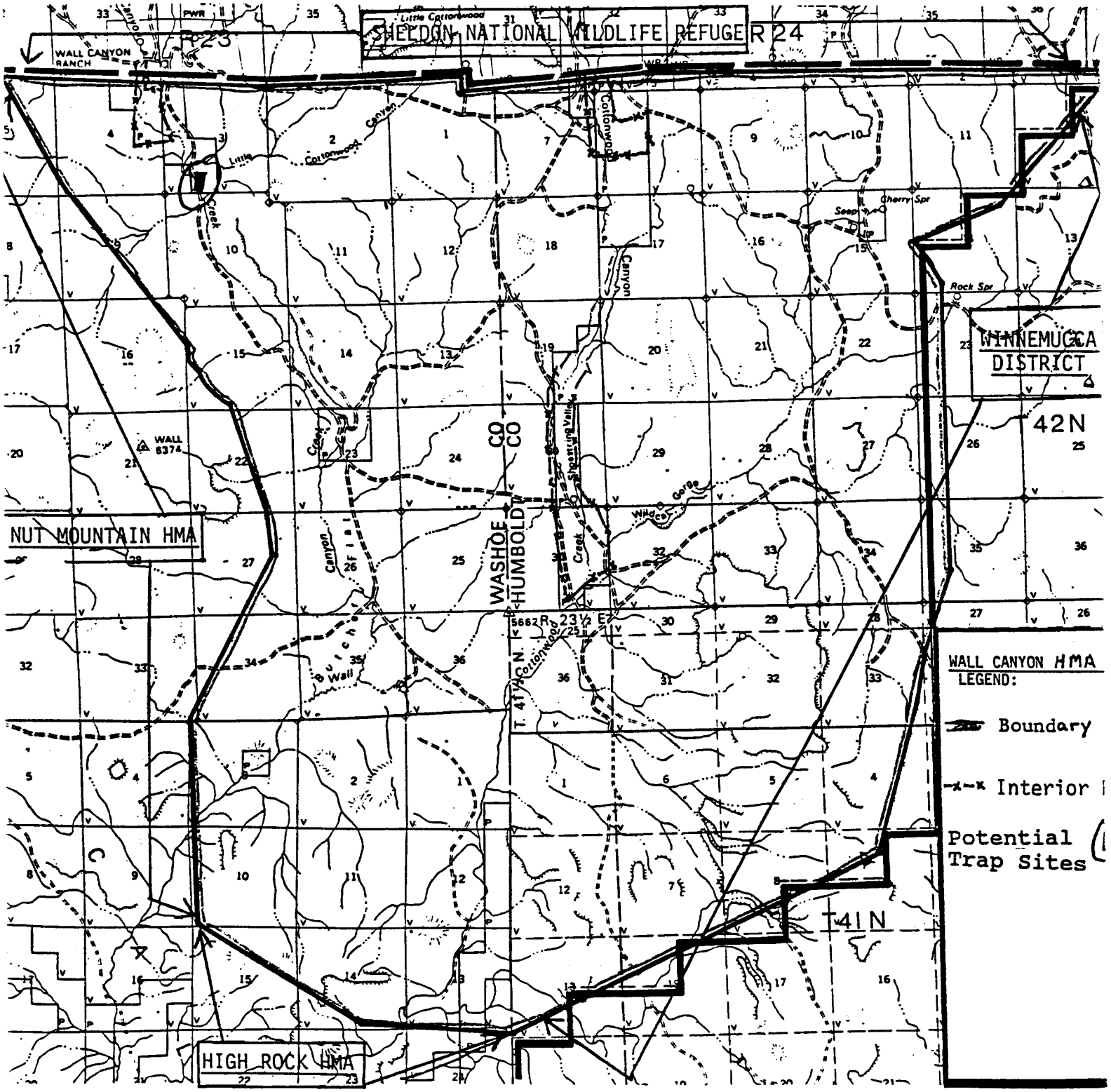
In 1973, 136 horses and 9 burros were counted on the High Rock HMA (High Rock HMA, Nut Mountain HMA, and Wall Canyon HMA).

Nut Mountain HMA

Map 7



WALL CANYON
HERD MANAGEMENT AREA
Map 8



This area was last gathered during the fall of 1988; when 142 horses were gathered, and 123 were removed leaving a population of 19 animals. This HMA was placed under structured management at that time. It is estimated that there will be approximately 40 head in the HMA in October 1992.

7. **Wilderness**

Five of the HMAs contain Wilderness Study Areas (WSA), East High Rock and part of the Nut Mountain and Wall Canyon HMAs are within the East Fork High Rock Canyon WSA (#914). All of the Bitner and most of the Massacre Lakes HMAs lie within the Massacre Rim WSA (#1013). All the potential trap sites in the Bitner, High Rock, and Massacre Lakes HMAs are in WSAs. None of the potential trap sites in the Carter Reservoir, Nut Mountain, or Wall Canyon HMAs are in WSAs.

Interim Management Plan guidelines allow temporary facilities for the management of wild horses and burros to be installed as long as they satisfy the non-impairment criteria which states that the use is temporary and does not create surface disturbance.

8. **Cultural Resources**

Numerous and continuing inventories and excavations have found that High Rock Canyon is rich in historical and archeological sites. Massacre Bench has many, high quality archeological sites. Through the Cowhead/Massacre EIS, it was determined that cultural resources in High Rock Canyon and on the Massacre Bench would be protected from damage. Decisions HR009 and HR010 stated that if wild horse impacts were shown, through monitoring, to be causing significant impacts on cultural resources, the wild horses would be adjusted. This would be accomplished by fencing and/or herd reduction. Decision MN009 stated that factors which may destroy the high archeological values in Area 2D were to be excluded. The 1,600 acre Massacre Bench Cultural Resource Management Area exclosure in the Bitner HMA was one result.

All the proposed trap sites have received archeological clearance.

9. **Livestock**

The six HMAs contain parts or all of seven grazing allotments. Bitner HMA contains all of the Bitner Allotment and a small part of the Nut Mountain Allotment. Carter Reservoir HMA lies within the Sand Creek

Allotment. East High Rock HMA lies within the Massacre Mountain Allotment. Massacre Lakes HMA contains the Sage Hen and most of the Massacre Lakes Allotments. Nut Mountain HMA lies within the Nut Mountain Allotment. And the Wall Canyon HMA contains all of the Wall Canyon (east) Allotment.

Due to the continuing drought all of the allotments have reduced stocking. The Bitner Allotment has been clear of cattle since early June, 26% of permitted use. The Sand Creek Allotment has about 90% of the total permitted cattle. The Massacre Mountain Allotment has 90% of the permitted sheep and 5% of the permitted cattle, for about 35% of the permitted grazing use. Massacre Lakes Allotment had about 90% of the permitted cattle at turn out, but the permittee had removed the livestock by mid-August, one and a half months early. Wall Canyon Allotment has about 60% of permitted cattle. Only Nut Mountain Allotment was fully stocked at first, but the permittee began removing cattle in August, two months early.

Both Nut Mountain and Massacre Lakes have rest rotation grazing systems. For part of the grazing season the cattle are using fields that they had not grazed the previous year. In each allotment during each grazing season at least one field is not grazed by cattle.

III. ANALYSIS OF THE ALTERNATIVES

A. Water

1. Background

Neither alternative will have any effect on the continuing drought. Most of the impacts that will be discussed below are partially or completely due to the continuing six year drought. Based on the recent past, we must plan for continuing drought. The drought will remain an underlying problem for all the biological resources until it ends.

There are fewer water sources, and those that remain have less available water. Current drinking water status is summarized in Table 2. In the Bitner HMA there are 15 water sources, 11 pits, two wells, a spring, and a creek. Ten of the 11 pits are dry; both wells are operating; the spring is flowing; and the creek, which is mainly on private land, is flowing onto BLM. In the Carter Reservoir HMA there are 12 water sources, eight pits, three springs, and one creek. Of the eight pits, two have water, one is mucky in the bottom, and the other five are dry. The three springs are all flowing. Sand Creek still is flowing within the HMA. In the East

WATER SUPPLY STATUS

	SPRINGS		PITS		WELLS		CREEKS	TOTAL
HMA	Water	Dry	Water	Dry	Water	Dry	Status	
Bitner	1	--	1	10	2	--	1 flowing	15
Carter Reservoir	3	--	3	5	--	--	1 flowing	12
East High Rock	2	2	0	3	--	--	1 inter-mitant	8
Massacre Lakes	1	4	7	6	5	1	--	24
Nut Mountain	9	0	1	8	3	0	1 flowing	22
Wall Canyon	4	2	0	11	1	1	1 flowing	20

Table 2. Drinking water status for six Herd Management Areas on the Surprise Resource Area as of August 1, 1992.

High Rock Home Range there are eight water sources, three pits, four springs, and High Rock Creek. The pits are dry. Two of the springs are still flowing. High Rock Creek and its springs are intermittent. Massacre Lakes HMA has 24 water sources, 13 pits, five springs, and six wells. Six pits have water and one is mucky, the remaining six pits are dry. One of the five springs is still flowing. Five of the six wells are operating. Nut Mountain HMA has 22 water sources, nine pits, nine springs, 3 wells, and Hanging Rock Canyon Creek. One of the nine pits still has water. All nine springs are still flowing. The three wells are operating. The creek is flowing. Wall Canyon HMA has 20 water sources, 11 pits, six springs, two wells, and Cottonwood Creek. All 11 pits are dry. Four of the six springs are still flowing. One well is operating. Cottonwood Creek is still flowing on the north end of the HMA. There are 100 identified water sources within the six HMAs, 53 of which are dry or not operating. Of the 47 remaining water sources, the three creeks have low or intermittent flows, and the 20 springs have flows typical of late summer, not mid-summer.

All of the large animals, and animals that do not get all their water from what they eat, are now concentrated at the remaining water sources. When the water source is a stock tank set on a concrete slab or a pit in a dry lake bed, the main problem is competition for use of the water. About 2/3 of the water sources fall into this group. The remaining 1/3 are creeks, springs, or pits in drainage ways. The creeks, and some of the springs and pits have associated riparian areas. Some of these riparian areas are being severely impacted due to the concentrations of animals. Also severe trampling at a spring source can result in loss of the spring.

The animal concentrations have been alleviated each winter when the weather is cooler, and all the livestock are gone. There have been some snow storms, but through the six years of drought each winter has resulted in less recovery. Each summer more water sources have been lost.

2. **Preferred Alternative**

Removal of any of the water users will make more water available to each of the remaining users. Under this alternative, approximately 140 wild horses would be removed. This will reduce competition for water among horses, wildlife, and livestock. Intraspecific competition among the horses for water would also decrease.

Wild horses will continue to be perennial, year long users of riparian areas. Reducing wild horses to the HMAP numbers will not end this use. It will place the use on these sensitive communities within levels that were determined to be acceptable through the EIS process.

Drinking water availability for horses is especially critical on the Bitner, East High Rock, and Wall Canyon HMAs. There are five known drinking water sources in Bitner, three in East High Rock, and six in Wall Canyon. Most of these are springs which are barely flowing. The horses in these three HMAs are in danger of running out of drinking water. Gathering the Bitner, East High Rock, and Wall Canyon herds will partially alleviate the drinking water shortage in these HMAs.

3. **Alternative 2**

With this alternative there will be no reduction in water users at this time. Pressure on existing water sources will continue to be heavy and intensify as water becomes scarcer due to the continuing drought. Concentration of livestock, wild horses, and wildlife at springs can trample unprotected spring sources until they no longer produce water. There will be no relief for the animals that are currently competing for water at the limited remaining water sources, other than that provided by livestock reductions. Horse condition will continue to decline due to lack of drinking water.

B. **Soils and Vegetation**

1. **Background**

Due to the very rocky or cobbly nature of most of the soils in the six HMAs, neither of the alternatives will have much effect. Soils that are more susceptible to trampling damage when wet, such as clayey and silty soils, are not as at risk during the drought.

Neither of the alternatives is expected to significantly effect the rate or extent of juniper encroachment. Since horses only eat small amounts of shrubs, and almost no bitterbrush, neither alternative is expected to effect the shrub component of the various plant communities or the amount of bitterbrush available for mule deer in late summer through winter. A change that will continue through time is the increase in shrubs and junipers in the plant communities.

When the Cowhead/Massacre EIS was prepared, annual forage production was allocated to watershed, wildlife cover, soil stability and six classes of herbivores, mule deer, antelope, bighorn sheep, cattle, domestic sheep,

and wild horses. Great basin perennial grasses require periods of rest to be vigorous and productive. Periods of deferment or rest allow the grasses to build up root reserves, produce more foliage, and produce and set seed. Providing this rest is the goal of grazing systems.

In the Bitner, East High Rock, Massacre Lakes, and Nut Mountain HMAs, either voluntarily through cooperation with the permittees or by BLM action (East High Rock HMA), each year large areas are not grazed by livestock. The amount of rest varies from this summer, to five consecutive years of non-use. Massacre Lakes and Nut Mountain Allotments have rest rotation grazing systems, so at least one field has no livestock use each year. Good range management and livestock exclusion have resulted in an upward trend in range condition over most of the six HMAs.

A study of wild horse diets on the Surprise Resource Area using fecal analysis found that through the year their diets contained 89.76% grass and grass-like plants. Spring diets were the most varied. Several early spring samples contained less than 50% grass and up to 60% forbs and shrubs. Winter samples were mostly grass and grass-like species. Some samples contained 100% grass. Fifty six samples were collected from four different habitat types, juniper/shrub, sagebrush/mixed shrub, mountain shrub, and wet meadow/juniper habitat types.

To summarize, the range condition trend is up across all six HMAs. This is due to implementation of grazing systems, development of water sources, closure of High Rock Canyon and the East High Rock area to livestock grazing, and permittees altering their operations to cope with the drought.

Keeping the wild horses within carrying capacity has also contributed to the improvement in range condition, because the management levels were set so the wild horses would be in balance with the forage base and the other resources. The wild horse numbers in the HMAPs were set to permit the forage to recover from livestock utilization, provide year long grazing for wild horses, and have a vigorous and improving plant community.

2. **Riparian Plant Communities**

Goal #6 in the Cowhead/Massacre MFP 3 is "to improve 10.0 miles of stream habitat to excellent condition by 1990." Riparian communities are very important and difficult to manage in a multiple use framework. They are rare, about 1% of the six HMAs. They provide drinking water for all

the species that use the area. They are the sole habitats of some species that would not occur in the desert if not for the oasis provided by riparian habitats. They are a source of habitat diversity important to all wildlife. They provide hiding and thermal cover. Sage grouse raise their chicks in the meadows below springs. They are a more permanent source of drinking water, especially during summer and droughts. They are preferentially used by cattle during the summer for resting areas, forage, and drinking water. Where trees and tall shrubs are present cattle use them for shade. They are preferentially used by horses for forage and drinking water. Riparian areas need hot season rest, light utilization, and residual ground cover during runoff events to maintain good condition.

Goal #6 is being achieved through two actions. High Rock Canyon and the East High Rock area were closed to cattle grazing. Wild horse numbers have been kept within the HMAP levels. The HMAP numbers were set so that the horses would have ample habitat and sufficient water outside the canyon.

Many riparian areas in the Massacre Lakes HMA also have an upward trend for several reasons. The Sage Hen Allotment has had five seasons of rest. Some of the springs were fenced, and the water piped to a trough outside the fence. Wells and pits were built in upland settings, which reduced summer livestock use in riparian areas. A rest rotation grazing system was implemented. The native range pastures are rested every other year. Wild horse numbers have been maintained within the HMAP levels. There are enough water sources so that the specified number of horses are not forced to concentrate in riparian areas for drinking water.

Wild horse use in riparian areas has become an especially serious problem in the Bitner, East High Rock, and Wall Canyon HMAs due to the overall shortage of drinking water.

Wild horses in the Massacre Lakes have ample drinking water sources that are not being used by cattle. However they seem to be concentrating on Sage Hen Spring, which has received heavy wild horse utilization this summer. Since, the number of horses in this HMA is small and the forage and drinking water supplies are abundant, it is believed that the heavy use of this spring is the result of wild horse behavior rather than limited drinking water availability.

3. **Preferred Alternative**

Range condition through out the six HMAs has an upward trend, due in part to maintaining the various herds at the specified management levels. Under the preferred alternative this upward trend will continue.

Gathering horses this fall will reduce them to levels that are within the forage allocation numbers. Fewer horses will mean less intraspecific competition for water which in turn will allow the remaining horses to forage further from water and stay away longer. In the areas where livestock use is managed or excluded, maintaining horse numbers within management levels will allow the upward trend in range condition and riparian area condition to continue.

Gathering the horses in the Bitner, East High Rock, and Wall Canyon HMAs will help protect the riparian areas in those HMAs.

4. **Alternative 2**

Adopting this alternative would cause the loss of seven years of range improvement. Wild horse utilization in upland communities will have to increase until the upward trend in range condition has been lost in order to demonstrate that range deterioration has occurred. By the time upland deterioration can be documented, riparian areas will have been damaged by increased use from more animals.

There were high numbers of wild horses on the six HMAs in the early 1970s. At that time wild horse populations were in excess of carrying capacity and range deterioration was evident. This information along with the 1977 vegetation data were used to develop the minimum and maximum management levels in the Cowhead/Massacre MFP 3 and subsequent HMAPs. One goal of these plans was to institute management which would keep wild horse numbers in balance with the other resource values. As a result of seven years of HMAP implementation, the wild horse populations are believed to be in balance with the forage and other resources and uses, and not a key factor in resource damage.

Currently it would difficult to show that wild horses specifically are causing deterioration of the upland plant communities. First, because the horses are in balance with their forage and habitat. In addition five of the six HMAs have both livestock and horse use. Their diets are similar, both are very selective for grasses and grass-like species. Both preferentially use riparian areas, especially in the summer. This use is intensified during hot, dry weather. Riparian area use is further increased

during prolonged drought when other water sources dry up. As a result of the similarity in use, separating cattle effects from horse effects under the current management is difficult.

C. Wildlife

1. Background

According to analysis of fecal samples collected on the Surprise Resource Area through one full year, horses ate very little bitterbrush, and there was little dietary overlap between horses and deer or antelope. The largest dietary overlap occurred during spring greenup, when all species selected green forbs and grasses. Forage is not usually limiting at this time.

Since the past several years have had warmer than average winters with less than average snowfall, there has not been winter range competition. In "normal" winters mule deer, antelope, and wild horses all use open south facing slopes for foraging. Competition may occur in a normal or severe winter. If bighorn sheep are reintroduced into High Rock Canyon, then there will be an additional species using these winter range areas in the East High Rock HMA.

The main wild horse impact on wildlife within the six HMAs results from the horses' impacts on riparian areas. In some cases riparian condition has and continues to improve, eg. High Rock Canyon and some parts of the Massacre Lakes HMA. When horses are damaging riparian areas because of overpopulation, insufficient water sources, and the drought, the associated wildlife habitat values deteriorate.

2. Preferred Alternative

Currently, because of compliance with HMAP numbers, wild horse impacts on wildlife are small. The main impact depends on how horses use riparian areas. Under the preferred alternative the condition of some riparian areas has improved, and the potential wildlife habitat values are being realized. Maintaining wild horse numbers at the HMAP levels will allow this trend to continue.

3. Alternative 2

Under this alternative wild horse numbers will increase and the number of riparian areas with severe horse utilization will increase.

D. **Threatened and Endangered Species**

The four sensitive plants found in the six horse herd areas do not appear to be affected by the current horse numbers.

1. **Preferred Alternative**

This alternative is not expected to effect the four sensitive species found in the six HMAs.

2. **Alternative 2**

The effect of this alternative on the sensitive plant species is not known. They are all small forbs which occur on barren, ashy slopes, poor foraging areas. Some of these sites overlap with winter range in snowy and/or cold winters. As horse numbers increase, they may have to use some of these sites during the winter and early spring.

E. **Wild Horses**

When the combined utilization of all the herbivores is in balance with the carrying capacity of the range, they all benefit, including the wild horses.

1. **Preferred Alternative**

The preferred alternative, following the HMAPs that have been in effect for seven years, has resulted in healthy, thrifty wild horses on the range. It has resulted in wild horses which can be successfully adopted, preventing the expensive and undesirable situation of large numbers of wild horses in BLM facilities. Structured herd management is a successful program which has benefitted the wild horses and the other resource values on the HMAs.

Keeping the wild horse populations in balance with the available forage and drinking water resources benefits the horses that remain on the range. The available forage and habitat have been allocated among all the users. When the horses are maintained at these levels they are likely to have adequate forage and habitat and be healthy and vigorous.

Many horses from the Winnemucca District drift onto the eastern part of the resource area. The most severely impacted areas at this time are the Wall Canyon, Nut Mountain, East High Rock HMAs, and to a lesser extent the Bitner HMA. From aerial counts during 1992, there are more the double the number of horses on the Wall Canyon and Nut Mountain

HMAs than would be expected from normal increase since the previous gather. Drift also occurs onto the Bitner and East High Rock HMAs, but by fewer horses. These extra horses increase horse impacts on the various plant communities and the competition for drinking water.

Currently horses gathered on the Susanville District have above average adoptability compared to all horses gathered by the BLM. This is the direct result of the HMAPs that have been implemented. The horses that are returned to the range perpetuate the existing characteristics of the various herds.

2. **Alternative 2**

Waiting until monitoring has shown that range condition has deteriorated due to wild horse populations will result in long periods between gathers with many more horses in each gather. Due to normal horse population structure, many of the excess horses will be over four years old, and more difficult to adopt. More of these horses will spend the rest of the their lives in BLM facilities at enormous expense to the tax payers in humane, but not truly desirable, conditions for the wild horses.

As the number of horses increases, the health of each herd will decrease. Since the forage in the HMAs was allocated among all the users at specific population levels, excess numbers result in increased stress for all the herbivores on the range. This problem is exacerbated now due to the six consecutive years of drought. All the animals are concentrated into the areas around the remaining water sources, reducing the effective available forage and resulting in direct competition for water among all the users. As horse numbers increase the effect becomes greater. Each adult horse eats more than each adult of any of the other users. So the effect of each additional adult horse is disproportionately greater. As interspecific and intraspecific competition increases, the horse herds will become generally less thrifty.

F. **Wilderness**

1. **Preferred Alternative**

Potential trap sites have been identified in WSA 914, East Fork High Rock Canyon and 1013, Massacre Rim. When gathering in WSAs, all vehicle travel will be on existing ways. The only ground disturbance will be at trap sites. Disturbance will result from building the trap, horses milling around in the trap and trampling at the entrance when driving them in, and turning the semi around at the trap site. The traps are

constructed of panels with jute wings. The traps are completely removed at the end of the gather. All signs of this disturbance will be removed at the end of the day that use is completed. Another disturbance will result from the presence of the helicopter flying low over the country herding the horses, and horses running in front of the helicopter. This disturbance will last for the time that the horse are being driven into the trap, up to three weeks total for all six HMAs. There are no residual effects to rehabilitate. The sense of solitude will be disturbed if a WSA user encounters the gather in progress.

The maintenance of animals within the carrying capacity of the range will help maintain riparian and other plant communities preserving the naturalness of the WSAs. Wild horse herds at planned management levels will provide opportunities to view wild horses as part of the wilderness experience.

2. **Consistency With BLM's Interim Management Policy**

a. Is the proposal temporary? Yes

The Proposed Action would take approximately two to three days in each WSA.

b. Does the activity require reclamation? No

The analysis indicates minor impacts to solitude. Solitude will be affected for two or three days per WSA due to the noise of the helicopter and other gathering facilities and activities.

Travel will be kept to a minimum number of trips using existing ways. The trap sites will require minor reclamation which can be accomplished on the last day that the trap is used. Reclamation will include removing crushed vegetation, removing tire tracks, and replacing displaced soil and rock.

c. Does the Proposed Action significantly constrain the Secretary of Interior's recommendation on the East Fork High Rock WSA and Massacre Bench WSA with respect to the area's suitability or non-suitability for preservation as wilderness? No

The limited disturbance will not affect the WSAs wilderness qualities.

3. **Alternative 2**

Since this alternative delays the gather, the WSA considerations would be delayed. All the same considerations would result at the time of a future gather. The WSA regulations or issues may be different for a gather in the future. The WSAs may have been designated Wilderness Areas or returned to multiple use.

G. **Cultural Resources**

1. **Preferred Alternative**

The preferred alternative, returning the wild horse populations to their minimum management levels, will achieve compliance with decisions HR009, HR010, and MN009 on the East High Rock, Bitner, and Massacre Lakes HMAs.

2. **Alternative 2**

Under this alternative wild horse numbers within the East High Rock, Bitner, and Massacre Lakes HMAs will continue to increase above the maximum management levels. Before wild horse numbers were reduced to those specified in the HMAPs, damage to cultural resources in High Rock Canyon and the Massacre area was documented. As wild horse numbers increase, with this alternative, damage will again begin to occur.

H. **Livestock**

Although range condition and the amount of forage on the allotments have increased through the period of the current allotment management plans, no increases in livestock numbers or season of use have been implemented.

1. **Preferred Alternative**

As discussed previously, gathering the wild horses and returning them to the specified management levels benefits all of the forage users in the six HMAs, including livestock.

Balancing the forage users is especially important on the Bitner HMA, which is the most closely allocated of the six HMAs. The permittee on the Bitner Allotment voluntarily removed his cattle from the allotment in June this year, because of poor forage production and water availability.

2. Alternative 2

Waiting until resource damage by wild horses can be specifically documented, will result in the loss of improving range condition, which will take a long time to recover.

Currently horses are competing with livestock for the available drinking water. The permittees have reduced livestock use in response to the drought, while horse numbers have, and will continue, to increase.

I. Mitigation Measures

The Proposed Action requires no additional mitigation.

J. Unavoidable Adverse Impacts

1. Adverse Impacts to Horses and Burros

In spite of using great care in gathering, hauling and sorting wild horses and burros, some level of stress is always created for the animals. There is always a chance of injury and on rare occasions, an animal dies. These adverse impacts cannot be totally mitigated.

2. Adverse Impacts to Wildlife

Some disturbance will be created for wildlife as the helicopter moves wild horses and burros through the area. This adverse impact can not be mitigated. However, this disturbance is minor and occurs only at widely spaced intervals (every three to four years).

III. PUBLIC REVIEW

The following individuals were informed of the proposed action and invited to comment:

Catherine Barcomb, NV Commission for the Preservation of Wild Horses
George Berrier, Modoc/Washoe Experimental Stewardship Program Wild Horse and Burro Representative
Dawn Lappin, Wild Horse Organized Assistance

In addition the individuals and organizations on the following Resource Area affected interest mailing lists were notified of this actions and given the opportunity to comment:

Wilderness Study Areas
Wild Horses and Burros
High Rock Canyon

Also the proposed action was presented to the Susanville District Advisory Council on September 16, 1992.

IV. LIST OF BLM CONTRIBUTORS

Bill Phillips - District Range Conservationist
Rob Jeffers - District Wild Horse Specialist
Richard Westman - Resource Area Supervisory Range Conservationist
Bill Dragt - Resource Area Range Conservationist
Roger Farschon - Resource Area Wildlife Biologist
Gary Schoolcraft - District Botanist
Hugh Bunten - Resource Area Archaeologist