

# United States Department of the Interior Bureau of Land Management

Ely and Elko Field Office

November 2007

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## Final Environmental Assessment for the Antelope and Antelope Valley Herd Management Areas Emergency Wild Horse Gather Plan

NV-040-08-EA-04

# ***Introduction***

## **Background Information**

The Ely and Elko Field Offices (FOs) are proposing to gather and remove approximately 964 wild horses from the Antelope Herd Management Area (HMA) and that portion of Antelope Valley HMA east of US Highway 93 Alternate in December of 2007 in order to prevent a catastrophic loss of wild horses within the HMAs due to continuing drought conditions. The Antelope and Antelope Valley HMAs are located approximately 50 miles north east of Ely, Nevada, within White Pine and Elko Counties. Refer to Map 1 for General Location and Map 2 for HMAs.

The Antelope and Antelope Valley HMAs were last gathered in 2004 as part of the Antelope Valley Complex. A total of 1,548 excess wild horses were removed at that time. An estimated 160 wild horses in the Antelope HMA and 140 in the Antelope Valley HMA remained post-gather. However, aerial census of the Antelope and that portion of the Antelope Valley HMA east of Hwy 93 Alternate in October 2007 estimated the actual population at 745 and 436 wild horses, respectively.

The number of excess wild horses found in the affected area is in part attributable to the construction of a fence along both sides of US Highway 93 Alternate in the spring of 2007. Wild horses in these HMAs traditionally move back and forth from the Antelope HMA (Ely District) in the summer to the Antelope Valley HMA (Elko District) during the winter. However, in the spring of 2007, the Nevada Department of Transportation (NDOT) fenced the Hwy 93 Alternate right of way to assure public safety. This new fence divided the eastern 1/3 of the Antelope Valley HMA from the rest of the management area, with the result that these animals can no longer migrate to their traditional winter range in the Dolly Varden Mountains. As a result, the current estimated wild horse population within the proposed capture area is 1,181 animals, about 3.3 times the appropriate management level (AML) of 362 wild horses.

Coupled with the fence project, the area has also been heavily impacted by continuing drought conditions. Available water is limited west of US Highway 93 Alternate. Additionally, on the ground range monitoring indicates there is not enough forage to carry this number of wild horses through the winter. Even if the animals could migrate to their traditional winter range (west of Hwy 93 Alternate) there is not enough forage and water currently available to maintain animal health. In the absence of an emergency removal of excess wild horses, catastrophic loss of wild horses due to starvation is likely.

**Map 1**



## **Purpose of and Need for Action**

The purpose of this action is to remove excess wild horses in the Antelope Herd Management Area (HMA) and that portion of Antelope Valley HMA east of US Highway 93 Alternate to prevent a catastrophic loss of wild horses within the HMAs over the winter because forage is not adequate to support this number of wild horses. Continuous years of drought have led to poor range conditions in the HMAs, and little new forage growth in many key grazing areas.

Vegetation monitoring in relation to use by wild horses in the HMAs has determined that current wild horse population levels are exceeding the capacity of the area to sustain wild horse use over the long term. Resource damage is occurring and is likely to continue to occur without immediate action. The proposed capture and removal is needed at this time in order to achieve a thriving natural ecological balance between wild horse populations, wildlife, livestock and vegetation, and to protect the range from the deterioration associated with overpopulation of wild horses as authorized under Section 3(b) (2) of the 1971 Free-Roaming Wild Horses and Burros Act and section 302(b) of the Federal Land Policy and Management Act of 1976.

## **Land Use Plan Conformance**

The Proposed Action and Alternatives are in compliance with the Wells Resource Management Plan (RMP) approved July 16, 1985. Issue 7: Wild Horses - management decisions 1, 2, and 3 direct the management of wild horses in the project area. An amendment to the Wells RMP was approved August 1993. This amendment further outlines the level of management for wild horses within the planning area including the Antelope Valley HMA.

The Proposed Action and Alternatives are in compliance with the Schell Management Framework Plan (MFP), Schell Grazing Environmental Impact Statement (EIS), and subsequent Record of Decision (ROD) dated 1983 and the Egan Resource Management Plan and Final Impact Statement (RMP/FEIS) Feb 3 1987. The proposed wild horse gather is in conformance with the Schell MFP as required by regulation (43 CFR 1610.5-3(a)). The White Pine County Policy Plan for Public Lands (PPPL) 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 action is also in conformance with the White Pine County Elk Management Plan (EMP), approved March 1999.

The Proposed Action and Alternatives are further consistent with other federal, state, and local laws and regulations, policies and plans to the maximum extent possible. This includes applicable regulations at 43 CFR (Code of Federal Regulations) 4700 and policies, Public Law 92-195 (Wild Horse and Burro Act of 1971), Northeastern Great Basin Resource Advisory Council (RAC) Standards and Guidelines for Rangeland Health (November 2003), and the 2001 BLM Strategic Plan for the Management of Wild Horses and Burros on Public Lands.

## **Conformance with Rangeland Health Standards**

The Antelope HMA has been assessed for conformance with Rangeland Health Standards and Guidelines as part of North Spring Valley and Antelope Valley Watershed Assessments. The assessment states that wild horses are contributing to the non-attainment of the Standard and Guidelines for the Antelope HMA. The assessment also recommended that AML should be maintained for the Antelope HMA to help achieve rangeland health standards. Historical levels of grazing use by wild horses are factors that have contributed to not meeting the upland standard.

1. Upland Sites Standard (Not Meeting the standard but making significant progress toward.)

2. Riparian and Wetland Sites Standard (Not Meeting the standard but making significant progress toward.)
3. Habitat Standard (Not Meeting the standard but making significant progress toward.)

## **Issues**

The BLM Ely Field Office has discussed the proposed removal with Forest Service, and the Nevada Department of Wildlife. The following issues were identified as a result of internal scoping and agency consultation and will be used in the preliminary EA to analyze the alternatives:

1. Will the Proposed Action achieve and maintain the appropriate management level of wild horses and remove wild horses residing outside HMA boundaries?
2. What are the potential impacts to wild horses, as well as other elements of the human environment, from proposed capture, removal and handling procedures?
3. What are the current impacts to natural resources, domestic livestock and native wildlife resulting from the current overpopulation of wild horses? What effect will achieving and maintaining AML have on these resources?

## ***Proposed Action and Alternatives***

This section of the EA describes the Proposed Action and alternatives, including any that were considered but eliminated from detailed analysis. Alternatives analyzed in detail including the following:

- Alternative A – Proposed Action (Remove Wild Horses in Excess of AML – Helicopter Removal)
- Alternative B – No Action Alternative (Defer Population Control)

The Proposed Action alternative was developed to meet the purpose and need (i.e. achieve and maintain AML and prevent further deterioration of the range associated with the current overpopulation) and in response to the issues identified during internal scoping and agency consultation. Although the No Action alternative does not comply with the 1971 WFRHBA (as amended), nor meet the purpose and need for action, it is included as a basis for comparison with the Proposed Action.

### **Alternative A – Proposed Action**

The Proposed Action is to capture and remove about 82% of the current population of wild horses or about 964 wild horses in December 2007. The animals gathered would be removed and shipped to BLM holding facilities where they will be prepared for adoption or sale to qualified individuals or long term holding. The estimated population remaining on the range following the gather would be about 194 wild horses for Antelope HMA, and 23 for Antelope Valley HMA (a total of 217 wild horses). All horses residing outside the HMAs would be gathered and removed.

Removal to the low range of AML for the Antelope and the Antelope Valley HMAs is necessary due to continued drought and current resource damage. This level of animals was determined to ensure a “*thriving natural ecological balance*”, to alleviate resource damage that is currently occurring, and allow vegetation to recover from the continued drought and wild horse overpopulation.

All capture and handling activities (including capture site selections) would be conducted in accordance with the Standard Operating Procedures (SOPs) described in Appendix I. Multiple capture sites (traps) may be used to capture wild horses from the HMA. Whenever possible, capture sites would be located in previously disturbed areas. Capture techniques would be the helicopter-drive trapping method and/or helicopter-roping from horseback.

## **Alternative B – No Action Alternative**

Under the No Action Alternative, a gather to remove excess wild horses would not take place beginning in about December 2007. There would be no active management to control the size of the wild horse population at this time. However, due to inadequate forage to support the current number of wild horses on the range, potential exists for up to 2/3 of the population to suffer or die from starvation over the winter. Many of these wild horses are starting to lose body condition and could suffer from starvation, which is cruel and inhumane when viable options exist such as gather/removal before herd health is jeopardized. Existing management, including monitoring, would continue.

The No Action Alternative would not comply with the 1971 WFRHBA or with applicable regulations and Bureau policy, nor would it comply with the Northeastern Great Basin RAC Standards and Guidelines for Rangeland Health and Healthy Wild Horse and Burro Populations. However, it is included as a baseline for comparison with Proposed Action, as required under the 1969 National Environmental Policy Act (NEPA).

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

### **Water/Bait Trapping Alternative**

An alternative which was eliminated from consideration was to water/bait trap wild horses within the HMAs. This alternative was eliminated because of the size and extent of the HMAs, the number of wild horses to be removed within heavy tree cover, and the limited time the contractor is available in order to complete this gather. In summary, bait/water trapping would not effectively meet the purpose and need.

### **Helicopter Drive Animals Across US Highway 93 Alternate to their Traditional Winter Range**

Another alternative considered was the option of driving the wild horses from the summer range (Ely District) to their traditional winter range (Elko District). However, due to the eighth consecutive year of drought, the winter range also has insufficient forage and water to carry this number of wild horses safely through the winter. Additionally, this would compound resource impacts on the winter range, when horses could not return to their summer range in 2008. As a result, this alternative was eliminated from detailed study.

### **Apply Fertility Control**

Application of fertility control was an alternative considered but eliminated from detailed study. While wild horses are currently in moderate body condition, their condition is beginning to decline. Capturing 95% of the total herd in order to administer fertility control would have resulted in increased handling and physical stress and increased the potential for injury or mortality during or immediately following the capture operation. The potential risks outweighed the potential benefits for this herd at this time.

## ***Description of the Affected Environment and Environmental Consequences***

This section of the environmental assessment briefly discusses the relevant components of the human environment which would be either affected or potentially affected by the Proposed Action (refer to Table 2 and 3 below). Direct impacts are those that result from the management actions while indirect impacts are those that exist once the management action has occurred. By contrast, cumulative impacts 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 action. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

## General Description of the Affected Environment

The Antelope and Antelope Valley HMAs are located in northeastern White Pine County and southeastern Elko County approximately 50 air miles north of Ely, Nevada. The area is within the Great Basin physiographic regions, ranging from rolling plateaus to steep mountain peaks covered with heavy pinyon juniper. On many of the low hills and ridges that are scattered throughout the area, the soils are underlain by bedrock. Elevations within the Complex range from approximately 5,000 feet to 10,000 feet. Precipitation normally ranges from approximately 7 inches on the valley bottoms to 16 to 18 inches on the mountain peaks. Most of this precipitation comes during the winter months in the form of snow. Temperatures range from greater than 90 degrees Fahrenheit in the summer months to minus 15 degrees in the winter. The area is also utilized by domestic livestock and numerous wildlife species. The area is bordered to the west by Hwy 93 and to the east by the Utah-Nevada state line.

The boundary between the Antelope HMA and that portion of the Antelope Valley HMA east of Highway 93 Alternate does not have a continuous fence or natural boundary and wild horses move regularly between the HMAs for water and forage.

Table 1. Critical Elements Checklist

Critical Elements	Present	Affected	Rationale
Air Quality	<b>Yes</b>	<b>No</b>	The proposed gather area is not within an area of non-attainment or areas where total suspended particulates exceed Nevada air quality standards. Areas of disturbance would be small and temporary.
Areas of Critical Environmental Concern (ACECs)	<b>No</b>	<b>No</b>	No areas of critical environmental concern are within or affected by the proposed gather area.
Cultural Resources	<b>Yes</b>	<b>No</b>	A number of known cultural resources exist within the proposed gather area that would be avoided during capture operations. Trap sites and holding facilities located in areas that have not been previously surveyed would be surveyed before the gather begins to prevent any effects to cultural resources.
Environmental Justice	<b>No</b>	<b>No</b>	The Proposed Action would have either no effect or negligible effect on minority or low-income populations.
Floodplains	<b>No</b>	<b>No</b>	Resource not present.
Waste (Hazardous or Solid)	<b>No</b>	<b>No</b>	Not present.
Noxious & Non-Native Invasive Weeds	<b>Yes</b>	<b>Yes</b>	Any noxious weeds or non-native invasive weeds would be avoided when establishing trap sites and holding facilities and would not be driven through to prevent the spread of noxious weeds. The amount of ground disturbance and not using weed-free certified forage could lead to new infestations.
Native American Religious Concerns	<b>No</b>	<b>No</b>	There are no known Native American religious concerns.
Migratory Birds	<b>Yes</b>	<b>Yes</b>	Discussed below under Wildlife.
Prime or Unique Farmlands	<b>Yes</b>	<b>No</b>	Resource is present no negative impacts due to proposed action. Under the Proposed Action, it is expected that the condition of Prime or Unique Farmland would improve over present as year-round grazing pressure by wild horses is

			decreased.
Riparian-Wetland Zones	<b>Yes</b>	<b>Yes</b>	Riparian-wetland zones would be avoided for trap site or holding facility locations. Under the Proposed Action, it is expected that the condition of riparian-wetland zones would improve over present as year-round grazing pressure by wild horses is decreased. See discussion under Vegetation, Soils and Riparian-Wetland Zones below.
Threatened or Endangered Species	<b>No</b>	<b>No</b>	No known threatened or endangered species are within the proposed gather area or would be affected by capture operations.
Water Quality, Drinking/Ground	<b>No</b>	<b>No</b>	Resource not present.
Wild and Scenic Rivers	<b>No</b>	<b>No</b>	Not present.
Wilderness and Wilderness Study Areas	<b>Yes</b>	<b>No</b>	Becky Peak Wilderness is within the area, but will have no disturbance in the wilderness area.

Table 2. Other Resources Checklist

Critical Elements	Present	Affected	Rationale
Fire Management	<b>Yes</b>	<b>No</b>	Resource is not affected by the Proposed Action or alternatives.
Forestry and Woodland	<b>Yes</b>	<b>No</b>	Resource is not affected by the Proposed Action or alternatives.
Land Use Authorizations	<b>Yes</b>	<b>No</b>	Resource is not affected by the Proposed Action or alternatives.
Livestock Management	<b>Yes</b>	<b>Yes</b>	Discussed below under Livestock.
Minerals	<b>Yes</b>	<b>No</b>	Resource is not affected by the Proposed Action or alternatives.
Paleontology	<b>Yes</b>	<b>No</b>	Resource is not affected by the Proposed Action or alternatives.
Rangeland Vegetation Resources	<b>Yes</b>	<b>Yes</b>	Discussed below under Vegetation, Soils and Riparian-Wetland Zones.
Recreation	<b>Yes</b>	<b>No</b>	Resource is not affected by the Proposed Action or alternatives.
Socioeconomics	<b>Yes</b>	<b>No</b>	Resource is not affected by the Proposed Action or alternatives.
Soils	<b>Yes</b>	<b>Yes</b>	Soil disturbances would be less than 1 acre in size and trap sites would be located in previously disturbed areas. Except for temporary disturbance at the trap sites, the resource is not affected. Refer to discussion under Vegetation, Soils, and Riparian-Wetland Zones below.
Visual Resources	<b>Yes</b>	<b>No</b>	No visual impacts would occur because the Proposed Action is temporary.
Wild Horses and Burros	<b>Yes</b>	<b>Yes</b>	Discussed under Wild Horses below.
Wildlife	<b>Yes</b>	<b>Yes</b>	Discussed under Wildlife below.

## Wild Horses

### Affected Environment

Wild horse population growth rates average 20-25% in the Antelope and Antelope Valley HMAs. A census flight conducted in October 2007 on these HMAs found 745 horses in the Antelope HMA and 436 horses in the Antelope Valley HMA, about 3.3 times the AML. These census flights have also provided information pertaining to: population numbers, foaling rates, distribution, and herd health.

Appropriate Management Level (AML) is defined as the number of wild horses that can be sustained within a designated HMA which achieves and maintains a thriving natural ecological balance keeping with the multiple-use management concept for the area. The AML for the Antelope and Antelope Valley HMAs were established through multiple use decisions (MUD) between 1990 and 2002 following in-depth analysis of monitoring data collected over several years. The allotment, AML, MUD, and date of MUD are shown in Appendix II.

The AML of that portion of the Antelope Valley HMA east of Highway 93 Alternate is 38 wild horses, while the AML for the Antelope HMA is set at 324 wild horses, for a total of 362 wild horses. Due to the prolonged drought and current resource conditions, the Proposed Action includes lowering the population for the Antelope HMA to 194 animals and 23 for that portion of the Antelope Valley HMA east of Hwy 93. By removing wild horses to achieve a post-gather population of 217 animals, the population would be allowed to grow over a 4-5 year period without the need for further removals in the interim and would ensure progress towards attainment of rangeland health standards and improved individual animal and herd health over the next four to five years. Refer to Table 3 below for additional information.

Table 3. Estimated Wild Horse Populations

HMA	AML	Current Estimated Population			Estimated Post-Gather Population	
		Within the HMA	Outside the HMA	Estimated Removal No.	Within the HMA	Outside the HMA
Antelope HMA	194-324	745	20-35	543	194	0
Antelope Valley HMA	23-38	436	10-15	407	23	0

\*Antelope Valley HMA AML East of ALT Hwy 93

Analysis of 2007 pre-livestock field monitoring data clearly demonstrates an excess of wild horses in the HMAs. Measurements of upland utilization on key grass species is mostly heavy to severe including livestock rested areas and winter use areas. Winterfat (*Eurotia lanata*) a key browse species exhibits heavy use by wild horses at a majority of key areas. Heavy trailing by wild horses is evident at riparian areas, and water developments. This data, together with a review of the analysis which established AML for the HMA, indicates that the current AML of wild horses is appropriate and that excess wild horses are present and require immediate removal in order to prevent their death from starvation over the winter.

On the ground monitoring conducted in September and October 2007 highlights the growing concern about limited forage available to wild horses, livestock, and wildlife due to continuing drought. Heavy to severe use of forage near available water is occurring and competition between wild horses, livestock, and wildlife for limited forage and water has increased. The livestock operators that graze within the HMAs have reduced their grazing permits from 70-100% of the allowable use due to depleted range conditions and lack of forage availability. Trailing/trampling from wild horses traveling from water to find forage is increasing; increasing areas of bare ground are also evident.

### Genetic Diversity and Viability

Blood samples were collected from 95 horses during the 2001 Antelope Complex gather to develop genetic baseline data (e.g. genetic diversity, historical origins of the herd, unique markers). The samples were analyzed by a geneticist to determine the degree of heterozygosity for the herd which showed good genetic diversity. This data would be incorporated into a Herd Management Area Plans in the future. At this time, there is no evidence to indicate that the Antelope and Antelope Valley HMAs wild horses suffer from reduced genetic fitness.



## **Environmental Consequences**

### ***Impacts Common to Both Alternatives***

The WinEquus program developed by Dr. Steven Jenkins at the University of Nevada at Reno was designed to assist wild horse and burro specialists evaluate various management plans and possible outcomes for management of wild horses. Population modeling was completed to analyze possible differences that could occur to the wild horse populations between alternatives. Included for this analysis was assessing the Proposed Action or removal of excess wild horses. The No Action Alternative (no removal) alternative was also modeled. One objective of the modeling was to determine if the Proposed Action would “crash” the population or cause extremely low population numbers or growth rates. Minimum population levels and growth rates were found to be within reasonable levels and adverse impacts to the population are not likely. Tabular results are displayed in detail in Appendix III.

### ***Impacts of Alternative A – Proposed Action***

Under the Proposed Action, the post-gather population of wild horses would be about 217 animals, which is the low range of the AML for the two HMAs. Reducing population size would also ensure that the remaining wild horses are healthy and vigorous, and not at risk of death or suffering from starvation due to insufficient habitat coupled with the effects of drought in 8 of the past 10 years (lack of forage and water).

Impacts to the rangeland as a result of the current overpopulation of wild horses would be reduced. Fighting among stud horses would decrease since they would protect their position at water sources less frequently; injuries and death to all age classes of animals would also be expected to reduce as competition for limited forage and water resources is decreased. As populations are managed within capacity of the habitat, bands of horses would be less likely to leave the boundaries of the HMA seeking forage and water.

The impacts associated with gathering wild horses are well documented. Gathering wild horses causes direct impacts to individual animals such as stress, fear or confusion as a result of handling associated with the gather, capture, processing, and transportation of animals. The intensity of these impacts varies by individual and is indicated by behaviors ranging from nervous agitation to physical distress. Mortality to individuals from this impact is infrequent but does occur in one half to one percent of wild horses captured in a given gather. Other impacts to individual wild horses include separation of members from individual bands of wild horses and removal of animals from the population.

Indirect impacts can occur to horses after the initial stress event, and may include increased social displacement, or increased conflict between studs. These impacts are known to occur intermittently during wild horse gather operations. Traumatic injuries may occur, and typically involve biting and/or kicking bruises, which don't break the skin. The occurrence of spontaneous abortion events among mares following capture is very rare.

While horses are currently in moderate body condition, body condition is beginning to decline. Removing excess horses while they are healthy will further reduce the potential for injury or death as a result of the physical stress associated with capture and handling activities.

Population-wide impacts to individual bands of wild horses would be minimized with this action because most of the horses caught would be removed. The remaining wild horses not captured would maintain their social structure and herd demographics (age and sex ratios). No observable effects to the remaining

population associated with the gather impacts would be expected except a heightened shyness toward human contact.

### ***Impacts of Alternative B – No Action Alternative***

Under the No Action Alternative, wild horses would not be removed from the Antelope and or that portion of the Antelope Valley HMA east of Hwy 93 Alternate at this time. Individual horses as well as the herd would not be subject to any direct or indirect impacts which may result during a gather operation as described for the Proposed Action. However, due to inadequate forage to support the current number of wild horses on the range, potential exists for up to 2/3 of the population to suffer or die from starvation over the winter. Additionally, implementation of the No Action alternative would be expected to result in needless suffering or death of up to 2/3 the current wild horse population from starvation over the winter. Allowing needless suffering or death to result when a reasonable alternative exists would be cruel and inhumane. Currently, the majority of wild horses are in good body condition, but visual observations over the past two months indicate body condition is beginning to decline.

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

### **Affected Environment**

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. The following weed species are found within the Antelope HMA: Russian knapweed (*Acroptilon repens*), musk thistle (*Carduus nutans*), spotted knapweed (*Centaurea stoebe*), Canada thistle (*Cirsium arvense*), bull thistle (*Cirsium vulgare*), hoary cress (*Lepidium draba*), tall whitetop (*Lepidium latifolium*), and Scotch thistle (*Onoropordum acanthium*). There is also cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomerus*), bur buttercup (*Ranunculus testiculatus*), and Russian thistle (*Salsola kali*) scattered along roads in the area. This area of the District was last surveyed for weeds in 2003. A Noxious and Invasive Weeds Risk Assessment was completed for this project and can be found in Appendix IV.

The non-native, invasive weed data base for the Elko Field Office was also consulted. Spot infestations of the following weeds are found within the Antelope Valley HMA: Russian knapweed (*Acroptilon repens*), bull thistle (*Cirsium vulgare*), Canada thistle (*Cirsium arvense*), Scotch thistle (*Onoropordum acanthium*), hoary cress (*Lepidium draba*), and houndstongue (*Cynoglossum officinale*). Cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomerus*), bur buttercup (*Ranunculus testiculatus*), and Russian thistle (*Salsola kali*) scattered along roads in the area. Poison hemlock (*Conium maculatum*) has also been identified in one location within the Antelope Valley HMA.

## **Environmental Consequences**

### ***Impacts of Alternative A – Proposed Action***

Implementation of the Proposed Action would result in ground disturbance around trap sites and holding pens which could lead to an increase of weeds in the area. Although use of weed-free certified forage is a SOP for the Ely and Elko Field Office, it will not be used for this gather due to the use of the national gather contract. Use of non-certified weed-free forage could introduce new weed infestations to the area through contaminated hay.

### ***Impacts of Alternative B -- No Action Alternative***

Under the No Action Alternative, a wild horse removal would not occur at this time. As a result, the potential for localized trampling or vegetation/soil disturbance associated with the trap sites and temporary holding facilities needed to conduct a gather operation would not occur.

## **Vegetation, Soils and Riparian/Wetland Areas**

### **Affected Environment**

Vegetation within the HMAs varies with elevation, soil type, and precipitation. Soils within the HMA are typical of the Great Basin, and vary with elevation. Soils range in depth and type and are typically gravelly loams and sandy loams. Along the valley bottoms, salt desert shrub species can be found. However, the more common shrub species is sagebrush. As elevation increases from valley bottom to foothills, sagebrush gives way to pinyon-juniper woodlands. At the highest elevations, mountain mahogany and mountain sagebrush dominate, with small pockets of aspen and fir trees.

As a result of the ongoing drought, plants throughout the HMA's continue to exhibit signs of severe drought stress. Very little growth has been observed for a majority of plants, both herbaceous and shrub. Areas with a high percent of plant mortality were also observed. During the current drought, while livestock numbers have decreased, wild horse numbers have increased and excessive use by wild horses has greatly impacted drought stressed vegetation.

Small riparian areas and their associated plant species occur throughout the HMA near seeps and springs. Riparian areas are currently experiencing trampling damage from the over-population of wild horses. Monitoring data collected for the HMAs highlight that utilization by wild horses is heavy in established key areas. Trampling damage by wild horses is also evident at most key areas, including upland sites.

### **Environmental Consequences**

#### ***Impacts of Alternative A – Proposed Action***

Implementation of the Proposed Action would reduce the wild horse population within the Antelope and Antelope Valley HMAs to the low range of the AML, and eliminate wild horses from outside the HMA. 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 the 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 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 generally be adjacent to or on roads, pullouts, water haul sites, or other flat spots that were previously disturbed. By adhering to the SOPs, adverse impacts to soils would be minimized.

Removing excess wild horses would make progress towards achieving a “thriving natural ecological balance.” It would reduce stress on vegetative communities, and be in compliance with the Wild Free Roaming Horse and Burro Act, Northeastern Great Basin RAC Standards and Guidelines, and land use plan management objectives. Vegetative resources, including riparian areas, would improve with the reduced population. Vegetative species would not experience over-utilization by wild horses, which would lead to healthier, more vigorous forage plants. This would result in an increase in forage availability, productivity, cover, and density. Plant communities would become more resilient to disturbances such as wildfire, drought, and grazing.

Impacts of hoof action on the soil around unimproved springs and stream banks would be lessened, which should lead to increased stream bank stability and improved riparian habitat conditions. There would also be a reduction in hoof action on upland habitats and reduced competition for available water sources.

### ***Impacts of Alternative B -- No Action Alternative***

Under the No Action Alternative, a wild horse removal would not occur at this time. As a result, the potential for localized trampling or vegetation/soil disturbance associated with the trap sites and temporary holding facilities needed to conduct a gather operation would not occur.

## **Wildlife and Migratory Birds**

### **Affected Environment**

There are over 300 species of vertebrate wildlife that potentially occur in east-central Nevada including elk, mule deer, and pronghorn antelope. The Antelope and Antelope Valley HMAs provide habitat for many of these species on a seasonal or yearlong basis in association with the predominant vegetation types of sagebrush, cliffs and talus, mountain brush, pinyon-juniper, salt desert scrub, playa/lakes and riparian habitat types. Although riparian areas comprise a relatively small portion of the available habitat, they provide a disproportionately higher habitat value for wildlife.

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 and directs executive departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act. A list of the migratory birds affected by the President's executive order is contained in 50 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.

Predominant habitat types within the HMA include aspen, montane riparian, montane shrub, sagebrush, pinyon/juniper, salt desert scrub, playa and cliffs/talus habitat types. There are small inclusions of coniferous forest and mountain mahogany habitat types in the upper elevations of the Antelope and Schell Creek Ranges. The Nevada Partners in Flight Bird Conservation Plan identifies the bird species associated with the predominant ecotypes, as listed in Appendix V. Depending on the habitat type, elevation, and bird species, the migratory bird breeding and nesting period could occur from mid-March to early September.

## **Environmental Consequences**

### ***Impacts of Alternative A – Proposed Action***

There would be no direct impacts to migratory birds because the gather would occur outside the breeding and nesting period. Wildlife adjacent to trap sites would be temporarily displaced during capture operations by increased activity of trap setup, helicopters and vehicle traffic. Reduction of wild horse numbers would result in reduced competition between wild horses and wildlife as soon as the gather is completed. This would result in improved habitat conditions by increasing forage availability, herbaceous cover, and quality. In addition, it would reduce competition between wild horses and wildlife for available forage and water resources. Disturbance associated with wild horses along stream bank riparian habitat and adjacent upland habitat would be reduced.

### ***Impacts of Alternative B – No Action Alternative***

Wildlife would not be temporarily displaced or disturbed under the no action alternative. There would be continued competition with wild horses for water and forage resources over the short term. Wild horses are aggressive around water sources, and some wildlife species may not be able to compete. The

competition for resources may lead to increased stress or dislocation of native wildlife species, or possible death of individual animals.

## **Special Status Species**

### **Affected Environment**

Special Status Species are those listed or proposed for listing as threatened or endangered under the Endangered Species Act (ESA), species that are candidates for listing under the ESA, species that are listed by the State of Nevada, and species that are on BLM's list of Sensitive Species.

Based on the diversity of habitats present within the HMA, the area likely supports sensitive species of migratory bird, raptors, and bats, as well as sage grouse, pygmy rabbits, and Preble's shrew. Appendix VI provides a detailed summary of the definition of Special Status Species, outlines BLM policy regarding those species, and contains a list of Special Status Species known or likely to occur within the Antelope and Antelope Valley HMAs.

Twenty-two sensitive species of migratory birds (including raptors) are thought or known to occur within the Antelope and Antelope Valley HMAs on a seasonal basis. These species use a variety of habitats. Healthy upland and riparian habitats are essential to provide suitable nesting habitat, foraging areas and cover. Raptor species are dependent on these habitats to provide, habitat (cover and forage) for their prey base. The HMAs provide habitat for bald eagles during the late fall and winter period. Foraging areas are widely dispersed. This includes areas that provide roost sites, and intact habitat with shrub cover for prey species such as black-tailed jackrabbits, and adjoining areas with open water.

In general, bats use water between night-time foraging bouts. They utilize all of the habitat types for foraging and feed on a variety of nocturnal insects.

Sage grouse are a BLM Sensitive Species and use the HMAs for all seasonal habitat needs. This includes breeding (lek areas/strutting grounds) and attendant (resting, foraging, and roosting areas) habitat, nesting, early (upland) brood-rearing, and winter habitat. There are eight known active sage grouse leks within the HMAs.

Sage grouse are considered sagebrush "obligates" because they feed almost exclusively on sagebrush and continue to feed on sagebrush throughout the late fall and winter until forbs reappear the following spring. Sage grouse are also dependent on healthy and diverse age structures of sagebrush to provide habitat for successful nesting, brood-rearing and winter use areas. During the spring, sage grouse utilize forbs, which are high in calcium, phosphorous and protein, to prepare them nutritionally for breeding. Sage grouse chicks rely heavily on forbs and insects in their diets. Habitats that provide a diversity of plant species also support a wide diversity of insects, which are essential to chicks. Riparian areas are critical to sage grouse during late brood rearing; as habitats start to dry up hens usually move their chicks to moister sites where more succulent vegetation is available.

The Antelope HMA is within the Schell Range/Antelope Valley sage grouse population management units (PMUs) in White Pine County. The Antelope Valley HMA occurs in the East Valley PMU in Elko County.

Pygmy rabbits are most often found in Basin big sagebrush habitat; however, stands of Wyoming big sagebrush also are used. Pygmy rabbits dig burrows in the loamy soils, and are usually found close to their burrow systems. Their primary food source is sagebrush, particularly in the winter. Grasses are more important in the summer. Pygmy rabbits have been documented within the two HMAs

Burrowing owls occur in open sites and areas of short grasses or shrubs where there are below-ground burrows for nesting. Burrowing owls prey primarily on beetles and small rodents. No burrowing owls have been documented within the two HMAs; however, they have been documented in surrounding areas within vegetative types which are present in the HMA.

Preble's shrews are found in Nevada primarily in riparian habitat, and feed primarily on insects. No Preble's shrews have been documented within the HMAs; however, they have been documented in surrounding areas within vegetative types which are present in the HMA.

## **Environmental Consequences**

### ***Impacts of Alternative A – Proposed Action***

Trap sites would not be located on known sage grouse leks to protect the integrity of the sites. There would be no direct impacts to sage grouse breeding and nesting activities because the gather would occur in the winter. Individual animals adjacent to trap sites would be temporarily displaced during capture operations by increased activity of trap setup, helicopters and vehicle traffic. Reduction of wild horse numbers would result in improved habitat conditions for sensitive species by increasing forage quantity and quality and herbaceous cover. Disturbance associated with wild horses along stream bank riparian habitat and adjacent upland habitat would be reduced. In addition, it would reduce competition between wild horses and sensitive species for available forage and water resources.

### ***Impacts of Alternative B – No Action Alternative***

Individual animals would not be temporarily displaced or disturbed under the no action alternative. Improvement in habitat condition for sensitive species would not occur, and could deteriorate further as wild horse numbers increase annually. There would be continued competition with wild horses for available forage and water resources over the short term.

## **Livestock Grazing**

### **Affected Environment**

The Antelope and Antelope Valley HMAs includes portions of the Chin Creek, Becky Springs, Deep Creek, Sampson Creek, Tippet, Tippet Pass, Red Hills, Schellbourne, Lovell Peak, North Steptoe, UT/NV North, UT/NV South, Badlands/Goshute Mountain, Antelope Valley, White Horse, West White Horse, Sugar loaf, Ferber Flat and Boone Springs grazing allotments (see Maps 2 and 3 which follow). Key grazing areas in the valley bottoms show heavy resource damage due to trampling and lack of new growth of forage due to drought situations. Due to heavy utilization in many areas livestock grazing has been reduced (see Table 4).

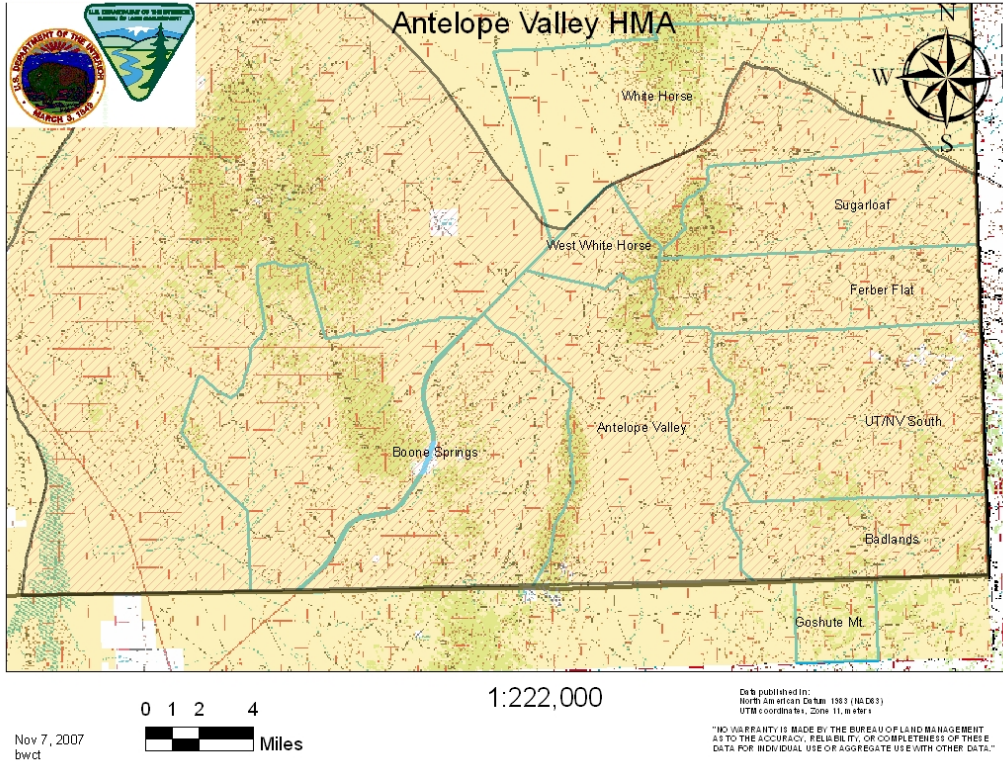
Table 4. Authorized Grazing Use of 2007 Grazing Season for Grazing Allotments within HMAs  
 \*2007 grazing year runs March 1<sup>st</sup> 2007 – February 28<sup>th</sup> 2008

Grazing Allotment	Permitted AUMs	Permitted AUMs	2007 Livestock Grazing Permit Adjustment	2007 Livestock Grazing Permit Adjustment	Percent Of Permit Use Cattle	Percent Of Permit Use Sheep
	Cattle	Sheep	Cattle	Sheep		
Chin Creek	3,564	3,619	571	1,777	16%	49%
Becky Springs	930	2,912	0	0	0%	0%
Deep Creek	2,584	N/A	1,760	N/A	68%	N/A
Sampson Creek	N/A	1,327	N/A	365	N/A	27%
Tippett	684	3092	300	0	44%	0%
Tippett Pass	N/A	2314	N/A	0	N/A	0%
Red Hills	N/A	2600	N/A	0	N/A	0%
Schellbourne,	683	N/A	178	N/A	26%	N/A
Lovell Peak	N/A	105	N/A	0	N/A	0%
North Steptoe	N/A	700	N/A	300	N/A	43%
Cherry Creek	5,293	N/A	2105	N/A	40%	N/A
UT/NV South	N/A	1,690	N/A	1,000	N/A	59%
Badlands/Goshute Mountain	N/A	1483	N/A	1,000	N/A	67%
Antelope Valley	2,691	N/A	500	N/A	18%	N/A
White Horse	N/A	2,154	N/A	1,508	N/A	70%
West White Horse	N/A	465	N/A	325	N/A	69%
Sugar loaf	N/A	1,979	N/A	903	N/A	45%
Ferber Flat	N/A	1,498	N/ A	774	N/ A	51%
Boone Springs	N/A	2,002	N/A	1,000	N/A	50%

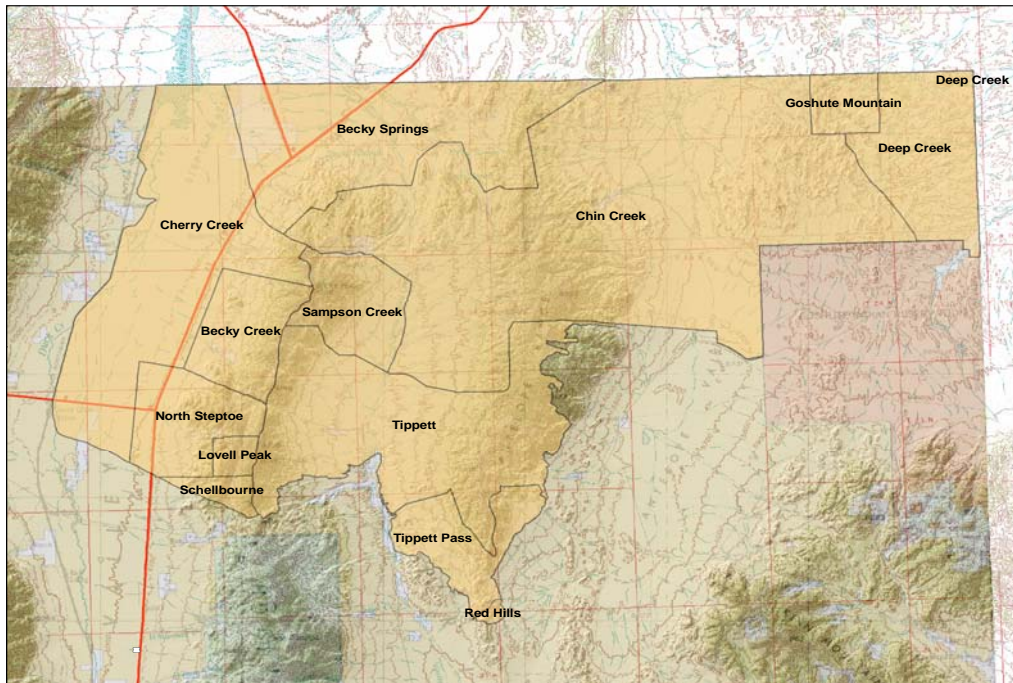
N/A in the above table denotes that this class of livestock is not authorized to graze within the referenced allotments.



**Map 2. Map of Grazing Allotments within the Antelope Valley HMA, Elko District**



**Map 3. Map of Livestock Grazing Allotments within Antelope HMA, Ely District**





## **Environmental Consequences**

### ***Impacts of Alternative A – Proposed Action***

Livestock located near gather activities would be disturbed by the helicopter and the increased vehicle traffic during the gather operation. This displacement would be temporary; and the livestock would move back into the area once gather operations moved. Past experience has shown that gather operations have little impacts to grazing cattle. A reduction of wild horses to AML would result in an increase in forage availability and quality, improved habitat condition, and reduced competition between livestock and wild horses for available forage and water resources. Areas outside the HMA would also show increased forage availability and quality. Wild horses living outside the HMA would be removed, eliminating the competition between livestock and wild horses for forage. No increases in permitted livestock use would occur as a result of the Proposed Action.

### ***Impacts of Alternative B – No Action Alternative***

Livestock would not be displaced or disturbed due to gather operations under the No Action Alternative, however, there would be continued competition with wild horses for water and forage resources over the short term.

## ***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. The area of cumulative impact analysis is the Antelope and Antelope Valley HMAs and areas immediately adjacent to them.

According to the 1994 BLM *Guidelines For Assessing and Documenting Cumulative Impacts*, the cumulative analysis should be focused on those issues and resource values identified during scoping that are of major importance. Accordingly, the issues of major importance that are analyzed are maintaining rangeland health and proper management of wild horses within the established boundaries of an HMA.

## **Past Actions**

Herd Areas (HAs) were identified in 1971 as areas occupied by wild horses. Herd Management Areas (HMAs) were established in the late 1980s through the land use planning process as areas where wild horse management was an approved multiple-use.

AML has been adjusted to a population range of up to 324 wild horses for the Antelope HMA and 38 wild horses for the portion of Antelope Valley based on in-depth analysis of monitoring data and evaluation of habitat suitability and issuance of a Wild Horse Decision and represents the number of wild horses which can graze without damage to the range (see Appendix II).

Removal of excess wild horses from the Antelope/Antelope Valley HMA has occurred on a regular basis. However, the HMAs was gathered in 2004 to remove about 440 wild horses from the Antelope HMA and 450 horses from the Antelope Valley HMA.

## **Present Actions**

Today the Antelope HMA has an estimated population of 745 wild horses and the Antelope Valley HMA east of the highway right of way fence has a population of 436 wild horses. Resource damage is occurring both within and outside the HMAs due to this overpopulation of wild horses.

Current BLM policy is to remove excess wild horses, prioritizing younger animals (5 years of age and less) for removal, while returning some animals to the range post-gather to maintain appropriate age and sex ratios. BLM is also working to conduct gathers in a manner which facilitates a four-year gather cycle (by managing wild horse numbers within a population range which allows the population to grow over a four year period without need for additional removals in the interim). This reduces disturbance to individual wild horses and the herd which occurs when gathers are needed more frequently.

Current policy prohibits the destruction of healthy animals that are removed or deemed to be excess. Only sick, lame, or dangerous animals can be euthanized, and destruction is no longer used as a population control method. Nor does BLM sell excess animals for slaughter; rather BLM makes every effort to place excess animals with private citizens in the continental United States who can provide the animals with a good home. A lagging adoption market and a lack of facility space has sometimes led to gather intervals that are longer than the desired four years although at the present time, BLM Nevada has achieved appropriate management levels of wild horses and burros on the range on a statewide basis and 83 of the 102 HMAs Nevada manages are currently at or below the upper limit of the AML range. As a result, Nevada will need to remove only about 2,600 animals per year to maintain AML as compared to the 5,000-6,000 animals per year which needed to be removed in the past in order to attain AML.

Public interest in the welfare and management of wild horses continues to be very high. Many different values pertaining to wild horse management form the public's perceptions. Some view wild horses as nuisances, while others strongly advocate management of wild horses as living symbols of the pioneer spirit.

An assessment for conformance with Rangeland Health Standards was completed in 2005 for the Antelope HMA and the associated livestock grazing allotments. Portions of the HMA have been monitored intensely over the past several years due to problems with drought, vegetation condition and combined use by wild horses and domestic livestock. Upon completion of these evaluations, additional adjustments in livestock season of use, livestock numbers, and grazing systems may be made through the allotment evaluation/MUD process.

The Proposed Action analyzed in this environmental assessment would result in reducing the current wild horse population size to the low range of the established AML. By reducing numbers to the AML, competition between wild horses and other users (i.e. native wildlife and domestic livestock) for limited forage and water resources would decrease over the current level. Direct improvements in vegetation, soils and riparian-wetland condition would be expected in the short term, which should benefit wildlife, wild horses and domestic livestock. Over the long-term, continuing to maintain wild horse populations within the AML range would further benefit all users and the resources they depend on for forage and water.

Under the No Action (no removal) alternative, the current overpopulation of wild horses would not be reduced to at/near the upper range of the AML because a gather would not occur at this time. Population numbers would continue to exceed AML. Competition between wild horses and native wildlife and domestic livestock for limited forage and water resources would increase, and vegetation and riparian-wetland conditions would continue to deteriorate. Over the longer-term, the health of wild horses and native wildlife would be expected to suffer as rangeland productivity further declines.

### **Reasonably Foreseeable Future Actions**

Management of the Antelope and Antelope Valley HMAs will need to assess the Allotments to make sure the AML is consistent with land use plans.

No further amendments to the 1971 WFRHBA are currently anticipated which would result in changes in horse and burro management on the public lands. However, the WFRHBA has been amended three times

since 1971 (i.e. the Act was amended in 1976, 1978, and again in 2004). Therefore, future changes to the WFRHBA are possible as a reasonably foreseeable future action.

Because Nevada has achieved AML, fewer numbers of horses or burros will need to be removed to maintain AML (only about 2,600 animals per year as compared to 5,000-6,000). As a result, the number of horses or burros available for adoption or sale is expected to more closely match demand. This should increase the likelihood that funding is available to gather HMAs every 4-5 years to maintain AML. In the absence of adequate funding to maintain AML, overpopulation of wild horses on more of Nevada's HMAs and range deterioration as a result of that overpopulation could result. This potential impact could be offset if fertility control with longer-term efficacy becomes available as a management tool, and could result in further extending the time between needed gathers or a need to remove fewer animals. Other management practices such as managing for a higher percentage of studs (60% studs to 40% mares) or managing a portion of the breeding population as geldings could also result in the need to remove fewer animals or extend the time needed between gathers.

Cumulative beneficial effects from the Proposed Action are expected, and would include continued improvement of vegetation and riparian-wetland conditions, which would in turn positively impact native wildlife, domestic livestock and wild horse populations as forage quantity and quality is improved over the current level.

Under the No Action (no removal) alternative, wild horse populations would continue to increase resulting in continuing impacts to native wildlife and vegetation and riparian-wetland areas. As populations continue to grow, increased competition between native wildlife, domestic livestock and wild horses for limited forage and water resources would occur, or alternatively domestic livestock use would need to be further reduced in order to slow the rate of range deterioration. Direct cumulative impacts of the No Action alternative coupled with impacts from past, present and reasonably foreseeable future actions would result in foregoing an opportunity to improve watershed health. As a result, the No Action Alternative, in conjunction with many of the past, present and reasonably foreseeable future actions would result in non-attainment of RMP or allotment-specific objectives and Standards for Rangeland Health and Wild Horse and Burro Populations.

## **Summary of Past, Present, and Reasonably Foreseeable Future Actions (Cumulative Impacts)**

The area affected by the Proposed Action includes the Antelope and Antelope Valley HMA. Past actions regarding the management of wild horses has resulted in the current wild horse population within the HMAs. Past wild horse management has contributed to existing resource conditions as well as wild horse herd age and sex structure within the proposed gather area.

The Proposed Action would achieve wild horse numbers near low range of the AML and is expected to decrease competition among the users for limited forage and water resources and to result in improving vegetation and riparian-wetland conditions. Future gathers to maintain wild horse populations within the AML range should result in cumulative beneficial effects to vegetation and riparian-wetland conditions, and improvements in forage quantity and quality. Under the No Action (no removal) alternative, due to inadequate forage to support the current number of wild horses on the range, potential exists for up to 2/3 of the population to suffer or die from starvation over the winter.

The combination of the past, present, and reasonably foreseeable future actions, along with implementation of the Proposed Action, should result in more stable wild horse populations, healthier rangelands, healthier wild horses, and fewer multiple-use conflicts within and adjacent to the Antelope and Antelope Valley HMAs within the short-term.

## **Mitigation Measures and Suggested Monitoring**

Ongoing rangeland monitoring within the Antelope and Antelope Valley HMAs would continue. Periodic population census would be completed and areas outside the HMA would also be monitored to detect wild horses living outside the HMA boundary.

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.

## ***Consultation and Coordination***

Public hearings are held annually on a state-wide basis regarding the use of helicopters and motorized vehicles to capture wild horses (or burros). During these meetings, the public is given the opportunity to present new information and to voice any concerns regarding the use of these methods to capture wild horses (or burros). The Nevada BLM State Office held a meeting on May 16, 2007; 2 oral comments, 8 written comments and approximately 120 e-mail comments were entered into the record for this hearing. Specific concerns included: (1) the use of helicopters and motorized vehicles is inhumane and results in injury or death to significant numbers of wild horses and burros; (2) bait and/or water trapping or removal by horseback are more humane methods of removal; (3) misconduct by gather contractors or others must be immediately corrected. One commenter commended BLM for the safe, effective, and humane use of helicopters and motorized vehicles to capture and transport wild horses and burros. Based on the number of concerns expressed with respect to the use of helicopters and motorized vehicles, BLM thoroughly reviewed the Standard Operating Procedures to assure that all necessary measures are in place to humanely capture, handle and transport Nevada’s wild horses and burros during the upcoming gather season. No changes to the SOPs were indicated based on this review.

The use of helicopters and motorized vehicles has proven to be a safe, effective and practical means for the gather and removal of excess wild horses and burros from the range. Over the past three years, of the nearly 18,000 animals BLM has gathered, mortality has averaged only one-half of one percent which is very low when handling wild animals. BLM also avoids gathering wild horses prior to or during the peak foaling season and does not conduct helicopter removals of wild horses during March 1 through June 30.

The preliminary EA was mailed to the individuals, groups and agencies listed in Appendix VII for a 15 day review and comment period on November 16, 2007. The public was specifically asked to identify any additional issues or alternatives (not already identified) or any data or information BLM should consider in finalizing the EA. This E.A. is also posted on Ely Field Office web site.

Comments were received from 13 interested individuals, groups, and agencies in response to review of the preliminary EA. Several changes were made in the final EA as a result of additional internal review and public comment. Please refer to Appendix VIII for additional information.

## **List of Preparers**

### **Ely Field Office**

Ben Noyes	Wild Horses, Ely Field Office
Susie Stokke	Wild Horses, Nevada State Office
Bonnie Waggoner	Invasive, Non-Native Species
Jake Rajala	Environmental Coordinator
Paul Podborny	Wildlife, Migratory Birds, Special Status Species
Chris Hanefeld	Public Affairs
Jake Rajala	Environmental Coordination
Elvis Wall	Native American Religious Concerns/Tribal Coordination
Brett Covlin	Livestock
Lisa Gilbert	Archeological/ Historic/Paleontological

### **Elko Field Office**

Bruce Thompson	Range/Wild Horses, Elko Field Office
Wendy Fuell	Wildlife, Migratory Birds, Special Status Species

## **APPENDIX I STANDARD OPERATING PROCEDURES**

Gathers would be conducted by contractors or agency personnel. The same procedures for gathering and handling wild horses 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 (WH) 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 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 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.

### **1. 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 a pilot (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 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.

3. Bait Trapping

Capture attempts may be accomplished by utilizing bait (feed or water) to lure animals into a temporary trap. If this method is selected the following applies:

- a. Finger gates shall not be constructed of materials such as “T” posts, sharpened willows, etc., that may be injurious to animals.
- b. All trigger and/or trip gate devices must be approved by the BLM prior to capture of animals.
- c. Traps shall be checked a minimum of once every 10 hours

BLM conducted Helicopter – 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 all applicable Federal, State, and local laws and regulations.

- b. Fueling operations shall not take place within 1,000 feet of the animals.

**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 facility 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.
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 ratio 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 HA 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 tractors- 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);  
8 sq. ft. per adult burro (1.0 linear ft. in an 8ft. wide trailer);

6 sq. ft. per horse foal (.75 linear ft. in an 8ft. wide trailer);  
4 sq. ft. per burro foal (.50 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 WH 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.

#### **Table 2 Responsibility and Lines of Communication**

The Contracting Officer's Representatives, Bryan Fuell and Benjamin Noyes, and assigned Project Inspectors from the Elko and Ely Field Offices, have the direct responsibility to ensure the Contractor's compliance with the contract stipulations. The Assistant Field Manager for Renewable Resources and the Elko Field Manager 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 Palomino Valley Wild Horse and Burro Center. 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 Manager for Renewable Resources. This individual will be the primary contact and will coordinate the contract with the Palomino Valley Wild Horse and Burro Center 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**  
**ALLOTMENT MULTIPLE USE DECISION TABLE**

<b>Allotment</b>	<b>HMA</b>	<b>MUD &amp; Date</b>	<b>AML # Animals</b>
Spruce	Antelope Valley, Spruce-Pequop, & Goshute	Spruce 1/30/98	AV 110-181 S-P 57-82 G 29-50
Valley Mountain	Antelope Valley	Spruce 1/30/98	Included in Spruce Allot.
Antelope Valley	Antelope Valley	Antelope Valley 12/22/94	5-8
Boone Springs	Antelope Valley	Sheep Complex 10/25/01	14-23
Whitehorse	Antelope Valley	Sheep Complex 10/25/01	Incidental
West Whitehorse	Antelope Valley	Sheep Complex 10/25/01	Incidental
Utah Nevada South	Antelope Valley	Sheep Complex 10/25/01	4-7
Badlands	Antelope Valley	Badlands-6/18/98	Incidental
Sugarloaf	Antelope Valley	Sheep Complex 10/25/01	Incidental
Ferber Flat	Antelope Valley	Sheep Complex 10/25/01	Incidental
Cherry Creek	Antelope	Cherry Creek 7/20/01	4
Becky Springs	Antelope	Becky Springs 11/16/01	8
Chin Creek	Antelope	Chin Creek 7/16/90	152
Deep Creek	Antelope	Deep Creek 10/24/01	30
Tippett	Antelope	Tippett 7/17/90	34
Tippett Pass	Antelope	Tippett Pass 11/16/01	16
Schellbourne	Antelope	Schellbourne 3/28/01	6
Lovell Peak	Antelope	Lovell Peak 10/7/94	8
North Steptoe	Antelope	North Steptoe 12/24/92	6
Becky Creek	Antelope	Becky Creek 4/19/91	8
Sampson Creek	Antelope	Sampson Creek 7/18/90	25
Goshute Mountain	Antelope	Goshute Mountain 6/18/98	0

**History of the Establishment of Wild Horse Appropriate Management Level and Livestock  
Grazing Management for the Antelope Wild Horse Herd Management Area**

The Chin Creek Allotment Final Multiple-Use Decision (FMUD) was issued July 16, 1990. This decision established the wild horse appropriate management level (AML) at 152 wild horses (1,824 AUMs) for the Chin Creek Allotment portion of the Antelope HMA. Permitted use for cattle and sheep has been adjusted from 13,245 AUMs to the current level of 7,180 AUMs with 3,564 AUMs for cattle and 3,616 AUMs for sheep use.

The Tippett Allotment FMUD was issued July 17, 1990. This decision established the wild horse AML at 34 wild horses for the Tippett Allotment portion of the Antelope HMA. Permitted use for cattle and sheep has been adjusted from 13,615 AUMs to the current level of 8,560 AUMs with 4,068 AUMs cattle use and 4,492 AUMs sheep use.

The Sampson Creek Allotment FMUD was issued July 18, 1990. This decision established the wild horse AML at 25 wild horses (300 AUMs) for the Sampson Creek Allotment portion of the Antelope HMA. Permitted use for sheep has been adjusted from 1,592 AUMs to the current level of 1,327 AUMs.

The Becky Creek Allotment FMUD was issued April 19, 1991. This decision established the wild horse AML at 8 wild horses (96 AUMs) for the Becky Creek Allotment portion of the Antelope HMA. Permitted use for sheep has been adjusted from 1,033 AUMs to the current level of 671 AUMs.

The North Steptoe Allotment FMUD was issued December 24, 1992. This decision established the wild horse AML at 6 wild horses (77 AUMs) for the North Steptoe Allotment portion of the Antelope HMA. Permitted use for sheep is 700 AUMs.

The Lovell Peak Allotment FMUD was issued October 7, 1994. This decision established the wild horse AML at 8 wild horses (93 AUMs) for the Lovell Peak Allotment portion of the Antelope HMA. Permitted use has remained unchanged at 105 AUMs for sheep since the issuance of the FMUD.

The Goshute Mountain Allotment FMUD was issued June 18, 1998. This decision established the wild horse AML at 0 wild horses (0 AUMs) for the Goshute Mountain Allotment portion of the Antelope HMA. Permitted use for sheep remained unchanged at 465 AUMs.

The Schellbourne Allotment FMUD was issued March 28, 2001. This decision established the wild horse AML at 6 wild horses (72 AUMs) for the Schellbourne Allotment portion of the Antelope HMA. Permitted use for cattle remained at 685 AUMs.

The Cherry Creek Allotment FMUD was issued July 20, 2001. This decision established the AML at 4 wild horses (46 AUMs) for the Cherry Creek Allotment portion of the Antelope HMA. Livestock numbers were adjusted from 6,562 AUMs to the current level of 5,293 AUMs for cattle grazing.

The FMUD for the Deep Creek Allotment Portion of the Antelope Wild Horse Herd Management Area was issued October 25, 2001. This decision established the AML at 30 wild horses (360 AUMs) for the Deep Creek Allotment portion of the Antelope HMA. An adjustment to livestock use was reflected in the PMUD which was carried forward through a livestock use agreement. An "Agreement For Implementation of Changes In Livestock Grazing Use On The Deep Creek Allotment" was prepared in 2000. The purpose of the agreement was to modify the areas of use and address uneven distribution of livestock grazing on the Deep Creek Allotment. The agreement included the three permittees: Kyle Bateman, Kyle Bateman (Bates Permit), and Gail Parker. The permittees signed the agreements during March and April of 2000. The permitted use on the allotment was not adjusted and remains at 2,085 AUMs. Reed Robison was not included in the agreement because he has taken nonuse for many years.

An "Agreement for Livestock Grazing Management and Establishment of Wild Horse Appropriate Management Level for the Becky Springs Allotment" was prepared during September 2001. There are three permittees who hold term permits on the Becky Springs Allotment. They are Need More Sheep Company, Kay Lear, and David Morris. The agreement was signed by all three permittees during October 2001. The agreement does not make changes to season of use or permitted use for cattle or sheep. The current permitted use for the Becky Springs Allotment is 3,842 AUMs of which 2,399 AUMs are for sheep (Need More Sheep Company), 517 AUMs are for sheep (David Morris) and 930 AUMs are for cattle (Kay Lear). This agreement was prepared in consultation with the permittees and is an initial step toward establishing a wild horse AML. This agreement established a wild horse AML of 35 wild horses (420 AUMs) for the Becky Springs Allotment portion of the Antelope HMA.

An "Agreement for Changes in Livestock Grazing Use and Establishment of Wild Horse Appropriate Management Level for the Tippett Pass Allotment" was signed on October 11, 2001. Vidler Water Company is the current permittee. Permitted use was adjusted to 3,914 AUMs (2,646 AUMs cattle and 1,268 AUMs sheep). The remainder of the permitted use of 4,263 AUMs (3,217 AUMs cattle and 1,046 AUMs sheep) was placed in voluntary nonuse for conservation purposes for three years.

Permitted use will be established by kind of livestock for both cattle and sheep. The 8,172 AUMs permitted use on the Tippett Pass Allotment has never been allocated to sheep and cattle. Total permitted use for cattle will be established at 5,863 AUMs with 3,217 placed in voluntary nonuse. Total permitted use for sheep will be established at 2,314 AUMs with 1,046 placed in voluntary nonuse. Use areas and permitted use by use areas were also established. The period of use for the allotment was changed from yearlong to fall/winter/spring. Other livestock management practices were made to include establishment of proper utilization levels, water hauling and movement and distribution of livestock to avoid conflicts with sage grouse areas. This agreement was prepared in consultation with the permittee and is an initial step toward establishing a wild horse AML. This agreement established a wild horse AML of 16 wild horses (192 AUMs) for the Tippett Pass Allotment portion of the Antelope HMA.

## APPENDIX III

### SUMMARY OF POPULATION MODELING OF WILD HORSES

#### **Population Model Overview**

WinEquus is a computer software program designed to simulate population dynamics based on various management alternatives concerning wild horses. Version 1.40 was developed by Stephen H. Jenkins of the Department of Biology, University of Nevada at Reno on April 2, 2002. For further information about the model, please contact Stephen H. Jenkins at the Department of Biology/314, University of Nevada, Reno, NV 89557.

The population model for wild horses was designed to help wild horse and burro specialists evaluate various management strategies that might be considered for a particular HMA. The model uses data on average survival probabilities and foaling rates of horses to project population growth for up to 20 years. The model accounts for year-to-year variation in these demographic parameters by using a randomization process to select survival probabilities and foaling rates for each age class from a distribution of values based on these averages. This aspect of population dynamics is called environmental stochasticity, and reflects the fact that future environmental conditions that may affect a wild horse population's demographics can not be established in advance. The stochastic approach to population modeling uses repeated trials to project a range of possible population trajectories over a period of years, which is more realistic than predicting a single specific trajectory.

#### **Population Modeling Criteria**

The following summarizes the population modeling criteria that are common for the Proposed Action and No Action:

- Starting Year: 2007
- Initial gather year: 2007
- Gather interval: minimum interval of five years (5 year run)
- Sex ratio at birth: 50% female-50% male
- Percent of the population that can be gathered: 80%
- Minimum age for long term holding facility horses: no restrictions
- Foals are included in the AML
- Simulations were run for ten years with 100 trials each

#### **Population Modeling Results**

The Tables show the projected population growth rates. 2007 population numbers are pre gather.

##### **Table 1 growth rate no fertility control**

Average Growth Rate in 10 Years

Lowest Trial	10.6
10 <sup>th</sup> Percentile	13.8
25 <sup>th</sup> Percentile	15.6
Median Trial	16.8
75 <sup>th</sup> Percentile	18.5
90 <sup>th</sup> Percentile	19.6
Highest Trial	22.4

The Tables show the projected population growth rates,  
**Table 2 with no gather**

	Population Sizes in 11 Years*		
	Minimum	Average	Maximum
Lowest Trial	1064	2361	4142
10th Percentile	1215	2787	5276
25th Percentile	1238	2941	5764
Median Trial	1274	3209	6528
75th Percentile	1332	3458	7073
90th Percentile	1406	3718	7822
Highest Trial	1713	4645	9755

- 0 to 20+ year-old horses



## APPENDIX IV

# RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

## Antelope HMA Gather White Pine County, Nevada

On November 7<sup>th</sup>, 2007 a Noxious & Invasive Weed Risk Assessment was completed for the Antelope Herd Management Area (HMA) gather in White Pine County, Nevada. The project consists of selectively remove wild horses, east of the Highway 93 corridor, from the Antelope HMA in the Ely District and the Antelope Valley HMA in the Elko District. This risk assessment only analyzes the potential impacts to noxious and invasive weeds in the Ely District.

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. There are no known infestations currently at the project site, however the following weed species are found in the vicinity:

<i>Acroptilon repens</i>	Russian knapweed
<i>Carduus nutans</i>	Musk thistle
<i>Centaurea stoebe</i>	Spotted knapweed
<i>Cirsium arvense</i>	Canada thistle
<i>Cirsium vulgare</i>	Bull thistle
<i>Lepidium draba</i>	Hoary cress
<i>Lepidium latifolium</i>	Tall whitetop
<i>Onopordum acanthium</i>	Scotch thistle

There is also cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomerus*), bur buttercup (*Ranunculus testiculatus*), and Russian thistle (*Salsola kali*) scattered along roads in the area. This area of the District was last surveyed for weeds in 2003.

**Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.**

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as Moderate (4) at the present time. There are several noxious and invasive weed infestations which already occur within the Antelope HMA, mostly within the Antelope and Schell Mountains. Given the nature of the project (gathering by helicopter, selecting weed free capture sites, etc.) project activities should be able to be implemented without infesting new areas with noxious weeds.

**Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.**

Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (8-10)	Obvious adverse effects within the project area and probable expansion of noxious/invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

This project rates as Moderate (8) at the present time. The Antelope HMA is relatively free from noxious weed infestations, especially in the flats and washes where the capture sites would most likely be established. If new weed infestations spread to the area there would be adverse effects to the surrounding native vegetation. Any increase in cheatgrass could alter the fire regime in the area.

**The Risk Rating is obtained by multiplying Factor 1 by Factor 2.**

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

For this project, the Risk Rating is Moderate (32). This indicates that the project can proceed as planned as long as the following measures are followed:

- Gather capture sites will be chosen in areas which are free from noxious weed infestations.
- To eliminate the transport of vehicle-borne weed seeds, roots, or rhizomes all vehicles used for the completion, maintenance, inspection, or monitoring of ground disturbing activities or for authorized off-road driving will be free of soil and debris capable of transporting weed propagules. All such vehicles and equipment will be cleaned with power or high pressure equipment prior to entering or leaving the work site or project area. Cleaning efforts will concentrate on tracks, feet and tires, and on the undercarriage. Special emphasis will be applied to axels, frames, cross members, motor mounts, on and underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out and refuse will be disposed of in waste receptacles. Cleaning sites will be recorded using global positioning systems or other mutually acceptable equipment and provided to the Field Office Weed Coordinator or designated contact person.
- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for reclamation or stabilization activities, feed, bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely Field Office.
- Removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting staging area sites, etc.)

Reviewed by: \_\_\_\_\_  
 Bonnie Waggoner  
 Ely District Noxious & Invasive Weeds Coordinator

11/7/2007  
 \_\_\_\_\_  
 Date

**APPENDIX V.  
MIGRATORY BIRDS BY ECOTYPE**

Aspen	Montane Riparian	Montane Shrub	Sagebrush	Pinyon/Juniper
<p><b><u>Obligates*:</u></b> see Montane Riparian</p> <p><b><u>Other**:</u></b> Northern Goshawk Calliope Hummingbird Flammulated Owl Lewis's Woodpecker Red-naped Sapsucker Mountain Bluebird Orange-crowned Warbler MacGillivray's Warbler Wilson's Warbler</p>	<p><b><u>Obligates:</u></b> Wilson's Warbler MacGillivray's Warbler</p> <p><b><u>Other:</u></b> Cooper's Hawk Northern Goshawk Calliope Hummingbird Lewis's Woodpecker Red-Naped Sapsucker Orange-crowned Warbler Virginia's Warbler Yellow-breasted Chat</p>	<p><b><u>Obligates:</u></b> None</p> <p><b><u>Other:</u></b> Black Rosy Finch Black-throated Gray Warbler Calliope Hummingbird Cooper's Hawk Loggerhead Shrike Blue Grosbeak Vesper Sparrow MacGillivray's Warbler Orange-crowned Warbler Swainson's Hawk Western Bluebird</p>	<p><b><u>Obligates:</u></b> Sage Grouse</p> <p><b><u>Other:</u></b> Black Rosy Finch Ferruginous Hawk Gray Flycatcher Loggerhead Shrike Vesper Sparrow Prairie Falcon Sage Sparrow Sage Thrasher Swainson's Hawk Burrowing Owl Calliope Hummingbird</p> <p><b><u>Other associated species:</u></b> Brewer's Sparrow Western Meadowlark Black-throated Sparrow Lark Sparrow Green-tailed Towhee Brewer's Blackbird Horned Lark Lark Sparrow</p>	<p><b><u>Obligates:</u></b> Pinyon Jay Gray Vio</p> <p><b><u>Other:</u></b> Ferruginous Hawk Gray Flycatcher Juniper Titmouse Mountain Bluebird Western Bluebird Virginia's Warbler Black-throated Gray Warbler Scott's Oriole</p> <p><b><u>Other Associated Species:</u></b> Mountain Quail Scrub Jay Black-billed Magpie Clark's Nutcracker Mountain Chickadee</p>

Salt Desert Scrub	Lakes (Playas)***	Cliffs and Talus
<p><b><u>Obligates:</u></b> None</p> <p><b><u>Other:</u></b> Loggerhead shrike Burrowing owl Sage thrasher Sage sparrow</p> <p><b><u>Other Associated Species:</u></b> Horned lark Brewer's sparrow Black-throated sparrow Lark sparrow Rock wren</p>	<p><b><u>Obligates (PIF-listed as Wetlands/Lakes):</u></b> White-faced Ibis Snowy Plover American Avocet Black Tern</p> <p><b><u>Other (PIF-listed as Wetlands/Lakes):</u></b> Sandhill Crane Long-billed Curlew Short-eared Owl</p> <p><b><u>Other Associated Species:</u></b> (Wetlands/Lakes) American bittern Great Egret Snowy Egret Cattle Egret Black-crowned Night Heron Marsh Wren Common Yellowthroat Yellow-headed Blackbird</p>	<p><b><u>Obligates:</u></b> Prairie Falcon Black Rosy Finch</p> <p><b><u>Other:</u></b> Ferruginous Hawk</p> <p><b><u>Other Associated Species:</u></b> Golden Eagle White-throated Swift Say's Phoebe Common Raven Cliff Swallow Violet-green Swallow Canyon Wren Rock Wren</p>

\* "Obligates" are species that are found only in the habitat type described in the section. [Habitat needed during life cycle even though a significant portion of their life cycle is supported by other habitat types]

\*\* "Other" are species that can be found in the habitat type described the Nevada Partners in Flight Bird Conservation Plan.

\*\*\* Other Associated (Wetlands/Lakes) Species are predominately associated with wetlands where emergent aquatic vegetation provides cover and foraging areas. Otherwise, snow pond/playas/manmade reservoirs could provide some seasonal habitat for some of the species shown.

## **APPENDIX VI** **SPECIAL STATUS SPECIES**

### **Definitions of Special Status Species and BLM Policy**

**Federally Threatened or Endangered Species:** Any species that the U.S. Fish and Wildlife Service has listed as an endangered or threatened species under the Endangered Species Act throughout all or a significant portion of its range.

**Proposed Threatened or Endangered Species:** Any species that the Fish and Wildlife Service has proposed for listing as a Federally endangered or threatened species under the Endangered Species Act.

**Candidate Species:** Plant and animal taxa that are under consideration for possible listing as threatened or endangered under the Endangered Species Act.

**BLM Sensitive Species:** Species 1) that are currently under status review by the U.S. Fish and Wildlife Service, 2) whose numbers are declining so rapidly that Federal listing may become necessary; 3) with typically small and widely dispersed populations; or 4) that inhabit ecological refugia or other specialized or unique habitats.

**State of Nevada Listed Species:** State-protected animals that have been determined to meet BLM's Manual 6840 policy definition.

Nevada BLM policy is to provide State of Nevada Listed Species and Nevada BLM Sensitive Species with the same level of protection as is provided for candidate species in BLM Manual 6840.06C. Per wording for Table IIa. in BLM Instruction Memorandum No. NV-98-013, Nevada protected animals that meet BLM's 6840 policy definition are those 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) 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 a federally listed, proposed, or candidate species.

**Special Status Species known or likely to occur within the Antelope and Antelope Valley HMAs**

COMMON NAME	SCIENTIFIC NAME	Habitat Types						
		Sagebrush <sup>1</sup> /grass	Mountain <sup>2</sup> / Shrub	Riparian <sup>3</sup>	Cliffs/ Talus <sup>4</sup>	Pinyon/ Juniper <sup>5</sup>	Salt Desert Scrub <sup>6</sup>	Playas/ Lakes <sup>7</sup>
<b>BLM Sensitive Species</b>								
bald eagle (winter resident)	<i>Haliaeetus leucocephalus</i>	X	X	X	X			
golden eagle	<i>Aquila chrysaetos</i>	X	X		X			
Western burrowing owl	<i>Athene cunicularia</i>	X					X	
ferruginous hawk	<i>Buteo regalis</i>	X			X	X		
Swainson's hawk	<i>Buteo swainsonii</i>	X	X	X				
northern goshawk	<i>Accipiter gentilis</i>			X				
peregrine falcon	<i>Falco peregrinus</i>	X	X	X	X			
prairie falcon	<i>Falco mexicanus</i>	X	X	X	X,O			
loggerhead shrike	<i>Lanius ludovicianus</i>	X	X				X	
vesper sparrow	<i>Poocetes gramineus</i>	X	X					
juniper titmouse	<i>Baeolophus griseus</i>					X		
pinyon jay	<i>Gymnorhinus cyanocephalus</i>					X,O		
gray vireo	<i>Vireo vicinor</i>					X,O		
short-eared owl	<i>Asio flammeus</i>	X	X	X				X
flamulated owl	<i>Otus flammeolus</i>			X				
Northern long-eared owl	<i>Asio otus</i>	X	X	X				
sage grouse	<i>Centrocercus urophasianus</i>	X,O	X	X				
black rosy finch	<i>Leucosticte atrata</i>	X	X		X			
long-billed curlew	<i>Numenius americanus</i>							X
snowy plover	<i>Charadrius alexandrinus</i>							X,O
sandhill crane	<i>Grus canadensis</i>							X
black tern	<i>Chlidonias niger</i>							X,O
Preble's shrew	<i>Sorex preblei</i>			X,O				
silver haired bat	<i>Lasionycteris noctivagans</i>			X				
western pipetrelle	<i>Pipistrellus hesperus</i>			X				X
long-eared myotis	<i>Myotis evotis</i>			X	X	X		
long-legged myotis	<i>Myotis volans</i>				X	X		
Yuma myotis	<i>Myotis yumanensis</i>			X	X			
spotted bat	<i>Euderma maculatum</i>			X	X			
little brown bat	<i>Myotis Lucifugus</i>			X	X	X		
small-footed myotis	<i>Myotis ciliolabrum</i>			X	X	X		
fringed myotis	<i>Myotis thysanodes</i>		X	X	X	X		
Pacific Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>			X	X,O	X		

Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>		X	X				X
pallid bat	<i>Antrozous pallidus</i>	X		X	X,O	X	X	
hoary bat	<i>Lasiurus cinereus</i>			X		X,O		
pygmy rabbit	<i>Brachylagus idahoensis</i>	X,O	X	X				
big brown bat	<i>Eptesicus fuscus</i>	X	X	X		X	X	
short –horned lizard	<i>Phrynosoma douglassii</i>	X			X			
<b>State of Nevada Protected Species</b>								
white faced ibis	<i>plegadis chihi</i>							X

O Obligate Species – Obligate species are species which are dependent on a specific habitat type to complete their life cycles. They may; however, use other habitats as well.

<sup>1</sup>The Sagebrush/grass habitat type is dominated by big sagebrush, low sagebrush, shadscale, bud sage, and rabbit brush, respectively. Associated grass species include: bluebunch wheatgrass, Idaho fescue, Sandberg bluegrass, needlegrass, and bottlebrush squirreltail. Forbs include arrowleaf balsamroot, lupine, phlox, and aster

<sup>2</sup>The Mountain shrub habitat type can be found in the mid-upper elevations within the allotment. Representative sagebrush species include: mountain big sagebrush, low sagebrush, and basin big sagebrush. The pre-dominant browse species are bitterbrush, snowberry and serviceberry. Associated grass species are bluebunch wheatgrass and Idaho fescue.

<sup>3</sup>Riparian habitats are primarily lentic (standing water) within the Complex. Lentic riparian areas include springs, seeps, wet and mesic meadows. Vegetation in lentic areas generally include: sedges, rushes, aspen, willow species, alder, Complex species.

<sup>4</sup>Cliffs and Talus habitat types occur as a result of uplift and erosion within erosion resistant rock types such as silica and carbonate-rich materials. Talus occurs as result of fallen rock which collects at the base of the cliffs. In general, plants are absent from the rock faces.

<sup>5</sup>Pinyon/Juniper habitat is dominated by stands of either singleleaf pinyon (*Pinus monophylla*) or any of four species of juniper including Utah (*Juniperus osteosperma*), Western (*J. occidentalis*), Rocky Mountain (*J. scopulorum*) or California (*J. californica*).

<sup>6</sup>Salt desert scrub habitat is characterized by the presence of a variety of salt-tolerant shrubs of the family Chenopodiaceae, predominantly shadscale and greasewood.

<sup>7</sup>Playa and wetland habitat within the complex is primarily characterized by seasonal wetlands of varying character, quality and periodic longevity.

## APPENDIX VII

### Mailing List for EA NV 042 -08-04

Craig C Downer  
Wilde Brough Humboldt Outfitters, Inc  
Steve Foree NDOW  
Patience O'Dowd  
Wild Horse Observers Assoc  
Vaugh Higbee  
Kenneth Jones  
Wild Horse Commission  
Cathy Barcomb  
Marge Prunty  
RC McClymonds  
Stuart Taylor  
Rob Stokes  
Elko County  
Bobbi Royale  
Wild Horse Spirit  
John Neff  
Tribal Chairman  
Shoshone-Paiute Tribes of Duck Valley  
Leona Rawley  
H. Bonnie & Chuck Matton  
Wild Horse Preservation League  
Eureka County  
Dept of Natural Resources  
Horace Smith  
Cottonwood Ranch  
Carl Slagowski  
Jack & Irene Walther  
Gary Back  
SRK Consulting  
Scott Egbert  
Egbert Livestock LLC  
John Carpenter  
Gale Dupree  
NVWF  
Rex Cleary  
Resource Concepts Inc  
Patricia and Lana Paul  
Wade West  
Robin C Lahnes  
Senator Dean Rhoads  
7H Ranch LLC  
Ms. Karen A Sussman  
Ira Renner  
Harold Rother Farms Inc  
Kathryn M. Cushman  
Karl Lind  
Honorable Harry Reid  
Karen Klitz  
Wesley Bowlen  
Hale Bailey  
Ellison Ranching Company  
ATTN: Bill Hall  
Martha Hoots

Jack and Terry Bowers  
Theresa Monoletti  
Richard Sewing  
National Mustang Assoc Inc  
Gary Bengochea  
Nevada First Corporation  
Michael Stafford  
State of Nevada Clearing House  
Katie Fite  
Western Watersheds Project  
Congressman Jim Gibbons  
Public Lands Foundation  
Leta Collord  
Naomi Pratt  
Holland and Hart, LLP  
Rex Steninger  
Joe Cumming  
Boss Tanks, Inc  
Karla Jones  
Nevada Ranch Service  
Kenny Merkley  
Cowboy John Tours  
Mori Ranches  
Peter Mori  
Betty Kelly  
Wild Horse Spirit  
    Andrea Lococo  
    The Fund for Animals Inc  
Von Sorenson  
Dawn Lappin  
Wild Horse Organized Assistance  
Need More Sheep Company  
Pine Valley Sheep Ranch  
Chournos Inc  
Sherie Goring  
LW Peterson  
Charles Young  
H&R Livestock  
Thousand Peaks Ranch  
Ms. Sharon Crook  
Scott Merrill  
Friends of Nevada Wilderness  
    Friends of Nevada Wildlife  
Attn: Tom Myers  
Hawkwatch International, Inc.  
Sierra Club  
    Sierra Club - Toiyabe Chapter  
    Attn: Marjorie Sill  
Nevada Outdoor Recreation Assn.  
Attn: Charles Watson  
    The Wilderness Society  
    Attn: Sara Barth  
    Sierra Club - Toiyabe Chapter  
    Attn: Rose Strickland  
Natural Resources Defense Council  
Attn: Johanna Wald  
    Wilderness Impact Research Foundation  
    Attn: Grant Gerber



Red Rock Audubon Society  
Attn: John E. Hiatt  
Roger Scholl  
Cindy McDonald  
Paul Bottari  
Nevada High Country Tours  
Ronald P. McRobbie  
Air Force Regional Environmental Office  
Nevada Cattlemen's Association  
Joe Guild  
    Simplot Land & Cattle  
Parasol Ranching LLC  
Jerry Goodwin  
Pelter Ranch  
c/o Robert Pelter  
    Jeffrey Roche  
    Animal Welfare Institute  
    Attn D.J. Schubert, Wildlife Biologist  
Ferris & Marlene Brough  
Ms Anne Charlton  
Animal Rights Law Center  
S I Newhouse Ctr for Law Justice  
Harvey Healey  
Dr. Donald A Molde  
Ms. Christine Stones  
Ely Shoshone Tribe  
Roberta L. Moore  
Great Basin National Park  
Wild Horses Forever  
c/o Jerry Reynoldson  
Tina Nappe  
Barbara Warner  
Diane Nelson  
Wild Horse Sanctuary  
Nora & Charles Watson, Jr  
Mr. Michael J. Podborny  
NDOW  
Mr. Michael S. Wickersham  
NDOW  
Mr. Mike Scott  
NDOW  
Elnoma Reeves  
Sterling Wines  
Kyle W. Bateman  
Double U Livestock LLC  
C/O Jim West  
CL Cattle Company, LLC  
C/O Chris Collis  
Kitt Lear  
Kay & Mary K Lear  
Carol Sherman  
C/O Allen Sherman  
Gail Parker  
Turner & Irlbeck Ran  
C/O Kathy Bertrand  
Herbert Stathes  
Kathleen Bertrand  
Henry C. Vogler

Friends of Nevada Wilderness  
Charles Baun  
URS Corp  
Ms. Laurel Marshall  
David Buhlig  
Nevada Land and Resource Co  
Betsy MacFarlan  
ENLC  
NDOW  
Brad Hardenbrook  
George Lea, President  
Public Lands  
Foundation  
John McLain, Principal  
Resource Concepts, Inc  
USFWS, Southern Nevada Field Office  
Mr. Lucas J. Phillips  
Ely Ranger District  
Nevada Farm Bureau Federation  
Barbara Flores  
Colorado Wild Horse and Burro Coalition  
Steven Fulstone  
Executive Director  
Animal Protection Institute of America  
Mr. Curtis A Baughman  
NDOW  
Nevada Dept of Agriculture  
Ms Patricia Irwin  
US Forest Service  
White Pine Co Commissioners  
National Wild Horse Assoc  
Mr. Bob Hallock  
US Fish and Wildlife Service  
John Blethen  
Ms. Anna M. Fritz  
Mary Bergevin  
Ms. Noreen Byatt  
Ms. Cindy A. Seaver  
Florette Laiche  
Dr. Kathie Kingett  
Rebecca Brickner  
Phillip N Williams  
Irving and Melody Boime  
Linda Beck LaRoche, R.N.  
Katherine Norman  
Rebecca Brickner  
Theresa Ziadie  
Patricia Brecto  
Ann Talley  
Juliette Fry  
Pershing County High  
Student Council  
Round Mountain High School  
Student Council  
Eldorado High School  
Student Council  
Irene Slater  
Elaine M. Osborne

Lydia Coeven  
Vivian Feagan  
Joann Condellone  
Mr. & Mrs. Larry Stites  
Cammie M. Green  
Sallie Carlson  
Ms. Marilyn Evenson  
Richard R. Getz Jr.  
Ms. Vicki Ginoli  
Cherie Newman  
Margaret Barsh  
Bette Mikkelson  
Norman Burstein  
Norman & Bonnie Salto  
Carol Rutkowski  
Ms. Martha Stavish  
Joseph Geralamo  
Patricia M.C. Hugh  
Mr. Adolpho Lopez  
Mr. Steven Barrows  
Cheryl Fisher  
Ms. Patricia Joralemon  
Vicki Tri  
Ms. Rhoda M. Kern  
Mr. Jeff Anderson

**APPENDIX VIII**  
**Summary of Comments Received Following Review of the Preliminary Gather Plan EA**  
**and How BLM Used These Comments in Finalizing the Environmental Assessment**

No.	Commenter Name	Comment	BLM Response
1	C. MacDonald Kathie Kingett	Please explain how the wild horse population of 3.3 times AML is a result of the new fence erected by NDOT? Please provide documentation as to how BLM determined the reproduction rate is 20-25%? Please explain how past action have resulted in the current population of wild horses as listed under the Conclusion section of the EA.	This statement has been amended in the final EA (see page 2). In part, the new fence is contributing to the number of wild horses current presently east of Hwy 93 Alternate as it has prevented the animals from returning to their traditional winter range. However, an additional factor appears to be that about twice the number of wild horses remained following the last average annual growth rate of about 25%, leading to the current overpopulation and resulting resource damage.
2	C. MacDonald	Please explain what the Bureau would consider a catastrophic loss of wild horses this winter? Will there be a catastrophic dieoff in the corrals instead?	This has been clarified in the final EA (refer to page 4).
3	C. MacDonald	What is the estimated body condition score of the horses at this time?	Currently, the majority of the horses are in moderate body condition. Some older horses are in 3-4 condition. The majority of the horses are beginning to drop in condition which is why a gather to remove them before any further decline is experienced has been proposed.
4	C. MacDonald	Will BLM provide pictures of the current range and horse conditions as verification?	This information is located at the Ely Field Office.
5	C. MacDonald	Please provide dates of monitoring and results that indicate lack of forage.	This information is located at the Ely Field Office.
6	C. MacDonald	What is the estimated forage requirements over the big game species to sustain current populations over the winter due to current catastrophic conditions of range resources? Will present big game population levels place these animals at risk of major dieoffs due to the current crisis? What mitigation is BLM proposing to protect the range from big game population utilization? What is the current authorized use of forage by big game within the proposal area? What management actions is NDOW proposing? Are elk contributing to the current crisis?	Information about forage allocations for wildlife is located at the Ely Field Office. The NDOW is responsible for managing wildlife populations on public lands and for mitigating any potential impacts to wildlife from the current ongoing drought. Additional information can be obtained from NDOW.
7	C. MacDonald	BLM states historic use by wild horse populations has contributed to rangeland health standards not being achieved. How far back does BLM define this historical use when wild horse removals have already occurred twice in five years with no significant change in rangeland health?	This comment is outside the scope of the current environmental analysis which is limited to the need to remove excess wild horses to achieve a thriving natural ecological balance and prevent further deterioration of the range. However, it should be noted the current wild horse population indicates BLM has not yet achieved or maintained wild horse populations within the established AML. Until AML is achieved and maintained, the

			BLM can not effectively evaluate whether or not the AML is set properly or requires adjustment (either up or down) in order to achieve healthy rangelands.
8	C. MacDonald	BLM states AML was set by a wild horse decision. Please provide actual title of the referenced document with associated EA# and date of decision.	This statement was incorrect and has been corrected in the final EA (refer to page 7).
9	C. MacDonald	Please provide the contractors name and the estimated cost of the removal.	This comment is outside the scope of this environmental analysis. BLM has determined that an excess of wild horses is present and is required to remove them immediately under the 1971 WFRHBA.
10	C. MacDonald Toni Siegrist Rebecca Brickner Kathie Kingett	<p>What are the mileage limits BLM will allow horses to be run during the capture? What are the temperature limits BLM has established to ensure horses will not be driven under inhumane conditions?</p> <p>Helicopters and planes are very upsetting and nerve wracking to wild horses. A better, quieter way of moving them should be found.</p> <p>Horses should be fed hay right away once they are captured.</p> <p>Horses when gathered are abused killed and stressed by those who could care less.</p>	<p>As stated in the SOPs (EA, Appendix I) the rate of movement and distance animals travel shall not exceed limitations set by the BLM who will consider terrain, physical barriers, weather, condition of the animals and other factors. Additionally, BLM</p> <p>Nevada has captured nearly 18,000 animals over the past three years with mortality of only one-half of one percent which is very low when handling animals. These data support the safe, effective and humane treatment of wild horses captured and handled under the SOPs.</p> <p>When horses are initially captured, they are then transported from the temporary trap site to the temporary holding facility where they are sorted, then fed and watered. This can take up to 10 hours. If it will take more than 10 hours, then they are fed at the trap site.</p> <p>Also refer to the EA, pages 7-10 for additional information on impacts to individual wild horses and the herd relative to capture and handling operations.</p>
11	C. MacDonald	Please explain why BLM has listed N/A in Table 4 (Livestock Grazing Adjustments).	This has been clarified in the final EA (refer to page 14).
12	C. MacDonald	Please explain why BLM cites disturbance to livestock when BLM officials say there will be no livestock grazing within the HMAs.	This information has been corrected in the final EA (refer to page 16).
13	C. MacDonald	Why is BLM not considering wild horse removals west of Hwy 93 Alternate if water is currently limited?	BLM has evaluated on the ground conditions, including the available forage, water and animal conditions and believes there is adequate forage and water to sustain animals in a healthy condition throughout the coming winter.
14	C. MacDonald	Please explain why BLM is not interested in hearing from the public via email regarding the proposed action?	BLM does not have the technology in place to accept a large volume of email comments. Rather, under our current system, email comments must go to an individual's email account which is limited in size. Once the maximum volume is exceeded, email is rejected and BLM has no means of tracking the rejected emails or responding to the comments contained in the rejected emails. Therefore, to ensure we receive all the comments and can review and consider them, we ask that all comments be postmarked or faxed.

15	Marilyn Evenson	Are drought conditions so severe that wild horses may die?	This emergency gather is necessary to prevent a catastrophic loss of wild horses within the HMAs due to continuing drought conditions (refer to EA, page 2).
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16	Phyllis Stiles Toni Siegrist Rebecca Brickner MS Connie Holt Brecto Irene Slater Barbra Warner	<p>What an unbelievable difference between authorized livestock use and wild horse numbers – why is the number of wild horses so much smaller than livestock numbers? How have grazing permits been increased in the past to get such a difference in the first place?</p> <p>I think the problem is there are too many cattle grazing on the land – there should be fewer cattle.</p> <p>The cattlemen should use their own land they get paid for selling their livestock instead of taking free grazing land from the horses.</p> <p>You need to reduce the allotment of grazing land for the cattle and sheep that have been allowed to infringe on the land.</p> <p>I believe that sheep and cattle should be limited even more sharply in their numbers to allow for an increased number of wild horses.</p> <p>The removal of wild horses allows cattle and sheep which causes range deterioration as a GAO study proved.</p>	<p>This comment is outside the scope of this environmental analysis which is limited to the need to remove excess wild horses to achieve AML and a thriving natural ecological balance and multiple use relationship and avoid a catastrophic loss of wild horses due to lack of forage during the coming winter.</p> <p>Under the 1971 WFRHBA, BLM is required to establish an appropriate management level (AML) of wild horses (or burros) for each HMA. AML is defined as the number of wild horses that can be sustained within a designated HMA which achieves and maintains a thriving natural ecological balance keeping with the multiple-use management concept for the area. The AML for the Antelope and Antelope Valley HMAs were established through multiple use decisions (MUD) between 1990 and 2002 following in-depth analysis of monitoring data collected over several years. During this process, BLM consulted with the interested public. The public was also afforded an opportunity for administrative review of BLMs final decisions. For more information, refer to the EA, Appendix II which summarizes the allotment/HMA, AML, MUD, and date of MUD.</p> <p>Under the 1971 WFRHBA, BLM is limited to managing wild horses or burros only where they were found in 1971 (about 16 million acres in Nevada) while livestock grazing is authorized under the 1934 Taylor Grazing Act and is permitted on about 48 million acres of public land in Nevada. Since 1971, authorized livestock use has been reduced by about 44%.</p>
17	Phyllis Stiles	What is meant by long term holding and how stressful and unnatural is this for wild animals?	This comment is outside the scope of this environmental analysis. However, LTH facilities are essentially sanctuaries for older, unadoptable excess horses. These facilities are large ranches located in SD, OK, and KS where horses can roam free and graze off native pasture or hay during the winter. Horses typically adjust to their new home within a few days to a week or two.
18	Phyllis Stiles Toni Siegrist Kathie Kingett	How truly safe are BLM adoptions and what are your adoption criteria?	<p>This comment is outside the scope of this environmental analysis. However, information on BLM's adoption program, including adoption criteria, is available at <a href="http://www.wildhorseandburro.blm.gov">www.wildhorseandburro.blm.gov</a></p> <p>Once excess wild horses or burros are removed from the range, they are placed in BLM facilities where they are prepared for</p>

			adoption, sale or in long term holding in accordance with the authority provided by Congress. Excess animals are not sold for slaughter and BLM aggressively works with law enforcement to prosecute any individuals who do.
19	Toni Siegrist Barbra Keenan Ms. Vivian Feagan	<p>It seems to me fencing along both sides of US Hwy 93 has caused this overpopulation and why there is not enough food or water for the horses. Horses need to be left in the wild and they need enough space to roam free.</p> <p>When the road divided the range I think BLM could have taken humane action.</p> <p>Horses should not be fenced from their natural range.</p>	These comments are incorporated in Issue 2 (EA, page 3). Additionally, refer to BLM's response to Comment 1 above.
20	Toni Siegrist Lydia Corvese Barbra Warner	<p>There has to be a way to bring in water rather than gather these horses.</p> <p>The money for this gather should be spent on providing comforts for the wild horse from time to time like water.</p>	<p>This comment is outside the scope of this analysis. Water is not the limiting factor for wild horses within the affected area at this time – a lack of forage to carry the animals in a healthy condition through the winter is at issue.</p> <p>Under the 1971 Wild Free-Roaming Horses and Burros Act (WFRHBA), BLM is prohibited from providing supplemental feed to wild horses and burros. The WFRHBA requires BLM to manage wild horses and burros on the range at the minimum feasible management level. A review of the conference notes when the Act passed also affirms the Congress' intent was to manage wild horses and burros as wild populations and not as "zoo herds".</p>
21	Toni Siegrist	It needs to be done in a way that individual herds are not split up. It should be planned in such a way that there is plenty of food, water and space for everyone.	This comment is incorporated in Issue 2 (EA, page 3). The impacts of the proposed removal on individual wild horses and the herd are disclosed in the EA (page 7-9).
22	Ann S. Mathews	The most humane and economical method to rid the area of horses is to let nature take its course; i.e. leave the horses where they are.	This comment is one of many incorporated in Issues 2 and 3 (EA, page 3). Under the 1971 Wild Free-Roaming Horses and Burros Act (WFRHBA) BLM is required to remove excess animals immediately upon determination that excess animals are present. Allowing horses to suffer from starvation is cruel and inhumane when viable options exist.

23	Barbara Warner Kathie Kingett	You have not allowed 30 days to comment on this proposal. This is not fair.	This comment is outside the scope of this environmental analysis. In accordance with BLM policy, field offices will make the preliminary EA available to the public for a 30 day review, except when herd or habitat conditions are being adversely impacted and immediate action is required. The proposed action is needed immediately in order to remove excess animals before their condition deteriorates due to lack of food.
24	Kathie Kingett	You state you cannot use birth control as an alternative because there is not time. Was anything done with fertility control to avoid these high numbers?	<p>The use of fertility control is an alternative considered but eliminated from detailed study. See EA, page 5.</p> <p>While BLM is aggressively pursuing fertility control research in an effort to develop an effective fertility control agent, current methods are not 100% effective nor are they readily available and practical to use for thousands of wild horses across millions of acres of public land. At the present time, a one year fertility control agent shows the greatest promise, but a practical means to deliver the agent to wild horses on an annual basis has not yet been found.</p>
25	Elaine M. Osborne	2 million horses once roamed the west, we now have 25000 and BLM wants to remove 7000?	This comment is outside the scope of this environmental analysis.