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Proposed Action: Wild Horse Gather
Proposed Name(s) Gather Plan for the Three Fingers Herd Management Area
Project Leader(s) Jim Johnson
INSTRUCTION: Route through your immediate supervisor first.

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Vale District Office

Gather Plan for the Three Fingers Herd Management Area

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BACKGROUND INFORMATION

With passage of the Wild Horse and Burro Act of 1971, Congress found that: "Wild horses are living symbols of the pioneer spirit of the West". In addition, the Secretary was ordered to "manage wild free-roaming horses and burros in a manner that is designed to achieve and maintain a thriving natural ecological balance on the public lands". From the passage of the Act through present day, the Bureau of Land Management (BLM) Vale District has endeavored to meet the requirements of this portion of the Act. The procedures and policies implemented to accomplish this mandate have been constantly evolving over the years.

Throughout this period, BLM experience has grown, and the knowledge of the effects of current and past management on wild horses has increased. For example, wild horses have been shown to be capable of 18 to 25% increases in numbers annually. This can result in a doubling of the wild horse population about every 3 years. At the same time, nationwide awareness and attention has grown. As these factors have come together, the emphasis of the wild horse and burro program has shifted.

Program goals have expanded beyond simply establishing "thriving natural ecological balance" (setting appropriate management level (AML) for individual herds), to include achieving and maintaining viable, vigorous, and stable populations.

AML for this HMA has been previously established based on monitoring data and following a thorough public review. Documents containing this information are available for public review at the Vale District office.

The numbers, age, and sex of animals proposed for removal are derived from The Wild Horse Population Model Version 3.2 developed by Dr. Steve Jenkins, Associate Professor, University of Nevada Reno. Appendix A establishes the parameters used for this HMA's modeling runs.

The Three Fingers HMA was last gathered in FY96. The Three Fingers HMA lies east of the Owyhee Reservoir and west of Succor Creek. The HMA is made up of the Wildhorse Basin pasture/Board Corral Allotment and Riverside pasture/Three Fingers Allotment. The topography of the HMA varies from towering, colorful geologic formations, to steep slopes and cliffs, to gently rolling hills. The unique soils of the area support five globally rare plant species. Much of the area is composed of sagebrush steppe vegetation, with representations of salt desert shrub types.

PURPOSE OF AND NEED FOR ACTION

The purpose of the action is to achieve and maintain wild horse AMLs that reflect the normal thriving ecological balance, collect information on herd characteristics, determine herd health, maintain sustainable rangelands, and maintain a healthy and viable wild horse population.

A wildfire in July 2002 consumed 32,200 acres in the HMA and surrounding area where wild horses are found. Most of the preferred summer and fall range for the horses was destroyed in this fire. The central portion of the HMA in the Riverside pasture, herein referred to as the canyon lands, consists of approximately 20,000 acres. There are no perennial water sources, and the Owyhee Reservoir is almost inaccessible from this area for horses. The canyon lands are grazed by horses if and when, there is winter or spring precipitation. The remaining unburned part of the HMA in the Riverside pasture is largely medusahead rye range which will not provide adequate nutrition for wild horses. Also unburned in the HMA is the Wildhorse Basin pasture, comprising about 17,000 acres, where most of the forage is available. Water is limited in the northern portion of this pasture, where there is some available forage. The southern end of this pasture has several perennial springs and some access for horses to the Owyhee Reservoir. Utilization levels in this end of the pasture are high due to concentrated horse use.

Also of concern is overpopulation of the HMA. Current numbers of horses exceed the upper limit of AML by 241 head. Due to competition because of overpopulation within the HMA, bands have been pressured to move outside of the HMA to find adequate space, feed, and water. Approximately, one quarter of the horses in the Three Fingers herd are residing outside of the HMA.

Climatic data document varying degrees of drought conditions in the area from 1985 to present. During the2001 drought conditions, forage production was estimated to be 60 to 80% of normal. These prolonged “below normal” precipitation conditions have reduced forage production, stressed plants, and decreased the vigor and health of many vegetative communities. Plants are generally in a low vigor condition, and yearlong wild horse grazing has stressed the community even further. Areas near water during the summer and fall of 2002 have been extremely stressed when livestock, wild horses and wildlife concentrated on the few available water sources. This concentration around water sources has increased since the 2002 wildfire. Therefore, horses need to be reduced in number to prevent further resource degradation in key areas of horse concentrations.

Objectives include:

1) Removal of excess horses to allow wildfire rehabilitation efforts to succeed and native vegetative communities to recover vigor.

2) Reduce reproductive rates to levels that will accommodate a minimum four year gather schedule allowing for the maintenance of AML.

3) Re-establish the pre-selective removal gather sex distribution toward a more "normal"

distribution as indicated by herd sex structure found during the first documented BLM gather in this area.

4) Re-establish pre-selective removal gather age class distribution toward a more "natural" year gather.

5) Re-establish or maintain herd characteristics that were typical of the Three Fingers horses at the time of the passage of the Act.

6) Maintain the genetic diversity of the Three Fingers herd.

7) Capture and remove horses from the Three Fingers herd to attain a thriving ecological balance between horses, wildlife, livestock, and vegetation.

CONFORMANCE WITH EXISTING LAND USE PLANS

The Northern Malheur Management Framework Plan (MFP) approved in 1983 and the Southern Malheur Grazing Management Program Environmental Impact Statement (EIS) of September 1983 have been reviewed. The Proposed Action is in conformance with these documents.

Relationship to Statutes, Regulations, Policies, Plans, or Other Environmental Analyses

This action is governed by the Wild Horse and Burro Act of 1971 (Public Law (PL) 92-195 as amended) and Title 43 Code of Federal Regulations (CFR) part 4700. Gathering and disposal of the wild horses would be in accordance with PL 92-195 as amended by PL 94-579 (Federal Land Policy and Management Act (FLPMA)) and PL 95-514 (Public Rangelands Improvement Act (PIRA)). Section 302(b) of FLPMA states that all public lands are to be managed so as to prevent unnecessary or undue degradation of the lands.

The following are excerpts from CFRs:
1) 43 CFR 4720.1 - "Upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately."
2) 43 CFR 4710.3-1 - "Herd Management Areas shall be established for maintenance of wild horse and burro herds."
3) 43 CFR 4180.2(b) - "Standards and guidelines must provide for conformance with the fundamentals of 4180.1."

Gathering excess horses conforms to the Standards and Guidelines (S & Gs; Appendix C) for Grazing Management. These S & Gs were developed with full public participation and in consultation with South Eastern Oregon's Resource Advisory Council. They have been reviewed by the Departmental Review Team that found they comply with the requirements of the regulations.

The Proposed Action is also consistent with the 1991 Final Oregon Wilderness Environmental Impact Statement and the Endangered Species Act Section 2(c) and 7(a)2.

Attainment of a thriving natural ecological balance that prevents excess utilization of forage resources would meet the objectives outlined in the Northern Malheur MFP and the Southern Malheur Grazing Management Program EIS of September 1983. In addition, the gathering of excess horses is consistent with the Three Fingers Allotment Plan. The Proposed Action also conforms to the Three Fingers Herd Management Area Plan completed in 1975 and revised in 1983 following the Southern Malheur Grazing Management Program EIS.

ALTERNATIVES INCLUDING THE PROPOSED ACTION

The Proposed Action and alternatives represent a reasonable range of alternatives based on the issues and goals identified through public scoping efforts.

Alternative 1 (Proposed Action)

The Proposed Action is to capture approximately 350 wild horses in the fall of 2002. This would include removing approximately 316 wild horses, determining sex, age and color, acquiring blood samples, assessing herd health (pregnancy/parasite loading/physical condition/etc), sorting individuals as to age, size, sex, temperament and/or physical condition, and returning selected animals, primarily in the 6 to 10 year age group. This would ensure a vigorous and viable breeding population, reduce stress on vegetative communities and wildlife, and be in compliance with the Wild Horse and Burro Act and land use plans.

Livestock grazing would be temporarily excluded or reduced in the burned areas during rehabilitation and restoration. No grazing by livestock would be authorized in the Wildhorse Basin pasture this fall to assure adequate forage for remaining wild horses.

In any future land use plans, consider expansion of the HMA to include former herd areas that were fenced out when the HMA was first established to provide more winter range for the wild horses.

All wild horses outside of the HMA boundary and the Riverside pasture of the Three Fingers Allotment, would be removed. If the remaining horses are in excess of the AML, the needed numbers would be removed from Wildhorse Basin to achieve AML. The remaining wild horse population would be left in Wildhorse Basin during the rehabilitation and restoration effort.

Multiple capture sites (traps) may be used to capture wild horses from the HMA and adjacent public and private lands. Whenever possible, capture sites would be located in previously disturbed areas. All capture and handling activities (including capture site selections) would be conducted in accordance with Standard Operating Procedures (SOPs) described in Attachment 1 (available on internet or in Vale District Office). Selection of capture techniques would be based on several factors such as herd health, season of the year and environmental considerations.

Determination of which horses would be returned to the range would be based on an analysis of existing population characteristics that are saddle horse type conformation. HMA objectives are to perpetuate the color characteristics of the herd.

Alternative 2: (Gather to Midpoint of AML)

This is the same as the proposed alternative, but the gather would not take the Three Fingers herd below the midpoint of the AML range. Approximately 309 wild horses would be captured in the fall of 2002. The number of horses removed under this alternative would be 278.

Alternative 3: (Continue Existing Management)
Under this alternative wild horse management would continue to remove horses, when funding is available, under issue based strategies according to state priorities. These issues include, but are not limited to, drought, resource degradation due to excess numbers of horses, wildlife impacts, or wildfires, etc.

Alternative 4: (No Action)
Under this alternative, wild horses would not be removed from the Three Fingers HMA during the fall of 2002. The existing population of 391 horses would continue to increase at approximately 20% per year.

Alternatives Considered But Eliminated From Further Analysis:

1. One alternative considered was wild horse management using fertility control measures only to regulate wild horse populations. Periodic capture operations would be required to administer the vaccine to mares, or suitable remote delivery methods would need to be developed. This alternative was eliminated from further analysis since the immunocontraceptive vaccine has not been formally approved by the Food and Drug Administration for management based applications. Even with formal approval, an effective remote delivery methodology (aerial or water based) has not been developed for current formulations. The current data suggest that repeated long-term applications of the vaccine may affect fecundity.

2. Closure of the area to livestock use, or reduction of permitted use, with the exception of time for rehabilitation and restoration work to be completed, was eliminated from consideration since it would not meet existing law, regulation, policy, nor concur with previous land use plan decisions. The Wild and Free Roaming Horse and Burro Act does not require that these areas of public lands be managed for wild horses but states under Section 2a (Act) that even in case of ranges that are devoted principally for wild horse management, it is not necessary to devote these lands exclusively to their welfare in keeping with multiple use management concept for public lands, but rather that these determinations be made through the land use plans.

3. Administration of immunocontraception vaccine PZP was eliminated from consideration due to the extreme terrain within the Three Fingers HMA. It was determined that due to the terrain, an insufficient number of horses would likely be captured beyond the targeted number for removal. To make administration of the drug effective to control population increases, a higher capture percentage would be required.

AFFECTED ENVIRONMENT

A. Wild Horses

Total area of the Three Fingers Herd Management Area (HMA) is 62,508 acres. It is located in the Mahogany Grazing Unit in the Malheur Resource Area of the Vale District. The HMA is bordered on the east by the Owyhee Reservoir, on the south by the Leslie Gulch Road, and on the north by the Owyhee Dam (Map 1). The HMA is made up of the Wildhorse Basin pasture/Board Corral Allotment and Riverside pasture/Three Fingers Allotment. The central portion of the Riverside pasture is made up of steep, highly dissected sediments referred to as the canyon lands. The southern portion of the Riverside pasture is made up of the Shadscale Flat area and surrounding ridges.

The Three Fingers herd has been periodically gathered since it was first gathered in 1977. Numbers of horses captured and removed for each successive gather are documented in the Burns District Office.

Last census in the HMA was done on June 22, 2002. Current population is 391 horses. Of these 391 horses, 87 were foals under one year of age, which indicates a 22% population increase. Adult horses in the HMA weigh an average of 950 to 1050 pounds and stand between 14.2 and 15.2 hands, with some stallions being slightly larger. The dominant colors are sorrel, bay, roan, gray, black, pinto, dun, and buckskin. Most have saddle horse type conformation. Some of the horses in the HMA are probably descendants of army remount studs. Characteristics of the herds have remained the same since 1975.

Peak foaling period for these herds is from March through May. Peak breeding period is from April through June. Currently, the existing sex ratio within the HMA is approximately 50/50.

The Owyhee Reservoir and a few springs or seeps are the only natural perennial water sources within the Three Fingers HMA. The reservoir is not used regularly by the horses due to limited access. Water is a limiting factor in most years throughout the Three Fingers HMA, with concentrations of horses around the few perennial water sources. Most of the other water sources in the HMA are seasonal seeps, springs, reservoirs, and drainages. These water sources are used in the winter and early spring.

Forage is allocated for 75 to 150 horses in the Three Fingers HMA or 1800 animal unit months (AUMs). Inventory data show that horses have historically concentrated in the Wildhorse Basin area and Shadscale Flat during the summer and fall. During the winter and early spring, the horses can graze the canyon lands and the northern portion of the Wildhorse Basin pasture if there is sufficient precipitation to provide seasonal surface water.

Utilization levels in the Shadscale Flat area were in the 60 to 70% range before the fire, while the Wildhorse Basin area ranged from 35 to 65%. Currently, the Shadscale Flat area is burnt in

the wildfire. Utilization levels in the southern portion of the Wildhorse Basin pasture are currently ranging from 60 to 90% in proximity to perennial water sources. The northern portion of the Wildhorse Basin pasture and the canyonlands area of the Riverside pasture has lower utilization levels due to a lack of perennial (hot season) water sources.

The numbers of horses using the HMA has steadily increased and there is no rest provided for key cool season grasses. Heavy use of these grasses is starting to deplete their health and vigor, which leads to a rangeland condition that is at risk (Attachment C). Loss of perennial grasses results in an increase in less desirable species, an increase in frequency and intensity of wildfires, and a decrease in forage production.

Other issues driving the Proposed Action include continuing drought conditions in the area leading to water shortage and excessive riparian impacts around the springs, seeps, and creeks. The results are degradation of water quality, riparian functionality and riparian habitat in the Three Fingers HMA.

B. Grazing Management

Forage allocation for livestock in the Three Fingers HMA is currently 3362 AUMs of active preference. Prior to the 2002 wildfire, there were no livestock grazing reductions made in Three Fingers or Board Corrals Allotments within Three Fingers HMA.

There are 8 permittees who graze livestock on the Three Fingers and Board Corrals Allotments. The grazing system in the Riverside pasture is March 1st to May 1st every year. The grazing system for the Wildhorse Basin pasture is a three year rotation of spring/early summer one year, summer/fall the next year, and late fall/winter the third year. Water for livestock is the same as mentined above for wild horses

C. Wildlife

Wildlife species and populations found in the proposed project area are typical of Wyoming big sagebrush/bluebunch wheatgrass and sagebrush/cheatgrass disturbed habitat types in the northern Great Basin and Owyhee Uplands communities. The steeper “badland” topography near the Owyhee Reservoir, including the area burned, and the main side canyons provides important habitat for a herd of California bighorn sheep. Big game species in the project area include pronghorn antelope, California bighorn sheep, mule deer, and mountain lion. Some chukar partridge and California quail are found in the area year-round. Small mammals such as black-tailed jackrabbits and woodrats, reptiles including western rattlesnakes, numerous species of neotropical migratory birds and several raptor species common to southeast Oregon can be found throughout the area. Reptiles will be hibernating at the time of the proposed gather and most neotropical migratory bird species will have migrated from the area by October, therefore will not be directly affected by any alternative.

Forage allocation is 79 AUMs for deer and is 12 AUMs for antelope in the Three Fingers Allotment. About 25-30% of this use occurs in the Three Fingers HMA. Although bighorn sheep utilize this area, there has been no forage allocated for them at present.

No fish occur in the proposed project area. Pacific tree frogs are abundant in reservoirs and springs throughout the Vale District, but no other amphibians have been observed.

D. Threatened and Endangered/Special Status Species

Four special status plant species are known to occur in the HMA. These include Ertter=s senecio (*Senecio ertterae*), sterile milkvetch (*Astragalus sterilis*), Owyhee clover (*Trifolium owyheense*), and grimy ivesia (*Ivesia rhypara* var. *rhypara*). None of these are listed under the federal Endangered Species Act, although the U.S. Fish and Wildlife Service considers them Species of Concern. Owyhee clover and grimy ivesia are listed by the state of Oregon as Endangered, and Ertter=s senecio and sterile milkvetch are listed by the state as Threatened. The senecio and grimy ivesia occupy highly specific ash sites, with the senecio on loose talus rubble at few sites in Malheur County only, and the ivesia on six sites of shallow, more compacted ash in this area and with limited sites in Lake County, Oregon. While Packard=s blazing star (*Mentzelia packardiae)* has not been identified in the portion of the HMA which burned, it is suspected to occur with Ertter=s senecio in the talus rubble sites and is listed by the state as Threatened. It is found in the HMA in Leslie Gulch. Owyhee clover and sterile milkvetch grow in less definitive habitat within the Wyoming big sagebrush type, but are restricted globally to the ash soils of the Owyhee River canyon area between Birch Creek and Owyhee Dam. Although the milkvetch has been found both east and west of Owyhee River, the clover has not yet been found west of the river. Several sites of these two species are known in Idaho just to the east at the edge of their eastern range. Inventory has been incomplete for all five species within the area due to the extremely rugged topography. It is anticipated that more sites would be found, particularly of the clover and milkvetch, with additional inventory.

The project area contains habitat for the following special status wildlife species: sage grouse, loggerhead shrike, western burrowing owl, California bighorn sheep, long-nosed leopard lizards, Mojave black collared lizards, northern sagebrush lizards and desert horned lizards. Mountain quail have been reported from the general area within the last 10 years but apparently have been extirpated since. At the time of year of the proposed gather western burrowing owls and loggerhead shrikes typically have migrated from the project area, and reptiles are hibernating and would not be directly affected by any proposed activity. Sage grouse and California bighorn sheep likely will be in the area during the gather and some individuals could be disturbed by the proposed action.

E. Vegetation

Vegetation types within the HMA consist primarily of a wide variety of sagebrush/grassland

types and areas of cheatgrass (*Bromus tectorum*). Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) and basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*) are found throughout the area and are generally associated with bluebunch wheatgrass (*Pseudorogneria spicata*), Thurber=s needlegrass (*Stipa thurburiana*), Indian rice grass (*Oryzopsis hymenoides*), needleandthread grass (*Stipa comata*), basin wildrye *(Leymus cinereus*), bottlebrush squirreltail (*Elymus elymoides*), and Sandberg bluegrass (*Poa secunda*). Sand dropseed (*Sporobolus cryptandrus*) is a minor component of low lands near Owyhee Reservoir. Some pockets of low sagebrush (*Artemisia arbuscula*), primarily associated with Sandberg bluegrass and bluebunch wheatgrass, also are found in the area.

Salt desert shrub types, including species such as greasewood (*Sarcobatus vermiculatus*), shadscale (*Atriplex confertiflora),* winterfat (*Kraschinninikovia lanata*), and spiny hopsage (*Grayia spinosa*), occur in many of the lower elevation areas. Both gray and green rabbitbrush (*Chrysothamnus naseosus* and *viscidiflorus*) are found scattered throughout the entire area, and broom snakeweed (*Guterrizea sarothrae*) is ubiquitous. Cheatgrass is dispersed through most vegetation communities with a number of other annual weedy species. Forbs include hermit milkvetch (*Astragalus erimiticus*), Pursh=s milkvetch (*Astragalus purshii*), Hood=s phlox (*Phlox hoodii*), arrowleaf balsamroot (*Balsamorhiza sagitatta*), and showy penstemon (*Penstemon speciosus*).

Major portions of the lower lying areas and bottom lands in this HMA consist of early seral stages, particularly the three subspecies of big sagebrush which frequently support an understory of cheatgrass and Sandberg bluegrass in this area. Mid seral stages are found on gentle slopes, with late and potential natural communities found sporadically at areas either higher in elevation and/or inaccessible to livestock or wild horses.

F. Noxious Weeds

Yellow starthistle (*Centaurea solstitialis*) is present within the upper Sage Creek basin in the McIntyre pasture of the Three Fingers Allotment. This pasture, which currently contains wild horses, is located adjacent to the HMA on the eastern edge. A noxious weed, starthistle, has been the target of a comprehensive treatment program at this site since 1998. Yellow starthistle is an aggressive annual that readily invades weakened rangelands, especially areas such as Sage Creek that were originally dominated by bluebunch wheatgrass, Idaho fescue and Sandberg's bluegrass.

G. Soils

The soils found in the Three Fingers HMA were surveyed and described in Oregon's Long Range Requirements for Water 1969, Appendix I-11, Owyhee Drainage Basin. Unit 60, Unit 98 and portions of Unit 76 occur on 20 to 60 percent slopes, while remaining portions of Unit 76 occur on 3 to 12 percent slopes. Microbiotic crusts have not been inventoried, but are known to exist throughout the HMA.

The area has Unit 60 soils that are moderately fine textured, well drained soils underlain by old lacustrine sediments. They occur on gently sloping to hilly uplands. This makes up approximately 60% of the HMA.

Unit 76 soils are shallow, clayey, very stony, well drained soils over basalt, rhyolite, or welded tuff. These soils occur on gently undulating to rolling lava plateaus and some very steep faulted and dissected terrain. This soil occurs mixed with Unit 77 soils in the northern end of the HMA on 3 to 12 percent slopes. It also occurs mixed with Unit 60 soils on steeper slopes. This soil makes up approximately 20% of the HMA.

Unit 98 is a miscellaneous land unit that makes up approximately 10% of the HMA. It consists of highly eroded and dissected raw old lacustrine sediments occurring as "badlands". Vegetative cover is very sparse in this soil.

H. Riparian Areas/Water Quality/Floodplains

The only perennial water sources in the HMA are springs associated with the drainages. Most of the perennial springs in the HMA have been developed. The herbaceous and woody riparian vegetation in all of the riparian areas is typically heavily utilized. There is very little recruitment or regeneration of the herbaceous or woody vegetation. There are also many areas that are trampled and pawed by the horses looking for water. Trails into the perennial sources are heavily utilized and are causing streambank instability. Season-long horse grazing in these areas becomes a resource concern as horse numbers increase.

Springs associated with Cherry Creek and Three Fingers Gulch are the major perennial water sources. Three Fingers Gulch is located in the southern portion of the Riverside pasture. Much of Three Fingers Gulch and the surrounding uplands burnt in the 2002 fire. The horses that typically used these riparian areas are currently displaced and putting pressure on other water sources. Some of the horses have moved into the Roger Spring area near the upper end of Three Fingers Gulch, but there is very little nutritional feed in this area. Cherry Creek is located in the Wildhorse Basin pasture and is typically a major summer water source for the wild horses. The 2002 fire has concentrated more horses in this area.

There are also many seasonal or intermittent seeps, springs, and creeks that the horses impact. Many of these cool season water sources are severely impacted by hoof traffic and pawing. Horses tend to paw in these areas as the water dries up during the hot season. This type of hoof action negatively impacts the water sources as much of the capability of the area for soil-water storage is decreased with soil loss.

I. Recreation and Visual Resources

The area within the HMA receives dispersed recreational use, mainly big game and upland

game bird hunting, rock hounding, nature viewing, and wild horse viewing.

The HMA includes public lands identifed for designation as VRM Classes I, II, III and IV in the proposed final Southeastern Oregon Resource Management Plan.

J. Wilderness Study Areas (WSAs)

The Honeycombs WSA (OR-3-77A) and the Wild Horse Basin WSA (OR-3-77B) are associated with the HMA (Map 2). There would be aircraft use over the WSAs, however, there would be no surface disturbing activity within the WSAs.

WSAs are managed in accordance with BLM's *Interim Management Policy for Lands Under Wilderness Review* (Handbook H-8550-1, commonly referred to as WSA IMP). The WSA IMP provides for the management of wild horse populations at appropriate levels to ensure thriving natural ecological balance while not allowing populations to degrade wilderness values, or vegetative cover as it existed on the date of the passage of FLPMA. The WSA IMP provides for the use of aircraft to support population management.

K. Areas of Critical Environmental Concern (ACEC)/Research Natural Areas (RNAs)

Two Areas of Critical Environment Concern (ACEC) within the HMA partially burned: Leslie Gulch ACEC and Honeycombs ACEC/Research Natural Area (RNA). A northern portion of the 11,963 acre Leslie Gulch ACEC burned along the southern boundary of the fire. Relevant and important values for this ACEC include high scenic values associated with the colorful ash talus cliffs, bighorn sheep and habitat, and five special status plant species, which include Packard=s mentzelia, grimy ivesia, Ertter=s senecio, sterile milkvetch, and Owyhee clover. Relevant and important values for Honeycombs ACEC/RNA include scenery, geologic formations, bighorn sheep and habitat, four special status plant species (sterile milkvetch, Ertter=s senecio, grimy ivesia, and Owyhee clover), and big sagebrush/needleandthread grass on cinders plant community which meets a vegetation cell need identified by the Oregon Natural Heritage Program. Only a southern portion of the existing 12,469 acre ACEC/RNA was burned. However, much of the 3,378 acre area proposed in the Southeast Oregon Resource Management Plan (RMP) as an addition to the ACEC/RNA in the eastern and southern areas burned in the fire and are part of the HMA also.

L. Cultural Resources and Paleontology

Prehistoric Lifeways

The continued use of the northern Great Basin is can be divided into different chronological periods represented by a different occupational intensity. From 14,000-11,000 B.P., Clovis and Folsum projectile points and a blade and core technology characterizes big game hunters and represents the PaleoIndian period. The period from 11,000-8,000 B.P., represents the climax of cultural development with the lithic technology characterized by seven different projectile point styles. The diversity in projectile point styles suggests not only an improvement

in lithic technology but also experimentation with hafting methods. From 8,000-7,000 B.P., and the eruption of Mt. Mazama at 7070 B.P., there is a decrease in the use of rock shelters. People appear to be moving from lower elevation lake sites to higher elevation spring sites as the climate becomes hotter and drier. Projectile points are corner-notched and classified typologically as the Lake Mohave, Windust, Norther Side-notched, Humboldt Basal-notched, Elko Eared, Elko Corner-notched, and Pinto Willowleaf. The preferred lithic material for projectile points and lithic artifacts shifts from basalt to obsidian. From 5,000-3,000 B.P., climatic conditions shift to warm and moist conditions characteristic of the Medithermal period. The predominate projectile point style is a slender corner notched point with continued use of the previous styles. In the northern Great Basin, Catlow twine is now an important class of perishable artifact. From 3000 B.P. to 1000 A.D. occupation continues without much change in the northern Great Basin. The archaeological evidence suggests a rather stable cultural environment where changes reflect the relative intensity of certain activities. The final stage of northern Great Basin prehistory, beginning about 1000 A.D., was the occupation of this area by the Numic speaking Northern Paiute. Radiocarbon dates on charcoal samples from Leslie Gulch yielded dates of BC 780 to AD 40 and AD 110 to 410.

With climatic changes, came a shift in floral and faunal species and the appearance of species that characterize arid environments. Overall, the prehistory of the northern Great Basin shows long continuity and adaptive change to distinctive ecosystems with a changing climate. The persistence of lithic and textile traditions and subsistence patters during these chronological periods supports the theory of cultural continuity throughout the northern Great Basin. Settlements of the Northern Paiute were of two types: village and camps. Winter villages of up to fifty huts have been reported, but generally the winter villages consisted of small, unstable groups of about three families located near a major lake or river. Seasonal camps were located wherever there was water and food. Living structures were typically a fence-like windbreak of sagebrush for a temporary or summer camp with a tree or brush sunshade or domed wickiup for both winter and summer use. The subsistence economy of the Northern Paiute was strongly oriented toward the utilization of more than 50 plant species because these provided a more abundant and dependable food source than fowl, fish, or mammals. However, when mammals were available, almost all the parts were utilized. Mammals provided skins, furs, tools and many other by-products of aesthetic and practical value. Insects were often eaten, beetles, grasshoppers, locusts, crickets, ants and caterpillars were consumed, as well as most eggs and larva. These dietary items, which thoroughly disgusted Euro-American observers, were readily available, storable, high protein foods. In addition, historic documents indicated several hundred plants were used by the Indians of the Great Basin for medicinal purposes, fiber sources, and food.

Historic Lifeways

Exploration into this area began with the expeditions of John Jacob Aster, after he heard the stories from the Lewis and Clark Expedition of 1804-1806. Aster formed the Pacific Fur

Company to capture the fur trade in the west. He sent a party by boat to build Fort Astoria and another party overland to explore the country, trap beaver and carry the furs to Astoria. The first written observations of southeastern Oregon can be found in journals kept by men involved in the expansion of fir trapping territory. In 1811, Wilson Price Hunt's party crossed the Snake River in the area of the Weiser River. Ramsey Crooks took nineteen men and followed the south bank of the Snake River, through Malheur County and past Farewell Bend, however, after entering Hell's Canyon in November, the weather turned bad and they were forced to turn around. and camp with Hunt at the mouth of the Weiser River. Eventually the Hunt and Crooks parties made their way to Fort Astoria. In 1812, Crooks and Robert Stuart were sent east, backtracking the route of their westward journey. They camped opposite the Weiser River on August 13, 1812. Journal excepts show that they had crossed the Malheur and the Owyhee Rivers. Prior to 1858, military activity in eastern Oregon was limited to providing escorts for immigrant parties on the Oregon Trail, and to military exploration. In 1858, the Military department of Oregon was established under the command of General William S. Harney, thus assuring military aid and protection for Euro-American expansion into previously hostile country. In 1859, the military began their explorations in southeast Oregon. Their principal interests were additional supply and communication lines. In 1860, the Military Department of Oregon was merged with that of the Pacific and the regular force in the Northwest was reduced. Drafts were made on it to increase the army in the East, in preparation for the coming Civil War. During the 1860s, the majority of Euro-Americans in southeastern Oregon were involved with horses, cattle, grain, and hay production, or road building, ferrying. freighting, or were associated with the military. Troops were responsible for protecting the settlers, miners and transportation routes between California and western Oregon to the Idaho mines. Euro-American settlements, like those of Native Americans can be found around water sources and the floodplain of the Owyhee River was prime farmland for hay, and fruit. The settlement of Watson was located approximately 4.2 miles south of Leslie Gulch.

Paleontology

While no extensive survey for paleontological resources has been undertaken in the project area, fossil flora and faunal resources are know to be present in areas adjacent to the Atkins Butte area. The Sucker Creek formation is one of the most famous and most extensive ash flows of the Miocene era. The ash and lava expelled during the middle Miocene occured during one of the most explosive volcanic episodes that resulted in calderas up to 22 miles in diameter. The Sucker Creek formation yields preserved fossil plants such as oak, pine, willow and maple as well as vertebrate fossils of horse, rhinoceros, peccary, camel and oreodonts. Newly identified fossil localities have yielded fossil species of moles, shrews, bats, rabbits, and other rodents.

M. Other

The following key elements are either not present or not affected by the proposal or alternative.

1. Wild and Scenic Rivers - Not present.

2. Visual Resources - VRM class I, not affected.

3. Air Quality - Not affected.

4. Prime or Unique Farmlands - None present.

5. American Indian Religious Concerns - None present.

6. Environmental Justice - Not affected.

7. Hazardous Wastes – None present.

8. Energy and Mineral Resources – Not affected.

ENVIRONMENTAL CONSEQUENCES

Alternative 1: (Proposed Action)

A. Wild Horses

Impacts to wild horses under the Proposed Action take the form of direct and indirect impacts and may occur on either the individual or the population as a whole. Direct individual impacts are those impacts that occur to individual horses and are immediately associated with implementation of the Proposed Action. These impacts include: handling stress associated with the roundup, capture, sorting, animal handling, and transportation of the animals. The intensity of these impacts vary by individual, and are indicated by behaviors ranging from nervous agitation to physical distress. Mortality of individuals from this impact is infrequent, but does occur in .5 to 1 percent of horses gathered in a given roundup.

Indirect individual impacts are those impacts that occur to individual horses after the initial stress event. Indirect individual impacts may include spontaneous abortions in mares, and increased social displacement and conflict in studs. These impacts, like direct individual impacts, are known to occur intermittently during wild horse gather operations. An example of an indirect individual impact would be the brief skirmish which occurs with most older studs following sorting and release into the stud pen which lasts less than two minutes and ends when one stud retreats. Traumatic injuries do not occur in most cases, however, they do occur. These injuries typically involve a bite and/or kicking with bruises that don't break the skin. Like direct individual impacts, the frequency of occurrence of these impacts among a population varies with the individual. Spontaneous abortion events are very rare among mares following captures.

Population wide direct impacts are immediate effects that would occur during or immediately following implementation of the Proposed Action (Appendix B). They include the displacement of bands during capture and the associated re-dispersal which occurs following release, the modification of herd demographics (age and sex ratios), the temporary separation of members of individual bands of horses, the reestablishment of bands following releases, and the removal of animals from the population. With exception of changes to herd demographics, direct population wide impacts have proven, over the last 20 years, to be temporary in nature with most if not all impacts disappearing within hours to several days of release. No observable effects associated with these impacts would be expected within one month of release except a heightened awareness of human presence.

The effect of band displacement on a population as a result of gather operations has been observed in several HMAs following releases. Observations have been made of individual and population wide horse response following releases from both the trap site where particular animals were captured and from the central holding facility where all captured animals were held. Most horses relocated themselves from the release site back to their home ranges within 12 to 24 hours and at times much faster. This redistribution occurred following a brief

"reorientation swing" involving horses ranging out from the release site in a curving arc until their bearings were apparently restored. Following this initial random travel, most horses lined out and headed off in a particular direction often without deviating from that line until they disappeared into the mountain or over the horizon. Assertions that horses are simply taking the most direct route away from humans are not accurate, as instances where horses reverse their original direction crossing back in front of the release trailer or holding area are fairly common following the re-orientation swing.

Specialists have also observed horse behavior, following releases, as it relates to bands that are separated at capture. While the affinity of individual animals to their band would be expected to vary, it was a common observation that mares or studs broke from the group they were released with (unexpected behavior for a social animal exercising the flight response) and headed toward a particular animal or group of animals. Following this activity, the pair or trio of horses continue the re-orientation swing and then lined out together in a common direction. In some cases, individual groups were observed later together in a new area presumed to be the site of their original home range. Some specialists have noted individual mares reassociated with specific studs or mare groups following capture.

The effect of removal of horses from the population would not be expected to have an impact on herd dynamics or population variables, as long as the selection criteria for the removal ensured a "typical" population structure was maintained. Obvious potential impacts on horse herds and populations, from exercising poor selection criteria not based on herd dynamics, includes modification of age or sex ratios to favor a particular class of animal.

Effects resulting from successive removals causing shifts in sex ratios away from normal ranges are fairly self evident. If selection criteria leaves more studs than mares, band size would be expected to decrease, competition for mares would be expected to increase, recruitment age for reproduction among mares would be expected to decline, and size and number of bachelor bands would be expected to increase. On the other hand, a selection criteria which leaves more mares than studs would be expected to result in fewer and smaller bachelor bands, increased reproduction on a proportional basis with the herd, lengthening of the time after birth when individual mares begin actively reproducing, and larger band sizes.

Effects resulting from successive removals causing shifts in age dynamics away from normal ranges are likewise fairly obvious. Herd shifts favoring older age horses (over 15 years) have been observed resulting in a favoring of studs over mares in some herds. Explanations include sex-based differences in reproductive stress (relative demand for individual contributions to reproduction) and biological stress (timing the most physically demanding period of the annual cycle).

For studs, reproductive stress is based on dominance in the herd and by definition is confined to

a fairly narrow period in their lifespan when they are capable of defending a mare group. For mares, recurrent reproductive stress starts as early as age 2 and continues until as late as age 15 or 16, and sometimes as late as 20. Biological stress in wild horses tends to indicate a selection against mares. Biological stress is based on the degree, duration, and timing of biologically demanding activities during the annual reproductive cycle.

For mares, the greatest biological stress is during pregnancy and lactation. In wild horse populations, this occurs in late winter or early spring when forage availability is at its lowest level, and body condition is at its poorest. For studs, biological stress is at its peak during the breeding season. This peak biological demand is in the late spring and early summer and is more suited to a rapid recovery and a lower energy deficit than for mares.

The susceptibility of the older herd to extreme climatic events would depend on the age of the dominant class in the group. Generally, survival rates of horses are very high (exceeding 98%) for mature animals and lower for very young. This survivability declines again at some older age. Similarly, reproductive success also declines at some age. The threshold age has not been established at which susceptibility to extreme events and reproductive senescence occurs. It is reasonable to conclude that the older the population, the more prone it would be to a catastrophic die-off as a result of reduced resistance to disease, lowered body condition, and/or reduced reproductive capacity.

The effects of successive removals on populations causing shifts in herd demographics favoring younger horses (under 15 years) would also have direct consequences on the population. These impacts are not thought of typically as adverse to a population. They include development of a population that is expected to be more biologically fit, more reproductively viable, and more capable of enduring stresses associated with traumatic natural and artificial events.

The Proposed Action would mitigate the potential adverse impacts on wild horse populations by establishing a procedure for determining what selective removal criteria is warranted for the herd. This more flexible procedure of removing horses under 6 years and over 10 years old, would allow for the correction of any existing discrepancies in herd dynamics which could predispose a population to increased chances for catastrophic impacts. The Proposed Action would establish a standard for selection that would minimize the possibility for developing negative age or sex based selection effects in the population in the future.

B. Grazing Management

The proposed action would not allow present livestock use at allocated levels to continue without temporary restrictions in livestock use to prevent grazing of burned areas.

C. Wildlife

Each wildlife species is dependent to varying degrees on different aspects of vegetation, water

and cover. Because vehicular traffic in the proposed action will be restricted to existing roads and trails, and horse concentrations will be in existing disturbed locations the human activities associated with the proposed project will have little direct impact on any wildlife habitat component. Low elevation helicopter flights can be highly disturbing to wildlife, causing them to change their behavior and/or leave the vicinity of the activity for varying lengths of time. However the short duration (5 to 6 hours per day during a 8 to 10 day period) will greatly limit the short and long-term adverse impacts of the helicopter flights and other human activities.

Indirect impacts from the proposed action would be beneficial to most wildlife species. Reduced horse numbers will reduce the amount of competition for water and forage that exists between wild horse horses and wildlife. Additionally, the increased vegetation would increase hiding cover for some small animals especially near water sources, and other horse concentration areas.

D. Threatened and Endangered/Special Status Species

Most special status animal species will be in hibernation or will have migrated from the project area at the time of the time of the proposed action. Direct impacts to those special status species present in the project area are expected to be similar to other wildlife species. Animals will move away from low flying aircraft, people on horseback or in vehicles. Because of the short duration of the proposed action there likely will be no change in long-term behavior or home range. Additionally, flights will concentrate in the habitat not favored by bighorn sheep, further reducing the direct impact to this species.

Long-term impacts to special status animal species will be mostly beneficial. Because most wild horse horses use topography that is flat to gently rolling, and bighorn sheep typically prefer steep to precipitous habitat there generally is little competition for forage. However, the few sources of water in the project area are critical to both species. Reduced wild horse numbers should allow bighorn sheep to access water with lessened disturbance, and should result in increased amounts and quality of riparian vegetation. Reduced horse numbers should also result in more grasses and forbs throughout the HMA, which will improve food, nesting and escape habitat conditions for sage grouse. Impacts to other special status species probably will be slight. The four species of special status reptiles generally prefer areas with little herbaceous vegetation (which impedes their movement) and they may benefit from depleted range conditions in concentration areas of any large ungulate.

Impacts to special status plant species would be positive. Although specific studies have not been conducted to determine impacts of wild horses on the five special status plants within the herd area, there is a high likelihood that Owyhee clover is utilized by horses; it has been observed to be highly palatable to livestock. Clover habitat is found throughout the horses: range and occurs both high on the ridges and in drainages. With the gathering of wild horses, considerably less impact would occur to this species, because fewer horses would seek out the

tender growth of the recently burned plants. Mechanical damage would be reduced as large numbers of horses would not be on site to pass over habitat supporting sterile milkvetch, Packard=s blazing star, Ertter=s senecio and grimy ivesia; habitat would remain intact for plant establishment. Removal of horses would also lessen likelihood of noxious weed invasion, one of the greatest threats to the special status plant species in this area. Noxious weeds successfully compete with native plants, including special status species, for nutrients and moisture on many range sites; all measures employed to lessen their spread and impacts are beneficial to special status plants. With removal, horses would no longer maintain or create large disturbed areas where weeds are most likely to establish a beachhead, and native species would remain vigorous where they occur, providing fewer areas for weed invasion.

E. Vegetation

There would be an overall positive impact to the upland vegetation by reducing the total numbers of wild horses grazing year long within the HMAs. Lessened utilization would allow critical growth period rest for all cool and warm season grasses. The composition of vegetation would shift to a higher percentage of desirable plants. Reducing numbers of horses also would enhance establishment of species seeded as part of the post fire rehabilitation. Mechanical disturbance of the seedbed would be greatly reduced, and fewer horses would utilize the grass species as they become established, which would ultimately enhance establishment.

In the immediate vicinity of the catch pens or corrals and the loading chute, short-term disturbance would occur. The soil would be compacted and vegetation would be trampled during panel installation by personnel and vehicles and severely trampled in the catch pen area by wild horses, domestic horses, and the wranglers. It is estimated and anticipated that 1 to 3 years would be required for native vegetation to become reestablished under average conditions with no reclamation. The total area of impact per trap would be approximately 2 acres, with less than ¼ acre severely disturbed. Less than one AUM of livestock forage would be temporarily lost for one grazing season at each trap site used.

F. Noxious Weeds

Yellow starthistle does not compete well in healthy rangelands with a good mix of sagebrush, forbs, and perennial grasses. Moderate grazing of 50% or less utilization that allows litter accumulation limits starthistle's germination and is important in the control of this noxious weed. Overgrazing decreases competition, thus enabling starthistle to become dominant. The proposed action would decrease use on the native vegetation, thereby creating a healthy rangeland that would help control the spread of yellow starthistle.

G. Soils

Soil loss and compaction would be expected to decrease in those areas near water sources where horses are forced to concentrate. This would lead to less soil erosion, better soil-water storage along riparian areas, and more natural water release rates, all of which contribute to a

properly functioning riparian area. Lower populations of horses would result in less hoof traffic on the uplands. The many benefits to this include decreasing soil surface compaction for native plant reproduction, decreasing soil erosion along trails and overgrazed rangeland, and decreasing negative impacts to soil microbiotic crusts.

Soil would be displaced and/or compacted on approximately two acres at each site in the construction of the trap panels, use of the access routes, and in the round-up and loading of the wild horses. The area of severe surface disturbance is normally less than 2,000 square feet. Minimal surface wind and water erosion is expected on these areas during the vegetative rehabilitation period (approximately 1 to 3 years).

H. Riparian Areas/Water Quality/Floodplains

The proposed action would limit the intensity of use on riparian areas and surrounding uplands. Degradation to riparian resources and water quality would be lessened with fewer horses in the HMA. Fewer horse numbers combined with cool season livestock use would allow some recruitment and reproduction of riparian vegetation to begin to occur. Streambank and riparian soil stability would increase with fewer horses trailing to water sources and pawing for water in seep/spring areas. All of these factors contribute to better riparian functionality, better water quality, and less damage to riparian resources.

The trap sites would not be located adjacent to any surface water sources or riparian areas, therefore, there would be no anticipated impact due to the gather operation.

I. Recreation and Visual Resources

Vale District Office Wild Horse and Burro Specialist has received complaints from recreationists that the HMA is overgrazed by horses creating a negative impact on game species. The proposed action would decrease the grazing impacts by horses to levels attaining a natural thriving ecological balance.

If visitors were recreating in the affected area during helicopter use, activities such as hunting would be temporarily adversely impacted. The proposed action would meet management objectives for all VRM classes.

J. Wilderness Study Areas (WSAs)

During the gathering operation, the opportunity for outstanding solitude would be temporarily reduced within the three WSAs as a result of the helicopter activity. The panels would be removed upon completion of the gather, eliminating any visual impacts from the trap. The beneficial impacts of removing the horses include an improvement in vegetation, soil, wildlife habitat, and the natural appearance of the entire WSA.

Whenever possible traps would be constructed outside WSA boundaries. No trap sites would

be established off existing roads within a WSA. Panels would be located along the roadway, with distance from the edge of the road varying from 1 to 10 feet. The panels would be placed within the disturbed area of the roadway wherever possible and surface disturbance would be held to a minimum. There would be no off road vehicle travel within WSAs.

The proposed action would not impair the area's wilderness values. The proposed action would be carried out in a manner that is least disturbing to public lands of the WSAs, and would be in compliance with BLM's WSA IMP . The proposal would not produce an aggregate effect upon the area's wilderness characteristics or values that would constrain Congress' prerogative to make a wilderness designation decision by preventing actions that would pre-empt that decision.

K. Areas of Critical Environmental Concern (ACEC)/Research Natural Areas (RNAs)

All ACECs would benefit from removal of wild horses, particularly Honeycombs ACEC/RNA, for which a vegetative community and special status plant species are identified as relevant and important values. Gathering of a substantial number of horses would permit the vegetative communities to recover from the wildfire without utilization by horses of the new growth of grasses and palatable forbs. In addition, mechanical damage to critical special status plant species habitat would be greatly reduced. The reduction in potential spread of noxious weeds as a result of wild horse activity and the establishment of vegetation in the areas seeded, which would benefit from horse removal, would also promote overall vegetative health of the ACECs.

L. Cultural Resources and Paleontology

The proposed action would benefit the integrity and condition of prehistoric and historic sites in the area, particularly those around water. There would be less surface disturbance and soil compaction resulting in less vertical and horizontal displacement of cultural resources. Fossil flora and faunal localities would also benefit from the proposed action.

Alternative 2: (Gather to Midpoint of AML)

A. Wild Horses

The negative impacts to horses would be increased under this alternative. Gathering to mid-point of the AML range would require a higher frequency of gathers (gather every two years instead of every four years) to maintain a natural thriving ecological balance. This would significantly add to the stress and exposure to injury of the horses during roundup, capture, sorting, animal handling, and transportation of the animals. There would be increased disruptions in band structure. In short, this alternative would double the negative impacts to the horses over Alternative 1.

B. Grazing Management

This alternative would be similar to the proposed action, but would increase competition for forage and water between wild horses and livestock due to increased numbers of horses. Livestock grazing would be negatively impacted due to increased consumption of forage and a lessening of a natural thriving ecological balance.

C. Wildlife

Impacts under this alternative would be similar to the proposed action with fewer benefits to natural resources due to higher numbers of horses remaining in the HMA.

D. Threatened and Endangered/Special Status Species

Impacts under this alternative would be similar to the proposed action with fewer benefits to natural resources due to higher numbers of horses remaining in the HMA.

E. Vegetation

Impacts under this alternative would be similar to the proposed action with fewer benefits to natural resources due to higher numbers of horses remaining in the HMA.

F. Noxious Weeds

Impacts under this alternative would be similar to the proposed action with fewer benefits to natural resources due to higher numbers of horses remaining in the HMA.

G. Soils

Impacts under this alternative would be similar to the proposed action with fewer benefits to natural resources due to higher numbers of horses remaining in the HMA.

H. Riparian Areas/Water Quality/Floodplains

Impacts under this alternative would be similar to the proposed action with fewer benefits to natural resources due to higher numbers of horses remaining in the HMA.

I. Recreation and Visual Resources

Impacts under this alternative would be similar to the proposed action with fewer benefits to natural resources due to higher numbers of horses remaining in the HMA.

J. Wilderness Study Areas (WSAs)

Impacts under this alternative would be similar to the proposed action with fewer benefits to natural resources due to higher numbers of horses remaining in the HMA.

K. Areas of Critical Environmental Concern (ACEC)/Research Natural Areas (RNAs)

Impacts under this alternative would be similar to the proposed action with fewer benefits to natural resources due to higher numbers of horses remaining in the HMA.

L. Cultural Resources and Paleontology

Under this alternative, the impacts to cultural resources would be the same as under the proposed action. Fewer horse numbers would cause less vertical and horizontal displacement of cultural resources. Fossil flora and faunal localities would also benefit from a fewer number of horses.

Alternative 3: (Continue Existing Management)

A. Wild Horses

Wild horses would continue to be removed using an issue based strategy when funding is available on a statewide priority basis. Impacts to horses would depend when funding was available to conduct gather operations. When funding was not available, horses could potentially suffer from over population and impacts from the no action alternative would apply. When funding was available, impacts from the proposed action would apply.

B. Grazing Management

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action. Long-term impacts would be greater as the forage base would be more negatively impacted potentially creating larger and longer reductions in livestock use.

C. Wildlife

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

D. Threatened and Endangered/Special Status Species

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

E. Vegetation

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

F. Noxious Weeds

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

G. Soils

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

H. Riparian Areas/Water Quality/Floodplains

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

I. Recreation and Visual Resources

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

J. Wilderness Study Areas (WSAs)

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

K. Areas of Critical Environmental Concern (ACEC)/Research Natural Areas (RNAs)

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

L. Cultural Resources and Paleontology

Same as no action until funding would be available to gather, then conditions would be similar to the proposed action.

Alternative 4: (No Action)

A. Wild Horses

The horses would continue to multiply and the population would increase at a rate of 15 to 20 percent per year until the habitat would no longer support the horse population and a natural die off would occur. Until this happens the horses would continue to overuse the available forage and water. The horses would begin to show signs of malnutrition, and a decrease in the population rate can be expected. In concentrated, overabundant animal populations, the individuals become much more susceptible to disease, which endangers the entire population.

Domestic stock in the vicinity could also be threatened by disease.

Under this alternative, natural controls would regulate wild horse numbers through predation, disease, and forage, water and space availability. Wild horses within the Three Fingers HMA are not substantially regulated by predators. In addition, wild horses are a long-lived species with documented foal survival rates exceeding 95%. This alternative would result in a steady increase in numbers that would exceed the carrying capacity of the range. Public Rangelands Improvement Act (PRIA) amended the Wild Horse and Burro Act of 1971 to mandate that the Bureau "prevent the range from deterioration associated with overpopulation", and "preserve and maintain a thriving natural ecological balance and multiple use relationships in that area".

B. Grazing Management

The HMA would continue to support an existing population of 391 horses in addition to an annual average increase of 20%. Assuming that livestock and wildlife populations are managed to allocated levels, the carrying capacity of the HMA would be over allocated. The condition of the livestock would decrease as the quality and quantity of available water and forage decreases. The BLM would be forced to suspend or reduce the permitted use of livestock in the area to compensate for the excess number of horses. This in turn, would affect the financial income of these operations.

C. Wildlife

Wildlife in the HMA would be forced to compete more for limited water and forage with an increasing horse population. This would most likely alter use patterns of most wildlife species, especially those in habitat and topographic types preferred by wild horses. As the horse herd increases in numbers it would likely use steeper slopes and areas further from water in order to obtain forage, increasing the disturbance of greater numbers of wildlife species and individuals. Habitat degradation would decrease wildlife populations and wildlife use in the HMA. Individual animals of mobile species likely would leave the HMA and begin to compete with animals of their species in adjacent areas. As wild horse die-offs occurred, scavenger species such as turkey vultures and coyotes would benefit under this alternative.

D. Threatened and Endangered/Special Status Species

California bighorn sheep and sage grouse would be adversely affected by increasing horse numbers through continued degradation of habitat conditions. Reduced amounts of herbaceous vegetation and increased physical damage to shrubs will reduce productivity of these species. Riparian vegetation browsing and trampling springs, primarily due to wild horse use, would further degrade habitat conditions for special statue wildlife species. Reptiles that prefer low densities of herbaceous vegetation might benefit from this alternative although the exact outcome could be difficult to predict as their insect prey could be adversely impacted by reduced vegetation.

Special status plants would be expected to decline in density and vigor as wild horses would increase in numbers. Species that are potentially palatable to horses, particularly Owyhee clover, would receive use specifically on succulent new growth in the burned areas, as well as on other sites. Horses would trample the fragile soils in critical plant habitats, leading to mechanical damage of any existing plants and potentially damaging sites for subsequent plant establishment. Wild horses may be a vector for spread of noxious weeds, particularly in low seral rangeland conditions where native species have been depleted and do not provide sufficient competition for weeds. With large numbers of horses in the HMA, these areas would remain highly disturbed and would act as sources of weed seed which may invade special status plant habitat.

E. Vegetation

Without gathering of wild horses, native perennial species, particularly grasses and palatable forbs, would be heavily utilized on a yearlong basis, causing significant damage to plants. There would be the potential of severe and extensive plant mortality at certain areas. This decline in both vigor and numbers of key species would lead to invasion of noxious weeds and further deterioration of rangeland vegetative conditions. Thriving ecological balances in many of the sagebrush steppe/salt desert shrub communities would be interrupted and potentially destroyed, particularly near water sources, as undesirable species would increase. Establishment of seedlings as a result of post-fire rehabilitation efforts may be impaired as horses would trample the newly planted sites and would utilize newly established plants.

Areas that are presently over-utilized, such as areas adjacent to water sources, would continue to be used excessively. The areas of over-utilization would continue to increase in both size and degree. The composition of vegetation would change to a higher percentage of undesirable plants.

F. Noxious Weeds

Overgrazing decreases competition from native vegetation, thus enabling starthistle to become dominant. Without gathering of wild horses, native perennial species would be heavily utilized on a yearlong basis, causing significant damage to plants. A decline in vigor of native plants and numbers of key species would lead to invasion of yellow starthistle.

G. Soils

Soil loss and compaction would be expected to increase in those areas near water sources where horses are forced to concentrate. This would lead to decreases in soil-water storage and impacts to water releases in drainages. Increased wild horse numbers on uplands would negatively impact soil surface features. These impacts include increased erosion, increased negative impacts to soil microbiotic crusts, and increased surface compaction contributing to decreased native vegetation germination and survival.

H. Riparian Areas/Water Quality/Floodplains

Increasing numbers of wild horses in the HMA would result in greater use and degradation of riparian areas. This would result in a decline in water quality through increased sedimentation and water temperatures. Soil-water storage would be decreased due to loss of floodplains that would contribute to higher than natural water releases during precipitation or snowmelt events. Riparian area vegetation would be degraded as additional horse use would decrease vegetation recruitment, reproduction, and survivability. In addition, riparian vegetation community types and distribution would be changed, root density lessened, and canopy cover reduced. This would lead to reduced stream channel and spring/seep dynamics and further deterioration of these systems.

I. Recreation and Visual Resources

Some negative impacts to hunters would occur with degraded conditions for wildlife populations. The visual resources would be negatively impacted with increased use of the water sources and vegetation. There would be increased horse numbers in the area, thus increasing the horse viewing opportunities.

J. Wilderness Study Areas (WSAs)

The increased horse use would impair the wilderness values of the affected WSAs by changing the manner and degree of use. Vegetative changes would occur with the increased use. The negative impacts of not removing the horses include the degradation of vegetation, soil, wildlife habitat, and the natural appearance of the WSAs. This alternative would not be in compliance with BLM's WSA IMP.

K. Areas of Critical Environmental Concern (ACEC)/Research Natural Areas (RNAs)

Current and increasing horse numbers would have a significant impact on relevant and important values for which both ACECs have been designated. With much of the forage base destroyed due to wildfire in these areas, horses would concentrate use in the portions of the ACECs not burned, particularly near water sources, leading to deteriorating vegetative conditions. Special status plants (a relevant and important value for both ACECs) and their habitat would receive impacts from trampling, as well as potential utilization, the latter particularly for Owyhee clover. These plants would decline in numbers, and habitat may be irretrievably destroyed, particularly if noxious weeds are introduced and thrive. As sites may be opened for weeds, natural communities would lose potential for recovery from both impacts of the wildfire and from establishment of species as a result of post-burn rehabilitation efforts.

L. Cultural

An increased horse population would compound the use near available water sources causing additional trampling of soils. This would result in both vertical and horizontal displacement of lithic artifacts and well as causing edge wear damage and fracturing.

CUMULATIVE IMPACTS

Cumulative impacts are impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Alternative 1: (Proposed Action)

The potential for cumulative impacts on most of the identified resources other than wild horses is minimal with respect to the gather operation. Removal of the horses would be a positive potential cumulative impact on all of the resources, including the horses. Range condition would improve, watershed cover would be adequate, water quality would improve, threats to special status species would be reduced, negative soil impacts would be decreased, wildlife use patterns and numbers would be less affected, and domestic livestock would be less affected. There would be lessened competition for forage and water with fewer numbers of horses. By removing horses without the selective removal policy there would be a restoration of age structure and sex ratio within the bands to historical levels. In addition, a quality cross section of horses in all age groups can be released back into the HMA and older, less desirable or defective horses removed.

Alternative 2: (Gather to Midpoint of AML)

Similar to the proposed action with the exception that there would be an increased frequency of gathers needed to maintain a natural thriving ecological balance that the horses require for overall health and vigor. Potentially more stress, injuries, spontaneous abortions, band disruption and displacement would result from increased handling of the horses over the proposed action. Natural resources would not benefit less from this alternative compared to the proposed action.

Alternative 3: (Continue Existing Management)

Impacts would be the same as proposed action only when funding is available. Continue to remove horses according to state priorities for gather.

Alternative 4: (No Action)

The horses would continue to over populate the HMA until numbers would reduce or the herd would be eliminated by natural means. Range condition would deteriorate, watershed cover would be reduced, water quality would be reduced, soil erosion increased, wildlife use patterns and numbers would be altered, and domestic livestock would be eliminated.

CONSULTATION AND COORDINATION

Public hearings are held at the Burns District Office prior to gathers to inform the public on the use of helicopters and motorized vehicles to capture wild horses. During these meetings, the public is given the opportunity to present new information and to voice any concerns regarding the use of these methods to capture wild horses. For more information contact Dean Bolstad at 541-573-4492.

Persons consulted and coordinated with outside of the Bureau of Land Management:
Walt Van Dyke…….Oregon Department of Fish and Wildlife
Suart Love……..…….. Oregon Department of Fish and Wildlife
Dan Joyce…….Malheur County Commissioner
John Bishop…….Wild Horse Representative, Southeast Oregon Resource Advisory Council
Board Corrals Allotment Livestock Permittees
Three Fingers Allotment Livestock Permittees
Wild Horse Interest Groups
Wilderness Interest Groups

List of Preparers

Jim W. Johnson……...……...Wild Horse and Burro Specialist
Bob Alward……..……..……..…...Outdoor Recreation Planner
Jean Findley…….…….Botanist
Lynne Silva……...…..Weeds Specialist
Al Bammann……...……..……..Wildlife Biologist
Mitch Thomas……..…Rangeland Management Specialist
Shaney Rockefeller……...…….……...Soil Scientist
Cynthia Tait……....…….Fish Biologist
Diane Pritchard…….……...Archaeologist
Randy Eyre…….Planning & Environmental Coordinator

ATTACHMENT 1 - STANDARD OPERATING PROCEDURES

A. Methods for Humane Capture Wild Horses Helicopter Removals with or without a Contract

The helicopter drive trapping method employed for this capture operation requires that horses be herded to a trap of portable panels and on extremely rare occasions to ropers who, after roping the animal, will bring it to the trap. Gathering would be conducted by using agency personnel or contractors experienced in the humane capture and handling of wild horses. The same rules apply whether a contractor or BLM personnel are used. The following stipulations and procedures will be followed during the contract period to ensure the welfare, safety and humane treatment of the wild horses in accordance with the provisions of 43 CFR 4700 and Great Basin Wild Horse and Burro Gathers contract.

1. Capture Methods That May Be Used in the Performance of a Helicopter Gather

a. Helicopter Drive Trapping

This capture method will involve driving horses into a pre-constructed trap using a helicopter. The trap is constructed of portable steel panels consisting of round pipe. Wings are constructed off the ends of the panel trap to aid in funneling horses into the trap. The wings are constructed of natural jute, (or similar netting which will not injure a horse), which is hung on either trees or long steel posts. This sort of wing forms a very effective visual barrier to the horses that they typically will not run through. When the trap is ready for use, a helicopter will start moving one band of horses at a time toward the trap and into the wings.

The contractor/BLM shall attempt to keep bands intact except where animal health and safety become considerations which would prevent such procedures. The contractor/BLM shall ensure that foals shall not be left behind.

At least one saddle horse should be immediately available at the trap site to perform roping if necessary. Roping shall be done as determined by the Contracting Officer's Representative (COR) or Project Inspector (PI). Under no circumstances shall animals be tied down for more than one hour.

Domestic saddle horses may also be used to assist the helicopter pilot (on the ground) during the gather operation, by having the domestic horse act as a pilot (or "Judas") horse on the ground, leading the wild horses into the trap site. Individual ground hazers and individuals on horseback may also be used to assist in the gather.

b. Helicopter Assisted Roping

Capture attempts may be accomplished by utilizing a helicopter to drive animals to ropers. Under no circumstances shall horses be tied down for more than one hour.

Roping shall be performed in such a manner that bands will remain together. Foals shall not be left behind.

2. Other Non-Helicopter Capture Methods

a. Water Trapping

This method involves setting up a trap around a well used water source and employing a self-closing gate with a triggering device or finger gates. Finger gates can be used only with the prior approval and under the supervision of the COR/PI. It may be necessary to exclude access to other neighboring water sources to encourage use by the target population at the trap site. Water traps equipped with trip wires would be every 10 hours for trapped animals.

All exclosures constructed for the purpose of the gather would be flagged and highly visible to the horses, wildlife, and the public. The wires, twine, and flagging would be promptly removed following completion of the trapping.

All water traps and exclosures would be constructed (whenever possible) to accommodate wildlife access points. These points would be where wildlife could get to water by going underneath the panels, such as along trails, washes or low spots.

Placement of portable corral panels would be permitted during foaling season to allow wild horses to become accustomed to them.

c. Bait Trapping

Bait trapping using hay or other enticements may be used as an additional or alternative method of capture. This method would involve setting up a panel trap in an area accessible to the horses and feeding of enticements in the trap over a period of time to habituate the target animal to the bait. Once virtually all horses in an area were coming in to the bait, they would be trapped. The principal limitation of this method is that forage must be limited or the bait must be more desirable than the surrounding forage.

d. Net Gunning

The net-gunning aerial capture technique uses weighted nets to individually capture wild animals. Net gun capture is a valuable tool when specific animals are targeted for restraint, relocation or removal. The technique is not applicable when a number of animals require capture.

When using nets, drug and electrical immobilization are rarely required. Individual animals are located, herded by the pilot as slowly as possible into an open area and then are netted from the helicopter using weighted, soft mesh net. As the horse becomes tangled in the net they become somewhat disoriented and further slow down. Some animals come to a complete standstill when surrounded by the net. Others become tangled to the point where they roll onto the ground.

Immediately after netting an animal the crew members approach the animal. The horse or burro is rolled onto its side, cross-hobbled and blindfolded. A muzzle is used in cases where an animal acts aggressive. The net is then rolled away from the horse or burro and the animal can be handled for collection of biological samples. If transport is required, the hobbled, blindfolded animal is rolled into a soft canvas bag. The bag is laced closed with a strong nylon rope. The rope is attached to a hook on the belly of the helicopter and the animal is transported to the destination. Transport time to small, portable corrals is usually under 10 minutes per animal.

Once at the destination, the horse is gently lowered into the small, portable corral. The ground crew unhooks the transport rope and removes the bag from around the animal. The blindfold and hobbles are removed. The horse immediately gets onto their feet, appearing only slightly disoriented.

3. Stipulations for Portable Corral Traps/Exclosures

Capture traps would be constructed in a fashion to minimize the potential for injury to wild horses and BLM personnel. Gates would be wired open at all unmanned trap sites, and would be left closed only when needed to hold horses inside. Trapped horses would not be held inside the traps for a period exceeding 10 hours, unless provided with feed (weed free hay) and water.

The Oregon Department of Fish and Wildlife would be notified as soon as possible if any wildlife became injured during capture operations. Wildlife caught inside traps would be released immediately.

4. Contract Helicopter, Pilot and Communications

The contractor must operate in compliance with Federal Aviation Regulations, Part 91. Pilots provided by the contractor shall comply with the Contractor's Federal Aviation Certificates, applicable regulations of the State in which the gather is located.

When refueling, the helicopter shall remain a distance of at least 1,000 feet or more from animals, vehicles (other than fuel truck), and personnel not involved in refueling.

The COR/PI shall have the means to communicate with the contractor's pilot at all times. If communications cannot be established, the Government will take steps as necessary to protect the welfare of the animals. The frequency(ies) used for this contract will be assigned by the COR/PI when

the radio is used. The contractor shall obtain the necessary FCC licenses for the radio system. 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 Contracting Officer or COR/PI, violate contract and FAA 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 Contracting Officer or his/her representative.

All incidents/accidents occurring during the performance of any delivery order shall be immediately reported to the COR.

5. Non-Contract Helicopter Operations

An Aircraft Safety Plan and flight hazard analysis will be appropriately approved and filed and copies distributed to the necessary individuals prior to commencing the removal operation. Daily flight plans will also be filed. If a BLM contract helicopter is used, all BLM, Aircraft Safety and Operations standards will be adhered to.

There will be daily briefings with the helicopter pilot, Authorized Officer and all personnel involved in the day's operation. The purpose of this meeting is to discuss in detail all information gathered during the familiarization flight such as hazards, location of horses, potential problems, etc. Discuss any safety hazards anticipated for the coming day's operation or any safety problems observed by the Authorized Officer or anyone else, outline the plan of action, delineate course of actions, specifically position the hazers and their responsibilities, logistics, and timing. After each flight, removal personnel will discuss any problems and suggest solutions. This may be accomplished over the radio or on the ground as the need dictates.

A flight operations plan will be filed with the Vale District Dispatch Center. This plan will describe the area to be flown and the expected time frames of flight operations. A weather forecast will be acquired from the dispatcher. There will be no flights on days of high or gusty, erratic winds or days with poor visibility.

Two-way radio communication between the helicopter and the ground crew will be maintained at all times during the operation.

An operation or contractor's log will be maintained for all phases of the operation. The log will be as detailed as possible and will include names, dates, places and other pertinent information, as well as, observations of personnel involved.

6. Animal Handling and Care

Prior to any gathering operations, the COR/PI will provide for a pre-capture evaluation of existing conditions in the gather areas. The evaluation will include animal condition, prevailing temperatures, drought conditions, soil conditions, road conditions, and a topographic map with location of fences, other physical barriers, and acceptable trap locations in relation to animal distribution. The evaluation will determine whether the proposed activities will necessitate the presence of a veterinarian during operations. If it is determined that capture efforts necessitate the services of a veterinarian, one would be obtained before capture would proceed.

The contractor will be appraised of the all conditions and will be given instructions regarding the capture and handling of animals to ensure their health and welfare is protected.

The Authorize Officer and pilot may take a familiarization flight identifying all natural hazards (rims, canyons, winds) and man-made hazards in the area so that helicopter flight crew, ground personnel, and wild horse safety will be maximized. Aerial hazards will be recorded on the project map.

No fence modifications will be made without authorization from the Authorized Officer. The contractor/BLM shall be responsible for restoration of any fence modification which has been made.

If the route the contractor/BLM proposes to herd animals passes through a fence, opening should be large enough to allow free and safe passage. Fence material shall be rolled up and fence posts will be removed or sufficiently marked to ensure safety of the animals. The standing fence on each side of the gap will be well flagged or covered with jute or like material.

Wings shall not be constructed out of materials injurious to animals and must be approved by the Authorized Officer.

It is the responsibility of the contractor/BLM to provide security to prevent loss, injury or death of captured animals until delivery to final destination.

Animals shall not be allowed to remain standing on trucks while not in transport for a combined period of greater than three (3) hours. Animals that are to be released back into the capture area may need to be transported back to the original trap site. This determination will be at the discretion of the COR.

Branded or privately owned animals captured during gather operations will be handled in accordance with state estray laws and existing BLM policy.

Capture methods will be identified prior to issuance of delivery orders. Regardless of which methods are selected, all capture activities shall incorporate the following:

a. Trap Site Selection

The Authorized Officer will make a careful determination of a boundary line to serve as an outer limit within which horses will be herded to a selected trap site. The Authorized Officer will insure that the pilot is fully aware of all natural and man made barriers which might restrict free movement of horses. Topography, distance, and current condition of the horses are factors that will be considered to set limits to minimize stress on horses.

Gather operations will be monitored and restricted (if necessary) to assure the body condition of the horses are compatible with the distances and the terrain over which they must travel. Pregnant mares, mares with small colts, and other horses would be allowed to drop out of bands which are being gathered if required to protect the safety and health of the animals.

All trap and holding facility locations must be approved by the Authorized Officer prior to construction. The situation may require moving of the trap. All traps and holding facilities not located on public land must have prior written approval of the landowner.

Trap sites will be located to cause as little injury and stress to the animals, and as little damage to the natural resources of the area, as possible. Sites will be located on or near existing roads. Additional trap sites may be required, as determined by the Authorized Officer, to relieve stress to the animals caused by specific conditions at the time of the gather (i.e. dust, rocky terrain, temperatures, etc.).

b. Trap/Facility Requirements

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:

Traps and holding facilities shall be constructed of portable panels, the top of which shall not be less than 72 inches high for horses, and the bottom rail of which shall not be more than 12 inches from ground level. All traps and holding facilities shall be oval or round in design.

All loading chute sides shall be fully covered with plywood (without holes) or like material. The loading chute shall also be a minimum of 6 feet high.

All runways shall be of sufficient length and height to ensure animal and wrangler safety and may be covered with plywood, burlap, plastic snow fence or like material a minimum of 1 foot to 6 feet above ground level for horses.

If a government furnished portable chute is used to restrain, age, or to provide additional care for animals, it shall be placed in the runway in a manner as instructed by or in concurrence with the Authorized Officer.

All crowding pens including the gates leading to the runways may, if necessary to prevent injuries from escape attempts, be covered with a material which prevents the animals from seeing out (plywood, burlap, snow fence etc.) and should be covered a minimum of 2 feet to 6 feet above ground level for horses.

When holding facilities are used, and alternate pens are necessary to separate mares or jennies with small foals, animals which will be released, sick and injured animals, and estrays from the other animals or to facilitate sorting as to age, number, size, temperament, sex, and condition. They will be constructed to minimize injury due to fighting and trampling. In some cases, the Government will require that animals be restrained for determining an animal's age or for other purposes. In these instances, a portable restraining chute will be provided by the Government. Either segregation or temporary marking and later segregation will be at the discretion of the COR.

If animals are held in the traps and/or holding facilities, a continuous supply of fresh clean water at a minimum rate of 10 gallons per animal per day will be supplied. 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.

When dust conditions occur within or adjacent to the trap or holding facility, the contractor/BLM shall be required to wet down the ground with water.

7. Treatment of Injured or Sick; Disposition of Terminal Animals

The contractor/BLM shall restrain sick or injured animals if treatment is necessary. A veterinarian may be called to make a diagnosis and final determination. Destruction shall be done by the most humane method available. Authority for humane destruction of wild horses is provided by the Wild Free-Roaming Horse and Burro Act of 1971, Section 3(b)(2)(A), 43 CFR 4730.1, BLM Manual 4730 - Destruction of Wild Horses and Burros and Disposal of Remains, and is in accordance with BLM policy as expressed in Instructional Memorandum No. 98-141.

Any captured horses that are found to have the following conditions may be humanely destroyed:

a. The animal shows a hopeless prognosis for life.
b. Suffers from a chronic disease.
c. Requires continuous care for acute pain and suffering.
d. Not capable of maintaining a body condition rating of one or two.
e. The animal is a danger to itself or others.

The Authorized Officer will determine if injured animals must be destroyed and provide for destruction of such animals. The contractor/BLM may be required to dispose of the carcasses as directed by the Authorized Officer.

The carcasses of the animals that 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 that 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 visual impacts. Carcasses will not be placed in drainages regardless of drainage size or downstream destination.

8. Motorized Equipment

All motorized equipment employed in the transportation of captured animals shall be in compliance with appropriate State and Federal laws and regulations applicable to the humane transportation of animals. The contractor shall provide the Authorized Officer with a current safety inspection (less than one year old) of all tractor/stock trailers used to transport animals to final destination.

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.

Only stock trailers with a covered top shall be allowed for transporting animals from trap site(s) to temporary holding facilities. Only stock trailers, or single deck trucks shall be used to haul animals from temporary holding facilities to final destination(s). Sides or stock racks of transporting vehicles shall be a minimum height of 6 feet 6 inches from the vehicle floor. Single deck trucks with trailers 40 feet or longer shall have two (2) partition gates providing three (3) compartments within the trailer to separate animals. The compartments shall be of equal size plus or minus 10 percent. Trailers less than 40 feet shall have at least one partition gate providing two (2) 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 at the minimum a 5-foot wide swinging gate. The use of double deck trailers is unacceptable and will not be allowed.

All vehicles used to transport animals to the final destination(s) shall be equipped with at least one (1) door at the rear end of the vehicle, which is capable of sliding either horizontally of 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. Final approval of vehicles to transport animals shall be held by the Authorized Officer.

Floors of vehicles, trailers, and the loading chute shall be covered and maintained with materials

sufficient to prevent the animals from slipping.

Animals to be loaded and transported in any vehicle or trailer shall be as directed by the Authorized Officer and may include limitations on numbers according to age, size, sex, temperament, and animal condition. The minimum square footage per animal is as follows:

11 square feet/adult horse (1.4 linear foot in an 8 foot wide trailer)
6 square feet/horse foal (0.75 linear foot in an 8 foot trailer)

The Authorized Officer 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 Authorized Officer shall provide for any brand and/or inspection services required for the captured animals.

Communication lines will be established with personnel involved in off-loading the animals to receive feedback on how the animals arrive (condition/injury etc.). Should problems arise, gathering methods, shipping methods and/or separation of the animals will be changed in an attempt to alleviate the problems.

If the Authorized Officer determines that dust conditions are such that animals could be endangered during transportation, the contractor/BLM will be instructed to adjust speed and/or use alternate routes.

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

9. Special Stipulations.

Private landowners or the proper administering agency(s) would be contacted and authorization obtained prior to setting up traps on any lands which are not administered by BLM. Wherever possible, traps would be constructed in such a manner as to not block vehicular access on existing roads.

If possible, traps would be constructed so that no riparian vegetation is contained within them. Impacts to riparian vegetation and/or running water is located within a trap (and available to horses) would be mitigated by removing horses from the trap immediately upon capture. No vehicles would be operated on riparian vegetation or on saturated soils associated with riparian/wetland areas.

Gathering would be conducted when soils are dry or frozen and conditions are optimal for safety and protection of the horses and wranglers. Whenever possible, scheduling of gathering activities will be

done to minimize impacts with big game hunting seasons.
Gathers would not be conducted 6 weeks on either side of peak foaling season which for this gather is May1 to August 1 to reduce the chance of injury or stress to pregnant mares or mares with young foals.

The helicopter would avoid eagles and other raptors, and would not be flown repeatedly over any identified active raptor nests. No unnecessary flying would occur over big game on their winter ranges or active fawning/calving grounds during the period of use.

Standard operating procedures in the siting and construction of traps will avoid adverse impacts from trap siting, construction, or operation to wildlife species, including threatened, endangered, or sensitive species.

10. Herd Health and Viability Data Collection

The following information will be collected form each animal captured: age, sex, color, overall health, pregnancy or nursing status.

In addition, blood or hair samples may be collected from individuals within the herd depending on available funding to identify the genome of the herd. Certain other activities including immunocontraceptive research radio collaring, and freeze marking may be conducted.

a. Population Management Plan/Selective Addition or Removal

Blood samples may be taken for the purposes of furthering genetic ancestry studies and incorporation into the Population Management Plans which will be developed for each HMA/complex.

On occasion, it may be necessary to enhance and maintain genetic diversity a few animals with compatible characteristics may be introduced from other HMAs. Introduced animals will be taken from areas with similar habitat.

b. Immunocontraceptive Research

When the immunocontraceptive vaccine is used, delivery of the vaccine will be conducted by trained individuals, using approved delivery methods. The vaccine will be administered to the large muscle on the hip.

11. Public Participation

Prior to conducting a gather a communications plan or similar document summarizing the procedures to follow when media or interested public request information or viewing opportunities during the gather should be prepared.

The public must adhere to guidance from the agency representative and viewing must be prearranged.

12. Safety

Safety of BLM employees, contractors, members of the public, and the wild horses will be given primary consideration. The following safety measures will be used by the Authorized Officer and all others involved in the operation as the basis for evaluating safety performance and for safety discussions during the daily briefings:

A briefing between all parties involved in the gather will be conducted each morning.

All BLM personnel, contractors and volunteers will wear protective clothing suitable for work of this nature. BLM will alert observers of the requirement to dress properly. BLM will assure that members of the public are in safe observation areas.

The handling of hazardous or potentially hazardous materials, such as liquid nitrogen and vaccination needles, will be accomplished in a safe and conscientious manner by BLM personnel or the contract veterinarian. (Refer to page 28, Hazardous Materials.)

13. Responsibility and Lines of Communication

The Contracting Officer's Representative, Dean Bolstad from the Burns District Office, and Project Inspector, Jim Johnson, from the Vale District Office, have the direct responsibility to ensure the contractor's compliance with the contract stipulations.

The Assistant Field Manager for Renewable Resources and the Jordan Resource Area Field Manager will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, Oregon State Office, and Burns Corral offices.

All employees involved in the gathering operations will keep the best interests of the animals at the forefront at all times.

14. Glossary

Appropriate Management Level - The number of wild horses and burro which can be sustained within a designated herd management area which achieves and maintains a thriving natural ecological balance keeping with the multiple-use management concept for the area.

Authorized Officer - An employee of the BLM to whom has been delegated the authority to perform the duties described in these Standard Operating Procedures. See BLM Manual 1203 for explanation of delegation of authority.

Census - The primary monitoring technique used to maintain a current inventory of wild horses on given areas of the public lands. Census data are derived through direct visual counts of animals using a helicopter.

Contracting Officer (CO) - Is the individual responsible for an awarded contract who deals with claims, disputes, negotiations, modifications and payments. Appoints CORs and PIs.

Contacting Officers Representative (COR) - Acts as the technical representative for the CO on a contract. Ensures that all specifications and stipulations are met. Reviews the contractor's progress, advises the CO on progress, problems, costs, etc. Is responsible for review, approval, and acceptance of services.

Evaluation - A determination based on studies and other data that are available as to if habitat and population objectives are or are not being met and where an overpopulation of wild horses exists and whether actions should be taken to remove excess animals.

Excess Wild Horses - Wild free-roaming horses which have been removed from public lands or which must be removed to preserve and maintain a thriving ecological balance and multiple-use relationship.

Genetically Viable - Fitness of a population as represented by its ability to maintain the long-term reproductive capacity of healthy, genetically diverse members.

Health Assessment - Evaluation process based on best available studies data to determine the current condition of resources in relation to potential or desired conditions.

Healthy Resources - Resources that meet potential or desired conditions or are improving toward meeting those potential or desired conditions.

Herd Area - The geographical area identified as having been used by wild horse and burro populations in 1971, at the time of passage of the Wild Free-roaming Horse and Burro Act.

Herd Management Area - The geographical area as identified through the land use planning process established for the long-term management of wild horse and burro populations. The boundaries of the herd management area may not be greater than the area identified as having been used by wild horse populations in 1971, at the time of passage of the Wild Free-roaming Horse and Burro Act.

Invasive Weeds - Introduced or noxious vegetative species which negatively impact the ecological balance of a geographical area and limit the areas potential to be utilized by authorized uses.

Metapopulation (complex) - A population of wild horses comprised of two or more smaller, interrelated

populations that are linked by movement or distribution within a defined geographical area.

Monitoring - Inventory of habitat and population data for wild horses and associated resources and other authorized rangeland uses. The purpose of such inventories is to be used during evaluations to make determinations as to if habitat and population objectives are or are not being met and where an overpopulation of wild horses exists and whether actions should be taken to remove excess animals.

Multiple Use Management - A combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals watershed, domestic livestock, wild horses, wildlife, and fish, along with natural, scenic, scientific, and historical values.

Project Inspector - Coordinates with the COR assigned to a contract to support his/her responsibility for review, approval, and acceptance of services.

Research - Science based inquiry, investigation or experimentation aimed at increasing knowledge about wild horses conducted by accredited universities or federal government research organizations with the active participation of BLM wild horse professionals.

Science Based Decision Making - Issuance of decisions affecting wild horses, associated resources and other authorized rangeland uses incorporating best available habitat and population data and in consultation with the public.

Studies - Science based investigation of specific aspects of wild horse and burro habitat or populations in supplement to established monitoring. These investigations would not be established following rigid experimental protocols and could include drawing blood on animals to study genetics, disease and general health issues and population dynamics such as reproduction and mortality rates and general behavior.

Thriving Natural Ecological Balance - An ecological balance requires that
wild horses and other associated animals be in good health and reproducing at a rate that sustains the population, the key vegetative species are able to maintain their composition, production and reproduction, the soil resources are being protected, maintained or improved, and a sufficient amount of good quality water is available to the animals.

APPENDIX A: POPULATION MODELING PARAMETERS

The population model used is Dr. Steve Jenkins Wild Horse Population Model, Version 3.2, as amended. The parameters used in the model for each HMA/Complex are as follows:

a. Each HMA/Complex will have herd specific age/sex information based on best available information and current census numbers.

b. The AML will have a range of 40 percent.

c. Foals will not be included in the count unless census is done after March 1 of each calendar year.

d. Average foaling rate is 20%. Sex ratio at birth would be 5O percent males and 50 percent females..

e. The gather cycle for the first gather will be 4 years.

f. Fertility control, if used will be a 1-year vaccine, with a 90 percent effective rate if applied from October 1 to February 28 (primary window). If the animals are primed (using just the PZP part of the vaccine), there will be a 35 percent effective rate. The priming doses would be applied from July 1 to September 30 and would expand the window of application so the effectiveness of the vaccine would similar to primary window the next time the animals were vaccinated.

g. Modeling outputs will consist of a minimum of the removal graph, and with tables displaying the age and sex of animals remaining on the HMA/Complex after the first gather and what is expected to be on the HMA/Complex prior to the next gather.

APPENDIX B: ANIMAL CHARACTERISTICS AND BEHAVIOR

Wild horses in this area likely have many domestic bloodlines in their background including American Quarter Horse, Thoroughbred, Standardbred, and Arabian. Nearly every coat, color, pattern, and combinations thereof can be found within the herds. The diverse phenotypes of wild horses in this area indicate a varied genotype. Habitat conditions are such that the horses are typically in good condition throughout the year.

Wild horse bands typically include a stallion, lead mare, mares with colts, mares without colts, and subordinate males. Bachelor bands (bands of wild horses without any females) are found in this area as are single wild horses that are typically male. Within an area, bands may develop lead and subordinate roles. Subordinate bands are also known as satellite bands.

This relationship is observable by their behavior at water holes. The wild horses' competitive social structure, combined with their size and strength, allows them to compete favorably with wildlife and domestic livestock for water.

Wild horses travel up to 10 miles to water, although two to five mile distances is more common. An adult wild horse normally consumes 10 to 12 gallons of water per day, depending primarily on ambient temperature and the animal's activity. Wild horses usually have adequate water from winter snows and spring runoff that fill reservoirs and intermittent streams. During late summer and early fall wild horses depend on the few perennial sources of water (some reservoirs, streams, springs, and flowing wells) and on wells pumped for domestic livestock and wildlife. The concentration of wild horses around available water becomes a problem when water is scarce. Wild horses may become possessive of available water, resulting in direct competition with livestock and wildlife. Mountain lions may prey on wild horses.

Releases of wild horses would be near available water. Usually, wild horses gathered together would be released together. If the area is new to them, a short term adjustment period would be required while the wild horses become familiar with the new area. We anticipate no long-term adverse impacts to returned wild horses.

Released wild horses would increase inter-band encounters and confrontations. These encounters should not be detrimental over the short-term, however if horse populations exceed AMLs for an indefinite period, impacts would become consequential.

Returns could change the sex ratio within the HMAs. This should have no effect on the viability of the remaining population in the near term. Long-term effects would not be anticipated unless the practice

was repeated in future actions. For this gather the removal criteria would be to reset normal sex and age ratio possibly skewed by previous removals.

Returns would alter the average age in the HMAs slightly with some of the older animals placed in long term holding facilities. Recent winters have been comparatively mild, which may have prolonged the life of some older horses. A small-scale increase in mortality of older horses would likely occur in the next normal or severe winter. The loss of these individuals to the population would be short-term as it is unlikely that many of these animals are still reproductively active.

APPENDIX C: STANDARDS FOR RANGELAND HEALTH, SOUTHEAST OREGON RESOURCE ADVISORY COUNCIL

The following section identifies the Standards for Rangeland Health, Oregon. The five standards are listed with a description of each standard.

Standard 1 - Upland soils exhibit infiltration and permeability rates that are appropriate for soil type, climate, landform, and geologic processes.

Standard 2 - Riparian systems associated with both running and standing water function properly and have the ability to recover from major disturbance.

Standard 3 - Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitats potential. Plants and animals at both the community and population level are productive,
resilient, diverse, vigorous and able to reproduce and sustain natural fluctuations and ecological processes.

Standard 4 - Special status, threatened and endangered species and other plants and animals officially designated by the BLM and their habitats are maintained or enhanced by sustainable, healthy native plant and animal communities.

Standard 5 - The water quality of all water bodies, including ground water where applicable, located or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Oregon. Water Quality Standards for surface and ground waters include the designated requirements set forth under state law as required by section 303(c) of the Clean Water Act.

USDI, Bureau of Land Management
Malheur Resource Area, Vale District
Vale, OR 97918

Finding of No Significant Impact
For
Maintaining Viable Populations of Wild Horses
In the Three Fingers Herd Management Area
EA OR-030-02-31

Based on the analysis of potential environmental impacts contained in the Environmental Assessment (EA) and all other available information, I have determined that the Proposed Action alternative (#1) and gathering to midpoint alternative (#2) do not constitute a major Federal action that would significantly affect the quality of the human environment. Adoption of the Continue Existing Management alternative (#3) could result in significant impacts by postponing the gather operation until funding is available. The No Action Alternative (#4) would result in negative impacts to both the resources and the horses, but would not affect the quality of the human environment. Therefore, an Environmental Impact Statement (EIS) is unnecessary and will not be prepared. This determination is based in the following factors:

1.Beneficial, adverse, direct, indirect, and cumulative environmental impacts discussed in the EA have been disclosed. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Vale, Malheur Resource Area, and adjacent land.

2.Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.

3.There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplains, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern (ACECs). There would be no adverse impacts from invasive, noninvasive species.

4.There are no highly controversial effects on the environment.

5.There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of similar nature.

6.This alternative does not set a precedent for other projects that may be implemented in the future to

meet the goals and objectives of adopted Federal, State, or local natural resource-related plans, policies or programs.

7.No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8.Based on previous and ongoing cultural resource surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. All trap locations will be surveyed for cultural and threatened and endangered species. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice policy.

9.No adverse impacts to any threatened or endangered species or their habitat, that was determined to be critical under the Endangered Species Act, were identified.

10.This proposed action is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

_____ _____

Field Manager
Malheur Resource Area Date
Vale District Office