

United States Department of the Interior

BUREAU OF LAND MANAGEMENT Carson City District Office 1535 Hot Springs Rd., Ste. 300 Carson City, NV 89706-0638



MAY 31 1991

(NV - 03480)

Commission for the Preservation of Wild Horses Stewart Facility Capitol Complex Carson City, NV 89710

Dear Ms. Barcomb:

Thank you for your comments concerning the Draft Lahontan Herd Management Area Plan (HMAP) and Environmental Assessment (EA). After careful consideration of the comments and a review of our land use planning objectives, our decision is to implement the proposed action contained in the final document with a few changes.

Each of your comments will be addressed as they appear in your letter dated October 12, 1990.

Paragraph 3: It is true that year long waters are not available within the Herd Management Area (HMA), nor are year long waters available any where within the allotment on BLM administered land. Wild horses have historically used private waters and waters (Lahontan Reservoir) located on State Park land immediately north of the HMA. The wild horses which utilize the HMA do not cross other BLM administered land to water, they trail through private and/or State Park land to water.

At this time we do not have sufficient data to calculate a rate of increase specific to the Lahontan HMA. Data on sex and age ratios is needed and will be collected during a gather. The current rate of increase would be expected to be considerably less than that which would occur after a gather. This is due to the current fair physical condition of the horses, and the distance the wild horses are required to travel to water. These wild horses are required to travel considerable distances to water during the summer because of the severe over utilization of the grasses near water sources.

Paragraph 4 & 11: Because of other priorities and lack of complaints from the State Parks we have not as yet addressed this issue.

Paragraph 14: The Lahontan HMA was originally founded by four horses and their entire use area was delineated by 1975. Wild horses cannot be managed outside of this area on public lands. Therefore, many options that you suggested are unavailable to us. We are dividing the available forage equally between wild horses and livestock within the HMA. Given the small size of the HMA and limited forage we are forced to manage for a small population of wild horses. However, we do not believe that a small population will present any special problems. If in the future we identify inbreeding problems releasing wild horses from other HMAs would always be an option.

Sincerely yours,

James W. Elliott District Manager

1 Enclosures:

1. Final Lahontan Herd Management Area Plan and EA. 27pp.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

CARSON CITY DISTRICT OFFICE

1535 Hot Springs Rd., Ste. 300 Carson City,NV 89706-0638



IN REPLY REFER TO:

4700 (NV-03480)

OCT 03 1990

Dear Interested Party:

Enclosed is the Draft Lahontan Herd Management Area Plan and Environmental Assessment for your review and comment.

Please submit your comments to this office by November 5, 1990, to be considered in the final plan and EA.

Sincerely yours,

James W. Elliott District Manager

1 Enclosure:

1. Lahontan Herd Management Area Plan and EA. (draft). (27 pp)

LAHONTAN HERD MANAGEMENT AREA PLAN (Draft)

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I. Resource and Background Information

A. <u>Introduction</u>

This plan presents management direction for the Lahontan HMA.

B. Background and History

The Lahontan HMA is located approximately 40 miles east of Carson City, Nevada. Private lands along the Carson River and the Lahontan Reservoir form the north and west boundaries, an area of the reservoir which is intermittently filled, forms the east boundary and the Lahontan Allotment boundary approximates the southern boundary (1975; map 1).

It is generally accepted that wild horses within the HMA originated from ranch stock that were turned out in the area.

The predominant vegetation consists of Bailey greasewood (<u>Sarcobatus</u> <u>vermiculatus</u>), shadscale (<u>Atriplex confertifolia</u>), Indian ricegrass (<u>Oryzopsis hymenoides</u>) Needle and threadgrass (<u>Stipa comada</u>).

The HMA includes the entire herd area (11,029 acres), that area delineated as the wild horse habitat after passage of P.L. 92-195 (map 1).

C. Land Use Plan Objectives and Constraints

The Lahontan Resource Management Plan (RMP) is the land use plan which provides the general guidance as to the management of the HMA. The RMP states that the HMAP would be the document that guides management of wild horses in HMAs.

The following decisions from the RMP affect the Lahontan HMA:

- a. Maintain sound thriving populations of wild horses within HMAs.
- b. An HMAP will be developed for Lahontan HMA.
- c. Initially manage for a population level of 42 wild horses.
- d. Future adjustments in livestock and wild horses will be based on analysis of data from monitoring studies and consultation with interested parties.
- e. Fences within wild horse herd areas will be located to minimize interference with normal distribution and movement of wild horses. Selected portions of new fences constructed in these areas would be flagged or otherwise marked for one year after construction to make them more visible to the wild horses.

- f. Watershed management plans will be developed through consultation with interested parties and will be coordinated with livestock, wildlife and WH&B management plans. The goals of watershed management plans are to reduce accelerated soil erosion on public lands.
- g. Maintain or improve the condition of public lands so as to enhance productivity for wildlife. Manage wildlife habitat to achieve a long-term goal of reasonable numbers of big game animals. Protect and maintain existing riparian areas in good or better condition.
- h. Improve the condition and productivity of public rangelands to enhance livestock grazing.
- i. Provide for proper utilization within key areas (on key species), achieve better livestock distribution to obtain more uniform utilization, and provide for an increase in available forage and water for livestock, wild horses and wildlife.

D. Other Activity Plans, Issues and Constraints

Existing Activity Plans have stated objectives and constraints which relate to the HMA, and are summarized below.

Range Program Summary Update, 1989:

- 1. Initially allow 1,155 AUM's of forage for livestock allotment wide.
- 2. Limit utilization of key grass species to 55% or less.
- 3. "Maintain or improve wild horse habitat consistent with wildlife and livestock objectives. Maintain or improve free roaming behavior of wild horses by protecting or enhancing wild horse home ranges. Maintain or improve wild horse habitat by assuring that all waters remain open to use by wild horses. Initially provide approximately 504 AUM's of forage for approximately 42 head" (the HMA comprises 21% of the allotment).

E. Wild Horses

a. Population

At the present time, the wild horses have virtually unrestricted movement within the HMA and the majority of the allotment. A majority of the wild horses are using areas outside of the HMA, as all or part of their home range. This is due to a population increase beyond the HMAs capacity to produce sufficient forage (vegetation section) and supply adequate space. The limited area of the HMA results in crowding which alone at current population levels would lead to many of the wild horses moving to areas outside of the HMA.

The latest complete census (entire allotment) was conducted in April, 1989, and documented that at a minimum 84% of the wild horses have moved out of the HMA. A census of the HMA conducted in August, 1989 documented only 9 horses within the HMA, this census was only conducted within the HMA and immediate area, therefore, a total number of horses within the allotment was not obtained. In September of 1988 a census documented that 79% of all the wild horses counted were located outside of the HMA.

Many of the horses currently spend all or part of the year outside of the HMA and at times on land which is not being administered by the BLM. This situation causes many problems, including:

- 1. horses becoming dependent upon the Truckee Carson Irrigation Ditch for water which is not a dependable water source,
- 2. becoming dependent on other water which may be fenced or turned off,
- 3. trailing through an active bombing range to obtain water,
- 4. crossing the Lahontan Reservoir (during summer draw downs) into the town of Silver Springs which posses a traffic hazard and a potential danger to humans and domestic animals (attacking dogs and interacting with domestic horses),
- 5. becoming entrapped in fenced in areas with a limited food supply as the reservoir level rises,
- 6. interfering with State Park campgrounds,
- 7. utilizing private lands due to the checkerboard land pattern in the northern part of the allotment,
- 8. increased susceptibility to capture and harassment due to their proximity to private lands and greater dispersion,
- 9 wild horses may intermingle with privately owned horses, therefore, making them difficult or impossible to identify, which causes protection problems. There has been 1 conviction for illegal capture of a wild horse. Also it is known that on 2 occasions individuals were attempting to gather wild horses.

Ground observations through the winter of 1988-89 documented that many of the horses in and around the HMA were in fair condition. Their ribs, pelvis and back bones were clearly visible.

A summary of the population data is as follows:

Census	
Date	# of Horses
1982	42
1984	21
1986	130
1987	143
1988	172
1989	185

All censuses were by rotary wing aircraft

Since the passage of the WH&B Act the Population has increased from an estimated 4 wild horses in 1971 to 185 wild horses in 1989. There have been no removals in this HMA since passage of the WH&B Act.

Garrott (pers. comm) looked at rates of increase in wild horse herds and concluded that the lowest rate of increase is between 14 -15% annually, and in areas where sufficient forage is available, rates of increase can approach 23 - 24% annually.

b. Habitat Evaluation

There is no water within the HMA, the wild horses water on private lands bordering the Carson River and the Lahontan Reservoir within the State Park.

F. Livestock Use

The HMA lies within the Lahontan Allotment. Historical grazing preference for the Lahontan Allotment, (HMA comprising 21% of the total allotment), has been 1,155 AUMs. However, due to the lack of forage within the HMA, livestock have changed their use patterns and for the last two years have made little or no use of the HMA. In fact due to the over utilization caused by wild horses both within and outside of the HMA only 75 AUMs of livestock use has been taken allotment wide per year for the past two years.

Livestock grazing occurs within the allotment from November 1 - March 31.

G. Wildlife Use

The HMA includes habitat for mule deer, bald eagles and many nongame species.

Wintering bald eagles, an endangered species, are the only known threatened, endangered, sensitive, or candidate fauna species within the HMA.

H. Soils and Vegetation

The majority of the Lahontan HMA consists of deep sandy soils (Patna, Hough, Isolde, and Rusty soil series) that are intermixed with areas of small sand dunes, badlands and playettes. The hazard of wind erosion is moderate to high, and soil reaction ranges from mildly alkaline or neutral, to strongly saline in the playettes.

The southeastern portion of the HMA consists of deep, fine-textured soils (Lahontan, Orizaba, and Delp soil series) that are strongly alkaline to strongly saline. The hazard of water or wind erosion is slight in this area and soil permeability is very slow. Water may pond for short periods following precipitation events.

Precipitation in the HMA is low, averaging 4-6 inches per year.

Three major range sites (27-009,27-018 & 27-025) comprise 95% of the HMA and are described below:

Sandy 5-8" 10-12" precipitation zone. (027 x 009N)

- Associated species: Indian ricegrass, needle-and-thread, four-wing salt brush, winter fat, Nevada delea and Bailey greasewood.
- Occurs on remnants and inset fans. It also occurs on sand sheets deposited over various land forms. Slopes range from 0 to 30 percent. Elevations are 4,000-5,500 feet.
- Soils are very deep, somewhat excessively drained and formed in alluvium.
- 4. Annual production in normal years is 450 lb./acre.

Gravelly Loam 4-6" precipitation zone (027 x 018)

- 1. Associated species: Indian ricegrass, bottlebrush squirreltail, shadscale, Bailey greasewood and bud sagebrush.
- 2. Occurs on fan piedmonts. Slopes range from 0 to 30 percent, but slope gradients of 2 to 15 percent are most typical. Elevations are 4,000 to 5,500 feet.
- 3. Soils are deep to very deep, well drained and formed in alluvium.
- 4. Annual production in normal years is 300 lbs./acre.

Sodic Flat 4-8" precipitation zone (027 x 025)

- 1. Associated species: Inland saltgrass, black greasewood, shadscale and seepweed.
- 2. Occurs on the lower portion of fan skirts and upper alluvial flats. Slopes range from 0 to 4 percent. Elevations are 3,500 to 5,500 feet.
- 3. Soils are deep, well drained and formed in mixed alluvium.
- 4. Annual production in normal years is 200 lbs./acre.

The ecological status of the HMA is as follows:

			Potential
Early Seral	Mid Seral	Late Seral	Natural Community
14%	54%	32%	< 1%

The selection of studies methodology and key area/key species to which these studies are correlated was made in accordance with procedures established in Nevada Rangeland Monitoring Handbook (NRMH) and the District's Monitoring Plan.

The data for the ecological status was collected in 1982. However, there were no key areas near the HMA. Therefore, the above ecological condition may not accurately reflect the HMA. An ecological condition transect will be done during 1990, when a key area is established within the HMA.

Utilization studies and use pattern mapping completed over the last year (1989) show that 76% of the HMA is currently receiving heavy and severe use. Wild horses are also causing heavy and severe utilization in areas outside of the HMA.

There are presently no key areas located within the HMA, however, a key area will be established in the spring of 1990, in the HMA. The locations of key area and establishment of frequency transacts will be done, following the format established in the Nevada Range Monitoring Procedures and BLM Handbook TR 4400-4 p. 29.

All utilization studies were conducted using the Key Forage Plant Method. Proper use is 55% or less on perennial grasses (key species) and 45% on shrubs as recommended in the Nevada Rangeland Monitoring Handbook.

Indian rice grass is the principal forage species for wild horses within the HMA. Utilization of 25 percent or more of current years growth during April and May is detrimental to Indian ricegrass (Cook & Harris).

There are no known threatened, endangered, sensitive, or candidate flora within the HMA.

I. Recreation

Relatively little recreation occurs within the HMA, due to the barren characteristics of the terrain and vegetation. Some observation of wild horses probably occurs because of the proximity to Carson City and Fallon.

Access to the HMA is limited to 2 dirt roads originating from highway 95A. Recreational use may be increased by placing an interpretive sign along the highway indicating the location of the HMA.

J. Range Improvements

There have been no range improvements within the HMA.

K. Water and Riparian

There are no water or riparian areas within the HMA.

L. Other Activities

There are no other activities known to impact the wild horses within the HMA.

M. Issue and Problem Summary

The following are the significant problems with the HMA.

- Limited forage within the HMA has resulted in over utilization, which in turn has caused the wild horses to seek forage outside of the HMA. Horses range to lands not administered by BLM and mix with horses not under jurisdiction of BLM.
- 2. Approximately 76% of the HMA is experiencing heavy and severe use which is attributed to wild horses alone. This is causing competition between wild horses and other species of wildlife utilizing the HMA and allotment.
- 3. There is an inadequate supply of forage for the wild horses, which results in unacceptable physical condition during the winter.
- 4. Gathers impact the social structure and create some stress on the individual animals. A few animals are injured or killed during gather operations.
- 5. There is no water within the HMA, these horses rely on the Lahontan reservoir. The Lahontan State Park's long range plan is to eventually fence the Park boundary.

II. Objectives and Management Methods

A. Animal Objectives

Objective 1

Improve the physical condition of the wild horses from fair to good or excellent.

Management Method

Provide an adequate amount of forage for the individual wild horses in the population by adjusting the population of wild horses to a level in balance with the forage productivity of the habitat within the HMA (Habitat Objective 1). Based on the analysis of monitoring data (as explained in a detailed discussion in appendix A) under Habitat Objective 1, the

population will initially be adjusted to 10 wild horses. Providing a proper amount of forage per animal will allow the animals to maintain themselves in a healthier condition, better able to withstand environmental fluctuations and enhance the birth rate and survival of young foals. Periodic ground observations to classify physical condition of wild horses will be conducted at a minimum during the fall, winter and spring. These observations will aid in determining if the wild horses are receiving sufficient nourishment.

Objective 2

Maintain the free-roaming nature of the wild horses.

Management Method

All projects proposed on BLM administered land within the HMA will be carefully evaluated through an environmental assessment process as to their effect on free-roaming behavior and movement. Any projects creating adverse impacts upon wild horses that cannot be mitigated will not be allowed.

Objective 3

Maintain the wild horses within the HMA.

Management Method

During periodic population reductions, horses gathered from outside of the HMA will not be released back into the HMA because they will return to the area from which they were removed (Waring 1979). Any wild horses located outside of the HMA will receive priority for removal.

B. Habitat Objectives

Objective 1

a. Allow no more than 55% total utilization on key plant grass species Indian ricegrass and 40% on squirrel tail.

Management Method

Implementation of this objective will require a reduction of overall utilization from 68% on the 5,073 acres in the heavy use category and from 84% on the 1,765 acres in the severe use category to 55% or less on key grasses (level recommended in the Nevada Rangeland Monitoring Handbook).

As stated earlier (vegetation section) the present stocking rate over the entire heavy and severe use areas needs to be adjusted downward. Based on current data as analyzed in appendix A an adjustment of the population to 10 wild horses (120 AUMs) within the HMA is required.

b. Limit utilization on Indian ricegrass to less than 25% of current years growth prior to May 31.

Management Method

Utilization studies will be done during the last week of May or the first week of June, to determine if utilization on Indian ricegrass is in excess of 25%. If utilization is in excess of 25% on Indian ricegrass then adjustments in wild horses will be made using the formula described in appendix A.

III. Management Evaluation and Revision

A. Animal Studies

The studies described below are designed to monitor the attainment of the specific management objectives developed for this HMA.

1. Actual Use

Need: It is necessary to continue collecting information on the number and kinds (wild horses, wildlife and livestock) of animals which are utilizing the forage within the HMA in order to make quantifiable decisions with regard to wild horse and cattle numbers and season of use.

Method: Helicopter censusing will be the method used to estimate wild horse populations in conjunction with on the ground identification of individual animals. Censuses will normally be conducted during late June, July, August or September to include and identify young. These censuses will occur at intervals of 3 years or less. Actual use by wild horses will be derived from population estimates. Livestock actual use will be obtained from billing statements, actual use records and/or livestock counts during standard compliance checks. Wildlife actual use will be obtained from the Nevada Department of Wildlife (NDOW).

B. <u>Habitat Studies</u>

1. Utilization

Need: To determine the amount of use (degree of utilization) occurring to the available forage by wild horses, livestock and wildlife.

Method: Utilization studies will be conducted prior to cattle turnout November 1. In addition to this the entire HMA will be done at the end of each grazing season with transacts run (at a minimum) at the key area. All utilization studies will be done using the Key Forage Plant Method. Each point where a utilization transect is run will be considered a study area and the location will be shown on the appropriate topographic map. (Outlined in BLM Technical reference 400-03 p. 11). Use pattern maps will then be constructed from utilization studies.

2. Use-Pattern Mapping

Need: To show relative areas and intensity of utilization and to identify specific areas where utilization objectives are not being met. This will be the basis for grazing adjustments.

Method: Use-pattern mapping the zones of utilization (Nevada Rangeland Monitoring Handbook).

3. Trend

Need: Trend refers to the direction of change of ecological condition. It indicates whether the rangeland is moving toward or away from its potential or toward or away from specific management objectives.

Method: A key area will be established in the summer of 1990 and read every 5 years thereafter.

4. Ecological Status

Need: Ecological status is the present state of the vegetation and soil protection of an ecological site in relation to the potential natural community for that site. Ecological range condition will be measured for the key area to assure progress towards the desired seral stages.

Method: Key area condition transacts will be re-evaluated upon measurement of a statistically significant change in frequency data. These results will be evaluated to determine change in frequency (trend) data. These results will be evaluated to determine if the appropriate objectives have been realized. (Refer to Nevada Rangeland Monitoring Handbook p. 13).

5. Climate

Need: To fully analyze utilization and distribution data, climatological data is necessary.

Method: Climatological data will be obtained from the National Weather Service station located at Fallon. Climatological data will be used in conjunction with ecological trend and condition studies.

C. Evaluation

All adjustments in livestock and wild horse use on the Lahontan HMA will be based on rangeland monitoring. Monitoring information will be collected and evaluated on a yearly basis in accordance with the Nevada Rangeland and Monitoring Task Force Recommendations.

Studies will be used to evaluate if methods are achieving objectives. The plan may be revised if, through this evaluation, Habitat Objective 1 standards are not being met.

Utilization results and use pattern maps will be analyzed to determine if Habitat Objective 1 is being reached. Actual use will be used in conjunction with utilization data in revision of the numbers in the plan. Horse and cattle numbers may be adjusted either \pm as utilization results indicate.

Helicopter censuses will be key to identifying the need for removals in accordance with Animal Objective 3.

All the above evaluations of population data will be analyzed as recommended in Nevada State Office Manual Supplement 4730.

The entire plan will be evaluated in 1995 to determine if objectives are being attained.

Adjustments of wild horse and livestock numbers will be based on the results from utilization studies (III. B. 1.) with the objective of limiting total vegetation use within the HMA to 55% or less on key species and 40% on interim species. The recommended 55% utilization level is for a healthy range. The HMA may not be in a healthy state and monitoring may indicate that utilization levels of less than 55% may be needed for the range to recover to a healthy state that can withstand a long term utilization level of 55%. Horses and livestock will be reduced based on actual use and utilization data (III. A. 1. & III. B. 1.).

Monitoring information will be collected in 1990 and 1991 with an analysis of the data completed in 1991. Based on this evaluation, if adjustments in livestock and wild horse use are needed to meet HMA objectives, including utilization levels, they will be implemented by March of 1992, subsequent evaluations will be completed every three years thereafter.

The formula for calculating proper use

Actual use (AUMs)
Average/Weighted
Average Utilization

<u>Potential Actual Use (AUMs)</u> Desired Average Utilization

will be used to base adjustments on. When total utilization increase above 55 percent on key species and 40 percent on interim species,

a gather will be conducted to bring the wild horse population down to a level in balance with the available forage.

Horses that have established home ranges outside of the HMA will be removed as soon as is practical.

Modification

This plan may be modified if data from studies and experience indicate that changes are desirable. The plan may also be modified through an amendment process, if during the course of evaluation the objectives are still valid, but the management methods are not effective, necessitating different or additional methods. Modification will be based on the results of the animal and habitat studies, evaluations inspections, and/or operations problems.

IV. Funding

All actions undertaken pursuant to this plan are contingent upon available funding and manpower.

Lahontan Herd Management Plan

A. INTRODUCTION AND PURPOSE

The purpose of this proposal is to restore the range to a thriving natural ecological balance and multiple use relationship preventing further deterioration of the vegetation community threatened by an over population of wild horses in the Lahontan HMA. This proposal is in conformance with the Lahontan Resource Management Plan (RMP).

Relationship to Other Environmental Documents

This EA is tiered to the Lahontan RMP Environmental Impact Statement (EIS) which analyzed the general ecological impacts of managing rangelands in the Lahontan area under a program including the monitoring and adjustment of wild horses and livestock. This EA is a project specific refinement of the EIS focused on the management of wild horses in the Lahontan HMA. The decisions regarding overall rangeland management analyzed in the Lahontan RMP/EIS will not be changed by the Lahontan HMAP. These documents are available for public review at the Carson City District Office.

B. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

1. Proposed Action

The purpose of the proposed action is to achieve a thriving natural ecological balance between the vegetative community, wild horses, wildlife and livestock and maintain the wild horse population in a healthy state. The specific objectives and management methods are described in the Objectives and Management methods section of the HMAP. They include removing wild horses to obtain a thriving natural ecological balance between the vegetative community, wild horses, wildlife and livestock within the HMA.

2. No Action Alternative

The no action alternative would not include any of the objectives. Wild horses would be maintained at their current level. Periodic gathers may be needed to maintain a population of 185 wild horses.

C. AFFECTED ENVIRONMENT

The affected environment is described in sections E - K in the HMAP.

D. <u>Environmental Impacts</u>

1. Proposed Action

Reducing the wild horse population to a level that the vegetation within the HMA can support would benefit both the wild horses and wildlife within the HMA and at the same time meet the management objectives of the RMP (improve ecological condition). By improving the vegetation all species of wildlife will benefit. It is anticipated that after the reduction the utilization will decrease from 77% to 55% on key species. It is also anticipated that the condition of the wild horses will improve from fair to good or excellent.

It is anticipated that by reducing the number of wild horses the rate of soil erosion should decrease because of increased basal cover such as grasses and litter.

Unavoidable impacts in the form of injuries to the horses may occur as a result of the removal process. Death loss is not expected to exceed 2% of the horses captured at the trap site. Potential injuries and fatalities can be limited through strict enforcement of contract specifications for safety and humane treatment of animals. BLM representatives would be monitoring the contractor's activities at all times during removal to ensure compliance with specifications and humane treatment of animals.

Some stress to the horses would be associated with the helicopter herding operations, however, after adoption, the horses would become accustomed to captivity and most would receive proper care.

Removal operations may disrupt band structure either temporarily or permanently and cause some stress to individuals.

Small localized areas within the vicinity of trap sites and holding facilities would receive trampling and the subsequent loss of vegetation. However, overall the vegetative resource would improve due to the reduction in grazing pressure. Forage availability should increase and utilization levels decrease.

No impacts would occur to cultural resources, as the trap sites would be cleared prior to construction.

Removal of wild horses will prevent further deterioration of the range due to the wild horse overpopulation. By removing the excess wild horses the remaining population will allow for a thriving ecological balance between wild horses, wildlife, livestock and vegetation.

2. No Action

Habitat improvement would not be realized with this alternative. The frequency of key species would decline. The animals would continue to search for food and further degrade their habitat, thereby reducing the carrying capacity of the area which would eventually lead to unacceptable adverse physiological stress. However, before the wild horses disappear many other species of wildlife would have died or dispersed to areas outside to the HMA and allotment. The few wild horses left would be in poor condition thus, viewing of these wild horses would be a negative experience for most people.

Over utilization of the HMA and entire allotment would continue to occur and as the range further deteriorates the carrying capacity of the HMA and allotment would be reduced. The objective of limiting utilization to 55 percent or less would never be met. Downward trend would not be reversed, and ecological condition would continue to decline. In the long-term, the excessive utilization would eliminate nearly all the forage plant species. Attainment of RMP objectives would not be met.

Further deterioration of the range would occur and the area will not be in a state of thriving natural ecological balance between wild horses, wildlife, vegetation and livestock.

Physical condition of wild horses would not improve. The wild horses would not be maintained within the HMA thus causing considerable conflicts with livestock operations and home owners.

E. <u>Public Involvement</u>

This environmental assessment and HMAP is being sent to the following persons, groups and government agencies for review and comment.

American Bashkir Curley Register American Horse Protection Association American Humane Association American Wild Mustang & Burro Foundation Amerongen, Frederick K. Animal Protection Institute Barbara Eustis-Cross Bureau of Reclamation Carson City District Grazing Advisory Board Commission for the Preservation of Wild Horses Compassion for Animals Craig C. Downer Craig London Debra Allard Fund for Animals Harris, Marty International Society for the Protection of Wild Horses and Burros Kathy McCovey

Lahontan Stat Park National Mustang Association National Wild Horse Association Nevada Cattlemen's Association Nevada Department of Wildlife Nevada Federation of Animal Protection Organization Nevada Humane Society Nevada Land Action Association Nevada State Clearinghouse Nevada State Division of Agriculture Rebecca Kunow Resource Concepts Save the Mustangs Sierra Club Snow, Gary The Nature Conservancy U.S. Fish and Wildlife Service U.S. Humane Society United States Wild Horse and Burro Foundation Washoe County Board of Commissioners Wild Horse Organized Assistance

Signature Page

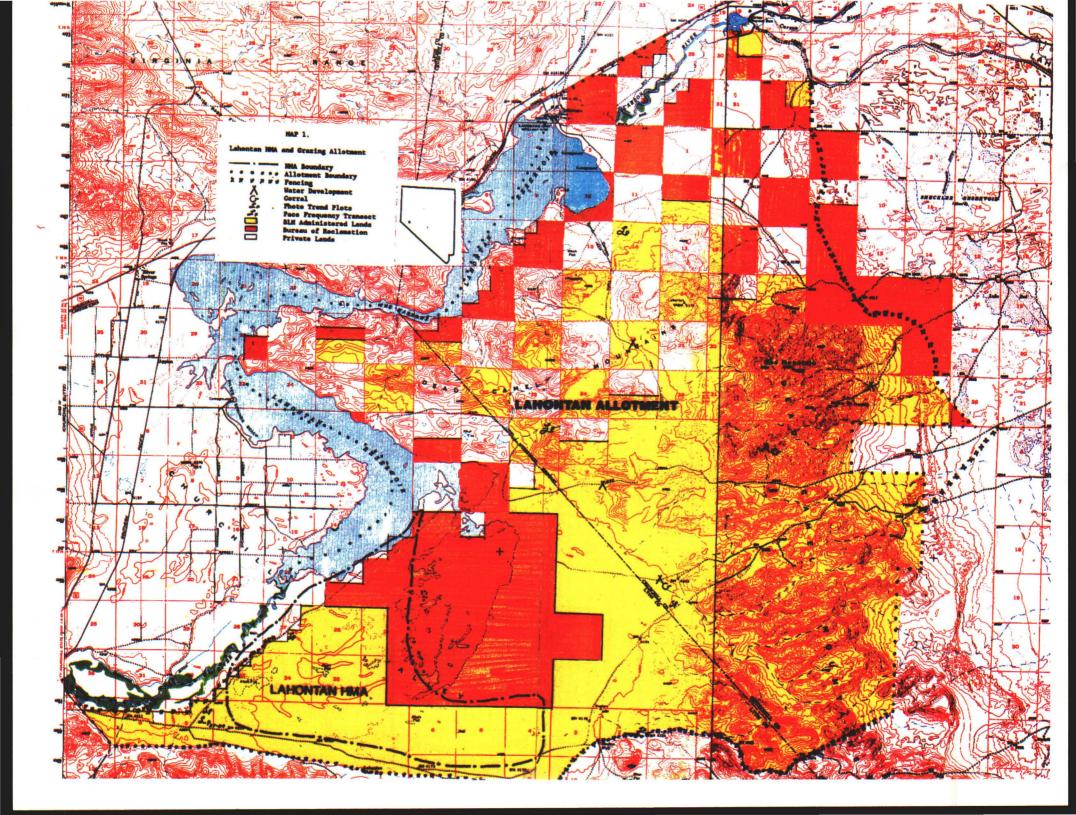
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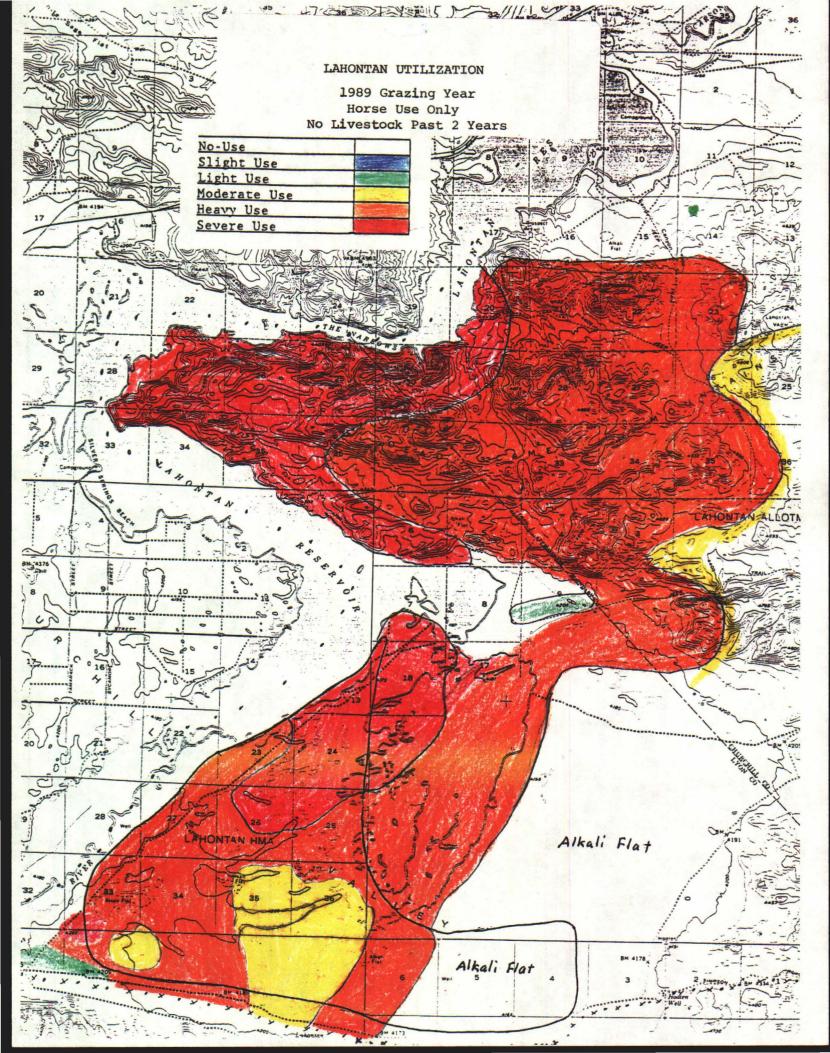
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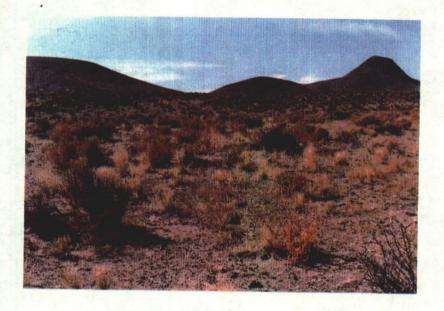
Cook & Harris. 1968. Nutritive Value of Seasonal Ranges. Utah Agr. Exp. Sta. Bul. 472.

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Waring, G.H. 1979. Behavioral adaptation as a Factor in the Management f Feral Equids in Symposium on the Ecology and Behavior of Wild and Feral Equids, Univ. of Wyoming Laramie pp. 85-92.

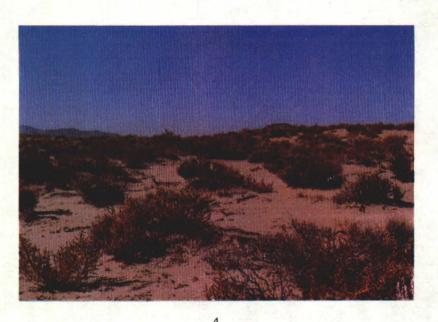












3

All photos were taken on October, 11 & 12, 1989.

Photos 1 & 2 are typical examples of healthy Indian ricegrass plants taken several miles west of the HMA in an area seldom used by wild horses due to the distance from water.

Photos 3 & 4 are typical examples of Indian ricegrass within the HMA.

APPENDIX A

An allotment evaluation was conducted which indicated that over utilization by wild horses is a major problem with this HMA and the Lahontan Allotment. The following discussion is taken form the allotment evaluation

In order to meet HMA objectives, adjustments in wild horses inside and outside of the HMA are required. All wild horses outside of the HMA will be removed. Based on 3 censuses conducted during 1988-89 an average of 25 (300 AUMs) wild horses inhabit the HMA, however, this number is more than the HMA can support.

Current vegetation monitoring indicates that the HMA will support approximately 122 AUMs of wild horse use taken yearlong and 122 AUMs of livestock use. Therefore, to properly manage the vegetative resource the wild horses will be adjusted to an average population of 10. Further monitoring data will be collected and analyzed, after the population is adjusted, to determine if this adjusted population level will be established as the population level.

Determination of wild horse and livestock numbers to be in balance with the habitat limitations:

Of the 11,029 acres within the HMA 2,096 acres are contained within a alkali flat, devoid of usable vegetation. There are no acres in the slight and light use categories.

Acres in the moderate (55%) use category are 2,096 comprising 23% of the HMA. Based on monitoring data it has been determined that 69 AUMs of horse use occurred on the area in moderate use. This use is in balance with the habitat.

Acres in the heavy use (68%) category are 5,073, comprising 56% of the HMA. Based on monitoring data it has been determined that 168 AUMs of horse use occurred on the area in heavy use. This use is excessive and at this level the habitat will continue to decline reducing the carrying capacity. Using the formula shown in table 1. it is determined that 136 AUMs is the maximum amount of use which the area in heavy use can sustain and still improve.

Acres in severe use (84%) category are 1,765 comprising 20% of the HMA. Based on monitoring data it has been determined that 60 AUMs of horse use occurred on this area in severe use. This use is excessive and at this level the habitat will continue to decline reducing the carrying capacity. Using the formula shown in table 1. it is determined that 39 AUMs is the maximum amount of use which the area in severe use can sustain and improve. Therefore, a maximum of 244 AUMs are available for use within the HMA and not adversely impact the vegetative resource.

Livestock have not used this area because of heavy and severe use caused by wild horses, however, livestock utilize the Lahontan Grazing Allotment (which includes the HMA) in accordance with the Taylor Grazing Act. Therefore, 50% of the available AUMs within the HMA will be reserved for livestock. Thus 122 AUMs will be reserved for wild horses, which equates to 10 wild horses using the HMA on a yearlong basis.

Table 1.

From utilization records the average utilization within the HMA from 1989 is:

Category	Acres	% Use	% of HMA**	AUMs***	Available AUMs To Maintain 55% Use
Alkali Flat	2,096				
Slight*	0				
Light*	0				
Moderate	2,096	55 %	23%	69	69
Heavy	5,073	68%	56%	168	$\frac{168}{68} - \frac{x}{55} - 136$ @
Severe	1,765	84 %	20%	60	60 - x - 39 @@
Total	11,029			297	244

^{*} There are no acres of slight or light use within the HMA.

Using the accepted formula for making grazing animal adjustments it is determined that 15 wild horses need to be removed from the HMA.

@	Actual use (AUMs) Average/Weighted Average Utilization	=	Potential Actual Use (AUMs) Desired Average Utilization
	$\frac{168}{68\%} = \frac{x}{55\%}$	-	136 total AUMs in the area of heavy use
@@	Actual use (AUMs) Average/Weighted Average Utilization	=	Potential Actual Use (AUMs) Desired Average Utilization
	$\frac{60}{84\%} = \frac{x}{55\%}$	-	39 total AUMs in the area of severe use

Thus a total of 244 AUMs of grazing use is available within the HMA to maintain the vegetation in a healthy state. Dividing the available AUMs equally between wild horses and livestock results in 122 AUMs for wild horses and 122 AUMs for livestock.

Dividing the 122 AUMs of horse use results in 10 horses year round.

^{**} Percent of acres with forage

^{***} Based on percentage of available HMA acres and an average of 3 census conducted in 1988-89.

The above formula works in areas where range conditions are satisfactory, however when the vegetative use is in heavy and severe use categories the above formula will over estimate the available AUMs which will bring about an improvement in vegetative condition. Therefore, a reduction in AUMs below what is indicated by the formula may be needed to bring about recovery of the vegetative condition.

COMMISSION FOR THE PRESERVATION OF WILD HORSES

Stewart Facility
Capitol Complex
Carson City, Nevada 89710
(702) 687-5589

October 12, 1990

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James W. Elliot, District Manager BLM - Carson City District Office 1535 Hot Springs Road, Ste. 300 Carson City, Nevada 89706-0638

Dear Mr. Elliot,

Thank you very much for the opportunity to comment on the Draft Lahontan Herd Management Plan and Environmental Assessment.

Lahontan HMAP

B. Background and History

Add to paragraph #2

See 3 PL92-195 "All wild free-roaming horses and burros are hereby declared to be under the jurisdiction of the Secretary for the purpose of management and protection in accordance with provisions of this Act.

E. Wild Horses

a. Popoulation

After first sentence add...Year long waters are not available within the presently designated boundary.

The document misrepresents the truth by implying that all use outside the boundary is from population increases when the facts are that wild horses <u>must</u> go outside the boundaries for water.

Page 6, second paragraph...

Garrot (pers comm)

Add Breakdown

adult foal ratios

computation for % increase for Lahontan

E. b. Habitat Evaluation

Add: whether or not resolution to this situation has been initiated.

F. Livestock Use

Add: whether an AMP for Lahontan Allotment exists.

James W. Elliot October 12, 1990 Page 2

G. Wildlife Use

Add: whether an HMP for the Lahontan Allotment exists.

Page 8

Add map generally depicting major range sites.

Page 9

Add map showing Key areas located in the HMA. Paragraph 6: add; other forage species within the HMA.

M. Issue

6. Public education regarding wild horse herd near urban communities.

II. Objectives

A. Animal Objectives add objective to maintain uniqueness of the colors.

You cannot meet objective #3 unless you address the HMA boundary or develop water specifically for wild horses within the current boundary.

B. Habitat Objectives

Objective #1 should be to address boundary issues and/or develop water within current boundaries otherwise all other habitat and animal objectives wil not be met.

Objective #2...allow no more than 55% total utilization...

III. Management Evaluation

A. Animal Studies

Actual Use

Need to identify by species in use pattern mapping. Need to have actual use livestock reports and grazing system.

B. Habitat Studies

1. Utilization

Same as Al

2. Use Pattern Mapping
Need to identify species

Need to identify species, movement (seasonal) patterns.

James W. Elliott October 12, 1990 Page 3

Conclusion:

The technical recommendation of the Lahontan Allotment Evaluation is to reduce the wild horses within their herd area to an average of 10 animals. That proposal seriously jeopardizes the Lahontan wild horse popultion by taking them below what is considered a viable number. According to the evaluation livestock have not grazed the Key areas for the past two years. However, the Vegetative damage by livestock and wild horses have been occuring for years. The allotment evaluation recommends adjustment of stocking rates but doesn't specify numbers of livestock to be reduced; but does recommend a number for wild horses. Nowhere do we see an adjudication of forage for wild horses.

The objectives, honorable as they may seem, cannot be met unless the boundary includes the horses habitat requirements, such as water. Nor can they be met without sufficient forage being directly allocated to them. Finally, the protection and management responsibility cannot be achieved without a real change in attitudes.

Again, thank you for the opportunity to participate in the Draft Lahontan HMAP and EA. If you have any questions, please feel free to call.

Sincerely,

CATHY BARCOMB Acting Executive Director WHOA

WILD HORSE ORGANIZED ASSISTANCE P.O. BOX 555 RENO, NEVADA 89504



. a note from

Dawn Y. Lappin

October 12, 1990

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DAWN Y. LAPPIN

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