

9/28/01



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

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**In Reply Refer To:**

NV-010-4710.4  
NV-040-4710.4

SEP 28 2001

Dear Reader:


This letter is to inform you that the Ely and Elko Field Offices are planning to conduct a wild horse gather during November and December of 2001. The area to be gathered consists of the Antelope, Antelope Valley, Goshute, Spruce-Pequop and Goshute Herd Management Areas (HMAs). The area is currently being managed as a complex (or single herd) due to the exchange of animals between the the HMAs. The area is known as the Antelope Complex. A preliminary Environmental Analysis (Ely EA #NV-040-01-077 and Elko EA #BLM/EK/PL2001/044) and capture plan have been completed at this time.

Currently we are proposing to capture approximately 2,500 wild horses and remove approximately 1,748 wild horses from the Antelope Complex. We are proposing to remove 399 wild horses from the Antelope HMA, 550 wild horses from the Antelope Valley HMA, 381 wild horses from the Spruce-Pequop HMA and 418 wild horses from the Goshute HMA.

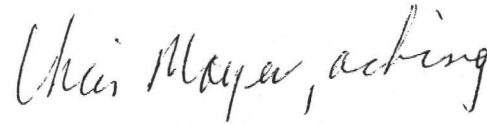
Enclosed is the Antelope Complex Capture Plan and Environmental Assessment. We would like to give the interested public a chance to review these documents, however we anticipate the completion of this process by November 1, 2001. If you have additional information that may assist us, please submit it no later than October 22, 2001. Written comments should be sent to Clint Oke, Assistant Field Manager, Renewable Resources, Elko Field Office, Bureau of Land Management, 3900 E. Idaho Street, Elko, NV 89801 or James Perkins, Assistant Field Manger, Renewable Resources, Ely Field Office, HC33 Box 33500, Ely, NV 89301-9408.

If you have any questions, please contact Kathy McKinstry, Natural Resource Specialist, Elko Field Office at (775) 753-0290 or Jared Bybee, Wild Horse and Burro Specialist, Ely Field Office at (775) 289-1889.

Sincerely,

  
for

Helen Hankins  
Field Manager  
Elko Field Office



Gene Kolkman  
Field Manager  
Ely Field Office

1 Enclosure

1. Antelope Complex Preliminary Environmental Analysis and Capture Plan.

cc:

American Mustang and Burro Association  
American Horse Protection Association  
American Bashkir Curly Register  
Andrea Lococo, Fund for Animals  
Animal Protection Institute of America  
Barbara Flores, Colorado Wild Horse and Burro Coalition  
Betty Kelly, Wild Horse Spirit  
Bertrand Paris & Sons, Livestock Permittee  
Board of County Commissioners, Elko County, Nevada  
Carol Sherman, Livestock Permittee  
Catherine Barcomb, Commission for the Preservation of Wild Horses  
Charles M. Young, Livestock Permittee  
Christine Stones, Chair, Te-Moak Tribe of Western Shoshone  
Craig C. Downer  
Curt Baughman, Nevada Division of Wildlife  
David Pete, Chair, Goshute Tribal Council  
DBA Need More Sheep, Co., Livestock Permittee  
Diane Nelson, Wild Horse Sanctuary  
Donald A. Molde, M.D.  
Earl Bingham Family LTD Partnership, Livestock Permittee



**U.S. DEPARTMENT OF THE INTERIOR**

**BUREAU OF LAND MANAGEMENT**

**ELY AND ELKO FIELD OFFICES**

**ANTELOPE COMPLEX**

**WILD HORSE REMOVAL PLAN AND ENVIRONMENTAL ASSESSMENT**

**BLM/EK/PL2001/044**

**NV/040/01/077**

**SEPTEMBER 2001**

## **Background Information**

With passage of the Wild Free Roaming Horse and Burro Act of 1971 (Public Law 92-195), Congress found that: "...wild free roaming horses and burros are living symbols of the historic and pioneer spirit of the West...." In addition, the Secretary was ordered to "...manage wild free-roaming horses and burros in a manner that is designed to achieve and maintain a thriving natural ecological balance on the public lands..." From the passage of the Act, through the present day, the Bureau of Land Management (BLM) Ely and Elko Field Offices have endeavored to meet the requirements of the Act. The procedures and policies implemented to accomplish this mandate have been constantly evolving over the years.

Throughout this period, BLM experience has grown, and knowledge of the effects of current and past management on wild horses and burros has increased. For example, wild horses have been shown to be capable of 18 to 25% increases in numbers annually. This can result in a doubling of the wild horse population about every 3 years. At the same time, nationwide awareness and attention have grown. As these factors have come together, the emphasis of the wild horse program has shifted.

Program goals have expanded beyond simply establishing a "thriving natural ecological balance" (by setting and achieving appropriate management level (AML)) for individual herds, to achieving and maintaining viable, vigorous, and stable populations.

This document has been prepared to assess the environmental impacts of adjusting the numbers of wild horses within the Antelope Herd Management Area (HMA) within the Ely Field Office management area and the Antelope Valley, Spruce-Pequop and Goshute HMAs within the Elko Field Office management area (refer to Map 1). Past capture, census, and distribution data collected indicate considerable movement among the horses of these HMA's. During the pilot fertility control study in 1992-93, 132 horses from the Antelope and Antelope Valley HMAs were freezemarked on their left hip for future study purposes. Many horses that were captured and marked in the Antelope HMA have been caught during subsequent gathers in the Antelope Valley HMA. The same is true for horses caught and marked in the Spruce-Pequop and Goshute HMAs. They have been seen during census flights throughout the complex. For this document the four HMA's will be referred to as the Antelope Complex.

AMLs for these HMAs have been previously established through the Land Use Plan Amendment process or the Allotment Evaluation /Multiple Use Decision process based on monitoring data and following a thorough public review. Documents containing this information are available for public review at the Ely and Elko Field Offices.

### **Need for the Proposal**

The Ely and Elko Field Offices propose to implement a program of integrated wild horse management in the Antelope, Antelope Valley, Spruce-Pequop and Goshute HMAs. The emphasis of this integrated management program will be to achieve and maintain wild horse AMLs through the removal of horses in excess of AML, collect information on herd characteristics, determine herd health, maintain sustainable rangelands, maintain a healthy and viable wild horse population and make progress towards achieving Northeastern Great Basin Resource Advisory Council standards for Wild Horse and Burro Management. All activities will be conducted according to a specified set of standardized operating procedures (SOPs, Appendix I).

### **Relationship to Planning**

The proposed action is in conformance with The Schell Management Framework Plan (MFP), approved in 1983. The proposed action is consistent with the White Pine County Policy Plan for Public Lands as adopted by the Board of County Commissioners of White Pine County, May 1, 1985 and amended June 12, 1985. This plan stated in part "...wild horse herds should be managed at reasonable levels to be determined with public involvement and managed with the consideration of the needs of other wildlife species and livestock..." The proposed action is also consistent with the "White Pine County Elk Management Plan" dated March 1999. The proposed action is consistent with the Antelope and Antelope Valley Herd Management Area Plans, dated September and October 1992.

The proposed action is also in conformance with the Wells Resource Management Plan (RMP) Wild Horse Amendment and Environmental Assessment, dated August 4, 1993. The proposed action is consistent with the Strategic Plan for Management of Wild Horses and Burros on Public Lands, dated June 1992 and is consistent with federal, state, and local laws, regulations, and plans to the maximum extent possible.

AMLs will be or were established through allotment evaluations and final multiple use decisions (FMUDs) for the allotments within the HMAs. These allotments are: Cherry Creek (FMUD) Becky Springs (FMUD expected 11/01), Chin Creek (FMUD), Deep Creek (PMUD, FMUD expected 10/01), Tippett (FMUD), Tippett Pass (FMUD expected 11/01), Schellbourne (FMUD), Lovell Peak (FMUD), North Steptoe (FMUD), Becky Creek (FMUD), Sampson Creek (FMUD), Goshute Mountain (FMUD), within the Ely Field Office management area and the Spruce (FMUD), Leppy Hills (FMUD), Ut/NV #1 (North and South pastures) (FMUD), Lead Hills (FMUD), White Horse (FMUD), West White Horse (FMUD), Sugarloaf (FMUD), Ferber Flat (FMUD), Boone Springs (FMUD), Antelope Valley (FMUD), Currie (FMUD), Badlands (FMUD), Big Springs (FMUD expect 10/01, for the portion of the allotment within the HMA. No multiple use decision is necessary to remove horses from the west portion of

the allotment that is outside the HMA), and Woods Hills (n/a, outside HMA) allotments within the Elko Field Office management area.

Environmental analyses have been conducted in past years. These analyses have covered the impacts of various removal methods on wild horses in order to achieve AML, and other critical elements of the human environment. These documents include:

- 1) Wells Resource Management Plan Wild Horse Amendment and Environmental Assessment (August 2, 1993)
- 2) Spruce-Pequop Capture Plan and Environmental Assessment (BLM/EK/PL/-037)
- 3) Goshute Capture Plan and Environmental Assessment (BLM/EK/PL-93-054)
- 4) Antelope Valley Capture Plan and Environmental Assessment (BLM/EK/PL-94/022)
- 5) Antelope Capture Plan and Environmental Assessment (NV-040-2-19)

These allotment evaluations, FMUD's, HMAPs and EA's are available in the Ely and Elko Field Offices for public review.

### **Major Issues**

Currently there are no major issues identified for this action, however, through public scoping new issues may be identified and will be addressed during this EA process.

### **Proposed Action and Alternatives**

The proposed action and alternatives represent a reasonable range of alternatives based on the issues and goals identified through public scoping efforts.

#### **Proposed Action**

The proposed action is to remove all animals in excess of 40% below the established AML from the Antelope Complex utilizing the current selective removal strategy as developed by the National Wild Horse and Burro Program Office. The Selective Removal Strategy was developed for the 2001 fiscal year. This strategy will allow the removal of all age classes in the following priority order:

1. Age class 5 years old and under
2. Age class 10 years old and over
3. Age classes 6 through 9 years old

The first animals to be removed would be five years and younger, the second class of animals to be removed would be 10 years and older. Animals aged six to nine would be left in the field

unless they need to be removed to achieve AML for that herd management area. Selective removal objectives target removal efforts for excess animals, based on specific segments of a given wild horse population and availability of space in Bureau processing and long term holding facilities.

The removal of excess wild horses to achieve and maintain AML is tentatively scheduled to commence on November 20, 2001 and last approximately 45 days. It is anticipated that the entire population will need to be captured and 2,067 horses will be removed (see Table II).

Past selective removals have been age based. Selective removal under this alternative however, would not only be age based, but could also be based on other critical population variables as well (sex ratios, historic characteristics, genetic viability, etc.). Selective removal under this alternative would be structured to reduce effects of specific population issues. Issues which may be addressed with selective removal strategies include: correction of unusual population variables, maintenance of herd structure and composition, and maintenance of long term herd viability.

Table I shows an example of the selective removal criteria using June 2001 census data to determine current population levels and estimated removal and release numbers for 0-5 and the 10 and older age classes:

**Table I**

HMA	Estimated 2001 population (census 6/01)	AML <sup>1</sup>	Estimated #'s 0-5 to remove	Estimated #'s 0-5 to release	Estimated #'s 10 and over to remove	Estimated #'s 10 and over to release	Estimated #'s 6-9 to release
Goshute	541	123 <sup>2</sup>	1,355	0	664	0	465 <sup>4</sup>
Spruce-Pequop	463 <sup>3</sup>	82					
Antelope Valley	809	259					
Antelope	710 <sup>5</sup>	311					
Total	2,523	775		0		0	

1. AML is expressed as a single number, however, as per Bureau guidance, the population may be lowered to 40% below AML (465) and allowed to increase over the next four years. This would implement a four year gather cycle.
2. If the FMUD for the Big Springs Allotment is not issued prior to the gather, the AML will fall back to what was determined in the Wells RMP Wild Horse Amendment. AML for the Goshute HMA was 160 as per that document. It was determined that 45% of the horses from the Goshute HMA utilize the Big Springs Allotment, therefore, AML would be 72 head within the allotment, giving an overall AML of 139.
3. This includes horses outside the HMA.
4. According to the population model, there will be 503 horses aged 6-9, thus some horses in this age group will have to be removed to achieve the objective of gathering to 40% below AML.
5. Number is an estimate based on census in June of 2000.

The proposed action for the Antelope Complex would be to capture approximately 100% of the estimated 2001 population or 2,523 wild horses and remove 2,067. Other data would also be collected such as animal sex, age, and color, acquire blood samples, assess herd health (pregnancy, parasite loading, physical condition, etc.), sort individuals as to age, sex, temperament and/or physical condition, and to return selected animals to the range. Horses determined to be in excess of AML would be transported to BLM holding facilities.

The following table shows the August 2000 and June 2001 wild horse census data which was used to determine current wild horse population levels and estimated removal and release numbers:



**Table II**

HMA	Census August 2000	Census June 2001	Estimated #'s to remove <sup>1</sup>	AML	Estimated #'s to release <sup>1</sup>
Antelope	592	719 (no census in 2001)	532	311	187
Antelope Valley	745	809	654	259	155
Goshute	370	541	467	123	74
Spruce-Pequop	217	463	414	82	49
Total	1,924	2,532	2,067	775	465

<sup>1</sup> Current policy is to gather to 40% below AML to institute a 4 year gather cycle, however gather numbers will depend on holding facility space.

Multiple capture sites (traps) could be used to capture wild horses from the HMA's. Whenever possible, capture sites would be located in previously disturbed areas. All capture and handling activities (including capture site selections) would be conducted in accordance with Standard Operating Procedures (SOPs) described in Appendix I. Selection of capture techniques would be based on several factors such as herd health, season of the year and environmental considerations.

Determination of which horses would be returned to the range would be based on a analysis of existing and past population characteristics and post-gather data for age, sex ratio, and colors.

In an attempt to predict population dynamics, a computer simulation was run using the wild horse population model developed by Dr. Stephen Jenkins of the University of Nevada, Reno (Jenkins 1996) The model ran simulations to determine future population growth, future age distribution and future population size(Appendix II).

**Alternative 1 - Remove Horses to AML**

Due to the unpredictability of the adoption demand, the amount of holding space in BLM facilities and the fiscal year 2002 budget, the Elko and Ely Field Offices may be instructed by the Nevada State Office to remove only those horses that would take the complex to AML as opposed to 40% below AML. This alternative would have the same impacts to all resources except wild horses.

### **Alternatives Considered But Eliminated From Detailed Analysis**

1. Removal of the first 2,067 horses captured or a straight "gate cut" regardless of age class or sex ratio.
2. Removal of only adoptable horses ages 0-9 years old. All horses age 10 and above returned to the range regardless of age class, sex or herd structure.

These alternatives were not considered for detailed analysis since they are in violation of the current BLM removal policy, which was outlined on page 4 of this document.

### **No Action Alternative**

This alternative consists of no direct management of wild horse or burro numbers. Wild horses would be allowed to regulate their numbers naturally through predation, disease, and forage, water and space availability. Gather operations would not be conducted.

### **Description of The Affected Environment**

#### **Antelope, Antelope Valley, Goshute and Spruce-Pequop Herd Management Areas**

The Antelope, Antelope Valley, Goshute and Spruce-Pequop HMAs encompasses approximately 1.2 million acres. Elevations range from 6,000 feet at the valley floors to nearly 10,000 feet in the Cherry Creek and Schell Creek Range Mountain Ranges. Vegetative types found within the Antelope Complex vary from salt desert shrub, black sage/grass, Wyoming big sage/grass, Pinyon/Juniper woodland, mountain brush, mountain mahogany, aspen, white fir and mixed conifer. There are three wilderness study areas (WSAs) within the Antelope Complex. These include the Bluebell, Goshute Peak and South Pequop WSAs. The project area lies within deer and antelope year long habitat. Several sage grouse leks are located within the project area. Brood rearing habitat and wintering grounds are interspersed throughout the project area as well. A major raptor flyway exists in the Goshute mountains. Buteos, accipters and falcons are counted, trapped and banded by Hawkwatch International annually. For a complete description of the affected environments, refer to the Schell MFP and Wells RMP. Refer to Appendix III for a complete list of migratory birds and special status species (federally listed, proposed, candidate species and state sensitive species).

#### **Migratory Birds**

On January 11, 2001 President Clinton signed the Migratory Bird Executive Order . This executive order outlines the responsibilities of Federal agencies to protect

migratory birds. The United States has recognized their ecological and economic value to this country and other countries by ratifying international, bilateral conventions for the conservation of migratory birds. These migratory bird conventions impose substantive obligations on the United States for conservation of migratory birds and their habitats. The United States has implemented these migratory bird conventions through the Migratory Bird Treaty Act. President Clinton's Migratory Bird Executive Order directs executive departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act. As defined in the executive order, "action" means a program, activity, project, official policy (such as a rule or regulation), or formal plan directly carried out by a Federal agency. The executive order further states that each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations is directed to develop and implement, within 2 years, a Memorandum of Understanding (MOU) with the Fish and Wildlife Service that shall promote conservation of migratory bird populations. The term "action" will be further defined in this MOU as it pertains to each Federal agency's own authorities and programs.

A list of the migratory birds affected by the President's executive order is contained in 43 CFR 10.13. References to "species of concern" pertain to those species listed in the periodic report "Migratory Nongame Birds of Management Concern in the United States", priority migratory bird species as documented by established plans (such as Bird Conservation Regions in the North American Bird Conservation Initiative or Partners in Flight physiographic areas), and those species listed in 50 CFR 17.11.

The proposed action is to gather wild horses. It has been determined that an overpopulation of wild horses exists in the Antelope Complex and certain standards and guidelines for rangeland health approved for the Northeastern Nevada Resource Advisory Council Area of Nevada are not being attained. A reduction in wild horse numbers will help towards the attainment of those standards. Therefore, the proposed action to gather wild horses is consistent with the conservation measures listed in Section 3 (e) of the President's Migratory Bird Executive Order, specifically:

- (1) support the conservation intent of the migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- (2) restore and enhance the habitat of migratory birds, as practicable;
- (5) within established authorities and in conjunction with the adoption, amendment, or revision of agency management plans and guidance, ensure that agency plans and

actions promote programs and recommendations of comprehensive migratory bird planning efforts such as Partners-in-Flight....

(6) ensure that environmental analyses of Federal actions required by the NEPA or other established environmental review processes evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern.

### **Wild Horses**

Wild horses are introduced species within North America and have few natural predators. Few natural controls act upon wild horse herds making them very competitive with native wildlife and other living resources managed by the Bureau. Wild horses have been shown to be capable of 18 to 25% increases in numbers annually. This can result in a doubling of the population about every 3 years. In the Antelope Complex, wild horse population growth rates (percentage of foals <1 year) have been verified as high as 21%.

The Antelope Complex has undergone several removals since passage of the Act. These removals have incorporated all of the removal strategies identified in the proposed action and alternatives.

Sex ratios for wild horses within the Antelope Complex are representative of other HMA's in the Ely and Elko Districts and the West at large. At birth, sex ratios are roughly equal. This balance shifts to favor mares throughout the younger age classes. This pattern shifts again at around 15 years of age favoring studs.

Past capture data was used to determine animal colors and approximate percentage of frequency within the herd. The majority of horses exhibit sorrel (40%), bay (29%), black (7%), buckskin (6%), dun (6%), brown (4%), chestnut (2%), red roan (2%), grulla (2%), palomino (1%), and gray (1%).

### **Environmental Consequences (Proposed Action & Alternatives)**

The following critical elements of the human environment are not present and/or not affected by the proposed action: air quality, areas of critical environmental concern, environmental justice, prime or unique farmland, floodplains, Native American religious concerns, special status species, water quality, wastes, hazardous/solid, or wild and scenic rivers. The following resources are present and have been brought forward for analysis:

## Vegetation, Soil, and Water

**Proposed Action** - Implementation of the proposed action would reduce the wild horse population 40% below AML in the Antelope Complex which would help to promote and maintain a thriving natural ecological balance for a period of approximately four years. This would result in an increase in forage availability, vegetation density, vigor, reproduction, and productivity.

The proposed action would lessen the impact of hoof action on the soil around unimproved springs and stream bank riparian areas which should lead to an improvement in stream bank stability and improved riparian habitat conditions. There would also be a reduction in hoof action on upland habitat area and reduced competition for available water sources.

Impacts to vegetation with implementation of the proposed action could include disturbance of native vegetation immediately in and around temporary trap sites, and holding and processing facilities. Impacts could be by vehicle traffic, and hoof action of penned horses, and could be locally severe in the immediate vicinity of the corrals or holding facilities. Generally, these activity sites would be small (less than one half acre) in size. Since most trap sites and holding facilities are would be re-used during recurring wild horse gather operations, any impacts would remain site specific and isolated in nature. In addition, most trap sites or holding facilities are selected to enable easy access by transportation vehicles and logistical support equipment and would therefore generally be adjacent to or on roads, pullouts, water haul sites, or other flat spots which were previously disturbed. By adhering to the SOPs, adverse impacts to soils would be minimized.

**Alternative 1** - The impacts would generally be the same as described in the Proposed Action. However, if horses are not reduced to 40% below AML, numbers would again exceed AML by the first foaling season, which would be in the Spring of 2002 rather than allowing a four year period for horse numbers to rise to AML. Any recovery of vegetative resources, including riparian areas would be lessened under this alternative.

**No Action Alternative** - The severe localized trampling associated with trap sites would not occur, however, as wild horse populations continue to grow, soil erosion would increase. Increased use throughout the complex would adversely impact soils and vegetation health, especially around the water locations. As native plant health deteriorates and plants are lost, soil erosion would increase. The shallow topsoils typical of this region can not tolerate much loss without losing productivity and thus the ability to be revegetated with native plants. Invasive non native plant species would

increase and invade new areas following increased soil disturbance and reduced native plant vigor and abundance. This would lead to both a shift in plant composition towards weedy species and an irreplaceable topsoil and productivity loss from erosion.

## **Wildlife**

**Proposed Action** - The proposed action would result in reduced competition with wildlife which would increase the quantity and quality of available forage. There would be less disturbance associated with wild horses along streambank riparian habitat and adjacent upland habitat. Temporary impacts during the gather to wildlife could be displacement of big game and non-game mammals and reptiles, but they would return eventually. This displacement would be due to the noise of the helicopter and increased traffic. A possibility exists that non-mobile or species with low vagility could be injured and killed by trampling. These disturbances could occur during the capture period.

**Alternative 1** - Wild horses would exceed the established AML within six months of the completion of the gather. AML has been established based on the carrying capacity of the range to sustain grazing by multiple species of animals. If AML is exceeded, the range would be overstocked.

**No Action Alternative** - Wildlife would not be displaced or disturbed under the no action alternative, however, there would be continued competition with wild horses for water and forage resources and because wild horses are very aggressive around water sources, some wildlife species may not be able to compete. The continued competition for resources may lead to increased stress and possible dislocation or death of native wildlife species.

## **Livestock**

**Proposed Action** - A reduction in wild horses would lead to less competition between cattle and wild horses for water and forage resources. During the proposed gather, livestock may be displaced or disrupted from their normal distribution pattern. Gates may be opened and fences may be cut to facilitate the gathering of wild horses. Every attempt would be made to keep cattle from mixing or entering an allotment where they don't belong. Gates would be closed and fences would be repaired as soon as practical.

**Alternative 1** - Alternative 1 would have the same impacts to livestock operations as the proposed action, however, wild horses would exceed the established AML within six months of the completion of the gather. AML has been established based on the carrying capacity of the range to sustain grazing by multiple species of animals. If AML

is exceeded, the range would be overstocked.

**No Action Alternative** - Cattle would not be displaced or disturbed under the no action alternative, however, there would be continued competition with wild horses for water and forage resources. Livestock operations may be impacted as wild horse numbers continue to climb and the range becomes unable to support both wild horses and cattle.

## **Wilderness**

**Proposed Action** - No impacts to wilderness values are anticipated to occur since every attempt would be made to place all trap sites and holding facilities outside wilderness study areas. There is one location within the Bluebell WSA where a trap could be placed. This location involves a gravel pit, a well and a road into both facilities. The gravel pit would lend itself very well to a temporary trap as there is no vegetation to be trampled or scenic values to impair. The contracting officer's representative (COR) would work closely with the Elko Field Office Wilderness Specialist to ensure non-impairment of wilderness values.

The one trap site proposed at the Shafter Well and gravel pit is necessary because as wild horses are continually captured and subsequently released, they become extremely "educated". The wild horses in the Goshute Herd Management Area are reluctant to leave the mountains and the heavy tree cover (and hence, the Bluebell WSA) as they know they are vulnerable. The most efficient and humane way to catch wild horses in the Goshute HMA is to push them off the mountain into the valley, then allow them to think they are escaping back into the mountains. A trap oriented to gather the horses as they return to the mountain must be constructed somewhere along the west bench of the Goshute HMA. Because the Bluebell WSA boundary follows the road along the western bench of the Goshutes, it is extremely difficult to find a trap location that doesn't affect the WSA. By utilizing the gravel pit at the Shafter Well, it would be possible to humanely catch wild horses and do the least amount of impairment to the Bluebell WSA. Ideally, several traps along the western bench of the Goshutes should be constructed. This would be the most humane scenario as the traps could be constructed near the concentrations of wild horses. However, because of the WSA, just one trap is proposed in the gravel pit. Please refer to Map 2 for a detailed location of the proposed Shafter Well trap.

Wilderness values would be positively affected by implementation of the proposed action as it would result in an improved ecological condition of the plant communities that are aesthetically more appealing to the public than the existing situation.

**Alternative 1** - Wilderness values would be positively affected by a reduction in wild horse numbers, again as a result of an improved ecological condition of the plant communities and other natural resources. However, under this alternative, the effects of the horse reduction would last a shorter period of time as the number of horses in the Goshute HMA increase over AML within 6 months.

The same trap site impacts as described in the proposed action would be expected to occur under Alternative 1.

**No Action Alternative** - No impacts due to trap construction would occur. Impacts to wilderness values would continue to occur in the form of continued degradation of vegetative and soil resources by high numbers of wild horses. To some, the sight of heavy horse trails, trampled vegetation and areas of high erosion, detract from the wilderness experience.

### **Noxious Weeds and Invasive Non-Native Species**

**Proposed Action** - The proposed gather may spread existing noxious weed species. This could occur if vehicles drive through infestations and spread seed into previously weed-free areas. The contractor together with the COR/PI would examine proposed trap sites and holding corrals prior to construction. If noxious weeds are found, the location of the facilities would be moved.

**Alternative 1** - Impacts would be the same as the proposed action.

**No Action Alternative** - Under this alternative, the wild horse gather would not take place. The chance that noxious weeds would be spread by the contractor, his personnel and equipment would not exist. However, overgrazing of the present plant communities could lead to an expansion of noxious weeds.

### **Cultural Resources**

**Proposed Action** - No impacts to cultural resources are anticipated to occur since all trap sites and holding facilities would be inventoried for cultural resources prior to construction. In the Ely Field Office, an archeologist would review all proposed and previously used trap sites and facility locations to determine if these sites have had a cultural resources inventory, and/or if a new inventory is required. In the Elko Field Office area of jurisdiction, a District Archeological Technician (DAT) would review all previously used trap sites and facility locations and would inventory all proposed trap sites and facility locations. If cultural resources are encountered at proposed trap site(s)



or holding facility location(s), those location(s) would not be utilized unless it could be modified to avoid impacts to cultural resources.

**Alternative 1** - The impacts would be the same as the Proposed Action

**No Action Alternative** - Under this alternative, the wild horse gather would not take place and therefore, no trap sites or holding facilities would be constructed. There would be no possibility that cultural resources would be damaged as a result of the horse gather, however, high numbers of wild horses can cause damage to cultural resources due to trampling, especially around water sources, where the occurrence of cultural resources is often high.

## **Wild Horses**

**Proposed Action** - Impacts to wild horses under the proposed action or alternative 1 may occur to either the individual animals or the population as a whole. These impacts include: handling stress associated with the gather, capture, processing, and transportation of animals. The intensity of these impacts vary by individual, and are indicated by behaviors ranging from nervous agitation to physical distress. Mortality of individuals from this impact is infrequent but does occur in one half to one percent of horses gathered in a given gather.

Impacts which can occur to horses after the initial stress event may include spontaneous abortions in mares, and increased social displacement and conflict in studs. These impacts are known to occur intermittently during wild horse gather operations. Traumatic injuries do not occur in most cases, however, they do occur. These injuries typically involve bite and/or kicking bruises which don't break the skin. The frequency of occurrence of these impacts among a population varies with the individual. Spontaneous abortion events among mares following capture is very rare.

Population-wide impacts can occur during or immediately following implementation of the proposed action. They include the displacement of bands during capture and the associated re-dispersal, modification of herd demographics (age and sex ratios), temporary separation of members of individual bands of horses, reestablishment of bands following releases, and the removal of animals from the population. With the exception of changes to herd demographics, direct population-wide impacts have proven, over the last 20 years, to be temporary in nature with most, if not all, impacts disappearing within hours to several days of release. No observable effects associated with these impacts would be expected within one month of release except a heightened shyness toward human contact.

Observations of animals following release have shown horses relocate themselves back to their home ranges within 12 to 24 hours of release and sometimes much faster.

The effect of removal of horses from the population would not be expected to have a significant impact on herd dynamics or population variables, as long as the selection criteria for the removal ensured a "typical" population structure was maintained. Obvious potential impacts on horse herds and populations from exercising poor selection criteria not based on herd dynamics includes modification of age or sex ratios to favor a particular class of animal.

The proposed action would mitigate the potential adverse impacts on wild horse populations by establishing a procedure for determining what selective removal criteria is warranted for the herd. This flexible procedure (Appendix I SOPs) would allow for correction of any existing discrepancies in herd demographics which could predispose a population to increased chances for catastrophic impacts. The proposed action would also establish a standard for selection which would minimize the possibility for developing negative age or sex-based selection effects to the population in the future.

**Alternative 1** - If the population in the Antelope Complex is removed just to AML at this time, the above impacts are likely to occur but to fewer animals. However, removing only enough horses to achieve the appropriate management level this year, would result in the complex being over AML within 6 months. Consequences of exceeding AML are exceeding the carrying capacity of the range and risking the health of the rangelands and the health of the horse herds. Horses would be at risk of death by starvation and lack of water. Fighting among stud horses would increase as they protect their position at scarce water sources and injuries and death to foals, as well as adults would increase. As populations increase beyond the capacity of the habitat, bands of horses may leave the boundaries of the HMAs seeking forage and water, which in turn may put them at risk in new and unfamiliar country.

**No Action Alternative** - Under this alternative, wild horses would not be removed from the Antelope Complex. The horses would not be subject to any individual direct or indirect impacts as described above as a result of a gather operation. However, allowing horse numbers to increase unchecked would have several negative consequences to the animals, including starvation, dehydration, and social stress.

### **Cumulative Impacts**

Cumulative impacts are impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can

result from individually minor but collectively significant actions taking place over a period of time.

Implementation of the proposed action would reduce the wild horse population to 40% below AML, and would be allowed to increase gradually over four years to AML in the Antelope Complex. This would help to promote a thriving natural ecological balance, which in turn would result in an increase in vegetation density, vigor, reproduction, productivity, and forage availability.

Adverse impacts to vegetation with implementation of the proposed action would include disturbance of native vegetation immediately in and around temporary trap sites, and holding and processing facilities. Impacts created by vehicle traffic, and hoof action of penned horses, can be locally severe in the immediate vicinity of the corrals or holding facilities. Generally, these activity sites would be small (less than one half acre) in size. Since most trap sites and holding facilities are re-used during recurring wild horse gather operations, any impacts would remain site specific and isolated in nature. In addition, most trap sites or holding facilities are selected to enable easy access by transportation vehicles and logistical support equipment and would therefore generally be adjacent to or on roads, pullouts, water haul sites, or other flat spots which were previously disturbed. These common practices would minimize the cumulative effects of these impacts.

Past, present, and reasonably foreseeable activities which would be expected to contribute to the cumulative impacts of implementing the proposed action include: past wild horse selective removal gathers which may have altered the age structure and composition sex ratios of the wild horse populations, continued livestock grazing in the allotments, and increasing recreational uses. These past, present, and reasonably foreseeable activities would be expected to generate cumulative impacts to the proposed action by influencing the habitat quality, abundance, and continuity for the Antelope Complex wild horses.

These impacts would be expected to be marked by changes occurring slowly over time. The Ely and Elko Field Offices would continue to identify these impacts as they occur, and mitigate them as needed on a project specific basis to maintain habitat and herd quality. At the same time, horse herds would be expected to continue to adapt to these small changes to availability and distribution of critical habitat components (food, water, shelter, space, etc.). The proposed action would contribute to the cumulative impacts of future actions by maintaining the herd at AML, and establishing a process whereby biological and/or genetic issues associated with herd or habitat fragmentation would become apparent sooner and mitigating measures implemented quicker.

## **Mitigation Measures**

The proposed action incorporates proven standard operating procedures which have been developed over time. These SOPs (Appendix I) represent the "best methods" for reducing impacts associated with gathering, handling, transporting and collecting herd data. Additional mitigation measures are not warranted.

## **Suggested Monitoring**

Weed detection would be incorporated into normal monitoring activities. Horses released back into the Antelope Complex after being captured will be monitored to ensure they return to normal patterns.

## **Consultation and Coordination**

### **Persons, Groups, and Agencies Consulted**

American Mustang and Burro Association  
American Horse Protection Association  
American Bashkir Curly Register  
Andrea Lococo, Fund for Animals  
Animal Protection Institute of America  
Barbara Flores, Colorado Wild Horse and Burro Coalition  
Betty Kelly, Wild Horse Spirit  
Bertrand Paris & Sons, Livestock Permittee  
Board of County Commissioners, Elko County, Nevada  
Carol Sherman, Livestock Permittee  
Catherine Barcomb, Commission for the Preservation of Wild Horses  
Charles M. Young, Livestock Permittee  
Christine Stones, Chair, Te-Moak Tribe of Western Shoshone  
Craig C. Downer  
Curt Baughman, Nevada Division of Wildlife  
David Pete, Chair, Goshute Tribal Council  
DBA Need More Sheep, Co., Livestock Permittee  
Diane Nelson, Wild Horse Sanctuary  
Donald A. Molde, M.D.  
Earl Bingham Family LTD Partnership, Livestock Permittee  
Egbert Livestock, LLC., Livestock Permittee  
Felix Ike, Chairman, Te-Moak Tribe of Western Shoshone  
Friends of Nevada Wilderness  
Fund for Animals  
Gail Parker, Livestock Permittee

George Irlbeck, Livestock Permittee  
Gordon Foppiano, Livestock Permittee  
H&R Livestock, Livestock Permittee  
Hawkwatch International, Inc.  
Herb Stathes, Schellbourne Ranch, Livestock Permittee  
Holtz, Inc., Livestock Permittee  
Intermountain Ranch, Livestock Permittee  
Jerry Millett, Tribal Chairman, Duckwater Tribal Council  
Joneille Anderson  
June Sewing, National Mustang Association  
Karen A. Sussman, International Society for the Protection of Mustangs and Burros  
Kathryn Cushman  
Kay Lear, Livestock Permittee  
Kenneth Jones, Livestock Permittee  
Kitt Lear, Livestock Permittee  
Mabel Bates Permit, c/o Kyle Bateman, Livestock Permittee  
L.W. Peterson, Inc., Livestock Permittee  
Larry Kibby, Consultant/Director, Western Shoshone Historic Preservation Society  
Metta Richins, Livestock Permittee  
Mike Podborny, Nevada Division of Wildlife  
Nan Sherwood  
National Audubon Society  
National Wild Horse Association  
Natural Resources Defense Council  
Nevada Outdoor Recreation Association  
Nevada Humane Society  
Nevada Farm Bureau Federation  
Nevada Cattlemen's Association  
Nevada Woolgrowers Association  
Nevada State Clearing House  
Nevada State Department of Agriculture  
Parasol Ranching, LLC., c/o Mr. Larry Schutte, Livestock Permittee  
Paul Bottari  
Paul C. Clifford Jr.  
Red Rock Audubon Society  
Resource Concepts Inc.  
Robert Smith  
Robert McGinty  
Robert and Jon Childs, Livestock Permittee  
Roger Scholl  
Rutgers School of Law-Newark, Animal Rights Law Center

Sam and Clelia Henriod, Livestock Permittee  
 Save The Mustangs  
 Sharon Crook  
 Sheri R. Goring, Livestock Permittee  
 Sierra Club - Toiyabe Chapter  
 Sierra Club, Ms. Rose Strickland  
 Sierra Club, Washington D.C.  
 Sterling Wines, Livestock Permittee  
 Steven and Vicki Nye, Livestock Permittee  
 Steve Foree, Nevada Division of Wildlife  
 Steven Fulstone  
 The Humane Society of the United States  
 The Wilderness Society  
 The Wilderness Society  
 Thousand Peaks Ranches, Inc., Livestock Permittee  
 Tina Nappe  
 U.S. Fish and Wildlife Service  
 Vidler Water Company, Livestock Permittee  
 Von L. and Marion Sorenson, Livestock Permittee  
 Webster Russel Peavey Testamentary Trust, Livestock Permittee  
 Western Watersheds Project  
 White Pine County Commissioners  
 White Pine Sportsmen  
 Wild Horse Organized Assistance  
 Wilderness Impact Research Foundation

**Internal District Review**

Ely Field Office

Jared Bybee	Wild Horse and Burro Specialist
Robert E. Brown	Wild Horse and Burro Specialist
Jake Rajala	Environmental Coordinator
Michael Perkins	Wildlife Biologist
Paul Podborny	Resource Team Lead/Wildlife Biologist/Riparian/T&E
Carolyn Sherve	Cultural Resources
Jack Tribble	Recreation/Wilderness
Gary Medlyn	Soil/Air/Water
Shane Deforest	Noxious Weeds
Chris Mayer	Team Lead Rangeland Management Specialist
John Longinetti	Rangeland Management Specialist
Ryan Pitts	Rangeland Management Specialist

Elko Field Office

Kathy McKinstry	Natural Resource Specialist, Wild Horses
Marlene Braun	Environmental Coordination
Bryan Hockett	Cultural Resources, Paleontology, Native American Religious Concerns
Suzanne Grayson	Wildlife Biologist
Bruce Thompson	Rangeland Management Specialist
Mark Coca	Noxious Weeds
Tamera Hawthorne	Wilderness Specialist

## APPENDIX I

### STANDARD OPERATING PROCEDURES

Gathers would be conducted by contractors or agency personnel. The same procedures for gathering and handling wild horses and burros apply whether a contractor or BLM personnel are used. The following stipulations and procedures will be followed to ensure the welfare, safety and humane treatment of the wild horses and burros (WH&B) in accordance with the provisions of 43 CFR 4700.

Gathers are normally conducted for one of the following reasons:

1. Regularly scheduled gathers to obtain or maintain the Appropriate Management Level (AML).
2. Drought conditions that could cause mortality to WH&B due to the absence of water or forage, and where continued grazing may result in a downward trend to the vegetative communities due to plant mortality and reduced vigor and productiveness.
3. Fires that remove forage to the extent that there is inadequate forage to sustain the population or to allow recovery of native vegetation.
4. Utilization levels that reach a point where a continued increase in utilization would cause a downward trend in the plant communities and impede meeting standards for rangeland health.
5. Monitoring indicates that WH&B use would begin to cause a downward trend in riparian function or not permit the recovery of riparian vegetation determined to be in undesirable condition.

#### A. **CAPTURE METHODS USED IN THE PERFORMANCE OF A GATHER-Contract Operations**

1. Helicopter - Drive Trapping

Capture attempts may be accomplished by utilizing a helicopter to drive animals into a temporary trap. If this method is selected the following applies:

- a. A minimum of two saddle-horses shall be immediately available at the trap site to accomplish roping if necessary. Roping shall be done as



determined by the BLM. Under no circumstances shall animals be tied down for more than one hour.

- b. The contractor shall assure that bands remain together, and that foals shall not be left behind.
- c. A domestic saddle horse(s) may be used as prada (or "Judas") horse to lead the wild horses into the trap site. Individual ground hazers may also be used to assist in the gather.

2. Helicopter - Roping

Capture attempts may be accomplished by utilizing a helicopter to drive animals to ropers. If this method is selected the following applies:

- a. Under not circumstances shall animals be tied down for more than one hour.
- b. The contractor shall assure that bands remain together, and that foals shall not be left behind..

**B. BLM Conducted Gather - Non-Contract Operations**

1. Gather operations will be conducted in conformance with the Wild Horse and Burro Aviation Management Handbook (March 2000).
2. Two-way radio communication between the helicopter and the ground crew will be maintained at all times during the operation

**C. Safety and Communications**

1. The Contractor shall have the means to communicate with the BLM and all contractor personnel engaged in the capture of wild horses and burros utilizing a VHF/FM Transceiver or VHF/FM portable Two-Way radio. If communications are ineffective the government will take steps necessary to protect the welfare of the animals.
  - a. The proper operation, service and maintenance of all contractor furnished property is the responsibility of the Contractor. The BLM reserves the right to remove from service any contractor personnel or contractor furnished

equipment which, in the opinion of the BLM violate contract rules, are unsafe or otherwise unsatisfactory. In this event, the Contractor will be notified in writing to furnish replacement personnel or equipment within 48 hours of notification. All such replacements must be approved in advance of operation by the BLM.

- b. The Contractor shall obtain the necessary FCC licenses for the radio system.
  - c. All accidents occurring during the performance of any delivery order shall be immediately reported to the BLM.
2. Should the helicopter be employed, the following will apply:
- a. 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 in which the gather is located.
  - b. Fueling operations shall not take place within 1,000 feet of the animals.
  - c. At time of delivery order completion, the contractor shall provide the BLM with a completed copy of the Service Contract Flight Hour Report.

#### **D. Trapping and Care**

1. The primary concern of the contractor is the safe and humane handling of all animals captured. All capture attempts shall incorporate the following:
  - a. All trap and holding facilities locations must be approved by the BLM prior to construction. The Contractor may also be required to change or move trap locations as determined by the BLM. All traps and holding facilities not located on public land must have prior written approval of the landowner.
  - b. A cultural resources investigation by an archaeologist or an archaeological technician would be conducted prior to trap or holding facility construction. If cultural values are found, an alternative site would be selected
  - c. Prior to facility (temporary traps and holding corrals) construction, the proposed locations would be examined for the presence of noxious weeds. If it is determined that noxious weeds are present, the contractor would be instructed to locate the facilities elsewhere. The contractor and his personnel would also be instructed to avoid camping in or driving through noxious weed

infestations.

2. The rate of movement and distance the animals travel shall not exceed limitations set by the BLM who will consider terrain, physical barriers, weather, condition of the animals and others factors.
3. 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 inches high for horses and 60 inches for burros, and the bottom rail of which shall not be more than 12 inches from ground level. All traps and holding facilities shall be oval or round in design.
  - b. All loading chute sides shall be a minimum of 6 feet high and shall be fully covered with plywood (without holes) or like material.
  - c. All runways shall be a minimum of 30 feet long and a minimum of 6 feet high for horses, and 5 feet high for burros, and shall be covered with plywood, burlap, plastic snow fence or like material a minimum of 1 foot to 5 feet above ground level for burros and 1 foot to 6 feet for horses. The location of the government furnished portable restraining chute to restrain, age, or provide additional care for animals shall be placed in the runway in a manner as instructed by or in concurrence with the BLM..
  - d. All crowding pens including the gates leading to the runways shall be covered with a material which prevents the animals from seeing out (plywood, burlap, etc.) and shall be covered a minimum of 1 foot to 5 feet above ground level for burros and 2 feet to 6 feet for horses. Eight linear feet of this material shall be capable of being removed or let down to provide a viewing window.
  - e. All pens and runways used for the movement and handling of animals shall be connected with hinged self-locking gates.
4. No fence modifications will be made without authorization from the COR/PI. The Contractor/BLM shall be responsible for restoration of any fence modification which he has made.
5. When dust conditions occur within or adjacent to the trap or holding facility, the Contractor/BLM shall be required to wet down the ground with water.

6. Alternate pens, within the holding facility shall be furnished by the Contractor to separate mares or jennies with small foals, sick and injured animals, and estrays from the other animals. 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. Under normal conditions, the government will require that animals be restrained for the purpose of determining an animal's age or other similar practices. In these instances, a portable restraining chute will be provided by the government. Alternate pens shall be furnished by the Contractor to hold animals if the specific gathering requires the animals be released back into the capture area(s). In areas requiring one or more satellite traps, and where a centralized holding facility is utilized, the Contractor may be required to provide additional holding pens to segregate animals transported from remote locations so they may be returned to their traditional ranges. Either segregation or temporary marking and later segregation will be at the discretion of the BLM.
7. The Contractor shall provide animals held in the traps and/or holding facilities with a continuous supply of fresh clean water at a minimum rate 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 hay at the rate of not less than two pounds of hay per 100 pounds of estimated body weight per day.
8. It is the responsibility of the Contractor/BLM to provide security to prevent loss, injury or death of captured animals until delivery to final destination.
9. The Contractor/BLM shall restrain sick or injured animals if treatment is necessary. A veterinarian may be called to make a diagnosis and final determination. Destruction shall be done by the most humane method available. Authority for humane destruction of wild horses (or burros) is provided by the Wild Free-Roaming Horse and Burro Act of 1971, Section 3(b)(2)(A), 43 CFR 4730.1, BLM Manual 4730 - Destruction of Wild Horses and Burros and Disposal of Remains, and is in accordance with BLM policy as expressed in Instructional Memorandum No. 98-141.

Any captured horses that are found to have the following conditions may be humanely destroyed:

- a. The animal shows a hopeless prognosis for life.
- b. Suffers from a chronic disease.
- c. Requires continuous care for acute pain and suffering.
- d. Not capable of maintaining a body score of one.
- e. The animal is a danger to itself or others.

10. Animals shall be transported to final destination from temporary holding facilities within 24 hours after capture unless prior approval is granted by the BLM for unusual circumstances. Animals to be released back into the HMA following gather operations may be held up to 21 days or as directed by the BLM. Animals shall not be held in traps and/or temporary holding facilities on days when there is no work being conducted except as specified by the BLM. The Contractor shall schedule shipments of animals to arrive at final destination between 7:00 a.m. and 4:00 p.m. No shipments shall be scheduled to arrive at final destination on Sunday and Federal holidays, unless prior approval has been obtained by the BLM. Animals shall not be allowed to remain standing on trucks while not in transport for a combined period of greater than three (3) hours. Animals that are to be released back into the capture area may need to be transported back to the original trap site. This determination will be at the discretion of the BLM.
11. The BLM will issue a Notice of Intent to Impound Unauthorized Livestock prior to all gathers. Branded or privately owned animals whose owners are known will be impounded by BLM, and if not redeemed by payment of trespass and capture fees, will be sold at public auction. If owners are not known, the private animals will be turned over to the State for Processing under Nevada estray laws.

#### **E. 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. The Contractor shall provide the BLM with a current safety inspection (less than one year old) for all motorized equipment and tractor-trailers used to transport animals to final destination.
2. All motorized equipment, tractor-trailers, and stock trailers shall be in good repair, of adequate rated capacity, and operated so as to ensure that captured animals are transported without undue risk or injury.
3. Only tractor-trailers or stock trailers with a covered top shall be allowed for transporting animals from trap site(s) to temporary holding facilities, and from temporary holding facilities to final destination(s). Sides or stock racks of all trailers used for transporting animals shall be a minimum height of 6 feet 6 inches from the floor. Single deck tractor-trailers 40 feet or longer shall have two (2) partition gates providing three (3) compartments within the trailer to separate animals. Tractor-trailers less than 40 feet shall have at least one partition gate providing two (2) compartments within the trailer to separate the animals. Compartments in all tractor-trailers shall be of equal size plus or minus 10 percent. 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 tractor-trailers is unacceptable and shall not be allowed.

4. All tractor-trailers used to transport animals to final destination(s) shall be equipped with at least one (1) door at the rear end of the trailer which is capable of sliding either horizontally or vertically. The rear door(s) of tractor-trailers and stock trailers must be capable of opening the full width of the trailer. Panels facing the inside of all trailers must be free of sharp edges or holes that could cause injury to the animals. The material facing the inside of all trailers must be strong enough so that the animals cannot push their hooves through the side. Final approval of tractor-trailers and stock trailers used to transport animals shall be held by the BLM.
5. Floors of tractor-trailers, stock trailers, and the loading chute shall be covered and maintained with wood shavings to prevent the animals from slipping.
6. Animals to be loaded and transported in any vehicle or trailer shall be as directed by the BLM and may include limitations on numbers according to age, size, sex, temperament, and animal condition. The following minimum square feet per animal shall be allowed in all trailers:
  - 11 sq. ft. per adult horse (1.4 linear ft. in an 8ft. wide trailer);
  - 6 sq. ft. per horse foal (.75 linear ft. in an 8ft. wide trailer).
7. Prior to any gathering operations, the BLM will provide for a pre-capture evaluation of existing conditions in the gather areas. The evaluation will include animal condition, prevailing temperatures, drought conditions, soil conditions, road conditions, and a topographic map with location of fences, other physical barriers, and acceptable trap locations in relation to animal distribution. The evaluation will determine the level of activity likely to cause undue stress to the animals, and whether such stress would necessitate a veterinarian be present. If it is determined that capture efforts necessitate the services of a veterinarian, one would be obtained before capture would proceed. The Contractor will be appraised of all the conditions and will be given directions regarding the capture and handling of animals to ensure their health and welfare is protected.
8. If the BLM determines that dust conditions are such that animals could be endangered during transportation, the Contractor will be instructed to adjust speed.
9. Trap sites will be located to cause as little injury and stress 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. Additional trap sites may be required, as determined by the BLM,

to relieve stress caused by specific conditions at the time of the gather (i.e. dust, rocky terrain, temperatures, etc.).

**F. Animal Characteristics and Behavior**

Releases of wild horses would be near available water. If the area is new to them, a short term adjustment period may be required while the wild horses become familiar with the new area.

**G. Public Participation**

It is BLM policy that the public will not be allowed to come into direct contact with wild horses or burros being held in BLM facilities. Only BLM personnel, or contractors may enter the corrals or directly handle the animals. The general public may not enter the corrals or directly handle the animals at anytime or for any reason during BLM operations.

**H. Responsibility and Lines of Communication**

**ELY**

**ELKO**

**Contracting Officer's Representatives**

Bob Brown  
Jared Bybee  
Alan Shepherd

Kathy McKinstry

**Project Inspectors**

Mike Perkins  
Paul Podborny  
Kyle Teel

Bruce Thompson  
Leticia Lister

The Contracting Officer's Representatives (CORs) and the project inspectors (PIs) have the direct responsibility to ensure the Contractor's compliance with the contract stipulations. The Assistant Field Managers for Renewable Resources and the Ely and Elko Field Managers will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, State Office, National Program Office, and PVC Corral offices. All employees involved in the gathering operations will keep the best interests of the animals at the forefront at all times.

All publicity, formal public contact and inquiries will be handled through the Assistant Field Managers for Renewable Resources. This individual will be the primary contact and will coordinate the contract with the PVC Corrals to ensure animals are being transported from the capture site in a safe and humane manner and are arriving in good condition.

The contract specifications require humane treatment and care of the animals during removal operations. These specifications are designed to minimize the risk of injury and death during and after capture of the animals. The specifications will be vigorously enforced.

Should the Contractor show negligence and/or not perform according to contract stipulations, he will be issued written instructions, stop work orders, or defaulted.



**APPENDIX II**

**POPULATION MODELING**

**Proposed Action**

**Alternative 1**

**No Action**

**Table I - Initial Age Distribution, Common for all alternatives**

Initial Age Distribution - Antelope Complex <sup>1</sup>		
AGE	MALES	FEMALES
0	336	311
1 <sup>2</sup>	21	20
2	199	253
3 <sup>3</sup>	42	33
4 <sup>3</sup>	35	40
5 <sup>3</sup>	18	57
6	88	111
7	54	61
8	21	45
9	50	73
10	42	34
11	30	48
12	23	21
13	34	45
14	22	31
15	36	40
16	14	18
17	10	10
18	19	16
19	5	4
20	14	19
21	16	11
22	6	2
23	65	29
24	0	0
25	0	0
Total	1200	1332

Explanation of Footnotes:

<sup>1</sup> This initial age distribution was determined using actual population statistics from the 1998-99 Antelope Complex release data.

<sup>2</sup> There should be very few yearlings as the fertility control vaccine was administered to approximately 66% of the total mares returned to the range. The vaccine did not effect their 1999 foaling rate, suppressed the 2000 foaling rate and it should have returned to normal in 2001.

<sup>3</sup> Both Ely and Elko removed weanlings, yearlings and two year olds in 1998-99, therefore the 3, 4, 5, year old segment of the population should be smaller.

<sup>4</sup> Ely removed 3, 4, and 5 year olds in 1998-99, therefore, the 6, 7, 8 year old segment of the population should be somewhat smaller, although Elko released this age group.

**Parameters for population model simulation, Proposed Action:**

1. gather when population exceeds 775
2. population size after gather 465
3. foals are included in AML
4. percent to gather - 90
5. no fertility control
6. four years between gathers
7. number of trails - 30
8. number of years - 10
9. initial calendar year - 2001

**TABLE II - Population in Complex by Year, Proposed Action**

<b>YEAR</b>	<b>POPULATION (Mean, 95% confidence bounds)</b>
2001	2532
2002	945
2003	1123
2004	1347
2005	1510
2006	555
2007	665
2008	780
2009	914
2010	586
2011	647

TABLE III - Age Distribution in Complex, Year 2011, Proposed Action

AGE	TRIAL 1	TRIAL 30
0	137	104
1	60	133
2	96	87
3	50	41
4	17	69
5	44	63
6	51	32
7	18	15
8	29	26
9	0	30
10	12	9
11	0	0
12	5	13
13	1	5
14	0	2
15	1	2
16	20	28
17	11	8
18	10	5
19	18	12
20	0	1
21	0	1
22	1	0
23	2	0
24	0	0
25	1	0
Total	584	686

**Table IV - Average Growth Rate, Proposed Action**

<b>Trial</b>	<b>Growth Rate (%)</b>
1	-1.9
2	20.3
3	20.9
4	20.7
5	21.3
6	23.0
7	25.2
8	4.1
9	16.9
10	23.8
11	19.1
12	20.2
13	23.6
14	15.2
15	21.6

Mean - 18.8

Minimum - -1.8

Maximum - 26.1

Low Limit - 16.3 (95% confidence limit)

High Limit - 20.8 (95% confidence limit)

**Parameters for population model simulation, Alternative 1:**

1. gather when population exceeds 775
2. population size after gather 775
3. foals are included in AML
4. percent to gather - 90
5. no fertility control
6. four years between gathers
7. number of trails - 30
8. number of years - 10
9. initial calendar year - 2001

**TABLE V - Population in Complex by Year, Alternative 1**

<b>YEAR</b>	<b>POPULATION (Mean, 95% confidence bounds)</b>
2001	2532
2002	1017
2003	1217
2004	1446
2005	1754
2006	926
2007	1114
2008	1312
2009	1547
2010	949
2011	1097

TABLE VI - Age Distribution in Complex, Year 2011, Alternative 1

AGE	TRIAL 1	TRIAL 30
0	153	155
1	184	168
2	96	108
3	106	89
4	77	95
5	46	67
6	26	52
7	32	56
8	71	82
9	110	58
10	22	21
11	2	2
12	14	11
13	1	0
14	0	0
15	0	3
16	23	23
17	8	18
18	5	8
19	10	6
20	1	2
21	0	1
22	0	1
23	1	2
24	2	0
25	1	1
Total	991	1029



**Table VII - Average Growth Rate, Alternative 1**

<b>Trial</b>	<b>Growth Rate (%)</b>
1	22.6
2	24.4
3	18.2
4	21.3
5	17.0
6	21.5
7	22.8
8	21.9
9	22.8
10	21.9
11	8.0
12	19.2
13	19.4
14	20.3
15	19.8

Mean - 20.1

Minimum - 8.0

Maximum - 25.5

Low Limit - 18.8 (95% confidence limit)

High Limit - 21.4 (95% confidence limit)

**Parameters for population model simulation, No Action Alternative:**

1. gather when population exceeds 10,000
2. population size after gather 10,000
3. foals are included in AML
4. percent to gather - 90
5. no fertility control
6. 50 years between gathers
7. number of trails - 30
8. number of years - 10
9. initial calendar year - 2001

**TABLE VIII - Population in Complex by Year, No Action Alternative**

<b>YEAR</b>	<b>POPULATION (Mean, 95% confidence bounds)</b>
2001	2532
2002	3117
2003	3775
2004	4377
2005	5349
2006	6290
2007	7566
2008	9121
2009	10759
2010	12585
2011	15011

**TABLE IX - Age Distribution in Complex, Year 2011, No Action Alternative**

AGE	TRIAL 1	TRIAL 30
0	4030	3472
1	1939	1811
2	2122	1706
3	2249	1712
4	1338	1377
5	1001	713
6	1155	749
7	887	553
8	792	448
9	514	446
10	495	367
11	28	21
12	342	254
13	51	42
14	57	39
15	50	47
16	147	113
17	79	67
18	46	37
19	94	79
20	63	41
21	63	42
22	40	21
23	65	46
24	41	29
25	59	43
Total	17,747	14,275

**Table X - Average Growth Rate, No Action Alternative**

<b>Trial</b>	<b>Growth Rate (%)</b>
1	21.4
2	20.5
3	23.6
4	20.3
5	20.7
6	17.5
7	12.1
8	20.3
9	19.7
10	15.7
11	20.5
12	18.2
13	14.3
14	22.4
15	21.0

Mean - 19.0

Minimum - 10.1

Maximum - 23.9

Low Limit - 17.6 (95% confidence limit)

High Limit - 20.3 (95% confidence limit)

**APPENDIX III**  
**MIGRATORY BIRDS**  
**AND**  
**THREATENED AND ENDANGERED SPECIES LISTS**

On January 11, 2001 President Clinton signed the Migratory Bird Executive Order . This executive order outlines the responsibilities of Federal agencies to protect migratory birds. The United States has recognized their ecological and economic value to this country and other countries by ratifying international, bilateral conventions for the conservation of migratory birds. These migratory bird conventions impose substantive obligations on the United States for conservation of migratory birds and their habitats. The United States has implemented these migratory bird conventions through the Migratory Bird Treaty Act. President Clinton's Migratory Bird Executive Order directs executive departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act. As defined in the executive order, "action" means a program, activity, project, official policy (such as a rule or regulation), or formal plan directly carried out by a Federal agency. The executive order further states that each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations is directed to develop and implement, within 2 years, a Memorandum of Understanding (MOU) with the Fish and Wildlife Service that shall promote conservation of migratory bird populations. The term "action" will be further defined in this MOU as it pertains to each Federal agency's own authorities and programs.

A list of the migratory birds affected by the President's executive order is contained in 43 CFR 10.13. References to "species of concern" pertain to those species listed in the periodic report "Migratory Nongame Birds of Management Concern in the United States", priority migratory bird species as documents by established plans (such as Bird Conservation Regions in the North American Bird Conservation Initiative or Partners in Flight physiographic areas), and those species listed in 50 CFR 17.11.

The proposed action is located in a sagebrush habitat type. The Nevada Partners in Flight Bird Conservation Plan identifies the following bird species associated with this physiographic region:

Obligates:

Sage Grouse

Other:

Black Rosy Finch  
Ferruginous Hawk  
Gray Flycatcher  
Loggerhead Shrike  
Vesper Sparrow  
Prairie Falcon  
Sage Sparrow  
Sage Thrasher  
Swainson's Hawk

Burrowing Owl  
Calliope Hummingbird

Other associated species:

Brewer's Sparrow  
Western Meadowlark  
Black-throated Sparrow  
Lark Sparrow  
Green-tailed Towhee  
Brewer's Blackbird  
Horned Lark  
Lark Sparrow

The greatest threat to these sagebrush-dependant migratory bird species is type conversion of sagebrush communities. Maintaining complete, diverse sagebrush communities is integral to conservation efforts for these species. Low elevation sagebrush sites, such as the project area, are vulnerable to conversion to cheatgrass types following wildfire. The proposed action to reseed with aggressive perennial grasses to prevent cheatgrass from dominating the site, coupled with secondary efforts to re-establish sagebrush on the stabilized site (as necessary) should provide beneficial impacts to these species.

The proposed action to reseed and stabilize the burned area, allowing for the restoration of this sagebrush habitat over time, is consistent with the conservation measures listed in Section 3 (e) of the President's Migratory Bird Executive Order, specifically:

(2) restore and enhance the habitat of migratory birds, as practicable;

(5) within established authorities and in conjunction with the adoption, amendment, or revision of agency management plans and guidance, ensure that agency plans and actions promote programs and recommendations of comprehensive migratory bird planning efforts such as Partners-in-Flight....

(6) ensure that environmental analyses of Federal actions required by the NEPA or other established environmental review processes evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern.

Threatened, Endangered, Candidate, and Sensitive Species of Plants and Animals on Lands Administered by Elko BLM as of December 15, 1999<sup>1</sup>.

COMMON NAME	SCIENTIFIC NAME
<b>Federally Endangered Species</b>	
none	none
<b>Federally Threatened Species</b>	
bald eagle	<i>Haliaeetus leucocephalus</i>
Lahontan cutthroat trout	<i>Oncorhynchus clarki henshawi</i>
<b>Federal Candidate Species</b>	
Columbia spotted frog	<i>Rana luteiventris</i>
<b>State of Nevada Listed Species<sup>2</sup></b>	
<b><i>Mammals</i></b>	
spotted bat	<i>Euderma maculatum</i>
<b><i>Birds</i></b>	
goshawk	<i>Accipiter gentilis</i>
golden eagle	<i>Aquila chrysaetos</i>
burrowing owl	<i>Athene cunicularia</i>
ferruginous hawk	<i>Buteo regalis</i>
Swainson's hawk	<i>Buteo swainsoni</i>
osprey	<i>Pandion haliaetus</i>
white pelican	<i>Pelecanus erythrorhynchos</i>
white-faced ibis	<i>Plegadis chihi</i>
<b><i>Fish</i></b>	
relict dace	<i>Relictus solitarius</i>



**Nevada BLM Sensitive Species<sup>3</sup>**

***Mammals***

small-footed myotis	<i>Myotis ciliolabrum</i>
long-eared myotis	<i>Myotis evotis</i>
fringed myotis	<i>Myotis thysanodes</i>
long-legged myotis	<i>Myotis volans</i>
Yuma myotis	<i>Myotis yumanensis</i>
pale Townsend's big-eared Bat	<i>Plecotis townsendii pallescens</i>
Pacific Townsend's big-eared bat	<i>Plecotis townsendii townsendii</i>
Preble's shrew	<i>Sorex preblei</i>

***Birds***

western sage grouse	<i>Centrocercus urophasianus</i>
black tern	<i>Chlidonias niger</i>
mountain quail	<i>Oreortyx pictus</i>

***Fishes***

interior redband trout	<i>Onchorhynchus mykiss gibbsi</i>
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***Mussel***

California floater	<i>Anodonta californiensis</i>
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***Butterflies***

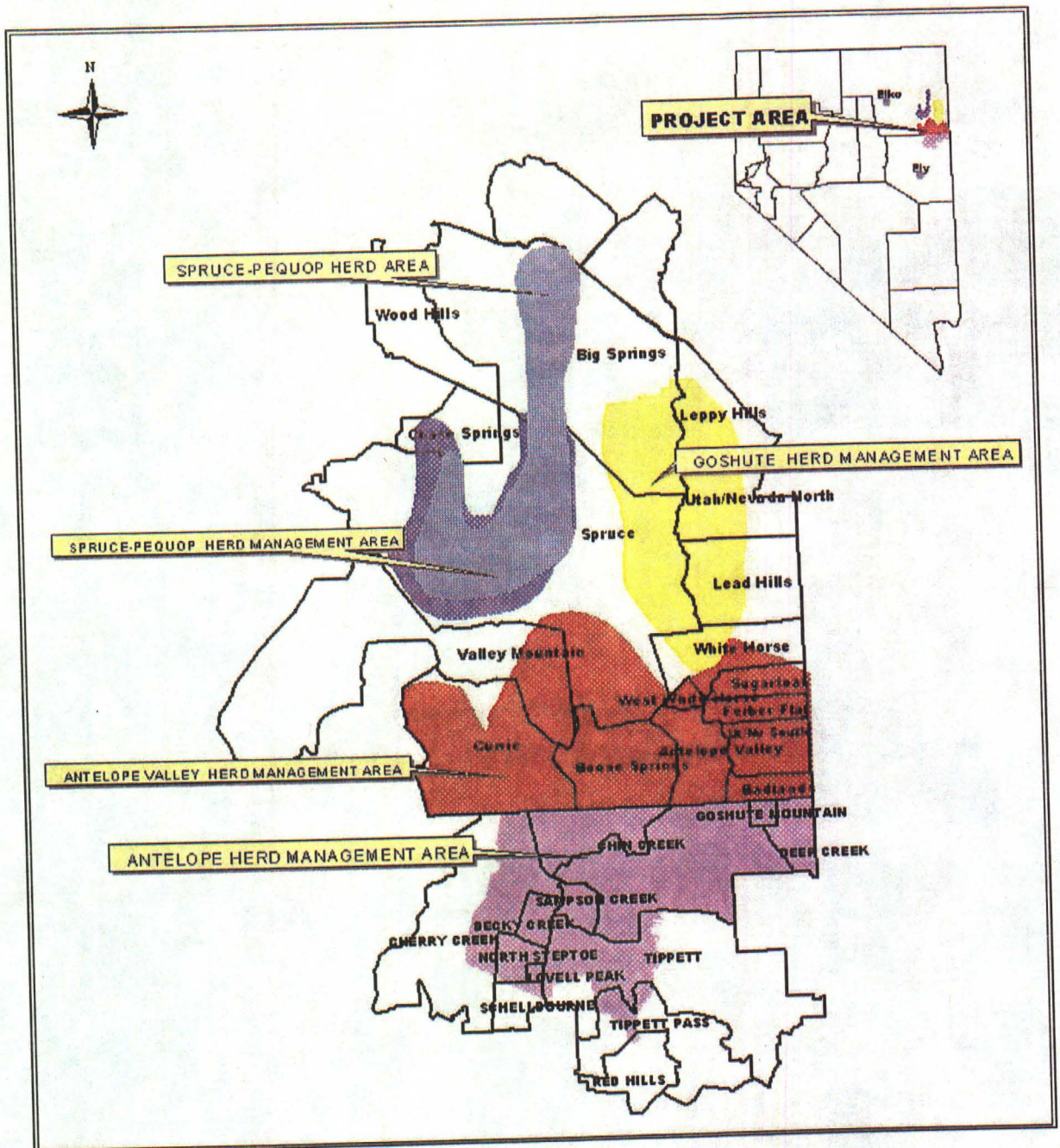
Mattoni's blue butterfly	<i>Euphilotes rita mattoni</i>
Nevada viceroy	<i>Limenitis archippus lahontani</i>

<i>Plants</i>	
Bruneau River prickly phlox	<i>Leptodactylon glabrum</i>
meadow pussytoes	<i>Antennaria arcuata</i>
Elko rockcress	<i>Arabis falcifructa</i>
Goose Creek milkvetch	<i>Astragalus anserinus</i>
Barren Valley collomia	<i>Collomia renacta</i>
broad fleabane	<i>Erigeron latus</i>
Lewis buckwheat	<i>Eriogonum lewisii</i>
grimy ivesia	<i>Ivesia rhypara var. rhypara</i>
Grimes vetchling	<i>Lathyrus grimesii</i>
Packard stickleaf	<i>Mentzelia packardiae</i>
least phacelia; dwarf phacelia	<i>Phacelia minutissima</i>
Cottam cinquefoil	<i>Potentilla cottamii</i>

<sup>1</sup> Based on input provided by BLM, Nevada Division of Wildlife, and U.S. Fish and Wildlife Service in BLM Instruction Memorandum No. NV-98-013 (February 27, 1998). BLM Elko Field Office input provided for BLM Instruction Memorandum No. NV-98-013 was entitled "Former Candidate Category 2 Species On Or Suspected On Elko District -BLM Lands Recommended As BLM Sensitive Species As Of 5/96".

<sup>2</sup> Per wording for Table IIa. in BLM Instruction Memorandum No. NV-98-013 for Nevada State Protected Animals That Meet BLM's 6840 Policy Definition: Species of animals occurring on BLM-managed lands in Nevada that are: (1) 'protected' under authority of Nevada Administrative Codes 501.100 - 503.104; (2) also have been determined to meet BLM's policy definition of "listing by a State in a category implying potential endangerment or extinction"; and (3) are not already included as BLM Special Status Species under federally listed, proposed, or candidate species.

<sup>3</sup> Nevada BLM policy is to provide these species with the same level of protection as is provided for candidate species in BLM Manual 6840.06C.



### Antelope Complex Gather Area

- ALLOTMENT BOUNDARY
- HERD MANAGEMENT AREAS
- ANTELOPE VALLEY HERD MANAGEMENT AREA
- GOSHUTE HERD MANAGEMENT AREA
- SPRUCE-PEQUOP HERD MANAGEMENT AREA
- ANTELOPE HERD MANAGEMENT AREA
- SPRUCE-PEQUOP HERD AREA

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
BLM FIELD OFFICE



BOUNDARY SURVEY BY THE BUREAU OF LAND MANAGEMENT, JULY 1978. FIELD OFFICE OF THE BUREAU OF LAND MANAGEMENT, ELKO, NEVADA.

