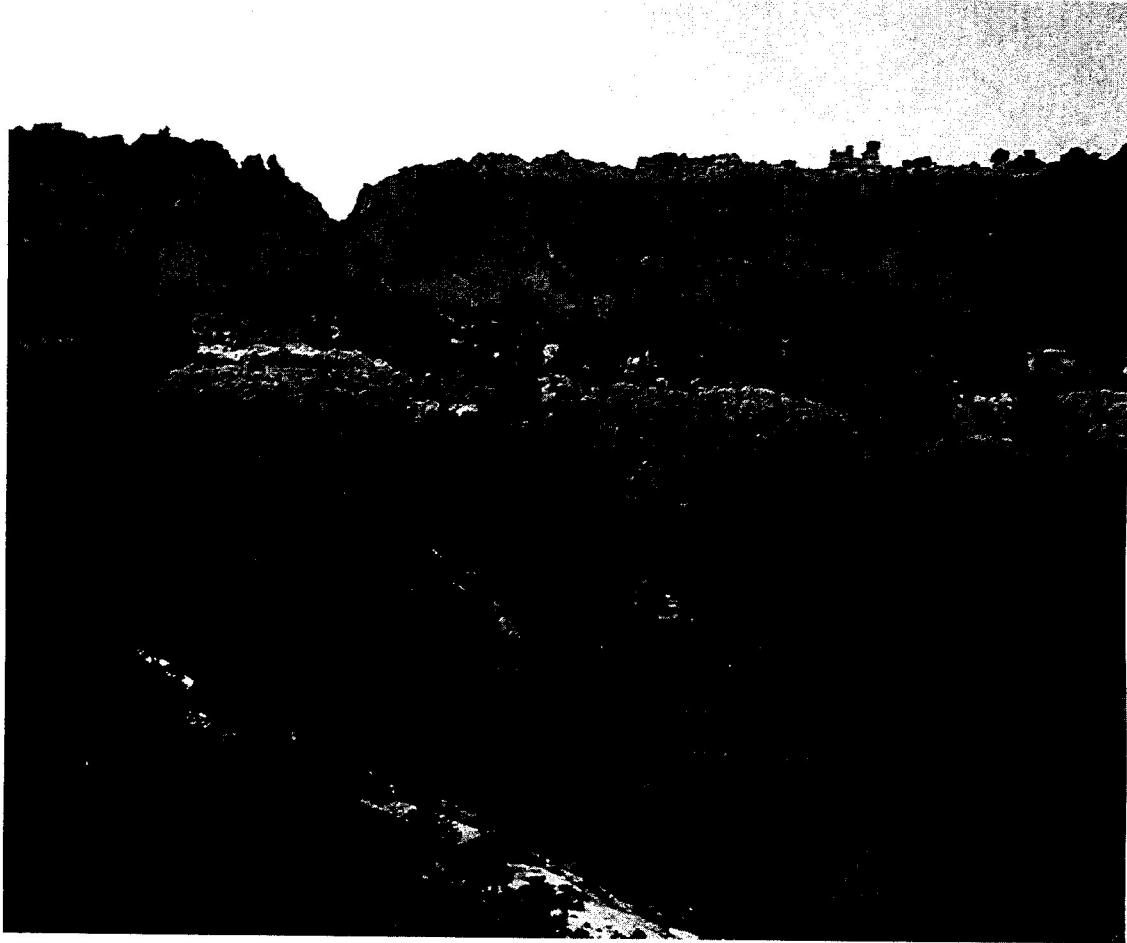


CHAPTER 3.8 EXCERPTED FROM:

Ely Proposed Resource Management Plan/Final Environmental Impact Statement



Volume I (Chapters 1, 2, and 3) November 2007

COOPERATING AGENCIES:

Great Basin National Park
Humboldt-Toiyabe National Forest
Nellis Air Force Base
Nevada Department of Transportation
Nevada Division of Minerals
Nevada Department of Wildlife
Nevada State Historic Preservation Office

Lincoln County
Nye County
White Pine County
Duckwater Shoshone Tribe
Ely Shoshone Tribe
Moapa Band of Paiutes
Yomba Shoshone Tribe



BLM

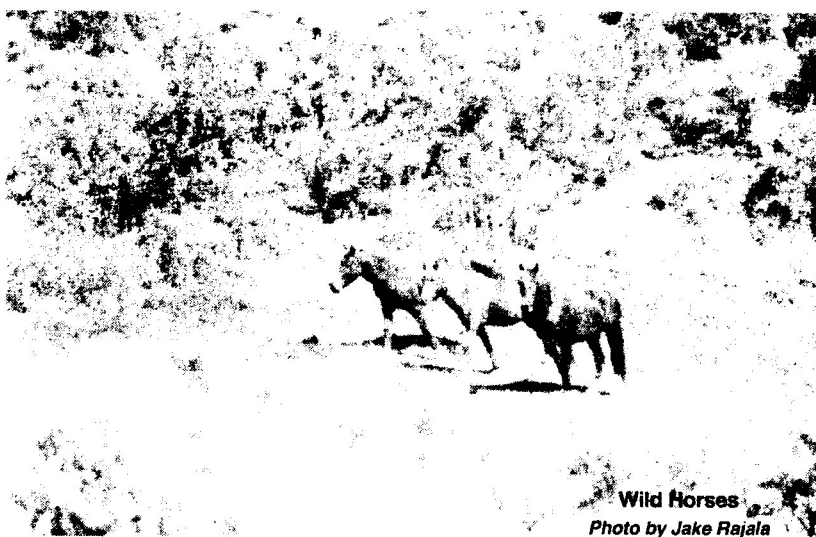
Ely Field Office / Nevada

3.8 Wild Horses

3.8.1 Existing Conditions

Current wild horse herds originated from animals released into native habitats since the early white exploration and settlement in the region in the 1800s (see Section 3.9, Cultural Resources). The current populations incorporate genetic material and traits from a wide variety of breeds used historically within the region. Some of the wild horses in the planning area have descended from mining stock and tend to have a draft appearance; others are derived from ranch stock or cavalry remount ancestry. Size and conformation usually are correlated with that ancestry. The most predominant colors are sorrels and bays, but other colors and patterns also are represented. Although they are not a native species, wild horses contribute to the biodiversity of the region, just like all other species present in the planning area.

Herd structure consists of a lead mare, a dominant stallion, and other mares and foals. From a distance, the lead mare frequently can be recognized by her agitation and vigilance. When a perceived threat materializes, she will take the herd away to a safer location. The stud, or stallion, spends much of his time segregating the herd from bachelor studs, which form small bands on the periphery of the main band. Occasionally, one of these studs will challenge the lead stallion for dominance.



Wild Horses
Photo by Jake Rajala

Although some predation (primarily by mountain lions) is known to occur, mortality due to predation is relatively limited in most herds because of the preponderance of open spaces and expanses in the planning area. Large predators require cover for stealth and stalking efficiency.

Wild horses compete with livestock and wildlife for available forage. There are both differences and similarities in dietary overlaps and food preferences (Hubbard and Hansen 1976). Managers, biologists, and interested public traditionally have perceived that free-roaming horses are ecologically equivalent to domestic cattle. Both species are regarded as equivalent in calculating animal unit months and having the same influence on structure, function, and composition of semi-arid ecological systems. Beever (2003) stated that it may be inappropriate to assume that influences of horses mirror influences of cattle or other ungulates. The author states that free-roaming horses have an evolutionary history that has given rise to a unique suite of behavioral, morphological, and physiological traits. Horses have a larger body size than cattle and physiologically are less efficient digesters of grass and other forage, therefore, requiring greater quantities of forage. Horses are one of the least selective grazers in western North America. Fewer plant species may remain ungrazed in areas occupied by wild horses compared to areas occupied by cattle and

3.0 AFFECTED ENVIRONMENT

other ungulates. Because of this non-selectivity and use of a lower quality diet, horses must consume 20 to 65 percent more forage than cattle per unit of body weight. In addition, horses physically are able to remove vegetation closer to the ground, sometimes with adverse effects.

3.8.2 Trends

After passage of the Wild Free-Roaming Horse and Burro Act (Public Law 92-195) in 1971, a comprehensive inventory was conducted in the planning area. Approximately 700 wild horses were found on 29 areas; these were designated as herd areas. The wild horse population in the planning area is approximately 2,000 horses at the present time. Some herds currently exceed the level that can be supported on a long-term basis by the available forage and water. Herd recruitment numbers greatly exceed the numbers being adopted or being placed into the process for eventual adoption.

Since 1973, when the horse and burro adoption program began, the two legal means of disposing of surplus, gathered animals has been through public adoptions and euthanasia. Some animals, especially older studs, lack the physical appeal and disposition that attract adopters. Ultimately, when these animals are perceived as unadoptable, they are returned to holding facilities or released back onto public lands. Euthanasia is no longer used for population control and is not likely to be resumed. Population trends continue to move upward because annual reproduction and recruitment considerably outnumbers adoptions. Population reductions are limited by the fact that herd recruitment exceeds the legal methods and mechanisms for disposal. With present high numbers on the range, the potential for negative impacts is extremely high.

In the fall of 2004, Congress amended the 1971 Act to facilitate the sale of animals over 10 years of age and those that had been offered unsuccessfully for adoption at least three times. It is too soon to judge the effectiveness of the amendment relative to control of herd populations.

In response to herd population problems, the Ely Field Office has attempted in some areas to slow natural reproduction by inoculating mares with an immunocontraceptive called porcine zona pellucida. Research continues for the development and testing of an effective multi-year vaccine that potentially could lower herd recruitment rates to a more desirable level.

3.8.3 Current Management

Perhaps no other federal program receives a higher level of public interest and scrutiny than the wild horse program. The health, nutrition, and general well being of wild horse herds are closely monitored by multiple public organizations for a variety of purposes and reasons. These groups present unique opportunities for cooperative and collaborative partnerships as well as for controversy. Such groups in Nevada have provided monitoring assistance, publicity for the program via training demonstrations and wild horse and burro shows, development and maintenance of wild horse projects, orphan foal adoptions, volunteers to assist in compliance checks, and the offer of pasture for surplus or unadoptable animals.

Following passage of the Wild Free-Roaming Horse and Burro Act of 1971 (Public Law 92-195), 29 herd areas within what is now the planning area were identified as having wild horse populations. Some of these were combined for management purposes, resulting in 25 herd management areas, one of which was later dropped under provisions of the Desert Tortoise Amendment to the Caliente MFP. The remaining 24 herd management areas encompass approximately 5.4 million acres of BLM-administered lands in the planning area, or approximately 45 percent of the entire planning area (**Table 3.8-1**). The smallest of the herd management areas is 19,500 acres; the largest is nearly 800,000 acres. There are no wild horse ranges designated within the planning area. The current established appropriate management level in the planning area is 2,141 animals.

Table 3.8-1
Herd Management Areas Under the Jurisdiction of the Ely Field Office

Herd Management Areas	Size (acres)	Appropriate Management Level Range
Antelope	389,900	324
Applewhite	30,300	1
Blue Nose Peak	84,600	1
Buck and Bald	799,500	423
Butte	427,800	95
Cherry Creek	35,000	0-0
Clover Creek	33,100	1-14
Clover Mountains	168,000	1-16
Deer Lodge Canyon	105,300	30-50
Delamar Mountains	183,600	51-85
Diamond Hills South	19,500	22
Dry Lake	487,800	94
Highland Peak	136,100	20-33
Jakes Wash	153,700	1-21
Little Mountain	53,000	9-15
Meadow Valley Mountains	94,500	0
Miller Flat	89,400	9-15
Monte Cristo	369,800	236
Moriah	53,300	1-29
Rattlesnake	71,400	1
Sand Springs East	476,100	257
Seaman	358,800	159
White River	116,300	90
Wilson Creek	624,500	160
Totals	5,361,300	1,985-2,140

The BLM State Director (Nevada) has approved standards and guidelines for wild horses and burros developed by both the Mojave/Southern Great Basin Resource Advisory Council and the Northeastern Great Basin Resource Advisory Council (see Appendix B). The advisory groups intend that these standards and guidelines would result in a balance of multiple use and sustainable development. Standards for rangeland health only can be reached and maintained by managing animal numbers so that appropriate

3.0 AFFECTED ENVIRONMENT

management levels are not exceeded in each herd management area. Controlling wild horse numbers by gathers and other controls is essential. The Resource Advisory Councils realize that achieving proper functioning rangelands may be a long-term process on degraded rangelands.

The Ely Field Office has established appropriate management levels for these herd management areas through a series of actions over the past 15 years. In the most recent of these actions, the Ely Field Office issued an Environmental Assessment (NV-04-03-036) and Finding of No Significant Impact in November 2003 for Establishment of Appropriate Management Levels for Twelve Wild Horse Herd Management Areas. **Table 3.8-2** summarizes the evaluation of habitat suitability for each of the herd management areas in the planning area and the recommendations for future management. In several cases, management changes are proposed to better allow for management of wild horse populations. These changes are discussed in greater detail in Section 2.5.8.

Maintenance of wild horse numbers is completed through gather operations. Typically the timing of gather operations tends to be sporadic. Some herd management areas are gathered every other year due to drought, while others are gathered every 5 or 6 years due to funding. The determination of an excess population of wild horses occurs primarily based on visual counts or helicopter census (inventory). Coupled with vegetation monitoring, the establishment of the appropriate management level and inventory data would trigger the request for a gather. Due to the majority of foals being born during the spring, gather operations don't occur from March to June.

The maintenance of wild horses within appropriate management levels strives to achieve a thriving natural ecological balance while maintaining a multiple use relationship, as well as achieving rangeland health standards. During wild horse maintenance or gathers, data are collected regarding herd health and characteristics. These data include genetic blood tests, collection of phenotypic characteristics, body condition, age, recruitment rates, and other herd-specific information. During field monitoring, public notification, or gather operations, sick and lame horses are euthanized for humane purposes.

Table 3.8-2
Current Conditions of Herd Management Areas in the Planning Area

Herd Management Area	Evaluation of Habitat Suitability						Reproductive Viability	Comments/ Recommendation
	Forage	Water	Space	Cover	Space	Water		
Antelope	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Adjust boundaries
Applewhite	Inadequate with excessive damage to riparian vegetation.	Adequate	Adequate			1	Allotment fencing prevents interaction with other herds and limits genetic viability of the herd.	Remove herd; drop HMA status.
Blue Nose Peak	Forage unsuitable for yearlong grazing.	Inadequate	1			1	No established herd present; HMA receives incidental use.	Drop HMA status
Buck and Bald	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Combine with Butte and a portion of Cherry Creek.
Butte	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Combine with Buck and Bald and Cherry Creek.
Cherry Creek	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	No established herd present.	Combine a portion with Buck and Bald and Butte
Clover Creek	Marginal	Adequate	1			1	Inadequate habitat resources to sustain a genetically viable population of 50 breeding animals.	Remove herd; drop HMA status.
Clover Mountains	Inadequate	Adequate	Marginal			1	Inadequate habitat resources to sustain a genetically viable population of 50 breeding animals.	Remove herd; drop HMA status.
Deer Lodge Canyon	1	1	1			1	Poor winter habitat; horses move to Wilson Creek HMA and other areas to winter.	Combine with Wilson Creek.

3.0 AFFECTED ENVIRONMENT

Table 3.8-2 (Continued)

Herd Management Area	Evaluation of Habitat Suitability						Reproductive Viability	Comments/ Recommendation
	Forage	Water	Space	Cover	Space	Reproductive Viability		
Delamar Mountains	Adequate; heavy to severe use is occurring near water sources and riparian areas.	Adequate	Adequate	Adequate	Adequate	Marginal; cannot sustain adequate herd size	Remove herd; drop HMA status.	
Diamond Hills South	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Retain; this is part of a metapopulation with Elko and Battle Mountain districts.	
Dry Lake	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Combine with a portion of Rattlesnake and Highland Peak.	
Highland Peak	1	Water available, primarily in northern part of HMA.	1	Inadequate winter habitat; horses in the northern portion of HMA winter in the Dry Lake HMA.	1	1	Combine with Dry Lake and a portion of Rattlesnake.	
Jakes Wash	Inadequate	Inadequate	Inadequate summer range	Inadequate winter cover	Inadequate		Remove herd; drop HMA status.	
Little Mountain	1	Inadequate	Inadequate	Inadequate summer habitat; horses move between this HMA and Miller Flat	1	1	Remove herd; drop HMA status.	
Meadow Valley Mountains	1	Inadequate	Inadequate	Marginal	1	1	Wild horse use conflicts with desert tortoise habitat, remove herd; drop HMA status.	
Miller Flat	Inadequate	Inadequate	Inadequate	Inadequate; poor winter habitat; horses move to Little Mountain HMA in winter.	1	1	Remove herd; drop HMA status.	

Table 3.8-2 (Continued)

Herd Management Area	Evaluation of Habitat Suitability					Reproductive Viability	Comments/ Recommendation
	Forage	Water	Space	Cover			
Monte Cristo	Adequate	Adequate	Adequate	Adequate		Adequate	Combine with Sand Springs East.
Moriah	Adequate	Inadequate	Inadequate	Lacks suitable yearlong habitat; horses move outside the HMA.		1	Remove herd; drop HMA status.
Rattlesnake	1	1	1	Inadequate summer habitat; horses move to Dry Lake HMA for summer habitat.		1	Combine a portion with Dry Lake and Highland Peak.
Sand Springs East	Adequate	Adequate	Adequate	Adequate		Adequate	Combine with Monte Cristo.
Seaman	1	Marginal, very little water on public lands.	Adequate	No summer habitat; cover inadequate.		1	Remove herd; drop HMA status
White River	1	Marginal: very little water on public lands.	Adequate	Adequate		1	Remove herd; drop HMA status.
Wilson Creek	Adequate	Adequate	Adequate	Adequate		Adequate	Combine with Deer Lodge Canyon.

¹ An "Inadequate" rating in one or more of the five essential habitat suitability components was considered to render the Herd Management Area unsuitable. In several such cases, full evaluation of other components was either not conducted or not considered essential to the management decision.