G 9/12/95

United States Department of Agriculture | Forest Service | Toiyabe National Forest, Spring Mountains National Recreation Area | 2881 S. Valley View, #16, Las Vegas, NV 89102, (702) 873-8800

Reply to: 2260/195

Date: September 12, 1995

Commission for the Preservation of Wild Horses
ATTN: Cathy Barcomb
255 W. Moana Lane, Suite 207-A
Reno, NV 89509

Dear Cathy:

The Forest Service is proposing to gather and remove wild horses from the Spring Mountains Wild Horse Territory. The gather, if approved, would be conducted this winter.

Enclosed, for your review, is the Environmental Assessment regarding this gather. Please provide comments and concerns regarding this gather no later than October 12. Send comments to Sara Mayben, Planning Team Ecologist, at the above address, or call at (702)873-8800.

Thank you for your participation.

Sincerely,

Jim Tallerico

JAMES S. TALLERICO
District Ranger

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FS-6200-28b (12/93)

ENVIRONMENTAL ASSESSMENT
for the proposed
WILD HORSE GATHER
SPRING MOUNTAIN WILD HORSE AND BURRO
TERRITORY/HERD MANAGEMENT AREA

Lucky Strike
and
Mt. Stirling-Wallace Canyon
Herd Units

SPRING MOUNTAINS NATIONAL RECREATION AREA
TOIYABE NATIONAL FOREST

I. PURPOSE AND NEED FOR ACTION

The Toiyabe National Forest, Spring Mountains National Recreation Area (hereinafter referred to as the Forest Service) has proposed to gather wild horses in the Spring Mountain Wild Horse and Burro Territory/Herd Management Area (hereinafter referred to as the T/HMA). The gather would be conducted between December, 1995 and January 1996.

The gather would be located in the Lucky Strike and Mt. Stirling-Wallace Canyon Herd Units of the Spring Mountain T/HMA. The area is located approximately 45 miles northwest of Las Vegas, in the northwestern corner of Clark County, Nevada (Appendix 1, Maps. A. General Vicinity Map; B. Map of Spring Mountain T/HMA). This T/HMA includes lands administered by the Bureau of Land Management (hereinafter referred to as the BLM). The BLM will be issuing a separate capture and removal plan for this gather, per their regulations and policies.

Wild horses within the above mentioned Herd Units would be gathered with the use of helicopters and ground riders according to Nevada State capture and removal policies.

The purpose of the proposed wild horse gather is to remove excess animals from the Spring Mountain T/HMA and to remove wild horses that have been documented using areas outside the T/HMA, specifically, the Mt. Charleston Wilderness Area, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley.

The action to remove excess wild horses is proposed to balance the available water with wild horse populations, to restore the range into a thriving ecological balance, and prevent further deterioration of the range threatened by an overpopulation of wild horses. No livestock grazing occurs within the Spring Mountains NRA. Elimination of permitted livestock grazing occurred in May of 1993.

The action to remove wild horses using areas outside the T/HMA is proposed to protect the fragile ecosystems within the Mt. Charleston Wilderness Area, Kyle Canyon, Lee Canyon, and Deer Creek; to increase public and wild horse safety in areas there are high concentrations of vehicles and recreationists; and eliminate wild horse grazing on private land in the Pahrump Valley.

Wild horses were determined to be in excess of the Appropriate Management Levels from analysis of water sources, vegetation, and soil. Tables 1 through 3 show water availability by use area. Table 4 shows Appropriate Management Levels, estimated current population, and estimated excess numbers by use area, according to the 1994 census.

Currently, as seen in the tables, wild burros are below Appropriate Management Levels, and therefore, wild burro removals are not considered part the proposed action.

Table 1. Water Sources, Flow and Percent Available for Wild Horses and Burros, Lower Deer Creek Use Area

Water Source Name	Location	Minimum Flow	Percent Available for each use
Grassy Spring	Lucky Strike Lower Deer Creek	.3 gpm	15% WH&B 35% WLF 50% Riparian Maint.
Lower Deer Creek Seep	Lucky Strike Lower Deer Creek	.1 gpm	15% WH&B 35% WLF 50% Riparian Maint.
Grapevine	Lucky Strike Lower Deer Creek	.25 gpm	15% WH&B 35% WLF 50% Riparian Maint.

gpm - Gallons per Minute
WH&B - Wild Horses and Burros
WLF - Wildlife
Riparian Maint. - Amount of water required to maintain a healthy riparian ecosystem.

Table 2. Water Sources, Flow and Percent Available for Wild Horses and Burros, Wheeler Pass Use Area

Water Source Name	Location	Minimum Flow	Percent Available for each use
Wheeler Well	Wheeler Wash	0.0 gpm	15% WH&B 35% WLF 50% Riparian Maint.
Buck Spring	Wheeler Pass	.75 gpm	15% WH&B 35% WLF 50% Riparian Maint.
Rosebud Spring	Wheeler Pass	.34 gpm	15% WH&B 35% WLF 50% Riparian Maint.

gpm - Gallons per Minute
WH&B - Wild Horses and Burros
WLF - Wildlife
Riparian Maint. - Amount of water required to maintain a healthy riparian ecosystem.

Table 3. Water Sources, Flow and Percent Available for Wild Horses and Burros, Wheeler Wash/Wallace Canyon Use Area

Water Source Name	Location	Minimum Flow	Percent Available for each use
Kiup Spring	Trout Canyon	1.7 gpm	15% WH&B 35% WLF 50% Riparian Maint.
Ford Spring	Trout Canyon	0.25 gpm	15% WH&B 35% WLF 50% Riparian Maint.

gpm - Gallons per Minute
WH&B - Wild Horses and Burros
WLF - Wildlife
Riparian Maint. - Amount of water required to maintain a healthy riparian ecosystem

Range analysis conducted in the Cold Creek use area during 1992 showed a downward trend in both vegetative community composition and soil characteristics, and utilization on willow species in excess of 40%. This does not meet the standards and guidelines developed to achieve the objectives in the Toiyabe National Forest Land and Resource Management Plan.

Table 4. Appropriate Management Levels (AML), Estimated Current Population, and Estimated Excess Animals by Herd Use Area

Use Area	AML		Estimated Current Population	Estimated Excess Animals
Lower Deer Creek	Horses	7	25	18
	Burros	14	10	0
Wheeler Pass	Horses	23	50	27
	Burros	0	0	0
Wheeler Wash/ Wallace Canyon	Horses	21	35	14
	Burros	24	20	0
Cold Creek	Horses	55	80	25
	Burros	0	0	0

LINKAGE TO MANAGEMENT PLANS

The proposal is designed to manage the wild horse populations inhabiting the Spring Mountain Wild Horse and Burro Territory/Herd Management Area in accordance with the Title 36 Code of Federal Regulations (Part 222.20) and Title 43 Code of Federal Regulations (Part 4700), the Toiyabe National Forest Land and Resource Management Plan, the Las Vegas District Management Framework Plan, the associated USFS and BLM manuals and handbooks, and the BLM Washington Office Instruction Memorandum No. 83-289.

The wild horse populations will be managed as a component of the National Forest System Lands and the public lands in a manner that maintains or improves the rangeland ecosystem and promotes a thriving natural ecological balance with all other users and resources. This proposal adheres to the multiple use policy specified in the Wild Free Roaming Horse and Burro Act of 1971 (P.L. 92-195) and the Federal Land Policy and Management Act of 1976 (P.L. 94-579), while maintaining the free-roaming behavior of the wild horses within the Territory/Herd Management Area.

Goals and objectives have been developed from land use planning documents, including Toiyabe National Forest Land and Resource Management Plan (effective in 1986), Clark County Management Framework Plan (effective in 1983), Clark County Grazing Environmental Impact Statement and Record of Decision (effective in 1984).

Toiyabe National Forest LMP Goals:

1. Manage wild free-roaming horses to maintain a thriving ecological balance

2. 95% of rangelands will be brought into satisfactory condition.

Objectives:

1. Involve other federal and state agencies and interested parties in the development of territory management plans (TOFLRMP IV-28).

2. Manage wild free-roaming horses to population levels compatible with resource capabilities and requirements (TOFLRMP IV-31).

3. Maintain or restore rangelands to satisfactory condition which is defined as:

   a. having a resource value rating (RVR) of 50 or above for vegetation or other features;

   b. being in mid-successional or higher class of ecological status;

   c. and having a stable or upward trend in soil and vegetation (TORLRMP IV-27).

   In order to achieve this, forage utilization standards for all uses have been developed:

   40% in grass seedings in unsatisfactory condition
   45% in grass seedings in satisfactory condition

   30% in shrublands in unsatisfactory condition
   40% in shrublands in satisfactory condition

   These standards will be used as maximum total allowable utilization for all grazing animals. More restrictive utilization standards may be designed for each unit (TOFLRMP IV-28).

   To insure these standards are met and rangelands are maintained or progressing towards satisfactory condition, monitoring and evaluation will be conducted in accordance with FSH 2209.21, Range Environmental Analysis Handbook, and the Nevada Rangeland Monitoring Handbook (TOFLRMP VI-26).

BLM Clark County Management Framework Plan and Grazing Impact Statement Record of Decisions:

1. Manage wild horses in the Spring Mountain Range for desired population size which is a viable population of wild horses. Initial stocking

levels will be the population that occurred in 1983. Populations can be adjusted based on data generated through the monitoring process. (Clark County Record of Decision 8, page 5).

2. Insure that wild horse habitat as well as the animals are managed in a manner designed to realize multiple land use objectives. (Clark County Record of Decision 14, page 11).

DECISION TO BE MADE

A. No Action. Do not remove excess or problem wild free-roaming horses from the Lucky Strike and Mt. Stirling-Wallace Canyon Herd Units of the Spring Mountain T/HMA.

B. Approve the gather of wild free-roaming horses, remove excess wild horses selectively based on age and sex, remove excess wild burros of any age, and remove problem animals that have been documented using areas outside the T/HMA.

C. Approve the gather of wild free-roaming horses, remove excess wild horses selectively based only on age, and remove problem animals that have been documented using areas outside the T/HMA.

D. Remove only the problem wild free-roaming horses that have been documented using areas outside the T/HMA.

SUMMARY OF SCOPING

Initial phone scoping was conducted by the Forest Service to determine issues and concerns related to the proposed action and changes in issues since the gather in 1993. All those responding to the initial gather NEPA process in 1993 were contacted, between August 25 and September 4, 1995, regarding this action (16 interested and affected parties representing 5 agencies, 4 organizations and 2 individuals). (Appendix 2, Phone Scoping list, Phone Scoping Response forms)

Significant Issues Determined from Scoping

1. Impacts of Excess Wild Horse Populations on the Environment

Excess wild horses are causing deterioration of forage and water resources. Excess wild horses reduce the ecosystem's ability to support and maintain wildlife populations, recreational use, and the environment's health and productivity, in general.

Indicator - Number of excess wild horses based upon 15% of Available Resources (Water and/or Forage).

2. Impacts of Wild Horses Using Sensitive Areas and Areas outside T/HMA

The areas outside the T/HMA, specifically the Mt. Charleston Wilderness, Kyle Canyon, Lee Canyon, and Deer Creek are fragile environments, with many sensitive species. Grazing and trampling of the sensitive plant species may be occurring. This could

reduce the number of individuals in a sensitive species population, ultimately requiring listing of the species as either Threatened or Endangered.

Removing wild free-roaming horses from areas outside the T/HMA, specifically, the Mt. Charleston Wilderness, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley; and returning the wild horses to the Spring Mountain Territory would over-populate the T/HMA with wild free-roaming horses.

Wild horses may be entering the Mt. Charleston Wilderness, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley because of an over-population of wild horses within the T/HMA.

Public and wild horse safety is impacted along the State Highways in Kyle Canyon, Lee Canyon, Deer Creek, Pahrump Valley, and within the Mt. Charleston Wilderness Area. There has been at least one wild horse/vehicle involved accident each year for the last three years.

Wild horse use in areas outside the T/HMA is not in accordance with the Code of Federal Regulations 43 CFR 4710.4 which states "management of wild horses shall be undertaken with the objective of limiting the animals' distribution to herd areas." nor in accordance with the Code of Federal Regulations 36 CFR 222.20, Subpart 15 which states "Wild horse and burro territories means lands of the National Forest System which are identified by the Chief, Forest Service as lands which were territorial habitat if wild free-roaming horses at the time of the passage of the Act.

Indicator - Expected number of days wild horses use Mt. Charleston, Kyle Canyon,Lee Canyon, Deer Creek, and Pahrump Valley.

3. Economic and Social Impacts

The economic and social impacts of the removal of wild horses from areas outside the T/HMA would be the decreased occurrence of wild horse involved vehicle accidents causing loss of life for both the public and wild horses, and the loss of property.

Wild horse grazing on private property in the Pahrump Valley is inappropriate.

Indicator - Expected number of accidents per year involving wild horses in the Mt. Charleston Wilderness, Kyle Canyon, Lee Canyon, and Deer Creek Area.

4. Humane Treatment and Safe Handling of Wild Horses

Wild horses may be stressed, injured, and/or killed during the capture, care, temporary holding, and transportation to the Adoption Preparation Facility.

Indicator - Number of injuries and fatalities during the capture, handling, and shipping process.

5. Impacts of Selective Removals on Wild Horse Population Dynamics, Short Term vs Long Term

Removal of specific ages and sexes may alter the population dynamics of wild horses. This may affect long term reproductive rates, age, and class structure of the populations.

Indicator - Years to return to the current population structure.

Nonsignificant Issues

Visual/Viewing Wild Horses

Viewing wild horses within the Spring Mountains is an important activity. The impact of viewing wild horses by the proposed action is considered a nonsignificant issue because wild horses would continue to be a part of the ecosystem and they would continue to be seen within the same travel corridors, especially movements to and from water sources.

Threatened, Endangered, and Sensitive Species

Threatened, Endangered and Sensitive species specifically during the gather operation are considered a non-significant issue because the Desert Tortoise would be in hibernation, the goshawk and Palmer's chipmunk are at higher elevations than the gather operations and the sensitive plants would be dormant. A TES clearance, however, would be conducted for all trap sites and holding facilities. All trap sites and holding facilities will be located outside TES species populations, therefore, there will be no effect on TES species. The issue of wild horses impacting TES species is covered in Issue 2, Impacts of Wild Horses Using Sensitive Areas and Areas outside T/HMA.

Heritage Resources

A heritage resources clearance would be conducted at all trap sites and holding facilities. All traps and holding facilities will be located outside heritage site boundaries. Therefore, there will no effect on heritage resources.

Soil

Soil compaction at the trap sites and holding facilities is unavoidable but is considered nonsignificant because the areas involved would be small and compaction would be light.

Vegetation

Loss of individual plants at the trap sites and holding facilities is unavoidable but is considered nonsignificant because the areas involved would be small and plants would naturally re-establish themselves.

Wildlife

This is considered a nonsignificant issue because wildlife populations do not closely associate with wild horses. This would also not be a critical time for wildlife (calving, hunting, etc...) and there would not be a significant chance of calves or adults being injured, killed, or left behind.

Air Quality

This is considered a nonsignificant issue because the capture/removal plan has strict stipulations regarding the level of fugitive dust allowed around the wild horses. (Appendix 3, Spring Mountain Territory/Herd Management Area Capture/Removal Plan).

II. ALTERNATIVES INCLUDING PROPOSED ACTION

This section describes the proposed action and alternatives to the proposed action, and defines the differences among the alternatives and their environmental consequences. These descriptions will include how each alternative relates to the issues. A comparison of alternatives and environmental consequences is provided.

Four alternatives were developed in response to the above listed issues. All alternatives were developed.

Alternative 1 "No Action"

Alternative 1 "No Action" would not gather and remove any excess or problem wild horses from the Spring Mountain Wild Horse and Burro Territory/Herd Management Area.

Management Requirements

Highway signing would need to be increased to warn the public of wild horse populations along roads and in the canyons.

Protect water sources from being contaminated and damaged.

Fence riparian areas to eliminate wild horse access that are being overgrazed or trampled. Pipe 15% of water out of riparian area for wild horse use.

Monitoring Requirements

Monitor loss of life and property from wild horse involved vehicle accidents.

Monitor economic loss due to wild horse grazing on private property.

Monitor riparian communities to determine vegetative and soil trend.

Monitor population dynamics (deaths, births and recruitment) of wild horse populations.

Alternative 2 Proposed Action

Alternative 2 would capture/remove excess wild horses from the Spring Mountain Wild Horse and Burro Territory, Lucky Strike and Mt. Stirling-Wallace Canyon Herd Units using an age and sex selective strategy. Animals five years olds and younger would be removed, with 90% of the animals removed being female, 10% male. Therefore, the population returned to the T/HMA would have more males than females under five years old.

The assumption is this would reduce the reproductive rate and, therefore, reduce population growth of the wild horse bands (Jenkins and Houston, 1993). This would reduce population size and growth rate, and reduce negative impacts to resources.

The second part of this alternative would be the removal of the wild horses, nine years old and younger, documented using areas outside the T/HMA; specifically, the Mt. Charleston Wilderness Area, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley. Wild horses 10 years and older documented using areas outside the territory would be returned to the T/HMA in areas away from their traditional home range, to discourage use outside the T/HMA.

Management Requirements

Prepare capture/removal plan and conduct capture/removal in accordance with Nevada's current capture policies and procedures for helicopter capture (Appendix 3, Capture/Removal Plan).

Require contractor strictly adhere to policies and procedures in capture plan regarding wild horse safety, safe operations of helicopter, and dust reduction requirements.

Require contractor use feed receptacles (troughs, traps) should the contractor have to feed the wild horses at trap sites. This would

help reduce non-native seeds from being introduced into the environment.

Monitoring Requirements

Population dynamics information would be gathered while horses are within the holding facilities. Wild horses being released back into the territory would be freeze branded with large number and letter combinations on the upper part of the hind quarter. This is to facilitate identification of individuals in population and behavioral studies.

Wild horses would be marked by bands and release locations so they may be released as a band and in the same area they were captured.

Post census would be conducted, either aerial or ground, within one week of release to check animal condition and to insure they are not trapped by fences or natural barriers.

Evaluate selective removal success by recording the number of births and recruitment in 1996, 97 and 98; and compare to data collected throughout the State of Nevada.

Monitor contractor activities to assure compliance with capture policies and procedures.

Monitor water source during the summers of 1996, 97 and 98.

Alternative 3 Selective Removal for Age

Alternative 3 would capture/remove excess wild horses from the Spring Mountain Wild Horse and Burro Territory, Lucky Strike and Mt. Stirling-Wallace Canyon Herd Units using an age selective strategy. Animals five years olds and younger would be removed.

This would reduce the population size and growth rate, and reduce the negative impacts to resources.

The second part of this alternative would be the removal of the wild horses, nine years old and younger, documented using areas outside the T/HMA; specifically, the Mt. Charleston Wilderness Area, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley. Wild horses 10 years and older documented using areas outside the territory would be returned to the T/HMA in areas away from their traditional home range, to discourage use outside the T/HMA.

Management Requirements

Prepare capture/removal plan and conduct capture/removal in accordance with Nevada's current capture policies and procedures for helicopter capture (Appendix 3, Capture/Removal Plan).

Require contractor strictly adhere to policies and procedures in capture plan regarding wild horse safety, safe operations of helicopter and dust reduction requirements.

Require contractor use feed receptacles (troughs, traps) should the contractor have to feed the wild horses at trap sites. This would help reduce non-native seeds from being introduced into the environment.

Monitoring Requirements

Population dynamics information would be gathered while horses are within the holding facilities. Wild horses being released back into the territory would be freeze branded with large number and letter combinations on the upper part of the hind quarter. This is to facilitate identification of individuals in population and behavioral studies.

Wild horses would be marked by bands and release locations so they may be released as a band and in the same area they were captured.

Post census would be conducted, either aerial or ground, within one week of release to check animal condition and to insure they are not trapped by fences or natural barriers.

Evaluate selective removal success by recording the number of births and recruitment in 1996, 97 and 98; and compare to data collected throughout the State of Nevada.

Monitor contractor activities to assure compliance with capture policies and procedures.

Monitor water source during the summers of 1996, 97 and 98.

Alternative 4 Removal of Problem Animals Only

Alternative 4 would remove all wild horses, nine years old and younger, documented using areas outside the T/HMA. Wild horses 10 years and older documented using areas outside the territory would be returned to the T/HMA in areas away from their traditional home range, to discourage use outside the T/HMA. Animals in excess of Appropriate Management Levels would remain.

Management Requirements

Prepare capture/removal plan and conduct capture/removal in accordance with Nevada's current capture policies and procedures for helicopter capture (Appendix 3, Capture/Removal Plan).

Require contractor strictly adhere to policies and procedures in capture plan regarding wild horse safety, safe operations of helicopter and dust reduction requirements.

Require contractor use feed receptacles (troughs, traps) should the contractor have to feed the wild horses at trap sites. This would help reduce non-native seeds from being introduced into the environment.

Protect water sources from being contaminated and damaged.

Fence off riparian areas currently being over grazed or trampled by wild horses. Pipe 15% of available water out of riparian area for wild horse use.

Monitoring Requirements

Population dynamics information would be gathered while horses are within the holding facilities. Wild horses being released back into the territory would be freeze branded with large number and letter combinations on the upper part of the hind quarter. This is to facilitate identification of individuals in population and behavioral studies.

Wild horses would be marked by bands so they may be released as a band.

Post census would be conducted, either aerial or ground, within one week of release to check animal condition and to insure they are not trapped by fences or natural barriers.

Monitor contractor activities to assure compliance with capture policies and procedures.

Monitor water source during the summers of 1996, 97, and 98.

Monitor riparian communities to determine vegetative and soil trend.

Monitor population dynamics (deaths, births and recruitment) of wild horse populations in areas where water is insufficient.

Table 2-1. Summary of Consequences

Issues	Alt 1 No Action	Alt 2 Proposed Action	Alt 3 Age Selective Removal	Alt 4 Problem Animal Removal
Effect of Excess WH&B on Environment (Issue A) Est # of Excess WH&B	84	<15	<15	74
Use Outside the T/HMA (Issue 1) Expected Days of Use	5 Horses for 5 mos 10 Horses for 2 mos Total 1350 Days	<1350 Days	<1350 Days	<1350 Days
Economic and Social (Issue 2) Expected Number of Accidents per Year in Mt. Charleston Wilderns Kyle, Lee Canyons, and Deer Creek	1	0	0	0
Proper Treatment (Issue 3) Expected % Injuries or fatalities of gathered population	0%	<2%	<2%	<2%
Selective Removal (Issue 4) Years to Return to Current Population Structure	0	15	24	1
Estimated Number of Wild Horses Removed	0	74	74	15

III. Environmental Consequences

This section is the analytic and scientific basis for the comparison of the alternatives. It describes the expected environmental consequences of each alternative on the relevant issues. This section will be organized by resources and the effect each alternative has on the individual resource.

Issue 1. Impacts of Excess Wild Horse Populations on the Ecosystem

Wild horses are not native to the Spring Mountain's ecosystem. They were introduced as travelers and miners began entering this area. Over the course of time, ranchers used the Spring Mountains for raising livestock, including saddle and pack horses. Ranchers began breeding specific characteristics into their herds, that are evident today; pintos in the northwestern portion of the range; palominos in the southern portion of the range; and draft horses in the northeastern portion of the range. Grazing horses under permit on the Spring Mountains continued until 1990.

The Spring Mountain's ecosystem did not evolve with large grazing animals, including wild horses, that foraged primarily on grass. Over the long term, with competition for resources with livestock and elk, also non-native species, resource production and condition has begun to decline. As of 1993, no livestock grazing permits have been issued for the Spring Mountains on National Forest System lands.

Alternative 1, "No Action"

Direct and Indirect Effects

There would be no removal of excess or problem wild horses from the T/HMA. Water and other resources would be insufficient to meet the needs of wild horse populations, wildlife populations, and riparian areas. The vegetative communities, both riparian and upland, and soil condition would continue to be degraded, reducing the areas ability to support these populations. The indirect effects include a reduction in forage production that reduces the ecosystem's ability to support wild horses and other populations. As soil erosion and compaction increase in the riparian areas, a reduction in water flow is predicted.

Mitigation

Fence riparian areas and other sensitive areas. Pipe water outside the riparian areas for wild horse use.

Monitoring

Monitor wild use and movements. Monitor population dynamics to predict population growth.

Alternative 2, Proposed Action

Direct and Indirect Effects

Excess and problem wild horses would be removed, reducing the population to a level where water and other resources would be sufficient to provide for their needs, along with wildlife and riparian needs. The vegetation and soil condition, both upland and riparian, would stabilize or turn upward with a reduction in grazing pressures. The indirect effect would possibly be a recovery of historic vegetative conditions, with increased production of favored forage species, and an increase in water flow at spring sources.

Mitigation

Require contractor use feed receptacles (troughs, traps) should the contractor have to feed the wild horses at the trap sites.

Monitoring

Monitor water sources during the summers of 1996, 97, and 98.

Monitor forage utilization and soil condition to determine if Appropriate Management Levels are at appropriate population size.

Monitor population dynamics to determine population growth and predict when the next gather would occur.

Alternative 3, Selective Removal, Age Only

Direct and Indirect Effects

Excess and problem wild horses would be removed, reducing the population to a level where water and other resources would be sufficient to provide for their needs, along with wildlife and riparian needs. The vegetation and soil condition, both upland and riparian, would stabilize or turn upward with a reduction in grazing pressures. The indirect effect would possibly be a recovery of historic vegetative conditions, with increased production of favored forage species, and an increase in water flow at spring sources.

Mitigation

Require contractor use feed receptacles (troughs, traps) should the contractor have to feed the wild horses at the trap sites.

Monitoring

Monitor water sources during the summers of 1996, 97, and 98.

Monitor forage utilization and soil condition to determine if Appropriate Management Levels are at appropriate population size.

Monitor population dynamics to determine population growth and predict when the next gather would occur.

Alternative 4, Problem Animal Removal Only

Direct and Indirect Effects

There would be no removal of excess wild horses from the T/HMA. Problem animals would be removed, but not enough to reduce the population to the Appropriate Management Level, based upon 15% of available resources. Water and other resources would be insufficient to meet the needs of wild horse populations, wildlife populations, and riparian areas. The vegetative communities, both riparian and upland, and soil condition would continue to be degraded, reducing the areas ability to support these populations. The indirect effects include a reduction in forage production that reduces the ecosystem's ability to support wild horses and other populations. As soil erosion and compaction increase in the riparian areas, a reduction in water flow is predicted.

Mitigation

Fence riparian areas and other sensitive areas. Pipe water outside the riparian areas for wild horse use.

Monitoring

Monitor wild use and movements. Monitor population dynamics to predict population growth.

Issue 2. Wild Horse Use Outside the T/HMA

The Mt. Charleston area was designated wilderness in 1988 because of the significant number of endemic species, its beauty, and it location. Kyle Canyon, Lee Canyon, and Deer Creek have wilderness surrounding their southern, western, and northern parts. These areas are highly used by recreationists throughout the year. These areas, along with the Pahrump Valley, were never part of a wild horse territory or herd management area. Because of this, wild horses were not considered in any land management planning for this area.

There are currently 54 sensitive species in the Spring Mountains (28 plants, nine invertebrates, two birds, two reptiles, and 13 mammals); one endangered species: peregrine falcon; one species proposed as an endangered species: southwest willow flycatcher; and three threatened species: desert tortoise, Mexican spotted owl, and Lahontan cutthroat trout. Of the 54 sensitive species, 22 of these are endemic to the Spring Mountains (found nowhere else in the world), five are endemic to southern Nevada, and the remainder are found throughout the southwestern United States. Wild horse use in the wilderness may impact the high-elevation sensitive species and cause these populations to decline to the point of being listed as Threatened or Endangered.

Alternative 1, "No Action"

Direct and Indirect Effects

There would be no removal of wild horses using areas outside the T/HMA. Wild horse use would continue in the fragile ecosystems of the Mt. Charleston Wilderness, Kyle Canyon, Lee Canyon, and Deer Creek. These areas would

continue to be degraded through trampling or grazing of sensitive plant species found within these areas. The indirect cumulative impacts (long term) of continued grazing and trampling of sensitive plants may reduce the number of individual plant species. Fewer sensitive plants may cause the species to move from the Forest Service informal sensitive species list to the formal threatened or endangered species list.

Mitigation

Fence the territory boundary to keep wild horses inside the territory. This, however may prove to be impractical because of expanse of the area, the few natural barriers, and exorbitant expense and maintenance. Estimated construction cost is $380,000. Maintenance cost is estimated to $8,000 per year.

Monitoring

Monitor wild horse use and movements in the Mt. Charleston Wilderness Area, Kyle Canyon, Lee Canyon, and Deer Creek Area. Determine access points for these areas and possible ways of closing off access.

Alternative 2. Proposed Action

Direct and Indirect Impacts

Wild horses using the fragile environments outside the T/HMA would be gathered. Wild horses, nine year olds and younger, would be removed from the territory and placed up for adoption. Wild horses, ten year olds and older, would be returned to the T/HMA in areas away from their traditional home ranges to prevent them from entering the higher elevations.

Wild horse grazing would no longer have a direct or indirect cumulative impact on these fragile environments. There would not be impacts to threatened, endangered, or sensitive species in these areas.

Mitigation

Conduct problem animal removals to remove any additional wild horses that access these areas.

Monitoring

Monitor Mt. Charleston Wilderness area, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley for wild horse use.

Alternative 3. Selective Removal, Age Only.

Direct and Indirect Impacts

Wild horses using areas outside the T/HMA would be gathered. Wild horses, nine year olds and younger, would be removed from the territory and placed up for adoption. Wild horses, ten year olds and older, would be returned to the T/HMA

in areas away from their traditional home ranges to prevent them from entering the higher elevations.

Wild horse grazing would no longer have a direct or indirect cumulative impact on these fragile environments. There would not be impacts to threatened, endangered, or sensitive species in these areas.

Mitigation

Conduct problem animal removals to remove any additional wild horses that access these areas.

Monitoring

Monitor Mt. Charleston Wilderness area, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley for wild horse use.

Alternative 4. Problem Animal Removal Only

Direct and Indirect Impacts

Wild horses using areas outside the T/HMA would be gathered. Wild horses, nine year olds and younger, would be removed from the territory and placed up for adoption. Wild horses, ten year olds and older, would be returned to the T/HMA in areas away from their traditional home ranges to prevent them from entering the higher elevations.

Wild horse grazing would no longer have a direct or indirect cumulative impact on these fragile environments. There would not be impacts to threatened, endangered, or sensitive species of the areas.

Mitigation

Conduct problem animal removals to remove any additional wild horses that access these areas.

Monitoring

Monitor Mt. Charleston Wilderness area, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley for wild horse use.

Issue 3, Economic and Social

The economic and social impacts of wild horses in areas outside the T/HMA are the increased occurrence of wild horse and public interactions. These interactions have been vehicle accidents causing loss of life for both the public and wild horses, and the loss of property. There has been at least one accident per year involving wild horses and vehicles in these areas. The public have also approached the wild horses. No accidents have been recorded for this type of interaction, but it is only a matter of time. Wild horse grazing on private property negatively impacts the property owners.

Alternative 1, "No Action"

Direct and Indirect Impacts

Problem wild horses would not be removed. WIld horses would continue to be involved in vehicle accidents, therefore, public and wild horse safety would not improve. Wild horses, because of the terrain, would be drawn to the highways and roads for travel routes. Wild horses would continue to be involved in traffic accidents at approximately, one accident per year. This figure could easily increase with the increase in visitation and use on the highway. All wild horses involved in vehicle accidents have been killed or have had to be destroyed. The public has also been injured and their personal property damaged. Wild horse grazing would continue on private property, negatively impacting property owners.

Mitigation

Sign the roads and highways to warn motorists of the possibilities of wild horses on the road. Sign recreational areas to inform the public on wild horses, their behaviors, and the dangers of approaching them.

Identify and fence areas where wild horses access the highways, the Wilderness, and private property if no other feasible alternatives can be identified.

Monitoring

Continue to monitor wild horse movements in Mt. Charleston Wilderness, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley.

Monitor loss of life and property from wild horse involved vehicle accidents.

Alternative 2, Proposed Action

Direct and Indirect Impacts

Wild horses would be eliminated from areas outside the T/HMA. Wild horse and public safety would improve by eliminating accidents involving wild horses and the public. Wild horse grazing would be eliminated on private property.

Mitigation

Conduct problem animal removals to remove any additional wild horses that access these areas.

Monitoring

Monitor Mt. Charleston Wilderness area, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley for wild horse use.

Alternative 3, Selective Removal Age Only

Direct and Indirect Impacts

Wild horses would be eliminated from areas outside the T/HMA. Wild horse and public safety would improve by eliminating accidents involving wild horses and the public. Wild horse grazing would be eliminated on private property.

Mitigation

Conduct problem animal removals to remove any additional wild horses that access these areas.

Monitoring

Monitor Mt. Charleston Wilderness area, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley for wild horse use.

Alternative 4, Problem Animal Removal Only

Direct and Indirect Impacts

Wild horses would be eliminated from areas outside the T/HMA. Wild horse and public safety would improve by eliminating accidents involving wild horses and public. Wild horse grazing would be eliminated on private property.

Mitigation

Conduct problem animal removals to remove any additional wild horses that access these areas.

Monitoring

Monitor Mt. Charleston Wilderness area, Kyle Canyon, Lee Canyon, Deer Creek, and Pahrump Valley for wild horse use.

Issue 4, Proper Treatment of Wild Horses During Gather

Wild horses may be stressed, injured, and/or killed during the capture, care, temporary holding, and transportation to the Adoption Preparation Facility.

Alternative 1, "No Action"

Direct and Indirect Impacts

Wild horses would not be gathered with "No Action", therefore, no direct or indirect impacts would occur from proper treatment of the animals

Mitigation

none

Monitoring

none

Alternative 2, Proposed Action

Direct and Indirect Impacts

Wild horses would be gathered so there would be the possibility of stress, injury, and death to the animals. We estimate less than two percent of the population gathered would be either injured, killed or destroyed because of the gather operation. This figure is based upon past experience in gathering wild horses throughout the State of Nevada.

Mitigation

Prepare capture/removal plan and conduct capture/removal in accordance with Nevada's current capture policies and procedures for helicopter capture (Appendix 3, Capture/Removal Plan).

Require contractor strictly adhere to policies and procedures in capture plan regarding wild horse safety, safe operations of helicopter, and dust reduction requirements.

Monitoring

Monitor contractor compliance of approved capture/removal plan.

Alternative 3, Selective Removal Age Only

Direct and Indirect Impacts

Wild horses would be gathered so there would be the possibility of stress, injury, and death to the animals. We estimate less than two percent of the population gathered would be either injured, killed or destroyed because of the gather operation. This figure is based upon past experience in gathering wild horses throughout the State of Nevada.

Mitigation

Prepare capture/removal plan and conduct capture/removal in accordance with Nevada's current capture policies and procedures for helicopter capture (Appendix 3, Capture/Removal Plan).

Require contractor strictly adhere to policies and procedures in capture plan regarding wild horse safety, safe operations of helicopter, and dust reduction requirements.

Monitoring

Monitor contractor compliance of approved capture/removal plan.

Alternative 4, Problem Animal Removal Only

Direct and Indirect Impacts

Wild horses would be gathered so there would be the possibility of stress, injury, and death to the animals. We estimate less than two percent of the population gathered would be either injured, killed or destroyed because of the gather operation. This figure is based upon past experience in gathering wild horses throughout the State of Nevada.

Mitigation

Prepare capture/removal plan and conduct capture/removal in accordance with Nevada's current capture policies and procedures for helicopter capture (Appendix 3, Capture/Removal Plan).

Require contractor strictly adhere to policies and procedures in capture plan regarding wild horse safety, safe operations of helicopter, and dust reduction requirements.

Monitoring

Monitor contractor compliance of approved capture/removal plan.

Issue 5, Selective Removals

Selective removals, based on both age and sex, would alter the population's growth rate, age distribution, and sex ratios. Changing the population growth would help achieve and maintain Appropriate Management Levels without frequent agency assistance.

Alternative 1, "No Action"

Direct and Indirect Impacts

Wild horses would not be removed, therefore, no direct or indirect impacts would occur because of selective removals on the wild horse population structure or size.

The indirect cumulative impacts of not reducing the wild horse populations to Appropriate Management Levels would be continued stress on the animals where water and forage are in short supply. There would be a reduction in the birth of foals and the foals' survival rate during their first years. The population would grow older. Older mares (+15 years old) do not have the reproductive success of younger mares (Berger, 1986). There would be little recruitment of young animals into the population. If this continued over an extended period, or if there was a catastrophic event (drought), the population might completely disappear.

The range condition is in a downward trend and utilization is excessive. The direct impacts of this is less vegetation to protect the soil from high intensity thunder storms. The indirect cumulative impacts would be excessive soil loss, in turn reducing the amount of forage produced, decreasing water

quantity and quality, and reducing ecosystem health and productivity. As the wild horse population increases, or if the excessive utilization continues over the long term, the downward trend may accelerate, and ecosystem health may decline beyond the point recovery. This may also make the ecosystem unable to support wild horse and wildlife populations.

Mitigation

Provide enough water to maintain riparian community health (50% of available water). Insure wildlife water (35% of available water) needs are met through pipelines and troughs that prohibit wild horse access.

Pipe water (15% of available water) from source to troughs accessible for wild horse use.

Fence off riparian areas that show excessive forage utilization and trampling.

Monitoring

Monitor wild horse population dynamics. Determine the direction the population is moving towards (young population with mostly young animals vs old population with mostly old animals). If a population is in danger of becoming extinct, trap and transplant wild horses out of the area.

Monitor the riparian community's condition and trend associated in areas where water supply is short.

The Toiyabe National Forest Land and Resource Management Plan states trend will be stable or upwards and in areas where range condition is not good, utilization of shrubs will not exceed 30% of current year's growth. Monitor range condition and trend in areas where water is not in short supply.

Monitor use of new troughs by wild horses.

Alternative 2, Proposed Action

Direct and Indirect Impacts

The selective removal would occur targeting age and sex classes for wild horses. This would have a direct impact on the population dynamics, birth rate, age class, and sex ratio. A reduction in birth rate would help in wild horse management. Fewer gathers would have to occur to achieve and maintain the populations at Appropriate Management Levels.

The average birth rate, as calculated for the State of Nevada, is 18% (Berger, 1986). For southern Nevada, the assumption is a slightly less reproductive rate, given the more harsh conditions. With this type of selective removal, the assumption is a birth rate of 10% (Jenkins and Houston, 1993). Mortality rates for both males and females would remain the same as average for the State of Nevada; male mortality - 10%; and females mortality - 5% (Genz, 1992)

Given this strategy, Appropriate Management levels could be achieved in six to 12 years. We expect the age, class, and sex structure to return to the original composition and the population to its original size within 18 years.

Over the long-term, with gathers every two to five years, wild horse populations would be reduced to a level where water would be sufficient to provide for their needs in the Lower Deer Creek, Wheeler Pass, and Wheeler Wash/Wallace Canyon use areas. There would be no indirect cumulative impacts on the populations survival.

Vegetation and soil trend would stabilize or turn upward in the Cold Creek use area. There would be no direct or indirect cumulative impacts of a reduced range condition or trend due to over grazing by wild horses.

Mitigation

Conduct genetic tests on the wild horse population to determine the population's genetic diversity, and the population's genetic flexibility given this selective gather strategy.

Monitoring

Population dynamics information would be gathered while horses are within the holding facilities. Wild horses being released back into the territory would be freeze branded with large number and letter combinations on the upper part of the hind quarter. This is to facilitate identification of individuals in population and behavioral studies.

Wild horses would be marked by bands and release locations so they may be released as a band and in the same area they were captured.

Post census would be conducted, either aerial or ground, within one week of release to check animal condition and to insure they are not trapped by fences or natural barriers.

Evaluate selective removal success by recording the number of births and recruitment in 1996, 97, and 98; and compare to data collected throughout the State of Nevada.

Alternative 3, Selective Removal Age Only

Direct and Indirect Impacts

The selective removal would occur targeting age and sex classes for wild horses. This would have a direct impact on the population dynamics, birth rate, age class, and sex ratio. A reduction in birth rate would help in wild horse management. Fewer gathers would have to occur to achieve and maintain the populations at Appropriate Management Levels.

The average birth rate, as calculated for the State of Nevada, is 18% (Berger, 1986). For southern Nevada, the assumption is a slightly less reproductive rate, given the more harsh conditions. With this type of selective removal,

the assumption is a birth rate of 13% (Jenkins and Houston, 1993). Mortality rates for both males and females would remain the same as average for the State of Nevada; male mortality - 10%; and females mortality - 5% (Genz, 1992)

Given this strategy, Appropriate Management levels could be achieved in 12 to 18 years. We expect the age, class, and sex structure to return to the original composition and the population to its original size within 24 years.

Over the long-term, with gathers every two to five years, wild horse populations would be reduced to a level where water would be sufficient to provide for their needs in the Lower Deer Creek, Wheeler Pass, and Wheeler Wash/Wallace Canyon use areas. Given no catastrophic events, such as prolonged drought, there would be no indirect cumulative impacts on the populations survival.

Vegetation and soil trend would stabilize or turn upward in the Cold Creek use area. There would be no direct or indirect cumulative impacts of a reduced range condition or trend due to over grazing by wild horses.

Mitigation

Conduct genetic tests on the wild horse population to determine the population's genetic diversity, and the population's genetic flexibility given this selective gather strategy.

Monitoring

Population dynamics information would be gathered while horses are within the holding facilities. Wild horses being released back into the territory would be freeze branded with large number and letter combinations on the upper part of the hind quarter. This is to facilitate identification of individuals in population and behavioral studies.

Wild horses would be marked by bands and release locations so they may be released as a band and in the same area they were captured.

Post census would be conducted, either aerial or ground, within one week of release to check animal condition and to insure they are not trapped by fences or natural barriers.

Evaluate selective removal success by recording the number of births and recruitment in 1996, 97, and 98; and compare to data collected throughout the State of Nevada.

Alternative 4, Problem Animal Removal

Direct and Indirect Impacts

Only problem animals using areas outside the territory would be gathered. Wild horses, nine years and younger would be removed. Wild horses 10 years and older would be returned to the T/HMA. No selective removals would occur, therefore, no direct impacts or indirect impacts would occur because of selective removals on the wild horse population structure or size.

The indirect cumulative impacts of not reducing the wild horse populations to Appropriate Management Levels would be continued stress on the animals where water and forage are in short supply. There would be a reduction in the birth of foals and the foals' survival rate during their first years. The population would grow older. Older mares (+15 years old) do not have the reproductive success of younger mares (Berger, 1986). There would be little recruitment of young animals into the population. If this continued over an extended period, or if there was a catastrophic event (drought), the population might completely disappear.

The range condition is in a downward trend and utilization is excessive. The direct impacts of this is less vegetation to protect the soil from high intensity thunder storms. The indirect cumulative impacts would be excessive soil loss, in turn reducing the amount of forage produced, decreasing water quantity and quality, and reducing ecosystem health and productivity. As the wild horse population increases, or if the excessive utilization continues over the long term, the downward trend may accelerate, and ecosystem health may decline beyond the point recovery. This may also make the ecosystem unable to support wild horse and wildlife populations.

Mitigation

Provide enough water to maintain riparian community health (50% of available water). Insure wildlife water (35% of available water) needs are met through pipelines and troughs that prohibit wild horse access.

Pipe water (15% of available water) from source to troughs accessible for wild horse use.

Fence off riparian areas that show excessive forage utilization and trampling.

Monitoring

Monitor wild horse population dynamics. Determine the direction the population is moving towards (young population with mostly young animals vs old population with mostly old animals). If a population is in danger of becoming extinct, trap and transplant wild horses out of the area.

Monitor the riparian community's condition and trend associated in areas where water supply is short.

The Toiyabe National Forest Land and Resource Management Plan states trend will be stable or upwards and in areas where range condition is not good, utilization of shrubs will not exceed 30% of current year's growth. Monitor range condition and trend in areas where water is not in short supply.

Monitor use of new troughs by wild horses.

R. Unavoidable Adverse Effects

There would be an unavoidable adverse effect to the soil and vegetation in the trap sites and the holding facilities.

S. Relationships of Short-term Uses and Long-term Productivity

The wild horses do not use the Mt. Charleston Wilderness Area, Kyle Canyon, Lee Canyon, or Deer Creek Areas during the winter. Therefore, we do not expect any short-term impacts to these areas because of the gather.

The short-term use of the areas associated with the trap sites and holding facilities would allow for an increase long-term productivity in the territory if the wild horse are adjusted to Appropriate Management Levels. There would be an increase in the amount of water available to maintain the health of the riparian area. These riparian areas may improve with more water being held in their system. Long term productivity may increase with increased water flow and supply.

T. Irreversible and Irretrievable Commitments of Resources

Selective removals are not irreversible nor irretrievable. The selective removal with five year olds and younger, and a sex ratio of 90% females to 10% males removed would reverse (or return to the original structure) within 15 years. The selective removal with five year olds and younger, with a sex ratio reflecting that of the population being removed would reverse in 24 years. Animals injured during the gather operation is an irreversible commitment of resources.

The wild horses removed from the territory are an irreversible commitment of resources. Any animals killed because of the gather operation are an irretrievable commitment of resources.

IV. List of Preparers

Name	Contribution	Degrees	Agency	Experience (years)
George Perkins	Range/NEPA	BS Range and Watershed Mgt	USFS	20
Sara Mayben	Range/Wildlife	BS Ecology MS Range Ecology	USFS	6
Gary McFadden	Range/ Wild Horses	BS Range Livestock Production MS Range Science	BLM	15
Butch Padilla	Wildlife	BS Biology	NDOW	26
Kathy Barcomb	Wild Horses/ Burros		NV Commission Preservation Wild Horses	6

References

Berger, Joel. Wild Horses of the Great Basin; Social Competition and Population Size. University of Chicago Press, 1986.

Genz, Ken. Personal Communication on Wild Horse Population Dynamics. US Forest Service, 1992.

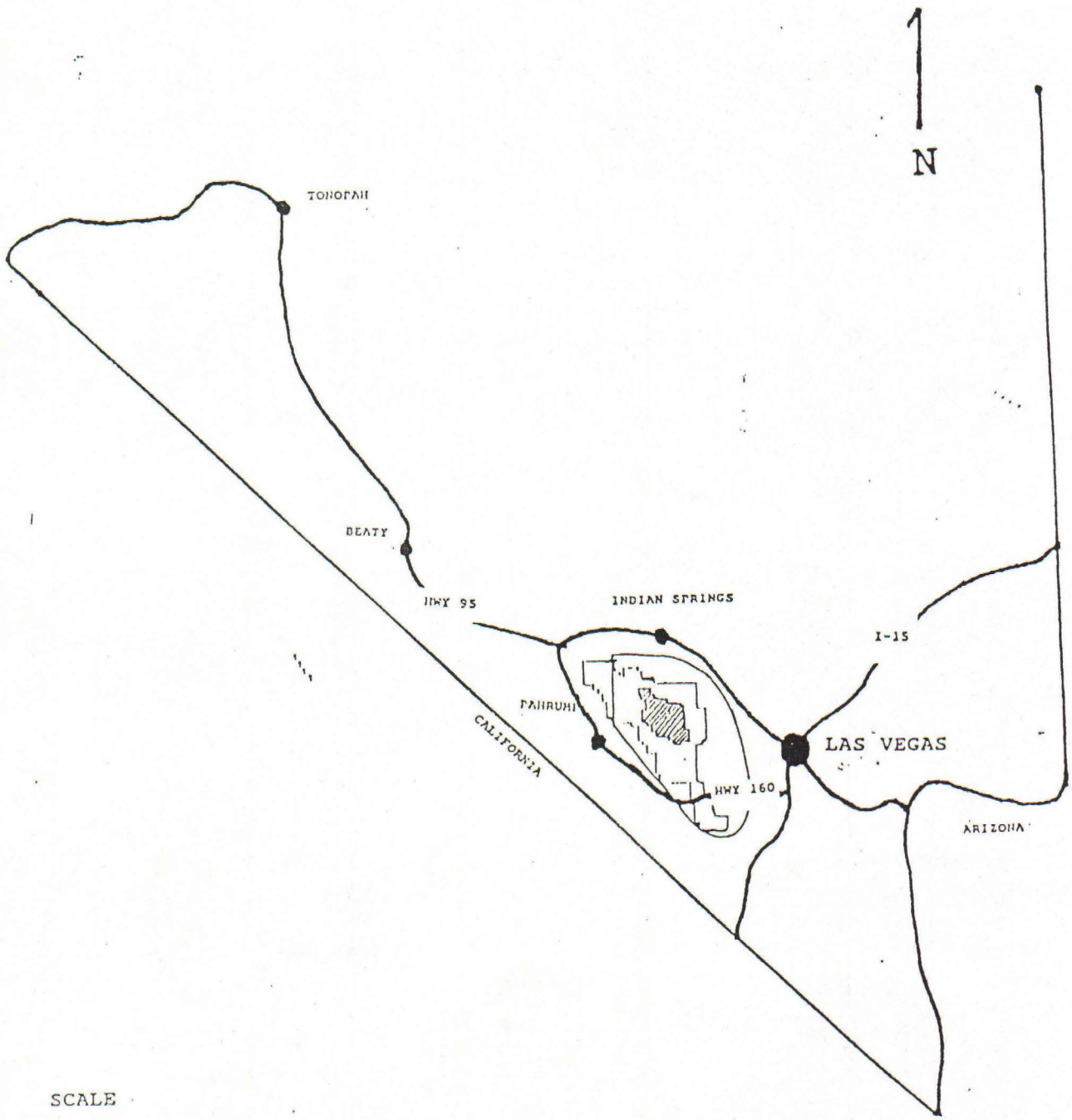
Jenkins, Stephen, and J.D. Houston. Wild Horse Population Model. Version 2.1 Univeristy of Reno, 1993.

Appendix 1

Map A. General Vicinity Map

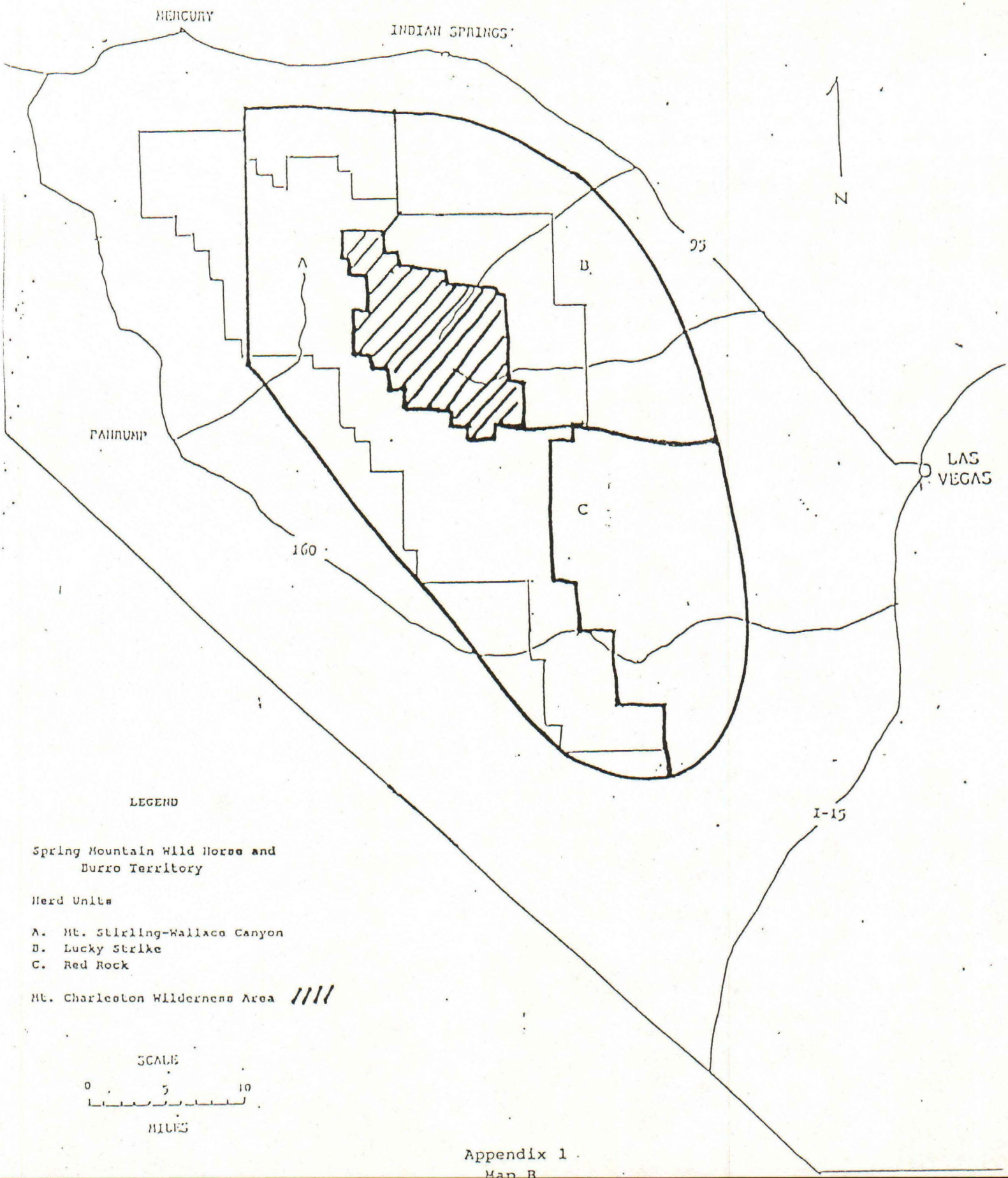
Map B. Spring Mountain Wild Horse and Burro Territory
And Management Units

GENERAL VICINITY MAP



Appendix 1
Map A

WILD HORSE AND BURRO TERRITORIES AND MANAGEMENT UNITS



Appendix 1
Map B

Appendix 2

A. Phone Scoping List

B. Phone Scoping Form

Nevada Division of Wildlife

Nevada Department of Transportation

Nevada Division of Forestry

Nevada Division of State Lands

Barbara Orcutt

Betty Burge

International Society for the Protection of Mustangs and Burros

Wild Horse Commission

Wild Horse Organized Assistance

National Wild Horse Association

US Fish and Wildlife Service

Bureau of Land Management

Wild Horse Gather
Spring Mountains Territory
1995-96
Phone Scoping Form

1. Gather will take place for approximately 2 weeks sometime during the period of Dec 1, 1995 through Jan 31, 1996. Approximately 150 wild horses will be gathered. Animals 5 years old and younger (approximately 75 animals) will be removed from the territory and placed into the BLM Adoption Program. Animals older than 4 years old will be returned to the Spring Mountains Territory. None of the wild horses will be destroyed, unless they are severly injured during the gather process, or have genetic defects, such as sway-back, or club-hoof. During the last gather in 1993, a total of 300 animals were gathered. Of those, 3 wild horses had to be destroyed, 2 for genetic defects, and 1 due to injuries obtained in the holding facility.
Any Concerns:_____

2. Appropriate Management Levels (population size) has been reduced from the 1992 figure to:

Deer Creek:	7 Horses
Cold Creek	50 Horses
Wheeler Pass	23 Horses
Wheeler Wash	21 Horses

This gather will not achieve these population sizes, but is necessary to reduce resource impacts of wild horses.
Any Concerns:_____

3. This environmental analysis will discuss a program of gathering wild horses every 2-4 years. This will help us achieve the desired population sizes (Appropriate Management Level), and help maintain the resources in good condition.
Any Concerns:_____

Any other concerns in general?_____

Appendix 3

Spring Mountain Wild Horse Capture/Removal Plan

CAPTURE/REMOVAL PLAN
FOR
SPRING MOUNTAIN WILD
HORSE AND BURRO TERRITORY

LUCKY STRIKE AND
MT. STIRLING-WALLACE CANYON
HERD UNITS

Las Vegas Ranger District

Toiyabe National Forest

Purpose

The proposed action is to capture and/or remove wild horses from the Spring Mountain Wild Horse and Burro Territory/Herd Management Area (T/HMA) for the purposes of maintaining the appropriate management level (AML) and to remove problem animals that use areas outside the territory, specifically, the Mt. Charleston Wilderness Area, Kyle and Lee Canyons, and the Pahrump Valley. Maintenance of AML will restore the range to a thriving natural balance and prevent further deterioration of the range threatened by an overpopulation of wild horses in and around the Spring Mountain T/HMA. Wild horses will be captured and/or removed using helicopters. Some roping from horseback will be allowed.

This document outlines the procedures and methodology for capturing and/or removing wild horses from the Spring Mountain T/HMA. Also outlined are the US Forest Service and Bureau of Land Management personnel involved with the gather, the Contracting Officer's Representative (COR) and Project Inspectors (PI's), the delegation of authority, the briefing of the contractor(s) and the precapture evaluation held prior to gathering operations.

Area of Concern

The Spring Mountain Wild Horse and Burro T/HMA is located approximately 45 miles northwest of Las Vegas, in northern Clark County, Nevada. The area is administered by both the US Forest Service, Toiyabe National Forest, Las Vegas Ranger District (hereinafter referred to as the Forest Service) and the Bureau of Land Management, Las Vegas District, Stateline Resource Area (hereinafter referred to as the BLM). Maps of the Territory/Herd Management Area are located in the Appendix 1.

The proposed action is in conformance with the Toiyabe National Forest Land And Resource Management Plan (LRMP) and the Clark County Management Framework Plan (MFP), the Clark County Grazing Environmental Impact Statement (EIS) and Record of Decision (ROD). This action is considered a part of long term management.

Any removals will be followed by a post-removal census to determine if the proper number of horses remain in the T/HMA.

Method of Capture

Captures and/or removals will take place through issuance of removal contract. The BLM will issue the contract.

Under no circumstances will gathering be allowed during the foaling season (March 1 to July 1).

The method of capture to be used will be a helicopter to bring the horses to trap site and horseback riders at the wings of portable traps. The horse free area may require a combination of helicopter trapping and roping from horseback, as determined by the COR, to eliminate all horses from the area. Roping will be allowed to complete the total removal as horses become widely scattered. The temporary traps and corrals will be constructed from portable pipe panels. A temporary holding corral will be constructed in the area to hold horses after capture. A loading chute at the holding corral will be

equipped with plywood sides or similar material so horses' legs won't get caught in the panels. Trap wings will be constructed of portable panels, jute netting, or other materials determined to be non-harmful to the horses. Barbed wire or other harmful materials will not be allowed for wing construction. All trap, corral, and wing construction will be approved by the COR.

Water trapping wild horses may be used as a capture method at the discretion of the Contractor and COR. Water traps take time to construct and require time for the horses to accept as part of their environment; the time allotted to each removal is limited.

Other methods of capture were not considered feasible. Trapping horses by running them on horseback is not feasible because it is too easy to lose animals after starting them towards the trap; injuries to both people and animals are more likely, and the cost shown from previous gathers using this method indicates that it is cost prohibitive.

Each trap site will be selected by the COR after determining the habits of the animals and observing the topography of the area. Specific locations may be selected by the contractor with the COR's approval within the general pre-selected area. Trap sites will be located to cause as little injury to the animals and as little damage to the natural resources of the area as possible. Sites will be located on or near existing roads and will receive cultural and threatened/endangered/sensitive plant and animal clearances prior to construction.

Because of variables such as weather, time of year, location of horses, and suitable trap sites, it is not possible to identify specific locations at this time. They will be determined at the time of the operation.

The terrain in the removal area varies from flat alluvial fans to mountainous, and horses could be located at all elevations during the time the gather is scheduled. There are few physical barriers and fences in the area and the contractor will be instructed to avoid them.

Administration of the Contract

The Forest Service and the BLM will be responsible, through contract, for all capture, care, temporary holding until release, and transportation of excess animals to the adoption preparation facility.

Within two weeks prior to the start of each operation, the Forest Service and the BLM will provide for a precapture evaluation of existing conditions in the gather area. The evaluation will include animal condition, prevailing temperatures, drought conditions, soil conditions, topography, road condition, locations of fences and other physical barriers, and animal distribution. The evaluation will also arrive at a conclusion as to whether the level of activity is likely to cause undue stress to the animals and whether such stress would be acceptable to the animals if veterinarian expertise were present, or whether a delay in capture activity is warranted. If it is determined that the capture can proceed with a veterinarian present, the services of a veterinarian will be obtained before capture will proceed.

At least one authorized Forest Service or BLM employee will be present at the site of captures/removals. Either a Contracting Officer's Representative (COR), a BLM employee, or Project Inspector (PI), a Forest Service Employee, preferably both, will be on site. The COR will be directly responsible for conducting the capture/removal and can appoint other Forest Service personnel to assist with the operation as necessary.

Other Forest Service and BLM personnel may be needed to help and include an archeologist to survey site for cultural resources, law enforcement to protect personnel and property from unlawful activities, and other personnel as the need arises.

The COR is directly responsible for the conduct of the gathering operation and for reporting progress to the District Ranger of the Las Vegas Ranger District, the Forest Supervisor of the Toiyabe National Forest, the Las Vegas District Manager, and the Nevada State Office, Bureau of Land Management.

The Forest Supervisor is responsible for maintaining and protecting the health and welfare of the wild horses. To ensure the contractor's compliance with the contract stipulations, the COR and/or PI will be on site. However, the Las Vegas District Ranger (or his Acting) is very involved with guidance and input into this removal plan and with contract monitoring. The health and welfare of the animals is the overriding concern of the Forest Supervisor, District Ranger, COR, and PIs.

The COR and/or PIs will constantly, through observation, evaluate the contractor's ability to perform the required work in accordance with the contract stipulations. Compliance with the contract stipulations will be through issuance of written instructions to the contractor, stop work orders, and default procedures should the contractor not perform work according to the stipulations.

If the contractor fails to perform in an appropriate manner at any time, the contract will not be allowed to continue until the problems encountered are corrected to the satisfaction of the COR. All publicity, formal public contact, and inquiries will be handled through the Public Affairs Officer on the Las Vegas Ranger District and Public Affairs Officer for the Stateline Resource Area. They will also coordinate the contract with the adoption preparation facility. They will assure corral space is available for the captured horses, that the animals are handled humanely and efficiently, and that animals being transported from the capture site are arriving in good condition.

Contractor's Briefing

The contractor, after award of the contract, will be briefed on his duties and responsibilities before the notice to proceed is issued to him. There will also be an inspection of the contractor's equipment at this time to assure that it meets specifications and is adequate for the job. Any equipment that does not meet specification must be replaced within 36 hours. The contractor will also be informed of the terrain involved, the condition of the animals, the condition of the roads, potential trap locations, and the presence of fences and other dangerous barriers.

Branded and Claimed Animals

A notice of intent to impound and a 28-day notice to gather wild horses will be issued concurrently by the Forest Service and BLM prior to any gathering operations in this area.

The Nevada Department of Agriculture and the District Brand Inspector will receive copies of these notices, as well as the Notice of Public Safety if issued.

The COR will contract the District Brand Inspector and make arrangements for dates and times when brand inspections will be needed.

When horses are captured, the COR/PI and the District Brand Inspector will jointly inspect all animals at the holding facility in the gathering area. If determined necessary at that time by all parties involved, horses will be sorted into three categories:

a. Branded animals with offspring, including yearlings.

b. Unbranded or claimed animals with offspring, including yearlings with obvious evidence of existing or former private ownership (e.g. geldings, bobbed tails, photo documentation, saddle marks, etc...).

c. Unbranded animals and offspring without obvious evidence of former private ownership.

The COR/PI, after consultation with the District Brand Inspector, will determine if unbranded animals are wild and free-roaming horses. The District Brand Inspector will determine ownership of branded animals and their offspring and, if possible, the ownership of unbranded animals determined not to be wild and free-roaming horses.

Branded horses with offspring and claimed unbranded horses with offspring for which the owners have been identified by the District Brand Inspector will be retained in the custody of the Forest Service, if capture site is on National Forest System lands, and the BLM, if the capture site is on Public Lands, pending notification of the owner or claimant.

A separate holding corral will be set up near the temporary holding corral to house these animals until the owner/claimant, BLM or Forest Service can pick them up.

The animals will remain in the custody of the BLM or Forest Service until settlement in full is made for impoundment and trespass charges, as determined appropriate by the Stateline Resource Area Manager in accordance with 43 CFR Subpart 4710.6 and provisions in 43 CFR Subpart 4150 or the Las Vegas District Ranger in accordance with 36 CFR Subpart 222.22. In the event settlement is not made, the horses will be sold at public auction by the BLM or Forest Service.

Branded horses with offspring whose owners cannot be determined, and unclaimed, unbranded horses with offspring having evidence of existing or former private

ownership will be released to the Nevada Department of Agriculture (District Brand Inspector) as estrays.

The District Brand Inspector will provide the COR/PI a brand inspection certificate for immediate shipment of excess wild horses to adoption preparation facility, and for the branded or claimed horses where impoundment and trespass charges have not been offered or received, for shipment to a public auction or another holding facility.

Destruction of Injured or Sick Animals

Any severely injured or seriously sick animal shall be destroyed in accordance with 43 CFR Subpart 4730.1. Animals shall be destroyed only when a definite act of mercy is needed to alleviate pain and suffering. The COR/PI will have the primary responsibility for determining when an animal will be destroyed and will perform the actual destruction. The contractor will be permitted to destroy an animal only in the event the COR/PI are not at the capture site or holding corrals, and there is an immediate need to alleviate pain and suffering of a severely injured animal. When the COR/PI is unsure as to the severity of an injury or sickness, a veterinarian will be called to make a final determination. Destruction shall be done in the most humane method available as per Washington Office Wild Free-Roaming Horse and Burro Program Guidance dated January 1983. A veterinarian can be called from Las Vegas or Pahrump, if necessary to care for any injured animals.

The carcasses of wild horses which die or must be destroyed as a result of any infectious, contagious, or parasitic disease will be disposed of by burial to a depth of at least three feet.

The carcass of wild horses which must be destroyed as a result of age, injury, lameness, or noncontagiuos disease/illness will be disposed of by removing them from the capture site or holding corral and placing them in an inconspicuous location to minimize the visual impacts. Carcasses will not be placed in drainages regardless of drainage size or downstream destination.

Temporary Holding Facility

The holding facility shall be on National Forest System Lands or Public Lands unless an agreement is made between the contractor and a private land owner for use of private facilities. When private land is used, the contractor must guarantee the Forest Service, the BLM, and the public access to the facilities and accept all liability for the use of such facilities.

The contractor shall provide all feed, water, labor, and equipment to care for captured horses at the holding facility. The contractor shall also provide transportation of captured excess animals from the temporary holding facility to the Distribution Centers, Ridgecrest Adoption Preparation Facility. The Forest Service will provide transportation of unclaimed and claimed branded animals to approved facility for release to the claimant or for handling under Nevada State estray laws. All work shall be accomplished in a safe and humane manner and be in accordance with the provisions of 36 CFR Part 2200 and 43 CFR Part 4700 and the following specification and provisions.

All labor, vehicles, helicopters, traps, troughs, feed, temporary holding facilities, and other supplies and equipment including but not limited to the aforementioned, shall be furnished by the contractor. The Forest Service and BLM shall provide contract supervision.

Stipulations and Specifications

A. Motorized Equipment

1. All motorized equipment employed in the transportation of captured animals shall be in compliance with appropriate State and Federal laws and regulations applicable to the humane transportation of animals.

2. Vehicles shall be in good repair, of adequate rate capacity, and operated so as to insure that captured animals are transported without undue risk or injury.

3. Only stocktrailers or single-deck trucks shall be allowed for transporting animals from traps to temporary holding facilities. Only Bobtail trucks, stocktrailers, or single deck trucks shall be used to haul animals from temporary holding facilities to final destination. Sides or stockracks of transporting vehicles shall be a minimum height of 6 feet 6 inches form vehicle floor. Single deck trucks with trailers 40 feet or longer shall have two partition gates to separate animals. Trailers less than 40 feet shall have at least one partition gate to separate animals. Each partition shall be a minimum of 6 feet high and shall have a minimum 5 foot wide swinging gate. The use of double deck trailers is unacceptable and will not be allowed.

4. All vehicles used to transport animals to final destination shall be equipped with at least one door at the rear end of the vehicle which is capable of sliding either horizontally or vertically.

5. Floors of vehicles and the loading chute shall be covered and maintained with a non-skid surface such as sand, mineral soil, or wood shavings to prevent the animals from slipping. This will be confirmed by the COR/PI prior to loading (every load).

6. Animals to be loaded and transported in any vehicle shall be as directed by the COR and may include limitation on numbers according to age, size, sex, temperament, and animal condition. A minimum of 1.4 linear foot per adult animal and .75 linear foot per foal shall be allowed per standard 8 foot wide stocktrailer/truck.

   The Forest Service and BLM employee supervising the loading of the wild horses to be transported from the trap to the temporary holding corral will require separation of small foals and/or weak animals from the rest should he/she feel that they may be injured during transport. He/She will consider the distance and condition of the road and animals in making this determination. Animals shipped from the temporary holding corral to the BLM facility will normally be separated by studs, mares and foals (including yearlings). However, if the numbers of these classed of animals are too few in one compartment and too many in another, animals may be shifted between

compartments to properly distribute the animals in the trailer. This may include placing a younger, lighter stud with mares or a weak mare with the foals. Further separation may be required should the condition of the animals warrant.

The Forest Service and BLM employees supervising the loading will exercise his/her authority to off-load animals should he/she feel there are too many animals on the trailer/truck.

7. The COR shall consider the condition of the animals, weather conditions, type of vehicles, distance to be transported, or other factors when planning for the movement of captured animals. The COR shall provide for any brand and/or inspection services required for the captured animals.

It is currently planned to ship all excess horses to the Ridgecrest Adoption Preparation facility. Communication lines have been established with the facility's personnel involved in off-loading the animals, to receive feedback on the condition of shipped animals. Should problems arise, shipping methods and/or separation of the animals will be changed in an attempt to alleviate the problems.

8. If the COR determines that dust conditions are such that the animals could be endangered during transportation, the contractor will be instructed to adjust speed. The maximum distance over which the animals may have to be transported on dirt roads is approximately 25 miles per load.

Periodic checks by Forest Service employees will be made as the horses are transported along dirt roads. If speed restrictions are placed in effect, then Forest Service employees will, at times, follow and/or time trips to ensure compliance.

B. Trapping and Care

1. All capture attempts shall be accomplished by the utilization of a helicopter. A minimum of one saddle horse shall be immediately available at the trap site to accomplish roping if necessary. Roping shall be done as determined by the COR. Under no circumstances shall animals be tied down for more than one hour.

Roping will be allowed to capture an orphaned foal or a suspect wet mare. However, since all wild horses have to be removed from the area outside of the T/HMA, roping will be allowed if certain individuals continue to elude helicopter herding operation.

2. The helicopter shall be used in such a manner that bands or herds will remain together. Foals shall not be left behind.

3. The rate of movement and distance the animals travel shall not exceed limitations set by the COR who will consider terrain, physical barriers, weather, condition of the animals, and other factors.

Forest Service and BLM will not allow horses to be herded more than 10 miles and not faster than 20 miles per hour. The COR may decrease the rate of travel or distance moved should the route to the trap site pose a danger or cause avoidable stress (steep and/or rocky). Animal condition will also be considered in making distance and speed restrictions.

Temperature limitations are 10 degrees F as a minimum and 95 degrees F as a maximum. Special attention will be given to avoiding physical hazards such as fences.

4. All trap locations and holding facilities must be approved by the COR prior to construction. The contractor may also be required to change or move trap locations as determined by the COR. All traps and holding facilities not located on National Forest System Lands or Public Lands must have prior written approval of the landowner.

   If tentative trap sites are not located near enough to the concentrations of animals, then the trap site will not be approved. The COR will move the general location of the trap closer to the animals. Trap sites will not be approved where barbed wire fences are used as wings, wing extensions, or to turn animals during herding toward the trap.

5. All traps, wings, and holding facilities shall be constructed, maintained, and operated to handle the animals in a safe and humane manner and be in accordance with the following:

   a. Traps and holding facilities shall be constructed of portable panels, the top of which shall not be less than 72 inched high, the bottom rail of which shall not be more than 12 inched from ground level. All traps and holding facilities shall be oval or round in design.

   b. All loading chute sides shall be fully covered with plywood or like material. The loading chute shall also be a minimum of 72 inched high.

   c. All runways shall be a minimum of 20 feet long and a minimum of 72 inched high and shall be covered with plywood or like material a minimum from the one foot to five foot level above ground.

   d. Wings shall not be constructed out of barbed wire or other material injurious to animals and must be approved by the COR.

   e. All crowding pens including gates leading to the runways shall be cover with a material that prevents the animals from seeing out (plywood, burlap, etc...) and shall be covered a minimum from the one foot to five feet level above ground. Eight linear feet of this material shall be capable of being removed or let down to provide a viewing window.

f. All pens and runways used for the movement and handling of animals shall be connected with hinged, self-locking gates.

6. No fence modification will be made without authorization from the COR. The contractor shall be responsible for restoration of any fence modification which he has made.

If the route the contractor wishes to herd animals passes through a fence, the contractor will be required to roll up the fencing material and pull up the posts to provide at least one-eighth mile of gap. The standing fence on each side of the gap will be well flagged for a distance of 300 yards from the gap on each side.

7. When dust conditions occur within or adjacent to the trap or holding facility the contractor shall be required to wet down the ground with water.

8. Alternate pens, within the holding facility shall be furnished by the contractor to separate mares with small foals, sick and injured animals, and estray animals from the other horses. Animals shall be sorted as to age, number, size, temperament, sex, and condition when in the holding facility so as to minimize, to the extent possible, injury due to fighting and trampling.

As a minimum, studs will be separated from the mares and foals when the animals are held overnight.

9. Animals shall be transported to final destination from the temporary holding facilities within 24 hours after capture unless prior approval is granted by the COR for unusual circumstances. Animals shall not be held in traps and/or temporary holding facilities on days when there is not work being conducted except as specified by the COR. The contractor shall schedule shipments of animals to arrive at the final destination between 6:00 am and 4:00 pm. Every effort will be made to ensure that the time horses are standing on the trucks prior to off-loading is minimized.

No shipment shall be scheduled to arrive at the final destination on Sunday.

10. The contractor shall provide animals held in the traps and/or holding facilities with a continuous supply of fresh clean water at a minimum of 10 gallons per animal per day. Animals held for 10 hours or more in the traps or holding facilities shall be provided good quality grass hay at the rate of not less than two pounds of hay per 100 pounds of estimated body weight per day.

11. It is the responsibility of the contractor to provide security to prevent loss, injury, or death of captured animals until delivery to final destination or until released back to the range.

12. The contractor shall restrain sick or injured animals if treatment by the Government is necessary. The COR will determine if injured animals must be destroyed and provide for the destruction of such

animals. The contractor may be required to dispose of the carcasses as directed by the COR.

C. Helicopter, Pilot, and Communications

1. The contractor must operate in compliance with Federal Aviation Regulations, part 91. Pilots provided by the contractor shall comply with the contractor's Federal Aviation Certificates, applicable regulations of the State of Nevada, and shall follow what are recognized as safe flying practices.

2. When refueling, the helicopter shall remain a distance of at least 1,000 feet or more from animals, vehicles (other than the fueling truck), and personnel not involved in refueling.

3. The COR shall have the means to communicate with the contractor's pilot and be able to direct the use of the gather helicopter at all times. If communications cannot be established, the Government will take steps as necessary to protect the welfare of the animals. The frequency(s) used for this contract will be assigned by the COR when the government furnished "slip-in" VHF/FM portable radio is used.

   The transmit frequency is 169.875, the receive frequeny is 169.875.

4. The contractor shall obtain the necessary FCC licenses for the radio system.

5. The proper operation, service, and maintenance of all contractor furnished helicopters is the responsibility of the contractor. The Forest Service and the BLM reserve the right to remove from service pilots and helicopters which, in the opinion of the contracting officer or COR, violate contract rules, are unsafe, or otherwise unsatisfactory. In this event, the contractor will be notified in writing to furnish replacement pilots or helicopters within 48 hours of notification. All such replacements must be approved in advance of operation by the contracting officer or his/her representative.

D. Contractor-Furnished Property

1. All hay, water, vehicles, saddle horses, helicopters, and other equipment shall be provided by the contractor. Other equipment includes but is not limited to, a minimum of 1,500 linear feet of 72 inch high (minimum height) panels for traps and holding facilities. Separate water troughs shall be provided at each pen where animals are being held.

2. The contractor shall furnish an avionics system that will allow communications between the contractor's helicopter and his fuel truck.

3. The contractor shall provide a programmable VHF/FM radio transceiver in the contractor's helicopter to accommodate the COR/PI in monitoring the gather operation.