

# United States Department of the Interior

#### BUREAU OF LAND MANAGEMENT

Winnemucca District Office 705 East 4th Street Winnemucca, Nevada 89445

IN REPLY REFER TO: 4700 (NV-240)

September 1, 1993

Dear Interested Party:

Enclosed is the final capture plan for the removal of wild horses within and adjacent to the Little Owyhee Desert Herd Management Area (HMA): This HMA is located within the Paradise-Denio Resource Area of the Winnemucca District. The purpose of the removal is to reduce the population of wild horses within the HMA to the appropriate management level established during the evaluation of the Little Owyhee grazing allotment. The plan also encompasses the gather and removal of wild horses outside of, but adjacent to the HMA.

The action is in conformance with the Paradise-Denio MFPIII decision WH&B 1.1 in which wild horse and burro numbers are to be established by adequate and supportable resource data.

In response to comments received, the following changes have been made to the draft plan:

1) The proposal to collar some of the horses has been dropped for the present.

2) Numbers were adjusted and a derivation of the population estimate is presented as an appendix.

3) An environmental assessment was prepared to address the impacts of a selective removal of horses and relocating horses into the HMA.

The proposed gathering will be conducted in the area shown on the enclosed map and as described below:

Herd Management Area Name	Environmental Analysis Record Number	Reason for Gathering	Approximate number to be removed	Approximate number to remain
Little Owyhee	NV-020-7-24 NV-020-03-43 Plan conformance document	Reduce the population to AML	410	290
Public land adjacent to HMA	Figh Conformance document	Remove wild horses outside HMA boundar	45 ies	0

If you have any questions regarding the removal plan, contact Dave Stockdale at (702) 623-1500.

Sinderely yours

Area Manager

Paradise-Denio Resource Are

**Enclosures** 

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

Winnemucca District Office
Paradise-Denio Resource Area

Little Owyhee Desert
Wild Horse Removal Plan
1993

#### Little Owyhee Desert HMA Wild Horse Removal Plan

#### I. INTRODUCTION

The intent of this removal plan is to outline the methods and procedures to be used in removing approximately 410 wild horses from the Little Owyhee Desert Herd Management Area (HMA), and to remove approximately 45 horses from the Little Owyhee Allotment outside the HMA. The proposed action would take the horse population in the HMA to within the AML range established for the HMA in the Little Owyhee Allotment Final Multiple Use Decision (MUD) dated March 26, 1993. The proposed removal operation is scheduled to begin on December 10, 1993 and to be completed by December 25, 1993.

# II. GENERAL AREA DESCRIPTION - BACKGROUND DATA

#### A. Location

The geographical center of the Little Owyhee Desert HMA is located about 40 air miles northeast of Winnemucca, Nevada. The HMA is bounded on the north by the states of Oregon and Idaho, on the south by the South Fork of the Little Humboldt River, on the east by the Elko BLM District, and on the west by the Santa Rosa Mountains. Refer to attached map.

The HMA is administered by the Paradise-Denio Resource Area (RA). The Little Owyhee HMA is situated entirely within the Little Owyhee grazing allotment. The proposed removal of excess animals from outside the Little Owyhee HMA would also be from areas of the Little Owyhee Allotment.

The HMA is in the Columbia Plateau and Great Basin physiographic regions, characterized by a high, rolling plateau underlain by basalt flows covered with a thin loess and alluvial mantle. Most of the soils have formed in mixed alluvium with some influence of loess and volcanic ash, and as a result have developed weak, strong or indurated silica and lime cementation. They are primarily moderately fine to moderately coarse textured. On many of the low hills and ridges that are scattered throughout the area, the soils are underlain by bedrock. In the foothills in the eastern and southern portions of the area, the soils are primarily fine textured and underlain by bedrock.

The climate is continental and semi-arid with cool, moist winters and warm, dry summers. Precipitation ranges from 6 to 14 inches, occurring primarily in the winter and spring. Average annual temperature is 43 to 47 degrees F. Frost free season is 80 to 120 days. Air quality is considered good to excellent.

Although there are adequate sources of water for wild horses in the early spring season, dependable year-round water is very limited.

The HMA includes habitat for wild horses, domestic livestock, chukar, sage grouse, deer, antelope, coyotes, and various species of birds, rodents and reptiles. Antelope and wild horses inhabit the HMA year-round. Domestic livestock use the area from November 1 to June 1. The HMA is used as an intermediate range for deer and provides valuable forage during migration periods.

The elevation in the Little Owyhee HMA ranges from 6,100 feet in the Whiskey Springs area to approximately 4,500 feet in the Little Humboldt River area. The majority of the HMA lies within 5000-5500 feet elevation.

The Little Owyhee Desert HMA is comprised of approximately 414,720 acres; 398,160 acres (96%) of BLM land and 16,560 acres (4%) of private land. It consists of the three spring pastures in the Little Owyhee allotment: Fairbanks, Twin Valley Springs and Lake Creek.

One Wilderness Study Area (WSA) (North Fork of the Little Humboldt River, NV-020-827) is located within the Little Owyhee HMA. A WSA designation restricts the choices for suitable trap sites and may place constraints on removal operations.

#### B. Vegetation

The area's vegetative composition is almost entirely the sagebrush-grass types typical of the cold desert and Great Basin. Low sagebrush (Artemisia arbuscula) and big sagebrush (A. tridentata) predominate throughout the greatest portion of the areas. Other plant species include cheatgrass (Bromus tectorum), Idaho fescue (Festuca idahoensis), needlegrass (Stipa spp.), Indian ricegrass (Oryzopsis hymenoides), bluebunch wheatgrass (Agropyron spicatum), squirreltail (Sitanion hystrix), bluegrass (Poa spp.), shadscale (Atriplex confertifolia), spiny hopsage (Grayia spinosa), green rabbitbrush (Chrysothamnus viscidiflorus), grey rabbitbrush (C. nauseosus), bud sagebrush (A. spinescens) and winterfat (Eurotia lanata).

Halogeton, larkspur, death camas, and lupine occur in the area, but the extent to which any of these poisonous plants affects wild horses is unknown.

#### C. Justification

#### 1. Little Owyhee HMA

The Wild Free-Roaming Horse and Burro Act of 1971 (Public Law . 92-195) as 'amended, Section 3(b)(1)," states that the Secretaries of Interior and Agriculture shall "determine appropriate management levels of wild free-roaming horses and burros on areas of public lands; and determine whether appropriate management levels should be achieved by the removal or destruction of excess animals, or other options (such as sterilization or natural controls on population levels)." Section 3(b)(2) states, "that if an overpopulation exists on a given area of the public lands and that action is necessary to remove excess animals, he shall immediately remove excess animals from the range so as to achieve appropriate management levels. Such action shall be taken, until all excess animals have been removed so as to restore a thriving natural ecological balance to the range, and protect deterioration associated with the from overpopulation."

The 1993 Little Owyhee Allotment Evaluation established the AML for the Little Owyhee Desert HMA as 298 adult wild horses. Horse numbers at this AML will maintain a thriving natural ecological balance.

#### 2. Little Owyhee Allotment

The Land Use Plan (MFP-III) decision was to manage horses within the spring pastures of the Little Owyhee Allotment. The summer pastures of the allotment are outside the Herd Management Area and are designated as horse-free areas.

# D. Reference to Environmental Assessment (EA)

A Programmatic EA (No. NV-020-7-24) analyzing the environmental consequences and mitigating measures for the use of helicopters during gather operations was prepared and distributed for public comment in May 1987. After the incorporation of public comments, a Record of Decision and Finding of No Significant Impact was approved on August 4, 1987.

A Plan Conformance Record for the Little Owyhee evaluation was completed and finalized on February 18, 1993.

An Environmental Assessment (NV-020-03-43) has been prepared addressing the impacts of selectively removing younger horses, and relocating horses back into the HMA.

These documents are available for review at the Winnemucca District Office.

#### E. Population and Removal Data

The following table shows the most current wild horse population . estimates for the capture area.

		Population	# to
Capture Area	AML	Estimate	Remain
Little Owyhee HMA	298	695	290
Little Owyhee Allot.	0	45	0
TOTAL	298	740	290

For a derivation of these estimates, see Appendix 1.

As identified in the wild horse strategic plan, the primary emphasis will be to remove animals that are five years old and younger.

All captured animals from the HMA five and younger and all captured animals from public lands adjacent to the HMA that are nine years and younger will be shipped to the Palomino Valley Corrals. Wild horses from the HMA that are six years of age or older and all wild horses ten years and older from public lands adjacent to the HMA will be released back into the herd management area. The latter horses will be placed in the Fairbanks pasture west of the gorge of the North Fork of the Little Humboldt River.

All animals to be released back into the HMA (except foals, grays and whites) will be freeze branded with a four-inch numerical brand, unique to each animal to assist with data collection on longevity, fertility, and movement patterns. Blood sampling for genetic analysis and collection of baseline data may be conducted on approximately 10% of the captured animals.

#### III. Methods For Removal And Safety

The methods employed during this capture operation will be herding animals with a helicopter to a trap built with portable panels, or herding animals with a helicopter to ropers. The Bureau of Land Management will contract with a private party for this operation. The following stipulations and procedures will be followed during the contract to ensure the welfare, safety and humane treatment of the wild horses and burros.

### A. Trapping and Care of Animals

- 1. All capture attempts will be accomplished by the utilization of a helicopter. A minimum of one saddle horse shall be immediately available at the trap site to accomplish roping if necessary. Roping will be done only when necessary and only with prior approval by a BLM authorized officer. Under no circumstances shall animals be tied down for more than one hour.
- 2. The helicopter shall be used in such a manner that bands will remain together. Foals shall not be left behind. The project helicopter actions may occasionally be observed by a Government controlled helicopter. All actions of the Government helicopter will be coordinated with the Contractor to prevent interference with the project helicopter and contract operations.

In the event an additional helicopter is not available to observe the project helicopter, other methods will be utilized to observe the removal operations such as using observers on horseback, in vehicles and/or placing stationary observers in strategic locations.

Capture operations shall be monitored to ensure foals are not orphaned and left on the range. It will be standard practice to check for wet mares without foals or foals coming into the trap without a mare. Field personnel should provide additional on-the-ground monitoring of capture operations where possible. Additional personnel may be requested through the National Program Office (NPO) to assist with capture operations during periods when young foals are expected. If it appears that foals are being separated during the capture operations and ground monitoring will not provide adequate information to develop a solution, a monitoring helicopter may be used to determine the cause of the separations and to assist in reaching a resolution to the situation. The health and well being of the captured animals are paramount and responsibility for meeting this objective lies with the district office and COR.

3. The rate of movement and distance that animals travel shall not exceed limitations set by a BLM employee who will consider terrain, physical barriers, weather, condition of the animals and other factors.

BLM will not allow horses to be herded more than 10 miles nor faster than 20 miles per hour. The COR may decrease the rate or distance traveled, should the route to the trap site pose a danger or cause undue stress.

Temperature limitations are 0°F as a minimum and 95°F as a maximum.

The terrain in the removal areas varies from flat valley bottoms to hilly, and the animals may be located at all elevations (ranging from 3900 feet to 7500 feet) during the time the gathering is scheduled.

Experience gained from past removals in this area indicates the proposed action may cause some stress to the animals. It will be difficult to remove animals from these areas without some concern for the welfare of the animals due to the following reasons.

- a. Snow depth and/or crusting of snow may make travel difficult for the horses. If this occurs the gather will be suspended.
- b. Snow cover may cause the animals to be widely scattered. If trap sites cannot be located within pre-set distance limitations, the gather will be suspended.
- c. Cold temperatures may sap horses' energy reserves, resulting in increased stress when moving to the trap.

Prior to any gathering operation, BLM will provide for a precapture evaluation of existing conditions in the gather areas. The evaluation will include animal condition, prevailing temperatures, snow conditions, soil conditions, topography, road conditions, location of fences and other physical barriers, and animal distribution in relation to potential trap locations. The evaluation will also arrive at a conclusion as to whether the level of activity is likely to cause undue stress to the animals, and whether such stress would be acceptable or whether a delay in the capture activity is warranted. If it is determined that the capture efforts necessitate the services of a veterinarian, one will be obtained before the capture will proceed.

The Contractor will be provided with a topographic map of the removal area which shows acceptable trap locations and existing fences and/or physical barriers prior to any gathering operations.

The Contractor will also be appraised of the above conditions and will be given direction regarding the capture and handling of animals to ensure their health and welfare is protected.

4. It is estimated that a minimum of one trap site will be required in each capture area to accomplish the work. All trap locations and holding facilities must be approved by a BLM employee prior to construction. The Contractor may also be required to change or move trap locations as determined by the BLM. All traps and holding facilities not located on public land must have prior written approval of the landowner.

Each general site will be selected by a BLM employee after determining the habits of the animals and observing the topography of the area. Site specific locations may be selected by the Contractor with the BLM's approval within this general preselected area. Trap sites will be located to cause as little injury and stress to the animals and as little damage to the natural resources of the area as possible. Sites will be located on or near existing roads and will receive cultural, and threatened/endangered plant and animal clearances prior to construction. Additional trap sites may be required, as determined by the BLM, to relieve stress caused by certain conditions at the time of the gather (i.e. dust, rocky terrain, temperatures, etc.).

Due to the many variables affecting the distribution of animals such as weather, health and condition, and time of year, it is not possible to identify specific locations at this time. They will be determined at the time of the removal operation.

- 5. All traps, wings, and holding facilities shall be constructed, maintained and operated to handle the animals in a safe and humane manner and be in accordance with the following:
  - a. Traps and holding facilities shall be constructed of portable panels, the top of which shall not be less than 72 inches high, and the bottom rail of which shall not be more than 12 inches from the ground level. All traps and holding facilities shall be oval or round in design.
  - b. All loading chute sides shall be fully covered with plywood without holes or separation of plies, or like material. The loading chute shall also be a minimum of 6 feet high.

- c. All runways shall be a minimum of 30 feet long and a minimum of 6 feet high, and shall be covered with plywood without holes or separation of plies, or like material a minimum of 1 foot to 6 feet above ground.
- d. Wings shall not be constructed out of barbed wire or other material injurious to animals and must be approved by a BLM employee.
- e. All crowding pens, including the gates leading to the runways, shall be covered with a material which prevents the animals from seeing out (plywood without holes or separation of plies, burlap, jute, etc.) and shall be covered a minimum of 2 feet to 6 feet above ground level. Eight linear feet of this material shall be capable of being removed or let down to provide a viewing window.
- f. All pens and runways used for the movement and handling of shall be connected with hinged self-locking gates.
- 6. No fence modifications will be made without authorization from the BLM. The Contractor shall be responsible for restoration of any fence modifications which he has made.

If the route the Contractor proposes to herd animals, passes through a fence, the Contractor shall be required to roll up the fence material and pull up the posts to provide at least a 50 yard gap. The standing fence on each side of the gap will be well flagged or covered with jute or like material for a distance of 50 yards from the gap on each side.

- 7. When excessively muddy conditions occur within or adjacent to the trap or holding facility, the Contractor shall be required to scatter wood shavings or straw to alleviate the problem.
- 8. Alternate pens within the holding facility shall be furnished by the Contractor to separate animals with small foals, sick and injured animals, and estray animals from the other animals. Animals shall be sorted as to age, number, size, temperament, sex, and condition when in the holding facility so as to minimize, to the extent possible, injury due to fighting and trampling.
- 9. Animals shall be transported to final destination from temporary holding facilities within 24 hours after capture unless prior approval is granted by the BLM for unusual circumstances. Animals shall not be held in traps and/or temporary holding facilities on days when there is no work being conducted except as specified by the BLM. The Contractor

shall schedule to arrive at the final destination between 6:00 a.m. and 4:00 p.m. No shipments shall be scheduled to arrive at final destination on Sundays or Federal holidays. Animals shall not be allowed to remain standing in trucks while not in transport for a combined period of greater than 3 hours.

- 10. The Contractor shall provide animals held in the traps and/or holding facilities with a continuous supply of fresh clean water at a minimum rate of 10 gallons per animal per day. Animals held for 10 hours or more in the traps or holding facilities shall be provided good quality hay at the rate of not less than two pounds of hay per 100 pounds of estimated body weight per day.
  - Separate water troughs shall be provided at each pen where animals are being held. Water troughs shall be constructed of such material (e.g. rubber, rubber over metal) so as to avoid injury to animals.
- 11. It is the responsibility of the contractor to provide security to prevent loss, injury or death of captured animals until delivery to final destination.
- 12. The Contractor shall restrain sick or injured animals if treatment by the Government is necessary. The BLM will determine if injured animals must be destroyed and provide for destruction of such animals. The Contractor may be required to dispose of the carcasses as directed by the BLM.

Any severely injured or seriously sick animal shall be destroyed in accordance with 43 CFR Subpart 4730.1. Animals shall be destroyed only when a definite act of mercy is needed to alleviate pain and suffering. A BLM employee will have the primary responsibility for determining when an animal will be destroyed and will perform the actual destruction. When a BLM employee is unsure as to the severity of an injury or sickness, a veterinarian will be called to make a diagnosis and final determination. Destruction shall be done in the most humane method available. A veterinarian can be called, if necessary, to care for any injured animal.

The carcasses of the animals which die or must be destroyed as a result of any infectious, contagious, or parasitic disease will be disposed of by burial to a depth of at least 3 feet.

The carcasses of the animals which must be destroyed as a result of age, injury, lameness, or noncontagious disease or illness will be disposed of by removing them from the capture site or holding corral and placing them in an inconspicuous location to minimize the visual impacts. Carcasses will not be placed in drainages regardless of drainage size or downstream destination.

- 13. Branded or privately owned animals whose owners are known will be impounded by BLM, and if not redeemed by payment of trespass and capture fees, will be sold at public auction. If owners are not known, the private animals will be turned over to the State for processing under Nevada estray laws.
- 14. Selecting pairs to be released back to the range as opposed to those to be shipped to PVC should consider the selective removal and the gather plan and/or herd management area plan objectives.

The following criteria shall be used to determine which animals will be returned to the range or sent to PVC:

- a. Mares older than the age group to be removed should be paired with their foals and returned to the range.
- b. When mares older than the age group to be removed will not pair with their foals, the foals should be sent to PVC and the mares returned to the range.
- c. When mares older than the targeted age group to be removed will accept their foals, but either the mare or the foal or both are in poor physical condition and their survival on the range is questionable, the animals should be held on site until healthy. If at the termination of the gather it still appears that the animal's survival is questionable, they should then be sent to PVC.
- d. When mares within the targeted age group to be removed are captured and will accept her foal, the pair should be sent to PVC.
- e. When mares within the age group to be removed are captured and will not accept the foal, both the mare and the foal should be sent to PVC.

- 15. When holding the animals at the capture site, every attempt will be made to pair animals at the trap site and ensure they remain paired. Although it is standard practice for the contractor to construct separate pens for holding pairs, should the COR determine it is necessary to construct special facilities beyond the contractor's capability additional portable panels are available at several districts and at PVC. It is recommended that the pen used to hold pairs be separated from the stallion pens by as great a distance as possible. It may be prudent to consider a satellite facility for the pairs removed from the main holding facility, yet within convenient access for feeding, watering, security, and observation.
- 16. When releasing animals back into the HMA, every effort should be made to avoid releasing all of the pairs at once so as to avoid a herd stampede mentality. The pairs should be released slowly, preferably a pair at a time and the animals allowed to fully clear the area around the gather site before releasing the remaining mares and stallions. The order of animal release should be adjusted to reflect the specific characteristics of each capture site and previous experience releasing animals from that site. Even with these precautions, there may be instances where foals are separated. Should some of these foals return to the trap site or be observed alone, they should be recaptured and sent to PVC.
- 17. Following release from the trap site, the area surrounding the trap will be monitored to determine the success of the releases prior to the contractor moving to another trap site or termination of the task order. The method of monitoring is dependent on the terrain in which the gather is being conducted and the trap site location. Monitoring should emphasize ground observation techniques and only be necessary within the immediate trap site area. In situations when ground observation is impractical due to terrain or vegetative cover, a monitoring helicopter may be employed.

#### B. Motorized Equipment

- 1. All motorized equipment employed in the transportation of captured animals shall be in compliance with appropriate State and Federal laws and regulations applicable to the humane transportation of animals.
- Vehicles shall be in good repair, of adequate rated capacity, and operated so as to ensure that captured animals are transported without undue risk or injury.

- 3. Only stock trailers with a covered top shall be allowed for transporting animals from traps to temporary holding facilities. Only bobtail trucks, stock trailers, or single deck trucks shall be used to haul animals from temporary holding facilities to final destination. Sides or stock racks of transporting vehicles shall be a minimum height of 6 feet 6 inches from vehicle floor. Single deck trucks with trailers 40 feet or longer shall have two partition gates providing three compartments within the trailer to separate animals. Trailers less than 40 feet shall have at least one partition gate providing two compartments within the trailer to separate animals. The compartments shall be of equal size plus or minus 10 percent. Each partition shall be a minimum of 6 feet high and shall have a minimum 5 foot wide swinging gate. The use of double deck trailers is unacceptable and shall not be allowed.
- 4. All vehicles used to transport animals to the final destination shall be equipped with at least one door at the rear end of the vehicle, which is capable of sliding either horizontally or vertically. The rear door must be capable of opening the full width of the trailer. All panels facing the inside of all trailers must be free of sharp edges or holes that could cause injury to the animals. The material facing the inside of the trailer must be strong enough, so that the animals cannot push their hooves through the sides.

The Contractor will not be allowed to begin work on the contract until all vehicles and equipment are in compliance with these stipulations.

5. Floors of vehicles and the loading chute shall be covered and maintained with wood shavings to prevent the animals from slipping.

The adequacy of this material will be confirmed prior to every load by a BLM employee.

- 6. Animals to be loaded and transported in any vehicle shall be as directed by a BLM employee and may include limitations on numbers according to age, size, temperament and animal condition. The following minimum linear feet per animal shall be allowed per standard 8 foot wide stock trailer/truck:
  - 1.40 linear foot per adult horse (11 square feet per adult horse)
  - .75 linear foot per horse foal (6 square feet per horse foal)

The BLM employee supervising the loading of the animals to be transported from the trap to the temporary holding corral will require separation of small foals and/or weak animals from the rest should he/she feel that they may be injured during the trip. He/she will consider the distance and condition of the road in making this determination. Animals shipped from the temporary holding corral to the BLM facility will be separated by sex and age class (including small yearlings). Further separation may be required should condition of the animals warrant.

The BLM employee supervising the loading will exercise his/her authority to off load horses should he/she feel there are too many animals on the vehicle.

- 7. The BLM shall consider the condition of the animals, weather conditions, type of vehicles, distance to be transported, or other factors when planning for the movement of captured animals. The BLM shall provide for any brand and/or inspection services required for the captured animals. It is currently planned to ship all animals to the Palomino Valley facility. Communication lines have been established with the Palomino Valley personnel involved in off-loading the animals, to receive feedback on how the animals arrive. Should problems arise, gathering methods, shipping methods and/or separation of the animals will be changed in an attempt to alleviate the problems.
- 8. If a BLM employee determines that road conditions are such that animals could be endangered during transportation, the Contractor will be instructed to adjust speed. The maximum distance over which animals may have to be transported on dirt roads is approximately 60 miles per load.

In general, roads in the capture areas are in fair to good condition. If a problem develops, speed restrictions shall be set or alternate routes used.

Periodic checks by BLM employees will be made as the animals are transported along dirt roads. If speed restrictions are in effect, then BLM employees will, at times, follow and/or time trips to ensure compliance.

- C. Helicopter, Pilot and Communications
  - 1. The Contractor must operate in compliance with Federal Aviation Regulations, Part 91. Pilots provided by the Contractor shall comply with the Contractors Federal Aviation Certificates, applicable regulations of the State of Nevada and shall follow what are recognized as safe flying practices.

- When refueling, the helicopter shall remain a distance of at least 1,000 feet or more from animals, vehicles (other than the fuel truck), and personnel not involved in refueling.
- 3. The BLM shall have the means to communicate with the Contractor's pilot and be able to direct the use of the gather helicopter at all times. If communications cannot be established, the Government will take steps as necessary to protect the welfare of the animals.
- 4. The proper operation, service and maintenance of all Contractor furnished helicopters is the responsibility of the Contractor. The BLM reserves the right to remove from service, pilots and helicopters which, in the opinion of the BLM violate contract rules, are unsafe or otherwise unsatisfactory. In this event, the Contractor will be notified in writing to furnish replacement pilots or helicopters within 48 hours of notification. All such replacements must be approved in advance of operation by the BLM.

#### IV. Responsibility and Lines of Communication

The Contracting Officer's Representative, Ron Hall and Project Inspectors Dave Stockdale and Dave Boyles, from the Winnemucca District, have the direct responsibility to ensure the Contractor's compliance with the contract stipulations. However, the Paradise-Denio Area Manager and the Winnemucca District Manager will take an active role to ensure that appropriate lines of communication are established between the field, District, State, and Palomino offices. All employees involved in the gathering operations will keep the best interests of the animals at the forefront at all times.

All publicity, formal public contact and inquires will be handled through the Paradise-Denio Area Manager. This individual will be the primary contact and will coordinate the contact with the Palomino Valley Corrals to ensure animals are being transported from the capture site in a safe and humane manner and are arriving in good condition.

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

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

V. Full Force and Effect

To prevent undue stress to the wild horse population during times of critical water shortages and to promote progression toward the attainment of a thriving natural ecological balance and multiple use relationship, this action is placed in full force and effect (43 CFR 4770.3(c)).

V. Signatures:

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Wild Horse and Burro Specialist Paradise-Denio Resource Area Date 8/30/93

Reviewed by:

Tild Horse and Burro Program Leader

Date 8/30/93

Recommended by:

Area Manager
Paradise-Denio Resource Area

Date 8/30/9

Approved by:

Winnemucca District Manager

Date 8/31/9

Appendix 1.. Determination of population estimate .

The population estimate is derived as follows: A helicopter census in July 1992 before the most recent gather counted 1393 horses, including 279 foals. During the gather, 831 horses were captured, of which 691 were shipped to Palomino Valley Center, 136 were returned to the HMA, and 4 were destroyed. Therefore following the gather the count was 698 horses (including 42 outside the HMA, which were not gathered). Divide the population of 698 into two segments: the older horses returned to the HMA, of which there were 128 (8 of the 136 returned were foals), and 570 remaining which have a "normal" age structure. Based on results of the 1992 Black Rock gather, the average weighted survival rate for "normal" horses is 89.3%, and for those 10 and older is 84.2%. Therefore 570 x .893 = 509 "normal", ungathered horses and 128 x .842 = 108 older horses survived the winter, for a total of 617.

Foal production in 1993 is estimated at 20% (the 1992 figure, 279/1393) Thus the estimated foal crop is  $617 \times .20 = 123$  foals, of which 22 came from the older horses (17.5% of 123, 108/617 = .175) and 101 from the ungathered horses. Therefore the estimated total population in the HMA and outside before the proposed removal is 740 animals. Calculations using the 89.3 and 20 percent figures on the 42 horses outside the HMA result in 45 horses there in 1993, so the population inside the HMA is estimated at 695.

To determine the total number of horses removed, consider the following. Demographic data from the Little Owyhee 1992 gather showed 69.8% of the herd was 5 years of age and younger, 15.8% was aged 6-9, and 14.4% was aged 10 and older. The total number of ungathered horses from 1992, plus their foals, is approximately 610 (509 + 101). Seventy percent of 610 is 427 animals removed, plus 22 foals from the older horses, plus an additional seven six-to-nine year olds from the outside horses (45 x .158 = 7) for a total of 456 animals removed. Six horses from outside the HMA will be relocated into the HMA (45 x .144 = 6).

Therefore the number of animals remaining is estimated at 740 (beginning) - 456 removed + 6 returned = 290 animals, which is just under the AML of 298.

It must be emphasized that the numbers given above are only estimates. The severe winter of 1992-93 may have increased mortality among the older horses. The wet winter resulted in better forage and nutrition for the mares, which may mean a larger foal crop. Distribution flights using a fixed wing aircraft (which admittedly do not count all the horses) on January 22 and May 14, 1993, counted 380 and 603 horses respectively. The latter figure included 57 foals; however foaling season had not been completed.

After this removal there should be more data with which to determine survival and mortality, and it may not be necessary to use figures from the Black Rock gather.

