

7/1/77

MONTE CRISTO

WILD & FREE ROAMING HORSES MANAGEMENT PLAN



WHITE PINE RANGER DISTRICT
HUMBOLDT NATIONAL FOREST



EGAN RESOURCE AREA
ELY DISTRICT - BLM

TABLE OF CONTENTS

	Page
I. BACKGROUND INFORMATION	1
A. Location and Area	1
B. Resource Data	1
1. Vegetative Types	1
2. Soils	2
3. Animals	3
a. Wildlife	3
b. Livestock	3
c. Wild Horses	4
(1) Population History	4
(2) Present Situation	5
(a) Numbers	5
(b) Colors	7
(c) Condition	7
(d) Forage	8
(e) Water	10
(f) Seasonal Use	10
(g) Home Ranges	10
C. Coordination	10
1. Relationship to Other Resource Uses and Resource Conflicts	10
a. Wild Horse - Wildlife	10
b. Wild Horse - Livestock	11
c. Interagency Cooperation	12
D. Existing Projects	13
II. OBJECTIVES	13
A. Habitat	13
1. Forage	13
2. Cover	13
3. Water	14
B. Horses	14
1. Animal Numbers	14
2. Sex Ratios	17
3. Disposal of Animals	17
4. Wild and Free Roaming Behavior	17
C. Other Resources	17
1. Wildlife	17
2. Livestock	18
3. Recreation	18
III. MANAGEMENT METHODS	18
A. Population Reduction	18
B. Population Maintenance	19
IV. MANAGEMENT FACILITIES AND EQUIPMENT	19
V. STUDIES AND EVALUATION	20
A. Habitat	20
1. Utilization Mapping	20
2. Fecal Transects	21

3.	Range Environmental Analysis (USFS)	21
	and Integrated Resource Studies (BLM)	21
B.	Animal	21
1.	Productivity and Survival	21
2.	Marked Horses	21
3.	Wild Horse Census	22
	a. Aircraft	22
	b. Time Lapse Movie Camera	22
4.	Sterilization	22
VI.	ANNUAL REVIEW	23

LIST OF TABLES

	Page
TABLE I Age Classes.	6
TABLE II Fecal Analysis Results	9

LIST OF MAPS

General Location Map

- Map # 1 Boundaries, Range Improvements, Land Status
- Map # 2 Home Ranges, Concentration Areas, Time
Lapse Camera Locations
- Map # 3 Wildlife

I. BACKGROUND INFORMATION

A. Location and Area

The Monte Cristo Herd Management Area is located in White Pine and Nye Counties, Nevada, approximately 30 air miles west of Ely, Nevada. The herd management area lies on the west slopes and foothills of the White Pine Range and extends into the east side of the Bull Creek drainage in Railroad Valley and the southern end of Newark Valley. General topography consists of alluvial fans, valley bottoms, foothills, canyons and steep ridges. (See General location Map).

Map number 1 shows the herd management area (BLM) and/or wild horse territory (USFS) which is the boundary where wild horses were found at the time of passage of the Wild Horse Act (PL 92-195). Map #1 also shows land status, allotment boundaries, watering places, and existing range improvements in the area.

Acreage tabulations are as follows:

<u>Land Status</u>	<u>Acres</u>	<u>Percent</u>
National Resource Lands (NRL)	155,330	68
National Forest	71,680	31
Private	1,930	1
	<u>228,940</u>	<u>100%</u>

B. Resource Data

1. Vegetative Types

Six vegetative types occur within the area. Pinyon-juniper, sagebrush, and salt desert shrub types provide the majority of the acreage, while grass, including crested wheatgrass seedings, timber, and mountain shrubs make up the remainder.

<u>TYPE</u>	<u>ACRES</u>	<u>PERCENT</u>
Salt desert shrub	42,760	19
Sagebrush	111,393	48
Pinyon-juniper	61,190	27
Grass	5,255	2
Timber	2,140	1
Mountain shrub	2,363	1
Barren	3,839	2
	<u>228,940</u>	<u>100%</u>

Studies show present range condition to be generally poor with a downward trend occurring. Condition and trend acreages are as follows:

<u>CONDITION</u>	<u>ACRES</u>	<u>PERCENT</u>
Good	5,870	3
Fair	50,360	22
Poor	172,710	75
<u>TREND</u>		
Upward	0	0
Stable	81,794	36
Downward	147,146	64

2. Soils

Soils in the area are generally shallow (less than 20 inches) with coarse to medium textured loamy surfaces. They are light colored, moderately to strongly alkaline, and moderately permeable. They have low water holding capacities and are moderately to severely susceptible to erosion.

Erosion on the lower slopes is relatively slight whereas at higher elevations the erosion is greater due primarily to the steepness of slope and slow permeability of the soil.

The majority of the erosion in the area occurs during spring runoff and summer thunderstorms. Through the years numerous gullies and washes have been formed by erosion which still continues in the area.

3. Animals

a. Wildlife (see map #3)

Yearlong range for antelope and mule deer exists in the area. Five crucial winter areas for mule deer have been identified by the Nevada Department of Fish and Game. Although there are normally few deer wintering here, these areas are crucial during severe winters when normal winter range is limited.

Habitat for chukar partridge and sage grouse is known to exist in valleys and suitable mountain brush habitat from Bull Creek springs through the northern part of the area.

Actual antelope numbers are not known, however, observations made in 1976 indicate approximately 35 head inhabit the area. There is no estimated number for deer, small game, and non-game species.

No endangered species are known to exist in the area.

b. Livestock (see map #1)

There are eight established allotments and two proposed allotments in the area. Livestock grazing in the area occurs from both sheep and cattle.

Grazing occurs primarily during fall, winter and spring on NRL allotments, and during summer on the National Forest allotments. Presently (1977) there are 7,714 animal unit months, (AUMs) within the area, 7,197 on BLM administered land and 517 on National Forest land. Livestock numbers will be adjusted as allotment management plans are developed.

An AUM, or animal unit month, is the amount of feed or forage required by one mature cow, or its equivalent, for a period of one month.

Non-use is a temporary lack of exercise of grazing privileges. Suspended non-use cannot be utilized until it has been determined that doing so will not damage the resource base, while preferred non-use is a voluntary action by the permittee and can be activated at any time during the grazing season.

AUMs of use, AUMs of non-use, and total AUMs by allotment are as follows:

<u>Allotment</u>	<u>AUM's of Use</u>	<u>Suspended and Preferred Non-use</u>	<u>Total AUM's</u>
<u>National Forest</u>			
*Treasure Hill	415	0	415
*Black Rock	102	0	102
Total	<u>517</u>	0	<u>517</u>
<u>NRL</u>			
*Newark Valley	483 Cattle	696	1179
South Pancake	526 Sheep	628	1154
*Moorman Ranch	106 Cattle	104	210
Six Mile	No current use	955	955
Monte Cristo	377 Cattle	0	377
*Duckwater	<u>2239 Cattle</u>	<u>1083</u>	<u>3322</u>
Total	<u>3731</u>	<u>3464</u>	<u>7197</u>

*This is not total AUM's in the allotment but rather only the portion within the wild horse area.

C. Wild Horses

1. Population History

Horses have always been a part of the range scene in the area, at least since contemporary livestock use began. The present wild horse populations stem primarily from domestic stock used in past ranching and mining operations. Due to the natural tendency

of these animals to go wild, many horses escaped and many of these were never retrieved. As the populations of these animals increased, periodic efforts were made by ranchers and government agencies to control populations and to remove unauthorized animals.

The number of horses licensed in the Monte Cristo area has varied over the years. The only recent license for horse use was allowed to Karl Bradshaw for five head on NRL. This license was discontinued in 1974 because the licensed horses created conflicts with efficient management of the wild and free roaming horses. No horses were claimed during the claiming period provided for subsequent to the passage of the Wild and Free Roaming Horse and Burro Act.

2. Present Situation

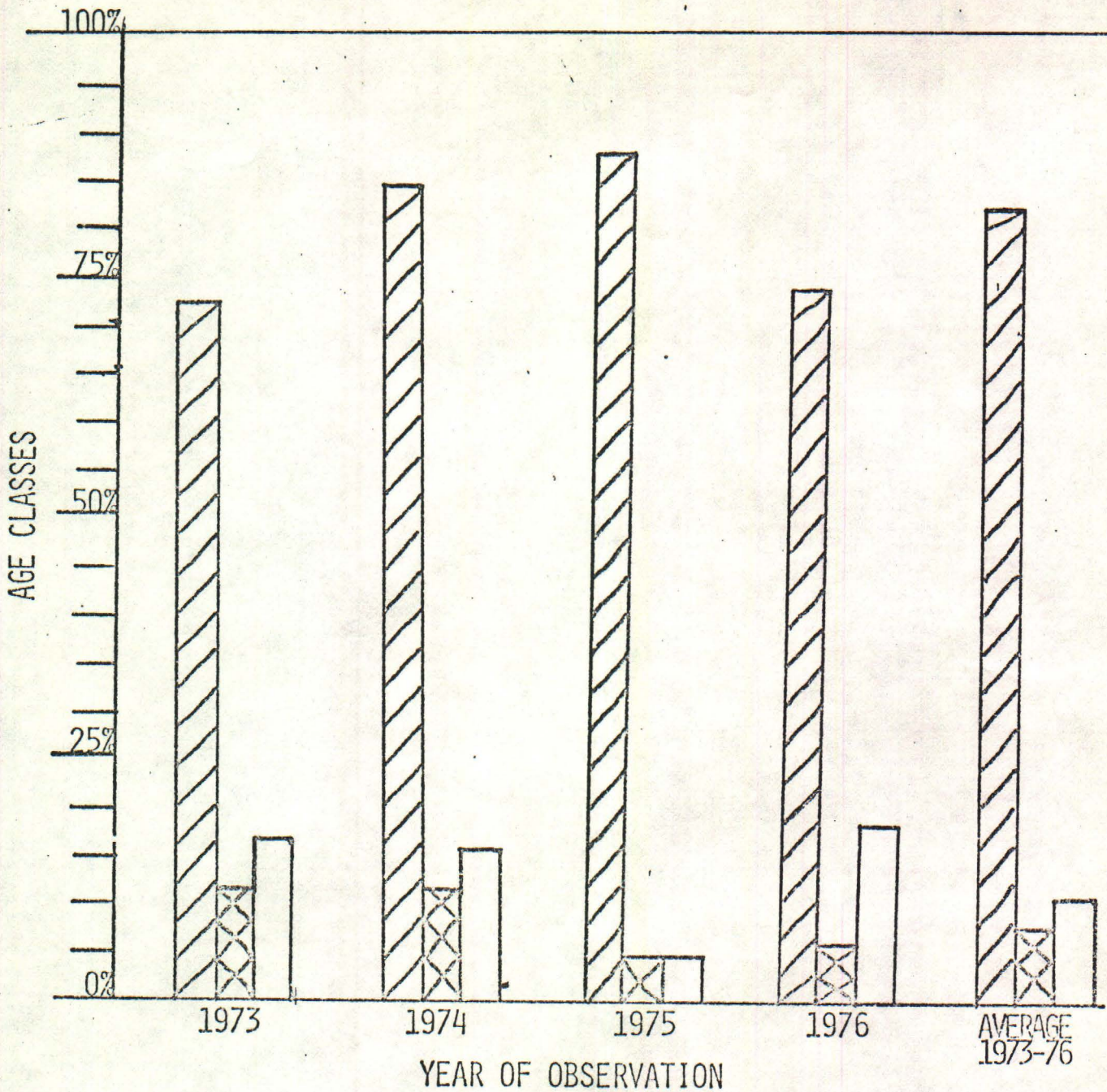
a. Numbers

With the passage of the Wild and Free Roaming Horse and Burro Act, a need was established for inventory data on wild horses. No inventories were present prior to or when the act was passed in 1971. Estimates based on subsequent inventory data places the number in the vicinity of 72 horses.

The first aerial inventory was not completed until January and February of 1973. A second aerial survey by helicopter was completed in March, 1975. The results of these inventories are as follows:

<u>Year</u>	<u>Adults</u>	<u>Yearlings</u>	<u>Young</u>	<u>Unclassified</u>	<u>Total</u>	<u>AUMs</u>
1973	61	5	11	11	88	1056
1975	127	7	7	0	141	1692

TABLE 1

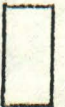


ADULTS



YEARLINGS

BECAUSE OF THE DIFFICULTY OF IDENTIFYING YEARLINGS, THE ACCURACY OF THIS AGE CLASS IS SUBJECT TO SOME QUESTION.



YOUNG

In the fall of 1974 a census was made by time lapse camera and on the ground inventory. This data was in agreement with the spring 1975 aerial inventory data.

The large increase between the 1973 and 1975 inventories is not believed to be entirely the result of a reproductive increase, but rather better methods of inventory and/or animals immigrating into the area.

Inventories have not been detailed enough to determine exact ages, productivity, sex ratios, or mortality. This information may be determined by future studies. Table I shows age classes observed between 1973-1976.

b. Colors

The southern portion of the wild horse area has predominately bays, red roans, and sorrels. The northern section of the area contains pintos, blacks, whites and buckskins.

c. Condition

Most animals appear to be in fair or good condition. Occasionally animals in poor condition were found intermixed with animals in fair or good condition.

Possible reasons for animals in poor condition could be the result of inbreeding, old age, sickness, parasites, or in the case of mares a result of nursing a foal. Limited forage, especially during critical times of the year, also accounts for poor condition.

The adult horses observed during inventories range in size from 700 pounds to 1000 pounds. The horses less than 1000 pounds are usually younger (3-5 years old). These horses

are considered larger than the average wild and free roaming horse.

d. Forage

The majority of forage utilization by horses occurs in the salt desert shrub, sagebrush and grass types. Concentrations of animals occur in these types. The three types receive considerable pressure year-round with the primary use occurring on winterfat (Seratoides lanata). Associated native grasses used are Indian ricegrass (Oryzopsis hymenoides), squirreltail (Sitanion hystrix), needleandthread (Stipa comata), galleta (Hilaria jamesii), and Sandberg bluegrass (Poa secunda).

Although no fecal analysis have been conducted in the Monte Cristo area, they have been taken in the Sand Springs area on NRL administered lands 12 miles west. Vegetative types in the Sand Springs area are almost identical to those in the Monte Cristo area and tabulated results can be used to help analyze forage preference in Monte Cristo. Results of the analysis are shown in Table II.

Pinyon-juniper covers 27 percent of the herd area and provides retreat cover, but little or no forage value. Studies have classified the majority of the P-J unsuitable for horse grazing.

Forage for horses, livestock, and wildlife is provided by 71 percent of the herd management area, resulting in a heavy concentration of animals in many areas where forage occurs.

TABLE II

Percentage of forage categories in the diets of wild horses determined by the microhistological analysis of feces technique (400 fields at 100 x were examined per sample) Ely District, Nevada

	Horses				
	Spring	Summer	Fall	Winter	Composite
Three awn (<i>Aristida</i>)					
Blue grama (<i>Bouteloua gracilis</i>)		1.38	.06		1.89
Cheatgrass (<i>Bromus tectorum</i>)	2.03				
Sedge (<i>Carex</i>)	1.12	.16			.24
Wild rye (<i>Elymus</i>)	9.16	.51	.28		.40
Galleta (<i>Hilaria Jamesii</i>)	2.88	41.40	5.26	8.55	22.18
Indian ricegrass (<i>Oryzops hymenoides</i>)	14.30	10.52	1.76	2.64	10.96
Squirrel tail (<i>Sitanion hystrix</i>)	12.26	1.04	1.24	.87	1.14
Dropseed (<i>Sporobolus</i>)	.58	1.69	1.89	.74	7.34
Needlegrass (<i>Stipa</i>)	47.65	5.36	2.46	5.99	30.75
Unknown grass	.16			.49	.49
Wheatgrass (<i>Agropyron</i>)					
Sagebrush (<i>Artemisia</i>)	.24				
Saltbrush (<i>Atriplex</i>)		.31	1.73	7.68	1.64
Balsam root (<i>Balsamorhiza</i>)					
Rubber rabbitbrush (<i>Chrysothamnus nauseosus</i>)					
Douglas rabbitbrush (<i>Chrysothamnus viscidiflorus</i>)					
Tansy Mustard (<i>Descurainia</i>)	.32			.49	
Pompeian Tea (<i>Ephedra</i>)					
Wall flower (<i>Erysimum</i>)				.12	
Wright buckwheat (<i>Eriogonum wrightii</i>)					
Winterfat (<i>Eurotia lanata</i>)	8.03	7.29	86.90	70.45	22.82
Halogeton (<i>Halocetron glomeratus</i>)	.32				
Spiny Hopsage (<i>Grayia spinosa</i>)					
Juniper (<i>Juniperus Utahensis</i>)					
Opuntia					
Phlox (<i>Phlox hoodii</i>)	.39			.25	.24
Greasewood (<i>Sarcobatus vermiculatus</i>)	.16				
Russian thistle (<i>Salsola Kali</i>)				.12	
Nightshade (<i>Solanum</i>)					
Globe Mallow (<i>Sphaeralcea coccinea</i>)					
Seed					.08
Unknown Chenopod		.08			.15
Unknown Composite (<i>Artemisia</i> type)					
Unknown Composite	.32				
Unknown Forb		.27	.22	1.24	.08
Unknown Legume	.08			.37	
Moss					

e. Water (See Map #1)

All but two perennial springs are on public land. Emigrant Spring (T. 17 N. R. 57 E. Sec. 34) and Rock Spring (T. 17 N. R. 58 E. Sec. 30) are on private land. Water rights were filed on Birch Spring by Forsgren Ranches, Inc., Box Spring by F. C. Vanover, Vanover Spring by A. C. Florio, and Mustang Spring by Burke and Yvonne Peterson. No others are on record for any springs in the area.

f. Seasonal Use

Fall, winter and spring use occurs primarily at the lower elevations. The horses tend to move up on the benches and higher elevations during the summer months.

g. Home Ranges (See Map #2)

Four home ranges have been identified in the area, Emigrant Spring, Green Springs, Lampson Spring, and Bull Creek.

Generally movement of horses is confined to each home range, however, movement does occasionally occur between home ranges.

Each home range contains forage escape cover and water. Extensive trail systems are evident throughout the area, linking water to areas of preferred grazing and escape cover.

C. Coordination

1. Relationship to Other Resource Uses and Resource Conflicts

a. Wild Horse - Wildlife

At the present time, deer numbers are low. Five crucial wintering areas are located within the boundaries of the wild horse area as shown on Map #3. Although crucial deer areas are within the wild horse area boundary, the deer

use the rough rocky cliff rose (Cowania sp.) areas, while the horses use the more gentle rock free areas.

In 1974 25 head of antelope were sighted near Silver Spring. In 1976 an estimated 50 head were counted near Bull Creek reservoir. The Nevada Department of Fish and Game flew the area in late 1976 and counted 35 head of antelope near Bull Creek reservoir.

A time lapse camera was used in 1974 to inventory the wild horse population. No antelope appeared on film, which indicates antelope are not closely tied to the water sources used by horses.

The area is northeast of a designated antelope hunting area. This potential conflict should be closely observed on a yearly basis by U. S. Forest Service, Bureau of Land Management and Nevada Department of Fish and Game personnel.

b. Wild Horse - Livestock (See Map #2)

A specific area of concern is located between Lampson Canyon and Broom Canyon along the National Forest and Bureau of Land Management boundary.

The present range condition is poor in lower Lampson Canyon because of the heavy utilization made by horses and some cattle. The forage was utilized between 71% - 90% in 1975-1976. Horses caused 90% of this heavy impact with cows only contributing 10%. A fence which separates lower and upper Lampson Canyon may prevent the horses from moving up the canyon and thus causing the heavy impact on the lower end of Lampson Canyon.

In upper Lampson Canyon the amount of utilization by horses and cows is completely reversed to what occurs in lower Lampson Canyon. Cows caused 65% of the utilization whereas horses only caused 35% of the utilization. In 1975-1976 the forage in Lampson Canyon seeding was utilized 71 - 95% by both horses and cattle.

The bench area between Birch Spring and Broom Canyon is used yearlong as the primary grazing area for the horses. The present range condition in this area is poor and utilization studies show forage use by horses and cattle to be very heavy. Forage utilization was between 70 - 80 percent during the 1975 grazing season, according to studies made in March 1976. Horses caused 78% of this utilization while cattle use resulted in 22 percent.

Horses and livestock in Emigrant Spring home range are in direct conflict for available forage. The low horse numbers (15 - 25) are not causing a significant impact upon the range. If however, the numbers should increase above 30 head, the livestock conflict could be serious.

In order to resolve these conflicts, coordination will be necessary between the Bureau of Land Management, U.S. Forest Service, and the livestock operators in the area.

c. Interagency Cooperation - U.S. Forest Service - Bureau of Land Management

The White Pine Ranger district and Egan Resource Area will coordinate the overall management of the Monte Cristo Area by conducting joint inventories and studies, and formulating management techniques to maintain and control the wild horses in the area. As part of this cooperative management program both agencies will jointly cooperate and coordinate information with the Nevada Department of Fish and Game, area ranchers, and wild horse interest groups concerning management goals and decisions.

D. Existing Projects

Data on existing land treatments and range improvements is shown on Map #1.

Existing fences have some effect on the movement of wild horses, but due to their presence in the area for many years, the horses are adjusted to them and no severe detrimental effects occur to the horses.

II. Objectives

A. Habitat

1. Forage

In order to determine the optimum number of horses to be maintained in the area, a maximum use of the forage species should be 30% in natural concentration areas. The possibility exists of spraying sagebrush in upper Lampson Canyon to increase forage production for both horses and cattle.

2. Cover

Any burning or chaining of pinyon-juniper within the wild horse territory will be designed to assure adequate cover is left

for horses. Pinyon-juniper serves as escape cover, loafing areas and protection from severe temperatures and winds. In the event of a chaining or controlled burn, at least 30 percent of the pinyon-juniper will be maintained in its existing state.

3. Water

Water will be maintained in its present state or improved. In the event private water is fenced or made unavailable, alternate waters will be developed.

B. Wild and Free Roaming Horses

The overall objective is to manage, protect, and control wild free roaming horses. Management will occur under Multiple Use principles in order to maintain the horses in the Monte Cristo area where they existed in 1971.

The main objective of the Wild and Free Roaming Horse and Burro Act was for protection of these animals against capture, branding, harrasment, or death. This law will be enforced to its fullest extent.

1. Animal Numbers

Tentative wild horse numbers on the Monte Cristo Wild Horse Area will be maintained at an average of 96 head. This is based on proper use studies conducted on the natural horse concentration areas. Total numbers on the entire area will not be allowed to increase above 120 head or be decreased below 72 head. This allows for a 25% fluctuation of the average numbers. (See rationale for individual home range.)

From observations the Monte Cristo Wild Horse Area has 4 home ranges. These are the Emigrant Spring, Green Spring, Lampson Spring, and Bull Creek home ranges. Specific objectives for these home ranges are:

Emigrant Spring Home Range (See Map #2)

The March 1975 helicopter count indicated 18 head of horses using this home range. This number does not pose a serious grazing problem with livestock or wildlife nor does it create a resource problem. To reduce this number much lower may not leave a viable herd and inbreeding would likely occur. It is therefore proposed to maintain this range with an average of 18 head of horses.

Green Springs Home Range (See Map #2)

Twenty-seven head of horses are using this home range as indicated by the March 1975 helicopter count. No resource problems nor serious grazing problems have been observed between livestock, wildlife and wild horses. It is proposed to maintain this range with an average of 27 head of horses.

Lampson Spring Home Range (See Map #2)

There are approximately 15 head of horses using this home range. Utilization studies indicate the Lampson seeding has a forage overuse problem which is due primarily to cattle use. Cattle are closely tied to the seeding whereas horses range out from the seeding and utilize the grass in draws and hills up to two miles from Lampson Spring. Key forage species are crested wheatgrass and bluebunch wheatgrass. Proper use on

these species is 50%. Horses will be allowed to use up to 30% in their natural concentration area (Lampson seeding). This will allow for an average of 19 horses. Cattle grazing in this area is in a rotation system.

Bull Creek Home Range (See Map #2)

The most recent aerial inventory by helicopter (March 1975) of the Bull Creek home range shows 90 horses inhabiting the area. Proper use on these species (white sage and perennial grass is 30%). Horses will be allowed to use up to a total of 20% of the annual forage production in the wild horse concentration areas. On this basis utilization studies indicate an average of 31 horses will be allowed within the Bull Creek home range. Inadvertent livestock use is recognized in the Bull Creek wild horse concentration area and 5% forage utilization is allowed. Five percent forage utilization by wildlife is also recognized. This use is primarily mule deer and antelope. A management system will be developed to control livestock use in the area.

Utilization studies have been done for two years of grazing in each home range (1975 and 1976). After the initial studies, utilization studies will be done periodically to confirm grazing impact and if studies indicate, the numbers of horses will be adjusted according to the degree of forage utilization and/or conflicts with wildlife. Studies will also be conducted on the grazing impact of livestock in all home ranges, and livestock numbers will be adjusted according to degree of forage utilization.

2. Sex Ratio

In 1974 a small random survey was made in this area. The survey showed 57% males and 43% females. With this ratio, the herd increased approximately 7% per year. This ratio seems satisfactory to maintain the herd at its present rate. Through selective removal, the sex ratio will be maintained at approximately 50 - 60% males and 50 - 40% females.

3. Disposal of Animals

Where the authorized officers of the U. S. Forest Service or Bureau of Land Management find it necessary to remove excess animals, and they determine it is not practical to relocate them on public land or capture and remove them for public maintenance, they may destroy such animals in the most humane manner possible.

Any severely injured or seriously sick animals will be destroyed immediately in the most humane manner possible as an act of mercy.

4. Wild Free-Roaming Behavior

Horses will be allowed to maintain their free-roaming behavior. Any fences to be constructed will be designed and located so that they do not significantly obstruct or impede movement of horses.

C. Other Resources

1. Wildlife

Maintain and manage wild horse numbers to avoid conflicts with wildlife requirements.

2. Livestock

Presently (1976) 4,248 AUMs of livestock use is licensed in this area (3,731 Aums - BLM, and 517 AUMs - USFS). Livestock numbers will be adjusted as allotment management plans are developed. Livestock management facilities must take into consideration horse movements, and use patterns, in order to maintain their free-roaming behavior.

3. Recreation

Presently very few people see or are aware of the wild horses in this area. Public awareness and understanding of wild horse management will be provided for by erecting an information sign in the Hamilton area, and at the junction of State Highway 20 and Bull Creek road.

III. MANAGEMENT METHODS

A. Population Reduction

Due to varying topography and habitat conditions within each designated home range, methods of capture and horse removal will vary as follows:

Emigrant Spring, Lampson Spring, and Green Spring home ranges.

Due to numerous water sources and non restrictive topography, water and wing trapping do not appear feasible. Therefore, excess animals will be removed in the most humane manner possible.

Bull Creek Home Range

Water trapping will be used to capture and select excess horses for disposal. Traps will be located at Birch and Vanover Springs. During trapping operations horses will be kept away from other springs in the area. The Nevada Department of Fish and Game will be consulted

in this regard. The use of the helicopters in gathering the horses will be evaluated. In the event these efforts fail, the excess animals will be removed in the most humane manner possible. This alternative will only be considered after one full month of effort has been expended in attempting to capture the animals.

Upon capture, excess horses will be removed to a central holding facility and cared for until such time as they can be relocated to suitable areas where horses exist, or turned over to the public under a cooperative maintenance program.

If no suitable areas are available to justify relocation and public demand for the horses is not present, the horses will be disposed of in a humane manner under the provisions of Federal and State laws.

B. Population Maintenance

The desired number of horses will be maintained according to the systems outlined above. In addition, the feasibility of sterilization to control population increases will be explored after the initial reductions. If it becomes necessary to capture additional animals to control population increases, this will be accomplished by adopting out the young animals and leaving the older ones on the range. This method will be used provided it is feasible and maintains a proper age structure. It is more humane to adopt out the young horses and they will adjust better to captivity.

IV. MANAGEMENT FACILITIES AND EQUIPMENT

Initial facilities and equipment needed:

<u>Facility and/or Equipment</u>	<u>Units</u>	<u>Materials</u>	<u>Labor</u>	<u>Total Cost</u>
Corral with chute	2	\$3,000 ea.	\$3,000 ea.	\$12,000
Transportation of horses from trap to holding facilities		Contract		3,000
20 hrs. bulldozer work to upgrade road and construct reservoirs for water trap	1		700	700
Fence other springs to be unavailable to horses during trapping operations	5	150 ea.	150 ea.	1,500
Develop water for trap	2	1,000	1,000	4,000
Veterinarian Cost			500	500
Administrative Cost			4,000	4,000
	TOTAL	\$4,150	\$9,350	\$25,700

V. STUDIES AND EVALUATION

A. Habitat

1. Utilization Mapping

The purpose for utilization mapping is to determine the impact on the range from all grazing animals. In order to determine the total utilization during the forage year, these studies should be made in the spring prior to green up. The forage use intensity is color coded on a detailed map. The following are the use intensity classes.

<u>Use Intensity Class</u>	<u>Forage Utilization</u>	<u>Use Class Symbol</u>	<u>Color Code</u>
Negligible	0-10%	N	White
Light	11-30%	L	Blue
Moderate	31-50%	M	Green
Heavy	51-70%	H	Yellow
Very Heavy	71 and over	V	Red

2. Fecal Transects

Transects will be conducted annually in conjunction with utilization studies. Results of the studies will determine the percentage of horse, livestock, and wildlife use occurring.

The ratio of droppings of wild horses, livestock and big game is determined by:

Horse - 8 droppings/day

Cattle - 12 droppings/day

Sheep - 13 droppings/day

Big Game - 13 droppings/day

3. Range Environmental Analysis (USFS) and Intergrated Resource Studies (BLM) is used to determine range condition and trend, watershed condition, vegetative types, and other habitat factors in the herd management area.

B. Animal

Management studies will be conducted as follows:

1. Productivity and Survival

Productivity and survival will be determined by making a representative count of adults, yearlings, and current year colts. This will be done during July annually.

This information will be used to determine population trend.

2. Marked Horses

Three horses have been immobilized by use of Cap-Chur gun and a colored collar placed on the animal. The location of the marked horse and description of associated horses will

be recorded when observed in order to document movement patterns, and band interactions.

3. Wild Horse Census

- a. Aircraft - When funds are available an aerial count will be made. Best results for this count are obtained when the aircraft flies systematically in an east-west grid pattern throughout the entire area.
- b. Time Lapse Movie Camera (See Map #2) - In the event aircraft cannot be obtained, a reasonably accurate census may be obtained with a time lapse camera. The time lapse movie camera was used in 1974 and has proven to be a valuable tool for inventorying horse numbers.

Starting in June, the movie camera should be set at Silver Spring (# 1) for one week and then move the camera in a northerly direction every week at springs (2) through 12.

This procedure should be systematically used periodically, approximately every three years, on a continuing basis, as criteria for determining population trend.

4. Sterilization

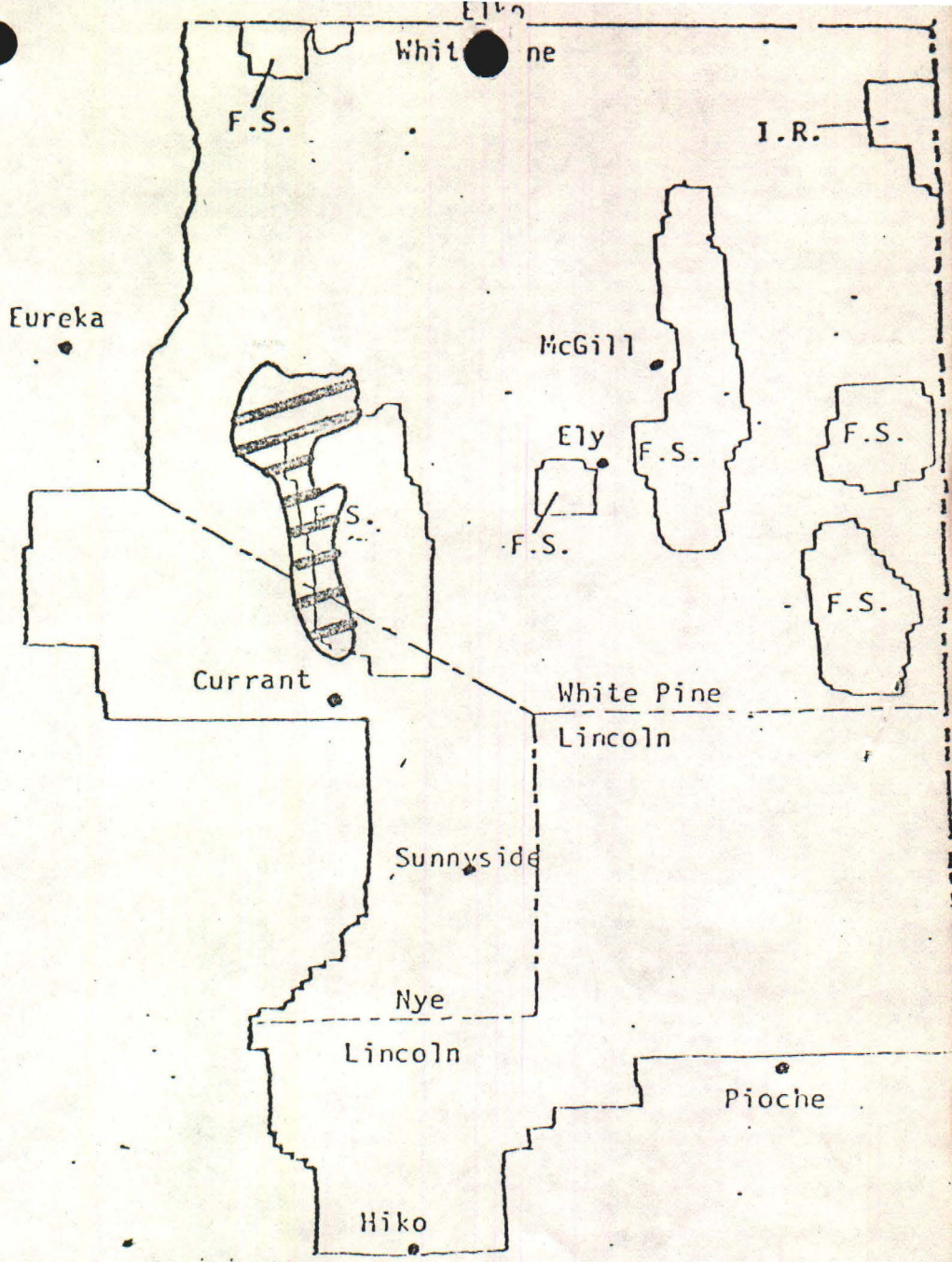
Six to 10 harem stallions will be sterilized using various techniques. These animals will be observed to determine their behavior characteristics. Their harems will be observed to determine the effect of the sterilization on band reproduction. If this study proves the method to be feasible, it will be used as a tool to control reproduction rate in the herd unit.

VI. ANNUAL REVIEW

A joint review of this plan will be conducted annually by the District Ranger and Wild Horse Specialist of the White Pine Ranger District (USFS), and the Area Manager and Wild Horse Specialist of the Egan Resource Area (BLM). The wild horse situation will be a topic for discussion at the annual interagency wildlife meeting.

This plan may be modified if data from public input, resource studies, plus experience gained in plan operation indicate that changes are desirable.

ELY DISTRICT



Nevada BLM Districts



LEGEND

Ely District Boundary

County Boundary

Monte Cristo Herd Unit

Humboldt National Forest



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5/25/77
Date

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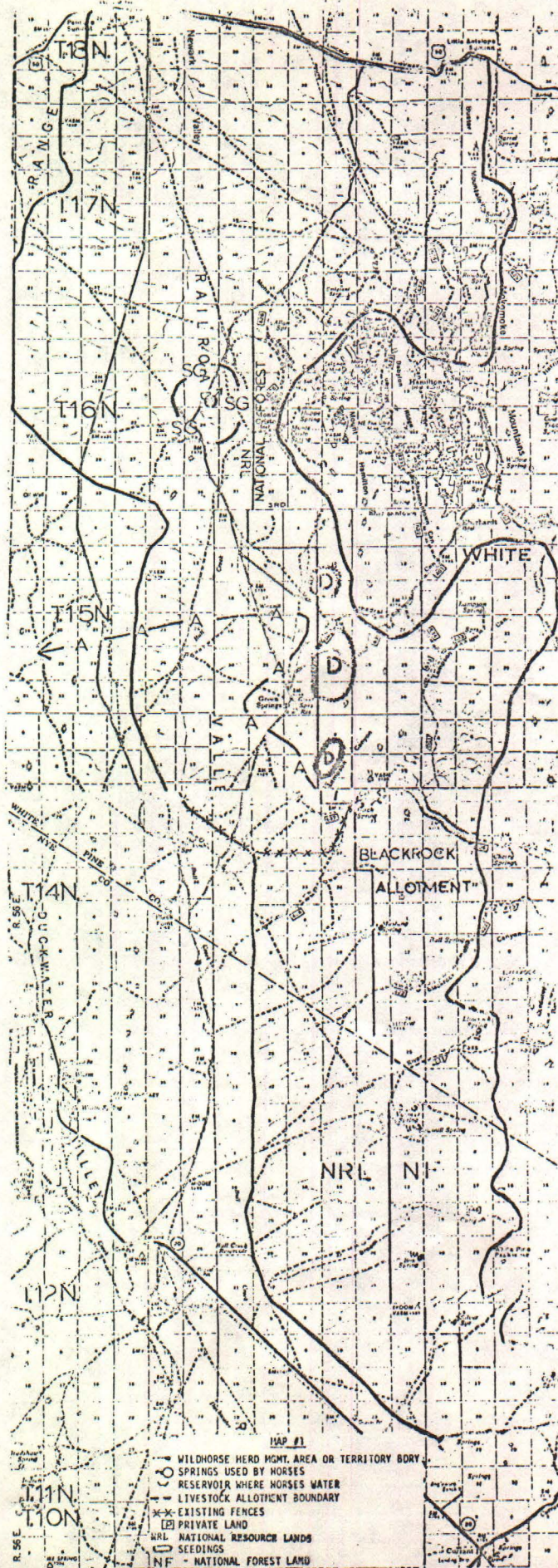
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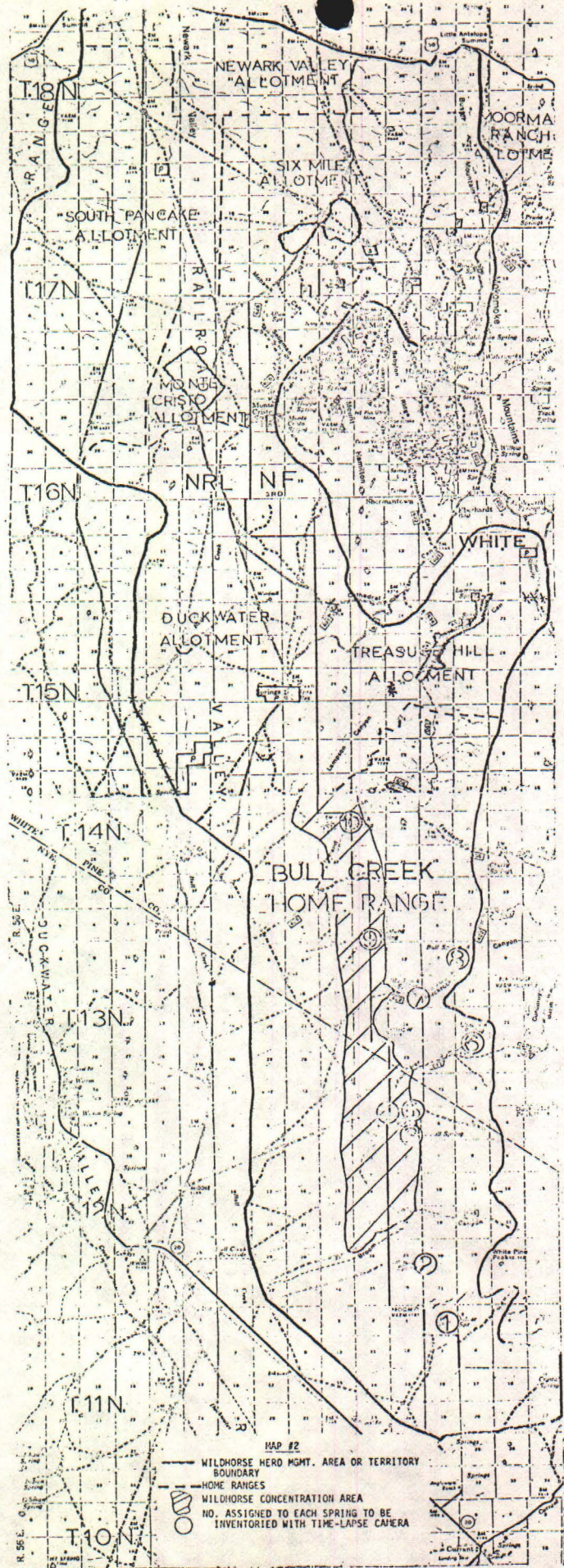
Neil B. McCleery
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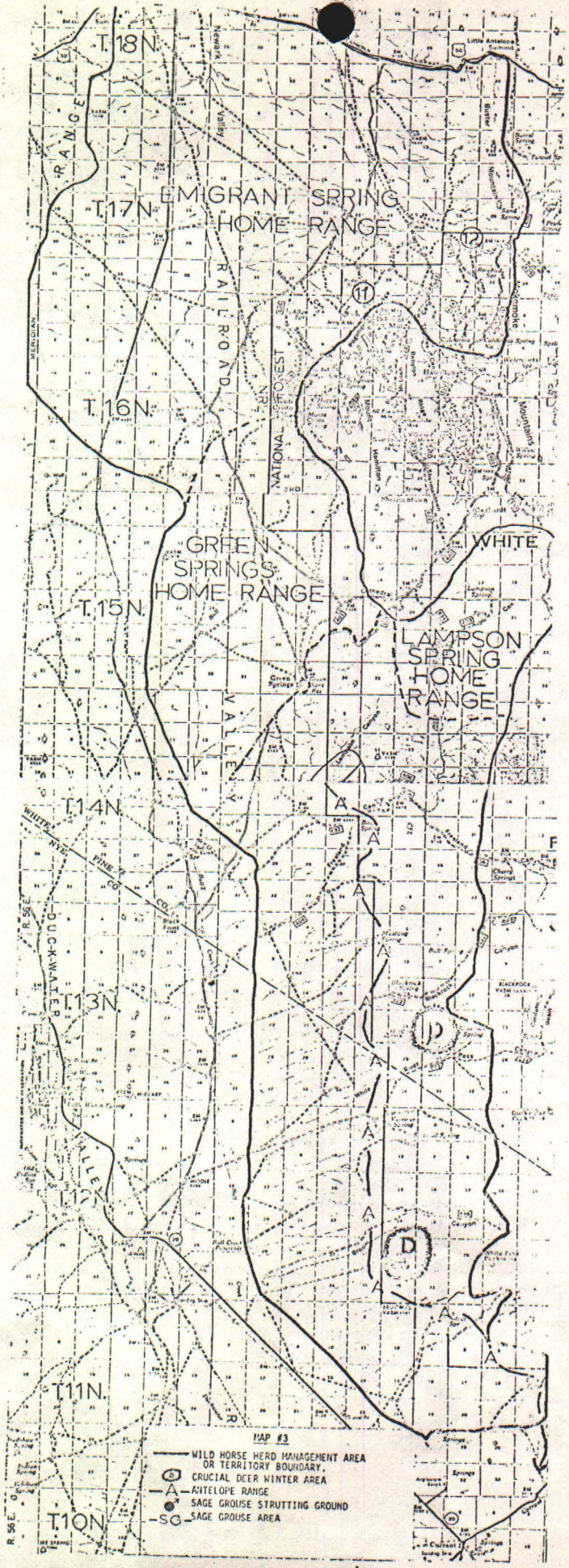
7/6/77
Date

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Environmental Assessment Record

BLM Ely #NV-040-7-17

for

Monte Cristo Wild Horse Herd Area Management Plan

Prepared by

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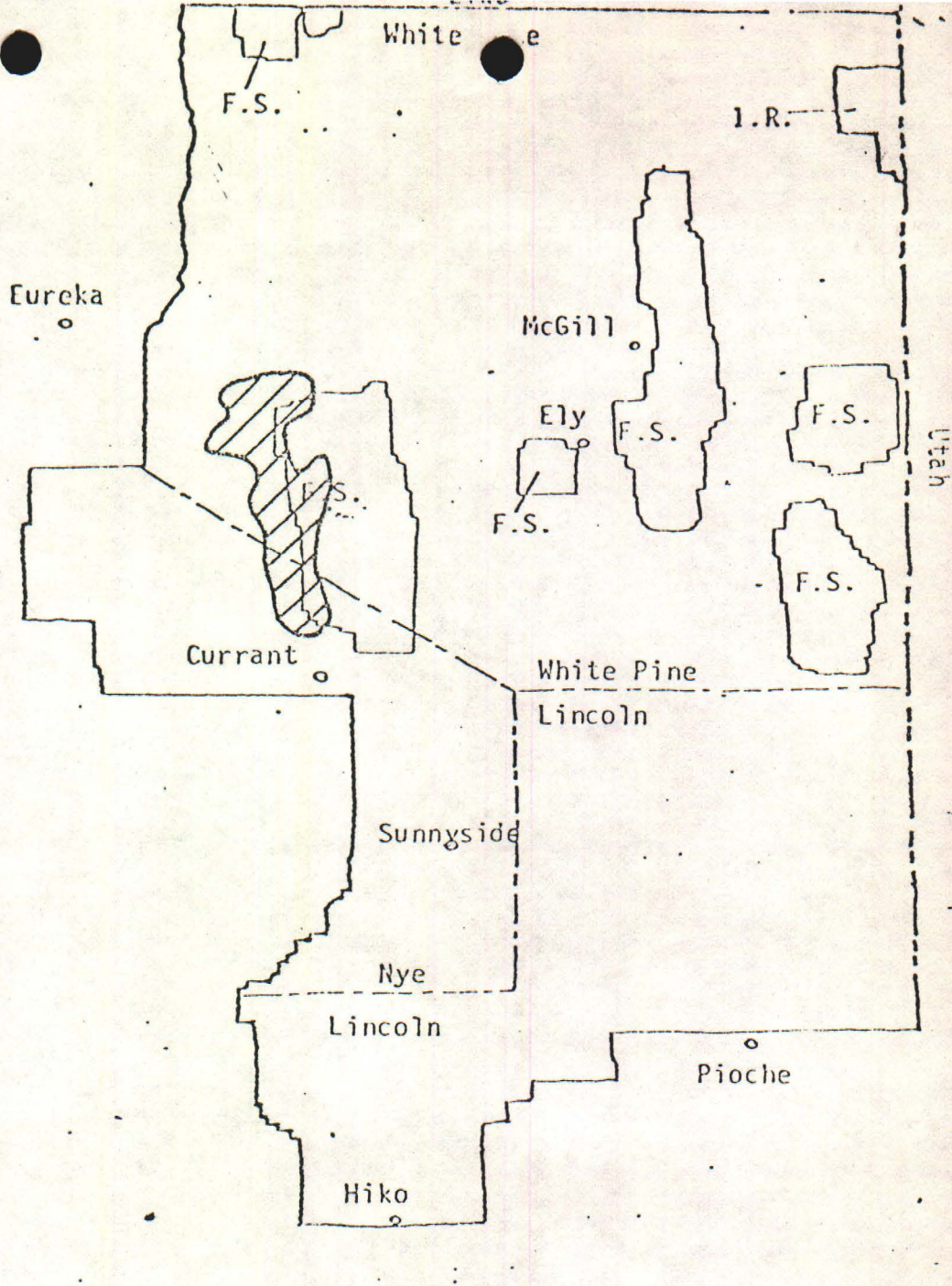
Tom Skinner, Range Conservationist, Egan Resource Area

TABLE OF CONTENTS

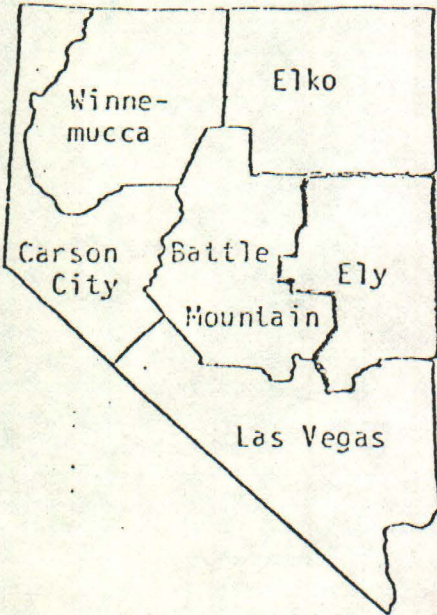
	<u>PAGE</u>
General Location Map	i
Expanded Location Map	ii
Chapter I	
Proposed Action	1-I
Alternatives to the Proposed Action	1-3
Chapter II	
Existing Environment	2-1
Chapter III	
Impact Analysis	3-1
Proposed Action	3-1
Alternatives	3-6
Chapter IV	
Record of Participation	4-1
Intensity of Public Interest	4-1
Staff Participation	4-2
Chapter V	
Summary	5-1
Review	5-1
Appendix I	
List of Individuals and Organizations Contacted	A-1

ELY DISTRICT

GENERAL LOCATION MAP
 MONTE CRISTO
 WILD HORSE MANAGEMENT PLAN

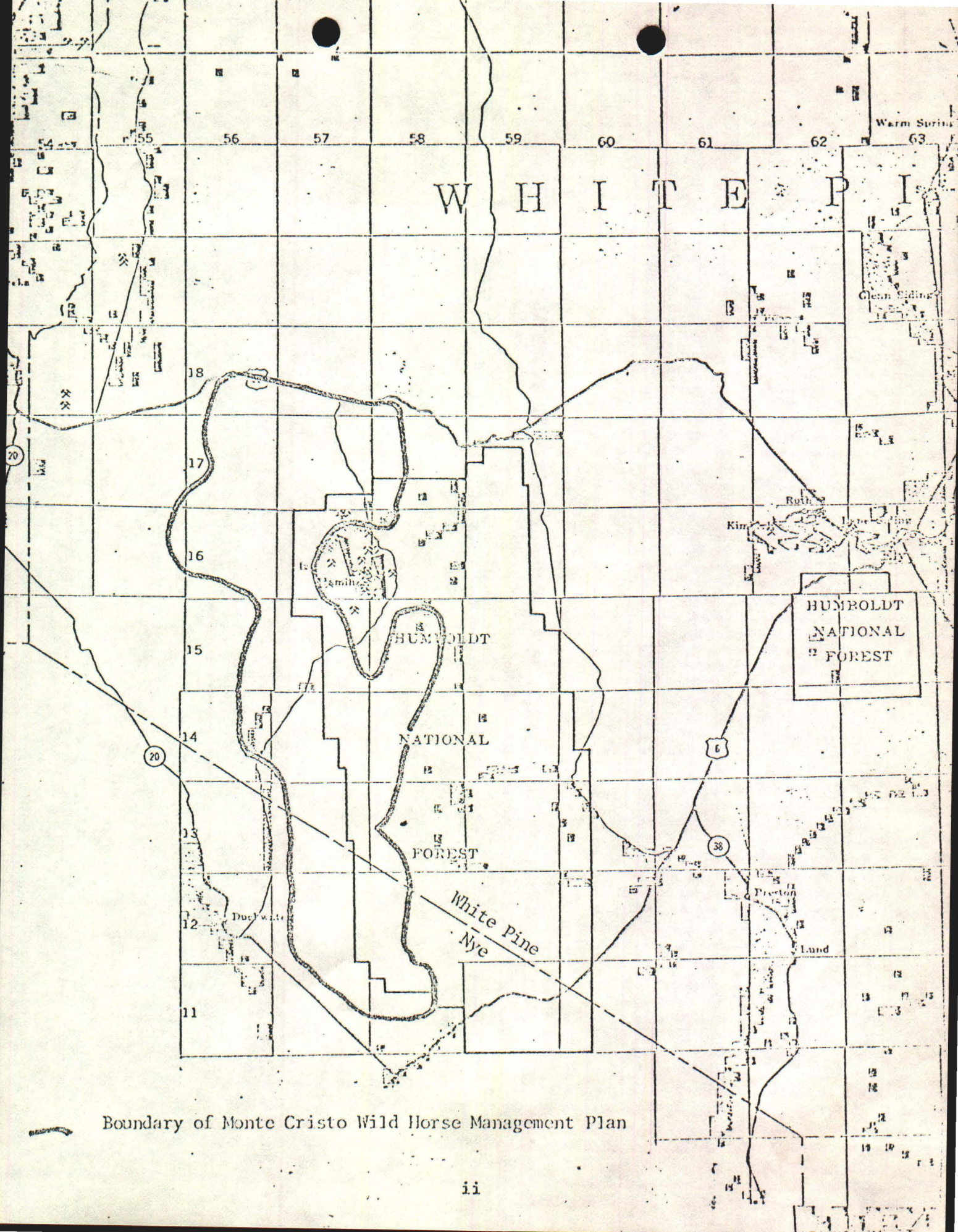


Nevada BLM Districts



LEGEND

- District Boundary ———
- County Boundary - - - - -
- Management Plan Boundary ▨
- National Forest - - - - -



— Boundary of Monte Cristo Wild Horse Management Plan

CHAPTER 1

PROPOSED ACTION

The proposed action is to develop and implement a plan for the proper management of horses in the Monte Cristo wild horse herd management area. The plan will be developed jointly with the White Pine District of the Humboldt National Forest. The optimum population level for the area will be determined using the most limiting factor for the area as a base, and will take into consideration other uses of the area such as wildlife and livestock. Studies will be established to insure that the objectives of the plan are being met.

Implementation of the plan will involve construction of trapping facilities, removal of excess horses to a number compatible with the forage resource and other uses in the area, and maintenance of the number of horses in the Monte Cristo herd, with adequate AUM's reserved for the maximum determined number.

Horses removed from the area will be trucked to holding facilities operated by the Bureau of Land Management near Reno, Nevada, where they will be cared for until such time that they can be released to the public under cooperative agreement through the Bureau's "Adopt-A-Horse" program.

Those horses to be disposed of by the Forest Service may be adopted under this program or under a local Forest Service program, whichever proves to be the most efficient.

Once the initial reduction is complete, the herd population will be allowed to build up to a specified maximum number, at which time a subsequent reduction will take place.

At the present time, an estimated 150 horses inhabit the Monte Cristo herd unit. Through management framework plan (MFP) decisions, establishment and interpretation of integrated studies, utilization and pellet group counts, and range environmental analysis an optimum number of horses will be arrived at. In order to allow for fluctuations in the population and to reduce the number of reductions to the population, a range of numbers will be established, allowing for a 25 percent fluctuation up or down from the optimum. Initial reduction is expected to take place in fiscal year (FY) 1979 with additional reductions occurring as the population increases.

Public Law 92-195, the Wild and Free Roaming Horse and Burro Act, places the responsibility for management of these animals with the Secretary of the Interior through the Bureau of Land Management and the Secretary of Agriculture through the Forest Service. This law provides for the management of wild horses in keeping with the multiple-use management concept for the public lands.

In accordance with law, an archaeological investigation will be conducted on any area where facilities will be constructed or where disruptive activities take place.

Water trapping will be the primary means of initially reducing numbers. This will involve the construction of corrals and loading chutes at selected springs within the herd unit. The trap itself will enclose the free water in the immediate vicinity of the spring. Road improvements may be required to accommodate vehicles transporting materials and horses to and from the trap site.

In order for water trapping to be an effective means of gathering horses, the water enclosed by the trap must be the only available free water in the immediate area. Therefore any other springs and water sources would have to be made unavailable for use by horses. This would require, at a minimum, the flagging of other water sources nearby.

Another method of capture being considered is wing trapping. This method requires the construction of a corral with a loading chute and wings extending out from the corral for distances of approximately one-quarter mile. The corral would be situated in an area frequently utilized by horses, preferably on a trail that passes through a geographical restriction such as a steep wash or canyon. The horses would then be slowly herded into the trap with the use of a helicopter.

A third method of capture is "parada" or the use of a domestic horse to encourage other horses to enter a corral or trap. This would also require the construction of trapping facilities similar to those mentioned above.

The final capture method to be considered is roping from horseback. This method requires highly skilled ropers on well trained horses to rope each wild horse and remove it from the area.

Two destructive methods of population reduction can also be considered. These are shooting with high powered rifles and overdosing the animals with euthanizing drugs administered remotely from a dart gun.

In both cases, small blinds would be constructed at desirable locations and personnel from either BLM or USFS would wait in the blinds for horses to pass by. While this is an efficient, humane, and economical method, and allows for a greater degree of selectivity of horses to be removed, it does require the destruction of horses and is very much in disfavor with the general public. As such, it will be considered only as a last resort after other methods have failed.

Population maintenance may also be partially achieved through the sterilization of selected male horses in individual bands through surgical, chemical, or mechanical means. This would require the immobilization of selected animals by remote injection of drugs. They would then be sterilized by one of the above mentioned methods, collared and released. This would reduce the productivity of each band, and lower the rate of population increase.

Finally the act provides for the capture and relocation of excess horses to areas where wild horses were found at the time of passage of the act, and where the present numbers are low and the area can support additional animals. No such areas are known to exist within the Ely District.

ALTERNATIVES TO THE PROPOSED ACTION

1. No Action - This alternative would involve no change in the present situation, and no studies would be conducted to gather information on range or herd conditions as they apply to the Monte Cristo herd unit. This alternative would not follow the intent of public law 92-195, which is to protect and manage wild horses in a manner which will achieve and maintain a thriving natural ecological balance on the public lands.

In addition, this alternative is not appropriate for this situation due to the joint nature of management of the herd between the Bureau of Land Management and the Forest Service.

2. Reduce Livestock Use with No Control on Horses - This alternative would eventually result in the removal of livestock from the herd area with those AUM's formerly used by livestock made available for horse use. This would allow the numbers of horses to increase without competition from livestock, and for control of numbers to be achieved through the processes of natural selection.

In effect, this would create a wild horse range or sanctuary with no domestic livestock use permitted. In order for this alternative to be effective, the area would require fencing to insure that no use from livestock would occur.

If control of horses were allowed, it would require roundups on a periodic basis to remove excess animals, control the population dynamics of the herd, and maintain the health and quality of the herd.

3. Increase Forage - This alternative would increase the amount of available forage in the herd unit through vegetative manipulation. At the present time, no suitable sites have been identified on National Resource Lands (NRL) within the herd unit. The possibility of suitable sites may exist on Forest Service lands on the White Pine range in the southern end of the herd unit. This would provide additional forage for wild horses, wildlife, and livestock, and could relieve some of the competition presently occurring in the area.

CHAPTER II

EXISTING ENVIRONMENT

The Monte Cristo herd management area is located in White Pine and Nye counties, Nevada, approximately 30 air miles west of Ely, Nevada. The herd management area lies on the west slopes and foothills of the White Pine Range and extends into the east side of the Bull Creek drainage in Railroad Valley in the south and to the summit of the Pancake Range in Newark Valley in the north.

General topography consists of valley bottoms, alluvial fans, foothills, canyons and steep ridges.

Land status and acreage tabulations are as follows:

<u>Land Status</u>	<u>Acres</u>	<u>Percent</u>
National Resource Lands (NRL)	155,330	68
Forest Service Lands (FS)	71,680	31
Private	<u>1,930</u>	<u>1</u>
TOTAL	228,940	100

Six vegetative types occur within the area. Pinyon-juniper, sagebrush and salt desert shrub types provide the majority of the acreage while grass, including crested wheatgrass seedings, timber, and mountain shrub make up the remainder. (Refer to Cherry Creek and Duckwater URA's for a more detailed discussion of vegetation.) Four species of threatened or endangered plants are believed to exist in the area. While none have been identified within the boundaries of the herd unit, they have been located close by in similar habitat types. These include Astragalus calycosus var. monophyllidus, Erigeron uncialis ssp. coryugans and Lepidium nanum all classified as threatened species, and Astragalus uncialis which is classified as endangered.

Studies show present range condition throughout the area to be poor with a downward trend occurring.

Soils in the area are generally shallow (less than 20 inches) with coarse to medium textured loamy surfaces. They are light colored, moderately to strongly alkaline, and moderately permeable. They have low water holding capacities and are moderately to severely susceptible to erosion.

Yearlong range for antelope and mule deer exists in the area. Five crucial winter areas for mule deer have been identified by the Nevada Department of Fish and Game. Although there are normally few deer wintering here, these areas are crucial during severe winters when normal winter range is limited.

Habitat for chukar partridge and blue grouse is known to exist in the area, and sage grouse are found in valleys and suitable mountain brush habitat in the northern portion of the area.

Actual numbers are not known, however, observations made in 1976 indicate that approximately 35 antelope inhabit the area. There is no estimated number for deer, small game or non-game species. No endangered species are known to exist in the area.

Livestock grazing occurs both from sheep and cattle. Grazing occurs primarily during fall, winter and spring on NRL and during summer on USFS land.

There are eight established allotments and two proposed allotments in the area. Presently (1976), there are 7,714 AUM's within the area, 7,197 on NRL and 517 on USFS lands. AUM, or animal unit month, means the amount of natural or cultivated feed necessary for the sustenance of one cow or its equivalent for a period of one month. Two types of non-use may be made, suspended and preferred. Suspended non-use is a mandatory reduction in grazing privileges due to a deteriorated range condition while preferred non-use is a temporary and voluntary non-use of AUM's which may be activated at any time during the grazing season.

AUM's of use, AUM's of non-use and total AUM's by allotment are as follows:

<u>Allotment</u>	<u>AUM's of Use</u>	<u>Suspended and Preferred Non-Use</u>	<u>Total AUM's</u>
<u>USFS</u>			
*Treasure Hill	415	0	415
*Blackrock	<u>102</u>	<u>0</u>	<u>102</u>
TOTAL	<u>517</u>	<u>0</u>	<u>517</u>
<u>NRL</u>			
*Newark Valley	483	696	1,179
South Pancake	526	628	1,154
*Moorman Ranch	106	104	210
Six Mile	0	955	955
Monte Cristo	377	0	377
*Duckwater	<u>2,239</u>	<u>1,083</u>	<u>3,322</u>
TOTAL	<u>3,731</u>	<u>3,466</u>	<u>7,197</u>

*Only that portion falling within the Wild Horse Area.

The Monte Cristo wild horse herd presently contains approximately 150 horses concentrated into four home ranges. These are the Emigrant Spring home range with 18 horses, the Green Springs home range with 27 horses, the Lampson Spring home range with 15 horses, and the Bull Creek home range with 90 horses. No grazing problems or conflicts have been identified in the Emigrant Spring, Green Springs or Lampson Spring home ranges, and no reduction in horse numbers is anticipated.

In the Bull Creek home range studies have indicated a serious overuse problem due to excessive numbers of horses. It is anticipated that the present numbers will be reduced to a number compatible with the resource base and other uses in the area.

Water is provided by several springs in the herd unit. Many intermittent streams also flow early in the year and may provide water until they run dry. For the most part, the horses are dependent on springs and winter snow for a source of water.

No outstanding or unique scenic values are recognized in the area. There are numerous intrusions from roads and past mining activity. The adjoining Pancake Range and the portion of the National Forest within the area are more scenic and provide more natural variety of terrain and vegetation than the two valley areas.

There are several recreational activities available in the area. These include hunting for deer, game birds, and small game, as well as visitors to several historical sites. Christmas tree cutting and pinyon nut collecting occur on a small scale.

The Pancake Range in the Cherry Creek Planning Area has been identified as possessing primitive qualities primarily because of its lack of intrusions. The Cherry Creek MFP decision regarding this area is to manage it on a multiple use basis with preservation of primitive values, an important consideration in management decisions.

There are eleven known archeological sites in the area. These sites are typical of many sites throughout eastern Nevada. They are the cultural remains of the Basin - Plateau Aboriginal Sociopolitical Groups. Most sites are found in association with water sources and generally consist of lithic and potsherd scatters.

CHAPTER III

IMPACT ANALYSIS

Proposed Action

Reduction of grazing pressure from the area encompassed by the Monte Cristo herd management area will aid in stabilizing the present downward trend of both range and watershed conditions in the area. It will also serve to reduce competition for forage, space and water between wild horses, wildlife and livestock. Proper management of the wild horses in this area will allow for a healthy viable herd while at the same time benefiting other resource uses in the area. Year-round AUM's will be reserved on BLM allotments for the maximum number allowable for the herd.

With reduced grazing pressure and proper management, desirable plant species should increase. With the implementation of a management plan, the public would become involved and public awareness of the government wild horse program would increase.

With the reduction in numbers, there would be fewer wild horses present on the range and it would be harder to see one by an individual going out for purposes of observation.

Each of the four accepted methods of reduction are described below.

Methods of Reduction - The method of water trapping for purposes of reduction would require the construction of trapping facilities at selected springs in the area. This would include a corral enclosing the available water at the spring with an attached loading chute. Some alteration or development of water may be required to facilitate the trapping operation. This could include diversions, piping water to another location, or the construction of small water holding facilities.

In the case of most springs in the area, approximately three miles of existing road would have to be upgraded, and an area cleared to accommodate vehicles for the loading and removal of captured horses. It would also require that all springs in the immediate vicinity be flagged to exclude use by horses. Some trampling of vegetation would occur in the corral. Vegetation at the loading site would also suffer damage.

A visual impact of the structure would occur, however, this would be minimal due to the presence of existing structures in the area of each potential trap site and the remoteness of the area.

Recommended Mitigating or Enhancing Measures

After optimum numbers are set, the required number of horses should be removed in one reduction effort. This will allow the remaining horses to be left alone for a longer period of time before another reduction is required.

Construction of trapping facilities should be done in such a manner as to allow the use of the water by other animals except when horses are actually in the trap. Construction of any water holding facility should be done so that surrounding vegetation will be left undisturbed and to guard against the possibility of soil erosion occurring. Upgrading of roads should be done to government specifications and be inspected by government personnel. This should control erosion and increase water quality on a long term basis. Springs flagged to exclude horses should be done with one strand of rope or smooth wire placed at a 48" height above ground with cloth or plastic flagging attached.

Government personnel should be present at the trap site at all times when trapping is in progress. No set or automatic water traps should be allowed in order to prevent water being made unavailable for long periods of time.

Residual Impacts

The reduction of horses should result in an increase in forage production, a decrease in overgrazing in critical areas, will aid in reversing the downward erosion trend, will reduce competition, and will help to maintain a healthy, viable horse herd.

Horses may be injured in the trap from crowding and fighting or trying to escape. Injuries may also occur during loading and transporting operations.

Increased public activity in the area would be expected with increased public awareness and improved roads in the area. This could lead to vandalism and harassment of the horses remaining. Visitor use may also increase in recreational activities. Accidents may occur to personnel involved in construction, trapping, handling, and transporting horses. Vehicle related accidents may occur in travel to the trap site, loading captured animals and transporting captured animals from the site.

Short Term Use -vs- Long Term Productivity

Short term use would involve the construction of trapping facilities at selected springs, upgrading existing roads and the possible construction of water holding facilities at one or more springs.

Long term productivity would involve an increase in forage, improvement of plant composition, possible improvement of water quality on a long term basis, reduction of competition for food, water, cover and living space, potential reduction of erosion and improvement of range condition and trend.

Irreversible and Irretrievable Commitment of Resources

No irreversible or irretrievable commitment of resources has been identified.

Wing Trapping

This method would involve the construction of a corral with a loading chute and gate and two wings radiating out from the gate for distances of approximately one-fourth mile. The trap would be located in a draw or deep wash that is frequently used by horses in the area. Horses would then be slowly herded from the benches into the draw and the trap using a helicopter. Construction of the trap would require the upgrading of existing roads from the main Bull Creek road to the trap site. In some locations, a short access road may have to be constructed to accommodate vehicles bringing in construction materials and loading and removing captured horses. The use of a helicopter may require small landing sites which, if repeatedly used, could result in trampling of vegetation and dust blowing. Trampling of vegetation may also occur at the trap site. There would be a visual impact of the trap itself which would be minimal due to the temporary nature of the corral and wings, location in a concealed area, and the general remoteness of the area.

Recommended Mitigating or Enhancing Measures

To reduce the effect of the corral and wings, portable traps and wing sections should be used. This would also reduce the visual impact once the trap is removed. Any damage to the area from construction or operation should be rehabilitated at the soonest opportune chance. An effort should be made to locate the trap site in an area where additional access roads would not be required. Any area damaged through the use of helicopters should be rehabilitated as soon as practicable. Roads, if needed, should be built to government specifications and inspected by government personnel. BLM and FS regulations concerning the use of helicopters in wild horse management and ground vehicle use should be followed.

Residual Impacts

Accidents may occur during trapping and transporting operations. Horses may be injured during trapping operations and while in the trap as a result of running into the wings, fighting, trampling, etc. Accidents to personnel may occur during trapping operations if riders are used in conjunction with a helicopter. Accidents may occur with helicopter use if the pilot and supervisor are not fully acquainted with proper methods of helicopter use and safety procedures relating to wild horse roundups.

Short Term Use -vs- Long Term Productivity

Short term use involves the construction of trapping facilities, upgrading of roads and possible construction of access roads. Long term productivity involves the removal of excess horses which will reduce the competition for forage between horses, wildlife and domestic livestock in the area. The reduction in competition should aid in improving forage condition and trend in the area. Watershed conditions should also improve through increases in ground cover, litter, etc.

Irreversible and Irretrievable Commitment of Resources

No irreversible or irretrievable commitment of resources are identified under this alternative.

Parada

This method would also involve the construction of corrals with gates and loading chutes. With this method, a domestic horse is used to encourage wild horses to enter a corral where they are then trapped. Impacts of construction are the same as those mentioned under water and wing trapping.

Recommended Mitigating or Enhancing Measures

Mitigating or enhancing measures for this method are the same as those described for water and wing trapping.

Residual Impacts

Accidents may occur during trapping and transporting operations. Horses may be injured during trapping operations and while in the trap as a result of fighting, trampling and trying to escape. Accidents to personnel may occur during trapping operations if riders are used in conjunction with domestic horses.

Short Term Use -vs- Long Term Productivity

These are the same as are described for water and wing trapping.

Irreversible and Irretrievable Commitment of Resources

No irreversible or irretrievable commitment of resources are identified under this alternative.

Roping

This method involves the roping of selected horses by mounted riders and taking them to a holding facility for transportation from the area. Riders would be stationed in an area frequented by horses and an attempt would be made to rope them when they passed by the selected spot. This method requires very experienced ropers and well trained and disciplined horses. Once the horses have been captured, they would be removed in the same manner as described above. The impacts of constructing a holding corral would be the same as those described for water and wing trapping.

Mitigating or Enhancing Measures

Personnel involved should be highly experienced in roping horses and be knowledgeable in the movements and habits of wild horses. Domestic horses used under this method should be well trained and in excellent condition to avoid injury to the horse or its rider.

Mitigating or enhancing measures involved with corral construction and transportation are the same as those mentioned for proceeding methods.

Residual Impacts

Accidents may occur to domestic horses used as roping horses. Riders may also be injured during the trapping operation. Wild horses may receive injuries from the roping activities and from trying to escape. Further residual impacts are the same as those for methods previously described.

Short Term Use -vs- Long Term Productivity

These are the same as those previously described.

Irreversible or Irrecoverable Commitment of Resources

No irreversible or irretrievable commitments of resources are identified with this method of reduction.

Shooting With High Powered Rifles and Overdosing With Drugs

This method involves the removal of selected animals by government officials using high powered rifles or through remote injection of an overdose of lethal drugs.

Small blinds would be constructed at vantage points and selected horses shot as they passed the blind. This method allows for greater selectivity of the animals removed, is humane, efficient, and economical. A problem could arise concerning disposal of the carcasses, especially during the initial reduction. This method would allow for a greater degree of flexibility in managing the population for sex ratios, age structures, and maintaining the general health of the population. This method creates a great deal of public concern and is not accepted by most factions. For these reasons, it is listed only as a last resort effort.

Mitigating or Enhancing Measures

Personnel involved should be knowledgeable in characteristics and habits of wild horses. Selection of horses for removal should be done by the district or area wild horse specialist. Personnel involved in the removal operation should be adept with firearms, drugs, injection equipment, and be able to carry out the assignment in as humane a manner as possible. Carcasses should be removed from the site as soon as possible and disposed of in an acceptable manner in order to avoid possible health hazards. Care should be taken to remove old, sick, lame and injured animals first.

An extensive public information program should be carried out so the public can be made aware of the situation and the reasons for this method of disposal.

Residual Impacts

Accidents may occur through the use of firearms, drugs, injection equipment, and from injured horses. If disposal of the carcasses is not done in a proper manner, an impact could arise.

Short Term Use -vs- Long Term Productivity

Short term use would result only from any handling and disposal of carcasses that might arise.

Long term productivity involves the removal of selected animals from the herd which will aid in better management of the population structure of the herd.

Irreversible or Irretrievable Commitment of Resources

No irreversible or irretrievable commitment of resources are made under this method other than the loss of the animals themselves.

Impacts of Alternatives to the Proposed Action

1) INCREASE FORAGE

This alternative would attempt to increase available forage on a multiple use basis by vegetation manipulation such as through seeding a selected area. Increased forage would be available for wild horses, wildlife, and livestock. Due to the lack of suitable sites on NRL and the unavailability during most winters on USFS, this increase in forage would be primarily seasonal in nature. A land disturbance would be made in preparation of the area from the method chosen to remove present vegetation. This could include chaining, spraying or plowing the selected area.

Recommended Mitigating or Enhancing Measures

The shape of a seeding should be discontinuous with irregular edges and islands or fingers of native vegetation rather than a block or other regular shape. The area should be kept to a small size with more than one small area better than one large one. Proximity to cover and water should be considered. Composition of the area should not be one species but rather a mixture such as 1/3 grass, 1/3 forbs and 1/3 shrubs to provide a more diverse habitat for a variety of species.

Residual Impacts

Forage production would increase in the area and provide additional forage for wild horses, wildlife and livestock. A visual impact

would occur which would partially be mitigated by the size and shape considerations listed above. A seeding may serve to attract animals and could create a concentration area, which may increase competition in the immediate area of the seeding.

Short Term Use -vs- Long Term Productivity

Short term use would involve the actual site preparation and seeding operation. Long term productivity would involve the loss of native vegetation types in the area. It would also involve the increase in forage production if the seeding were successful. Increases in forage could lessen the grazing pressure and reduce competition between species. It could also create a competition problem by attracting animals to the site. Watershed, wildlife habitat, wild horses, and livestock habitat would all increase.

Irreversible or Irretrievable Commitment of Resources

Native vegetation would be removed from the area and replaced by introduced species. The natural community system would be altered. No other irreversible or irretrievable commitments of resources are identified under this action.

2) REDUCE LIVESTOCK USE OR CREATE A WILD HORSE RANGE

This alternative would result in the eventual removal of domestic livestock use within the boundaries of the wild horse herd area and reserve use of the area for wild horses and wildlife exclusively. Competition between wild horses and livestock would be eliminated under this alternative. Eventually horse numbers would expand to the point where the range would no longer be able to support them. At this point, numbers would be reduced through the process of natural selection or through one of the methods discussed under the proposed action. It is generally felt that the herd unit would require fencing to exclude use by domestic livestock and to prevent horses from roaming outside the boundaries of their range in accordance with Public Law 92-195. This would involve the construction of over 100 miles of fence.

Complete removal of livestock from the area would create a serious economic hardship on ranchers presently holding grazing privileges in the area, with the loss of over 3,500 AUM's of active use. Many of the springs in the herd area have had water right filed on them for a number of years. To create a wild horse range and exclude livestock grazing would effectively deny the use of this water for which compensation would have to be made. Over 1,900 acres of private land are found within the herd area. Much of this land is used in conjunction with livestock operations and the denial of use of adjacent public land for livestock grazing would effectively make the present uses of this land unfeasible.

The combination of the above factors would, in all probability, cause several livestock operators to go out of business.

Creation of a wild horse range would enable horses to roam unmolested throughout the area and would increase the likelihood of observation by the general public.

Recommended Mitigating or Enhancing Measures

To mitigate the loss of over 3,500 AUM's to local ranchers, forage should be increased in other areas to compensate for the loss. This would involve the establishment of one or a number of seedings to increase grazing capacity and the drilling of several wells to provide livestock water.

Fencing the area should be done in such a manner that will not disrupt wildlife and will not be a hazard to wild horses or wildlife.

When horse numbers increase to the point where the range will no longer support them, or they are creating a serious conflict with wildlife, the excess animals should be reduced by implementation of a procedure equivalent to the proposed action described in this document.

Residual Impacts

The impact of the loss of 3,500 AUM's and its economic results cannot be fully mitigated.

The impact of increases in horse numbers to the point where deterioration of the range occurs could not be mitigated without the implementation of proposals other than those outlined in this alternative.

In the event a reduction in numbers were to take place, the risk of accidents would be similar to those discussed under the various methods of removal outlined in the proposed action.

Short Term Use -vs- Long Term Productivity

Short term use would involve the construction of the boundary fence around the herd area, and the reduction in competition between wild horses and livestock. Long term productivity would involve the increased use of the range and increases in conflicts with wildlife as horse numbers increased. Range and watershed condition would deteriorate as numbers reached the point where the resources could no longer support them.

Irreversible or Irretrievable Commitment of Resources

Irreversible and irretrievable commitment of resources would involve the loss of over 3,500 AUM's of livestock grazing within the boundaries of

the herd unit. The use of water from a number of springs by private individuals would also be lost. When horse numbers increased to the point where degradation to the range was taking place, the vegetative and soil resources would increasingly continue to be lost.

CHAPTER IV

a) Record of Participation

On October 14, 1976 a public information meeting and tour was given. A short office presentation was followed by an all day tour of the Monte Cristo wild horse herd management area. Several comments were received from local area ranchers, special interest groups and local residents.

Comments were solicited on a proposed management plan to be developed jointly by the Bureau of Land Management and the U.S. Forest Service. Representatives of local and regional offices of the Nevada Fish and Game Department were contacted for comments. Several wild horse interest groups were contacted including Wild Horse Organized Assistance (WHOA!), America Horse Protection Association (AHPA), Nevada Horsemen's Association, and a newspaper column dealing with horses called Saddle Chatter. The Nevada State Office of the Bureau of Land Management and the Forest Supervisor's Office of the Humboldt National Forest were also contacted for comments.

Newspaper articles soliciting comments on a draft management plan ran in Ely and Reno newspapers, and on the Ely radio station, and copies were available for review at the White Pine County Library, Ely District Office of the BLM, and White Pine District, USFS.

The proposed management plan was presented to the National Wild Horse Forum in Reno, Nevada in April 1977. The proposal was received favorably and no adverse comments were made.

Eighteen copies of the proposed plan were sent to a variety of people for review and comment. Of these eighteen, four responses were received. (See Appendix 1 for a detailed list.)

b) Intensity of Public Interest

The issue of wild horses and their management has been one of high public interest for many years. Prior to the passage of the first protective regulations in the 1950's, local area residents captured horses on a regular basis, generally to be sold for slaughter. As laws were passed and more publicity was attached to the issue, public concern became greater, both for and against protection of these animals. In recent years, groups have become very vocal for the total protection of wild horses with reduction in grazing pressure to be absorbed by livestock interests in the areas where horses were found. Opposing views were held by the livestock industry and, in some cases, progressed to the point where horses were shot when seen on the range. Present public interest continues on both sides with each side generally becoming more moderate in their views. Both sides, for the most part, realize that reductions are necessary and that management plans and disposal procedures developed by the Federal land managing agencies are the processes that must be followed.

In recent years, roundups have been held in areas where severe damage is being done to the resources and a private maintenance under cooperative agreement program has been developed to dispose of the captured animals. In addition, herd area management plans are in the process of being developed for those areas identified as wild horse herd units. Efforts have been made in many areas to remove privately owned claimed animals from the Federal range. Interest still exists on the national level through organized wild horse interest groups, humane societies, lobby groups and organized livestock interests. The recently passed Federal Land Policy and Management Act of 1976 provides for changes in implementation of the wild horse laws and Federal agency regulations are periodically updated and altered to meet changing situations.

c) Staff Participation

Ross Ferris - - - Nevada State Office, BLM

Ken Timothy - - - Humboldt National Forest

CHAPTER V

Summary

The proposed action is the development of a Monte Cristo wild horse herd area management plan and its implementation using water trapping as the primary means of reducing population numbers. Residual impacts identified are minor and vary with each method and alternative discussed. Short term use is identified as construction of facilities with long term productivity identified as increases in forage production and plant composition, reduction in grazing pressure and competition between wild horses, wildlife and domestic livestock and an increase in watershed condition and trend. No irreversible or irretrievable commitment of resources is identified other than the loss of excess animals from the wild horse population. Public interest is high and support for the project is mixed between interest groups but generally in favor of management.

Review

<u>Review</u>	<u>Initial</u>	<u>Date</u>
Eugene Jonart, Environmental Coordinator	<u>ESJ</u>	<u>7/1/77</u>
Steve Sherman, Egan Area Manager	<u>WSS</u>	<u>7/5/77</u>
Garth Baxter, District Ranger	<u>Garth Baxter</u>	<u>7/1/77</u>
Neil McCleery, Ely District Manager	<u>nmccleery</u>	<u>7/6/77</u>
John Hafterson, Forest Supervisor	<u>JAH</u>	<u>7/20/77</u>

APPENDIX I

List of Individuals
and
Organizations Contacted

1. Wild Horse Organized Assistance (WHOA!)
Reno, Nevada
2. Saddle Chatter, Nevada State Journal
Reno, Nevada
3. Mr. Edward Halstead
Halstead - Forsgren Ranches
4. Nevada Department of Fish and Game
Ely, Nevada
5. Nevada Department of Fish and Game
Elko, Nevada
6. Elias Goicoechea
Elko, Nevada
7. Richard McKay
Eureka, Nevada
8. Nevada State Horsemen's Association
Reno, Nevada
9. Nevada Humane Society
Reno, Nevada
10. Dwain Nelson
Vernal, Utah
11. American Horse Protection Association (AHPA)
Escondido, California
12. Joyce Yelland
Ely, Nevada
13. Karl Bradshaw
Duckwater, Nevada
14. Bureau of Land Management
Ely, Nevada
15. Humboldt National Forest
Ely, Nevada
16. Ross Ferris
Reno, Nevada

17. White Pine County Library
Ely, Nevada
18. Keith Bartholomae
Elko, Nevada

Comments were received from the following:

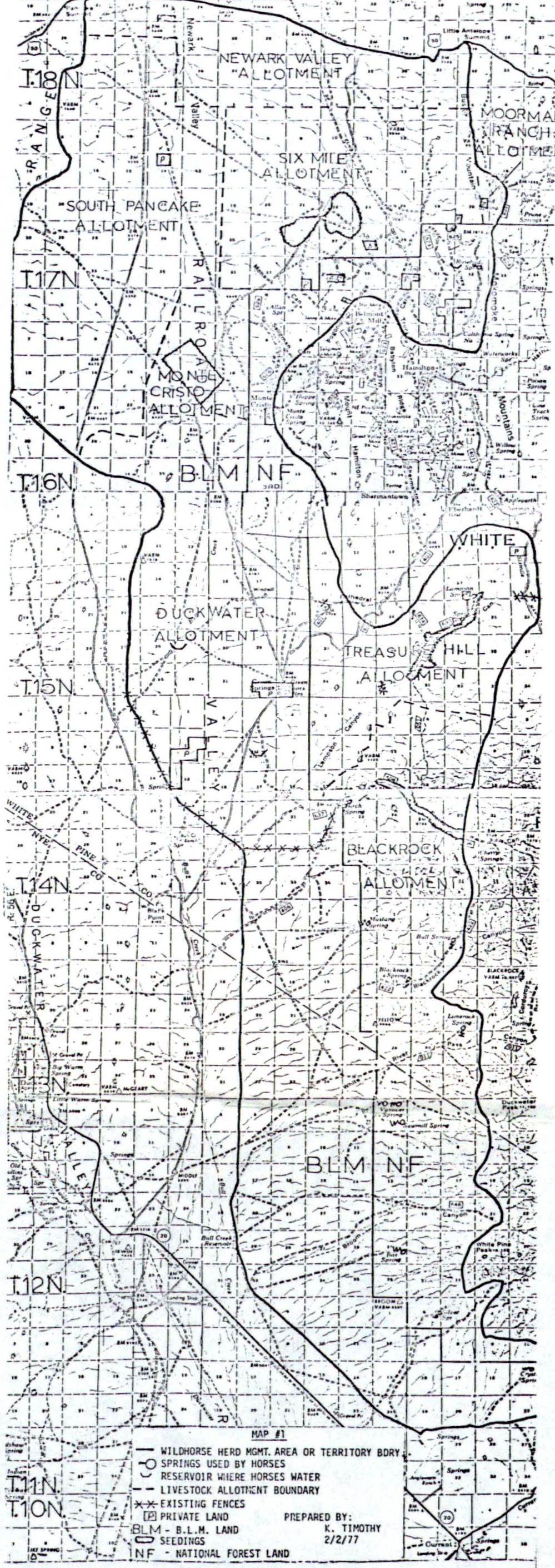
1. Wild Horse Organized Assistance (WHOA!)
Reno, Nevada
2. Nevada Department of Fish and Game
Reno, Nevada
3. American Horse Protection Association (AHPA)
Escondido, California
4. Bureau of Land Management
Ely and Reno, Nevada
5. Ross Ferris
Reno, Nevada
6. Humboldt National Forest
Ely and Elko, Nevada



MAP #1

- WILDHORSE HERD MGMT. AREA OR TERRITORY BDY.
- SPRINGS USED BY HORSES
- ⌒ RESERVOIR WHERE HORSES WATER
- - - LIVESTOCK ALLOTMENT BOUNDARY
- ××× EXISTING FENCES
- Ⓟ PRIVATE LAND
- BLM - B.L.M. LAND
- SEEDINGS
- NF - NATIONAL FOREST LAND

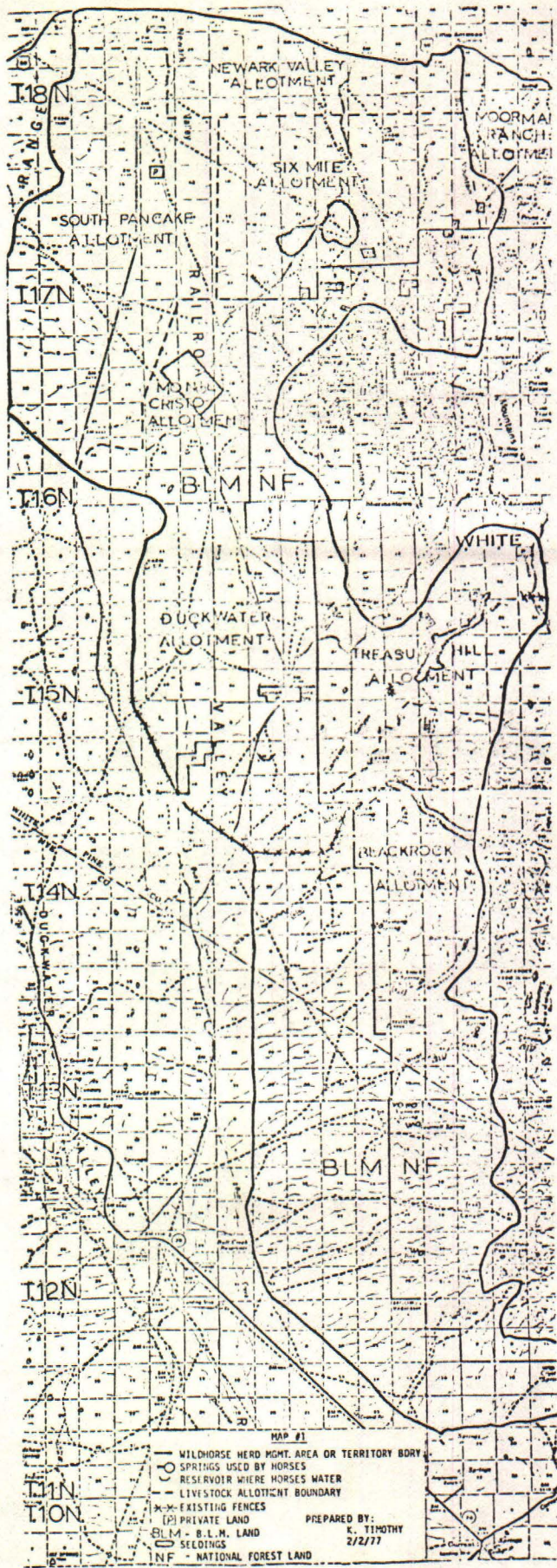
PREPARED BY:
K. TIMOTHY
2/2/77



MAP #1

- WILDHORSE HERD MGMT. AREA OR TERRITORY BDY.
- SPRINGS USED BY HORSES
- RESERVOIR WHERE HORSES WATER
- - - LIVESTOCK ALLOTMENT BOUNDARY
- ××× EXISTING FENCES
- PRIVATE LAND
- BLM - B.L.H. LAND
- SEEDINGS
- NF - NATIONAL FOREST LAND

PREPARED BY:
K. TIMOTHY
2/2/77







MAP #1

— WILDHORSE HERD MGMT. AREA OR TERRITORY BDRY
 ○ SPRINGS USED BY HORSES
 ▭ RESERVOIR WHERE HORSES WATER
 - - - LIVESTOCK ALLOTMENT BOUNDARY
 x-x-x EXISTING FENCES
 [P] PRIVATE LAND
 BLM - B.L.M. LAND
 [S] SEEDINGS
 INF - NATIONAL FOREST LAND

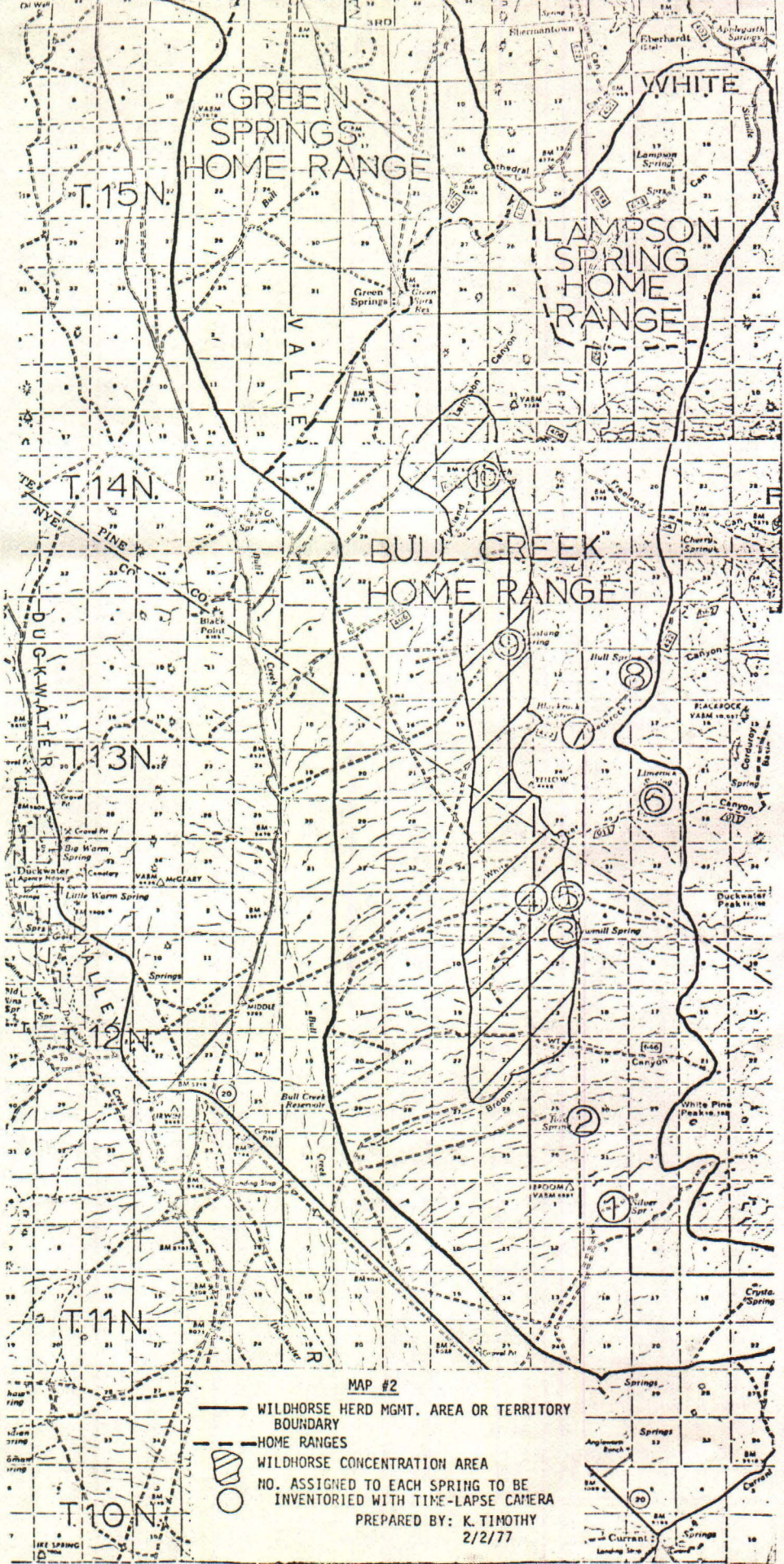
PREPARED BY:
 K. TIMOTHY
 2/2/77

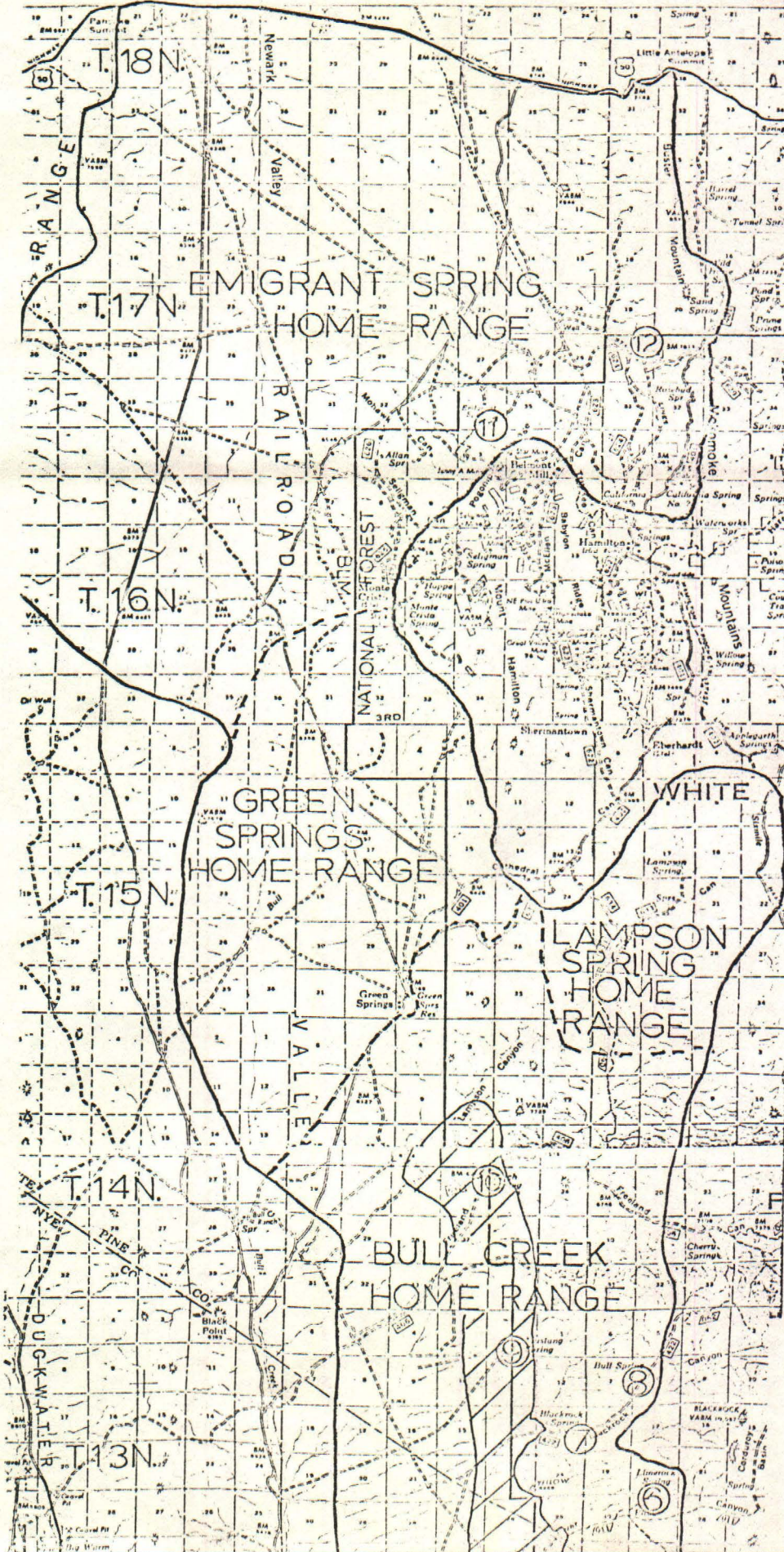


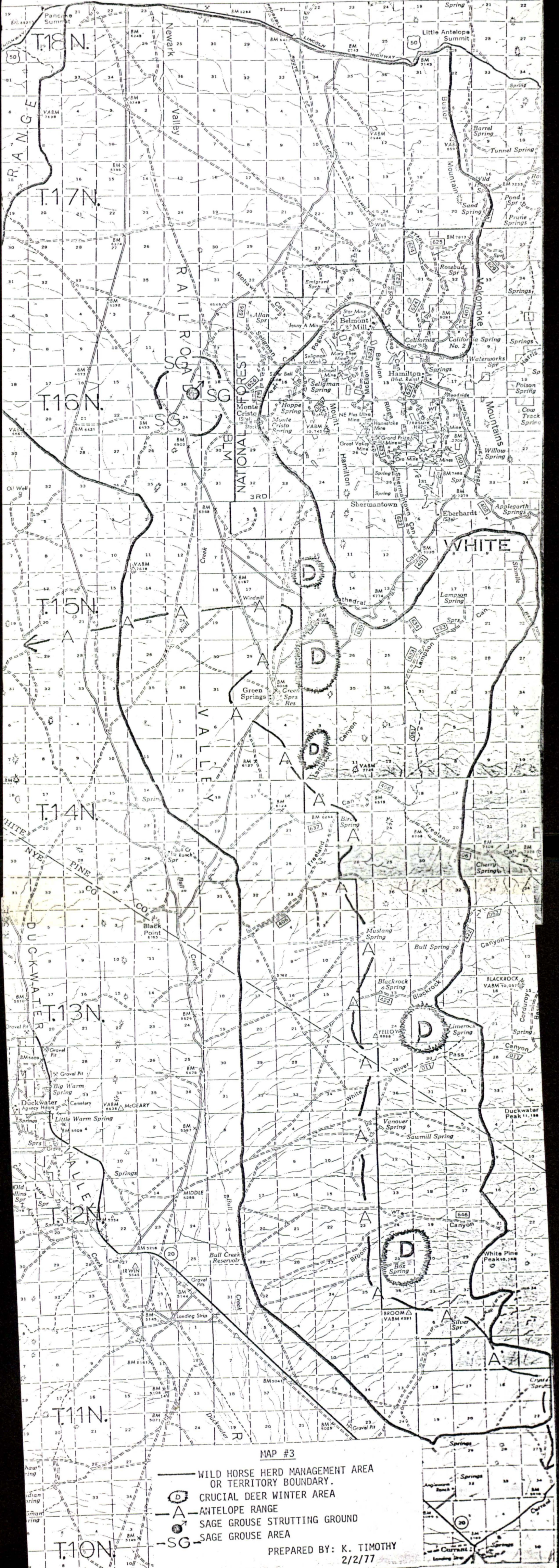
MAP #2

-  WILDHORSE HERD MGMT. AREA OR TERRITORY BOUNDARY
-  HOME RANGES
-  WILDHORSE CONCENTRATION AREA
-  NO. ASSIGNED TO EACH SPRING TO BE INVENTORIED WITH TIME-LAPSE CAMERA

PREPARED BY: K. TIMOTHY
2/2/77





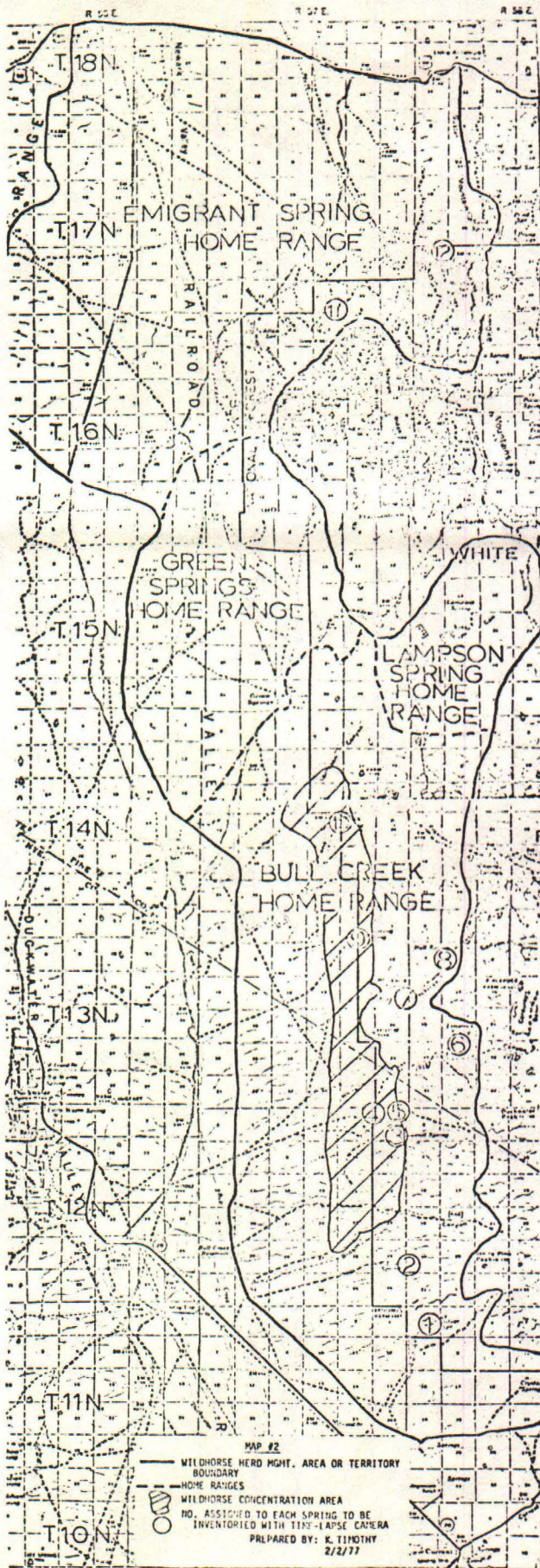


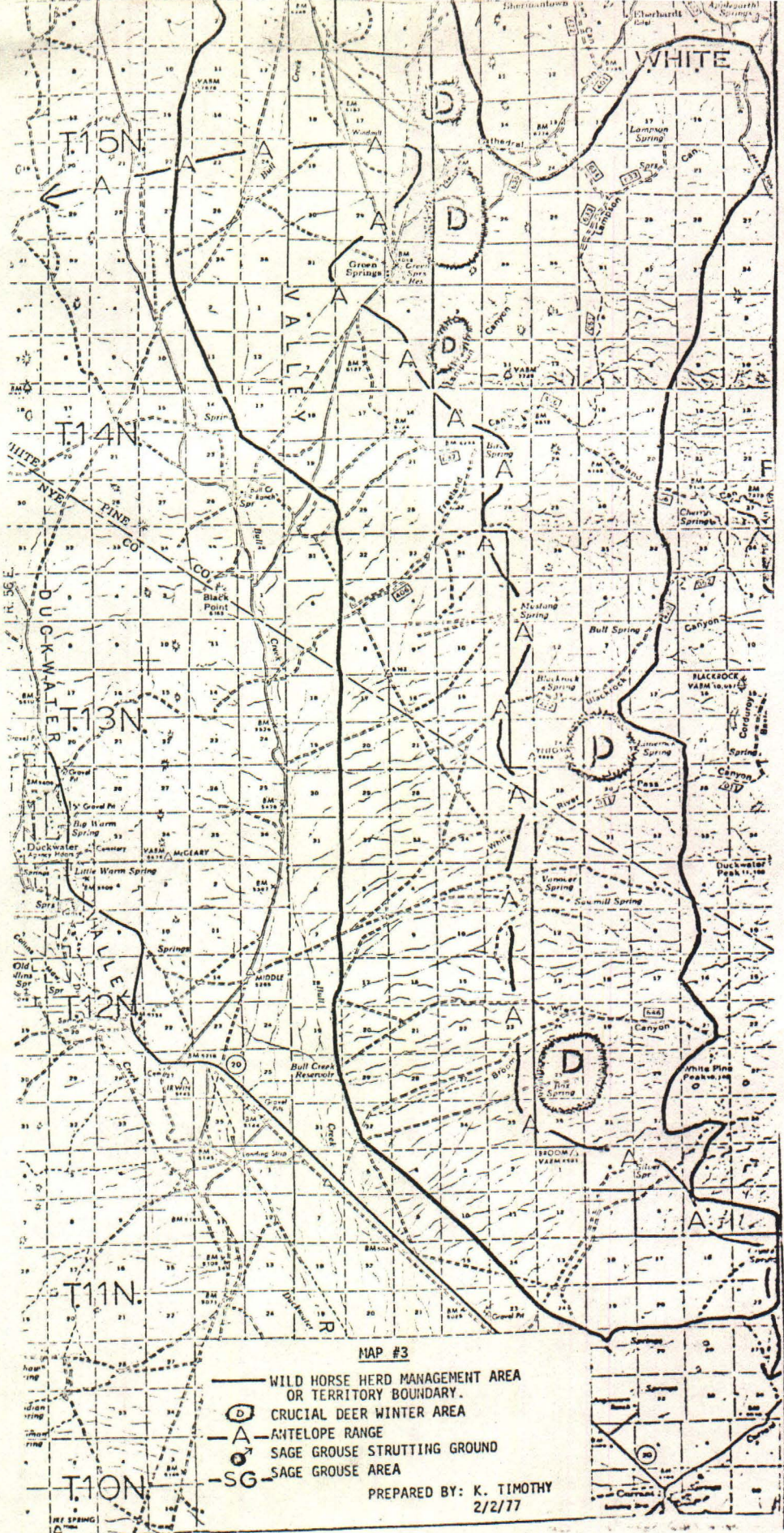
MAP #3

- WILD HORSE HERD MANAGEMENT AREA OR TERRITORY BOUNDARY.
- D — CRUCIAL DEER WINTER AREA
- - - A — ANTELOPE RANGE
- - - SG — SAGE GROUSE STRUTTING GROUND
- SG — SAGE GROUSE AREA

PREPARED BY: K. TIMOTHY
2/2/77

Scale: 1 inch = 1 mile

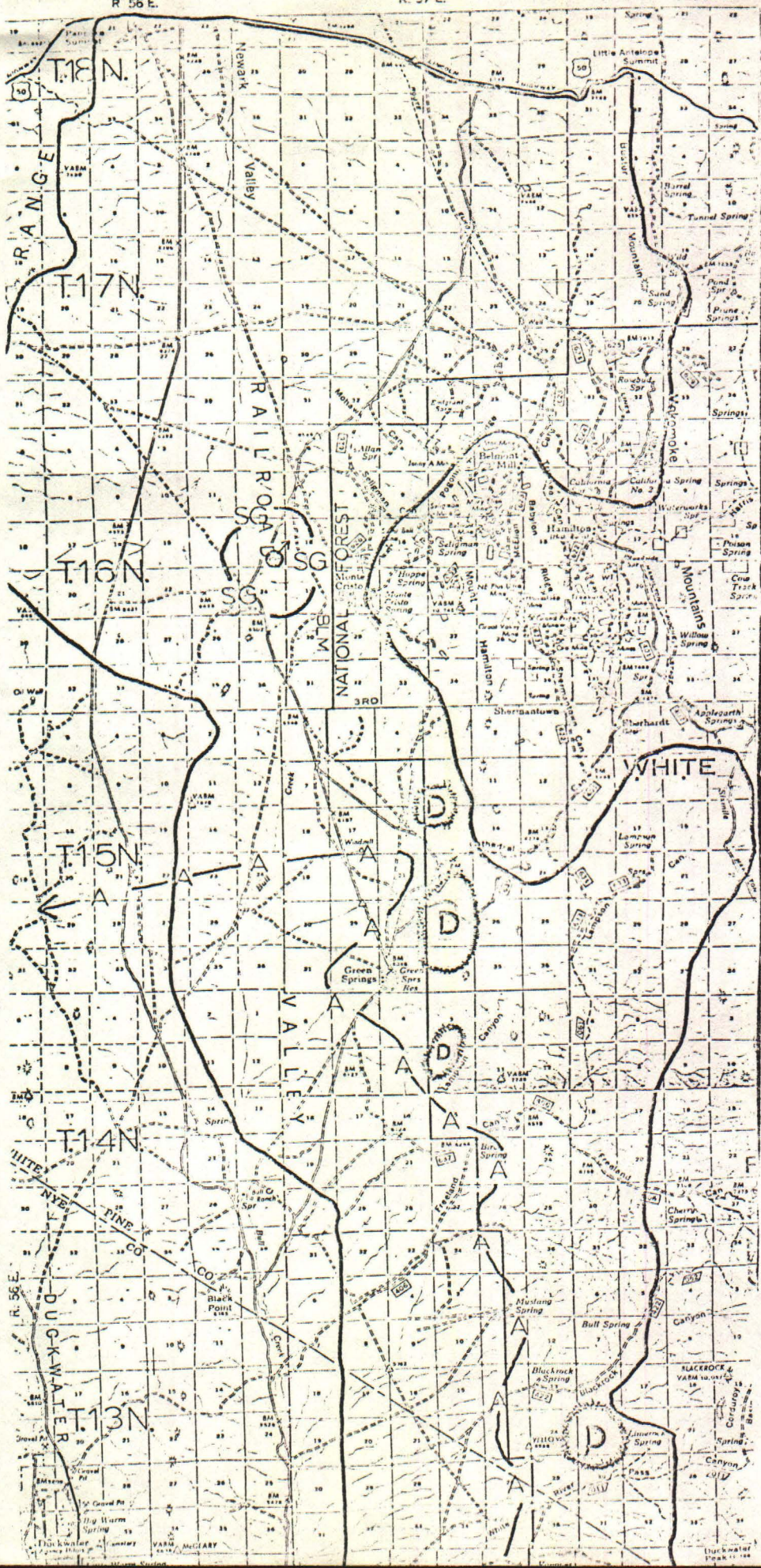




MAP #3

- WILD HORSE HERD MANAGEMENT AREA OR TERRITORY BOUNDARY.
- D CRUCIAL DEER WINTER AREA
- △ A ANTELOPE RANGE
- S SAGE GROUSE STRUTTING GROUND
- SG- SAGE GROUSE AREA

PREPARED BY: K. TIMOTHY
2/2/77



T.18N
T.17N
T.16N
T.15N
T.14N
T.13N

RAILROAD VALLEY

NATIONAL FOREST

WHITE MOUNTAINS

VALLEY

WHITE RIVER
DUCKWATER

PINE CO.

CO.

Blackrock Varm
Duckwater Varm

BLKCRK VARM

BLKCRK VARM

BLKCRK VARM

BLKCRK VARM

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