

UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 Vale District Office  
**INTERDISCIPLINARY TEAM REVIEW RECORD**

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Proposed Action: Wild Horse Gather

Proposed Name: Jackies Butte Herd Management Area Gather

Project Leader(s) Jim Johnson

INSTRUCTION: Route through your immediate supervisor first.

T	NAME/DISCIPLINE	Date Reviewed	INITIALS	REVIEW COMMENTS
	(Wild horses) <b>JOHNSON</b>			
	(Range & Vegetation) <b>BUMGARNER</b>			
	(Botany & T&E Plants) <b>FINDLEY</b>			
	(ACEC/RNAs) <b>FINDLEY</b>			
	(Wildlife & T&E Animals) <b>ROSS</b>			
	(Fisheries) <b>ROSS</b>			
	(Soil/Water/Air) <b>WENDEROTH</b>			
	(Soils) <b>ROCKEFELLER</b>			
	(Cultural) <b>PRITCHARD</b>			
	(Recreation) <b>DRAHEIM</b>			
	(Wilderness) <b>DRAHEIM</b>			
	(Project Leader) <b>JOHNSON</b>			FINAL EA & FONSI/DECISION RECORD PREPARATION
	(Jordan Resource Area Manager) <b>FREEBORN</b>			FINAL EA REVIEW & FONSI/DECISION RECORD (Signature)
	(P&E Coordinator) <b>MAYES</b>			FINAL REVIEW & FILING

This page is to be filed with the  
 AD/CE/EA & FONSI/DECISION RECORD

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**Jackies Butte Herd Management Area Gather EA**

**OR-030-07-004**

**September 10, 2007**

**Vale District Office**

**Gather Plan for Jackies Butte**

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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 the Jackies Butte Herd Management Area (HMA) has been previously established at a range from 75 to 150 horses based on monitoring data and following a thorough public review. The Jackies Butte HMA was last gathered in FY2000. 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.

## **PURPOSE OF AND NEED FOR ACTION**

Gathering and removal of excess wild horses from the Jackies Butte Herd Management Area (HMA) (Attachment 1) is necessary to maintain a thriving natural ecological balance which protects public land resources from deterioration. Both actions are consistent with necessary population controls that maintain appropriate management levels established in the Southeastern Oregon Resource Management Plan (SEORMP, 2002). Recent monitoring has indicated heavy utilization of key vegetative species in riparian zones along a perennial stream, spring, and reservoirs. Vegetation and soils have been extremely stressed in the summer when horses concentrate on the few available water sources.

During the most recent aerial inventory in July 2007, 189 wild horses were counted within the HMA. The SEORMP stipulates minimum and maximum population levels of 75 and 150 horses, respectively, with 1800 animal unit months (AUMs) allocated. With an estimated 20% annual increase, the forage consumption rate would increase a like amount for each succeeding year if not gathered.

The purpose and need of the proposed action is to remove approximately 114 horses from the Jackies Butte HMA to attain a thriving ecological balance between horses, wildlife, livestock, and vegetation and to allow for fertility treatment of mares to block estrus to aid in maintaining wild horse populations at appropriate management levels (AML) by means other than gathering every 3 to 4 years.

Wildfire destroyed approximately one tenth of the HMA in the summer of 2006 in a highly preferred range for the wild horses. A temporary fence to aid in the rehabilitation of the burned area was built in the spring of 2007 which excludes wild horse and domestic livestock grazing for at least two growing seasons.

## **CONFORMANCE WITH LAND USE PLANS AND REGULATIONS**

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 (PRIA)). Section 302(b) of 4700 CFR of FLPMA, states that all public lands

are to be managed so as to prevent unnecessary or undue degradation of the lands. The proposed action is in compliance with: 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 - HMAs shall be established (through the land use planning process) 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 43 CFR 4180.1." The Standards and Guidelines for Grazing Management for public lands have been reviewed by the Departmental Review Team who found that they comply with the requirements of the regulations. Gathering excess horses conforms to the standards and guides which were developed with full public participation and in consultation with Oregon/Washington's resource advisory councils and are in conformance with appropriate land use plans. Attainment of a thriving natural ecological balance which prevents excess utilization of vegetative resources would meet the objectives established in the Southeastern Oregon Resource Management Plan that constitutes the land use plan for Jordan Resource Area. In addition, the gathering of horses in excess of the appropriate management level (AML) is consistent with the Jackies Butte HMA Plan and the Wild Horse HMA Monitoring Plan for the Vale District. All monitoring is coordinated with the range management program and the wild horse programs to identify areas of conflict between wild horses, wildlife, and domestic livestock. This effort is used to identify areas where resource damage is taking place due to excess wild horses, including but not limited to riparian areas, and helps to set priorities for determining where removal is needed to achieve or maintain a thriving ecological balance in accordance with the above statutes, plans, and regulations. The proposed action would be in conformance with the current selective removal policy as established in Instruction Memorandum 99-053. The current selective removal policy is a feature of the Strategic Plan for Management of Wild Horses on Public Lands. This plan was developed in June of 1992 to implement a long range strategy for the management of wild horses and burros. The goal was to develop a plan that recognized wild horses and burros as important and perpetual components of the rangeland ecosystem. Current policy also reflects the desire of BLM to remove only the most adoptable animals.

## **PROPOSED ACTION AND ALTERNATIVES**

### **A. PROPOSED ACTION**

The proposed action would be to remove approximately 114 horses from the Jackies Butte HMA in the fall of 2007. At least 75 horses would be returned to the Jackies Butte HMA, which is the minimum population of the range associated with the AML recommended in the SEORMP. The Bureau Selective Removal Policy will be used on this gather as listed below.

- 1) Wild horses five years of age and younger should be the first priority for removal and placed into the national adoption program.
- 2) Wild horses six to fifteen years of age should be removed last and only if management goals and objectives cannot be achieved through the removal of younger animals.
- 3) Wild horses aged sixteen years and older should not be removed from the range unless specific exceptions prevent them from being turned back and left on the range.

Other criteria for returning horses to the HMA would be to maintain herd characteristics.

All capture and handling activities (including capture site selections) would be conducted in accordance with Standard Operating Procedures described in Appendix I.

Gathering may be delayed as a result of unforeseen reasons including weather limitations and scheduling. All wild horses in the Jackies Butte HMA would be helicopter-drive trapped at an appropriately located trap site specified by BLM and agreed to by the contractor. Depending on the location of the horses, more than one trap site may be used. Trap sites will be located in close proximity to the horses during gather operations which will minimize stress and injury to the horses during capture and the least possible damage to the natural resources. The catch pen and loading areas would be the most heavily disturbed. The native vegetation would be expected to fully reestablish without reclamation within one to three years. All trap sites have been previously established so no new sites would be established without approval and clearances. The selected trap would be constructed using the existing right-of-way

road or way as the center of the trap with portable panels extending approximately 60 feet from the center of the catch pen. A portable loading chute would be placed in the road or at the edge of the roadway within the existing right-of-way to allow loading without creating a new road.

The gathering and removal of wild horses would be conducted by a contractor authorized by the National Wild Horse and Burro Program Office in Reno, Nevada. The contractor would be responsible for trap construction, all gathering activities, transportation of wild horses, and trap removal. The Vale District BLM would provide a resource advisor/on-site project inspector while any horse activities are occurring. Proven gathering and transport practices would be used to provide maximum safety and protection for horse wranglers and horses. Standard Operating Procedures would follow established procedures for the gathering, handling, and transportation of horses in a humane manner and all safety measures would be adhered to.

The horses would be herded into a temporary trap constructed of portable metal panels and "jute" wings which would be removed when the proposed action is completed. No permanent structures would be constructed and no new road construction would occur. The trap and corral facilities would be portable and temporary and would be on the site only for as long as required to complete the gathering operation. The entire operation is expected to be completed in less than one week. Appropriate clearances, including cultural and botanical surveys, would be completed prior to any surface disturbance.

The proposed action would include fertility control on all mares returned to the Jackies Butte HMA. They would be treated with an immunocontraceptive vaccine (Porcine zona pellucidae (PZP)) administered by trained BLM personnel. Administration of PZP to returned mares would be expected to lengthen the gather cycle beyond the normal four year cycle to five or six years thereby reducing stress to the horses. All actions regarding administering the fertility control are outlined in the Standard Operating Procedures (Appendix II).

**B. ALTERNATIVE 1**

Alternative 1 would be the same as the proposed alternative, except none of the mares in the HMA would be treated with an immunocontraceptive.

**C. ALTERNATIVE 2**

Under this alternative, wild horses would not be removed from the Jackies Butte HMA during the fall of 2007. The existing population of 189 horses would continue to increase at approximately 20% per year.

**D. ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS**

1. One alternative considered was wild horse management using fertility control measures without gather-to-adopt 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 use of the immunocontraceptive vaccine would not address the current wild horse population exceeding the high end AML. Also, the current data suggest that repeated long-term applications of the vaccine may affect long-term fecundity.
2. The helicopter/roping method of gathering entails moving wild horses to a roping site by helicopter and then capturing the horses by roping. This is feasible, but this technique has only been used in limited circumstances where a small number of wild horses were excessively difficult to trap. This method poses a safety hazard to wild horses, personnel, and their saddle horses. Due to these reasons, this alternative as a primary method of gathering has been eliminated from further consideration.
3. Closure of the area to livestock use or reduction of permitted use was eliminated from consideration since it would not meet existing law, regulation, policy, nor would it concur with previous land use decisions. The Wild and Free Roaming Horse and Burro Act does not require that these areas of public land be managed exclusively for wild horses but states under Section 2 (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 plan. Existing planning decisions provide for maintaining populations of wild horses in these areas and for providing the opportunity for livestock grazing.

## **AFFECTED ENVIRONMENT**

### **BACKGROUND**

The Jackies Butte Wild Horse Herd Management Area (HMA) is located 12 miles southeast of Rome, Oregon in the Jackies Butte Allotment of the Jordan Resource Area. The HMA consists of one pasture, namely Dry Creek, and totals 56,104 acres. Topography of the HMA is relatively flat to gently undulating. Jackies Butte, elevation 4380, is the only prominent land mark.

#### **A. WILD HORSES**

Adult horses in the HMA weigh an average of 950 to 1,150 pounds and stand between 14.2 and 15.2 hands, with some stallions being slightly larger. The colors in this herd are widely varied with a few appaloosa colored.

Population census has been done in the HMA since 1972. Aerial inventories have been conducted in the Jackies Butte HMA since the passage of the Wild Horse and Burro Act (Public Law 92-195). The most recent aerial inventory was completed in July 2007 and 189 horses were counted.

Since 1977, the BLM has removed a total of 1,074 horses from the HMA. During the most recent gather in January 1999, 189 horses were removed from the area.

Forage is allocated for 75 to 150 horses in the Jackies Butte HMA or 1,800 AUMs.

In most herds that have not been selectively gathered for some time, the approximate age structure may be broken down as follows:

Age Class 0-5: 60-70 percent of herd  
Age Class 6-20+: 30-40 percent of herd

Selective removal has typically increased the ratio of male wild horses to female wild horses. Prior to selective removal, most herds seem to have a 53:47 ratio favoring females. Where all horses 5 years and younger are removed, the sex ratio may be adjusted to around 50/50. Previous selective removal criteria used in earlier gathering efforts called for the release of all horses over the age of nine. Under this criterion, the sex ratio was skewed more toward males than it is under current policy. This effect is mitigated by several factors: (1) Increased males in the population increases the likelihood that fertile mares will be bred and can result in smaller band size. This not only results in increased reproduction rates but also decreases the potential for inbreeding. (2) Research has shown that older mares are more fecund and successful at raising their foals than younger mares. (3) Large herd size (AML) dilutes these effects.

#### **B. SURFACE WATER SOURCES AND RIPARIAN AREAS**

Riparian vegetation is extremely limited in scope throughout the area, existing primarily at Hardin Springs, Dry Creek, and a few reservoirs. Riparian environments are even more limited in areas where gathers are likely to occur. While not extensive, riparian zones are an important resource for wildlife, wild horses, and livestock. Because of the demands on riparian areas, management considerations have focused on protecting these areas. Maintaining AML of wild horse herds is important to keeping utilization at acceptable levels and preserving riparian habitat.

#### **C. SOILS**

The soils found in the Jackies Butte Herd Management Area were surveyed and described in Oregon's Long Range Requirements for Water 1969, Appendix I-11, Owyhee Drainage Basin. They are mainly a combination of Unit 76 and 99 soils on slopes varying from three to twelve percent.

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. Native vegetation consists mostly of big sagebrush, low sagebrush, bluebunch wheatgrass, and Sandberg bluegrass.

Unit 99 is a miscellaneous land unit consisting of recent lava flows. These flows are generally on low slopes, but do have extremely irregular, rough surfaces. There do tend to be small pockets of soil development on which there is some vegetation.

D. VEGETATION

Vegetation in the vicinity of the proposed trap locations primarily consists of big sagebrush (*Artemisia tridentata*), low sagebrush (*Artemisia arbuscula*), bluebunch wheatgrass (*Agropyron spicatum*), bottlebrush squirreltail (*Sitanion hystrix*), Sandberg bluegrass (*Poa sandbergii*), and cheatgrass (*Bromus tectorum*). The present ecological condition of the vegetation is considered to be in middle seral stage with static trend.

E. WILDLIFE

The major big game species in the HMA is pronghorn antelope (*Antilocapra americana*). Approximately 20% of the HMA is utilized as winter range (November to March) by pronghorn. Mule deer inhabit approximately 10% of the HMA during the winter and approximately 2% of the HMA year-long. Birds are especially abundant with high species diversity. Swainson's, Ferruginous, and red-tailed hawks, as well as kestrels and northern harriers are common. Peregrine falcons, prairie falcons and sharp-shinned hawks have also been observed. Golden eagles are abundant year-long.

Other species (game and non game) which are known to occur in the HMA include chukar, Hungarian partridges, mourning doves, sage grouse, bobcats, badgers, and marmots.

F. THREATENED AND ENDANGERED SPECIES

The kit fox (*Vulpes microtus*), a sensitive species in Oregon, inhabits localized areas of the more arid rangelands. No threatened and endangered plant species have been identified in the HMA.

G. LIVESTOCK MANAGEMENT

The HMA lies within the Dry Creek pasture of the Jackies Butte Allotment. The total adjudicated livestock use licensed within the Dry Creek pasture of the Jackies Butte Allotment is 4028 AUMs for the seasons of use. 1377 AUMs from 3/25 to 4/15 and 2651 AUMs from 6/15 to 7/21

H. CULTURAL RESOURCES

A cultural resource survey of the area was conducted by A. Bronsdon in 1995 as part of the survey of the Indian Fort Fire reseeding project. No cultural resources were located in the vicinity of the horsetrap.

I. RECREATION

The recreation use in the area includes hunting, and vehicle touring. The area contains limited recreation opportunities and minimal opportunities for primitive and unconfined types of recreation. The 2007 seasons for game animals within the HMA are shown in Table 1.

**Table 1  
General Hunting Seasons**

Species	From	To
Pronghorn antelope	August 13	August 21
Mule deer	October 1	October 12
Chukar/partridge	October 9	January 31
Sage grouse	September 11	September 15
Duck	October 9	January 23
Goose	October 9	January 30

J. SPECIAL MANAGEMENT AREAS

Jackies Butte HMA acreage includes no Wilderness Study Areas (WSA).

K. OTHER

The following critical elements are either not affected by the proposal and alternatives or are not present:

Critical Element	Not Affected	Not Present
Air Quality	X	
Prime and Unique Farmlands		X
Floodplains		X
Native American Religious Concerns	X	
Hazardous and Solid Wastes		X
Ground Water Quality	X	
Environmental Justice	X	
Adverse Energy Impacts	X	

L. MONITORING

Extensive monitoring was done throughout the spring and summer beginning in February, 2007 and continuing through August, 2007. The riparian areas mainly being affected by the wild horses during this time period include Hardin Springs and Dry Creek, especially in the Long Water Holes area. There is domestic livestock grazing in these areas between March 25 and July 27 so livestock does contribute to riparian damage during the late spring, and summer seasons. All areas of concern were carefully evaluated and utilization levels taken. Photographic documentation is on file in the Vale District Office along with the utilization readings of horse use in the fore mentioned areas. As the hot season progressed the wild horses were forced to congregate in the riparian areas more often and in greater numbers as other water sources within the Jackies Butte HMA were depleted. Competition for limited water and forage was increased thus creating more confrontations and conflict among the bands. Excessive trailing by increasing numbers of wild horses coming into these water sources was documented by photo points. These water sources are very important to wildlife in providing food and cover. By August, the monitoring studies show there was very little riparian vegetation left remaining in the areas of concern.

**ENVIRONMENTAL CONSEQUENCES**

A. PROPOSED ACTION

1. Wild Horses

The chase and capture would subject the wild horses to considerable stress. There would be a possibility that some horses would be seriously injured or killed, that foals could become separated from their mothers, and that minor injuries could occur. Behavioral traits and band composition of the herd would be temporarily disrupted. Late-term abortions in mares would be insignificant to nonexistent as gathers would occur in fall.

Released wild horses would increase interband encounters and confrontations. A short-term adjustment period of two to three weeks would be required. Wild horses are highly adaptable and no long-term adverse effects to returned animals are anticipated. Released wild horses would increase the average age within the HMA slightly which may result in a small scale increase in mortality during a severe winter. However, the impacts of the loss of these individuals to the population will be short-term as it is unlikely that many of these animals are still reproductively active.

Population-wide indirect impacts that would not appear immediately are difficult to quantify. Concerns related to the proposed participation in research for PZP are associated primarily with the use of fertility control drugs, and involve reductions in short term fecundity of initially a large percentage of mares in a population and potential genetic issues regarding the control of contributions of mares to the gene pool. Again, as AML's are achieved with increasing herd health, the potential for these impacts would be expected to lessen as the need to gather excess horses and impose fertility control treatments on a high proportion of the mare population would be less frequent and all mares would be expected to successfully recruit some percentage of their offspring into the population. Decreased competition coupled with reduced

reproduction as a result of fertility control should result in improved health and condition of mares and foals and in maintaining healthy range conditions over the longer-term. Additionally, reduced reproduction rates would be expected to extend the time interval between gathers and reduce disturbance to individual animals as well as herd social structure over the foreseeable future.

Impact analysis assumes that fertility control will slow wild horse reproduction rates. Previous research on winter application of the two-year drug has shown that mares that are already pregnant will foal normally, but the fertility control treatment will be 94% effective the first year, 82% the second year, and 68% the third year.

Wild horse populations would experience a decrease in stress due to extending the period of time between gathers. Mares would experience some stress during the administration of the fertility control drugs and would not produce progeny for two years if successful. Mares which are not supporting young would be expected to experience an increase in health and condition during their non-productive time. Animals would be exposed to potential hazards during treatment. If contraception is used genetic contributions from individual animals will be only delayed, not removed. Fertility control would also decrease gather frequency and disturbance to individual animals and the herd, and provide for a more stable wild horse social structure.

Population modeling was completed to illustrate the differences in the alternatives and will be used for a comparison. Modeling helps to determine future herd demographics and population growth. The modeling for the proposed action indicates that the average wild horse population growth rate of the median of 100 trials should be 9.9% over ten years. The average population size of the median of 100 trials would be 187 wild horses at the end of ten years. Modeling also indicates that the population after the gather would not put the population at risk of catastrophic loss or “crash” (Appendix III).

## 2. Surface Water/Riparian Areas

Riparian areas in the HMA consist mainly of areas around springs and reservoirs with the exception of Long Water Holes on Dry Creek. Regulating the number of wild horses in the HMA would protect the water sources and riparian areas and lessen degradation of these resources. The proposed action would limit the intensity of use at water sources and surrounding uplands. Protecting the water sources, riparian areas, and water quality is also important to wildlife, recreationists, and livestock.

Regulating the increase in wild horse numbers through fertility control would have a positive and immediate impact on water sources and lessen the degradation of these resources. The proposed action would further limit the intensity of use at water sources and surrounding uplands as addressed in the original EA.

## 3. Soils

Soil would be displaced and/or compacted on approximately 2 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).

Fertility control treatments would delay wild horse population increases thereby delaying impacts to soil resources.

## 4. Vegetation

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 men and vehicles and severely trampled in the catch pen area during the round-up 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 destroyed for one grazing season at each trap site used.

Applying fertility control measures as part of the proposed action would slow reproduction rates of mares returned to the HMA following the gather, allowing vegetation resources time to recover.

5. Wildlife

Wildlife populations in the areas from which horses are gathered by the helicopter would be forced to seek cover in areas adjacent to the flight path. This would not cause them to abandon their normal habitat areas as the disturbance would be of short duration (8 to 10 days) and very localized. Competition for water and/or forage that might exist between wild horses and wildlife would be reduced.

6. Threatened and Endangered Species

No impact is anticipated.

7. Livestock Management

The proposed action will allow present livestock use at allocated levels to continue. Fertility control would delay wild horse populations for one to two years thereby delaying competition between wildlife, livestock and wild horses.

8. Cultural

No impact is anticipated.

9. Recreation

Some negative impacts to hunters may occur around the Dry Creek area as a result of the low level flights of the helicopter. Due to the lack of water within the interior of the HMA no other areas are expected to be impacted.

10. Special Management Areas

No impact is anticipated.

11. Other

This proposal is consistent with SEORMP objectives to manage wild horse populations which established AMLs to maintain a thriving natural ecological balance within the Jackies Butte HMA. This action is in conformance with management objectives found in the land use plan and any proposed change to the AML is beyond the scope of this analysis.

B. ALTERNATIVE 1

1. Wild Horses

Impacts from this alternative would be the same as in the Proposed Action, except that fertility control would not be applied. Individual mares would not receive the fertility control shot, and would undergo less stress due to decreased handling. Mares would continue to foal normally. Past gather experience has shown that the wild horse population will be at the high end of AML four years after the gather. Without slowing reproduction, a gather to maintain AML may be needed sooner than in the Proposed Action.

Population modeling indicates that the average wild horse population growth rate of the median of 100 trials should be 16.8% over ten years. The average population size of the median of 100 trials would be 166 wild horses at the end of four years. Modeling also indicates that the population after the gather would not put the population at risk of catastrophic loss of "crash" (Appendix III).

2. Surface Water/Riparian Areas

Riparian areas may not get as much recovery as proposed action.

3. Soils

Soils may be impacted more than proposed action.

4. Vegetation

Vegetative resources may not get as much recovery as in the proposed action but a thriving natural ecological balance would still be achieved. Without slowing reproduction a steady increase in the number of horses would have a more steady impact on vegetation.

5. Wildlife

Wildlife may be displaced sooner than in proposed action during to increased gather frequency. Competition for forage may occur sooner with natural foaling rates of wild horses.

6. Threatened and Endangered Species

Threatened and endangered species may not get as much recovery as in proposed action.

7. Livestock Management

Livestock management would continue.

8. Cultural

Cultural resources around springs may be less protected than in proposed action.

9. Recreation

Recreation values may be impacted sooner than in proposed action.

10. Special Management Areas

Special management areas may be impacted sooner than in proposed action.

11. Other

Same as proposed action.

C. ALTERNATIVE 2

1. 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 would endanger the entire population. Domestic stock in the vicinity could also be threatened by disease.

To facilitate easy comparison of alternatives, the no action alternative was also modeled for ten years. The average of 100 population modeling trials indicates that if the current wild horse population continues to grow without a removal the median population size would be 570 wild horses at the end of ten years. Modeling indicates the average growth rate is expected to be a 20.4% annual increase (Appendix III).

2. Surface Water/Riparian Areas

Increasing numbers of wild horses in the HMA would result in greater use and degradation of surface water sources and riparian areas. More wild horses would adversely affect the water sources and could potentially damage or change spring flows. The vegetation associated with riparian areas would be degraded as the horses would concentrate on it more in the summer. This would result in an unacceptable decline in water quality through increased sedimentation and an increase in water temperatures. This would impact other users of the water sources in the area. Gathering excess wild horses would help keep water quality within acceptable standards.

3. Soils

Soil loss and compaction can be expected to increase in those areas near water sources where horses are forced to concentrate. Increased wild horse numbers on uplands and riparian areas would negatively impact soil surface features and would increase erosion in the HMA.

4. Vegetation

Areas which are presently over utilized, such as areas adjacent to water sources, would continue to be used excessively. The area 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, soil cover would be reduced, and erosion would increase.

5. Wildlife

Wildlife populations in the HMA would be forced to compete for limited water and forage, which would most likely alter use patterns.

6. Threatened and Endangered Species

Colonies of *Lepidium davisii* would receive an increase in trampling as a result of the increase in wild horse numbers. This increased use would have a negative impact on the species.

7. Livestock Management

The HMA would increase at approximately 20% per year on average from the existing population of 189 horses. Assuming that livestock and wildlife populations are managed to allocated levels, the carrying capacity of the HMA would be over allocated in 2007. The weight gains of the livestock would decrease as the quality and quantity of available water and forage decreases. The BLM may be forced to temporarily suspend or reduce the permitted use of livestock in the area to compensate for the excess number of horses. This in turn, would significantly affect the financial income of these operations.

8. Cultural

An increased horse population would compound the use near available water sources, and may damage or displace artifacts in the immediate vicinities.

9. Recreation

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.

10. Special Management Areas

No impact is anticipated.

11. Other

This alternative would not impact any prime and unique farmlands or air quality. The water quality and visual characteristics would be negatively affected. The reduction in livestock use would cause a negative impact in the social and economic element. This alternative is not consistent with the SEORMP objectives to manage wild horse populations.

## MITIGATION MEASURES

A. PROPOSED ACTION

Gathering operation would occur early in the day and trap sites within a reasonable distance from the horses thereby minimizing the possibility of having wild horses succumb to heat exhaustion and reducing the chance of mares aborting a fetus.

B. ALTERNATIVE 1

Mitigation measures would be the same as the proposed action.

## CUMULATIVE IMPACTS

A. PROPOSED ACTION

The potential for cumulative effects on the identified resources other than wild horses is minimal. Any known or potential deleterious impacts to non wild horse resources would be mitigated through preplanning and gather placement. There would be no competition for forage and limited water with horses removed from the HMA during the rehabilitation period. In addition, a quality cross section of horses in all age groups can be released back into the HMA and less desirable or defective horses removed.

## PAST ACTIONS

Herd Areas were identified in 1971 as areas occupied by wild horses. The Sand Springs HMA was established in the late 1980s through the land use planning process as areas where wild horse management was a designated land use. Since the early 1980s, AMLs have been established on the Vale BLM District HMAs.

The BLM also moved to long range planning with the development of the Southeastern Oregon Resource Management Plan (SEORMP) completed in 2002. This analyzed impacts of the Land Use Plan's management direction for grazing and wild horses, as updated through Bureau policies, Rangeland Program direction, and Wild Horse Program direction. Forage was allocated within the allotments for livestock use and range monitoring studies were initiated to determine if allotment objectives were being achieved, or that progress toward the allotment objectives was being made.

Due to these laws and subsequent court decisions, integrated wild horse management has occurred in the Sand Springs HMA. Gathers have been completed in the past in the HMA. Wild horses have been regularly removed from the Sand Springs HMA in the last 25 years and populations are thriving and have not been negatively impacted. An Appropriate Management Level (AML) determination for the Sand Springs HMA was established through BLM Multiple Use Decisions.

Similarly, adjustments in livestock season of use, livestock numbers, and grazing systems were made through the allotment evaluation process. In addition, temporary reductions to livestock grazing in areas burned by wildfires, or due to extreme drought conditions, were implemented to improve range condition.

Standards and guidelines for rangeland health have been the basis for managing wild horse and livestock grazing within the Vale District. Adjustments in numbers, season of use, grazing season, and allowable use are based on evaluating progress toward reaching the standards.

The Sand Springs HMA was gathered in October 2005 to reduce the numbers of wild horses to the low end of the AML range. There were no significant impacts to resources within the HMA.

## PRESENT ACTIONS

The October 2005 horse gather lessened the impacts to resources in the HMA after the wildfire due to reduced competition for forage and water. Today the Sand Springs HMA has an estimated population of 125 wild horses. Current mandates prohibit the destruction of healthy animals that are removed or deemed to be excess. Currently only sick, lame, or dangerous animals can be euthanized, and destruction is no longer used as a population control method. Gather intervals are typically four to five years due to facility space and funding. A recent amendment to the Wild Free-Roaming Horses and Burro Act allows the sale of excess wild horses that are over 10 years in age or have been offered unsuccessfully for adoption three times. As this sale authority is implemented, facility space and funding for gathers should become more available as less unadoptable wild horses are maintained in facilities.

Today public interest in the welfare and management of wild horses is currently higher than it has ever been. Many different values pertaining to wild horse management form current wild horse perceptions. Wild horses are viewed as nuisances, as well as living symbols of the pioneer spirit.

The Vale District BLM has also modified grazing permits and conducted vegetation treatments to improve watershed health. Currently within the Sand Springs HMA cattle grazing occurs on a yearly basis during the winter.

The focus of wild horse management has also expanded to place more emphasis on achieving rangeland health.

## REASONABLY FORSEEABLE FUTURE ACTIONS

There is an ESR plan being proposed that would have positive impacts on resources in the HMA. After restocking the HMA to low end of AML following the rehabilitation period, future gathers would be scheduled on a 4-or 5-year gather cycle. In the future, the BLM would manage wild horses within the Sand Springs HMA for a population range of AML of 100 to 200 horses, while maintaining genetic diversity, age structure, and sex ratios. Current policy is to express all future wild horse AMLs as a range, to allow for regular population growth, as well as better management of population. As the Geographic Management Area (GMA) process progresses in the Vale District, Future wild horse management would focus on an integrated ecosystem approach with the basic unit of analysis being the watershed. The Vale District Office would continue to conduct monitoring to assess progress toward meeting rangeland health standards. Wild horses would continue to be a component of the public lands, managed within a multiple use concept.

While there is no anticipation that there would be amendments to the Wild and Free-Roaming Horse and Burro Act that would change the way wild horses could be managed on the public lands, the Act has been amended four times since 1971. Therefore, there is potential for an amendment as a reasonably foreseeable future action. Once AML in all HMAs is achieved gathers and removals should become more predictable due to facility space. This should increase stability of gather schedules, which would result in the Sand Springs HMA being gathered every four years. Fertility control should also become more readily available as a management tool, with treatments that last between gather cycles, reducing the need to remove as many wild horses, and possibly extending the time between gathers.

### B. ALTERNATIVE 1

The potential for cumulative effects on the identified resources other than wild horses is minimal. Any known or potential deleterious effects to other resources would be mitigated through preplanning and gather placement. There would be lessened competition for forage and limited water with fewer numbers of horses. 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. Gathering the HMA to less than the lower level of the AML (100 head) may not reduce the frequency of gathers as compared to the proposed action, but may maintain a thriving, ecological balance as compared to the No Action Alternative.

### C. NO ACTION ALTERNATIVE

The horses would continue to overpopulate the HMA until the herds would be reduced or eliminated by natural means. Rehabilitation would not take place, 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 could be reduced or eliminated. Lasting, long-term effects would occur across the entire landscape.

Monitoring studies document areas on upland and riparian sites which have moderate to very heavy grazing by wild horses. These excessive levels of utilization have negative effects on wildlife species.

## **CONSULTATION AND COORDINATION**

In accordance with the Wild Horse and Burro Act (Public Law 92-195), a public meeting to discuss the use of helicopters in gathering wild horses and the proposed gathering schedule for FY 2007 was held in Burns District Office. The meeting was announced in the Federal Register. The intensity of a public interest concerning the proposed action has been low in past years.

A notice of the action was sent to the groups and individuals on the District Mailing List including wild horse and burro and special interest groups.

Livestock operators in the Jackies Butte Allotment have been consulted.

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