

G 11/29/77

Bureau of Land Management

Winnemucca District

Environmental Assessment Record

NV-020-8-13

4700

Paradise-Denio

Paradise-Denio Wild Horse Gathering Plan

11/29/77

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ENVIRONMENTAL ASSESSMENT RECORD (EAR)
FACE SHEET

1. Public Purpose or Environmental Goal to be Served by (this/these) Bureau Action(s)
- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations
 - assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings
 - attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences
 - preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice
 - achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities
 - enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources

Office

Winnemucca

EAR number

NV-020-8-13

Environmental assessment reference number (only for EAR update or supplement)

2. Discrete Operations (attach additional sheets, if necessary)

		DECISION*			
		a	b	c	d
PROPOSED ACTION(S)	<input checked="" type="checkbox"/> 1 Surveillance	✓			
	<input checked="" type="checkbox"/> 2 Construction of traps	✓			
	<input checked="" type="checkbox"/> 3 Actual Capture	✓			
	<input checked="" type="checkbox"/> 4 Continued Management	✓			
	<input type="checkbox"/>				
ALTERNATIVE ACTION(S)	<input checked="" type="checkbox"/> 1 No Action				✓
	<input checked="" type="checkbox"/> 2 Reduction of livestock numbers				✓
	<input checked="" type="checkbox"/> 3 Partial Reduction with Control				✓
	<input type="checkbox"/>				
3. Mitigating Measures** (attach additional sheets, if necessary)					
<input type="checkbox"/>	See attached sheets	✓			
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					

4. Environmental Impact Statement recommended Yes No

Approved by (Signature of Area Manager) <i>William J. Harkemider Jr.</i>	Date 1-17-78
Signature of District Manager <i>Robert J. Carroll - Acting</i>	Date 1-18-78

* See reverse
** Summarize if decision is b or c

DECISIONS*

- a Accepted as stated in EAR
- b Accepted with environmentally-insignificant modification
- c Accepted with environmentally-significant modification which has been assessed and appended to (or incorporated in) the initial EAR
- d Rejected

Remarks (Explain if conclusion is that an Environmental Impact Statement is not required. The explanation should relate to significance of residual impacts, whether beneficial or adverse, and/or relate to controversy about impacts.)

This action does not warrant an environmental statement nor will this action be sent to the state clearinghouse. wjh

NOTE

The principal purpose of this form is to provide a written record of the management decision and its salient environmental aspects. When properly completed, it attests to the consideration of environmental amenities and

values in planning and decisionmaking. Its completion by the decisionmaker, or authorized officer, provides subordinate officials with explicit written guidance as to the complexion of the decision.

SPECIFIC INSTRUCTIONS

1. In this section, record the linkage, if any, of the decision and the pursuit of national environmental goals expressed in Section 101(b) of the National Environmental Policy Act of 1969. The authorized officer should check any of the listed purposes/goals which this decision helps attain.

2. Record discrete operations of the proposed action which was assessed and discrete operations of its alternatives. A checkmark corresponding to the type of decision made (see asterisk above) should be entered in the pertinent box (a, b, c, or d) following the description of each discrete operation.

3. The authorized officer records the selection of mitigating measures. Every mitigating measure assessed should be listed. A checkmark corresponding to the type of decision made (see asterisk above) should be entered in the pertinent box (a, b, c, or d) following the description of each mitigating measure. If the decision corresponds to items b, or c, summarize the modification of the mitigating measure. The findings concerning significance of associated residual impacts should be summarized if the decision corresponds to items b, c, or d.

4. The authorized officer records recommendation concerning the need for an environmental impact statement on the action proposed SUBSEQUENT to the environmental assessment.

Possible Mitigating Measures (Item 3 on Form 1791-1)

1. Archeological clearance will be done on all trap sites prior to their construction. If archeological values are present, trap sites will be moved. No traps will be placed near any of the identified historic sites.
2. A Bureau employee will make a careful determination of a boundary line to serve as an outer limit within which attempts will be made to herd horses to a given trap. Topography, distance and current conditions of the horses are factors that will be considered to set the limits so as to avoid undue stress on the horses while they are being herded.
3. Any trap site located in the Sand Dunes area will be cleared by Bureau personnel to insure no populations of the threatened plant species Dalea kingii are disturbed.
4. All corral panels will be from 72" to 84" high in order to prevent horses from jumping out of traps.
5. Brutality to horses in any form will not be tolerated. Any employee who mistreats any horse will be dismissed immediately from the roundup operation.
6. A Bureau official will be in the helicopter at all times in order to insure that all stipulations are met and that horses are not over-stressed.
7. All holding facilities will meet U.S. Department of Agriculture and U.S. Department of the Interior specifications.
8. Only experienced horseback riders will be used in the gathering operations.
9. Experienced horse wranglers from the local area will be employed whenever possible.
10. All saddle horses will be properly shod and over three years in age. All saddles and tack will be in good repair.
11. Equine Infectious Anemia (EIA) samples will be taken at the holding facilities at Carson City.
12. Only experienced drivers will be used to transport the horses to the holding facilities.
13. The helicopter will have radio communication with the Authorized Officer or his designated representative at all times.

I. Description of the Proposed Action and Alternatives

A. Background Data

These mountain ranges, Slumbering Hills, Bloody Run Hills, Hot Springs Range, Osgood Mountains, Blue Mountain and Krum Hills, which includes Winnemucca Mountain, have a total wild horse population of approximately 900 animals*. The horses are distributed between the ranges as follows:

<u>Mountain Range</u>	<u>Number of Wild Horses*</u>
Bloody Run Hills	256
Krum Hills	342
Slumbering Hills	180
Hot Springs Range	103
Osgood Mountains	25
	<u>906</u>

*According to the 1980 wild horse inventory

These mountain ranges are composed of approximately 65% public land and 35% private. Four of the grazing users, which have control of the majority of the private land in their allotments, have requested that the Bureau remove the horses from their private land. This private land is in a checkerboard pattern and unfenced (see Figure #1). The Bureau has determined that the only way to effectively remove the horses from unfenced private land is to remove them from the entire mountain range involved. } wow!

Section 4 of Public Law 92-195 states "if wild free-roaming horses or burros stray from public lands onto privately owned land, the owners of such land may inform the nearest Federal Marshall or agent of the Secretary, who shall arrange to have the animals removed."

These mountain ranges are located in the Paradise and Denio Planning Units of the Paradise-Denio Resource Area. This action complies with the management goals of the area. } what-? as determined by what? This is an interim action

Implementation of the gathering plan will involve the construction of traps and trap wings, the movement of horses by use of a helicopter, the transportation of horses from the traps to holding corrals, the holding of horses in the corrals and some road work.

The traps will generally be circular (100' in diameter) and constructed out of approximately 90-100 portable panels 6' to 7' in height constructed from 1 1/2" steel pipe. Each trap will have in addition a small holding corral (100' in diameter maximum) adjoining the trap. This corral will also be circular and constructed from identical portable panels.

A portable loading chute will be used at each trap site to load captured horses onto stock trucks that will transport the animals.

The start of each wing will be constructed from portable panels (6' to 7' high). The remainder of the wing will be constructed from white rope stretched on 6 1/2' steel fence posts. The fence posts will be spaced from 50' to 100' apart, depending upon the terrain.

The helicopter will carry a Bureau employee at all times and should the horses become unnecessarily stressed the BLM employee will instruct the pilot to break off the pursuit so that the animals may rest and recover. The helicopter use plan will also incorporate the precautions specified in the proposed rulemaking for the use of helicopters (7440.4). All attempts will be made to move and keep bands together.

A Bureau employee will make careful determination of a boundary line to serve as an outer limit within which attempts will be made to herd horses to a given trap site. Topography, distance and current condition of the horses are factors that will be considered to set the limits so as to avoid undue stress on the horses while they are being herded. Each trapping area will be flown prior to the start of trapping to locate any hazards to the horses while being herded (fences, cliffs, etc.).

An archeological clearance will be completed on all trap sites prior to construction of the trap. If archeological values are found on the trap site, the trap site will be moved to another location.

Only experienced horse wranglers that meet Bureau criteria will be used. Brutality to horses in any form will not be tolerated.

Drivers of vehicles transporting wild horses from the capture area to holding facilities will be knowledgeable of handling such animals. The unloading of wild horses shall be in an orderly fashion.

A veterinarian will be on call at all times during the roundup operation. The veterinarian will never be more than 50 miles from the roundup operation.

B. The Proposed Action

The proposed action consists of removing 100% of the wild horses, if possible, from these mountain ranges. An inventory conducted in 1980 placed the population at 900 total in all these ranges. The actual population may be somewhat higher. Capture will be by the use of a helicopter to run the horses into portable traps.

The Winnemucca District has received requests from four of the users in the checkerboard area to remove the horses from their private land. This action is in response to that request as well as an attempt to alleviate the grazing pressure on a seriously overobligated range resource. The range adjudications made in the 1960s did not allocate any forage to wild horses. All the forage was allocated to wildlife and the livestock operations in the area. At the present time wild horses are using 10,872 AUMs annually in this area, which is a 531% over-obligation of the range resource.

The proposed action will be implemented in several stages. Surveillance of animal movements and location of trap sites is the first stage. Construction of traps and trap wings is scheduled to be completed as the roundup progresses. All traps will be portable and will be moved as the need arises. Archeological clearance of the trap sites will be completed prior to construction.

The actual capture process will begin on November 30 and proceed as long as it is economically feasible to keep trapping or until March 15, whichever comes first.

C. Alternatives to the Proposed Action

1. Alternative No. 1

No action would allow the horse population on the ranges involved to continue to increase. Control would come eventually in the form of disease or starvation. Elimination of all the livestock operations on the mountain range would also result if no action is taken.

2. Alternative No. 2

Reduction of cattle numbers to accommodate horse numbers would eliminate 12 ranches presently licensed in the area from the livestock business. It would also make their private lands, which amount to 35% of the land on these mountain ranges, unusable to them. The horse population would continue to grow under this alternative and control would still be necessary. If control were not exercised by man it would come in the form of disease and starvation on a depleted range resource.

3. Alternative No. 3

Partial reduction of horse numbers with control in preceding years would call for the removal of wild horses to a population level more suitable for the available forage. The horse numbers will then be maintained at this level by removing excess animals every few years. This alternative is not possible with the current forage allocations.

At the present time all available forage is allocated to livestock and wildlife, no forage is allocated to wild horses. With the current situation the only suitable level of horse population for forage is zero. In addition, this action would eventually cost more than the proposed action because of the continuing cost of maintaining horse numbers at a given level.

II. Description of the Existing Environment

A. Previous Actions Pertinent to the Proposal

Prior to the enactment of P.L. 92-195, the Wild Horse and Burro Act, many wild horses were gathered in the mountain ranges. It is since passage of this law in 1971 that horse herds in the area have multiplied to such large numbers that they have become one of the major factors in the overgrazing of the rangeland.

B. Nonliving Components

1. Air

The prevailing winds are from the west or southwest with an average velocity of 5-10 miles per hour. Extreme velocities to 80 miles per hour occur, with high velocities primarily during the spring months of March and April.

Some particulate matter originates from the playas and sandy soils of the surrounding valleys. This occurs primarily in the spring as a result of high winds.

A wide range of temperatures can be noted in the mountain ranges. Maximum summer temperatures can exceed 100°F with winter lows to -30°F. No official temperatures are kept in the area.

Noxious gasses are rare in the capture areas. This is in part due to the sparse human population and distances from major population centers.

No radiological contaminants or nonionizing radiation levels are known to exist in the areas.

2. Land

Public land is classified for retention and multiple use management. Ownership is checkerboard with 65% of the total 704,190 acres in public ownership and 35% in private ownership. Private lands are managed in conjunction with public lands primarily for grazing.

Winnemucca Mountain, Blue Mountain, Hot Springs Range and Bloody Run Mountains serve as area landmarks.

Soils over the area are fine textured, alluvial deposits near the valley bottoms becoming coarser as the elevation increases. Infiltration rates are moderate to extreme. The steep slopes are dominately composed of Paleozoic sedimentary and metamorphic rocks. Soil depth varies from 2 to 60 inches with the shallower soil occurring on the steeper slopes and in the deeper soils in the canyons and valley bottoms.

Approximately eight miles north of Winnemucca lies a large area of sand dunes. These dunes have an east-west orientation of 18 miles. South portions of Silver State Valley and Paradise Valley are covered by these dunes.

Rocky soils with moderate to high infiltration rates help to deter erosion. Spring run-off accounts for most of the erosion. There is a significant amount of wind erosion occurring during high velocity winds. Gully erosion is evident throughout the area and sheet erosion does occur during heavy thunderstorms. As overgrazing continues sheet and gully erosion will intensify, removing valuable topsoil needed for vegetation growth.

3. Water

The majority of the precipitation that falls on this area falls during the winter months from November through March. Spring rains occur but are irregular.

Investigations of water quality of all the streams in the area was conducted during the 1977 field season. No data is presently available on the amounts of sediment that is carried in Paiute Creek, Osgood Creek or China Garden Creek, which are the only perennial streams in the area.

C. Living Components

1. Aquatic Plants

The riparian habitat along the perennial streams has been severely overgrazed to the extent that willow (*Salix*), most of the sedges (*Carex*) and other plants normally found in the riparian zone can only be found in areas that are inaccessible to livestock.

2. Terrestrial Plants

Big sagebrush (*Artemisia tridentata*) is the dominant shrub in the vegetative cover in the capture area. Shadscale (*Atriplex confertifolia*), white sage (*Seratoides lanata*) and bud sage (*Artemisia spinescens*) are the dominant shrubs on the valley floors and lower slopes.

Associated with big sagebrush on the mountain slopes are other shrubs, such as rabbitbrush (*Chrysothamnus* spp.), bitterbrush (*Purshia tridentata*) and snowberry (*Symphoricarpos* spp.). Grass understory on these higher elevation sites consists dominantly of Sandberg's bluegrass (*Poa secunda*), cheatgrass (*Bromus tectorum*), squirreltail (*Sitanian hystrix*), Thurber's needlegrass (*Stipa thurberiana*), Great Basin wildrye (*Elymus cinereus*) and bluebunch wheatgrass (*Agropyron spicatum*). Arrowleaf balsamroot (*Balsamorhiza sagittata*), buckwheat (*Eriogonum* spp.), lupine (*Lupinus* spp.) and phlox (*Phlox* spp.) are the dominant forbs in the mountains.

Associated with big sagebrush at the lower elevations on the alluvial fans and terraces are spiny hopsage (*Grayia spinosa*) and littleleaf horsebrush (*Tetradymia glabrata*). The grass understory consists of cheatgrass, squirreltail and Sandberg's bluegrass. Russian thistle (*Salsola kali*), milkvetch (*Astraglas* spp.) and annual mustards (*Brassica* spp.) are common forbs in this area.

Associated with shadscale, white sage and bud sage are cheatgrass, squirreltail, Sandberg's bluegrass, annual mustards and Russian thistle.

There are some black greasewood (*Sarcobatus vermiculatus*) stands on the saline bottoms in Paradise Valley, Silver State Valley and Eden Valley.

3. Animal Life - Aquatic(a) Mammals

Few aquatic mammals inhabit the area. The possibility exists that beaver (Castor canadensis) may inhabit the Humboldt River. Beaver are not found in any of the other perennial streams. No other aquatic mammals are known to inhabit the area.

(b) Birds

The only water associated birds known to inhabit the area are the killdeer (Charadrius vaciferus) and some migratory waterfowl during their annual migrations north and south.

(c) Fish

There are no known fisheries in any of the perennial streams in the capture area.

4. Animal Life - Terrestrial(a) Mammals

The most common species of mammals include mule deer (Odocoileus hemionus), which have a population of approximately 445 animals. Other mammals are mountain lion (Felis concolor), coyote (Canis lantrans), bobcat (Lynx rufus), badger (Taxides taxus), black-tail jackrabbit (Lepus californicus), Richardson's ground squirrel (Otospermophilis richardsonii), kangaroo rat (Dipodomys ordi), domestic cattle (Bos taurus), and wild horses (Equus caballus).

(b) Birds

Sage grouse (Centrocercus urophasianus) and chukar (Alectoris graeca) occur in scattered populations. A variety of bird life is common to the area. Many species are unidentified. However, the most common include golden eagle (Aquila chrysaetos), red-tailed hawk (Buteo jamaicensis), mourning dove (Zenaidura macroura), common raven (Corvus corax), and a wide variety of passerine and non-passerine birds.

b. Unusual Ecological Areas

The sand dunes located 10 miles north of Winnemucca are unique in this area. The dunes, in addition to being unique, are also inhabited by Dalea kingii, a threatened plant species.

c. Unusual Geological Formations

No unusual geological formations have been identified in the capture area.

d. Hunting and Fishing

Hunting is a minor activity in this area. There are approximately 445 mule deer and only small populations of sage grouse. Fairly dense chukar populations occur in scattered areas. No significant fisheries occur in the area.

e. Wild Horses and Burros

A helicopter census was taken in 1980. This inventory revealed a total of 900 horses in the capture area. For the distribution by mountain range refer to Section I-A, Background Data.

There are no outstanding claims for horses in the capture area.

f. Wilderness Potential

There is no wilderness potential in this area.

3. Social Welfare

The population of the area is very low. The majority of the population live in Paradise and Silver State Valleys on farms and ranches. No capturing will be done on the farming lands. The nearest community of any appreciable size is Winnemucca, which is located on the south boundary of the capture areas.

Livestock grazing and mining are the main uses of the mountain ranges. The income generated by these operations is not large. Nearly all economic exchange takes place outside of the area to be gathered.

Most local people have a very negative attitude toward wild horses. Organized livestock interest groups have been very vocal in calling for the removal of most or all of the wild horses particularly from intermingled public and private lands.

III. Analysis of the Proposed Action and Alternatives

A. Anticipated Impact of Proposed Action

1. Air

Air quality should not adversely be affected by the proposed gathering. There will be periods of time when the gathering will cause dust to be locally heavy. However, these time periods will be of short duration and the areas involved would be widely scattered. Drive trapping will create some dust as the animals are driven several miles to a trap. Vehicular traffic will create dust because of the heavy use roads will receive while a particular trap site is used. Dust and the exhaust gases should be rapidly dispelled because the wind is constantly blowing whether it is gentle or near gale force. However, the prevailing winds are generally from the west so there should be no impact to the air in any populated areas. In addition, the gathering should only last approximately three months, so impact to the air should be short lived.

2. Land

The land will only receive slight disturbance from the proposed gathering. The roads that will be improved have existed for years so the impact has already occurred. By regrading, making water bars, ditches, turnouts, etc., as needed, soil erosion should be greatly reduced from the roadbeds.

The other major land disturbance would be clearing areas of land to build the traps and holding facilities. The drive traps should require only about 1/4 acre to be cleared.

With the removal of a large number of horses, a lot of the pressure on the depleted forage resource should be removed. As recovery proceeds, native grasses and forbs should regain vigor and add organic matter to the soil. Because of the poor condition of the range it will probably take several years before a noticeable change can be seen. Wind erosion should decrease as vegetative cover increases. The long-term benefits to the land should outweigh the detrimental effects of disturbing approximately 5 acres of land. A pit will be used as the burial site for all animals which must be humanely destroyed. At each trap site this will require only a small additional ground disturbance.

3. Water

No detrimental effects are anticipated to any waters. Water quality should improve after the gathering as fewer animals will be using it. Trap sites will not be located on any of the perennial streams or springs.

4. Living Components

The vegetation which supports the wild horse population will improve with the removal of a significant amount of the year-long grazing pressure. Deterioration of the winterfat areas has been severe and these areas are most in need of rest from grazing. All other forage plants (mainly perennial bunchgrass) should respond with increased vigor. These benefits will help to begin restoration of the forage resource.

As for the relationship between wild horse reduction and benefits to wildlife, no firm conclusions can be made at this time. It is likely, though, that the decreased pressure on forage resources should benefit mule deer by reducing competition for forage. It is not anticipated that any harassment to mule deer should occur during trapping operations. No known raptor nesting areas exist in the gathering areas so no conflict is anticipated. No threatened or endangered species are located in the areas where trapping will take place. No traps will be used in the sand dunes area without clearance.

5. Ecological Interrelationships

Wild horses are currently the second largest consumers of forage on the capture area. The grazing pressure they apply to the range is on a year-round basis. No other large herbivore (cattle and deer) exerts year-round pressure in this manner. The removal of a large number of animals should provide a large measure of relief to the forage resource. The native perennial bunchgrasses and forbs should begin to regain vigor. It is probable that retrogressive succession would be at least slowed. Complete halt to retrogression is highly unlikely until further grazing pressure, especially during the growing season, is removed through livestock grazing plan modifications. When retrogression is halted, secondary succession can begin. As secondary succession progresses toward climax, the habitat for species, such as mule deer and sage grouse, should also improve.

6. Human Values

The majority of the landscape character should become more varied as the land takes on the appearance of sagebrush-grass savannah, instead of a monotonous stand of sagebrush.

Much information can be obtained from the gathered animals. All of this information will be useful in management of the horses in the future.

Local public opinion would most likely be strongly in favor of gathering wild horses. National opinions might be entirely the opposite, however, no firm conclusion can be made at this time. With such a large scale gathering planned, it is very probable that it will draw national attention.

The gathering should have no significant effect on the local economy.

B. Anticipated Impact of Alternatives

1. No Action

a. Air

The only effect on air quality might be the long-term increase in dust as the soil-binding perennial grasses are overgrazed and killed.

b. Land

As vegetative cover is removed, especially the perennial grasses, soil protection from plant cover will decrease. Erosion, especially from wind would most likely increase. Water caused erosion might also increase. Since soil forming processes in all semi-desert areas create topsoil at a very slow rate, accelerated soil loss whether by wind or water only degrade the entire community.

c. Water

It is presently unknown how much sedimentation is caused by horses using the perennial streams and springs to water. Therefore, no conclusion can be made as to whether or not sedimentation will increase if no action is taken.

d. Living Components

No action would be very detrimental to the vegetative resource which supports the wild horse populations. The winterfat and shadscale areas are severely overgrazed. The continued drought and heavy overgrazing may destroy these important wintering areas for decades. In the big sagebrush areas, the native perennial grasses have either been grazed out or are in a low state of vigor. The big sagebrush sites contain far less perennial grass than they would in a high seral or climax condition. Big sagebrush has replaced the grasses and this effectively limits reestablishment of the perennial grasses once they are gone. This degraded habitat is less valuable for mule deer, sage grouse and most other mammalian and avian species.

e. Ecological Interrelationships

If no action is taken to relieve the forage over-obligation, retrogressive succession will continue. The whole ecosystem will be degraded until the pressure which causes the degradation is removed. As vegetative cover is removed, soil erosion will increase. This will decrease soil productivity which in turn hinders vegetative recovery. So a cycle is started which will be very difficult to break.

f. Human Values

No action will bring a loud outcry from the local population. If the situation on these mountain ranges continues to deteriorate, a large number of horses will die from starvation, or diseases caused by weakened condition. This would probably cause an outcry from wild horse protection groups. Thus, the Bureau could very conceivably receive more bad publicity from doing nothing than if they gather such a large number of animals.

2. Reduction of Cattle Numbers to Accommodate Horse Numbersa. Air

Overall effects should be the same as described in the No Action Alternative.

b. Land

Removal of the cattle from the area would have a beneficial effect on the vegetation in that it would relieve the pressure on the depleted resource. The same number of cattle are turned on to the allotment each year. Horse numbers without control would continue to increase until they had surpassed what they are at present, plus what would be removed by cattle reductions. Without horse control depletion of the forage resource is inevitable. This will cause an increase in erosion of all types and cause a general overall degradation of the land.

c. Water

Again, removal of the cattle without control of the horse populations is only a temporary measure and a deterioration of the waters in the area will eventually occur.

d. Living Components

Deterioration of the forage resource and wildlife habitat will continue until the proposed gathering is implemented. The effect on all living components should be the same as described in the Proposed Action section.

e. Ecological Interrelationships

Effects are the same as the No Action Alternative.

f. Human Values

Effects are the same as the No Action Alternative.

C. Unmitigated Impacts

The horse population would be directly effected. The population would be eliminated or reduced to a very small number.

Soil compaction and vegetation trampling will occur in traps and other places of heavy concentration of horses.

Removal of a large number of horses from these mountain ranges will reduce the conflict and competition for forage between range users on critical areas. Reduction in forage use will increase the amount of forage available to cattle and wildlife.

The gathering operations will cause some stress on the horses and disturbance to wildlife and cattle.

D. Possible Mitigating Measures

1. Archeological clearance will be done on all trap sites prior to their construction. If archeological values are present, trap sites will be moved. No traps will be placed near any of the identified historic sites.
2. A Bureau employee will make a careful determination of a boundary line to serve as an outer limit within which attempts will be made to herd horses to a given trap. Topography, distance and current condition of the horses are factors that will be considered to set the limits so as to avoid undue stress on the horses while they are being herded.
3. Any trap sites located in the Sand Dunes area will be cleared by Bureau personnel to insure no population of the threatened species, Dalea kingii, are disturbed.
4. All corral panels will be from 72" to 84" high in order to prevent horses from jumping out of traps.
5. Brutality to horses in any form will not be tolerated. Any employee who mistreats any horse will be dismissed immediately from the roundup operation.

6. A Bureau official will be in the helicopter at all times in order to insure that all stipulations are met and that horses are not over-stressed.
7. All holding facilities will meet U.S. Department of Agriculture and U.S. Department of the Interior specifications.
8. Only experienced horseback riders will be used in the gathering operation.
9. Experienced horse wranglers from the local area will be employed whenever possible.
10. All saddle horses will be properly shod and over three years in age. All saddles and tack will be in good repair.
11. Equine Infectious Anemia (EIA) samples will be taken at the holding facilities at Carson City.
12. Only experienced drivers will be used to transport the horses to the holding facilities.
13. The helicopter will have radio communications with the Authorized Officer or his designated representative at all times.

E. Adverse Impacts That Cannot Be Avoided

An estimated two percent death loss of captured horses will occur during the roundups. This loss is minimal due to the unavoidable hazards involved. The use of portable panels for traps and wings will allow all evidence of the roundup to be removed. Damaged vegetation at the trap site will eventually replace itself.

IV. Relationship Between Short-term Use and Long-term Productivity

Short-term use under existing conditions would have subtle adverse effects on the animal and plant community. Without control of horse numbers range and watershed conditions would continue to deteriorate effecting the animals supported by them.

Increased horse numbers would further magnify the conflict between range users and produce a high degree of population stress. Elimination of horse numbers would help stabilize and/or improve the range and reduce population stress. This benefit would be recognized until horse numbers increase substantially. With periodic removal of excess horses the balance between range users can be properly managed pending evaluation of the plan and adjustments, if needed. The ultimate goal is to manage wild horses, wildlife and livestock in an ecological balance for the maximum use without jeopardizing the range health.

V. Irreversible and Irretrievable Commitment of Resources

There should be no permanent loss of any resources in these mountain ranges because of the proposed gathering.

Possible injury may result from the gathering of horses; if so, the animals would have to be destroyed in a humane way.

VI. Persons, Groups and Government Agencies Consulted

Roscoe E. Ferris, State BLM Wild Horse Specialist

Wild Horse Organized Assistance, Reno, Nevada

California Humane Association

T Quarter Circle c/o Henry Angus, Rancher, Winnemucca, NV.

Jack Fullenwider, Rancher, P. O. Box 128, Golconda, NV.

Glen Tipton, Rancher, P. O. Box 98, Golconda, NV.

Alvin & Anesita Miller, Ranchers, Star Rt. Box 138, Winnemucca, NV.

Ms. George Miller, Rancher, Star Rt. Box 162, Winnemucca, NV.

VII. Public Interest and/or Controversy

Due to the large nature of the proposed gathering, the public, both locally and even nationally, should show a high level of interest. Wild horse interest groups will undoubtedly closely scrutinize all phases of the gathering. Many of these horse protection groups have been very influential in shaping BLM policies concerning wild horse management. The Bureau has been enjoined many times by these groups and has been forced into court battles long before a roundup could begin. In the case of this gathering, it is possible that the Bureau may be taken to court. Basically, in the past, injunctions have been based on the premise that no management is the proper management for horses. Without adequate data, the Bureau has often lost these court cases and been stopped from gathering. Another problem should, theoretically at least, have been solved by the United States Supreme Court ruling in 1976 which clearly places wild horse responsibility with the United States. An agreement concerning brand inspection of captured animals has been drawn up for this gathering.

VIII. Recommendations of Preferred Action

Based on the foregoing facts and analysis, it is recommended that the proposed action be approved and adopted. It is further recommended that the stipulations and mitigating measures called for in this document be adopted.

IX. Participating Staff

Glenn T. Patterson, Range Conservationist

J. Ron Hall, Wild Horse Specialist

John R. Roney, District Archeologist

Carl J. Keller, Area Wildlife Biologist

Richard D. Wheeler, Range Conservationist

Robert G. Brown, Natural Resource Specialist

X. Signatures

Lead responsibility:

Paul W. Bryant
Paul W. Bryant
Natural Resource Specialist

11/20/77
Date

Edward J. Hopper
Edward J. Hopper
Range Technician

11-20-77
Date

Reviewed by:

J. Ron Hall
J. Ron Hall
Wild Horse Specialist

11/21/77
Date

Henry B. Beauchamp
Henry B. Beauchamp
Environmental Planning Coordinator

11/20/77
Date

Approved by:

William J. Harkenrider Jr.
William J. Harkenrider, Jr.
Area Manager

1-17-78
Date

for Robert J. Carroll
Chester E. Conard
District Manager

1-18-78
Date

Amendment to EAR NV-020-8-13

I. Description of Proposed Action and Alternative

A. Background Data

This amendment includes the Eugene Mountains, Alpha Mountain, and Majuba Mountain to EAR NV-020-8-13, Paradise-Denio Wild Horse Capture Plan. The area to be added includes all of Humboldt Valley and Majuba Allotments (Figure #1). This area contains an estimated total of 470 wild horses. The horses are distributed between the mountain ranges as follows:

<u>Mountain Range</u>	<u>Number of Wild Horses</u>
Eugene Mountains	358
Majuba Mountain	112

These allotments are composed of 192,792 acres of public land and 138,536 acres of private land. Two of the grazing users, which have control of the majority of private land in these allotments, have requested that the Bureau remove the horses from their private land. This private land is in a checkerboard pattern and unfenced (Figure #1).

B. Proposed Action

The proposed action is amended to include the 268 horses in the Humboldt Valley and Majuba Allotments.

The range adjudication for these allotments was completed in the 60's. All AUM's available, 7,585, were adjudicated to livestock use. No AUM's were adjudicated for horse use. At the present time wild horses are using approximately 3,216 AUM's on these allotments, this is a 42% overobligation of the forage resource.

II. Description of the Existing Environment

B. Nonliving Components

2. Land

In addition to the lands stated in this section of the EAR, 192,792 acres of public land and 138,536 acres of private also in the checkerboard pattern are included. These lands are in the Humboldt Valley and Majuba Allotments.

Eugene Mountains, Alpha Mountain, and Majuba Mountain serve as landmarks for the area.

D. Human Values

1. Sociocultural Interests

a. Archeological and Historical

There are three major archeological sites located in the Eugene Mountains. One site consists of petroglyphs on a 12'x12' schist outcrop and a rock blind type structure. The other two sites are camp sites with 6" to 24" midden deposits, indicating an extended period of occupation. These sites are all located on the high ridges at the north end of the mountain range. All trap sites will be located at the base of the mountains. No conflict with these sites is expected.

- e. A helicopter census was taken in the spring of 1977. This inventory revealed a total of 268 horses. For distribution by mountain range, refer to Section I-A, Background Data.

VI. Persons, Groups and Government Agencies Consulted

Lane Duncan and E. Tharalson, Permittees
Majuba Allotment.

X. Signatures

Lead Responsibility:

Paul W. Bryant
Paul W. Bryant
Natural Resource Specialist

1/6/78
Date

Reviewed by:

J. Ron Hall
J. Ron Hall
Wild Horse Specialist

1/10/78
Date

Henry B. Beauchamp
Henry B. Beauchamp
Environmental Planning Coordinator

1-16-78
Date

Approved by:

William J. Harkemider, Jr.
William J. Harkemider, Jr.
Area Manager

1-17-78

Date

Robert J. Neary
Robert J. Neary
Area Manager

1-24-78

Date

Chester W. Conard
Chester W. Conard
District Manager

1-18-78

Date

DISCRETE OPERATIONS

Surveillance
Construction
Capture
Confined
Management

COMPONENTS, SUBCOMPONENTS, AND ELEMENTS IMPACTED	ANTICIPATED IMPACTS					REMARKS
	Surveillance	Construction	Capture	Confined	Management	
II. L. COMPONENTS (Con.)						
B. PLANTS (Terrestrial)						
Shrubs	0	0	L-	M+		Pressure on the ever obligated
Forbes	0	L-	L-	M+		forage resource will be greatly
Grasses	0	L-	L-	M+		reduced allowing an increase in vegetative cover.
C. ANIMALS (Aquatic)						
Non-applicable						
D. ANIMALS (Terrestrial)						
Mammals	0	L-	L-	M+		Horse removal will ease competition
Birds	0	L-	L-	M+		for forage with mule deer & chukar
Reptiles	0	L-	L-	M+		populations due to increased vegetation
III. INTERRELATIONSHIPS						
A. ECOLOGICAL PROCESSES						
Succession	0	0	0	L+		Secondary succession should begin
Energy transfer	0	0	0	L+		with the elimination of the over obligation of forage
IV. VALUES						
A. LANDSCAPE CHARACTER						
Aesthetics	0	0	0	L-		General appearance of the
Open space	0	L-	L-	0		landscape will improve with the increase in vegetative cover
B. SOCIOCULTURAL INTERESTS						
Human interest	0	X	X	L+		Controversy may arise due to action taken

INSTRUCTIONS

- Action** - Enter action being taken, analytic step for which worksheet is being used, environmental viewpoint of impact, and any assumptions relating to impact.
 - Worksheet is normally used to analyze "Anticipated Impacts" of action; however, it may be used to analyze "Residual Impacts." Worksheets may also be used to compare impacts before and after mitigating measures are applied.
 - State viewpoint that best describes environmental impact. For example, a fence viewed down the fence line has greater impact than the same fence viewed over an entire allotment. Generally, narrow viewpoints better illustrate specific impacts than will broad viewpoints.
 - Assumptions may be made to establish a base for analysis (e.g. estimated time periods, season of year, etc.).
- Stages of Implementation** - Identify different phases of proposed project (e.g. a road project consists of survey, construction, use, and maintenance stages).
- Discrete Operations** - Identify separate actions comprising a particular stage of implementation (e.g. the construction stage of the road project has the discrete operations of clearing, grading, and surfacing).
- Elements Impacted** - Enter under appropriate heading all environmental elements susceptible to impact from action and alternatives. Relevant elements not contained in the
 - Anticipated Impact** - Evaluate anticipated impact on each element and place an entry in the appropriate square indicating degree of impact as low (L), medium (M), high (H), no impact (O), or unknown or negligible (X). Precede each entry by a plus (+) or minus (-) sign indicating a beneficial or adverse type of impact. If type of impact reflects a matter of opinion or is not known, do not precede with a sign. For example, construction of a wind mill on open range has a definite visual impact; however, to some people the effect is detrimental while to others it is an improvement. By not entering a plus (+) or minus (-) sign the worksheet is kept factual and unbiased. If both degree and type of impact are unknown, place an (x) in the appropriate square.
 - The measures of impact (e.g. low, medium, and high) are relative and their meaning may vary slightly from action to action. The term "low" should not be applied to impacts of a negligible nature. For example, we know that a pickup truck driving down a proposed fence line laying wire has some impact on air quality. However, the significance of this impact is not normally great enough to warrant even a "low" rating. In cases like this, the impact will usually be marked "O" or the element left off the worksheet.
 - It is recognized that some environmental elements may defy accurate measurement or in-depth analysis within current Bureau capabilities or expertise. The nature of the action as well as type and degree of impact should guide in the decision to seek outside expertise or assistance.

DISCRETE OPERATIONS

Surveillance
Construction
Capture
Continued Management*

	COMPONENTS, SUBCOMPONENTS, AND ELEMENTS IMPACTED	ANTICIPATED IMPACTS				REMARKS	
II. L. COMPONENTS (Con.)	B. PLANTS (Terrestrial)						
	Shrubs	0	L-	L-	M+	Pressure on an over obligated forage resource will be reduced.	
	Forbs	0	L-	L-	M+		
	Grasses	0	L-	L-	M+		
III. INTERRELATIONSHIPS	C. ANIMALS (Aquatic)						
	Non-Applicable						
IV. VALUES	D. ANIMALS (Terrestrial)						
	Mammals	0	0	0	M+	Horse removal will ease competition with mule deer and chukar populations due to increased vegetation.	
	Reptiles	0	0	0	M+		
	Birds	0	0	0	M+		
III. INTERRELATIONSHIPS	A. ECOLOGICAL PROCESSES						
	Succession	0	0	0	L+	Secondary succession should begin with the elimination of the over obligation of forages.	
	Energy Transfer	0	0	0	L+		
IV. VALUES	A. LANDSCAPE CHARACTER						
	Aesthetics	0	0	0	L+	General appearance of the landscape will improve with an increase in vegetative cover.	
	Open Space						
IV. VALUES	B. SOCIOCULTURAL INTERESTS						
	Human Interest	0	X	X	L+	Controversy may arise due to action taken.	

INSTRUCTIONS

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 - Worksheet is normally used to analyze "Anticipated Impacts" of action; however, it may be used to analyze "Residual Impacts." Worksheets may also be used to compare impacts before and after mitigating measures are applied.
 - State viewpoint that best describes environmental impact. For example, a fence viewed down the fence line has greater impact than the same fence viewed over an entire allotment. Generally, narrow viewpoints better illustrate specific impacts than will broad viewpoints.
 - Assumptions may be made to establish a base for analysis (e.g. estimated time periods, season of year, etc.).
- Stages of Implementation - Identify different phases of proposed project (e.g. a road project consists of survey, construction, use, and maintenance stages).
- Discrete Operations - Identify separate actions comprising a particular stage of implementation (e.g. the construction stage of the road project has the discrete operations of clearing, grading, and surfacing).
- Elements Impacted - Enter under appropriate heading all environmental elements susceptible to impact from action and alternatives. Relevant elements not contained in the "Elements Impacted" section should be listed in the "Other Elements Impacted" section. See BLM Manual 1701.
- Anticipated Impact - Evaluate anticipated impact on each element and place an entry in the appropriate square indicating degree of impact as low (L), medium (M), high (H), no impact (O), or unknown or negligible (X). Precede each entry by a plus (+) or minus (-) sign indicating a beneficial or adverse type of impact. If type of impact reflects a matter of opinion or is not known, do not precede with a sign. For example, construction of a wind mill on open range has a definite visual impact; however, to some people the effect is detrimental while to others it is an improvement. By not entering a plus (+) or minus (-) sign the worksheet is kept factual and unbiased. If both degree and type of impact are unknown, place an (x) in the appropriate square.
 - The measures of impact (e.g. low, medium, and high) are relative and their meaning may vary slightly from action to action. The term "low" should not be applied to impacts of a negligible nature. For example, we know that a pickup truck driving down a proposed fence line laying wire has some impact on air quality. However, the significance of this impact is not normally great enough to warrant even a "low" rating. In cases like this, the impact will usually be marked "O" or the element left off the worksheet.
 - It is recognized that some environmental elements may defy accurate measurement or in-depth analysis within current Bureau capabilities or expertise. The nature of the action as well as type and degree of impact should guide in the decision to seek outside expertise or assistance.

DISCRETE OPERATIONS

Surveillance
Construction
Capture
Continued Management

	COMPONENTS, SUBCOMPONENTS, AND ELEMENTS IMPACTED	ANTICIPATED IMPACTS					REMARKS
II. LIFE COMPONENTS (Con.)	B. PLANTS (Terrestrial)						
	Shrubs	0	0	L-	M+		Pressure on the already over obli-
	Forbs	0	L-	L-	M+		gated forage area will be reduced
	Grasses	0	L-	L-	M+		due to increased vegetative cover.
	C. ANIMALS (Aquatic)						
	Non-Applicable						
II. INTERRELATIONSHIPS	D. ANIMALS (Terrestrial)						
	Mammals	0	0	0	M+		Horse removal will ease competition
	Reptiles	0	0	0	M+		for forage with mule deer and
	Birds	0	0	0	M+		chukar populations due to increased
							vegetation.
II. INTERRELATIONSHIPS	A. ECOLOGICAL PROCESSES						
	Succession	0	0	0	L+		Secondary succession should begin
	Energy Transfer	0	0	0	L+		with the elimination of the over
IV. VALUES	A. LANDSCAPE CHARACTER						
	Aesthetics	0	0	0	L-		General appearance of the land-
	Open Space	0	L-	L-	0		scape will improve with the in-
							crease in vegetative cover.
IV. VALUES	B. SOCIOCULTURAL INTERESTS						
	Human Interest	0	X	X	L+		Controversy may arise due to
							action taken.

INSTRUCTIONS

- Action** - Enter action being taken, analytic step for which worksheet is being used, environmental viewpoint of impact, and any assumptions relating to impact.
 - Worksheet is normally used to analyze "Anticipated Impacts" of action; however, it may be used to analyze "Residual Impacts." Worksheets may also be used to compare impacts before and after mitigating measures are applied.
 - State viewpoint that best describes environmental impact. For example, a fence viewed down the fence line has greater impact than the same fence viewed over an entire allotment. Generally, narrow viewpoints better illustrate specific impacts than will broad viewpoints.
 - Assumptions may be made to establish a base for analysis (e.g. estimated time periods, season of year, etc.).
- Stages of Implementation** - Identify different phases of proposed project (e.g. a road project consists of survey, construction, use, and maintenance stages).
- Discrete Operations** - Identify separate actions comprising a particular stage of implementation (e.g. the construction stage of the road project has the discrete operations of clearing, grading, and surfacing).
- Elements Impacted** - Enter under appropriate heading all environmental elements susceptible to impact from action
 - The measures of impact (e.g. low, medium, and high) are relative and their meaning may vary slightly from action to action. The term "low" should not be applied to impacts of a negligible nature. For example, we know that a pickup truck driving down a proposed fence line laying wire has some impact on air quality. However, the significance of this impact is not normally great enough to warrant even a "low" rating. In cases like this, the impact will usually be marked "0" or the element left off the worksheet.
 - It is recognized that some environmental elements may defy accurate measurement or in-depth analysis with current Bureau capabilities or expertise. The nature of the action as well as type and degree of impact should guide in the decision to mark outside the
- Anticipated Impact** - Evaluate anticipated impact on each element and place an entry in the appropriate square indicating degree of impact as low (L), medium (M), high (H), no impact (O), or unknown or negligible (X). Precede each entry by a plus (+) or minus (-) sign indicating a beneficial or adverse type of impact. If type of impact reflects a matter of opinion or is not known, do not precede with a sign. For example, construction of a wind mill on open range has a definite visual impact; however, to some people the effect is detrimental while to others it is an improvement. By not entering a plus (+) or minus (-) sign the worksheet is kept factual and unbiased. If both degree and type of impact are unknown, place an (x) in the appropriate square.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ENVIRONMENTAL ANALYSIS WORKSHEET

1. Action

Krum Hills Horse Removal

2. Stages of implementation

Surveillance and Location of Traps, Trap Construction, Capture

3. DISCRETE OPERATIONS

Surveillance
Construction
Capture
Continued Management

4. COMPONENTS, SUBCOMPONENTS, AND ELEMENTS IMPACTED 5. ANTICIPATED IMPACTS 6. REMARKS

I. NONLIVING COMPONENTS	A. AIR		5. ANTICIPATED IMPACTS				6. REMARKS
	Component	0	L-	L+	M-	M+	
	Air Space	0	0	0	0		Vehicle travel and light construction will not cause any significant dust hazards. Good access to capture area provided thru roads in the area.
	Particulate Matter	0	L-	L-	L-		
I. NONLIVING COMPONENTS	B. LAND						
	Soils - General	0	0	L-	L+		Soils profile will not be impacted appreciably by the implementation of the action. A reduction of erosion will be prevalent due to increased vegetative cover.
	Erosion	0	0	L-	M+		
I. NONLIVING COMPONENTS	C. WATER						
	Surface Water	0	0	0	M+		Riparian habitat pressures will be reduced.
	Ground Water	0	0	0	L+		
	Evapotranspiration	0	0	0	L+		
Hydrologic Cycle	0	0	0	L+			
II. LIVING COMPONENTS	A. PLANTS (Aquatic)						
	Riparian Habitat	0	0	0	L+		Pressure on the riparian habitat will be reduced.

DISCRETE OPERATIONS

Surveillance
Construction
Capture
Continued Management

II. L. COMPONENTS (Con.)	COMPONENTS, SUBCOMPONENTS, AND ELEMENTS IMPACTED	ANTICIPATED IMPACTS					REMARKS
	B. PLANTS (Terrestrial)						
	Shrubs	0	0	L-	M+		Pressure on the over obligated
	Forbs	0	L-	L-	M+		forage area will be reduced due
	Grasses	0	L-	L-	M+		to increased vegetative cover.
	C. ANIMALS (Aquatic)						
	Non-Applicable						
	D. ANIMALS (Terrestrial)						
	Mammals	0	0	0	M+		Horse removal will ease competi-
	Reptiles	0	0	0	M+		tion for forage with mule deer and
	Birds	0	0	0	M+		chukar populations due to increased
							vegetation.
	A. ECOLOGICAL PROCESSES						
	Succession	0	0	0	L+		Secondary succession should begin
	Energy Transfer	0	0	0	L+		with the elimination of the over-
							obligation of forage.
	A. LANDSCAPE CHARACTER						
	Aesthetics	0	0	0	L-		General appearance of the land-
	Open Space	0	L-	L-	0		scape will improve with the increase
							in vegetative cover.
	B. SOCIOCULTURAL INTERESTS						
	Human Interest	0	X	X	L+		Contravergy may arise due to action
							taken.

INSTRUCTIONS

1. Action - Enter action being taken, analytic step for which worksheet is being used, environmental viewpoint of impact, and any assumptions relating to impact.
 - a. Worksheet is normally used to analyze "Anticipated Impacts" of action; however, it may be used to analyze "Residual Impacts." Worksheets may also be used to compare impacts before and after mitigating measures are applied.
 - b. State viewpoint that best describes environmental impact. For example, a fence viewed down the fence line has greater impact than the same fence viewed over an entire allotment. Generally, narrow viewpoints better illustrate specific impacts than will broad viewpoints.
 - c. Assumptions may be made to establish a base for analysis (e.g. estimated time periods, season of year, etc.).
2. Stages of Implementation - Identify different phases of proposed project (e.g. a road project consists of survey, construction, use, and maintenance stages).
3. Discrete Operations - Identify separate actions comprising a particular stage of implementation (e.g. the construction stage of the road project has the discrete operations of clearing, grading, and surfacing).
4. Elements Impacted - Enter under appropriate heading all environmental elements susceptible to impact from action
5. Anticipated Impact - Evaluate anticipated impact on each element and place an entry in the appropriate square indicating degree of impact as low (L), medium (M), high (H), no impact (O), or unknown or negligible (X). Precede each entry by a plus (+) or minus (-) sign indicating a beneficial or adverse type of impact. If type of impact reflects a matter of opinion or is not known, do not proceed with a sign. For example, construction of a wind mill on open range has a definite visual impact; however, to some people the effect is detrimental while to others it is an improvement. By not entering a plus (+) or minus (-) sign the worksheet is kept factual and unbiased. If both degree and type of impact are unknown, place an (x) in the appropriate square.
 - a. The measures of impact (e.g. low, medium, and high) are relative and their meaning may vary slightly from action to action. The term "low" should not be applied to impacts of a negligible nature. For example, we know that a pickup truck driving down a proposed fence line laying wire has some impact on air quality. However, the significance of this impact is not normally great enough to warrant even a "low" rating. In cases like this, the impact will usually be marked "O" or the element left off the worksheet.
 - b. It is recognized that some environmental elements may defy accurate measurement or in-depth analysis within current Bureau capabilities or expertise. The nature of the action as well as type and degree of impact should guide in the decision to mark outside operating

ENVIRONMENTAL ANALYSIS WORKSHEET

1. Action

Bloody Run Mountains Horse Removal

2. Stages of implementation

Surveillance and Location of Traps, Trap Construction, Capture

3. DISCRETE OPERATIONS

Surveillance
 Construction
 Capture
 Continued Management

4. COMPONENTS, SUBCOMPONENTS, AND ELEMENTS IMPACTED		5. ANTICIPATED IMPACTS				6. REMARKS
I. NONLIVING COMPONENTS	A. AIR					
	Air Space	0	0	0	0	Vehicle travel and light construction will not cause any significant dust hazards. Good access to the capture area is provided by roads in the general area.
	Particulate Matter	0	L-	L-	L+	
	B. LAND					
	Soils General	0	0	L-	L+	Soils profile will not be impacted appreciably by the implementation of the action. A reduction of erosion will be prevalent due to increased vegetative cover.
	Erosion	0	0	L-	L+	
	C. WATER					
	Surface Water	0	0	0	M+	Riparian habitat pressures will be reduced.
	Ground Water	0	0	0	L+	
	Evapotranspiration	0	0	0	L+	
	Hydrologic Cycle	0	0	0	L+	
II. LIVING COMPONENTS	A. PLANTS (<i>Aquatic</i>)					
	Riparian	0	0	0	L+	Pressure on the riparian habitat will be reduced.

DISCRETE OPERATIONS

Surveillance
Construction
Capture
Captive Management

COMPONENTS, SUBCOMPONENTS, AND ELEMENTS IMPACTED		ANTICIPATED IMPACTS				REMARKS
II. I. COMPONENTS (Con.)	B. PLANTS (Terrestrial)					
	Shrubs	0	X-	X-	M+	Pressures on an already over obligated forage area will be reduced allowing on increased in vegetative cover.
	Forbs		L-	L-	M+	
	Grasses		L-	L-	M+	
	C. ANIMALS (Aquatic)					
	D. ANIMALS (Terrestrial)					
	Mammals	0	0	0	M+	Horse removal will ease competition with mule deer and chukar populations due to increases in vegetation.
	Reptile	0	0	0	M+	
	Birds	0	0	0	M+	
	III. INTER-RELATIONSHIPS	A. ECOLOGICAL PROCESSES				
Succession		0	0	0	L+	Secondary succession should start with the elimination of the over obligation of forage.
Energy Transfer		0	0	0	L+	
IV. VALUES	A. LANDSCAPE CHARACTER					
	Aesthetics	0	0	0	L+	General appearance of the landscape will improve with the proper management of the area. This includes managing horse numbers.
	Open Space	0	L-	L-	0	
	B. SOCIOCULTURAL INTERESTS					
	Human Interest	0	X	X	L+	Controversy may arise due to the action being taken.

INSTRUCTIONS

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 - State viewpoint that best describes environmental impact. For example, a fence viewed down the fence line has greater impact than the same fence viewed over an entire allotment. Generally, narrow viewpoints better illustrate specific impacts than will broad viewpoints.
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- Stages of Implementation** - Identify different phases of proposed project (e.g. a road project consists of survey, construction, use, and maintenance stages).
- Discrete Operations** - Identify separate actions comprising a particular stage of implementation (e.g. the construction stage of the road project has the discrete operations of clearing, grading, and surfacing).
- Elements Impacted** - Enter under appropriate heading all environmental elements susceptible to impact from action and alternatives. Relevant elements not contained in the digest should also be entered. See BLM Manual 1791.
- Anticipated Impact** - Evaluate anticipated impact on each element and place an entry in the appropriate square indicating degree of impact as low (L), medium (M), high (H), no impact (O), or unknown or negligible (X). Precede each entry by a plus (+) or minus (-) sign indicating a beneficial or adverse type of impact. If type of impact reflects a matter of opinion or is not known, do not precede with a sign. For example, construction of a wind mill on open range has a definite visual impact; however, to some people the effect is detrimental while to others it is an improvement. By not entering a plus (+) or minus (-) sign the worksheet is kept factual and unbiased. If both degree and type of impact are unknown, place an (x) in the appropriate square.
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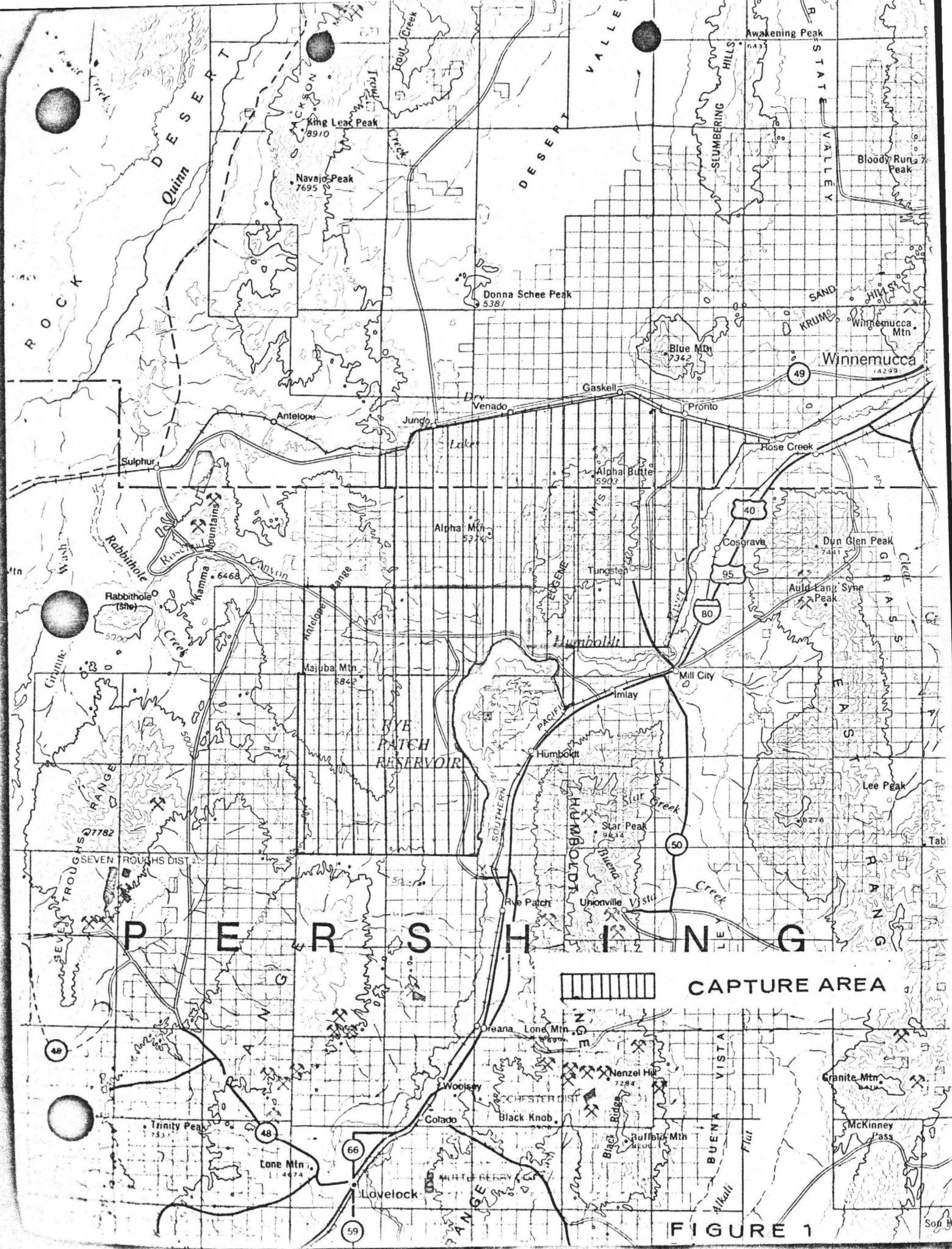


FIGURE 1

BUREAU OF LAND MANAGEMENT

WINNEMUCCA DISTRICT OFFICE

WILD HORSE MANAGEMENT

4740

PARADISE-DENIO RESOURCE AREA

CAPTURE PLAN

Stipulations

1. Archeological clearance will be done on all trap sites prior to their construction. If archeological values are present, trap sites will be moved. No traps will be placed near any of the identified historic sites.
2. A Bureau employee will make a careful determination of a boundary line to serve as an outer limit within which attempts will be made to herd horses to a given trap. Topography, distance and current conditions of the horses are factors that will be considered to set the limits so as to avoid undue stress on the horses while they are being herded.
3. Any trap site located in the Sand Dunes area will be cleared by Bureau personnel to insure no populations of the threatened plant species Dalea kingii are disturbed.
4. All corral panels will be from 72" to 84" high in order to prevent horses from jumping out of traps.
5. Brutality to horses in any form will not be tolerated. Any employee who mistreats any horse will be dismissed immediately from the roundup operation.
6. A Bureau official will be in the helicopter at all times in order to insure that all stipulations are met and that horses are not over-stressed.
7. All holding facilities will meet U.S. Department of Agriculture and U.S. Department of the Interior specifications.
8. Only experienced horseback riders will be used in the gathering operations.
9. Experienced horse wranglers from the local area will be employed whenever possible.
10. All saddle horses will be properly shod and over three years in age. All saddles and tack will be in good repair.
11. Equine Infectious Anemia (EIA) samples will be taken at the holding facilities at Carson City.
12. Only experienced drivers will be used to transport the horses to the holding facilities.
13. The helicopter will have radio communication with the Authorized Officer or his designated representative at all times.

I. Introduction

The intent of this capture plan is to outline the methods and procedures to be used in removing the wild horses from the Krum Hills, Bloody Run Hills, Hot Spring Range, and Osgood Mountains. This involves around 900 horses on both public and private land.

The BLM is directed to manage wild horses and burros as authorized by P.L. 92-195 Section 3. This management includes maintaining an ecological balance on the public lands. Over the past years the increase in horse numbers and drought have depleted the range condition and adversely effected the ecological balance of the area. Also, five of the private landholders have requested that the BLM remove all the wild horses from their land. The BLM has determined that the only effective method of removing the horses from the unfenced private land is to remove them from the entire mountain range involved.

II. General Area Description

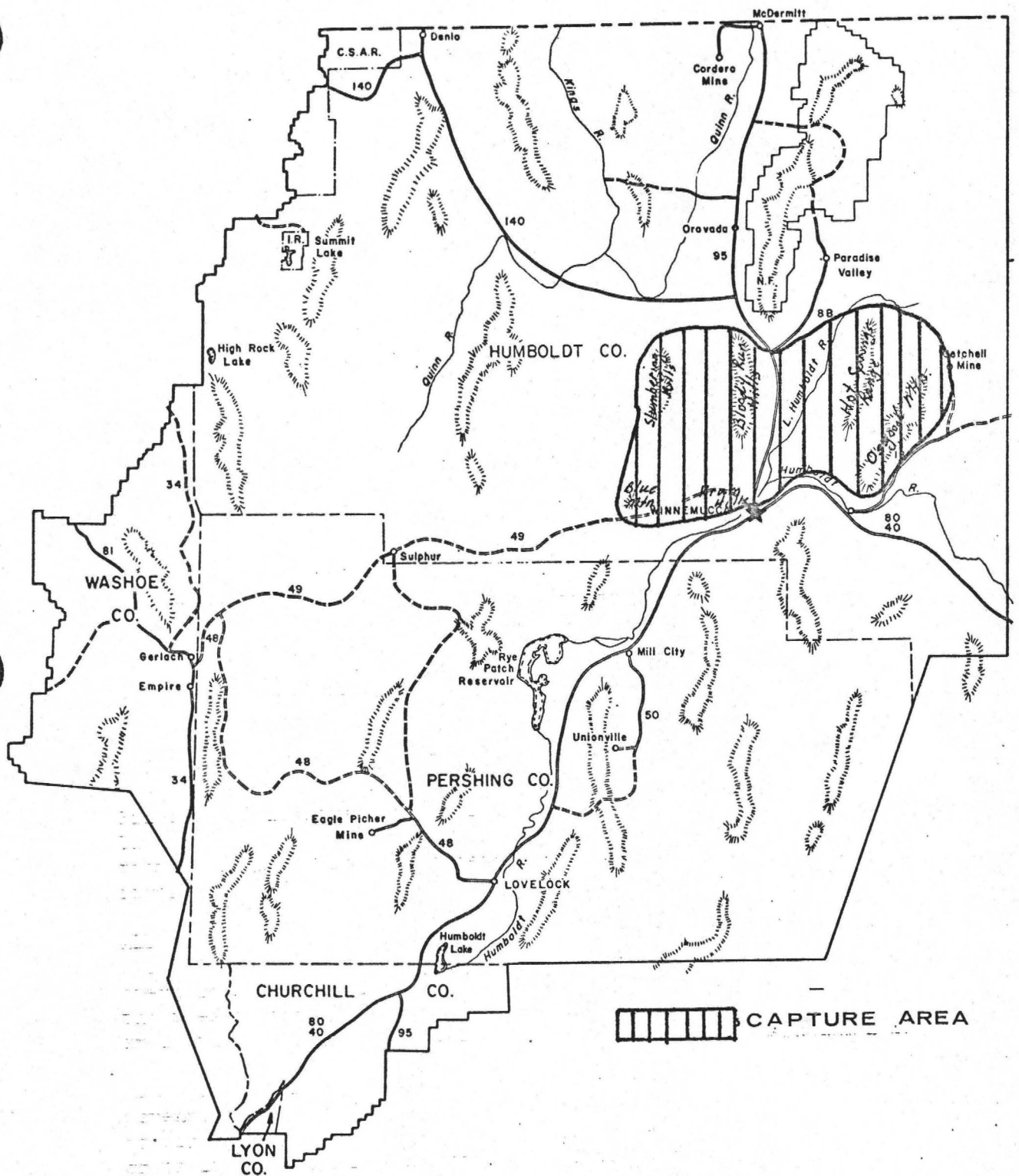
All the mountain ranges are within 20 miles of Winnemucca and are located northwest and northeast of Winnemucca (see Figure #1).

The Krum Hills, which includes Winnemucca Mountain, lie approximately one mile northwest of Winnemucca. This range has an east-west orientation and is approximately 12 miles long. Elevations range from a high of 7,700' at Winnemucca Mountain on the east end of the range to 4,200' on the Silver State Valley side (to the north) and 4,400' on the Humboldt River side of the range (to the south).

Slumbering Hills lie 18 miles northwest of Winnemucca. This range has a north-south orientation and is approximately 18 miles long. Elevations range from a high of 6,437' at Awakening Peak on the north end to 4,400' on the Desert Valley side (to the west), and 4,200' on the Silver State Valley side (to the east).

Bloody Run Hills lie 10 miles north of Winnemucca on the west side of Paradise Valley. Elevations range from a high of 7,835' at Bloody Run Peak on the south end to 4,200' on the Silver State Valley side (to the west), and 4,500' on the Paradise Valley side (to the east). This range has a north-south orientation and is approximately 19 miles long.

The Hot Springs Range lies 16 miles northeast of Winnemucca on the east side of Paradise Valley. This range has a north-south orientation and is approximately 22 miles long. Elevations range from a high of 6,556' on an unnamed peak in the middle of the range to 4,600' on the Paradise Valley side (to the west) and 4,800' on the Eden Valley side (to the east).



WINNEMUCCA DISTRICT

FIGURE 1

The Osgood Mountains lie 14 miles east by northeast from Winnemucca. This range also has a north-south orientation and is approximately 24 miles long. Elevations range from a high of 8,678' at Adam Peak in the center of the range to 4,800' on the Eden Valley side (to the west) and 4,700' on the Kelly Creek side (to the east).

Blue Mountain lies 14 miles west of Winnemucca. The foothills of Blue Mountain have an east-west orientation of approximately seven miles. These foothills to the east connect with the foothills of the Krum Hills. Elevations range from a high of 7,342' at Blue Mountain to 4,300' on the Humboldt River side (to the south) and 4,500' on the Sand Dunes side (to the north).

Vegetation types are consistent throughout the capture area. Greasewood and shadscale types are found in the valley bottoms and low elevation foothills. The remaining foothills and mountains consist of big and low sagebrush vegetative types.

A detailed wild horse inventory was conducted in Spring 1980 on these mountain ranges. A total of 906 wild horses were counted as follows:

<u>Mountain Range</u>	<u>Total # Wild Horses</u>
Bloody Run	256
Krum Hills	342
Slumbering Hills	180
Hot Spring	103
Osgood	25
GRAND TOTAL	<u>906</u>

Since 1971, no horse roundups have been authorized in this area. The Winnemucca District Office has not received any claims from private individuals for horses, burros, or mules in the areas involved.

All of the available forage on the public lands in the allotments (31,331 AUMs) was adjudicated in the mid-60s for use in cattle operations and wildlife. No AUMs were adjudicated for horses. At the present time, wild horses are using 10,872 AUMs in the capture area, this is a 35% overobligation of AUMs for these allotments.

Significant range damage is occurring on several allotments; perennial grasses are being overgrazed, and big sagebrush and hopsage are being pawed out by horses in search of the protected grass in these shrub understories. This is causing a significant decrease in the percent of ground cover and contributing to increased soil erosion problems, plus increased wildlife and livestock competition for forage.

Land status is as follows:

	<u>Acres</u>	<u>Percent</u>
Public Lands	462,694	65
Private Lands	241,496	35
TOTAL	<u>704,190</u>	

The majority of the private land is in a checkerboard pattern with public lands (see Figure #2).

These mountain ranges encompass all or part of 12 separate allotments. A list of permittees by allotment and percent of public land follows:

<u>Mtn. Range</u>	<u>Allotment</u>	<u>% Public Land*</u>	<u>Permittee</u>
Slumbering Hills	Sand Dunes	52	Malvin & Hazel Pedroli Stanley Daniels **T Quarter Circle
	Davey Town	99	N.J. Ranches, Inc.
Bloody Run	Sand Pass	51	**T. Quarter Circle
	Bloody Run	64	**Steve Lucas **Mr. George Miller
	Asa Moore	60	**Steve Lucas
	Long Canyon	97	Frey & Sons, Inc.
Osgood & Hot Springs	Golconda Butte	39	**Glen Tipton
	Osgood	57	Jo Hibbs Christison Pinson Ranch
	Eden Valley	53	**Jack Fullenwider
	Scott Spring	51	**Steve Lucas
	Hot Spring Peak	98	Stanley & Janice Klaumann

Bloody Run, Golconda Butte, and Scott Springs Allotments are all leased by the current operators from Nevada First Corporation.

* Remaining percentage of land is private.

** These five (5) permittees have written letters to the BLM requesting that the BLM remove all wild horses from private lands which they own or control.

These mountain ranges support a small population of mule deer, potential is estimated at 445 by the Nevada Department of Fish and Game, in addition a low density population of chukar, mourning dove, and sagehen are found throughout these ranges.

III. Justification

Section 4 of P.L. 92-195 authorized the Secretary of the Interior to arrange to have horses removed that stray from public lands onto privately owned lands. Since this office has received written requests from five (5) private landowners on the mountain ranges and because of the checkerboard land status, the only feasible way to remove the horses from the private land is totally remove all the horses from the mountain ranges.

IV. Capture Plan and Methods

Wild horses will be rounded up through the use of a helicopter. The horses will be directed toward temporary capture corrals by means of a helicopter. Wings (from 1/8 to 1/4 mile) will be constructed leading into the corral. When the horses have been driven to within 1/4 to 1/2 mile of the trap, riders on horseback will then flank the animals and guide them into the trap. Once the horses are in the trap the gate will be closed by hand. Should a horse break back at the trap it will be roped, if possible, by the riders.

It is expected that the number of animals that are driven into the traps will vary from 1 to 35 horses at a time.

The capture corrals will generally be circular (100' in diameter) and constructed out of approximately 90-100 portable panels (height 6' to 7'). Each trap will have in addition a small holding corral (100' in diameter) adjoining the trap. This corral will also be circular and constructed from portable panels. The trap will be camouflaged with sagebrush.

A portable loading chute will be used at each trap site to load captured horses onto stock trucks that will transport the animals.

The start of each wing will be constructed from portable panels (6' to 7' high). The remainder of the wing will be constructed from white rope stretched on 6-1/2' steel fence posts. The fence posts will be spaced from 50' to 100' apart, depending upon the terrain.

The helicopter will carry a Bureau employee at all times and, should the horses become unnecessarily stressed, the BLM employee will instruct the pilot to break off the pursuit so that the animals may rest and recover. All attempts will be made to move and keep bands together.

A Bureau of Land Management employee will make careful determination of boundary lines to serve as an outer limit within which attempts will be made to herd horses to a given trap. Topography, distance, and current condition of the horses are factors that will be considered to set the limits so as to avoid undue stress on the horses while they are being herded. Each area will be flown prior to the start of trapping to locate any hazards to the horses while being herded (fences, cliffs, etc.).

More than one trap site will probably be needed in each mountain range. Each site will be located after the habits of the horses in that area are determined. In general, all sites will be located to cause as little damage to the natural resources of the area as possible. Sites will be located close to existing roads, when possible, and all sites will be cleared by the District Archeologist.

As the horses are captured in the trap sites they will be loaded onto the stock trucks and shipped to Palomino Valley or to temporary holding corrals in the area.

Those horses that are determined to be privately owned animals will be handled as stipulated in the Cooperative Agreement between the BLM and the Nevada State Department of Agriculture, for this specific roundup.

A veterinarian will be on call in Winnemucca at all times during the roundup process. At a maximum he will be 50 miles away from any one trap site.

The area adjacent to each trap site will be worked by the helicopter until capturing any remaining horses becomes unfeasible. At that time the trap location will be moved to another capture site of location.

All handling of the horses captured by Bureau employees will conform to the "Safety Guidelines For Gathering, Transporting, and Handling Wild Horses", prepared by the BLM, Burns District Office.

Undoubtedly some wild horses will be captured that are old, sick or injured. If it is determined that the veterinarian cannot solve the problem the animal will be humanely disposed of by shooting with a rifle. The carcass will then be buried in an open pit near each trap site.

Any horses that have been moved to the temporary holding corrals will be shipped as transportation is available to the Bureau's Palomino Valley corral facility.

V. Signatures

Lead responsibility:

Paul W. Bryant
Natural Resource Specialist

Date

Reviewed by:

J. Ron Hall
Wild Horse Specialist

Date

Henry B. Beauchamp
Environmental Planning Coordinator

Date

Approved by:

William J. Harkenrider, Jr.
Area Manager

Date

Chester E. Conard
District Manager

Date

Undoubtedly some wild horses will be captured that are old, sick or injured. If it is determined that the veterinarian cannot solve the problem the animal will be humanely disposed of by shooting with a ~~22-caliber~~ rifle. The carcass will then be buried in an open pit near each trap site.

Any horses that have been moved to the temporary holding corrals will be shipped as transportation is available to the Bureau's Palomino Valley corral facility.

V. Signatures

Lead responsibility:

Paul W. Bryant
Paul W. Bryant
Natural Resource Specialist

11/20/77
Date

Reviewed by:

J. Ron Hall
J. Ron Hall
Wild Horse Specialist

11/21/77
Date

Henry B. Beauchamp
Henry B. Beauchamp
Environmental Planning Coordinator

11/20/77
Date

Approved by:

William J. Harkenrider, Jr.
William J. Harkenrider, Jr.
Area Manager

1-17-78
Date

Chester E. Conard
For Chester E. Conard
District Manager

1-18-78
Date

Amendment to Paradise-Denio Capture Plan

I. Introduction

This amendment includes the Eugene Mountains, Alpha Mountain, and Majuba Mountain to the existing capture plan for the Paradise-Denio area (see attached map).

II. General Area Description

The amendment includes all of the Humboldt Valley and Majuba Allotments. Major capture areas are:

- (1) Eugene Mountains lie 22 miles southwest of Winnemucca. This range has a north-south orientation and is approximately 18 miles long. Elevations range from a high of 7,520' on an unnamed peak in the center of the mountain range, to 4,500' on the Humboldt River side (to the east) and 5,000' on the Alpha Mountain side (to the west).
- (2) Alpha Mountain lies 32 miles southwest of Winnemucca three miles west of the Eugene Mountains. The mountain and foothills are approximately three miles in diameter. Elevations range from a high of 5,374' at the peak of Alpha Mountain to 4,400' at the base of the foothills.
- (3) Majuba Mountain lies 38 miles southwest of Winnemucca and 12 miles southwest of the Eugene Mountains. The foothills of Majuba Mountain have a north-south orientation and are approximately 12 miles long. Elevations range from a high of 6,842' at Majuba Mountain to 5,000' at the base of the foothills. Rye Patch Reservoir is located 10 miles east of the mountain.

The 1977 wild horse inventory located a total of 470 horses in the capture area. 358 horses were located in the Humboldt Valley Allotment, which includes Alpha Mountain and the Eugene Mountains. The remaining 112 horses were in the Majuba Mountain Allotment.

These allotments were adjudicated in the 60s. 7,585 AUMs were determined to be available and all were adjudicated to livestock use. No AUMs were adjudicated for wild horse use. At the present time wild horses are using 5,640 AUMs in these allotments, this is a 74% overobligation of the forage resource.

Land status is as follows:

	<u>Acres</u>	<u>Percent</u>
Public lands	192,792	58
Private lands	138,536	42

Allotments and operators involved:

<u>Mountain Range</u>	<u>Allotment</u>	<u>% Public Land*</u>	<u>Operators</u>
Eugene Alpha	Humboldt Valley	48	**T. Quarter Circle J. Thacker V. Heckman
Majuba	Majuba	75	**Duncan & Tharalson **Duncan & Tharalson

* Remaining percentage of land is private.

** These operators have written to the BLM requesting removal of all wild horses from private lands which they own or control.

V. Signatures

Lead responsibility:

Paul W. Bryant 1/6/78
Paul W. Bryant Date
Natural Resource Specialist

Reviewed by:

J. Ron Hall 1/10/78
J. Ron Hall Date
Wild Horse Specialist

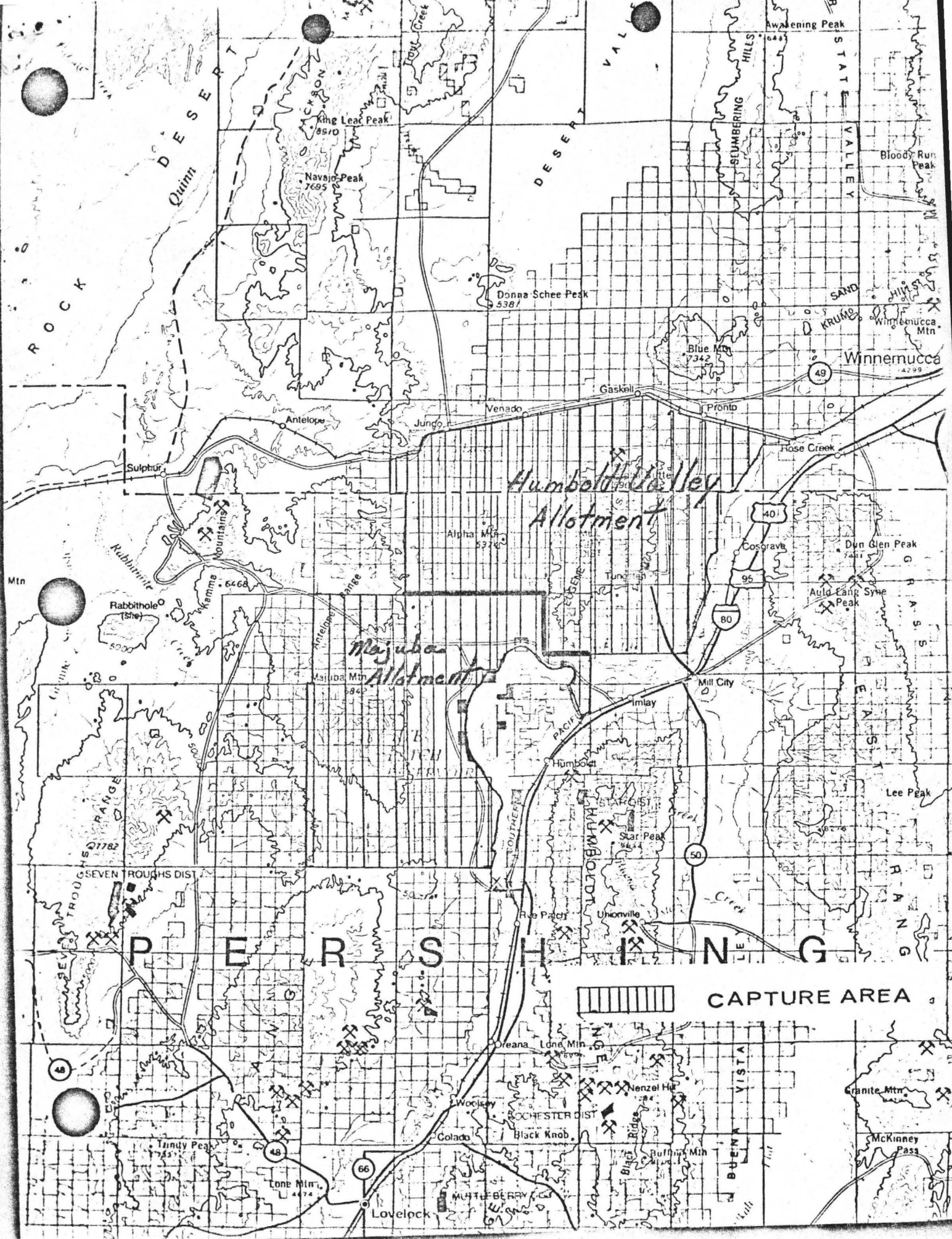
Henry B. Beauchamp 1/16/78
Henry B. Beauchamp Date
Environmental Planning Coordinator

Approved by:

William J. Harkenrider Jr. 1-17-78
William J. Harkenrider, Jr. Date
Area Manager

Robert J. Neary 1-24-78
Robert J. Neary Date
Area Manager

Robert Conard 1-18-78
for Chester E. Conard Date
District Manger



Humboldt Valley
Allotment

Majuba
Allotment

CAPTURE AREA

ROCK DESERT VALLEY DESERT STATE VALLEY
Quinn King Lear Peak 8570 Navajo Peak 7695 Donna Schee Peak 5387 Blue Mt. 7342 Winnemucca 4299
Antelope Junco Venado Gaskill Prnto Rose Creek
Sulphur Rabbit Hole Mountains 6468 Alpha Mt. 5370 Cosorave Dun Glen Peak 7451 Auld Lang Syde Peak
Rabbit Hole (She) 5000
Masuda Mt. 5842 Imlay Mill City
SEVEN TROUGHS RANGE 527782
HUMBOLDT RIVER
HUMBOLDT HILLS
Lee Peak 6276
PACIFIC SOUTHERN
Humboldt
Star Peak 6434
Unionville
50
OREANA Lone Mt. 4765 Nenzel Hill
Woolsey ROCHESTER DIST Black Knob
Colado BUFFUM Mt. 4710
LOVELOCK MUTTE BERRY
Tandy Peak 7755 Lone Mt. 4474
GRANITE Mtn McKinney Pass
BUENA VISTA