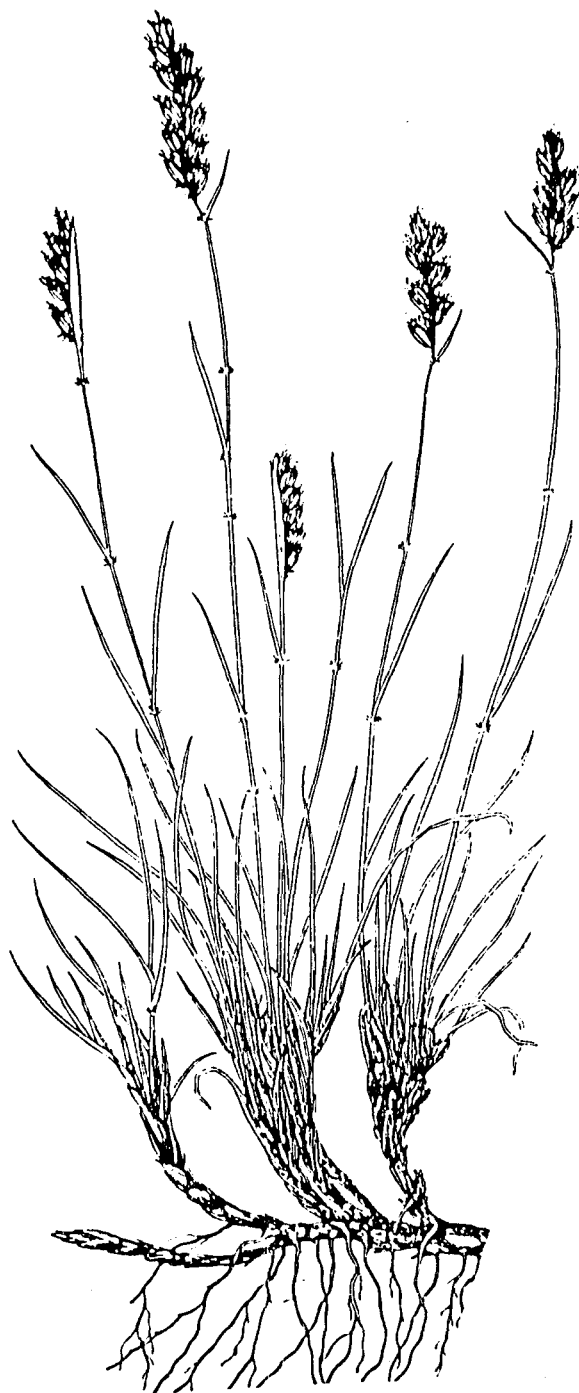


2/1991



*Hilaria jamesii* (Torr.) Benth.

WILD HORSE ADVISORY COMMITTEE

TOIYABE NATIONAL FOREST  
LAS VEGAS RANGER DISTRICT

FEBRUARY, 1991

LAS VEGAS, NEVADA

## INTRODUCTION

Welcome to the Las Vegas Ranger District, Toiyabe National Forest. The Las Vegas Ranger District is unique in many ways. A person can travel through five life zones from the lower desert near Las Vegas to the alpine at the top of Mt. Charleston. The island dynamics of this area leads to its uniqueness and is one reason the District contains 48 endemic plant species. The District administers habitat for three threatened vertebrate species (Desert Tortoise, Palmer's Chipmunk, and Lahonton cutthroat trout) as well as 26 sensitive plants. Also, there is a possibility the district provides habitat for the Threatened Mexican Spotted Owl (see Appendix A, TES Location Map).

The District contains approximately 316,000 acres of which approximately 72,500 acres are classified as rangeland. Rangeland provides habitat and forage for wildlife, wild horses and burros. Forage use by domestic livestock is limited to three allotments: Mt. Stirling and Wheeler Wash have cattle grazing and Lucky Strike has domestic horse grazing (see Appendix A, Grazing Allotment Map).

Through the Enhancement Act, the Las Vegas Ranger District acquired approximately 263,000 acres of the Spring Mountain Wild Horse and Burro Herd Management Area (HMA), 27,634 acres of the Mt. Stirling HMA and 3,342 acres of the Last Chance HMA (see Appendix A, Wild Horse and Burro Territory and Management Unit Map). The original Las Vegas Ranger District was not part of any Wild Horse and Burro Territory.

Wildlife, wild horses and burros utilize the same forage and cover resources throughout the Spring Mountains and are in direct competition on 70 percent of their distributional range. Major areas of concentration include the Mt. Stirling area south to Wallace Canyon, Mt. Stirling area east to Cold Creek, Lee Canyon east and south to Angels Peak, and the Mt. Potosi area. (see Appendix A, Wild Horse and Burro High Use Area Map and Big Game High Use Area Map).

Important wildlife management species include desert bighorn sheep, Rocky Mountain elk, mule deer, and Rio Grande turkeys. Providing and maintaining habitat for these species will necessitate resolving conflicts among recreational users, private landowners, livestock grazing and wild horse and burro habitat requirements.

## HISTORY

The Spring Mountains have long been used by local families for grazing of livestock and horses. Burros are a past reminder of the large mining impacts which occurred in Nevada from 1850 to the early 1900's. Local sources relate that much of the wild horse population has been influenced by early settlers through the mixing of private owned and feral horses. This has created several unique characteristics for the Spring Mountain wild horse bands. On the northwest end of the district, approximately 30 percent of the bands are made up of paints, while on the south end, approximately 25 percent are palominos. The permittee on the Lucky Strike allotment historically mixed his permitted horses with the feral stock and may in fact be the source of the feral stock in that area.

Long time residents on the west side of the mountain relate that a native american family is responsible for adding a major component of feral horses to the wild horse bands in the north central area. According to one source this family has been running branded horses with the wild bands (we are unable to confirm this claim at present and may not be able to until a gather is actually conducted).

#### CURRENT STATUS

##### Vegetation

The ecological status of the vegetation on the district is declining. Grass plants associated with a thriving ecological condition are decadent and producing few seed heads or completely absent in the potential natural vegetative community (based on soil type, elevation and climate from the Soil Conservation Service Vegetative Community Guide for Areas 29 and 30). Forage species for wildlife, wild horses, burros and livestock are reduced to less palatable species and in extreme cases, to unpalatable shrub species that would not otherwise be utilized. Other evidence of this problem is the fact the animals are utilizing more than annual growth and in certain cases, the animals are utilizing portions of hedged shrubs greater than 0.5 inches in diameter. Areas of concentration are associated with recent burns, riparian areas and developed water sites. A few burns have been seeded and provide a good forage base. On burns that have not been seeded, the animals are utilizing pioneer plants with little or poor nutritional value.

Problems associated with the low ecological condition include low productivity, increased occurrence of invading, non-native plant species and high sediment load in storm run-off.

Table 1. Vegetative Production and Condition for the Spring Mountain HMA and Mt. Stirling HMA Lands on the Las Vegas Ranger District.

Vegetative Type	*A Suitable Acres	B Forage Produced lbs/acre	**C Allowable Utilization	D Usable Forage in lbs/acre	***E Capacity in Days
Pinion/Juniper	20,000	300	30%	90	69,000
Mtn Shrub	20,000	350	30%	105	80,000
Desert Shrub	20,000	250	30%	75	57,000
Recent Burns					
Macks Canyon	3,500	500	40%	200	26,000
Wheeler Pass	6,000	500	30%	150	34,000
Wallace Canyon	1,500	500	30%	150	8,600
Big Timber	500	250	40%	100	1,900
Stirling	1,000	250	40%	100	3,800

Total  
Capacity = 280,300

Total Capacity/26 lbs = 10,780 AUM's available on the District

\*A - Suitable Acres includes Rangelands with slope < 30% and within 5 miles of water

\*\*C - Allowable Utilization based on the the Toiyabe National Forest Standards and Guidelines for range in low seral or declining ecological condition: 30% for shrubs, 40% for grasses.

\*\*\*E - Grazing Capacity in Days =  $\frac{\text{Suitable Acres} \times \text{lbs Usable Forage}}{26 \text{ lbs of forage consumed/day}}$

Livestock numbers under permit:

Mt. Stirling Allotment - 100 cow/calf pairs  
Wheeler Wash Allotment - 125 cow/calf pairs  
Lucky Strike Allotment - 5 horses

Each allotment has permitted use for 5 months; June 1 - October 31

Estimated numbers of wild horses and burros:		1988*
Mt. Stirling HMA	-	35 Horses 50 Burros
Last Chance HMA	-	50 Burros
Spring Mountain HMA	-	270 Horses 213 Burros
Herd Use Areas w/in Spring Mountain HMA		
Lucky Strike HUA	-	50 Horses 53 Burros
Mt Stirling/Wallace Canyon HUA	-	185 Horses 124 Burros
Red Rock HUA	-	35 Horses 36 Burros

\*Estimates taken from Bureau of Land Management Census, 1988

Estimated numbers of elk and deer		*1990
Rocky Mountain Elk		
Cold Creek Area	270 elk	+/-20%
Lovell Canyon	30 elk	
Mule Deer		
District wide	850	

\*Estimates taken from Nevada Department of Wildlife Census, 1990

Estimated Annual Forage Use

	#		months on forest	Conversion Factor	AUM's
Permitted Livestock:	230	x	5	x 1.32	= 1520
Wild Horses:	305	x	9	x 1.25	= 3430
Burros	313	x	3	x 0.6	= 560
Elk:	300	x	12	x 0.7	= 2520
Deer:	850	x	9	x 0.3	= 2300

Total AUM's on District = 10,330

Current AUM's is 96% of Available AUM's

Cooperating Organizations:

Bureau of Land Management, Stateline Resource Area  
Nevada Department of Wildlife  
Commission for the Preservation of Wild Horses  
National Wild Horse Association  
Wild Horse Organizational Assistance  
Rocky Mountain Elk Foundation

Dual Agency Responsibilities:

An Interagency Agreement (IA) is currently being developed between the Bureau of Land Management, Stateline Resource Area and the Toiyabe National Forest, Las Vegas Ranger District that will outline individual agency and joint responsibilities (monitoring, inventory and reports).

PROBLEMS

1. Wild horse and burro use of areas outside the designated territories. One band of wild horses has been grazing in Lee Canyon. This area is part of the original ranger district and not within Spring Mountain Territory. Grazing by horses in this canyon is currently causing significant resource damage and endangering horses due to a high level of recreational use in this area. (see Appendix B, Lee Canyon NEPA Analysis).
2. Past abuses by the livestock grazing industry prior to the Taylor Grazing Act.
3. Excess use by grazing animals in certain areas: riparian areas, developed watering sites, salting locations and recent burns.
4. The drought that has plagued the Southwest for the last four years.
5. Decrease in upland game birds due to excess use in riparian areas and developed water sites.
6. Utilization is not uniform over the district. Use is excess in areas associated with water (riparian, developed water sites). Water is the critical habitat requirement. Areas farther from water (> 2 miles) have slight to no grazing use.

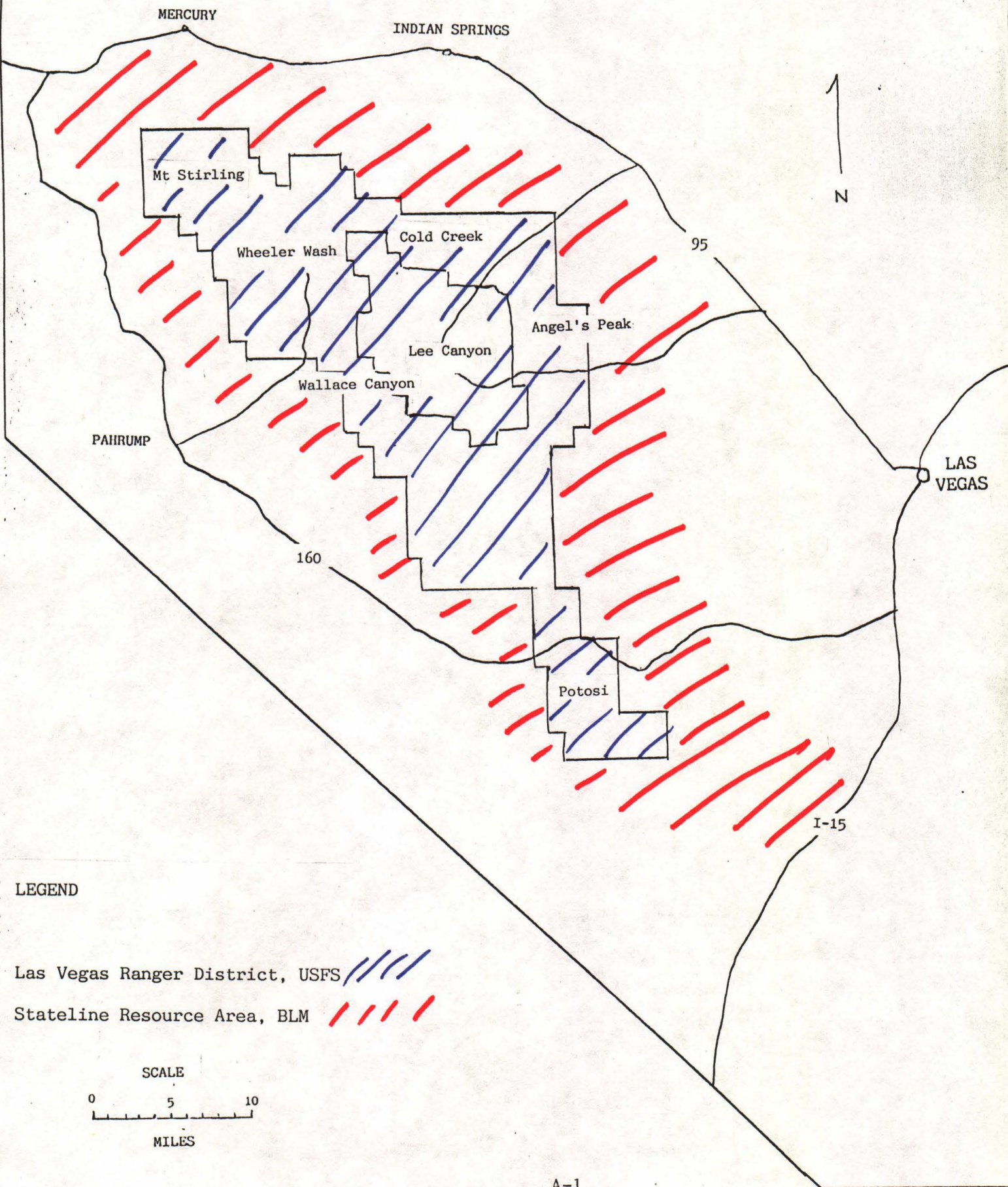
## SOLUTIONS

1. Equitable allocation of forage for all uses. Wildlife, wild horses, burros and livestock grazing are all viable and valuable use of rangelands as subject to the Multiple-Use and Sustained-Yield Act of 1960 (16 U.S.C. 528-531). Forage allocation analysis will be determined through a series of exclosures and fecal analyses in high concentration areas. This will help to determine which forage resources are being used and at what intensity by each group of ungulates.
2. Intensive census of wild horse, burro and wildlife populations to obtain a more accurate estimate of population size, population dynamics and condition for each group.
3. Decrease the number of permitted livestock, wildlife, wild horses and burros in an equitable way as determined through Coordinated Resource Management Planning (CRMP) using the information gathered from the forage allocation study and the updated census for each population.
4. Intensive range improvements to better distribute water, protect riparian areas and critical habitat for wildlife, wild horses and burros. Intensive livestock management to better distribute livestock grazing so as not to impact critical wildlife, wild horse and burro habitat.
5. Fence areas outside the territory that endanger wild horses and areas that do not allow for wild horse or burro use because of direct conflict with management direction.
6. Prescribed burning program or more effective fuelwood program to increase wildlife and wild horse habitat outside of current areas of concentration.

APPENDIX A



Las Vegas Ranger District

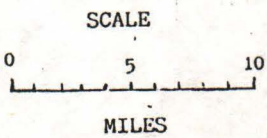


LEGEND

Las Vegas Ranger District, USFS

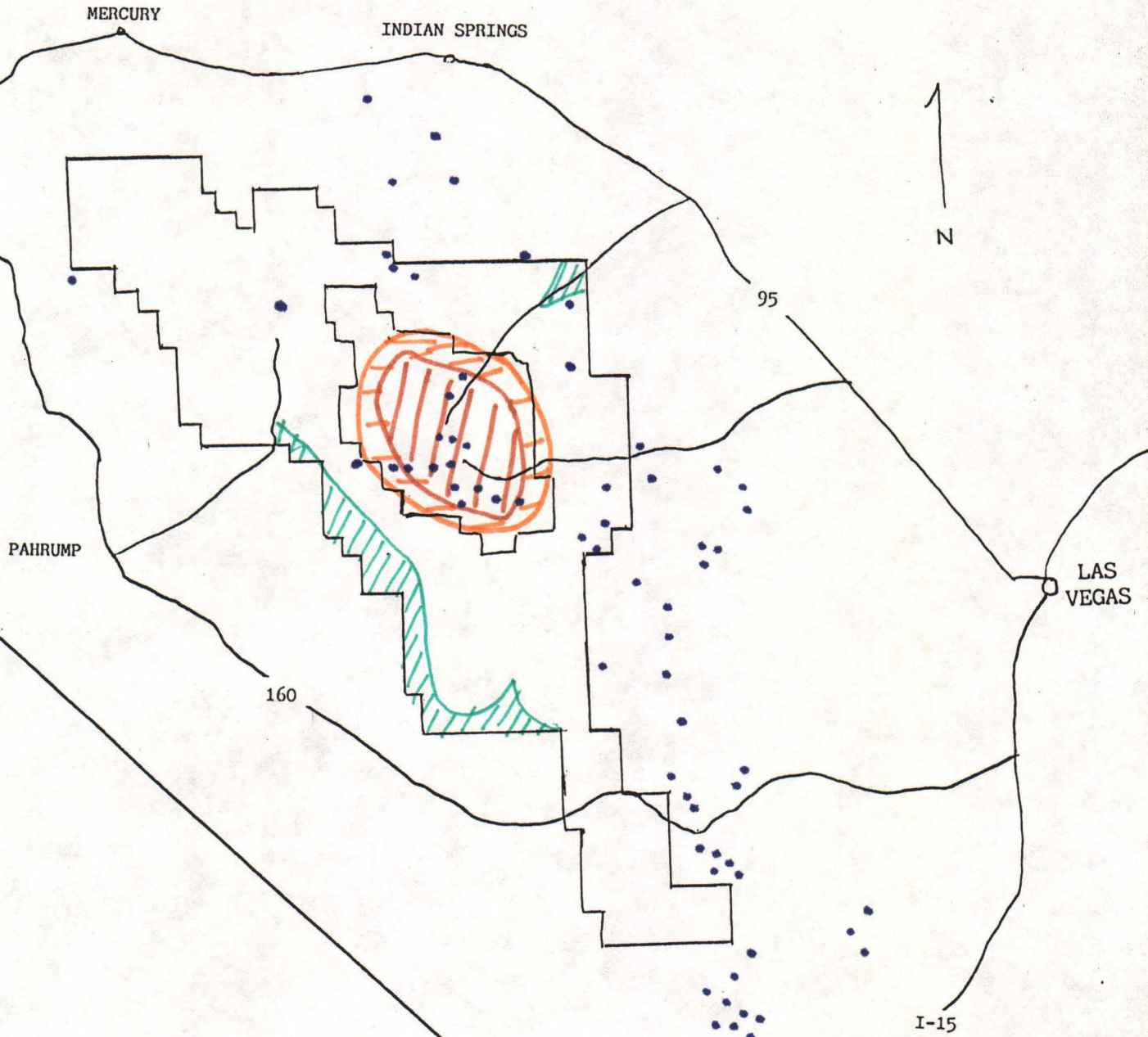


Stateline Resource Area, BLM






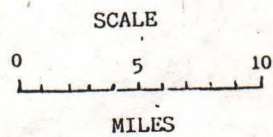


# THREATENED, ENDANGERED AND SENSITIVE SPECIES LOCATIONS



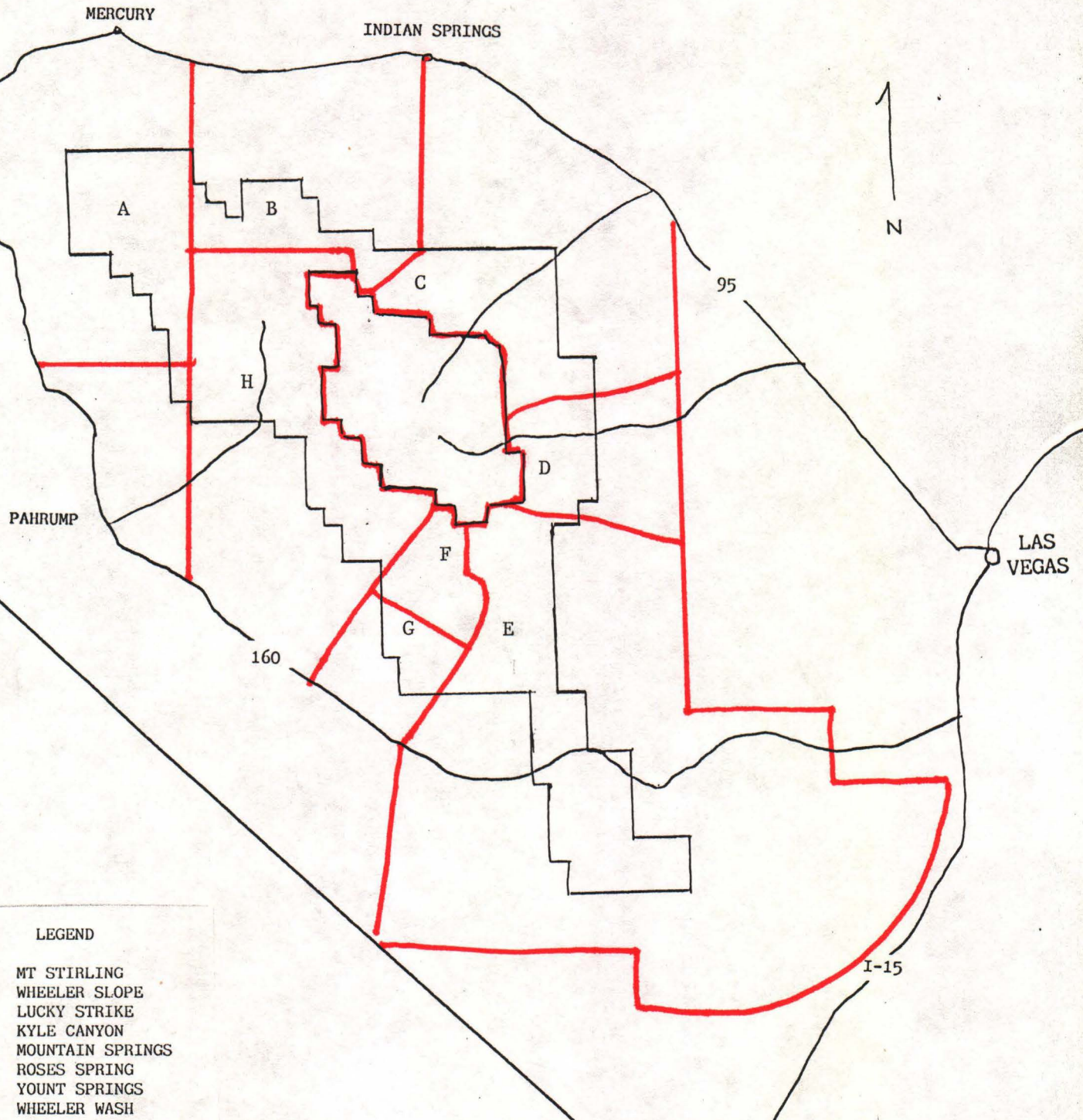
## LEGEND

- TES PLANT POPULATION LOCATIONS •
- POSSIBLE DESERT TORTOISE HABITAT 
- POSSIBLE SPOTTED OWL HABITAT 
- PALMER'S CHIPMUNK HABITAT 





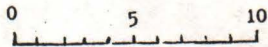
GRAZING ALLOTMENTS



LEGEND

- A. MT STIRLING
- B. WHEELER SLOPE
- C. LUCKY STRIKE
- D. KYLE CANYON
- E. MOUNTAIN SPRINGS
- F. ROSES SPRING
- G. YOUNT SPRINGS
- H. WHEELER WASH

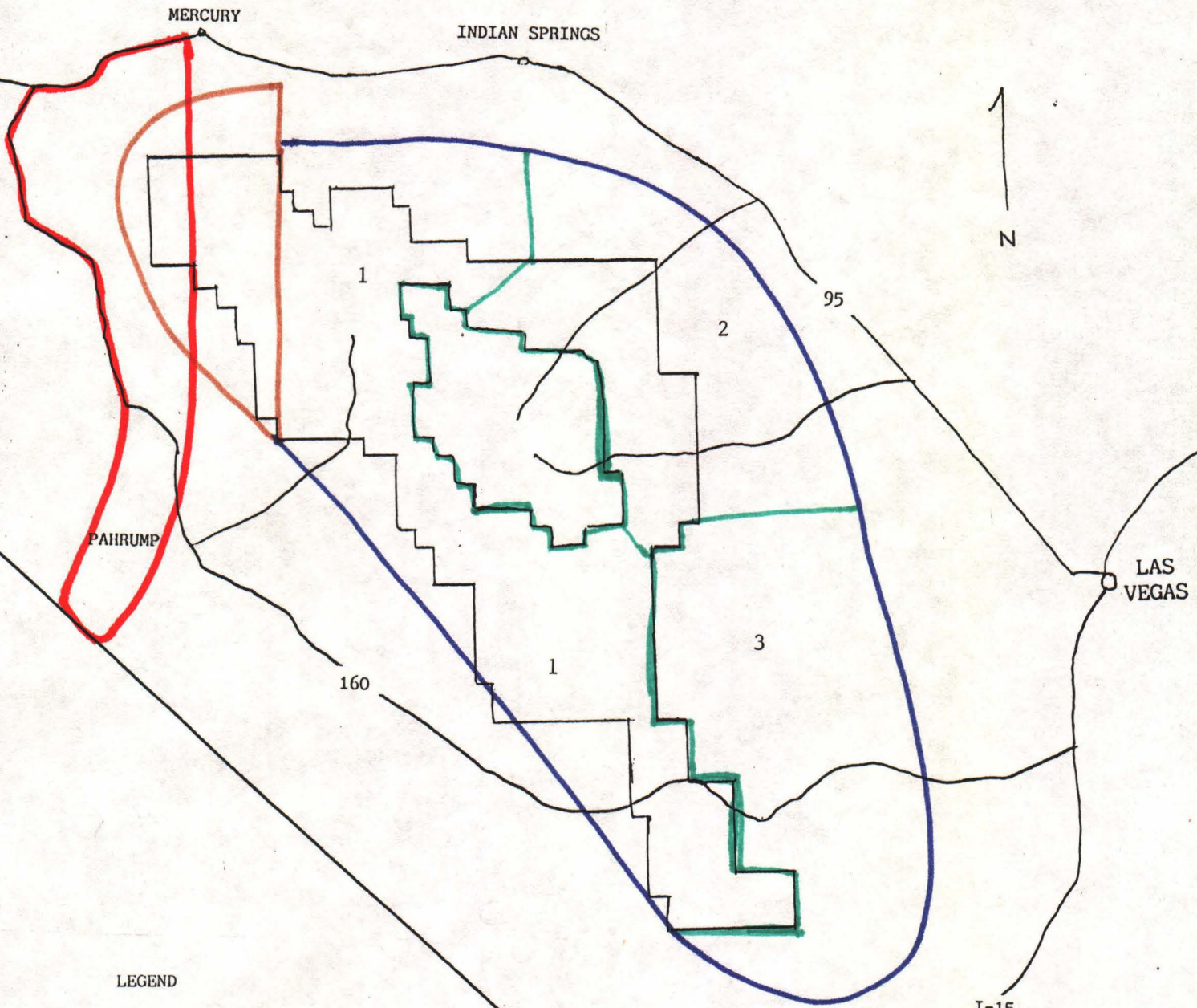
SCALE



MILES



WILD HORSE AND BURRO TERRITORIES AND MANAGEMENT UNITS



LEGEND

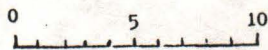
WILD HORSE AND BURRO TERRITORIES

- A. LAST CHANCE —
- B. MT STIRLING —
- C. SPRING MOUNTAIN —

WILD HORSE AND BURRO MANAGEMENT UNITS —

- A. STIRLING-WALLCE —
- B. LUCKY STRIKE —
- C. RED ROCK —

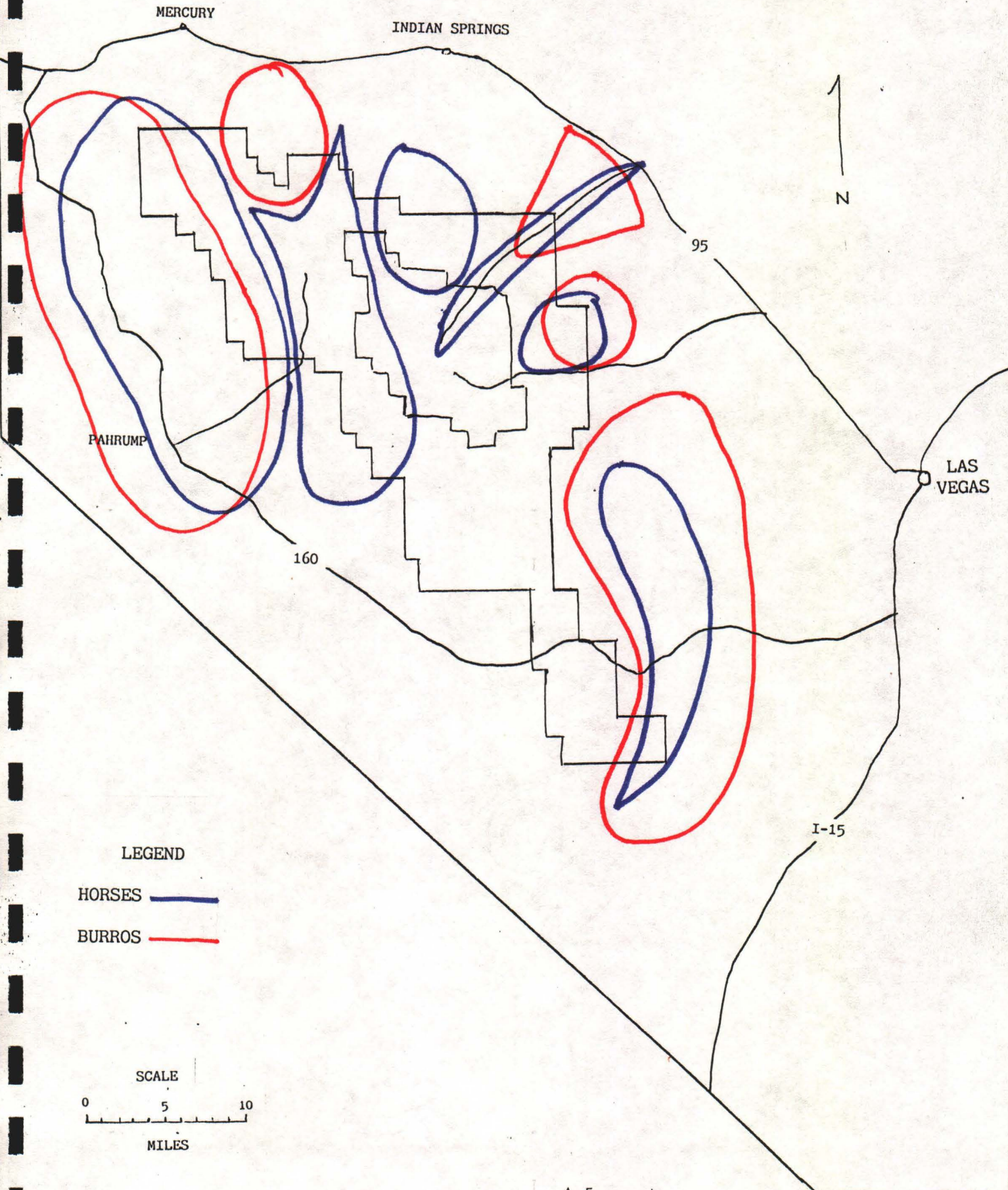
SCALE



MILES



WILD HORSE AND BURRO HIGH USE AREAS

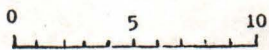


LEGEND

HORSES ———

BURROS ———

SCALE



MILES



# BIG GAME HIGH USE AREAS

MERCURY

INDIAN SPRINGS



95

PAHRUMP

160

LAS VEGAS

I-15

## LEGEND

ELK



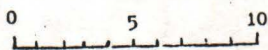
DEER



DESERT BIGHORN SHEEP



## SCALE



MILES

APPENDIX B

SCOPING STATEMENT  
PROPOSED WILD HORSE REMOVAL  
LEE CANYON

LAS VEGAS RANGER DISTRICT  
TOIYABE NATIONAL FOREST  
CLARK AND NYE COUNTIES, NEVADA

I. Description of the Proposal

The Toiyabe National Forest, Las Vegas Ranger District, is proposing to remove all the wild and free roaming horses in Lee Canyon. Lee Canyon is not a part of, or within the boundaries of any Wild and Free Roaming Horse Territory. Therefore grazing use by wild horses is not an authorized use of this area of the Toiyabe National Forest. The presence of these horses and their grazing use on the vegetation, specifically the Ski Lee slopes and the meadow in Lee Canyon, is causing significant vegetative resource damage. Ski Lee is required through the terms and conditions of their permit to maintain vegetative cover on the ski slopes to provide for watershed stability and soil protection from rain and snowmelt runoff. This permit requirement represents a large financial investment by Ski Lee. Removal of these wild horses is needed to maintain the integrity of the ski slope watershed project. In addition, the existing fence and cattle guard constructed to keep wild and free roaming horses out of Lee Canyon is in need of repair.

A. Location and general description of the area involved

The locations of the areas involved are the Ski Lee site and the meadow located between Old Mill picnic area and McWilliams campground in Lee Canyon.

B. Nature of decision to be made

What method will be used to remove the wild and free roaming horses from Lee Canyon and where will the horses be relocated to. The decision will allow for repair and maintenance of the existing fence to prevent wild horses from entering Lee Canyon.

C. Possible Solutions

1. Remove trespass horses and make them available for adoption at Kingman Wild Horse and Burro Handling Facility to prevent their attempts to return to the Lee Canyon area.
2. Remove and return the horses to the Spring Mountain Wild Horse territory.
3. Repair existing fence and sign the area to prevent the fence from being cut again.



4. Develop a Cooperative Cost Share agreement with an organization to maintain the fence as needed.

## II Identified preliminary resource consideration

The following environmental factors have been identified as being affected by this proposal:

1. Soils
2. Wildlife
3. Hydrology
4. Recreation
5. Economic and Social Factors
6. Land Uses
7. Vegetation

## III Timing requirements

You are invited to participate in the evaluation process. To be most effective, your written comments need to be received by us no later than August 3, 1990. We will review, evaluate and consolidate comments to form a list of issues, concerns and opportunities that will be addressed in the Decision Memo.

END

ORIGINAL FOREST BOUNDARY ———

NEW FOREST BOUNDARY - - - - -

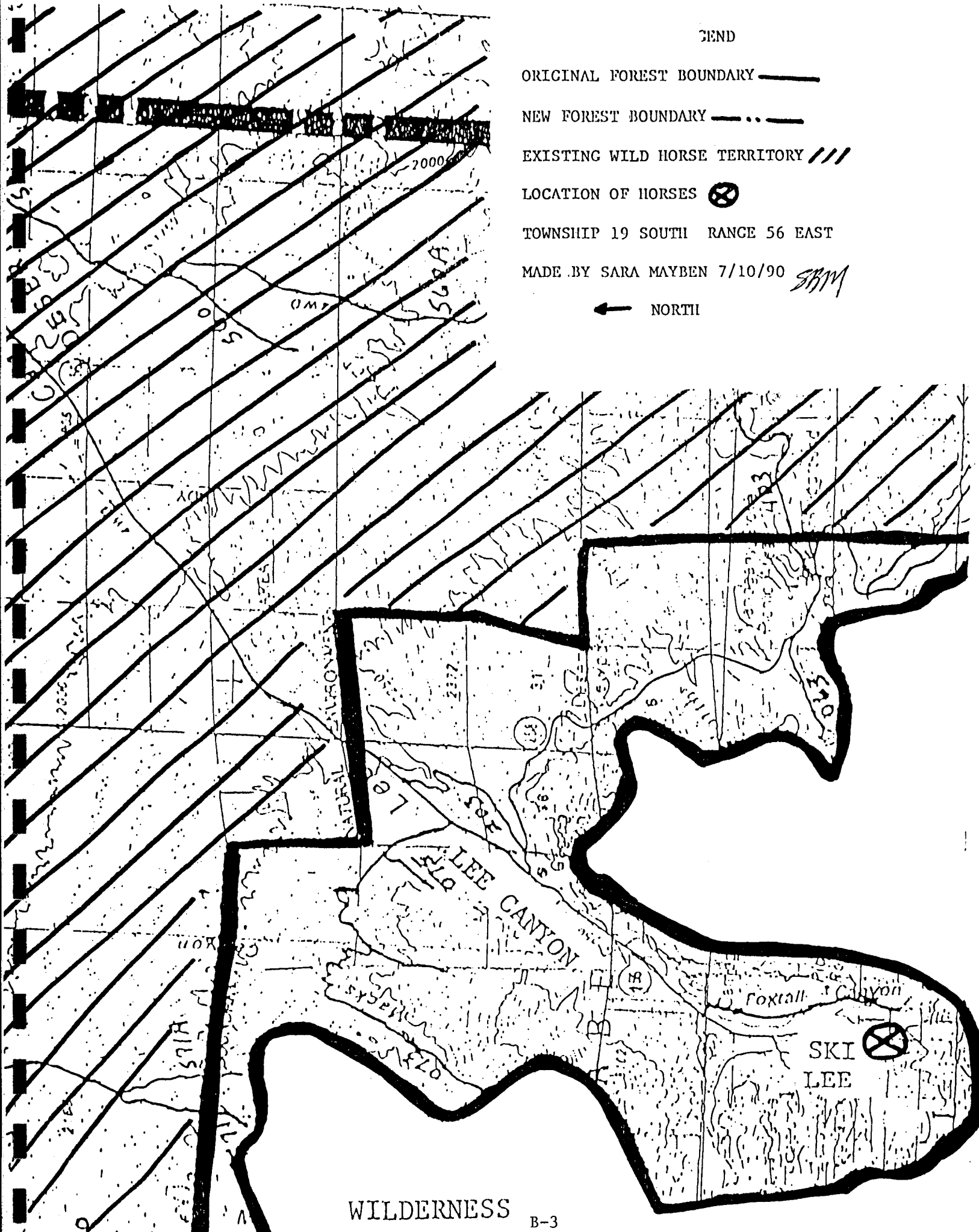
EXISTING WILD HORSE TERRITORY ///

LOCATION OF HORSES ⊗

TOWNSHIP 19 SOUTH RANGE 56 EAST

MADE BY SARA MAYBEN 7/10/90 *SAM*

← NORTH



WILDERNESS

Reply To: 2260

Date: August 20, 1990

maddressn

mnamen

This letter is to answer several generic questions raised as a result of your responses to the scoping document about the problem horses in Lee Canyon. The questions and responses are as follows:

Question 1. How many problem horses are involved and how long has this use been occurring?

There are 12-15 head of horses using the meadow and Ski Lee and this use has been occurring over the past several years.

Question 2. What is the current actual use by domestic livestock?

There is not any use by domestic livestock. Lee Canyon is not part of a grazing allotment. The National Forest System lands acquired through the enhancement act at the mouth of Lee Canyon does contain an allotment but it is currently inactive. When active this permit was for horses not cattle. The cattle guard located in Lee Canyon was to prevent horses from straying into the canyon.

Question 3. What is the current availability of forage and water for horses in the surrounding areas?

The Bureau of Land Management's response to the scoping statement states "that their monitoring data indicates that there is not an excess of wild horses or burros within the Herd Management Area."

Water in this area does not appear to be limiting at this time. In the Mt. Potosi area, some horses have died as a result of lack of water.

Question 4. What type of terrain and vegetation is involved?

Lee Canyon is a relatively narrow canyon. The sides of the canyon are steep and the soils are very gravelly with cobbles and many small rocks. The ski area operators are required in their permit to revegetate slopes which range from 6 to more than 40 percent. This vegetation is primarily grasses with some sweet clover. Native vegetation includes ponderosa pine and white fir with bristlecone pine and aspen at the higher elevations. The forest floor is relatively open and free from heavy understory. Shrubs such as current, bitterbrush, and sagebrush can be found along with some small shrubby trees like mountain mahogany. Native grasses include bluegrasses, brome, and lower in the canyon indian ricegrass.

We hope that this letter answers most of your questions. If you still have questions or would like to visit the area in question, please contact Sara Mayben of my staff (702) 477-7782, and she will arrange a tour for you.

Sincerely,

KIM E. MARSHALL  
District Ranger

DECISION MEMO

Lee Canyon Wild and Free Roaming Horse Removal

Las Vegas Ranger District  
Toiyabe National Forest  
Las Vegas, NV

I have decided to allow the wild and free roaming horses remove themselves from Lee Canyon. This area is located on Mount Charleston, 1.5 miles from Charleston Peak (T. 19S., R. 56E., Sec.10 and 14). Lee Canyon is not within the existing Spring Mountain Wild and Free Roaming horse and Burro Territory.

There will be no actual removal of the horses from Lee Canyon. I will wait and let the winter conditions force the horses out of the canyon to the lower elevations. The existing fence will be reconstructed at the mouth of Lee Canyon (T. 18S, R. 56E, Sec. 35) prior to the horses leaving and a portion of the fence will be left open to allow their migration. The fence will then be completed after all the horses are out of the canyon area to alleviate any reoccurrence of this problem. If the fence is not successful at keeping the horses out of the canyon next spring, the horses will be captured early in the season and will be taken to the Kingman Wild Horse and Burro Handling Facility.

The removal of the horses and the reconstruction of the fence is necessary in order to maintain the integrity of the Lee Canyon watershed. Ski Lee is required through the terms and conditions of their permit to maintain vegetative cover on the ski slopes to provide for watershed stability and soil protection from rain and snowmelt runoff. The permit requirement represents a large financial investment by Ski Lee. The horses presence in the area has degraded the seeding on the ski slope, decreasing vegetative cover, therefore, causing problems with existing watershed improvements.

Scoping was completed with thirteen people representing nine different organizations. No one objected to the project.

This proposed action falls within Category 2 (low impact range management activities, such as fencing, seeding and installing water facilities). No extraordinary circumstances exist that might cause the action to have significant effects on the quality of the human environment nor any adverse accumulative or secondary environmental effects; therefore, the action is categorically excluded from documentation in an environmental impact statement or an environmental assessment (FSH 1909.15, section 26.2).

This action is consistent with the management direction, including standards and guidelines included in the Forest Plan.

This decision is subject to appeal pursuant to 36 CFR 217. A notice of appeal must be filed with the Forest Supervisor, Toiyabe National Forest, 1200 Franklin Way, Sparks, Nevada, 89431, within 45 days of the date of this decision. Simultaneously send a copy of the notice of appeal to my office.

For further information, contact George Perkins or Kim Marshall at the address below or telephone (702) 477-7782.

---

Kim E. Marshall  
District Ranger  
550 E Charleston  
Las Vegas, Nevada 89104

---

Date

Cooperative  
Agreement

Between

National Wild Horse Association

and

Las Vegas Ranger District  
Toiyabe National Forest

THIS COOPERATIVE AGREEMENT, is hereby made and entered into by and between National Wild Horse Association hereinafter referred to as the ASSOCIATION and the Las Vegas Ranger District, Toiyabe National Forest, U.S. Department of Agriculture Forest Service, hereinafter referred to as the FOREST SERVICE, under the provisions of the Interior and Related Agencies Act, P.L. 101-121; Multiple-Use and Sustained-Yield Act of 1960 (16 U.S.C. 528-531); the Cooperative Funds Act of June 30, 1914 (16 U.S.C. 498); the USDA Acceptance of Gifts Act ( 7 U.S.C 2269); the Volunteers in National Forest Act of 1972 (16 U.S.C. 558a-558d); and the Forest and Rangeland Resource Act of 1978 (16 U.S.C. 1641 et. seq.).

WITNESSETH:

WHEREAS, the Forest Service manages National Forests lands which include the opportunities and,

WHEREAS, the Association is interested in promoting and assisting the Forest Service in these opportunities and,

WHEREAS, it is mutually beneficial for the Association and the Forest Service to work cooperatively to make these opportunities available to the public and,

WHEREAS, the Forest Service is willing to reimburse for the agreed upon expenses actually incurred by the Association.

NOW, THEREFORE, in consideration of the above promises, the parties hereto agree as follows:

A. THE ASSOCIATION SHALL:

1. Enter into supplemental agreements, to this master agreement, to perform mutually agreed upon project work. If any part of the project is to be reimbursable, a financial project plan will need to be submitted with the supplemental agreement.

2. Bill the Forest Service upon completion of the project for the actual cost incurred for all agreed upon reimbursable services, transportation, tools or equipment and materials. Billings shall consist of a statement or SF-270 and itemized receipts submitted to:

Forest Supervisor  
Toiyabe National Forest  
1200 Franklin Way  
Sparks, NV 89431

3. Give USDA Forest Service or the Controller General, through any authorized representative, access to and the right to examine all books, papers, or documents related to the award for reimbursable funds.

B. THE FOREST SERVICE SHALL:

1. Reimburse the Association up to the agreed upon price for actual costs incurred as provided in the supplemental agreement and financial project plan. Payment will be made upon receipt of itemized invoice furnished by the Association.

2. Provide to the Association any and all supplies, materials, and equipment as agreed upon.

3. Provide leadership for planning and technical expertise in the design and construction of the project.

C. IT IS MUTUALLY AGREED AND UNDERSTOOD BY AND BETWEEN THE SAID PARTIES THAT:

1. The Forest Service, in writing, may terminate the agreement in whole or in part, at any time before the date of expiration, whenever it is determined that the other party has materially failed to comply with the conditions of this agreement. The other party shall not incur any new obligations for the terminated portion of the agreement after the effective date and shall cancel as many obligations as is possible. Full credit shall be allowed for the Forest Service share of the obligations incurred to the effective date and all noncancellable obligations properly incurred by the cooperating party prior to termination.



2. Any monies that are payable from the United States under this agreement to any person or legal entity not an agency or subdivision of a State or local government may be subject to administrative offset for the collection of any debt the person or legal entity owes to the United States. Information on the person's or legal entity's responsibility for a commercial debt owed the United States shall be disclosed to consumer or commercial credit reporting agencies.

3. The cooperator shall comply with all Federal Statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Right Act of 1964 (P.L. 88-352), which prohibits discrimination on the basis of race, color, handicap, or national origin; (b) Title IX of the Education amendments of 1972, as amended (20 U.S.C. 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex.

5. Improvements placed on National Forest land at the direction of either of the parties, shall thereupon become the property of the United States, and shall be subject to the same regulations and administration of the Forest Service as all other National Forest improvements of a similar nature.

6. This agreement in no way restricts the Forest Service from participating with other public or private agencies, organizations and individuals or from accepting contributions and/or gifts for the improvement, development, administration, operation and preservation of this or any other project.

7. No part of this agreement shall entitle the Association to any share or interest in the project other than the right to use and enjoy the same under the existing regulations of the Forest Service.

8. No member of, or Delegate to Congress shall be admitted to any share or part of this agreement, or any benefits that may arise therefrom; but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

9. Nothing herein shall be considered as obligating the Forest Service to expend or as involving the United States in any contract or other obligations for the future payment of money in excess of appropriations authorized by law and administratively allocated for this work.

10. This agreement may be revised as necessary by mutual consent of both parties, by the issuance of a written amendment, signed and dated by both parties.

11. Either party may terminate the agreement by providing 60 days written notice, unless terminated by the Forest Service unilaterally for cause in accordance with Article 2 of this section.

IN WITNESS WHEREOF, the parties hereto have executed the Master Agreement as of the last date written below.

National Wild Horse Association

USDA Forest Service

BY: \_\_\_\_\_  
GERALD CONDON  
President

BY: \_\_\_\_\_  
KIM E. MARSHALL  
District Ranger

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

## LEE CANYON FENCE PROPOSAL

### Introduction

The Spring Mountain Wild and Free Roaming Horse Territory is located northwest of Las Vegas, Nevada. Currently, there is wild horse use in Lee Canyon on a developed recreational site, Ski Lee. Lee Canyon is outside the established Spring Mountain Territory.

### Problem Statement

The problem to be addressed is the reconstruction of the existing fence at the mouth of Lee Canyon. A barbed wire fence was built in 1974 to keep the horses out of the canyon and was successful until it was vandalized. In May of 1989, Ken and Russell Highfield, managers of Ski Lee, contacted the Las Vegas Ranger District, Toiyabe National Forest about a band of wild horses grazing on the ski slopes.

The horses have historically trespassed into Lee Canyon. They are drawn to Lee Canyon because of the grass seeded slopes and the water development. The removal of the horses is necessary in order to maintain the integrity of the Lee Canyon watershed. Ski Lee is required through the terms and conditions of their permit to maintain vegetative cover on the ski slopes to provide for watershed stability and soil protection from rain and snowmelt runoff. The permit requirement represents a large financial investment by Ski Lee. The horses' presence in the area has degraded the seeding on the ski slope, decreasing vegetative cover, therefore causing problems with existing watershed improvements. According to the Bureau of Land Management, water and forage are available within the Spring Mountain Territory outside of Lee Canyon.

### Method

The Commission for the Preservation of Wild Horses will contribute \$12,510.36 to the Toiyabe National Forest, Las Vegas Ranger District. These contributed funds will be used to purchase materials to reconstruct the Lee Canyon fence. The fence will be changed to a buck and pole design, built in accordance with the attached USFS specifications. The construction of the fence will be completed by volunteers from the National Wild Horse Association, USFS personnel and individuals from Spring Mountain Youth Camp.

Environmental analysis has already been completed. Scoping was performed with thirteen people representing nine organizations. Responses from all the scoping has shown no problem with removing the horses from Lee Canyon. It has been decided to let winter conditions force the horses to lower elevation outside the canyon. The fence will be reconstructed prior to the horses leaving. A portion of the fence will be left open to allow for their migration. The fence will then be completed after all the horses are out of the canyon area.

The USFS will provide a project inspector to assure the project is completed in accordance with the attached specifications. The National Wild Horse Association will maintain the fence. Personnel from the Las Vegas Ranger

District of the Toiyabe National Forest will notify the Commission upon completion of this project.

Monies needed to complete this fence will vary depending on the actual material cost. In the event the actual cost is less than the requested funds, these monies will be returned to the Commission for the Preservation for Wild Horses.

#### Objective

This project will allow the wild horses to continue to be part of the Spring Mountain Herd Management Area and to co-exist with the recreational demands occurring on the Toiyabe National Forest, Las Vegas Ranger District. This fence will help to insure the horses safety by preventing their access into this narrow, highly traveled canyon. It should also negate any further damage to the improvement projects in place on the ski slopes.

#### Evaluation

The success or failure of this project will be easily determined as the horses will be kept out of Lee Canyon and off the ski slopes. As long as the fence is not vandalized allowing the wild horses to return, there will not be a need for further evaluation.

## Budget Justification

### In-Kind

All but a very small portion of the USFS costs associated with this fence will be in the form of personnel or labor costs, therefore, this analysis will reflect only this aspect of our input. The actual cost, as a reflection of time needed, is summarized in the budget proposal itself.

#### Survey and Design

The average daily costs for individuals working on all aspects of rangeland projects is approximately \$120/man/day. Because the fence already exists, there will not be a need to survey a new line. Aerial survey of the existing fence line and surrounding area is needed to determine access to the canyon from other areas (4 hours flight time). The cost of the helicopter through a contract is \$1000/hour. This includes the helicopter, pilot, fuel and helitack for a total of \$4000 for the survey.

#### Construction

The fence will be constructed by USFS personnel, volunteers from National Wild Horse Association and individuals from Spring Mountain Youth Camp. USFS personnel costs will be 20 man days (2 men for 10 days) at \$120/man/day. Volunteers from the National Wild Horse Association will enter into a Cooperative Agreement with the Las Vegas Ranger District, Toiyabe National Forest to complete construction and maintain the fence. This value to the Las Vegas Ranger District is approximately \$6000/mile of fence constructed. The Spring Mountain Youth Camp crews (2 crews, 8 boys/crew for 5 days at \$3.00/boy/day) will help complete the fence next summer. The cost of these individuals to the USFS is approximately \$240.

Removal of the original fence will be completed at the time of construction (2 volunteers for 2 days at \$120/man/day) at a value of \$480 to the USFS.

#### Project Inspection

During the construction, USFS personnel will be inspecting the fence to assure USFS fence standards are met. The days required are included in the construction portion of the budget justification.

#### Maintenance

The normal recognized life of this type of a rangeland fence is 30 years after which time reconstruction is recommended. Due to the location and vandalism of the past fence, there will be high maintenance costs. Maintenance will require USFS personnel to make a visual inspection of the fence six times a year at a half a man day required each time for a total of 3 man days (1 man for 6 half days at \$120/man/day) at a cost of \$360/year. Repairs will be made as needed by the National Wild Horse Association. Estimated time required for actual repairs is 2 man days at \$120/man/day for a value of \$240/year. Estimated material costs for maintenance is \$100/year. For the estimated life of the fence, maintenance is estimated at \$21,000 for the 30 years.

Budget Justification

Requested Funds

Material Costs

All of the fences currently built on USFS administered land are required to be constructed following detailed specifications. A buck and pole fence built using 5 feet, 5 inch diameter treated wood posts (@ \$2.78 ea) and 16 feet, 3 inch diameter treated wood poles (@ \$5.99 ea) is both cost effective and durable for this project. Vandalism and maintenance should be reduced using the buck and pole design. This design seems to be the most effective around wild horses.

Lee Canyon Fence Budget

In-Kind

Survey and Design	4 hours Flight Time @ \$1000/hour	= \$ 4,000
Construction	20 man days @ \$120/day	= \$ 2,400
	Volunteer Value	= \$ 6,000
	SMYC Crew @ \$24/crew/day (2 crews for 5 days)	= \$ 240
Removal of Existing Fence	4 man days @ \$120/day	= \$ 480
Maintenance	5 man days @ \$120/day for 30 years	= \$18,000
	Materials for 30 years	= \$ <u>3,000</u>
	Total	= \$34,120

Requested

Materials

1 mile Buck and Pole Fence

1500 16' 3" diameter full treated poles	@ \$5.99 ea
700 5' 5" diameter full treated posts	@ \$2.78 ea
Freight to Las Vegas	\$1200.00
500 lbs 6" nails	@ \$19.54/50lb box
200 lbs 8" spikes	@ \$45.99/50lb box

Poles	=	\$8,985.00
Posts	=	\$1,946.00
Freight	=	\$1,200.00
Nails	=	\$ 195.40
Spikes	=	\$ <u>183.96</u>
Total	=	\$12,510.36

EROSION CONTROL ANALYSIS PHOTOS

LEE CANYON SKI AREA

LAS VEGAS RANGER DISTRICT, TOIYABE NATIONAL FOREST



Photo look south up chairlift on August 24th, 1971. Cleared ski slopes are void of vegetation. Rills and gullies are forming from overland flow as a result of high intensity rain storm on steep, barren slopes.





Looking east down rope tow area on August 24th, 1971. Note rills and gullies forming.

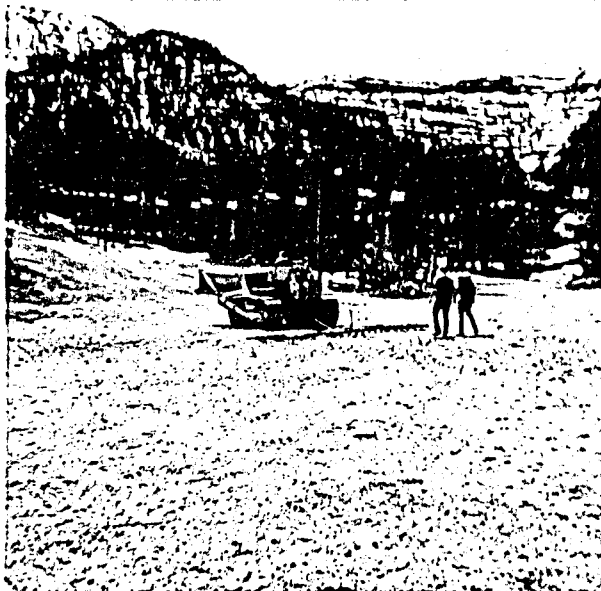


Looking southwest toward chairlift on August 24th, 1971. Soil fines are washing away from high intensity rainstorm and barren ski slopes void of vegetation. As the soil is lost, the ground surface is becoming exposed with rock and erosion pavement lessening the chance of rehabilitation.



Water continues down the drainage from the ski area causing erosion problems throughout Lee Canyon.





Ski Area reseeding Summer 1972  
Highfield, Cummings, Herrmann



Ski Area reseeding Summer 1972  
Cummings, Herrmann

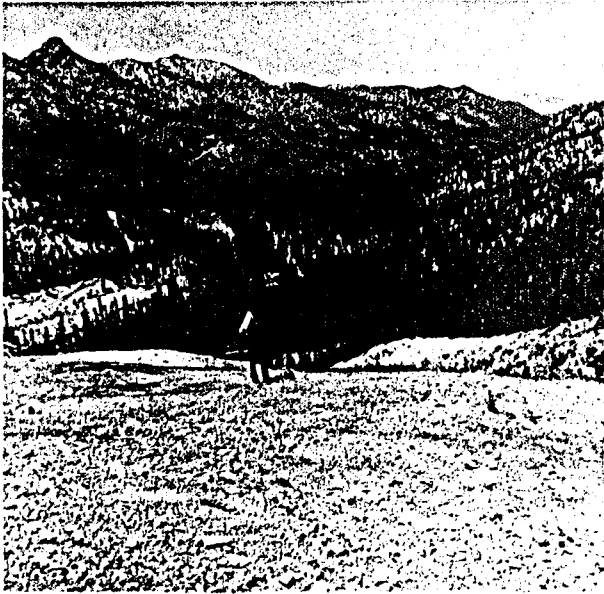


Highfield and harrow at Ski Area  
reseeding Summer 1972



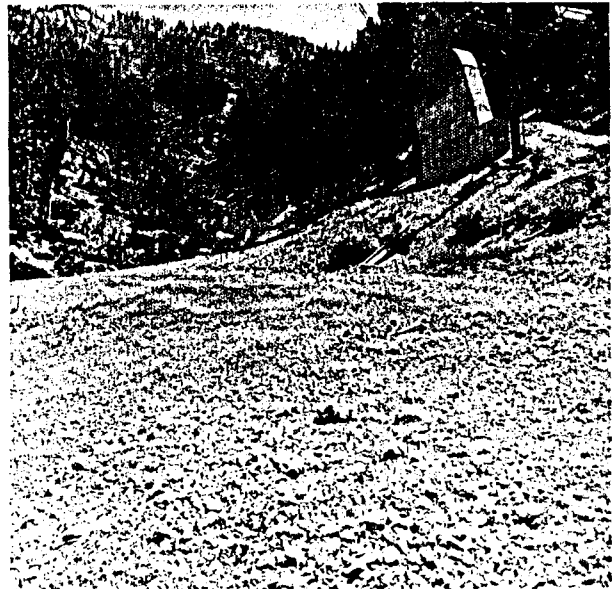
Ground Cover at Ski Area shortly  
after seeding Summer 1972

## Lee Canyon Ski Area



Forester Mac Thomson standing at head of chairlift ski run. Light green color on run is grass seedlings which have germinated from spring seeding.

Looking up at chairlift terminal and new grass seedlings which germinated from spring seeding.



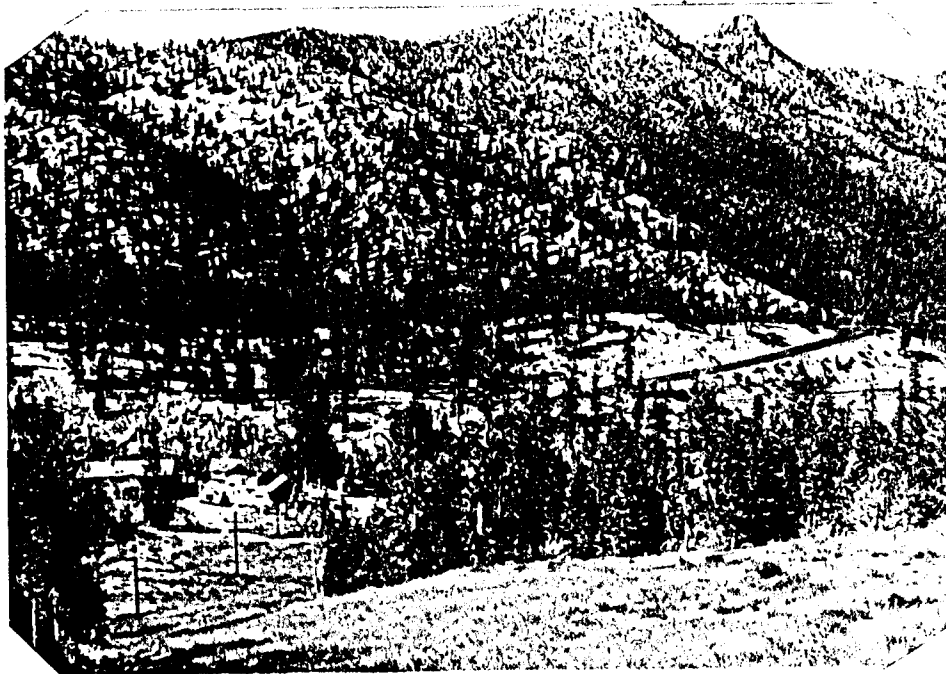
All photos taken on July 4, 1972 by A. J. Frandsen



Spring Mtn. Youth Camp Personnel  
Planting on T-Bar Ski Run  
on 6/1/73







Summer 1980

The horses have been fenced out of Lee Canyon since the fall of 1974. Vegetative cover has increased due to reseeding and absence of horses.

