

**United States Department of the Interior
Bureau of Land Management
Burns District Office**

**FINDING OF NO SIGNIFICANT IMPACT
Stinkingwater Herd Management Area Wild Horse Gather
Environmental Assessment
DOI-BLM-OR-B050-2010-0024-EA**

INTRODUCTION

The Stinkingwater Herd Management Area Wild Horse Gather Environmental Assessment (DOI-BLM-OR-B050-2010-0024-EA) was completed to analyze the impacts of conducting a gather and removal of excess wild horses within the boundaries of the Stinkingwater Herd Management Area (HMA) and any wild horses immediately outside or adjacent to the HMA. The current population of wild horses within the gather area is estimated to be 214 animals. The Appropriate Management Level (AML) for the herd is 40 to 80 wild horses. The AML for the Stinkingwater 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 Burns District Office.

SUMMARY OF THE PROPOSED ACTION

The Proposed Action is to gather approximately 214 wild horses (100 percent of the population) in the summer of 2010, and approximately 174 excess wild horses would be removed from the Stinkingwater HMA. Approximately 40 wild horses (20 mares and 20 studs) would be returned to the HMA at completion of the gather, leaving a post gather population of approximately 40 head, which is the lower level of the AML. This alternative would include determining sex, age, and color, assessing herd health pregnancy/parasite loading/physical condition/etc.), monitoring results as appropriate, 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 diverse breeding population, reduce stress on vegetative communities and wildlife, and be in compliance with the Wild Free-Roaming Horse and Burro Act of 1971 and land use plans.

FINDING OF NO SIGNIFICANT IMPACT

Consideration of the Council on Environmental Quality (CEQ) criteria for significance (40 CFR 1508.27), both with regard to context and intensity of impacts, is described below:

Context

The affected region is limited to portions of Harney County, where the project area is located. The area is located 30 miles east of Burns, Oregon. It is adjacent to and west of Warm Springs Reservoir and south of Highway 20. There would be no substantial broad societal or regional impacts not previously considered in the Three Rivers Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS). The actions described represent anticipated program adjustments complying with the Three Rivers RMP/Record of Decision, and implementation of the wild horse management program within the scope and context of this document.

The gather has been planned with input from interested public and users of public lands.

Intensity

Based on my review of the EA against the succeeding CEQ's 10 considerations for evaluating intensity (severity of effect), there is no evidence that the severity of impacts is significant:

1. *Impacts that may be both beneficial and adverse.* The proposed gather is expected to meet Bureau of Land Management's resource objective for wild horse management of maintaining a thriving natural ecological balance consistent with other multiple uses. Although the gathering and removal of excess wild horses is expected to have short-term impacts on individual animals, it is expected to ensure the long-term diversity of the wild horse herd and help to improve forage and habitat conditions in the HMAs.
2. *The degree to which the Proposed Action affects public health or safety.* The proposed gather has no effect on public health or safety.
3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.* The Proposed Action has no potential to affect unique characteristics such as historic or cultural resources or properties of concern to American Indians. There are no wild and scenic rivers or affected ecologically critical areas present in the areas. Maintenance of appropriate numbers of wild horses is expected to help make progress in meeting resource objectives for improved riparian, wetland, aquatic and terrestrial habitat.
4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.* Controversy in this context means disagreement about the nature of the effects, not expressions of opposition to the Proposed Action or preference among the alternatives. No unique or appreciable scientific controversy has been identified regarding the effects of the Proposed Action or alternatives as effects of the gather are well known and understood. No unresolved issues were raised following notification of wild horse advocacy groups of the proposed gather.

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.* The analysis has not shown there would be any unique or unknown risks to the human environment nor were any identified in the Three Rivers PRMP/FEIS. Effects of gathering wild horses are well known and understood.
6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.* The action would not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration. Wild horse gathers are a reoccurring management activity.
7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.* The EA includes an analysis of cumulative effects which considers past, present, and reasonably foreseeable future actions in the Stinkingwater HMA that supports the conclusion that the proposed gather is not related to other actions with individually insignificant but cumulatively significant impacts.
8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.* The proposed gather has no potential to adversely affect significant scientific, cultural, or historical resources as there are no features within the project area listed or eligible for listing in the National Register of Historic Places.
9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.* There are no known threatened or endangered species affected by the Proposed Action or alternatives and the action area does not include any habitat determined to be critical under the Endangered Species Act.
10. *Whether the action threatens a violation of Federal, State, local or tribal law or requirements imposed for the protection of the environment.* The proposed gather conforms to the approved 1992 Three Rivers RMP. Further the proposed gather is consistent with other Federal, State, local, and tribal requirements for protection of the environment to the maximum extent possible.

On the basis of the information contained in the EA and all other information available to me, it is my determination that:

- 1) The implementation of the Proposed Action or alternatives will not have significant environmental impacts beyond those already addressed in the Three Rivers PRMP/FEIS (1991);
- 2) The Proposed Action and alternatives are in conformance with the Three Rivers RMP (1992);

- 3) There would be no adverse societal or regional impacts and no adverse impacts to affected interests; and
- 4) The environmental effects against the tests of significance found at 40 CFR 1508.27 do not constitute a major Federal action having a significant effect on the human environment.

Therefore, an EIS is not necessary and will not be prepared.

/signature on file/
Richard Roy
Three Rivers Resource Area Field Manager

July 2, 2010
Date

**U.S. Department of the Interior
Bureau of Land Management**

**Environmental Assessment
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Wild Horse Gather**

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Burns District
Three Rivers
Resource Area



TABLE OF CONTENTS

1.0	Introduction: Purpose of and Need for Action.....	1
1.1	Introduction.....	1
1.2	Background.....	1
1.3	Purpose of and Need.....	2
1.4	Land Use Plan Conformance	2
1.5	Relationship to Laws, Regulations, and Other Plans.....	3
1.6	Decision to be Made	3
1.7	Scoping and Identification of Issues	3
2.0	Alternatives Including the Proposed Action	4
2.1	Introduction.....	4
2.2	Description of Alternatives Considered in Detail.....	4
2.3	Summary Comparison of Alternatives.....	6
2.4	Alternatives Considered but not Analyzed in Detail	6
3.0	General Description of the Affected Environment	7
3.1	General Description of the Affected Environment.....	7
3.2	Description of Affected Resources/Issues	8
4.0	Cumulative Effects for all Alternatives	28
5.0	Monitoring and Mitigation Measures	29
6.0	List of Preparers.....	29
7.0	Consultation and Coordination	30
8.0	Public Involvement	30
9.0	List of References	30
10.0	Appendices.....	30
	Appendix A – Standard Operating Procedures (Gather Operation)	31
	Appendix B – Win Equus Population Modeling Results.....	38

1.0 Introduction: Purpose of and Need for Action

1.1 Introduction

The Bureau of Land Management (BLM) is proposing to gather approximately 214 and remove approximately 174 excess wild horses from within and outside the Stinkingwater Herd Management Area (HMA) beginning about July 2010. Up to 40 of the captured wild horses would be released; of these, about 20 would be males, with 5 to 10 of these being geldings to manage the sex ratio and slow population growth.

This Environmental Assessment (EA) is a site-specific analysis of the potential effects that could result with the implementation of the Proposed Action or alternatives to the Proposed Action. Preparation of an EA assists the BLM authorized officer to determine whether to prepare an Environmental Impact Statement (EIS) if significant affects could result, or a Finding of No Significant Impact if no significant impacts are expected.

1.2 Background

The Stinkingwater HMA comprises about 85,490 acres of public and private land. The HMA is located in Harney County, about 30 miles east from Burns, Oregon (Map 1).

The Appropriate Management Level (AML) for wild horses within the HMA is 40 to 80. The AML was established in the 1979 Drewsey EIS and reaffirmed in the 1992 Three Rivers Resource Management Plan (RMP) following an in-depth analysis of habitat suitability and resource monitoring and population inventory data, with public involvement. The AML upper limit is the maximum number of wild horses that can graze in a thriving natural ecological balance and multiple-use relationship on the public lands in the area. Establishing AML as a population range allows for the periodic removal of excess animals (to the low range) and subsequent population growth (to the high range) between removals.

The estimated population of wild horses at the time of gathering will be approximately 214 head. This number is based on a direct count aerial inventory conducted in July 2009 and includes the addition of the 2009 and 2010 foal crops. Wild horse numbers have increased an average of 20 percent per year since the HMA was last gathered. The population will be about five times over the AML lower limit.

The HMA was last gathered in September 2005. At that time, 121 wild horses were gathered, 93 removed, and 28 released back to the range. Post-gather, an estimated 80 head of wild horses with an estimated sex ratio of 42 percent/58 percent males/females remained within the HMA.

Assessment is of numbers and conditions for removal is based on the following factors including, but not limited to:

- A direct count of 179 wild horses in July 2009 showed 139 horses in excess of the AML lower limit.
- Use by wild horses is exceeding the forage allocated to their use by four times.
- By comparison, livestock use has averaged only 74 percent, 84 percent, and 74 percent of active preference in the Mountain Allotment, Stinkingwater Allotment, and Texaco Basin Allotment, respectively since the last gather.

- ❑ Utilization monitoring completed in 2006 to 2009 documents heavy to severe utilization by wild horses on key forage species within riparian areas (Clear Creek and Stinkingwater Creek) of the HMA.
- ❑ Monitoring completed in 2008 and 2009 documents severe utilization of forage within riparian habitats, and extensive trampling and trailing damage by wild horses.
- ❑ The rangeland health assessment completed in 2007 for the Stinkingwater Allotment indicates wild horse overpopulation is contributing to the following standards not being achieved: Uplands-Riparian, Water Quality and Threatened and Endangered (T&E) Species (redband trout). In the Mountain Allotment a rangeland health assessment was completed in 2004 and indicated that the Riparian and Water Quality standards were not being achieved on a portion of Stinkingwater Creek at mile 20.3, upstream to the private land due to wild horses. Riparian monitoring on Big Stinkingwater Creek since that time shows that wild horse numbers in excess of AML are impacting streambank stability, vegetative composition, and water quality. Standards not achieved due to livestock grazing or juniper encroachment will be addressed under separate National Environmental Policy Act (NEPA) analysis.

1.3 Purpose of and Need

The purpose of the action is to return the wild horse population to within the established AML within Stinkingwater HMA, protect rangeland resources from further deterioration associated with the current overpopulation, restore a thriving natural ecological balance and multiple-use relationship on public lands in the area consistent with the provisions of 1333(b)(2)(iv) of the Wild Free-Roaming Horse and Burro Act of 1971 (WFRHBA) and make significant progress toward achieving Rangeland Health Standards.

The need for action derives from excess wild horses within Stinkingwater HMA. According to the July 2009 inventory and assuming a 20 percent foal crop for 2010, there would be 174 excess wild horses. Based on the 2004 and 2007 Mountain and Stinkingwater Allotment Evaluations, late season wild horse use is a causal factor for Rangeland Health Standards not being achieved for Riparian, Water Quality, and Special Status Aquatic Species along Stinkingwater Creek, due to heavy grazing use on riparian herbaceous species.

Additional objectives include:

1. Reduce reproductive rates to levels that would accommodate a target 4-year gather schedule allowing for the maintenance of AML.
2. Maintain herd characteristics which were typical of Stinkingwater HMA at the time of passage of the Act.

1.4 Land Use Plan Conformance

The Action Alternatives are in conformance with the Three Rivers RMP, 1992, which lists the following management actions for wild horses:

- Adjust wild horse herd population levels in accordance with the results of monitoring studies while maintaining herd viability (WHB 1.3 Three Rivers RMP, 1992, 2-44).
- Enhance the management and protection of Herd Areas and herds in the Stinkingwater HMA (WHB 2 Three Rivers RMP, 1992, 2-44).

- Select for high quality horses when gathered horses are returned to the HMA (WHB 2.3 Three Rivers RMP, 1992, 2-45).

1.5 Relationship to Laws, Regulations, and Other Plans

Statutes and Regulations

The Action Alternatives are in conformance with the WFRHBA (as amended), applicable regulations at 43 CFR § 4700 and BLM policies. Included are:

43 CFR 4710.3-1 HMAs.

HMAs shall be established for the maintenance of wild horse and burro herds. In delineating each HMA, the authorized officer shall consider the AML for the herd, the habitat requirements of the animals, the relationships with other uses of the public and adjacent private lands, and the constraints contained in 4710.4. The authorized officer shall prepare an HMA plan, which may cover one or more HMAs.

43 CFR 4710.4 Constraints on management.

Management of wild horses and burros shall be undertaken with limiting the animals' distribution to herd areas. Management shall be at the minimum feasible level necessary to attain the objectives identified in approved land use plans and HMA plans.

43 CFR 4720.1 Removal of excess animals from public lands.

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.

43 CFR 4740.1 Use of motor vehicles or aircraft.

(a) Motor vehicles and aircraft may be used by the authorized officer in all phases of the administration of the Act, except that no motor vehicle or aircraft, other than helicopters, shall be used for the purpose of herding or chasing wild horses or burros for capture or destruction. All such use shall be conducted in a humane manner.

(b) Before using helicopters or motor vehicles in the management of wild horses or burros, the authorized officer shall conduct a public hearing in the area where such use is to be made.

The Stinkingwater Herd Management Plan was updated in 2009.

1.6 Decision to be Made

The authorized officer would determine whether or not to gather excess wild horses and implement the proposed population control measures. The authorized officer's decision is limited to removing excess wild horses and implementing sex ratio adjustment and not adjusting AML or livestock use, as these were set through previous decisions.

1.7 Scoping and Identification of Issues

The following issues were identified as a result of consultation/coordination and internal scoping relative to the BLM's management of wild horses in the planning area:

1. Affects to individual wild horses and the herd. Measurement indicators for this issue include:
 - Projected population size and annual growth rate (WinEquus population modeling)
 - Expected affects to individual wild horses from handling stress
 - Expected affects to herd social structure
 - Potential effects to genetic diversity
 - Potential affects to animal health and condition
2. Affects to vegetation/soils, riparian/wetland, and cultural resources. Measurement indicators for this issue include:
 - Expected forage utilization;
 - Potential affects to vegetation/soils and riparian/wetland resources.
3. Affects to wildlife, migratory birds, and threatened, endangered, and Special Status Species (SSS) and their habitat. Measurement indicators for this issue include:
 - Potential for temporary displacement, trampling or disturbance
 - Potential competition for forage and water over time.

2.0 Alternatives Including the Proposed Action

2.1 Introduction

This section of the EA describes the Proposed Action, alternatives to the Proposed Action, No Action Alternative, and alternatives considered but eliminated from detailed analysis. Three alternatives are considered in detail:

- Alternative 1: No Action - Defer gather and removal.
- Alternative 2: Proposed Action – Capture wild horses in order to remove 174 excess animals, and establish a 50 percent male/female sex ratio.
- Alternative 3: Removal only (no fertility control or sex ratio adjustment).

Alternative 2 (Proposed Action) and Alternative 3 were developed to respond to the identified resource issues and the Purpose and Need to differing degrees. Alternative 1 (No Action Alternative) would not achieve the identified Purpose and Need. However, it is analyzed in this EA to provide a basis for comparison with the other action alternatives, and to assess the effects of not conducting a gather at this time. The No Action Alternative is in violation of the WFRHBA which requires the BLM to immediately remove excess wild horses.

2.2 Description of Alternatives Considered in Detail

2.2.1 Alternative 1: No Action

Under the No Action Alternative, no gather would occur and no additional management actions would be undertaken to control the size or sex ratio of the wild horse population at this time.

2.2.2 Management Actions Common to Alternatives 2-3

- ❑ The gather would begin about July 2010 and take about 14 days to complete. Several factors such as animal condition, herd health, weather conditions, or other considerations could result in adjustments in the schedule.
- ❑ Gather operations would be conducted in accordance with the Standard Operating Procedures (SOPs) described in the National Wild Horse and Burro Gather Contract (Appendix A). The primary gather (capture) methods would be the helicopter drive method with occasional roping from horseback.
- ❑ Trap sites and temporary holding facilities would be located in previously used sites or other disturbed areas (Map 2) whenever possible. Undisturbed areas identified as potential trap sites or holding facilities would be inventoried for cultural resources. If cultural resources are encountered, these locations would not be utilized unless they could be modified to avoid affects to cultural resources.
- ❑ An Animal and Plant Inspection Service or other veterinarian may be onsite during the gather, as needed, to examine animals and make recommendations to BLM for care and treatment of wild horses.
- ❑ Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Washington Office Instruction Memorandum 2009-041). Current policy reference: http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2009/IM_2009-041.html
- ❑ Data including sex and age distribution, condition class information (using the Henneke rating system), color, size, and other information may also be recorded, along with the disposition of that animal (removed or released).
- ❑ Excess animals would be transported to the Burns BLM corral facility via semi truck and trailer where they would be prepared (freeze-marked, vaccinated and dewormed) for adoption, sale (with limitations) or long-term pasture.
- ❑ The risk of noxious weed introduction would be minimized by ensuring all equipment (including all machinery, 4-wheelers, and pickup trucks) used for trap construction and use is cleaned prior to entry to the site, minimizing disturbance activities, and completing follow-up monitoring, for at least 3 years, to ensure no new noxious weed establishment.
- ❑ Trap sites and temporary holding facilities will be located in previously used sites or other disturbed areas (Map 2) whenever possible. Undisturbed areas identified as potential trap sites or holding facilities would be inventoried for noxious weeds. If any new populations of noxious weeds are found during the site-specific clearances for the project, they will be treated using the best available methods prior to instigating the project in conformance with the Burns District Weed Program Management EA/DR OR-020-98-05.

2.2.3 Alternative 2. Proposed Action

The Proposed Action would gather about 214 and remove approximately 174 excess wild horses from within and outside the Stinkingwater HMA beginning about July 2010. Animals would be removed using a selective removal strategy. Selective removal criteria for the HMA include: (1) First Priority: Age Class – Four Years and Younger; (2) Second Priority: Age Class – Eleven to Nineteen Years (3) Third Priority: Age Class Five to Ten Years 4) Fourth Priority: Age Class Twenty Years and Older should not be removed from the HMA unless specific exceptions prevent them from being turned back to the range. Irrespective of their age class, all animals residing outside the HMA boundary and within Stinkingwater Riparian Pasture would be removed. Up to 40 of the captured wild horses would be released; about 20 would be males of which 5 to 10 of these would be geldings as follows:

- Mares would be selected to maintain a diverse age structure, herd characteristics and conformation (body type).
- Studs and geldings would be selected for release with the objective of establishing a 50 percent male sex ratio. Studs would be selected to maintain a diverse age structure, herd characteristics and body type (conformation).
- The 5 to 10 stallions selected for gelding would meet the following requirements:
 - o Limit to stallions between 5 and 15 years of age
 - o Limit to stallions that have a body condition score of 4 or above.
 - o Surgery would be performed at a temporary holding facility, at a BLM-managed holding center, or in the field by a licensed veterinarian in good standing, using appropriate anesthetic agents and surgical techniques.
 - o When gelding is done in the field, geldings would be released near a water source approximately 24 to 48 hours following surgery. When the gelding is performed at a BLM-managed facility, selected stallions would be shipped to the facility, gelded, held in a separate pen to minimize risk for disease, and returned to the range near water within 30 to 60 days following recovery (recovery is indicated by animals moving freely to/from forage and water).
 - o Gelded animals would be monitored for approximately 7 to 10 days post-surgery.
 - o Gelded animals would be branded with a "G" high on their hip to minimize the potential for future recapture and to facilitate post-treatment monitoring.
- Post-gather, every effort would be made to return released horses to the same general area from which they were gathered.

2.2.4 Alternative 3: Removal Only

Alternative 3 would gather and remove about 134 to 174 excess wild horses from within and outside the Stinkingwater HMA beginning about July 2010. Fertility control would not be applied and no changes to the herd's existing sex ratio would be made. No horses would be returned to the HMA.

2.3 Summary Comparison of Alternatives

Table 1: Summary Comparison of the Alternatives

Item	Alternative 1: No Action	Alternative 2: Proposed Action	Alternative 3
<u>Affects to Wild Horses</u>			
• Gather Number	0	214	134-174
• Removal Number	0	174	134-174
• Post-Gather Sex Ratio	58% stud/42% mare	50% stud or gelding/50% mare	58% stud/42% mare
• Post-Gather Population Size	214	40	40-80

2.4 Alternatives Considered but not Analyzed in Detail

1. One alternative considered for wild horse management was using fertility control measures only to regulate wild horse populations. This alternative would not meet the immediate purpose of achieving the AML for wild horse numbers within Stinkingwater HMA. The need for action derives from excess wild horses 174 animals within the HMA. The RMP (Page 2-43) states to, "[m]anage and maintain healthy wild horse herds in established HMAs at AMLs...."

2. Closure of the area to livestock use or a reduction of permitted use was eliminated as it would not meet the Purpose and Need to achieve and sustain the AML for wild horse numbers within Stinkingwater HMA, specifically the 174 wild horses in excess over the low end of the AML, and RMP direction to, "[m]anage and maintain healthy wild horse herds in established HMAs at AMLs to maintain a thriving natural ecological balance between wild horse populations, wildlife, livestock, vegetation resources, and other resource values. Enhance and perpetuate the special or rare and unique characteristics that distinguish the respective herds." (Three Rivers RMP Page 2-45).

In addition, the WFRHBA does not require these areas of public lands be managed only for wild horses but states under 1332 (c) (Act) that even ranges, that are devoted principally for wild horse management, but not exclusively to their welfare in keeping with multiple-use management concept for public lands.

3. Complete removal of horses within the Project Area was eliminated from detailed analysis because decisions to remove all the wild horses and return the HMA to Herd Area status can only be made pending appropriate land use plan planning. Therefore, it is outside the scope of the current environmental analysis.

3.0 Affected Environment/Environmental Consequences

This section of the EA briefly discusses the relevant resources and issues and potential affects expected with implementation of the No Action or Action Alternatives (Table 2). These include the direct effects (those that result from the management actions) and indirect effects (those that exist once the management action has occurred).

3.1 General Description of the Affected Environment

The Stinkingwater HMA encompasses 85,490 acres of public and private lands, within Harney County, Oregon (Map 1). Topography ranges from low elevation rolling hills to steep-walled, rimrock canyons. Elevation varies from 3,885 feet to 5,935 feet. Precipitation averages 10 inches at lower elevations to 15 inches at the highest elevations. Temperatures also vary, from -40 degrees Fahrenheit in winter to between 95 degrees Fahrenheit in summer.

Vegetation types within the HMA are low sagebrush/Sandberg's bluegrass, mountain big sagebrush/Idaho fescue, bluebunch wheatgrass, and stiff sagebrush/Sandberg's bluegrass. Dense stands of western juniper are present across much of the HMA. Small stands of aspen and mountain mahogany can be found at the higher elevations. An invasive species, medusahead rye, is increasing its range in the HMA. This is especially true on the heavier clay soils and disturbed areas.

Water availability is generally very good across the HMA in the form of live streams and springs. There are four perennial streams found within the HMA. They are Stinkingwater Creek, Clear Creek, Warm Springs Creek, and Little Stinkingwater Creek. Each contains populations of redband trout. Numerous human-made reservoirs and spring developments are also scattered across the HMA. Many of these hold water even on dry years.

Most of the HMA provides summer, fall and winter range for deer, antelope, and elk, and habitat for sage-grouse, chukars, and many raptor species.

3.2 Description of Affected Resources/Issues

An Interdisciplinary Team (IDT) has reviewed and identified issues and resources affected by the alternatives. Table 2 summarizes the results of that review. Affected resources are in bold.

Table 2: Resources/Issues

Resources/Issues	Present	Affected	Rationale
Areas of Critical Environmental Concern (ACECs)	Yes	NO	Horses are rarely found in the Biscuitroot ACEC.
Air Quality	YES	NO	The planning area is outside a non-attainment area. Implementation of the Proposed Action would result in small areas of dust in the area for 1 to 2 hours after the horses enter the trap.
Cultural Resources	YES	NO	To prevent any affects to cultural resources, trap sites and temporary holding facilities would be located in previously disturbed areas. Cultural resource inventory and clearance would be required prior to using trap sites or holding facilities outside existing areas of disturbance.
Environmental Justice	NO	NO	Implementation would not result in a disproportionately adverse effect on minority or economically disadvantaged populations as such populations do not occur in or near the Project Area.
Fish Habitat	YES	YES	Discussed below. Combined with Riparian/Water Quality
Floodplains	NO	NO	Not present.
Grazing Management	Yes	Yes	Discussed below.
Rangelands	YES	YES	Discussed below.
Migratory Birds	YES	Yes	Discussed below.
American Indian Religious Concerns	YES	NO	None known.
Noxious Weeds	YES	Yes	Discussed below.
Prime or Unique Farmlands	NO	NO	Not present.
Riparian-Wetland Zones	YES	YES	Discussed below.
Social and Economic Values	Yes	No	Fewer horses would be on the landscape potentially affecting a person's social values but not measurably; allotted livestock Animal Unit Months (AUMs) would be available (see Grazing Management); and a Contractor would remove excess horses with potential to add revenue to local communities, however, economic effects would not be measurable.
T&E Species	NO	NO	Discussed below.
Special Status Species	Yes	YES	Discussed below.
Water Quality	YES	YES	Discussed with Riparian Resource.

Stinkingwater Herd Management Area Wild Horse Gather
 Environmental Assessment DOI-BLM-OR-050-2010-0024-EA

Waste (Hazardous or Solid)	NO	NO	Not present.
Wild and Scenic Rivers	NO	NO	Not present.
Wilderness and Wilderness Study Area	NO	NO	Not present.
Wilderness Characteristics	NO	NO	Not Present
Wild Horses	Yes	Yes	Discussed below.
Green House Gas Emissions	YES	NO	Carbon dioxide emissions from gathering operations are about 10 metric tons. Reduced methane emissions from removing 174 horses would be about 350 metric tons. This emission would be so small that its incremental contribution to national and global emissions would not be measureable at the level of precision of the global and national emissions. This emission would be so small that it would not merit reporting under the Environmental Protection Agency rule on mandatory reporting of greenhouse gases, which presents a reporting threshold of 25,000 metric tons of carbon dioxide equivalent (40 CFR 98.2).

Affected resources will be discussed in the following order: Grazing Management, Wild Horses, Rangelands, Riparian-Wetland Zones/Water Quality and SSS.

3.2.1 Grazing Management

Affected Environment

The Stinkingwater, Mountain, and Texaco Basin Allotments are within the HMA. There are a total of seven livestock operators who are currently authorized to graze livestock in these allotments annually. The operators are authorized to use 8,456 AUMs of forage each year. An AUM is the amount of forage needed to sustain one cow, five sheep, one horse, or five goats for a month. There are a total 15 pastures within the three allotments. Grazing management consists of different strategies within the pastures. Pastures are managed in generally a graze/deferment rotation; seasonlong rest is implemented when monitoring data shows a need to maintain or improve plant health. The season of use may vary by 1 to 2 weeks annually based upon forage availability, drought conditions, and other management criteria. The BLM allocated forage for livestock use through the Three Rivers RMP, 1992. These allocations were based on the analysis of monitoring data that included actual use, utilization, climate data, long-term trend studies and professional observations.

Table 3 summarizes the livestock use information for the allotments in the HMAs.

Table 3: Livestock Use Information

Allotment	Total Allotment Acres	% of Allotment in HMA	Permittee	Livestock	Authorized Season of Use	Authorized Livestock AUMs (Preference)	Average Actual Livestock Use (Past 4-5 years)
Stinkingwater	27,609	100	1	328c	04/16-09/20	2,857 All permittees	2,403
			2	132c	04/16-09/20		
			3	182c	12/01-02/28		
Mountain	43,323	100	1	468c	04/15-09/15	3,248 All permittees	2,409
			2	176c	05/01-09/15		
			3	178c	05/01-09/15		
Texaco Basin	14,558	100	1	334c	03/01-09/30	2,351	1,731

Permittees within Stinkingwater, Mountain, and Texaco Basin Allotments have only been able to utilize the following portions of their preference since the last gather: 74 percent, 84 percent, and 74 percent, respectively. Some of this can be attributed to excessive use of vegetation by wild horses in Clear Creek Seeding, Stinkingwater, and Crow Camp Pastures. Reduced use can also be attributed to poor growing conditions in two of the past 5 years.

Affects Common to All Alternatives

Through previous decisions, the BLM has allocated the available forage to livestock, wildlife and domestic livestock. Other decisions have resulted in adjustments to livestock numbers and seasons of use and for implementation of grazing systems and the associated range improvements to promote rangeland health. The current level of permitted livestock grazing use is approximately 100 percent of that permitted in 1971 when the WFRHBA passed.

While the present livestock grazing system and efforts to manage the wild horse population within AML has reduced past historic impacts, the current overpopulation of wild horses is continuing to contribute to areas of heavy vegetation utilization, trailing and trampling damage and is preventing the BLM from managing for rangeland health and a thriving natural ecological balance and multiple-use relationship on the public lands in the area.

Environmental Consequences

Livestock grazing is expected to continue at similar stocking rates and utilization of the available vegetation (forage) would also be expected to continue at similar levels. Continuing to graze livestock in a manner consistent with grazing permit terms and conditions would be expected to achieve or make significant progress toward achieving Rangeland Health Standards. Upland areas with juniper expansion and density increases are planned for reducing juniper through various control efforts to prevent the continued loss of understory vegetation and resulting movement of soil.

Alternative 1 (No Action)

Utilization by authorized livestock has been directly affected due to the current excess of wild horses, both within and outside the HMA. Livestock operators have been forced to take voluntary nonuse due to the effects of the wild horse population on range vegetation/forage conditions. The current wild horse population is four times above their forage allocation. Heavy to severe utilization is occurring. The indirect effects of No Action (Defer Gather and Removal) would be continued damage to the range, continuing competition between livestock, wild horses, and wildlife for the available forage and water, reduced quantity and quality of forage and water, and undue hardship on the livestock operators who would continue to be unable to fully use the forage they are authorized to use.

Affects Common to Alternatives (2-3)

Gather activities could result in direct affects by disturbing and dispersing the livestock present for a period of 5 to 7 days. Reduced competition between livestock and wild horses for the available forage and water would also result. Indirect effects would include an increase in the quality and quantity of the available forage for the remainder of the grazing year. Over the next 4 to 5 years, improved vegetation resources would lead to a thriving natural ecological condition.

3.2.2 Wild Horses

Affected Environment

The HMA was designated an HMA in 1977 and formally through the Drewsey EIS, 1979. The AML was reaffirmed as a population range of 40 to 80 horses in the Three Rivers RMP, 1992. The AML was established through public participation and in-depth analysis of resource monitoring studies.



Typical conformation, size and color phases of horses in the HMA.

The last removal of excess wild horses from the Stinkingwater HMA was completed in September 2005 when 121 horses were gathered and 93 were removed. Following the gather, 20 mares and 8 stallions including 2 geldings were released. The ungathered population was estimated at 52 animals for a total estimated post-gather population of 80 animals (about 34 males and 46 females or a 42/58 percent male/female sex ratio). Released mares were not given a fertility control vaccine Porcine Zona Pellucida, (PZP or PZP-22) prior to their release.

The estimated population of wild horses in the HMA in July 2009 was 179 based on a direct count aerial population survey completed. Analysis of these data indicates an average annual growth rate of 20 percent since the last gather. The estimated population size, including the 2010 foal crop would be approximately 214 animals by the time of the scheduled gather.

Between the three allotments within the HMA there are a total of 960 AUMS of forage allocated to wild horses. During the last 4 years, wild horses have used approximately the following amounts of forage.

2006	1,152 AUMS
2007	1,380 AUMS
2008	1,656 AUMS
2009	2,148 AUMS

During the inventory flight of 2009, horses were observed to be in good to excellent condition. The foal ratio was 32 percent and the horses were generally well dispersed across the HMA.

The makeup of the 1977 Stinkingwater wild horse herd includes horses abandoned by homesteaders, escaped horses from ranches in the area, and offspring of licensed and trespass horses that have used the area in the past. The first selective gather based on this management plan acknowledged the wide genetic pool "from Shetland to Clydesdale and everything in between" (Stinkingwater Wild Horse Management Plan 1977). Horses returned to the HMA from this gather in 1978 emphasized sound horses of good confirmation, dorsal striped horses were favored, and of average size. Horses removed included studs of less than 700 pounds or more than 1,200 pounds, palomino studs, and horses over 15 years old. The herd was returned to a 50 percent male, 50 percent mare mix with an even age spread below 15 years old.



Red and Blue Roan color phases.

The Stinkingwater wild horse population has been gathered four times since 1978, most recently in 2005. From that time, 14 wild horse censuses of the HMA were completed. Data from these census and wild horse gathers have helped define the needs of current and future horse population management.

Table 4: Stinkingwater HMA Census and Gather History

Date	Activity	No. of Horses	Foal Rate	Comments
02/1977	Census	161	19%	
12/1978	Gather	179		Returned 29 head
03/1979	Census	20	50%	
03/1981	Census	64	6%	
01/1985	Census	119	10%	
08/1987	Census	71	no data	High temperatures/late-day flyover = low horse count
10/1987	Gather	141		
10/1989	Census	48	17%	
02/1989	Gather	18		
12/1989	Gather	34		
09/1992	Census	79	no data	20-30 horses may not have been counted in flyover
09/1992	Gather	68		
01/1995	Census	34	15%	
09/1997	Census	74	15%	
03/1999	Census	30	no data	3.5-hour flyover of five HMAs
06/2000	Census	92	11%	

Date	Activity	No. of Horses	Foal Rate	Comments
09/2002	Census	119	25%	Heavy herbaceous vegetation and riparian pasture usage
07/2004	Census	175	23%	40+ head outside HMA
09/2005	Gather	121		28 head returned
09/2005	Census	80		Estimated population
07/2009	Census	179	24%	17 head outside HMA

Environmental Consequences

Cumulative effects which would be expected when incrementally adding either of the Action Alternatives would include continued improvement of upland vegetation conditions, which would in turn benefit permitted livestock, native wildlife, and wild horse population as forage (habitat) quality and quantity is improved over the current level. Benefits from a reduced wild horse population would include fewer animals competing for limited forage and water resources. Cumulatively, there should be more stable wild horse populations, healthier rangelands, healthier wild horses, and fewer multiple-use conflicts in the area over the next 1 to 5 years. Over the next 15 to 20 years, continuing to manage wild horses within the established AML range would achieve a thriving natural ecological balance and multiple-use relationship on public lands in the area.

Reasonably Foreseeable Future Actions (RFFAs) include gathers about every 4 years to remove excess wild horses in order to manage population size within the established AML range. The excess animals removed would be transported to short-term corral facilities where they would be prepared for adoption, sale (with limitations), or long-term holding.

The actions which have influenced today's wild horse population are primarily wild horse gathers, which have resulted in the capture of some 561 wild horses, the removal of 504 excess horses, and release of 57 horses back into the HMA (Table 4, Section 3.2.2).

Results of Win Equus Population Modeling

Population modeling using Version 3.2 of the Win Equus population model (Jenkins 2000) was completed to analyze possible differences that could occur to the wild horse populations between the No Action Alternative and Alternatives 2 and 3. The purpose of the modeling was to analyze and compare the effects of the Action Alternatives on population size, average population growth rate, and average removal number. Table 5 summarizes the results. See Appendix B for additional detail.

Table 5: Average Population Size, Growth Rates, Next Projected Gather Year

Alternative	Avg. Pop. Size (11 years)	Ave. Growth Rate Next 10 Years (%)	Next Projected Gather (Year)	Est'd No. to Remove (Next 11 years)
Alternative 1- No Action	674	19	2011	N/A
Alternative 2 - Proposed Action	80	19	2014	273
Alternative 3 – Gather to Low AML (No fertility control or sex ratio adjustment)	85	24	2014	292

This modeling was used to identify if any of the alternatives would eliminate the population or cause numbers or growth rates to reach a point where there was no new recruitment to the population. Modeling data indicate sustainable population levels and growth rates would be expected to be within reasonable levels and adverse affects to the population would be unlikely. Additionally, these data indicate that adjusting to a 50/50 sex ratio (in Proposed Action) would reduce the estimated number of horses to be removed by 7 percent over the next 11 years (when compared to Alternative 2).

Alternative 1 (No Action)

Under the No Action Alternative, there would be no active management to control the population size within the established AML at this time. In the absence of a gather, wild horse populations would continue to grow at an average rate of 20 percent per year. Without a gather and removal now, the population would grow to 370 in 4 years' time based on the average annual growth rate.

Use by wild horses would continue to exceed the amount of forage allocated for their use. Competition between wildlife, livestock, and wild horses for limited forage and water resources would continue. Damage to rangeland resources would continue or increase. Over time, the potential risks to the health of individual horses would increase, and the need for emergency removals to prevent their death from starvation or thirst would also increase. The health and sustainability of the wild horse population is dependent upon achieving a thriving natural ecological balance and sustaining healthy rangelands.

Affects Common to Action Alternatives (2-3)

Over the past 35 years, various affects to wild horses as a result of gather activities have been observed. Under the action alternatives affects to wild horses would be both direct and indirect, occurring to both individual horses and the population as a whole.

The BLM has been conducting wild horse gathers since the mid-1970s. During this time, methods and procedures have been identified and refined to minimize stress and affects to wild horses during gather implementation. The SOPs in Appendix B would be implemented to ensure a safe and humane gather occurs and would minimize potential stress and injury to wild horses.

In any given gather, gather-related mortality averages only about one half of one percent (0.5 percent), which is very low when handling wild animals. Approximately, another six-tenths of one percent (0.6 percent) of the captured animals could be humanely euthanized due to pre-existing conditions and in accordance with BLM policy (GAO-09-77). These data affirm that the use of helicopters and motorized vehicles has proven to be a safe, humane, effective, and practical means for the gather and removal of excess wild horses (and burros) from the public lands. The BLM generally avoids gathering wild horses by helicopter during the 6 weeks prior to and following the peak foaling season (i.e., March 1 through June 30).

Individual, direct affects to wild horses include the handling stress associated with the roundup, capture, sorting, handling, and transportation of the animals. The intensity of these affects varies by individual, and is indicated by behaviors ranging from nervous agitation to physical distress. When being herded to trap site corrals by the helicopter, injuries sustained by wild horses may include bruises, scrapes, or cuts to feet, legs, face, or body from rocks, brush or tree limbs. Rarely, wild horses encounter barbed wire fences and receive wire cuts. These injuries are rarely fatal and are treated onsite until a veterinarian can examine the animal and determine if additional treatment is indicated.

Other injuries may occur after a horse has been captured and is either within the trap site corral, the temporary holding corral, during transport between facilities, or during sorting and handling. Occasionally, horses may sustain a spinal injury or a fractured limb but based on prior gather statistics, serious injuries requiring humane euthanasia occur in less than 1 horse per every 100 captured. Similar injuries could be sustained if wild horses were captured through bait and/or water trapping, as the animals still need to be sorted, aged, transported, and otherwise handled following their capture. These injuries result from kicks and bites, or from collisions with corral panels or gates.

To minimize the potential for injuries from fighting, the animals are transported from the trap site to the temporary (or short-term) holding facility where they are sorted as quickly and safely as possible, then moved into large holding pens where they are provided with hay and water. On many gathers, no wild horses are injured or die. On some gathers, due to the temperament of the horses, they are not as calm and injuries are more frequent. Overall, direct gather-related mortality averages less than 1 percent.

Indirect individual affects are those which occur to individual wild horses after the initial event. These may include miscarriages in mares, increased social displacement, and conflict in studs. These affects, like direct individual affects, are known to occur intermittently during wild horse gather operations. An example of an indirect individual impact would be the brief 1 to 2 minute skirmish between older studs which ends when one stud retreats. Injuries typically involve a bite or kick with bruises which do not break the skin. Like direct individual affects, the frequency of these affects varies with the population and the individual. Observations following capture indicate the rate of miscarriage varies, but can occur in about 1 to 5 percent of the captured mares, particularly if the mares are in very thin body condition or in poor health.

A few foals may be orphaned during a gather. This can occur if the mare rejects the foal, the foal becomes separated from its mother and cannot be matched up following sorting, the mare dies or must be humanely euthanized during the gather, the foal is ill or weak and needs immediate care that requires removal from the mother, or the mother does not produce enough milk to support the foal. On occasion, foals are gathered that were previously orphaned on the range (prior to the gather) because the mother rejected it or died. These foals are usually in poor, unthrifty condition. Every effort is made to provide appropriate care to orphan foals.

Veterinarians may administer electrolyte solutions or orphan foals may be fed milk replacer as needed to support their nutritional needs. Orphan foals may be placed in a foster home in order to receive additional care. Despite these efforts, some orphan foals may die or be humanely euthanized as an act of mercy if the prognosis for survival is very poor.

During a summer gather, foals are smaller than during gathers conducted during the winter months. Water requirements are greater than in the winter due to the heat. If forage or water is limiting, animals may be traveling long distances between water forage, and may become more easily dehydrated. To minimize the potential for distress during summer gathers, capture operations are often limited to the early morning hours when temperatures are cooler. The distance animals must travel to the trap is also shortened to minimize the potential for stress. The BLM and the gather Contractor also make sure there is plenty of clean water for the animals to drink once they have been captured. A supply of electrolytes is also kept on hand to apply to the drinking water if necessary. Electrolytes help to replace the body fluids that may be lost during capture and handling.

A small number of foals can be orphaned in any gather. Sometimes foals which have been previously orphaned (abandoned by the mare) are also captured. In either situation, the BLM makes every effort to provide prompt, humane care to orphan foals. Veterinarians may administer electrolyte solutions or orphan foals may be fed milk replacer as needed to support their nutritional needs. Orphan foals may also be placed in an approved foster home to receive additional care. Once orphan foals are large enough, they are made available for adoption to qualified individuals who can provide them with a good home.

Through the capture and sorting process, wild horses are examined for health, injury and other defects. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy. BLM Euthanasia Policy IM-2009-041 is used as a guide to determine if animals meet the criteria and should be euthanized (refer to SOPs, Appendix A). Animals that are euthanized for non-gather related reasons include those with old injuries (broken or deformed limbs) that cause lameness or prevent the animal from being able to maintain an acceptable body condition (greater than or equal to BCS 3); old animals that have serious dental abnormalities or severely worn teeth and are not expected to maintain an acceptable body condition, and wild horses that have serious physical defects such as club feet, severe limb deformities, or sway back. Some of these conditions have a causal genetic component and the animals should not be returned to the range to prevent suffering, as well as to avoid amplifying the incidence of the problem in the population.

Wild horses not captured may be temporarily disturbed and moved into another area during the gather operation. With the exception of changes to herd demographics from removals, direct population effects have proven to be temporary in nature with most, if not all, effects disappearing within hours to several days of release. No observable effects associated with these effects would be expected within 1-month of release, except for a heightened awareness of human presence.

It is not expected that genetic health would be negatively impacted by the Proposed Action. The AML range of 40 to 80 should provide for acceptable genetic diversity. If genetic diversity becomes an issue with this herd, a couple of mares portraying desirable conformation, but having new genetics would be introduced into this herd.

By maintaining wild horse population size within the AML, there would be a lower density of wild horses across the HMA, reducing competition for resources and allowing wild horses to utilize their preferred habitat.

Maintaining population size within the established AML would be expected to improve forage quantity and quality and promote healthy, self-sustaining populations of wild horses in a thriving natural ecological balance and multiple-use relationship on the public lands in the area. Deterioration of the range associated with wild horse overpopulation would be avoided. Managing wild horse populations in balance with the available habitat and other multiple uses would lessen the potential for individual animals or the herd to be affected by drought, and would avoid or minimize the need for emergency gathers, which would reduce stress to the animals and increase the success of these herds over the long term.

Over the next 4 years, implementation of the action alternatives would result in fewer excess wild horses which would require removal from the range. For every excess horse not placed in the adoption, sale or long-term holding pipeline, a savings to the American taxpayer of up to \$12,000 per animal over 20 years would accrue.

Transport, Short-Term Holding, and Adoption (or Sale) Preparation

Animals would be transported from the capture/temporary holding corrals to the designated BLM short-term holding corral facility(s). From there, they would be made available for adoption or sale to qualified individuals or to long-term holding (grassland) pastures.

Wild horses selected for removal from the range are transported to the receiving short-term holding facility in a straight deck semi-trailers or gooseneck stock trailers. Vehicles are inspected by the BLM Contracting Officer's Representative (COR) or Project Inspector (PI) prior to use to ensure wild horses can be safely transported and that the interior of the vehicle is in a sanitary condition. Wild horses are segregated by age and sex and loaded into separate compartments. A small number of mares may be shipped with foals. Transportation of recently captured wild horses is limited to a maximum of 8 hours. During transport, potential affects to individual horses can include stress, as well as slipping, falling, kicking, biting, or being stepped on by another animal. Unless wild horses are in extremely poor condition, it is rare for an animal to be seriously injured or die during transport.

Upon arrival at the short-term holding facility, recently captured wild horses are off-loaded by compartment and placed in holding pens where they are fed good quality hay and water. Most wild horses begin to eat and drink immediately and adjust rapidly to their new situation. At the short-term holding facility, a veterinarian examines each load of horses and provides recommendations to the BLM regarding care, treatment, and if necessary, euthanasia of the recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club feet, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the American Veterinary Medical Association. Wild horses in very thin condition or animals with injuries are sorted and placed in hospital pens, fed separately and/or treated for their injuries as indicated. Recently captured wild horses, generally mares, in very thin condition may have difficulty transitioning to feed. Some of these animals are in such poor condition that it is unlikely they would have survived if left on the range. Similarly, some mares may lose their pregnancies. Every effort is taken to help the mare make a quiet, low stress transition to captivity and domestic feed to minimize the risk of miscarriage or death.

After recently captured wild horses have transitioned to their new environment, they are prepared for adoption or sale. Preparation involves freeze-marking the animals with a unique identification number, drawing a blood sample to test for equine infections anemia, vaccination against common diseases, castration, and deworming. During the preparation process, potential affects to wild horses are similar to those that can occur during handling and transportation. Serious injuries and deaths from injuries during the preparation process are rare, but can occur.

At short-term corral facilities, a minimum of 700 square feet is provided per animal. Mortality at short-term holding facilities averages approximately 5 percent per year (GAO-09-77, Page 51), and includes animals euthanized due to a pre-existing condition; animals in extremely poor condition; animals that are injured and would not recover; animals which are unable to transition to feed; and animals which are seriously injured or accidentally die during sorting, handling, or preparation.

Adoption or Sale with Limitations, and Long-Term Holding

Adoption applicants are required to have at least a 400 square foot corral with panels that are at least 6 feet tall for horses over 18 months of age. Applicants are required to provide adequate shelter, feed, and water. The BLM retains title to the horse for 1-year and the horse and the facilities are inspected to assure the adopter is complying with the BLM's requirements. After 1-year, the adopter may take title to the horse, at which point the horse becomes the property of the adopter. Adoptions are conducted in accordance with 43 CFR 5750.

Potential buyers must fill out an application and be pre-approved before they may buy a wild horse. A sale-eligible wild horse is any animal that is more than 10 years old; or has been offered unsuccessfully for adoption three times. The application also specifies that all buyers are not to resell the animal to slaughter buyers or anyone who would sell the animal to a commercial processing plant. Sales of wild horses are conducted in accordance with Bureau policy.

Between 2007 and 2009, nearly 62 percent of excess wild horses or burros were adopted and about 8 percent were sold with limitation (to good homes) to qualified individuals. Animals 5 years of age and older are generally transported to long-term grassland pastures, where they remain available for adoption. These pastures are generally located in the Midwest.

Potential affects to wild horses from transport to adoption, sale or long-term holding are similar to those previously described. One difference is that when shipping wild horses for adoption, sale or long-term holding, animals may be transported for a maximum of 24 hours. Immediately prior to transportation, and after every 18 to 24 hours of transportation, animals are offloaded and provided a minimum of 8 hours on-the-ground rest. During the rest period, each animal is provided access to unlimited amounts of clean water and 25 pounds of good quality hay per horse with adequate bunk space to allow all animals to eat at one time. Most animals are not shipped more than 18 hours before they are rested. The rest period may be waived in situations where the travel time exceeds the 24-hour limit by just a few hours and the stress of offloading and reloading is likely to be greater than the stress involved in the additional period of uninterrupted travel.

Long-term holding pastures are designed to provide excess wild horses with humane, life-long care in a natural setting off the public rangelands. There wild horses are maintained in grassland pastures large enough to allow free-roaming behavior and with the forage, water, and shelter necessary to sustain them in good condition. About 22,700 wild horses, that are in excess of the existing adoption or sale demand (because of age or other factors), are currently located on private land pastures in Iowa, Kansas, Oklahoma, and South Dakota. Located in mid or tall grass prairie regions of the United States, these long-term holding pastures are highly productive grasslands as compared to more arid western rangelands. These pastures comprise about 256,000 acres (an average of about 8 to 10 acres per animal). The majority of these animals are older in age.

Mares and castrated stallions (geldings) are segregated into separate pastures except one facility where geldings and mares coexist. Although the animals are placed in long-term holding, they remain available for adoption or sale to qualified individuals. No reproduction occurs in the long-term grassland pastures, but foals born to pregnant mares are gathered and weaned when they reach about 8 to 10 months of age and are then shipped to short-term facilities where they are made available adoption.

Handling by humans is minimized to the extent possible although regular on-the-ground observation and weekly counts of the wild horses to ascertain their numbers, well-being, and safety are conducted. A very small percentage of the animals may be humanely euthanized if they are in very thin condition and are not expected to improve to a BCS of 3 or greater due to age or other factors. Natural mortality of wild horses in long-term holding pastures averages approximately 8 percent per year, but can be higher or lower depending on the average age of the horses pastured there (GAO-09-77, Page 52). The savings to the American taxpayer which results from contracting for long-term holding pastures averages about \$4.45 per horse per day as compared with maintaining the animals in short-term holding facilities.

Euthanasia and Sale without Limitation

While humane euthanasia and sale without limitation of healthy horses for which there is no adoption demand is authorized under the WFRHBA, Congress prohibited the use of appropriated funds between 1987 and 2004 and again in 2010 for this purpose.

Alternative 2 (Proposed Action)

Alternative 2 (Proposed Action) would gather up to 214 horses, of which 174 would be removed to return wild horse population size to within AML. Up to 20 mares and 20 males of which 5 to 10 would be geldings would be released back following the gather if all horses were captured. Mares or studs would be selected for release to maintain a diverse age structure, herd characteristics, and conformation (body type). Gelding of males would be conducted under the procedures listed under 2.2.2 above.

Under Alternative 2, some captured wild horses would be released back to the range to achieve a post-gather sex ratio of 50 percent males and 50 percent mares. These effects would be slight, as the proposed sex ratio is not an extreme departure from normal sex ratio ranges.

Alternative 3

Implementation of Alternative 3 would result in capturing fewer wild horses than would be captured in Alternative 2. A gate cut removal would be implemented rather than a selective removal (i.e., the gather would end when the number of excess wild horses which requires removal has been captured). Alternative 3 would not involve fertility control; mares would not undergo the additional stress of receiving fertility control injections or freeze-marking and would foal at normal rates until the next gather is conducted. The post-gather sex ratio would be about 50:50 mares to males, or would slightly favor mares. This would be expected to result in fewer and smaller bachelor bands, increased reproduction on a proportional basis within the herd, larger band sizes, and individual mares would likely begin actively producing at a slightly older age.

3.2.3 Rangelands/Weeds

Affected Environment

Plant communities in the HMA consist primarily of mountain big sagebrush, bunchgrass, and low sagebrush-bunchgrass with the associated grasses and forbs changing with elevation. At the lower elevations associated grasses include Sandberg's bluegrass, Thurber's needlegrass, and bluebunch wheatgrass.

Idaho fescue is often the dominant grass in locations of higher elevation and increased precipitation. Crested wheatgrass seedings within the HMA occur primarily in the Texaco Basin Allotment, but also occur in the Stinkingwater Allotment. Silver sagebrush-Nevada bluegrass communities occur to a lesser extent on sites with seasonal high water tables.

Most of the mountain and low sagebrush plant communities within the Mountain and Stinkingwater Allotments are being encroached by western juniper. These communities are in various stages of transition to juniper woodlands. As these plant communities develop into woodlands, plant diversity decreases.

The deeper soil sites in the Mountain and Stinkingwater Allotments contain scattered aspen plant communities, often in areas that accumulate added snowpack. Many of these aspen communities have also been encroached by juniper.

There are approximately 2,094 acres of noxious weeds located within the Stinkingwater HMA. The largest infestation, totaling approximately 1,896 acres, consists of medusahead rye which the Oregon BLM is currently unable to effectively treat with the permitted suite of herbicides. Selecting trap, temporary holding sites and transportation routes that avoid medusahead rye sites, as well as other known noxious weed sites, would lower the risk for spread of noxious weeds.

Environmental Consequences

Cumulative effects which would be expected when incrementally adding either of the Action Alternatives include continued improvement of upland vegetation conditions, which would in turn benefit permitted livestock, native wildlife, and wild horse population as forage (habitat) quality and quantity is improved over the current level. Benefits from a reduced wild horse population would include fewer animals competing for limited forage and water resources. Cumulatively, there should be more stable wild horse populations, healthier rangelands, healthier wild horses, and fewer multiple-use conflicts in the area over the short and long term. Over the next 15 to 20 years, continuing to manage wild horses within the established AML range would achieve a thriving natural ecological balance and multiple-use relationship on public lands in the area.

Alternative 1 (No Action)

Areas which are presently overutilized within the HMA, such as areas adjacent to water sources, would continue to be used excessively. The area of overutilization 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.

Cumulative impacts would result in foregoing the opportunity to improve rangeland health and to properly manage wild horses in balance with the available forage and water and other multiple uses. Attainment of site-specific vegetation management objectives and Standards for Rangeland Health would not be achieved.

The increase in horse numbers above the AML leads to areas of higher horse concentrations causing a severe impact to the vegetation due to overgrazing providing more niches for noxious weeds to establish and spread.

Areas of high horse concentration include riparian areas, springs and reservoirs. Every allotment within the Stinkingwater HMA is infested to some degree with medusahead rye. Currently, the Oregon BLM is under an injunction which only allows the use of four herbicides, none of which is effective at reducing the amount of medusahead without significant impacts to native vegetation. Allowing horse numbers to increase will potentially increase the areas of heavy grazing providing more disturbed areas for the medusahead rye to move into.

Alternative 2 (Proposed Action)

Disturbance to the vegetation for 1-year would occur in and around the loading chutes, trap sites, and/or corrals due to trampling (by horses and personnel) and vehicle usage. The disturbance would be kept to as small an area as possible.

Reducing the number of wild horses grazing yearlong would subsequently reduce affects to those portions of uplands and riparian communities currently with heavy utilization or grazed during critical growth stages each year, which effects plant health. This would improve forage species vigor, cover, and allow the plant communities to provide for maximum plant density to site capability. This would allow progress toward meeting riparian and upland objectives outlined in the Mountain, Texaco Basin, and Stinkingwater Allotment Management Plans.

Areas of high horse concentration lead to heavy grazing which opens up more niches for noxious weed establishment and spread. By maintaining horse numbers at or below AML, the chance of noxious weed spread would be greatly reduced. Limiting vehicle travel to existing roads and ways, combined with avoidance of noxious weed infestations when selecting trap sites, would limit the potential of noxious weed spread during gathering operations. Gather sites will be noted and reported to Range staff and District Weed personnel for monitoring and/or treatment of new and existing infestations.

Alternative 3

Same as the Proposed Action.

3.2.4 Riparian-Wetland Zones/Water Quality

Affected Environment

There are approximately 8.5 miles of Stinkingwater Creek and its associated riparian zone within the Stinkingwater HMA. Portions of this creek (approximately 1-mile) do not meet the Riparian and Wetland Zone Standard for Rangeland Health due, in part, to wild horse use. Topography and a one-half mile water gap on Stinkingwater Creek concentrate wild horse, cattle, and other wildlife use along these two portions of Stinkingwater Creek. Because of this, the riparian vegetative characteristics are not adequate to dissipate stream energy, filter sediment, aid in groundwater recharge, or maintain channel characteristics. Because vegetation that is capable of withstanding high streamflow events is not present, erosion and excessive sedimentation is a problem in the creek.

Approximately 2.8 miles of Warm Springs Creek and its associated riparian zone flow through the HMA. In June of 1998 an IDT conducted a Proper Functioning Condition (PFC) Assessment of Warm Springs Creek. The team considered most of the creek to be in PFC with the exception of a .4-mile segment which was considered to be Functioning at Risk, Trend Not Apparent.

Approximately 5 miles of Clear Creek flows through the HMA. In June of 1998 an IDT conducted a PFC Assessment of Clear Creek. The team considered 1.7 miles of Clear Creek to be in PFC and 1.7 miles of the creek to be Functioning at Risk with a downward trend. Excessive erosion, a lack of adequate vegetation to dissipate stream energy and little to no woody vegetation were the foremost reasons for this classification.

Approximately 0.5-mile of Stinkingwater Creek flows through the HMA on BLM-managed land. In September of 2007 an IDT conducted a PFC of Little Stinkingwater Creek. The team considered approximately 0.5-mile of Little Stinkingwater Creek to be Functioning at Risk with no apparent trend. Grazing pressure on new and young willows and a lack of adequate deep rooted hydric herbaceous vegetation along the stream is influencing the width to depth ratio of the stream.

Water quality is monitored to assess whether the quality of the water resources are adequate for fish, recreation, drinking, agriculture, and other uses. The Oregon Department of Environmental Quality has established water quality standards for the State of Oregon that are designed to protect the most sensitive of these multiple uses. In this case, redband trout (*Oncorhynchus mykiss*) are designated as the most sensitive use and to which the standards in this HMA are based upon. Because water temperature has one of the greatest effects on fish and fish habitat, water quality has been monitored on Stinkingwater, Clear, and Warm Springs Creeks by collecting water temperature data. Warm Springs Creek dried up at the temperature probe location 2 out of 4 years collected; therefore, water temperature cannot be collected in this stretch. Stinkingwater and Clear Creeks both rose above the 68 degree standard as they flowed through the HMA during the 2 years data was collected. The poor condition of large portions of these streams (both on private and public land) is likely the cause of the high water temperatures due to the reduction in shade and the widening of the stream channel.

Environmental Consequences

The cumulative effects analysis area is the watersheds for Warm Springs Creek, Stinkingwater Creek, Little Stinkingwater Creek, and Clear Creek. The longer wild horse numbers remain above a level that riparian resources can sustain, the more difficult it would be for these resilient systems to maintain their integrity for future resistance to degradation in the way of bank stability. Without periodic relief from grazing pressure, riparian species lose their ability to colonize and remain established to hold streambank soil in place during runoff events. This in turn reduces shading for the water surfaces and jeopardizes water quality for fish species.

Alternative 1 (No Action)

Increasing numbers of wild horses in the HMAs 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. 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.

The removal of riparian herbaceous and woody species cover due to heavy grazing from horse populations exceeding AMLs would also affect the function of this vegetation for the retention of sediment during high water events. The year-round grazing by wild horses within riparian zones prevents regeneration of deciduous woody species and favors the increase of xeric species within the plant communities.



This photo, taken on July 23, 2007, shows severe utilization of the riparian vegetation along the lower end of Stinkingwater Creek. There were no livestock using this area this year.

The condition of riparian areas in Stinkingwater Creek and Clear Creek has noticeably declined since the last removal of horses. Monitoring of these streams has shown less than 1-inch of vegetative stubble remaining at the end of the growing season. This lack of vegetative stubble prevents the capture of sediment, retention of water and shading of the stream.

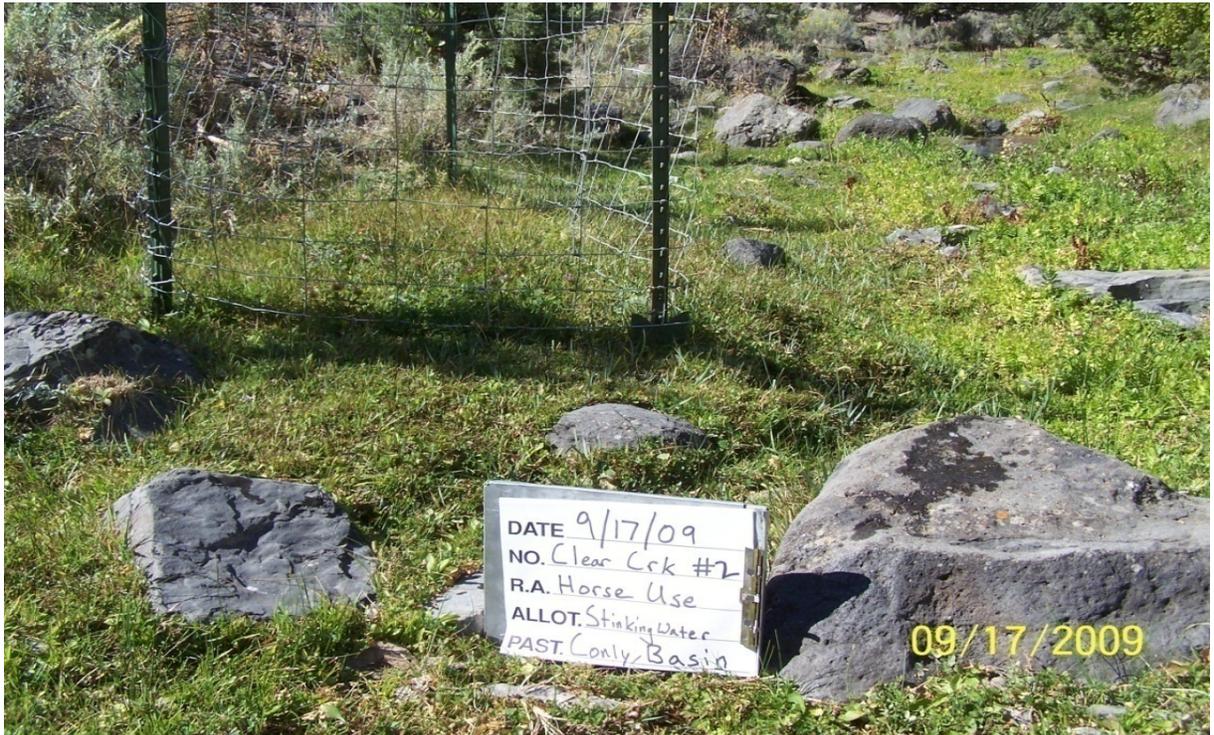


Photo of residual vegetation adjacent to and outside of cage #2 along Clear Creek within Conly Basin Pasture. Herbaceous riparian species were completely utilized with stubble heights of <1-inch. Inside the cage vegetation was 6 inches in height.

Concentrated use on the north end of Crow Camp and Stinkingwater Pastures has reduced the vigor of native upland vegetation and exposed this area to increased invasion by medusahead rye. The concentration of horses in the Clear Creek Seeding Pasture during the 2009 season resulted in a utilization level of 60 percent even with no livestock present. There will be no livestock authorized to use this pasture in 2010, because of last years' heavy horse use. Livestock will only trail through the Stinkingwater Pasture in 2010 due to the heavy use that occurred along the riparian area in 2009. There were over 49 wild horses in this small pasture year-round.

Alternative 2 (Proposed Action)

Reduction of yearlong grazing and late season grazing from horses would result in an increase in the amount and vigor of herbaceous and deciduous woody riparian species, and allow progression of the riparian plant communities toward later seral stages. Improved riparian conditions would result in more cover and shading along streams, narrowing of stream channels, and potentially a reduction in water temperature. Lower numbers of animals may result in less compaction of moist riparian soils and less shearing of streambanks, leading to improved riparian vegetation, narrowing of stream channels, and reduction of sediment into the streams.

Alternative 3

Same as the Proposed Action.

3.2.5 Special Status Species

Affected Environment:

Special Status Flora

There are several Special Status plant sites in the Stinkingwater HMA. Malheur prince's plume (*Stanleya confertiflora*) is a Special Status plant species known to occur in the Texaco Basin Allotment. This plant is a Bureau Sensitive species, a Federal Species of Concern, and is on the Oregon Natural Heritage Program (ONHP) list 1 as a species which is threatened or endangered throughout its range. It is only found in the Burns and Vale Districts and on three sites in Idaho. There is potential for conflicts between this species and grazing. Malheur prince's plume appears to be very palatable to grazers. Prince's plume appears to be the most palatable to grazers when it is actively growing and flowering. The plants are more susceptible to grazing in areas where grazers naturally congregate, such as near water or fence corners. The best mitigation for grazing a pasture containing prince's plume is to graze it after the seed is ripe and has fallen to the ground.

Back's sedge (*Carex cordillerana*) is a Bureau Assessment species and is on the ONHP list 2, which indicates a species that is rare or may be threatened with extirpation from Oregon. This species is known to occur in the Miller Canyon area within the HMA and may be susceptible to grazing in areas where it is accessible.

Two other Special Status plant species, found in the HMA, are short-lobe beardtongue (*Penstemon seorsus*) and Biddle's lupine (*Lupinus biddlei*). Both species are Bureau Tracking species and are on ONHP list 4 as species of conservation concern because they are rare and require continued tracking, but are not currently threatened or endangered.

Special Status Fauna (Terrestrial)

There are no known Federally listed Threatened or Endangered wildlife species found within the Stinkingwater HMA. There are three known species found within the HMA that have increased monitoring due to population concerns (SSS). Greater sage-grouse are found within the Stinkingwater HMA at all times of the year. There are seven known lek sites within the HMA (Attachment 1.c). Almost 50 percent of the HMA provides quality nesting and foraging habitat. Due to juniper encroachment, approximately 40 percent of the HMA is currently considered to be unsuitable habitat for sage-grouse.

Burrowing owls are also known to occur within the HMA. There are five known burrowing owl nest sites within the HMA. These nest sites are all located at lower elevations of the HMA. Habitat quality for burrowing owls is good at the lower elevations of the HMA. The higher elevation parts of the HMA are generally not considered burrowing owl habitat.

Special Status Fauna (Aquatic)

Stinkingwater, Little Stinkingwater, Clear, and Warm Springs Creeks all support Great Basin redband trout (*Oncorhynchus mykiss*), a Bureau Sensitive species in Oregon. Much of the riparian areas along these creeks are Functioning at Risk, according to PFC Assessments conducted. The condition of these riparian areas directly affects redband trout habitat specifically related to cover and water temperature.

Environmental Consequences

The cumulative effects analysis area for SSS extends a couple of miles beyond the allotment boundary to incorporate most movements of birds regularly using the allotment. Potential effects to SSS would decrease as the distance from the allotment increases. Wildfires may occur in the future, but predicting the effects of potential wildfires would be speculative and analysis of post fire rehabilitation plans would address SSS. All alternatives and other ongoing and reasonably foreseeable future projects would not lead to cumulative effects to SSS, because impacts from the alternatives would be localized and combined effects with the other projects would not be measurable due to distance to other projects or lack of direct and indirect effects to species or habitat. Medusahead would likely continue to spread, displacing native habitat for sage-grouse under all alternatives until an effective treatment is available.

Alternative 1 (No Action)

Special Status Flora

Not gathering wild horses down to the AML could result in excessive, yearlong grazing on Malheur prince's plume and Back's sedge. These species are palatable to grazers and would be vulnerable to grazing by excessive numbers of wild horses.

Special Status Fauna (Terrestrial)

Affects to greater sage-grouse and burrowing owls could increase the possibilities of nest and fledgling trampling. The removal of vegetation cover from grazing by wild horses during nesting and fledging by these birds could increase vulnerability to predation.

Special Status Fauna (Aquatic)

The increased utilization levels and yearlong grazing from wild horses in Stinkingwater Creek, Clear Creek, and Warm Springs Creek would continue to inhibit the development of deciduous woody species, remove shading cover, and increase soil compaction and streambank shearing.

This would result in a decrease in shade and thermal cover over streams and potentially an increase in stream width to depth ratio (i.e., wider and shallower), which would increase maximum water temperature and temperature variability and reduce the quality and quantity of habitat for redband trout.

Alternative 2 (Proposed Action)

Special Status Flora

Gathering wild horses down to low end of AML would lower the threat to Malheur prince's plume and Back's sedge because of the reduced grazing pressure on forb species as availability of grass species increases due to less demand by horses. Grazing a pasture containing prince's plume during the growing period could inhibit growth and flowering of the population and thus affect the amount of seed that is produced. Yearlong grazing in the HMA could still have an effect on some populations of more palatable plant species.

Special Status Fauna (Terrestrial)

The effects to greater sage-grouse would be positive for nesting and foraging due to the increase in availability of riparian herbaceous vegetation and upland grass species. Both of these have been utilized by horses prior to cattle entering the allotment and at a time when these resources are most critical to sage-grouse.

Special Status Fauna (Aquatic)

Reduction of yearlong grazing and late season grazing would result in an increase in the amount and vigor of herbaceous and deciduous woody riparian species, and allow progression of the riparian plant communities toward later seral stages. Improved riparian conditions would result in more cover and shading along streams, narrowing of stream channels, and potentially a reduction in water temperature. Lower numbers of animals may result in less compaction of moist riparian soils and less shearing of streambanks, leading to improved riparian vegetation, narrowing of stream channels, and reduction of sediment into the streams. This would result in improved habitat for redband trout and other aquatic organisms.

Alternative 2

Same as the Proposed Action.

4.0 Cumulative Effects for All Alternatives

As the Council on Environmental Quality (CEQ), in guidance issued on June 24, 2005, points out, the "environmental analysis required under NEPA is forward-looking," and review of past actions is required only "to the extent that this review informs agency decision-making regarding the Proposed Action." Use of information on the effects on consideration of the Proposed Action's cumulative effects, and secondly as a basis for past action may be useful in two ways according to the CEQ guidance. One is for identifying the Proposed Action's effects. The CEQ stated in this guidance that "[g]enerally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions." This is because a description of the current state of the environment inherently includes the effects of past actions. The CEQ guidance specifies that the "CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions." Our information on the current environmental condition is more comprehensive and more accurate for establishing a useful starting point for a cumulative effects analysis, than attempting to establish such a starting point by adding up the described effects of individual past actions to some environmental baseline condition in the past that, unlike current conditions, can no longer be verified by direct examination.

The second area in which the CEQ guidance states that information on past actions may be useful is in "illuminating or predicting the direct and indirect effects of a Proposed Action." The usefulness of such information is limited by the fact that it is anecdotal only, and extrapolation of data from such singular experiences is not generally accepted as a reliable predictor of effects.

However, "experience with and information about past direct and indirect effects of individual past actions" have been found useful in "illuminating or predicting the direct and indirect effects" of the Proposed Action in the following instances: the basis for predicting the effects of the Proposed Action and its alternatives is based on the general accumulated experience of the resource professionals in the agency with similar actions.

The environmental consequences discussion described all expected effects including direct, indirect and cumulative on resources from enacting the proposed alternatives. A distinction between direct and indirect effects is not made and in many cases cumulative effects are only described as effects. All effects are considered direct and cumulative; therefore, use of these words may not appear. In addition, the Introduction Section of this EA, specifically the Purpose of and Need for Action, identifies past actions creating the current situation.

RFFAs include those Federal and non-Federal activities not yet undertaken, but sufficiently likely to occur, that a Responsible Official of ordinary prudence would take such activities into account in reaching a decision. These Federal and non-Federal activities that must be taken into account in the analysis of cumulative impact include, but are not limited to, activities for which there are existing decisions, funding, or proposals identified by the bureau. RFFAs do not include those actions that are highly speculative or indefinite. Cumulative effects were thoroughly addressed throughout Chapter III by resource if applicable.

5.0 Monitoring and Mitigation Measures

The BLM COR and PIs assigned to the gather would be responsible for ensuring contract personnel abide by the contract specifications and the SOPs (Appendix A). Ongoing monitoring of forage condition and utilization, water availability, aerial population surveys, and animal health would continue.

Monitoring the herd's social behavior would be incorporated into routine monitoring. The objective of this additional monitoring would be to determine if additional studs (or geldings) form bachelor bands or are more aggressive with breeding bands for the forage and water present. Individual behavior of geldings would be observed during the first breeding season following treatment (i.e., June-October). Monitoring would be designed to determine if they interfere with breeding harems (i.e., demonstrate stallion-like behavior) or form bachelor bands. Periodic population census, together with gather data from future gathers, will be used to determine whether managing a portion of the herd as geldings is effective in slowing the average annual population growth.

6.0 List of Preparers

The following list identifies the IDT member's area of responsibility:

Bill Andersen, Lead Preparer
Lindsay Davies, Fisheries Specialist
Lisa Grant, Riparian Specialist
Rhonda Karges, Planning and Environmental Coordinator
Gary McFadden, Wild Horse and Burro Specialist
Rachel McNeley, Rangeland Management Specialist
Rob Sharp, Rangeland Management Specialist

7.0 Consultation and Coordination

A public hearing was held at the Burns District Office on April 21, 2010, regarding the use of helicopters and motorized vehicles to capture wild horses (or burros) at a Statewide level and to discuss the upcoming Stinkingwater gather plan. During the hearing, the public was given the opportunity to present new information and to voice any concerns or opinions regarding the use of these methods to capture wild horses (or burros). There were no comments received during this meeting. There may be an additional hearing scheduled.

8.0 Public Involvement

The preliminary gather plan EA was made available for a 30-day review and comment period on May 19, 2010.

9.0 List of References

Department of Environmental Quality web site, www.deq.gov.

10.0 Appendices

Appendix A – Standard Operating Procedures (Gather Operation)

Appendix B – Win Equus Population Modeling Results

APPENDIX A

Standard Operating Procedures for Wild Horse (or Burro) Gathers

Gathers are conducted by utilizing Contractors from the Wild Horse (or Burros) Gathers-Western States Contract or BLM personnel. The following procedures for gathering and handling wild horses apply whether a Contractor or BLM personnel conduct a gather. For helicopter gathers conducted by BLM personnel, gather operations will be conducted in conformance with the *Wild Horse Aviation Management Handbook* (January 2009).

Prior to any gathering operation, the BLM will provide for a pre-capture evaluation of existing conditions in the gather area(s). The evaluation will include animal conditions, prevailing temperatures, drought conditions, soil conditions, road conditions, and a topographic map with wilderness boundaries, the 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 a large number of animals may need to be euthanized or capture operations could be facilitated by a veterinarian, these services would be arranged before the capture would proceed. The Contractor will be apprised of all conditions and will be given instructions regarding the capture and handling of animals to ensure their health and welfare is protected.

Trap sites and temporary holding sites will be located to reduce the likelihood of injury and stress to the animals, and to minimize potential damage to the natural resources of the area. These sites would be located on or near existing roads whenever possible.

The primary capture methods used in the performance of gather operations include:

1. Helicopter Drive Trapping. This capture method involves utilizing a helicopter to herd wild horses into a temporary trap.
2. Helicopter Assisted Roping. This capture method involves utilizing a helicopter to herd wild horses or burros to ropers.
3. Bait Trapping. This capture method involves utilizing bait (e.g., water or feed) to lure wild horses into a temporary trap.

The following procedures and stipulations will be followed to ensure the welfare, safety and humane treatment of wild horses in accordance with the provisions of 43 CFR 4700.

A. Capture Methods used in the Performance of Gather Contract Operations

1. The primary concern of the Contractor is the safe and humane handling of all animals captured. All capture attempts shall incorporate the following:

All trap and holding facilities locations must be approved by the Contracting Officer's Representative (COR) and/or the Project Inspector (PI) prior to construction. The Contractor may also be required to change or move trap locations as determined by the COR/PI. All traps and holding facilities not located on public land must have prior written approval of the landowner.

2. The rate of movement and distance the animals travel shall not exceed limitations set by the COR/PI who will consider terrain, physical barriers, weather, condition of the animals and other factors. Under normal circumstances this travel should not exceed 10 miles and may be much less dependent on existing conditions (i.e., ground conditions, animal health, and extreme temperature (high and low)).
3. All traps, wings, and holding facilities shall be constructed, maintained, and operated to handle the animals in a safe and humane manner and be in accordance with the following:
 - a. Traps and holding facilities shall be constructed of portable panels, the top of which shall not be less than 72 inches high for horses and 60 inches for burros, 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.
 - b. All loading chute sides shall be a minimum of 6 feet high and shall be fully covered, plywood, metal without holes larger than 2 inches by 4 inches.
 - c. All runways shall be a minimum of 30 feet long and a minimum of 6 feet high for horses, and 5 feet high for burros, and shall be covered with plywood, burlap, plastic snow fence or like material a minimum of 1 foot to 5 feet above ground level for burros and 1 foot to 6 feet for horses. The location of the government-furnished portable fly chute to restrain, age, or provide additional care for the animals shall be placed in the runway in a manner as instructed by or in concurrence with the COR/PI.
 - d. All crowding pens including the gates leading to the runways shall be covered with a material which prevents the animals from seeing out (plywood, burlap, plastic snow fence, etc.) and shall be covered a minimum of 1 foot to 5 feet above ground level for burros and 2 feet to 6 feet for horses.
 - e. All pens and runways used for the movement and handling of animals shall be connected with hinged self-locking or sliding gates.
4. No modification of existing fences will be made without authorization from the COR/PI. The Contractor shall be responsible for restoration of any fence modification which he has made.
5. When dust conditions occur within or adjacent to the trap or holding facility, the Contractor shall be required to wet down the ground with water.
6. Alternate pens, within the holding facility shall be furnished by the Contractor to separate mares or jennies with small foals, sick and injured animals, strays or other animals the COR determines need to be housed in a separate pen from the other animals. Animals shall be sorted as to age, number, size, temperament, sex, and condition when in the holding facility so as to minimize, to the extent possible, injury due to fighting and trampling. Under normal conditions, the government will require that animals be restrained for the purpose of determining an animal's age, sex, or other necessary procedures. In these instances, a portable restraining chute may be necessary and will be provided by the government.

Alternate pens shall be furnished by the Contractor to hold animals if the specific gathering requires that animals be released back into the capture area(s). In areas requiring one or more satellite traps, and where a centralized holding facility is utilized, the Contractor may be required to provide additional holding pens to segregate animals transported from remote locations so they may be returned to their traditional ranges. Either segregation or temporary marking and later segregation will be at the discretion of the COR.

7. The Contractor shall provide animals held in the traps and/or holding facilities with a continuous supply of fresh clean water at a minimum rate of 10 gallons per animal per day. Animals held for 10 hours or more in the traps or holding facilities shall be provided good quality hay at the rate of not less than 2 pounds of hay per 100 pounds of estimated body weight per day. The Contractor will supply certified weed-free hay if required by State, County, and Federal regulations.

An animal that is held at a temporary holding facility through the night is defined as a horse/burro feed day. An animal that is held for only a portion of a day and is shipped or released does not constitute a feed day.

8. It is the responsibility of the Contractor to provide security to prevent loss, injury or death of captured animals until delivery to final destination.
9. The Contractor shall restrain sick or injured animals if treatment is necessary. The COR/PI will determine if animals must be euthanized and provide for the destruction of such animals. The Contractor may be required to humanely euthanize animals in the field and to dispose of the carcasses as directed by the COR/PI.
10. Animals shall be transported to their final destination from temporary holding facilities as quickly as possible after capture unless prior approval is granted by the COR for unusual circumstances. Animals to be released back into the HMA following gather operations may be held up to 21 days or as directed by the COR. Animals shall not be held in traps and/or temporary holding facilities on days when there is no work being conducted except as specified by the COR. The Contractor shall schedule shipments of animals to arrive at final destination between 7:00 a.m. and 4:00 p.m. No shipments shall be scheduled to arrive at final destination on Sunday and Federal holidays, unless prior approval has been obtained by the COR. Animals shall not be allowed to remain standing on trucks while not in transport for a combined period of greater than 3 hours in any 24-hour period. 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/PI or Field Office horse specialist.

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

1. Capture attempts may be accomplished by utilizing bait (feed, water, mineral licks) to lure animals into a temporary trap. If this capture method is selected, the following applies:
 - a. Finger gates shall not be constructed of materials such as "T" posts, sharpened willows, etc., that may be injurious to animals.
 - b. All trigger and/or trip gate devices must be approved by the COR/PI prior to capture of animals.

- c. Traps shall be checked a minimum of once every 10 hours.
2. Capture attempts may be accomplished by utilizing a helicopter to drive animals into a temporary trap. If the Contractor selects this method the following applies:
 - a. A minimum of two saddle-horses shall be immediately available at the trap site to accomplish roping if necessary. Roping shall be done as determined by the COR/PI. Under no circumstances shall animals be tied down for more than one-half hour.
 - b. The Contractor shall assure that foals shall not be left behind, and orphaned.
3. Capture attempts may be accomplished by utilizing a helicopter to drive animals to ropers. If the Contractor, with the approval of the COR/PI, selects this method the following applies:
 - a. Under no circumstances shall animals be tied down for more than 1-hour.
 - b. The Contractor shall assure that foals shall not be left behind, or orphaned.
 - c. The rate of movement and distance the animals travel shall not exceed limitations set by the COR/PI who will consider terrain, physical barriers, weather, condition of the animals and other factors.

C. Use of Motorized Equipment

1. All motorized equipment employed in the transportation of captured animals shall be in compliance with appropriate State and Federal laws and regulations applicable to the humane transportation of animals. The Contractor shall provide the COR/PI, if requested, with a current safety inspection (less than 1-year old) for all motorized equipment and tractor-trailers used to transport animals to final destination.
2. All motorized equipment, tractor-trailers, and stock trailers shall be in good repair, of adequate rated capacity, and operated so as to ensure that captured animals are transported without undue risk or injury.
3. Only tractor-trailers or stock trailers with a covered top shall be allowed for transporting animals from trap site(s) to temporary holding facilities, and from temporary holding facilities to final destination(s). Sides or stock racks of all trailers used for transporting animals shall be a minimum height of 6 feet 6 inches from the floor. Single deck tractor-trailers 40 feet or longer shall have at least two partition gates providing at least three compartments within the trailer to separate animals. Tractor-trailers less than 40 feet shall have at least one partition gate providing at least two compartments within the trailer to separate the animals. Compartments in all tractor-trailers shall be of equal size plus or minus 10 percent. Each partition shall be a minimum of 6 feet high and shall have a minimum 5-foot wide swinging gate. The use of double deck tractor-trailers is unacceptable and shall not be allowed.
4. All tractor-trailers used to transport animals to final destination(s) shall be equipped with at least one door at the rear end of the trailer which is capable of sliding either horizontally or vertically.

The rear door(s) of tractor-trailers and stock trailers must be capable of opening the full width of the trailer. 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 all trailers must be strong enough so that the animals cannot push their hooves through the side. Final approval of tractor-trailers and stock trailers used to transport animals shall be held by the COR/PI.

5. Floors of tractor-trailers, stock trailers and loading chutes shall be covered and maintained with wood shavings to prevent the animals from slipping as much as possible during transport.
6. Animals to be loaded and transported in any trailer shall be as directed by the COR/PI and may include limitations on numbers according to age, size, sex, temperament and animal condition. The following minimum square feet per animal shall be allowed in all trailers:
 - 11 square feet per adult horse (1.4 linear foot in an 8-foot wide trailer);
 - 8 square feet per adult burro (1.0 linear foot in an 8-foot wide trailer);
 - 6 square feet per horse foal (.75 linear foot in an 8-foot wide trailer);
 - 4 square feet per burro foal (.50 linear feet in an 8-foot wide trailer).
7. The COR/PI shall consider the condition and size of the animals, weather conditions, distance to be transported, or other factors when planning for the movement of captured animals. The COR/PI shall provide for any brand and/or inspection services required for the captured animals.
8. If the COR/PI determines that dust conditions are such that the animals could be endangered during transportation, the Contractor will be instructed to adjust speed.

D. Safety and Communications

1. The Contractor shall have the means to communicate with the COR/PI and all Contractor personnel engaged in the capture of wild horses utilizing a VHF/FM Transceiver or VHF/FM portable Two-Way radio. If communications are ineffective the government will take steps necessary to protect the welfare of the animals.
 - a. The proper operation, service and maintenance of all Contractor-furnished property is the responsibility of the Contractor. The BLM reserves the right to remove from service any Contractor personnel or Contractor-furnished equipment which, in the opinion of the CO or COR/PI violate contract rules, are unsafe or otherwise unsatisfactory. In this event, the Contractor will be notified in writing to furnish replacement personnel or equipment within 48 hours of notification. All such replacements must be approved in advance of operation by the CO or his/her representative.
 - b. The Contractor shall obtain the necessary FCC licenses for the radio system.
 - c. All accidents occurring during the performance of any task order shall be immediately reported to the COR/PI.

2. Should the Contractor choose to utilize a helicopter the following will apply:
 - a. 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.
 - b. Fueling operations shall not take place within 1,000 feet of animals.

G. Site Clearances

No personnel working at gather sites may excavate, remove, damage, or otherwise alter or deface or attempt to excavate, remove, damage or otherwise alter or deface any archaeological resource located on public lands or Indian lands.

Prior to setting up a trap or temporary holding facility, BLM will conduct all necessary clearances (archaeological, T&E, etc). All proposed site(s) must be inspected by a government archaeologist. Once archaeological clearance has been obtained, the trap or temporary holding facility may be set up. Said clearance shall be arranged for by the COR, PI, or other BLM employees.

Gather sites and temporary holding facilities would not be constructed on wetlands or riparian zones.

H. Animal Characteristics and Behavior

Releases of wild horses would be near available water. If the area is new to them, a short-term adjustment period may be required while the wild horses become familiar with the new area.

I. Public Participation

Opportunities for public viewing (i.e., media, interested public) of gather operations will be made available to the extent possible; however, the primary considerations will be to protect the health, safety and welfare of the animals being gathered and the personnel involved. The public must adhere to guidance from the onsite BLM representative. It is BLM policy that the public will not be allowed to come into direct contact with wild horses or burros being held in BLM facilities. Only authorized BLM personnel or Contractors may enter the corrals or directly handle the animals. The general public may not enter the corrals or directly handle the animals at anytime or for any reason during BLM operations.

J. Responsibility and Lines of Communication

Contracting Officer's Representative/Project Inspector

Gary McFadden

The CORs and the PIs have the direct responsibility to ensure the Contractor's compliance with the contract stipulations. The Three Rivers Resource Area Field Manager will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, State Office, National Program Office, and BLM Holding Facility offices. All employees involved in the gathering operations will keep the best interests of the animals at the forefront at all times.

All publicity, formal public contact and inquiries will be handled through the Assistant Field Managers for Renewable Resources and Field Office Public Affairs. These individuals will be the primary contact and will coordinate with the COR/PI on any inquiries.

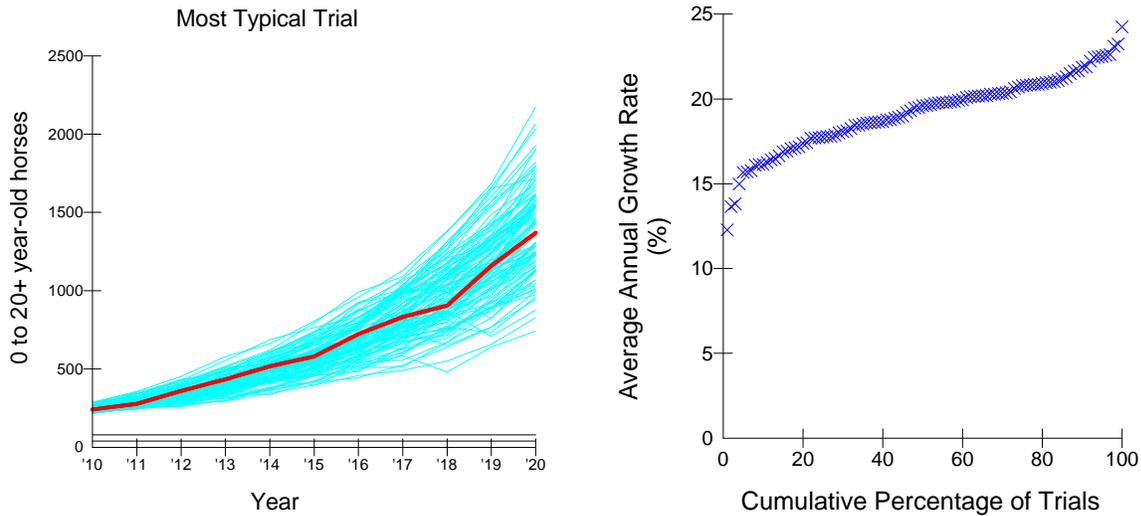
The COR will coordinate with the Contractor and the BLM Corrals to ensure animals are being transported from the capture site in a safe and humane manner and are arriving in good condition.

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

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

APPENDIX B

No Action Alternative:



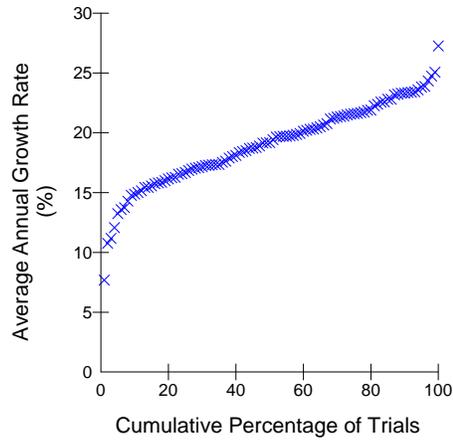
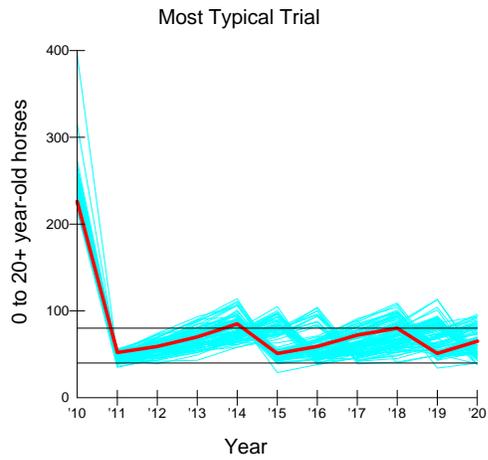
Population Sizes in 11 Years*

	Minimum	Average	Maximum
Lowest Trial	215	434	742
10th Percentile	219	543	1,039
25th Percentile	226	596	1,208
Median Trial	236	674	1,430
75th Percentile	247	750	1,592
90th Percentile	265	819	1,772
Highest Trial	287	937	2,173

Average Growth Rate in 10 Years

Lowest Trial	12.3
10th Percentile	16.2
25th Percentile	17.8
Median Trial	19.6
75th Percentile	20.8
90th Percentile	21.9
Highest Trial	24.2

Proposed Action:



Totals in 11 Years*
 Gathered Removed

Lowest Trial	213	204
10th Percentile	234	226
25th Percentile	268	258
Median Trial	282	273
75th Percentile	303	290
90th Percentile	317	306
Highest Trial	363	351

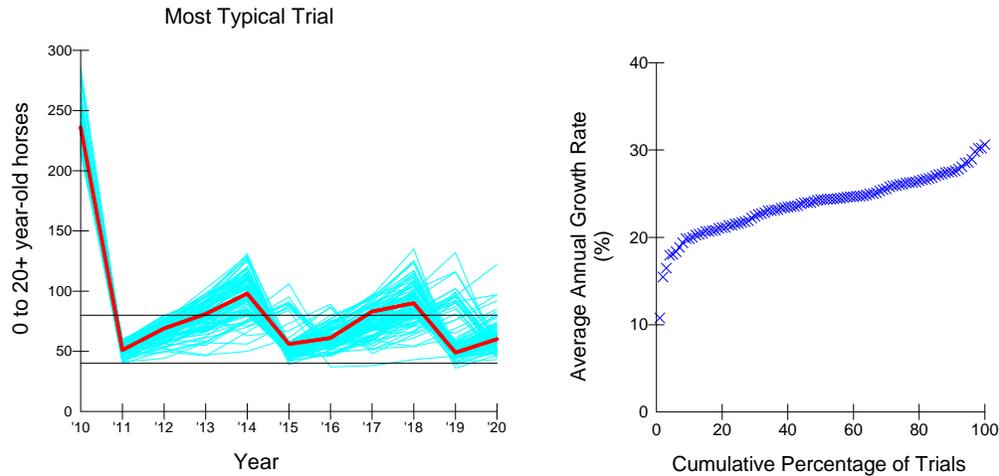
Population Sizes in 11 Years*

	Minimum	Average	Maximum
Lowest Trial	29	70	215
10th Percentile	39	76	219
25th Percentile	42	78	224
Median Trial	44	80	231
75th Percentile	47	82	242
90th Percentile	49	85	256
Highest Trial	53	90	395

Average Growth Rate in 10 Years

Lowest Trial	7.7
10th Percentile	14.9
25th Percentile	16.8
Median Trial	19.3
75th Percentile	21.6
90th Percentile	23.3
Highest Trial	27.3

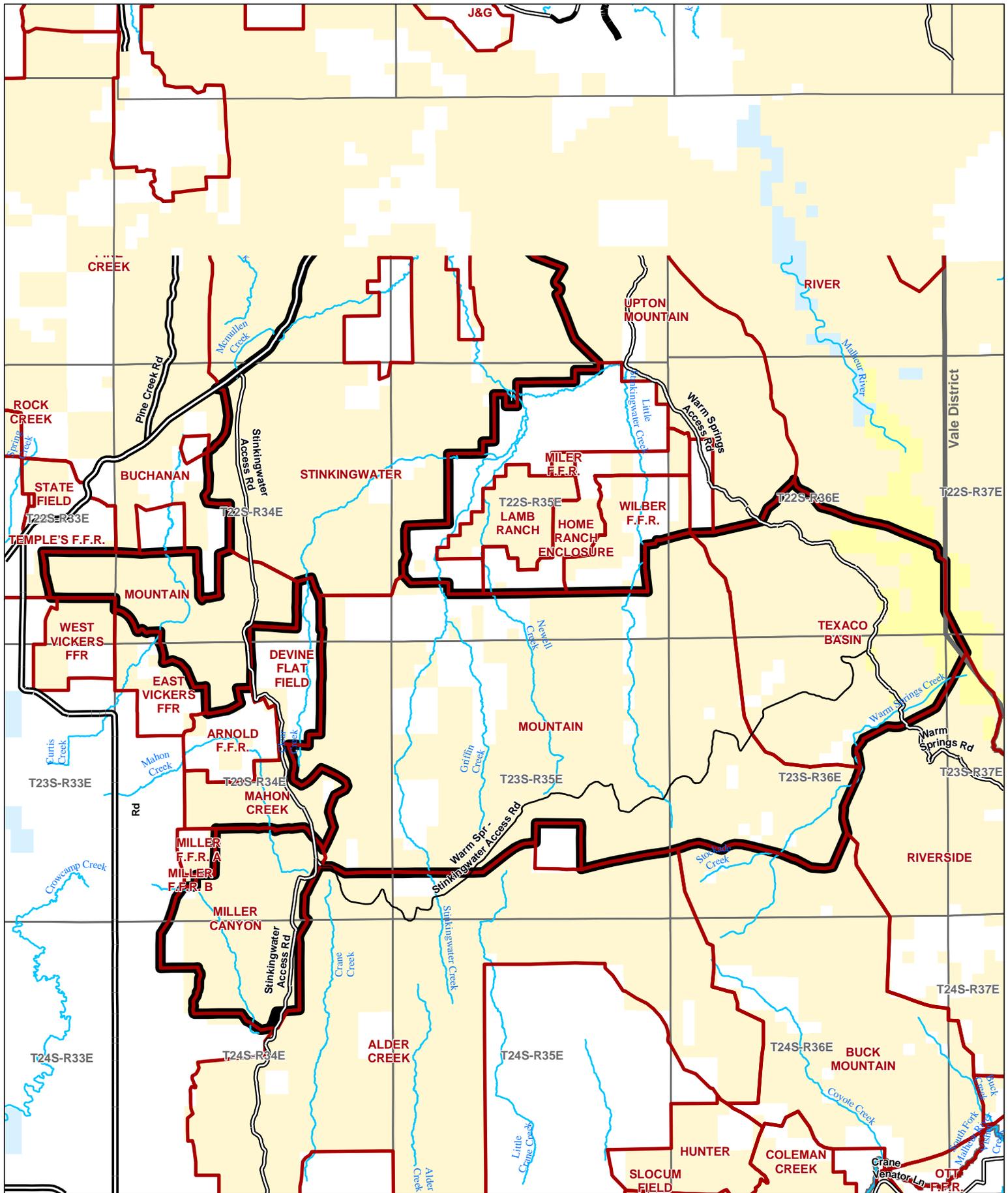
Alternative 3:



	Totals in 11 Years*	
	Gathered	Removed
Lowest Trial	237	213
10th Percentile	294	264
25th Percentile	308	278
Median Trial	324	292
75th Percentile	343	308
90th Percentile	356	321
Highest Trial	415	373

	Population Sizes in 11 Years*		
	Minimum	Average	Maximum
Lowest Trial	36	68	214
10th Percentile	41	80	218
25th Percentile	44	82	224
Median Trial	47	85	234
75th Percentile	49	88	242
90th Percentile	51	90	259
Highest Trial	54	97	286

	Average Growth Rate in 10 Years
Lowest Trial	10.8
10th Percentile	19.9
25th Percentile	21.6
Median Trial	24.3
75th Percentile	26.1
90th Percentile	27.6
Highest Trial	30.6



Stinkingwater Herd Management Area

Legend

- Herd Management Area
- Allotments
- District Boundary
- Bureau of Land Management Private
- State
- Bureau of Reclamation
- Major Streams
- Paved Road
- Non-Paved Improved Road
- Primitive or Unknown Road Surface

2 Miles

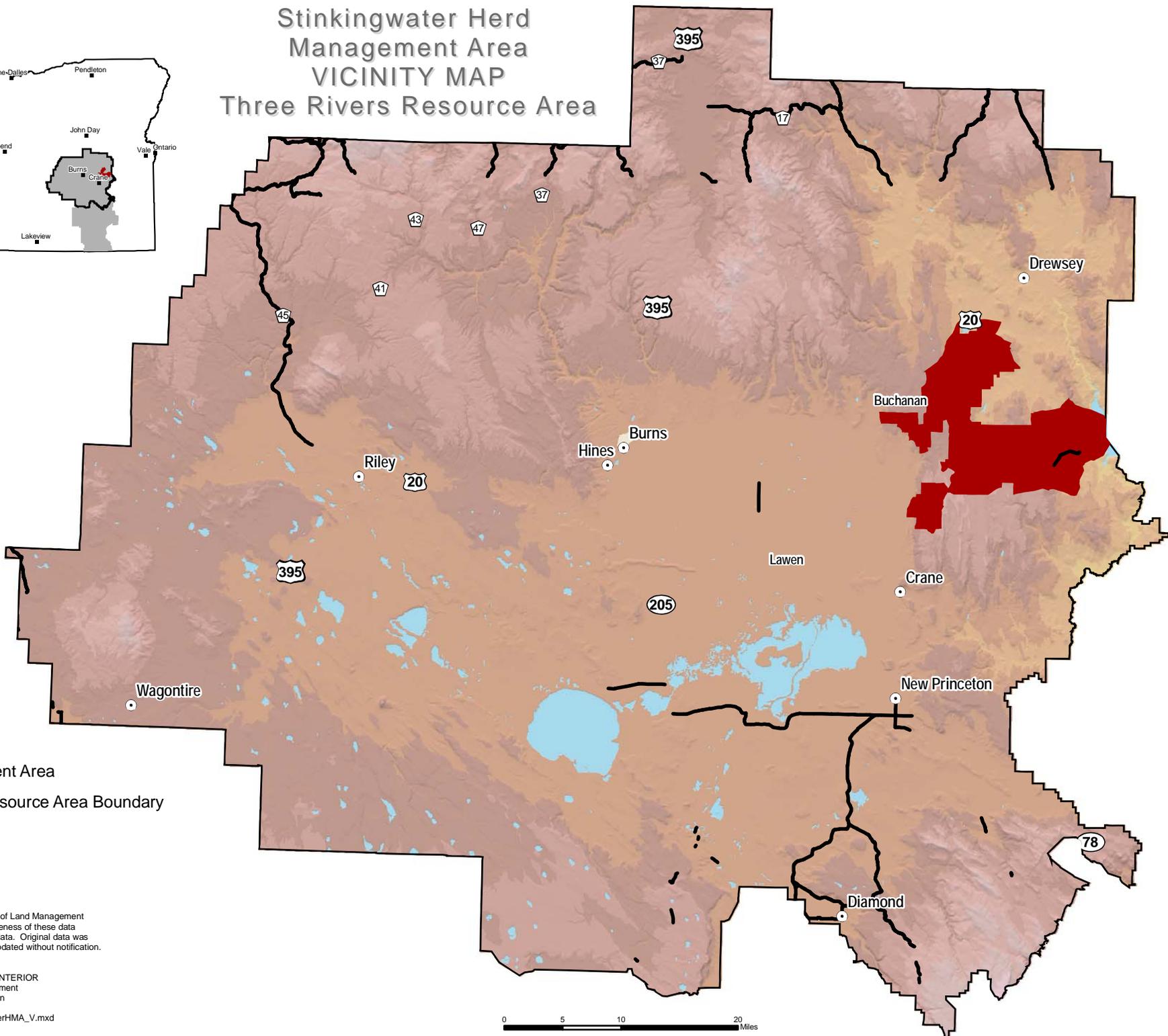
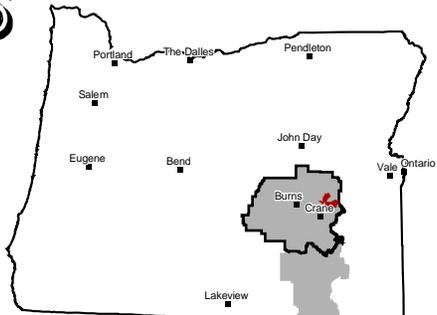


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Bureau of Land Management
Burns District, Oregon

Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual or aggregate use with other data. Original data was compiled from various sources and may be updated without notification.

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Stinkingwater Herd Management Area VICINITY MAP Three Rivers Resource Area



Legend

- Herd Management Area
- Three Rivers Resource Area Boundary
- Major Roads



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