



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Humboldt River Field Office
5100 East Winnemucca Boulevard
Winnemucca, Nevada 89445

AUG 18 2009

In Reply Refer to:

4700/1792 (NV-010) (NV-010-18)

Dear Reader:

The Bureau of Land Management (BLM) Humboldt River Field Office (HRFO) has completed the *Tobin Range Herd Management Area and Sonoma Herd Area Wild Horse Capture Plan and Preliminary Environmental Assessment (EA)*.

This preliminary EA can be reviewed online at

http://www.blm.gov/nv/st/en/fo/wfo/blm_information/nepa0.html.

Hardcopies are also available upon request. The purpose of this environmental assessment (EA) is to analyze the impacts associated with the BLM's proposal to capture about 450, release about 10, and remove approximately 440 excess wild horses from the Tobin Range Herd Management Area (HMA) and the Sonoma Range Herd Area (HA). The gather would begin about October 22, 2009. The proposed gather is needed to achieve and maintain the established appropriate management level (AML) and prevent further range deterioration resulting from the current overpopulation of wild horses within the HMA. The Tobin Range HMA and Sonoma Range HA are located 30 miles south and east of Winnemucca, within Pershing and Humboldt Counties, Nevada.

The BLM would appreciate receiving substantive comments on this preliminary EA by the close of business on Friday September 18, 2009. Questions and written comments should be directed to:

Robert J. Edwards, Field Manager, Humboldt River Field Office
BLM Winnemucca District Office
5100 E. Winnemucca Blvd
Winnemucca, NV 89445-2921

Comments may also be submitted by email to wfoweb@nv.blm.gov. Email messages should include "Tobin Range Capture Plan (Fox)" in the subject line.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

After the public review period has ended, comments will be analyzed and considered as part of the decision-making process.

Sincerely,



for Robert J. Edwards
Field Manager
Humboldt River Field Office

Preliminary Environmental Assessment DOI-BLM-NV-WO10-2009-0007-EA

Tobin Range Herd Management Area and Sonoma Herd Area Wild Horse Capture Plan



Wild horse herd in the Tobin Range HMA, August 2008.

August 2009

Prepared by:

U.S. Bureau of Land Management
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It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

BLM/NV/WN/EA-GI-09/22+8300

DOI-BLM-NV-WO10-2009-0007-EA

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1.0 INTRODUCTION

The purpose of this environmental assessment (EA) is to analyze the potential impacts associated with the Bureau of Land Management's (BLM's) proposal to capture and remove excess wild horses from the Tobin Range Herd Management Area (HMA) and the Sonoma Range Herd Area (HA) during the fall of 2009. The Sonoma-Gerlach Management Framework Plan (MFP) (July 9, 1982) identified the management of zero (0) wild horses within the Sonoma Range HA. Wild horses occupy an area within the Tobin Range HMA and the Sonoma Range HA, seasonally these wild horses can be found in either area or both. move from the Tobin Range HMA into the Sonoma Range HA. The proposed gather is needed to achieve and maintain the established AML and prevent further range deterioration resulting from the current overpopulation of wild horses within the area.

This EA contains the site-specific analysis of potential impacts that could result with the implementation of the Proposed Action or No Action. Based on the following analysis of potential environmental consequences, a determination can be made whether to prepare an Environmental Impact Statement (EIS) or issue a "Finding of No Significant Impact" (FONSI). A FONSI documents why implementation of the selected alternative will not result in environmental impacts that significantly affect the quality of the human environment.

1.1 Background Information

The Tobin Range Herd HMA and Sonoma Range HA are located about 30 miles south and east of Winnemucca, Nevada within Pershing County (refer to Map 1).

The AML for wild horses within the Tobin Range HMA is established as a range of 22-42 wild horses as follows:

Table 1

TOBIN RANGE HERD MANAGEMENT AREA		
Allotment	Decision and Date	AML
Gold Banks	Sonoma-Gerlach Management Framework Plan (MFP), 1982	0
Pleasant Valley	Sonoma-Gerlach Management Framework Plan (MFP), 1982	0
Pumpernickel	Final Multiple Use Decision (FMUD), 1996	13-17
South Buffalo	EA#NV-020-05-15, 2005 Decision Date 09/06/2005	9-25
TOTAL AML		22-42

The established population range allows the population to grow at about 24% per year to the high range of the AML over a 3 year period without the need for removal of excess animals in the interim.

Aerial census completed in September 2007 provided a direct count of 287 wild horses within and outside the Tobin Range HMA. At a 24% per year population growth rate, the estimated wild horse population size following the 2009 foaling season will be 443 wild horses, approximately 20 times the low range of the AML.

The Tobin Range HMA is continuing to experience moderate drought conditions. National Oceanic and Atmospheric Administration reported below normal precipitation for the 2008 growing season and is abnormally dry through July 2009. Field site inspections completed throughout summer-fall-winter 2008/2009 indicated continuing drought conditions are limiting the forage and water available for use by wild horses in portions of the Pumpnickel and South Buffalo Allotments within this HMA as shown by:

- Dramatic decreases in water flows in China Creek and the two other major water sources within the Pumpnickel Allotment portion of the Tobin Range HMA boundary. If drought conditions continue, the available water is not expected to be sufficient to support the existing wild horse herd's present numbers and large numbers of wild horses would be expected to continue to rely on areas outside the established HMA boundary for forage and water.
- Low vigor and below average vegetative production during the 2008 growing season was probably due to below average moisture and unusually hot temperatures. Sandberg's blue grass (*Poa secunda*) and cheatgrass (*Bromus tectorum*) plants were seeded out as of mid May 2008 with about 1-2" leaf growth and 2-3" leaf growth, respectively. Grass plants were about a month ahead of normal maturation schedules; annual growth was completed by the end of May 2008.
- Total utilization of key forage species during 2007 and 2008 was greater than 50%.
- Riparian areas show high trampling, compaction, and bank shearing impacts from wild horses and insufficient stubble heights (< 3 inches) to adequately protect riparian systems and provide wildlife habitat. Trailing damage (compaction and erosion) is evident throughout the area as horses move between forage and water.
- About 323 wild horses are residing outside the Tobin Range HMA in areas not designated for use by wild horses due to space and available forage.

Vegetation and population monitoring of the Tobin Range HMA and the Sonoma Range HA has determined that current wild horse populations are exceeding the rangeland's ability to sustain wild horse use over the long-term. Resource damage is occurring and is likely to continue to occur, especially with current moderate drought conditions, low forage production and a forecast for continued below normal precipitation. Excess animals are present and require immediate removal.

1.2 Purpose and Need

The purpose of the Proposed Action is to capture and remove excess wild horses from the Tobin Range HMA and Sonoma HA. The remaining population would be within the AML range and

would assist to protect rangeland resources from the deterioration associated with the current overpopulation of wild horses as authorized under Section 3(b) (2) of the *Wild Free-Roaming Horses and Burros Act of 1971* (1971 WFRHBA) and Section 302(b) of the Federal Land Policy and Management Act of 1976 (FLPMA).

Implementation of the Proposed Action is needed at this time to achieve and maintain established appropriate management levels; to make significant progress toward achievement of Sierra Front-Northwest Great Basin Standards for Rangeland Health; to achieve a thriving natural ecological balance between wild horse populations, wildlife, vegetation, riparian-wetland resources, water resources, and domestic livestock; and to protect wild horse health and sustainability.

1.3 Land Use Plan Conformance

The Proposed Action is in conformance with the Sonoma-Gerlach MFP(1982). Applicable decisions and goals are: “to manage sustainable populations of wild horses, maintain a thriving ecological balance, and to maintain free-roaming behavior.”

1.4 Relationship to Laws, Regulations, and Other Plans

Under the Proposed Action alternative in this EA, no federal, state, or local law, or requirement imposed for the protection of the environment will be threatened or violated. The Proposed Action is in conformance with all applicable regulations at 43 CFR (Code of Federal Regulations) 4700 and policies, as well with the 1971 WFRHBA. More specifically, this action is designed to remove excess wild horses consistent with the following regulation:

- ❑ 43 CFR 4720.1: “*Upon examination of current information and a determination that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately...*”

1.5 Conformance with Rangeland Health Standards

The Tobin Range HMA has not yet been assessed for conformance with the *Standards and Guidelines for Rangeland Health* developed in consultation with the Sierra Front-Northwestern Great Basin Resource Advisory Council (RAC). However, water inventory and riparian functionality data, as well as utilization monitoring and trend data, indicates excess wild horse use is contributing to the Riparian/Wetland, Plant and Animal Habitat Standards not being met. The Proposed Action is consistent with making significant progress towards or meeting rangeland health standards and conforms to the recommendations presented in the March 2007 *Standards and Guidelines for Management of Wild Horses and Burros of the Sierra Front-Northwest Great Basin Area* (Appendix A).

1.6 Identification of Issues

The following issues were identified as a result of internal scoping and consultation with the Resource Advisory Board, Wild Horse Commission and affected livestock operators and will be used in this EA to analyze the alternatives:

1. Impacts to individual wild horses and the herd from proposed capture, removal, and handling procedures. Measurement indicators for this issue include:
 - Projected population size and annual growth rate using annual recruitment rates
 - Expected impacts to individual wild horses from handling stress
 - Expected impacts to herd social structure
 - Potential effects to genetic diversity
 - Potential impacts to animal health and condition

2. Impacts to potentially affected critical and other elements of the human environment (**Soils, Vegetation, Wildlife, Migratory Birds, and Special Status Species**) from the proposed wild horse capture and removal. Measurement indicators for this issue include:
 - Potential for temporary displacement, trampling or disturbance
 - Potential competition for forage and water over time (expected change in actual forage utilization by wild horses)
 - Expected impacts to range condition over time

2.0 PROPOSED ACTION AND ALTERNATIVES

This section of the EA describes the Proposed Action and alternatives, including any that were considered but eliminated from detailed analysis. Alternatives analyzed in detail include the following:

- Proposed Action: Remove Excess Wild Horses
- No Action: Defer Gather and Removal

The Proposed Action was developed to meet the purpose and need (i.e. to achieve and maintain established AML; to make significant progress toward achievement of the RAC's Standards and Guidelines for Rangeland Health; to achieve a thriving natural ecological balance between wild horse populations, wildlife, vegetation, riparian-wetland resources, water resources, and domestic livestock; to protect wild horse health and sustainability; and to prevent further deterioration of the range associated with the current overpopulation) and in response to the issues identified during internal scoping and consultation. Although the No Action alternative does not comply with the 1971 WFRHBA (as amended), nor does it meet the purpose and need for action, it is included as a basis for comparison with the Proposed Action.

2.1 Description of Alternatives Considered in Detail

2.1.1 Proposed Action: Remove Excess Wild Horses

The Proposed Action would capture and remove excess wild horses from the Tobin Range HMA and Sonoma Range HA during the fall of 2009:

Table 2

Item	Tobin Range HMA	Sonoma Range HA
	2009	2009
AML	22-42	0
Est'd Population	320	123
Est'd Removal No.	298	123
Post-Gather Pop. Est.	22-42	0

- The gather would be completed in about eight to ten days. All gathering and handling activities would be conducted in accordance with the Standard Operating Procedures (SOPs) described in Appendix B. Factors such as animal condition, herd health, weather conditions, or other considerations could result in the gather being delayed until 2010.
- The helicopter drive trapping method would be used and would include multiple trap sites. BLM would be responsible for contractor compliance to national contract specifications, including SOPs.
- Undisturbed areas would be inventoried for cultural resources. If cultural resources are encountered, these locations would not be utilized unless they could be modified to avoid impacts to cultural resources. Trap sites and holding facilities would not be placed in known areas of Native American concern.
- Trap sites and holding facilities would not be located in or near wilderness study areas (WSAs). Wild horses located within the WSAs would be driven out with helicopters and trapped in another location. Census data shows wild horse populations are currently low or nonexistent in the China Mountain and Tobin Range WSA.
- Information such as: age, sex, color, body condition, or other characteristics would be recorded on captured animals.
- Hair samples for genetic testing would be taken on approximately 20-25 horses.
- Excess animals would be sent to BLM facilities for adoption, sale, or long-term holding.
- Noxious weed monitoring at trap sites and temporary holding facilities would be conducted in the spring and summer of 2010 by BLM. Treatment would be provided, if necessary, following guidance from the Noxious Weed Control EA# NV-020-02-19, 8/27/2002.

2.1.2 No Action: Defer Gather & Removal

Under the No Action Alternative the capture and removal of excess wild horses would be deferred. There would be no active management to control the size of the wild horse populations at this time. The wild horse population would continue to grow at 24% per year and would be expected to reach 549 animals by 2010 (about 25 times the low range of AML

The No Action Alternative would not comply with the 1971 WFRHBA or with applicable regulations and BLM policy, nor would it comply with the *Standards and Guidelines for Management of Wild Horses and Burros of the Sierra Front-Northwest Great Basin Area*. However, it is included as a baseline for comparison with the Proposed Action.

2.2 Alternative Considered but Dismissed from Detailed Analysis

An alternative considered but dismissed from detailed analysis was use of bait and/or water trapping as the primary gather method. This alternative was dismissed from detailed study for the following reasons: (1) nearly $\frac{3}{4}$ of the wild horses present reside outside the HMA in an area not approved for wild horse use; (2) outside the HMA boundary, a large number of water sources are present on both private and public lands which would make it impractical to restrict wild horse access and effectively remove the animals without extending the time required to remove the horses. The expanded area and the extended time would result in an increase in gather cost.

3.0 THE AFFECTED ENVIRONMENT

This section of the EA briefly discusses the relevant components of the human environment which would be either affected or potentially affected by the Proposed Action and/or No Action Alternative (refer to Tables 1 and 2 below).

3.1 General Description of the Affected Environment

The Tobin Range Herd Use Area (HUA) was designated in its entirety as a HMA by the 1982 Sonoma-Gerlach MFP. Initial herd size was established at 19 wild horses. The HMA comprises a total of 195,136 acres, of which 7,702 acres is unfenced private land 3.9%. This range is oriented north south with large valleys on both the west and east sides. Elevations range from 9,775 feet to 4,371 feet. Dominant vegetation is characterized by big sagebrush, saltbrush, bud sage, low sage, Utah juniper, rabbitbrush, horsebrush, Sandberg bluegrass, cheat grass, bottlebrush, squirreltail, needlegrass, halogeton, Russian thistle, and tansymustard. Average annual precipitation ranges from 4 to 6 inches at lower elevations and occurs as snow during winter months with spring and fall rains and run off from higher elevations. Precipitation has been below normal during 7 of the last 10 years which has caused annual production of available forage to be below normal.

AML was set for the Tobin Range HMA in 2005 as a population range of 22-42 animals (refer to Section 2.1.1 for additional information). Even though this HMA has never previously been gathered in a pure sense, the population was kept in check by neighboring gathers. Once the neighboring gathers stopped the Tobin Range HMA was left to expand by 20 to 24% annual growth rate to present population size.

The Sonoma HUA was identified as an area used by wild horses when the WFRHBA passed in 1971. However, the HUA was not designated as a HMA suitable for the long-term management of wild horses through the 1982 Sonoma-Gerlach MFP due to the amount of intermingled private land which landowners did not want managed for wild horses.

3.2 Supplemental Authorities (Critical Environmental Elements of the Human Environment)

To comply with the National Environmental Policy Act (NEPA), the following elements of the human environment (Table 1) are subject to requirements specified in statute, regulation or executive order and must be considered.

Table 3: Supplemental Authorities (Critical Elements of the Human Environment)

Supplemental Authorities	Present	Affected	Rationale
Air Quality	YES	NO	The proposed gather area is not within an area of non-attainment or areas where total suspended particulates exceed Nevada air quality standards. Areas of disturbance would be small and temporary.
Areas of Critical Environmental Concern (ACEC's)	NO	NO	
Cultural Resources	YES	YES	Trap sites and/or holding corrals would be placed in disturbed areas or inventoried prior to use. Locations would avoid cultural resource sites. However, other potential impacts are addressed.
Environmental Justice	NO	NO	
Floodplains	NO	NO	
Invasive, Nonnative Species	YES	NO	Any noxious weeds or non-native invasive weeds would be avoided when establishing trap and/or holding facilities, and would not be driven through. Noxious weed monitoring at trap/holding sites would be conducted and applicable treatment of weeds would occur per Noxious Weed Control EA#NV-020-02-19 (8/27/2002) as needed.
Migratory Birds	YES	YES	Discussed below.
Native American Religious Concerns	YES		Consultation is on-going
Prime or Unique Farmlands	NO	NO	
Threatened & Endangered Species	NO	NO	
Wastes, Hazardous or Solid	NO	NO	
Water Quality (Surface/Ground)	YES	YES	Discussed below
Wetlands and Riparian Zones	YES	YES	Discussed below.
Wild and Scenic Rivers	NO	NO	
Wilderness	NO	NO	

Supplemental authorities identified in Table 1 as present and potentially affected by the Proposed Action and/or No Action alternatives include: Cultural Resources, Migratory Birds, Native American Religious Concerns, Water Quality, and Wetlands and Riparian Zones. These critical elements are discussed further in the following sections.

3.2.1 Cultural Resources

The project area is located in the Tobin Range and the southern areas of the Sonoma Range of the Northern Great Basin. The Tobin and Sonoma Ranges are large dynamic areas with rich prehistoric and historic cultural histories and has been occupied for up to the last 12,000 years. The occupation of mountain ranges has varied significantly over time driven by the changes of the environment from the lakes of Lahontan to the dry climate of modern time, the historic rush to the west, the boom and bust of mining, and the resilience and persistence of settlers.

The cultural use of the area would have varied over time. During the early periods of the cultural use of the area the shore lines of Lake Buffalo were to the east of the Tobin Range. The shore lines of Lake Lahontan were to the northwest of the southern portion of the Sonoma Range during the same time. Cultural use of the project area would have been utilized primarily for hunting and gathering with the potential for temporary or longer term campsites. During the Archaic and Late Prehistoric periods these areas would have continued to be utilized for hunting and plant gathering. In the historic period the project area would have been primarily utilized by miners and associated industries, ranchers, and settlers.

Cultural resources that can be expected in and around the project area could consist of isolated prehistoric and historic artifacts; lithic scatters that could represent temporary, extended, or multiple occupation sites; historic mine sites and debris; and ranching and herding sites. These sites could consist of surficial or surficial with subsurface deposits.

3.2.2 Migratory Birds

Migratory birds are protected and managed under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et. seq.*) and Executive Order 13186. Under the MBTA nests (nests with eggs or young) of migratory birds may not be harmed, nor may migratory birds be killed. Executive Order 13186 directs federal agencies to promote the conservation of migratory bird populations.

Migratory birds that may be associated with adjoining vegetative communities typically characterized by sagebrush or salt desert shrub may include: black-throated sparrow (*Amphispiza bilineata*), Brewer's blackbird (*Euphagus cyanocephalus*), Brewer's sparrow (*Spizella breweri*), burrowing owl (*Athene cunicularia*), canyon wren (*Catherpes mexicanus*), gray flycatcher (*Empidonax wrightii*), green-tailed towhee (*Pipilo chlorurus*), loggerhead shrike (*Lanius ludovicianus*), rock wren (*Salpinctes obsoletus*), sage sparrow (*Amphispiza belli*), sage thrasher (*Oreoscoptes montanus*), western meadowlark (*Sturnella neglecta*), and vesper sparrow (*Pooecetes gramineus*) (Great Basin Bird Observatory, 2003).

Most of these species require a diversity of plant structure and herbaceous understory. Good diversity provides sufficient habitat for nesting, foraging and cover.

The burrowing owl, loggerhead shrike, and vesper sparrow are designated BLM sensitive species.

3.2.3 Native American Religious Concerns

The proposed project area is located in the traditional territory of the Makuhadökadö, also known as the Pauida tuviwarai, bands of the Northern Paiute. Traditionally the area of the proposed action would have been utilized primarily for hunting and gathering with the potential for periods of longer term occupations (Stewart 1939). To date, no Traditional Cultural Properties or Sacred Sites have been identified within the project area that might be impacted by the Proposed Action or No Action alternative. Consultation is on-going.

3.2.4 Water Quality

There are two ponds and one intermittent creek that supply water for the horses in the Pumpnickel Allotment portion of the Tobin HMA where 320 horses are, or 72% of the horses in this HMA. Water quality can become contaminated with fecal material and urine especially during periods of low flows when available watering sites are limited and demand by animals are highest.

3.2.5 Wetlands and Riparian Zones

There are two ponds and one intermittent creek that supply water for the horses in the Pumpnickel Allotment portion of the Tobin HMA where 320 horses are, or 72% of the horses in this HMA. Riparian sites have been recently assessed for riparian functionality. The majority of sites are classified as “functioning at risk.” Wild horses contribute to riparian degradation through the removal of riparian vegetation and by trailing/trampling/loafing which denudes the area, compacts the soil, and alters stream banks. Riparian sites are heavily impacted (photos 1 and 2) as most sites are small and flows are minimal, especially during the summer or in dry years. The following riparian sites have been assessed for riparian functionality on Cherry Creek, Hoffman Canyon Creek, Lee Canyon, Pollard Creek, and eight springs within the HMA. The majority of sites are classified as “functioning at risk - static.” Wild horses contribute to riparian degradation through the removal of riparian vegetation and by trailing/trampling/loafing which denudes the area, compacts the soil, and alters stream banks. Riparian sites are heavily impacted (photos 1 and 2) as most sites are small and flows are minimal, especially during the summer or in dry years.



Photo 1. Spring flow to pond at Smelser Pass 6/08.



Photo 2. Kent Springs on private lands outside HMA 6/08.

3.3 Additional Affected Resources

In addition to the critical elements, the following resources may be affected by the Proposed Action and/or No Action alternative: rangeland management, soils, special status species, vegetation, wild horses, wildlife, and wilderness study areas.

The proposed project area is located within areas of Class 1, 2, 3a, 3b, and 4a Potential Fossil Yields with known Miocene and Pliocene vertebrate sites. The proposed action should have no effect on paleontological resources.

Table 4: Other Affected Resources

OTHER RESOURCES	Present	Affected
Rangeland Management	YES	YES
Soils	YES	YES
Special Status Species	YES	YES
Vegetation	YES	YES
Wild Horses	YES	YES
Wildlife	YES	YES
Wilderness Study Area	YES	YES

3.3.1 Rangeland Management

Portions of the South Buffalo, Pumpernickel, Pleasant Valley, and Gold Banks Allotments are within the Tobin Range HMA (refer to Map 1).

Table 5: Authorized Livestock Use

ALLOTMENT	Percent of Allotment within HMA	LIVESTOCK #/KIND	GRAZING PERIOD
South Buffalo	43%	743 Cattle	3/1 to 2/28
		15 Cattle	4/1 to 11/30
Pumpernickel	5%	4050 Sheep	3/1 to 6/30
		500 Sheep	7/1 to 9/30
		3275 Sheep	10/01 to 2/28
		212 Cattle	11/11 to 5/8
		120 Cattle	10/12 to 5/8
		57 Cattle	12/1 to 9/30
		Pleasant Valley	54%
90 Cattle	4/1 to 5/16		
524 Cattle	4/16 to 10/3		
100 Cattle	3/1 to 3/15		
181 Cattle	3/16 to 3/31		
359 Cattle	4/1 to 7/31		
303 Cattle	8/1 to 8/31		
323 Cattle	9/1 to 10/31		
143 Cattle	11/1 to 11/30		
Goldbanks	48%		
		222 Cattle	5/1 to 10/31
		223 Cattle	12/1 to 2/28
		426 Sheep	1/1 to 3/31

Pumpernickel Allotment

Within the Pumpernickel Allotment more cattle have been authorized for a shorter period of time to shift use away from the hot season to the winter and spring. This was authorized due to the lack of water in the allotment. Domestic livestock and horse use overlap within the HMA has been slight. The majority of this overlap occurs outside of the HMA within the Pumpernickel Allotment. The sheep permit holder for the Pumpernickel Allotment has taken non-use in the allotment from 2004 and has not used his permit until 2009. In 2009 the permit was not used in full. Therefore over the past 6 years use has been slight. The current sheep permit holder has

agreed to stay out of the Tobin use area until after a gather is completed, therefore, no sheep use occurred within the HMA since 2004.

Goldbanks Allotment

The Goldbanks Allotment utilizes a rotational system for cattle and use has been consistent with the authorized use. The sheep permit holder for the Goldbanks allotment is the same as the Pumpnickel Allotment. Non-use has been taken for the sheep permit in the Goldbanks allotment since 2004, with the exception of 2008, when 30% of permitted use was used. Non-use was also applied for in 2009 for the sheep permit in the Goldbanks Allotment. In 2004, 62% of the permitted use was utilized by sheep. Culmatively in the last 6 years (2004 -2009) only 18% of sheep use permitted for the Goldbanks allotment has been utilized.

The Pleasant Valley Allotment

The Pleasant Valley Allotment is a common allotment with three cattle permittees. Analysis of the actual use submitted in the last ten years shows an average of 81% of the authorized grazing was used.

The South Buffalo Allotment

Prior to 2007, the permitted use for Buffalo Valley, which included Buffalo Valley and the South Buffalo Allotments, was 15,623 Animal Unit Months (AUMs) Active Use and 5,456 Suspended AUMs for a total of 21,079 AUMs. However, according to Land Use Plan documents, the AUMs should have been broken down as 6,588 Active and 0 suspended AUMs for the Buffalo Valley Allotment and the South Buffalo Allotment should have had 9,035 Active and 5,456 Suspended AUMs. From 1997 – 2006, actual use has been approximately 11,471 AUMs or 73% of the permitted active AUMs, this was the actual use for the two allotments combined.

In 2007, the permit renewal for the cattle permits associated with the South Buffalo and Buffalo Valley allotments was completed. At that point, the grazing permit was adjusted to account for management of the AUMs per allotment versus a complex known generally as “Buffalo Valley”. In addition to the permit being issued with AUMs specific to South Buffalo and Buffalo Valley allotments, 3,077 AUMs were placed in temporary suspension due to non-functioning water developments that were installed on both allotments in the past (113 for South Buffalo and 2,694 for Buffalo Valley). Once the water developments are back in working order and in accordance with BLM specifications, the AUMs may be re-activated.

3.3.2 Soils

The majority of soils in the HMA were developed under low precipitation with minimal topsoil development. All soil types are subject to water and wind erosion. With the excessive trailing and hoof action this area has the potential of accelerated erosion following intense storms or snow melt (photos 5 and 6). Potential water erosion hazard for the trap sites is slight and potential wind erosion hazard is moderate. Soil surface disturbance due to hoof action and vehicle use would be limited to trap sites.



Photo 5 Pumpernickel Allotment looking north (outside of HMA) Point 1 11/08.



Photo 6. Pumpernickel Allotment looking south (outside of HMA) Point 1 11/08.

Ocular estimate, landscape appearance method, and utilization cages are showing evidence of heavy utilization. Heavy utilization on all available vegetation is occurring both inside and outside of the HMA. Current population of wild horses being 20 times AML is compounding trampling and trailing damage to the environment.

3.3.3 Special Status Species

The Nevada Natural Heritage Program (NNHP) database (April, 2008) and the Nevada Department of Wildlife (NDOW) Diversity database (August, 2007) were consulted regarding information for the possible presence of endangered, threatened, candidate and/or sensitive plants or animal species.

The NNHP data base showed the presence of Pleasant Valley pyrg (*Pyrgulopsis aurata*) and Sada's pyrg (*Pyrgulopsis sadai*) which are spring snails and both are on the Nevada Sensitive Animal List. The data base also showed the presence of windloving buckwheat (*Eriogonum anemophilum*) a BLM sensitive plant species.

The NDOW data base showed one observation each of a burrowing owl (*Athene cunicularia*), golden eagle (*Aquila chrysaetos*) and prairie falcon (*Falco mexicanus*).

Sensitive Species

Sensitive species are taxa that are not already included as BLM Special Status Species under (1) Federally listed, proposed, or candidate species: or (2) State of Nevada listed species. BLM policy in BLM Manual 6840.06, states, "Actions authorized by the BLM shall further the conservation and/or recovery of federally listed species and conservation of Bureau sensitive species. Bureau sensitive species will be managed consistent with species and habitat management objective in land use and implementation plans to promote their conservation and to minimize the likelihood and need for listing under the ESA."

As stated under **3.1.4 Migratory Birds**, the burrowing owl, loggerhead shrike, and vesper sparrow are designated BLM sensitive species.

The following designated BLM sensitive animal species are described as portions of the capture area exhibit habitat characteristics where these species could occur.

Burrowing Owl (*Athene cunicularia*)

Burrowing owls are known to occur within the gather area. Burrowing owls prefer open, arid, treeless landscapes with low vegetation. They are dependent upon burrowing mammal populations for maintenance of nest habitat and choose nesting areas based on burrow availability (Floyd et. al., 2007). These birds are highly adaptable and readily nest in open disturbed areas such as golf courses, runways, and industrial areas that border suitable habitat (Neel, 1999). Dense stands of grasses and forbs within owl home ranges support populations of rodent and insect prey. Urbanization is the biggest threat to this species as suitable habitat is converted to non-habitat for human use (Floyd et. al., 2007).

Loggerhead Shrike (*Lanius ludovicianus*)

Loggerhead shrikes may be found in sagebrush/bunchgrass and salt desert scrub vegetative communities, so it is possible that they occur in the gather area. Loggerhead shrikes tend to favor arid, open country with just a few perches or lookouts. They nest in isolated trees and large shrubs and feed mainly on small vertebrates and insects. The species is relatively common and well-distributed across the state (Neel, 1999). Despite this fact, species numbers have declined over the last half century (Floyd et. al., 2007). Pesticide use is a current concern but direct human disturbance is presently not (Neel, 1999). These birds would benefit from habitat with a diverse structure and species composition. Healthy sagebrush communities would provide these habitat characteristics. According to Paige and Ritter (1999), “Long-term heavy grazing may ultimately reduce prey habitat and degrade the vegetation structure for nesting and roosting. Light to moderate grazing may provide open foraging habitat.”

Raptors

Golden eagles and Prairie falcons have been observed in the gather area. Golden eagles are primarily cliff nesters and would utilize the area to forage for prey species such as jackrabbits and other small mammals. Golden eagles are protected under the Bald and Golden Eagle Protection Act. Nevada’s Golden eagle population is thought to be stable to increasing. They are widespread and frequently encountered (Floyd et. al., 2007).

The Prairie falcon may be found foraging in sagebrush habitats that have cliffs in close proximity for nesting. They prey on small mammals and birds, especially horned larks. Populations experienced declines in the 60’s and 70’s but appear to be stable now in the West (Paige and Ritter, 1999).

Vesper Sparrow (*Pooecetes gramineus*)

The vesper sparrow may be found in the gather area since it typically inhabits sagebrush-grass vegetative communities at higher elevations. The vesper sparrow forages on the ground and eats mostly seeds from grasses and forbs and will also eat insects when they are available. The vesper sparrow responds negatively to heavy grazing in sagebrush/grasslands. In these habitats, it benefits from open areas with scattered shrubs and a cover of good bunchgrasses for nest concealment, since it is a ground nester (Paige and Ritter, 1999).

Sage-Grouse (*Centrocercus urophasianus*)

The sage-grouse is a sagebrush obligate species and is strictly associated with sagebrush/grasslands. Sage-grouse may eat a variety of grasses, forbs and insects during the breeding season. However, they feed almost entirely on sagebrush during the winter months, selecting shrubs with high protein levels (Paige and Ritter, 1999).

Much of the capture area is encompassed by the Sonoma Population Management Unit. All classes of seasonal sage-grouse habitat occur on the capture area including summer, winter, and nesting. There are 12 leks within the gather boundary.

Pygmy Rabbit (*Brachylagus idahoensis*)

In the Great Basin, the pygmy rabbit is typically restricted to the sagebrush-grass complex. A dietary study of pygmy rabbits showed dependence on sagebrush year round. Sagebrush was eaten throughout the year at 51% of the diet in summer and 99% in the winter. They also showed a preference for grasses and to lesser extent forbs, in the summer (Green and Flinders, 1980). These data seem to indicate that pygmy rabbits require sagebrush stands with an understory of perennial grasses to meet their seasonal dietary requirements. Potential habitat is primarily big sagebrush communities, so the occurrence of pygmy rabbits in the gather area is likely.

Bats

Several species of bats may occur in the gather area. Most bats in Nevada are year-round residents. In general terms, bats eat insects and arthropods during the warmer seasons and hibernate in underground structures during the cooler seasons. Bats commonly roost in caves, mines, outcrops, buildings, trees and under bridges. Bats may eat flies, moths, beetles, ants, scorpions, centipedes, grasshoppers, and crickets. Bats thrive where the plant communities are healthy enough to support a large population of prey (Bradley et. al., 2006).

Bighorn Sheep (*Ovis canadensis nelsoni*)

The capture area encompasses the Tobin Range, which falls within the Desert bighorn subspecies delineation for reintroductions identified in the Nevada Bighorn Sheep Management Plan (NDOW, 2001). Bighorns have been released several times in the south end of the Tobin Range and a population of them has been established there. Bighorn sheep habitat is typically characterized by mountainous terrain with escape cover provided by steep rock outcrops.

3.3.4 Vegetation

The plant community is dominated by Wyoming big sagebrush, spiny hopsage, Thurber's needlegrass and Indian ricegrass. Sandberg's bluegrass and bottlebrush squirreltail are also important grasses along with basin wildrye and needleandthread.

Fires in the Pumpnickel Allotment portion of this HMA, along with continued overgrazing by a combination of wild horses and livestock, have degraded the potential native vegetation. Recent fires in this area are: Dixie 1985, Buffalo 1996, Smellser Pass 2006, and Horse 2007. These fires, along with horses being at twenty times AML, have excelled degradation of the vegetation to mostly annuals.

The typical growing season is March through May in the lower elevations and April through July in higher elevations. Dry grasses provide little nutritional value from mid-summer through

winter. Fall and winter green-up on grasses improves nutritional value, but shrubs provide the majority of protein during those months. Annual (yearly) forage production is complete in July with minor regrowth on shrubs and grasses in winter months. When grass production is limited from drought or overutilization, horses will consume more shrubs and forbs. While some of these plants such as bud sage are palatable, others are toxic, of poor nutritional value, and/or could disrupt their digestive system.

Long-term, continuous heavy grazing (greater than 60% utilization annually) results in loss of highly desired forage species such as Indian ricegrass, bottlebrush squirreltail, needle grass, and winterfat from the native plant communities. Wild horses graze riparian areas heavily in summer and early fall as the vegetation tends to stay green due to the water source when upland grasses are dry and dormant.

The short-term vegetation management objective for this HMA (FMUD, 1996) states: “Upland utilization not to exceed 50% on bottlebrush squirreltail, Indian ricegrass, Sandberg bluegrass.” Currently, short-term vegetation management objectives are not being met as utilization levels exceed 50% upland utilization (photos 5 and 6).

3.3.5 Wilderness Study Areas (WSAs)

Two WSAs exist within the project area: China Mountain WSA (NV-020-406P) and Tobin Range WSA (NV 020-406Q). Section 603 (c) of FLPMA directs how the BLM is to manage “lands under wilderness review,” which includes WSAs. These lands are to be managed in a manner so as not to impair the suitability of such areas for preservation as wilderness. Consequently, actions proposed within WSAs are to be evaluated on the basis of their possible direct and indirect impacts on wilderness values of naturalness, solitude and primitive or unconfined recreation, and special features. Temporary trap sites and/or holding corrals fall outside these WSA boundaries.

3.3.6 Wild Horses

The current estimated wild horse population within the Tobin Range HMA and Sonoma Range HA is 443, about 20 times the lower limit of 22 wild horses. This estimate is derived from a direct aerial census count of 287 wild horses in September 2007 and grown at a 24% per year average growth rate for 2008 and 2009 to arrive at the current estimated wild horse population size. Of the 287 animals counted in September 2007, nearly $\frac{3}{4}$ (257 head) of the animals were observed outside the Tobin Range HMA and within portions of the Sonoma Range HA. Of those outside the HMA boundary, almost 90% (227 animals) were located within the Pumpnickel Allotment.

These wild horses that are outside of the HMA in the Pumpnickel Allotment have moved out for survival. Available forage within the HMA will no longer support the numbers of horses that are within this area. Current and past drought conditions compiled with low forage production has put survivability of wild horses at risk within the HMA. The over population of wild horses will continue to grow and will increase the distance the horses travel from the HMA. Currently those horses inside and out of the HMA are traveling 10 or more miles between available forage and water sources during the hot summer season.

The HMA has not been gathered previously. As a result, a baseline genetic diversity for this herd has not been established. The majority of the horses are bays, browns or sorrels with some grays and appaloosa types. They are descendants of ranch horses and horses that escaped or were released into the area.

3.3.7 Wildlife

The vegetation in the gather area could be categorized into the two broad vegetative types, big sagebrush and salt desert shrub. A wide variety of wildlife species common to the Great Basin ecosystem can be found within the capture area. Some of the large mammal species would include the badger (*Taxidea taxus*), black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), and pronghorn antelope (*Antilocapra Americana*). Various small common mammals, primarily rodents, and common reptiles may also be found in the gather area.

Mule Deer (*Odocoileus hemionus*)

Mule deer habitat in the Tobin Range has been classified as crucial winter and summer. Deer are generally classified as browsers, with shrubs and forbs making up the bulk of their annual diet. The diet of mule deer is quite varied; however, the importance of various classes of forage plants varies by season. In winter, especially when grasses and forbs are covered with snow, their entire diet may consist of shrubby species.

In the gather area, Wyoming big sagebrush is probably the most important browse species. Perennial grasses such as bluegrass (*Poa spp.*), bottlebrush squirreltail and Thurber's needlegrass are important when they are green in spring and early summer and in the winter when they are not covered by deep snow. These perennial grasses provide diversity in the mule deer's diet. Forbs such as globemallow (*Sphaeralcea spp.*) would also provide needed diversity in the deer's diet.

Pronghorn Antelope (*Antilocapra americana*)

It is generally understood that pronghorn have expanded their range to occupy the gather area and are continuing to spread their distribution within it. Pronghorn habitat within the gather area has been classified as potential and all months. Rangelands with a mixture of grasses, forbs, and shrubs provide the best habitat for pronghorns. Pronghorn seem to prefer habitats with shrub heights less than 25 inches.

4.0 ENVIRONMENTAL CONSEQUENCES

Direct impacts and indirect impacts regarding both the Proposed Action and the No Action alternatives are discussed in each resource section below. Cumulative impacts are addressed in chapter 5.

4.1 Supplemental Authorities (Critical Elements of the Human Environment)

4.1.1 Cultural Resources

Proposed Action: Remove Excess Wild Horses

Direct or indirect impacts to cultural resources are not anticipated to occur from implementation of the Proposed Action. All gather sites and temporary holding facilities would be inventoried for cultural resources prior to construction. A BLM, Winnemucca District archeologist would review all proposed gather sites and temporary holding facility locations to determine if these have had a cultural resources inventory, and/or if a new inventory is required. If cultural resources are encountered at proposed gather sites or temporary holding facilities, those locations would not be utilized unless they could be modified to avoid impacts. The proposed action would further protect cultural resources from future disturbance as the wild horse population would be lessened.

No Action: Defer Gather and Removal

At the current overpopulation of wild horses, riparian areas/wetland zones with high potential for cultural resources are being impacted by extensive trailing, trampling and compaction. However, indirect impacts described above may increase as wild horse populations continue to increase and concentrate.

4.1.2 Migratory Birds

Proposed Action: Remove Excess Wild Horses

Short-term impacts to migratory birds as a result of temporary disturbance at/near trap sites during gather operations may be expected. This impact would be minimal (generally less than 0.5 acre/trap site), temporary, and short-term (less than two weeks) in nature. However, this would be an indirect impact, since the gather would be completed outside the dates of the migratory bird nesting season (April 15 to July 15). Other indirect impacts would be related to altering wild horse densities and patterns of use. Reduction of current wild horse populations would allow vegetative communities to maintain a diverse vegetative structure characterized by healthy populations of native perennial plants.

No Action: Defer Gather and Removal

At the current stocking rate of wild horses, impacts are occurring to nesting cover and food sources. These impacts would be expected to increase as the wild horse population grows from 443 at present to 681 by 2011. In the absence of a gather, the wild horse population would be expected to double in four years or less to 1,047 animals, resulting in increased competition for forage and habitat among wild horses, wild life, and livestock. Indirect impacts would be the increasing inability of rangelands to support healthy populations of native perennial plants. These impacts to rangelands would increase each year that a gather is postponed.

4.1.3 Native American Religious Concerns

Proposed Action: Remove Excess Wild Horses

The proposed project would reduce indirect impacts to plants in riparian zones used by Native Americans for medicinal and other purposes by reducing the population of wild horses. Consultation is on-going.

No Action: Defer Gather and Removal

Under the no action alternative there would be no direct impacts under this alternative. There would be indirect impacts to areas of Native American concern in riparian zones where concentrations of horses could impact plants utilized by Native Americans for medicinal and other purposes.

4.1.4 Water Quality

Proposed Action: Remove Excess Wild Horses

Direct impacts to water quality occur when wild horses cross streams or springs as they are herded to temporary gather sites. This impact would be temporary and relatively short-term in nature. Indirect impacts would be related to wild horse population size. Reduction of wild horse populations from current levels would decrease competition for available water sources which should lead to a reduction in hoof action around unimproved springs, improvement in stream bank stability, and improved riparian habitat condition. These areas are now being negatively impacted by the over population of wild horse; trampling stream banks, allowing more sediment to fill ponds, removing vegetation which destabilizes banks, and the over population is contaminating all available waters.

No Action: Defer Gather and Removal

Short term impacts may be avoided due to the direct impacts of the gather. However, the continued impacts by the overpopulation of horses would be greater than these short term impacts. Long term impacts by continuing to allow the herd to grow would cross thresholds which would be hard and may be impossible to recover from. Indirect impacts would be increasing degradation to riparian habitats and water quality as horse populations increase each year that a gather is postponed.

4.1.5 Wetlands and Riparian Zones

Proposed Action: Remove Excess Wild Horses

Direct impacts to wetlands or riparian zones occur when wild horses cross streams or springs as they are herded to temporary gather sites. This impact would be temporary and relatively short-term in nature. Indirect impacts would be related to wild horse population size. Reduction of wild horse populations from current levels would decrease competition for available water sources which should lead to a reduction in hoof action around unimproved springs, improvement in stream bank stability, and improved riparian habitat condition. These areas are now being negatively impacted by the over population of wild horses; trampling stream banks, allowing more sediment to fill ponds, removing vegetation which destabilizes banks, and the over population is contaminating all available waters.

No Action: Defer Gather and Removal

Short term impacts may be avoided due to the direct impacts of the gather. However, the continued impacts by the overpopulation of horses would be greater than these short term impacts. Long term impacts by continuing to allow the herd to grow would cross thresholds which would be hard and may be impossible to recover from. Indirect impacts would be increasing degradation to riparian habitats and water quality as horse populations increase each year that a gather is postponed.

4.2 Additional Affected Resources

4.2.1 Rangeland Management

Proposed Action: Remove Excess Wild Horses

The livestock operators are currently experiencing direct competition by wild horses for the available forage and water, especially outside the Tobin Range HMA, in the Pumpernickel and South Buffalo Allotments. Direct impacts in the Tobin Range HMA would be the minor and short-term.

No Action: Defer Gather and Removal

Utilization by authorized cattle and sheep use has been directly impacted due to the overpopulation of wild horses, especially outside the HMA. In these areas of overpopulation of wild horses, competition for feed and water is increased and livestock permittees have been forced to shift use within the allotment, within their permitted dates, or take voluntary non-use due to the diminished health of the allotment. Heavy to severe use is also occurring on intermingled private lands where livestock and wild horse overlap is occurring. The indirect impacts would be continued resource deterioration resulting from competition between wild horses, cattle, and sheep for water and forage, reduced quantity and quality of forage, and undue hardship on the livestock operators through a lack of livestock forage on public lands.

4.2.2 Soils

Proposed Action: Remove Excess Wild Horses

Direct impacts associated with the Proposed Action would consist of disturbance to vegetation and soil surfaces immediately in and around the temporary gather site(s) and holding facilities. Impacts would be created by vehicle traffic; hoof action as a result of concentrating horses, and could be locally high in the immediate vicinity of the gather site(s) and holding facilities. Generally, these sites would be small (less than one half acre) in size. Any impacts would remain site specific and isolated in nature. Herding horses to trap sites may impact wild fire emergency stabilization and rehabilitation treatment areas. These impacts would include trampling of vegetation. Impacts would be minimal as herding would have short term duration. In addition, most gather sites and holding facilities would be selected to enable easy access by transportation vehicles and logistical support equipment. Normally, they are located near or on roads, pullouts, water haul sites or other flat areas, which have been previously disturbed. These common practices would minimize the long-term effects of these impacts.

Implementation of the Proposed Action would reduce the current wild horse population and provide the opportunity for the vegetative communities to progress toward achieving a thriving natural ecological balance. Reduced concentrations of wild horses would contribute to the recovery of the vegetative resource and reduce soil erosion. Utilization levels by wild horses would be reduced, which would result in improved forage availability, vegetation density, increased vegetation cover, increased plant vigor, seed production, seedling establishment, and forage production over current conditions. Higher quality forage species (grasses) would be available. Individual wild horse condition and health would improve due to less competition for available resources.

No Action: Defer Gather and Removal

No direct impacts are expected under this alternative. Indirect impacts include increased competition for forage among multiple-uses as wild horse populations continue to increase. Forage utilization would exceed the capacity of the range resulting in a loss of desired forage species from plant communities as plant health and watershed conditions deteriorate. Soil loss from wind and water erosion and invasion of undesired plant species would occur. Abundance and long-term production potential of desired plant communities may be compromised.

Indirect impacts would be increasing degradation to riparian habitats as horse populations increase each year that a gather is postponed.

4.2.3 Special Status Species

As the impacts to special status species are closely related to those disclosed for wildlife, these impacts are analyzed under the Wildlife section 4.2.7.

4.2.4 Vegetation

As the vegetation impacts are closely related to those disclosed for soils, these impacts are analyzed under the Soils section 4.2.2.

4.2.5 Wilderness Study Areas

Proposed Action: Remove Excess Wild Horses

The primary direct affect on wilderness values within the project area would be the sight and noise of the helicopter used to herd wild horses to gather sites located outside of the WSAs. During the time frame of the proposed gather, solitude and primitive recreation may be negatively impacted for recreationists who may be subjected to the sight and sound of the helicopter. This impact would be temporary and relatively short term in nature. No horses were observed within the two WSAs in the last census that was conducted in April 2009.

No Action: Defer Gather and Removal

If wild horses are not removed, populations would continue to increase about 24% per year. Increased impacts to water and forage resources by wild horses would negatively affect wilderness values by increasing trampling, trailing, hedging, and forage utilization of native grasses, thus degrading the naturalness value. Attainment of LUP/FMUD objectives and Standards for Rangeland Health and Wild Horse and Burro Populations would not be achieved.

4.2.6 Wild Horses

Impacts Common to All Alternatives

The Win Equus population model developed by Dr. Steven Jenkins at the University of Nevada (Reno) is typically used during HMA planning or gather planning to analyze and compare the effects of proposed wild horse management. The model's primary purpose is to analyze and compare the effects of the Proposed Action (and any Alternatives, including No Action) on population size, average population growth rate, and average removal number.

The Win Equus population model was not used to compare potential impacts to wild horse population size, average population growth rate and average removal number for the Tobin Range HMA. For the model to be reliable, the population size and range must be large enough to show a difference between alternatives. With the narrow population range of 22-42 wild horses for the Tobin Range HMA, the model would not be useful, i.e. to achieve and maintain AML some wild horses would need to be removed every year or every other year to effectively maintain numbers within AML. Nor would proposed management be likely to “crash” the population based on consecutive gathers/removals of HMAs with similarly small AML size/range.

Proposed Action: Remove Excess Wild Horses

The direct impacts of the Proposed Action would involve the capture and removal of about 421 in 2009 or 506 in 2010 excess wild horses from the project area. A post gather wild horse population of approximately 22-42 head would remain in the HMA. The average annual recruitment rate would be expected to remain at about 24% but would be re-evaluated over the next 5-10 years based on population monitoring (aerial survey).

Direct individual impacts include handling stress associated with the gather, capture, sorting, animal handling and preparation, and transportation of the animals. Traumatic injuries that may occur typically involve biting and/or kicking that may result in bruises and minor swelling which normally does not break the skin. These impacts are known to occur intermittently during wild horse gather operations. The intensity of these impacts varies by individual, and is indicated by behaviors ranging from nervous agitation to physical distress. Mortality of individuals from these impacts averaged only 0.5% of horses gathered in a given removal operation (national BLM statistics). Implementation of SOPs would help minimize direct impacts to animals.

Removing excess wild horses before range conditions deteriorate further would decrease competition for water and forage for the remaining animals. Decreased competition would result in improved wild horse health and condition, especially mares and immature animals, and in healthier forage plants and other habitat resources.

Recommended Mitigation

Genetic diversity could become an issue with this population size (22-42 animals). The following actions would be taken, (1) establish a genetic baseline, and (2) reassess genetic diversity every gather, and (3) if genetic diversity becomes an issue the proposed mitigation may be: (1) return to HA status, or (2) introduce horses from other HMAs.

No Action: Defer Gather and Removal

The direct impacts of not removing excess wild horses would affect current and future herd population numbers. The current population estimate is 443 head. Populations would continue to grow annually by about 24 percent. Without a gather and removal now, the wild horse population in this portion of the HMA would exceed 1,000 head within four years based on population annual growth rate.

Wild horses often graze the same area repeatedly throughout the year. Forage plants in those areas receive little rest from grazing pressure. Continuous grazing does not allow plants sufficient time to recover from grazing impacts resulting in reduced plant health, vigor, reproduction, and ultimately to a loss of native perennial forage species from natural plant communities. Few resources would be available for wildlife and livestock.

Indirect impacts may include high horse mortality rates, thin body conditions, and poor health as habitat resources are diminished by increasing horse populations. Older and younger age classes and lactating mares would be most affected by nutritional deficiencies and stress. Skewed sex ratios, undesirable age distributions, and social disruption may result as herd members compete for available resources. Nutritional deficiencies would negatively affect growing animals and may limit their potential growth. Parasites and disease would increase as population densities continue to increase.

4.2.7 Wildlife

Proposed Action: Remove Excess Wild Horses

Direct impacts would consist primarily of disturbance and displacement of wildlife by the low-flying helicopter and construction of temporary trap/holding facilities. Trap sites and holding facilities are usually located at previously disturbed sites. Typically, the natural survival response to a low-flying helicopter is to flee from the perceived danger. There is a slight possibility that non-mobile or site-specific animals would be trampled. Direct impacts would be minimal, temporary, and of short duration.

Indirect impacts would be related to wild horse densities. A reduction in the number of wild horses from current levels would decrease competition for available cover, space, forage, and water. Wild horses often display dominant behavior over wildlife species and livestock at water sites forcing animals to wait or go elsewhere for water. A reduction in forage utilization levels and hoof action would improve stream bank stability and riparian habitat condition. Reduced utilization levels should produce increased plant vigor, seed production, seedling establishment, and ecological health of the habitat. Most wildlife species populations would benefit from an increase in forage availability, vegetation density and structure.

No Action: Defer Gather and Removal

Maintaining the status quo of the wild horse population would negatively impact wildlife species and their habitats and would be of greater impact than the Proposed Action. Repeated utilization of key grass, forb, and shrub species during the peak growing season, would not allow proper plant health. Over time, this may result in diminished habitat quality.

No direct impacts are expected under this alternative. Indirect impacts include increased competition between wild horse and wildlife species and also diminished habitat conditions. Wild horse populations would increase (about 20%) each year that the gather is postponed, which would impact ecological conditions/habitat quality and ultimately, wildlife populations.

5.0 CUMULATIVE IMPACTS

The NEPA regulations define cumulative impacts as impacts on the environment that result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency, federal or non federal or person undertakes such other actions (40 CFR 1508.7). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

For the purpose of this cumulative analysis, the cumulative area is the Tobin Range HMA and a small portion of lands immediately adjacent (Map 1). The potential cumulative impacts are directly related to wild horse populations and their cumulative impacts on vegetation quantity and quality. Therefore, the past, present and reasonable future actions presented below concentrate on wild horses and vegetation information for the cumulative assessment area.

5.1 Past

Wild Horses

In 1971, Congress introduced and passed *The Wild Free-Roaming Horses and Burros Act*. President Richard M. Nixon signed the new Act into law (Public Law 92-195) on December 15, 1971. *The Wild Free-Roaming Horses and Burros Act* required the protection, management and control of wild free-roaming horses and burros. Local livestock operators now had to claim and permit their private horses and burros grazing on public lands or lose ownership of them. After a specified time period following passage of the Act, any remaining unbranded and unclaimed herds inhabiting BLM or Forest Service lands were declared “wild free-roaming horses and burros” and became the property of the federal government.

The Tobin Range HUA was designated in its entirety in 1982 by the Sonoma-Gerlach MFP (1982) as a HMA suitable for the long-term management of wild horses.

Vegetation

Forage utilization during the early 1900’s was high when thousands of cattle, sheep, and horses grazed lands in northern Nevada. In the 1930s when overgrazing threatened to reduce Western rangelands to a dust bowl, Congress approved the Taylor Grazing Act (TGA) of 1934, which for the first time regulated grazing on public lands. The TGA required ranchers who grazed horses or livestock on public lands to have a permit and to pay a grazing fee, but by that time, thousands of horses roamed the Nevada desert unbranded and unclaimed.

Prior to the TGA grazing practices contributed to significantly impacting the soil resource. The soil tolerance was exceeded and the soil medium for plant growth was not maintained. Prior to the TGA livestock grazing activities had significant impacts to the vegetation resources within the impact assessment area by eliminating or greatly reducing the primary understory plants. Cheatgrass was introduced into the area in the early 1900s.

Prior to the TGA grazing practices significantly impacted wetland and riparian zones. Wetland and riparian zones declined, riparian vegetation was insufficient to dissipate energy and filter sediment increasing erosion and destabilizing stream banks and meadows. Destabilization of streams and meadows resulted in incised channels and gullies resulting in lowered water table. In order to support and distribute livestock, a variety of range improvement projects have been implemented through the years dating back to the 1930s.

Past livestock grazing decisions have resulted in adjustments of livestock numbers and seasons of use for the livestock grazing allotments in the HMA.

5.2 Present

Wild Horses

Currently, management of the Tobin Range HMA and wild horse population is guided by the Sonoma-Gerlach MFP. At present, the HMA has an estimated population of 443 wild horses. The current sex ratio of males/females is within the expected range (40-60% in favor of either males or females) with young, middle and older age class animals well represented.

Under the law, BLM is required to remove excess animals immediately once a determination has been made that excess animals are present. Program goals have expanded beyond establishing a “*thriving natural ecological balance*” (i.e. establishing AML for individual herds), to achieving/maintaining population size within the established AML as well as managing for healthy, self sustaining wild horse (or burro) populations. The destruction of healthy excess animals is prohibited. Adoptions, sales¹ or placement of excess wild horses and burros in long term holding are the primary means for caring for the animals removed from the range. The focus of wild horse and burro management has also expanded to place emphasis on achieving rangeland health as measured through the standards and guidelines for rangeland health and healthy wild horse and burro populations developed by RAC.

Vegetation

Vegetation production in 2008 was estimated to be 160 pounds per acre which is 40% of the normal production of 400 pounds per acre for the Tobin Range HMA area. Currently the perennial grass species consists mainly of Sandberg bluegrass (*Poa secunda*), bottlebrush squirreltail (*Elymus elymoides*), and Indian ricegrass (*Oryzopsis hymenoides*). Plant community management objectives, as set in the 1996 FMUD, are not being met.

5.3 Reasonable Foreseeable Future Actions

Wild Horses

Future wild horse gathers would be conducted about every 3-4 years over the next 10-15 year period in order to continue to manage the HMA within the established AML. Additional gathers would be needed to remove excess wild horses on a 3-4 year gather cycle in order to maintain populations within the AML range. Fertility control may also be applied in future gathers in an effort to slow population growth. Cumulatively over the next 5-15 years, these actions should result in fewer gathers and less frequent disturbance to individual wild horses and the herd's social structure. Individual and herd health would be maintained. Genetic diversity could become an issue with this population size. The actions taken would be: (1) establish a baseline, and (2) reassess genetic diversity every gather, and (3) if genetic diversity becomes an issue the proposed mitigation would be: (1) return to HA status, (2) introduce 1-2 horses from other HMAs every other gather, etc. etc. The issue of genetic diversity is also be discussed in section 3.3.6.

Under the No Action alternative, wild horse population size would exceed 1,000 head within five years. A number of emergency removals could be expected in order to prevent individual

¹ Under authority provided by the Congress of the United States in December 2003, sales of excess animals to individuals who can provide the animals with a good home are limited to animals over age 10 or that have been offered unsuccessfully for adoption three times.

animals from suffering or death due to lack of forage and water. Increased stress and disturbance to the herd's social structure would be expected, habitat resources would be over-utilized, and progress toward rangeland health standards would not be met.

Any future proposed projects within the Tobin Range HMA would be analyzed in an appropriate environmental document following site specific planning. Future project planning would also include public involvement.

Vegetation

Livestock grazing is expected to continue at similar stocking rates for cattle. Domestic sheep use may be reactivated to full permitted use in the foreseeable future. Cumulatively over the next 5-15 year period, continuing to manage wild horses within the established AML range would result in improved vegetation condition (i.e. forage availability and quantity), which in turn would positively impact vegetation and other habitat resources.

5.4 Cumulative Impacts (For all affected resources analyzed in Chapter 4)

The Proposed Action: Remove Excess Wild Horses

This combination of the past, present and reasonably foreseeable future actions, along with implementation of the Proposed Action, should result in more stable wild horse populations, healthier rangelands, healthier wild horses, and fewer multiple use conflicts within the HMA over the short and long-term.

Cumulative effects from the Proposed Action would include continued improvement of upland and riparian vegetation conditions, which would in turn impact permitted livestock, native wildlife, and wild horses populations as forage (habitat) quantity and quality is improved over the current level. Reduced wild horse populations would include fewer animals competing for limited water quantity and at limited sites.

No Action: Defer Gather & Removal

Cumulative impacts of the No Action would result in foregoing an opportunity to improve rangeland health and to properly manage wild horses in balance with the available water and forage. Over-utilization of vegetation and other habitat resources would occur as wild horse populations continue to increase. Wild horse populations would be expected to crash at some ecological threshold; however, wild horses, livestock, and wildlife would all experience suffering and possible death as rangeland resources continued to degrade. Attainment of RMP/FMUD objectives and Standards for Rangeland Health and Wild Horse and Burro Populations would not be achieved.

6.0 MONITORING and MITIGATION MEASURES

Monitoring

The BLM Contracting Officer Representative (COR) and Project Inspectors (PIs) assigned to the gather would be responsible for insuring contract personnel abide by contract specifications and

SOPs. Ongoing rangeland, riparian, and wild horse monitoring within the Tobin Range HMA would continue, including periodic aerial population inventory counts. This gather will allow for the collection of hair samples to establish a genetic baseline.

Mitigation

Genetic diversity could become an issue with this population size (22-42 animals). The following actions would be taken, (1) establish a genetic baseline, and (2) reassess genetic diversity every gather, and (3) if genetic diversity becomes an issue the proposed mitigation would be: (1) return to HA status, or (2) introduce horses from other HMAs.

The gather would occur in October during times of moderate temperatures and potentially dry fuel conditions. Care should be taken to avoid human caused fire starts during the gather. Proposed mitigation measures to reduce the potential of wildfire would include:

- a. All vehicles should carry fire extinguishers.
- b. Adequate fire fighting equipment i.e. shovel, Pulaski, extinguisher(s), and/or an ample water supply should be kept at the project site(s).
- c. Vehicle catalytic converters should be inspected often and cleaned of all brush and grass debris.

7.0 LIST of PREPARERS

Jerome Fox	Wild Horse & Burro Capture Plan Lead
Alan Shepherd	Wild Horse & Burro, NV State BLM Office
Lynn Ricci	Environmental Coordination
Samuel Potter	Cultural, Paleontological, and Historical Resources Native American Religious Concerns
Gerald Gulley	Wilderness Study Areas
Ken Detweiler	Wildlife, Special Status Species, Migratory Birds
Jeff Johnson	Fire Management
Dave Hodgson	Rangeland Management
Celeste Mimnaugh	Rangeland Management
Derek Messmer	Rangeland Management, Invasive, Nonnative Plants
Mike Zielinski	Vegetation, Soils, Water Quality, Wetland-Riparian Zones

8.0 CONSULTATION and COORDINATION

Public hearings are held annually on a state-wide basis regarding the use of helicopters and motorized vehicles to capture wild horses (or burros). During these meetings, the public is given the opportunity to present new information and to voice any concerns regarding the use of these methods to capture wild horses (or burros). The Nevada BLM State Office held a meeting on May 20, 2009; several written comments were entered into the record for this hearing. Specific concerns included: (1) the use of helicopters and motorized vehicles is inhumane and results in injury or death to significant numbers of wild horses and burros; (2) inventory methods using helicopters and fixed wing aircraft; (3) reported reproduction and mortality rates; (4) providing the public with pertinent information regarding gather plans at site-specific locations; (5) statistics or statements relating to impacts of helicopter driving, distances, terrain, etc. on wild burro herds; (6) studies on impacts to wild horses and burros on the use of helicopters and helicopter driving during gather. Standard Operating Procedures were reviewed in response to these concerns and no changes to the SOPs were indicated based on this review.

Since 2004, BLM Nevada has gathered just over 26,000 excess animals. Of these, mortality has averaged only 0.5% which is very low when handling wild animals. Another 0.6% of the animals captured were humanely euthanized due to pre-existing conditions and in accordance with BLM policy. This data affirms 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 range. BLM also avoids gathering wild horses prior to or during the peak foaling season and does not conduct helicopter removals of wild horses during March 1 through June 30.

Consultation between the BLM, State of Nevada Commission for the Preservation of Wild Horses and the Sierra Club was conducted in November 2008. These groups toured the area proposed for the gather and jointly concurred that the gather was needed. The conclusion of the group was that the gather was needed to protect the natural resources as well as the wild horses.

This preliminary environmental assessment (EA) would be posted to the Winnemucca District Office (WDO) Internet website for a 30-day public review and comment period. In addition, notice of the availability of the preliminary EA would be mailed to individuals, groups, and agencies (Appendix D) on the WDO wild horse and burro mailing list.

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- 2006b Gather Operations GIS Layer
- 2006c Grazing Allotments GIS Layer
- 2006d Range Improvement Points GIS Layer
- 2006e Range Improvement Lines GIS Layer
- 2006f Roads GIS Layer
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10.0 APPENDICES

Appendix A – Standards and Guidelines for Management of Wild Horses and Burros of the Sierra Front-Northwest Great Basin Area (3/07)

-Excerpt-

Background

Wild horse and burro management practices based on the following Standards and Guidelines will consider both the economic and physical environment and will be consistent with other multiple uses including but not limited to: recreation, minerals, cultural values, wildlife, domestic livestock, areas of critical environmental concern (ACEC's), designated wilderness and wilderness study areas (WSA's), and land acquisition and disposition activities.

With approval of these Standards for wild horses and burros maintaining animal health and population viability will focus primarily on controlling population size and herd composition within the Appropriate Management Level (AML) of the Herd Management Areas (HMA) as established in Sierra Front-Northwestern Great Basin planning decisions. The Guidelines outlined below are designed to achieve the existing rangeland health standards for the Sierra Front-Northwestern Great Basin as well as the proposed Wild horse and Burro Standards.

Existing Rangeland Health Standards for Wild Horse and Burro Management:

The five (5) Standards outlined below are included in the approved **Standards and Guidelines for Rangeland Health in the Nevada's Sierra Front-Northwestern Great Basin Area** and are adopted as Standards for wild horses and burros.

STANDARD 1. SOILS:

Soil processes will be appropriate to soil types, climate and land form. As indicated by:

- Surface litter is appropriate to the potential for the site;
- Soil crusting formations in shrub interspaces, and soil compaction are minimal or not in evidence allowing for appropriate infiltration of water;
- Hydrologic cycle, nutrient cycle, and energy flow are adequate for the vegetative communities;
- Plant communities are diverse and vigorous, and there is evidence of recruitment; and
- Basal and canopy cover (vegetative) is appropriate for the site's potential.

STANDARD 2. RIPARIAN/WETLANDS:

Riparian/Wetlands systems are in properly functioning condition. As indicated by:

- Sinuosity, width/depth ration, and gradient are adequate to dissipate stream flow without excessive erosion or deposition;
- Riparian vegetation is adequate to dissipate high flow energy and protect banks from excessive erosion; and
- Plant species diversity is appropriate for riparian-wetland systems.

STANDARD 3. WATER QUALITY:

Water quality criteria in Nevada or California State Law shall be achieved or maintained. As indicated by:

- Chemical constituents do not exceed the water quality Standards;

- Physical constituents do not exceed the water quality Standards;
- Biological constituents do not exceed the water quality Standards; and
- The water quality of all water bodies, including ground water located on or influenced by BLM lands will meet or exceed the applicable Nevada or California water quality Standards. Water quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law, and as found in the Section 303(c) of the Clean Water Act.

STANDARD 4. PLANT AND ANIMAL HABITAT:

Populations and communities of native plant species and habitats for native animals species are healthy, productive and diverse. As indicated by:

- Good representation of life forms and numbers of species;
- Good diversity of height, size, and distribution of plants;
- Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and
- Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation.

STANDARD 5. SPECIAL STATUS SPECIES HABITAT:

Habitat conditions meet the life cycle requirement of special status species. As indicated by:

- Habitat areas are large enough to support viable populations of special status species;
- Special status plant and animal numbers and ages appear to ensure stable populations;
- Good diversity of height, size, and distribution of plants;
- Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and
- Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation.

STANDARD 6. SELF-SUSTAINING POPULATIONS OF HEALTHY WILD HORSES AND BURROS:

Wild horse and burro populations are healthy and self-sustaining (reproductively viable). As indicated by:

- Herd size, age structure, and sex ratios appropriate for maintaining reproductively viable herds.
- Herds display no significant deleterious genetic conditions.
- Herd Management Areas provide adequate food, water, and living space for long term maintenance of healthy wild horses and burros.
- Adult animals have sufficient Henneke body condition class to withstand short term (3-4 months) forage loss due to adverse winter conditions or other habitat destruction.

Appendix B – Wild Horse and/or Burro Gathers Standard Operating Procedures

Gathers would be conducted by utilizing contractors from the Wild Horse Gathers-Western States Contract, or BLM personnel. The following procedures for gathering and handling wild horses would 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, 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"x4".
 - 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, estrays 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 two 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 regulation.

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 three (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 one 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 one 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 (2) partition gates providing at least three (3) compartments within the trailer to separate animals. Tractor-trailers less than 40 feet

shall have at least one partition gate providing at least two (2) 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 (1) 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 contracting officer 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 Contracting Officer 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 on-site 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

Jerome Fox, Wild Horse and Burro Specialist

Contracting Officer's Representative/Project Inspector

Alan Shepherd, NV WH&B Program Lead

The Contracting Officer's Representatives (CORs) and the project inspectors (PIs) have the direct responsibility to ensure the Contractor's compliance with the contract stipulations. The Humboldt River Field Office Manager will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, District 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 C – Fire Management Stipulations

FIRE MANAGEMENT STIPULATIONS FOR WILD HORSE AND BURRO GATHERS

Wild Horse and Burro gathers that occur between April 15 to October 30;

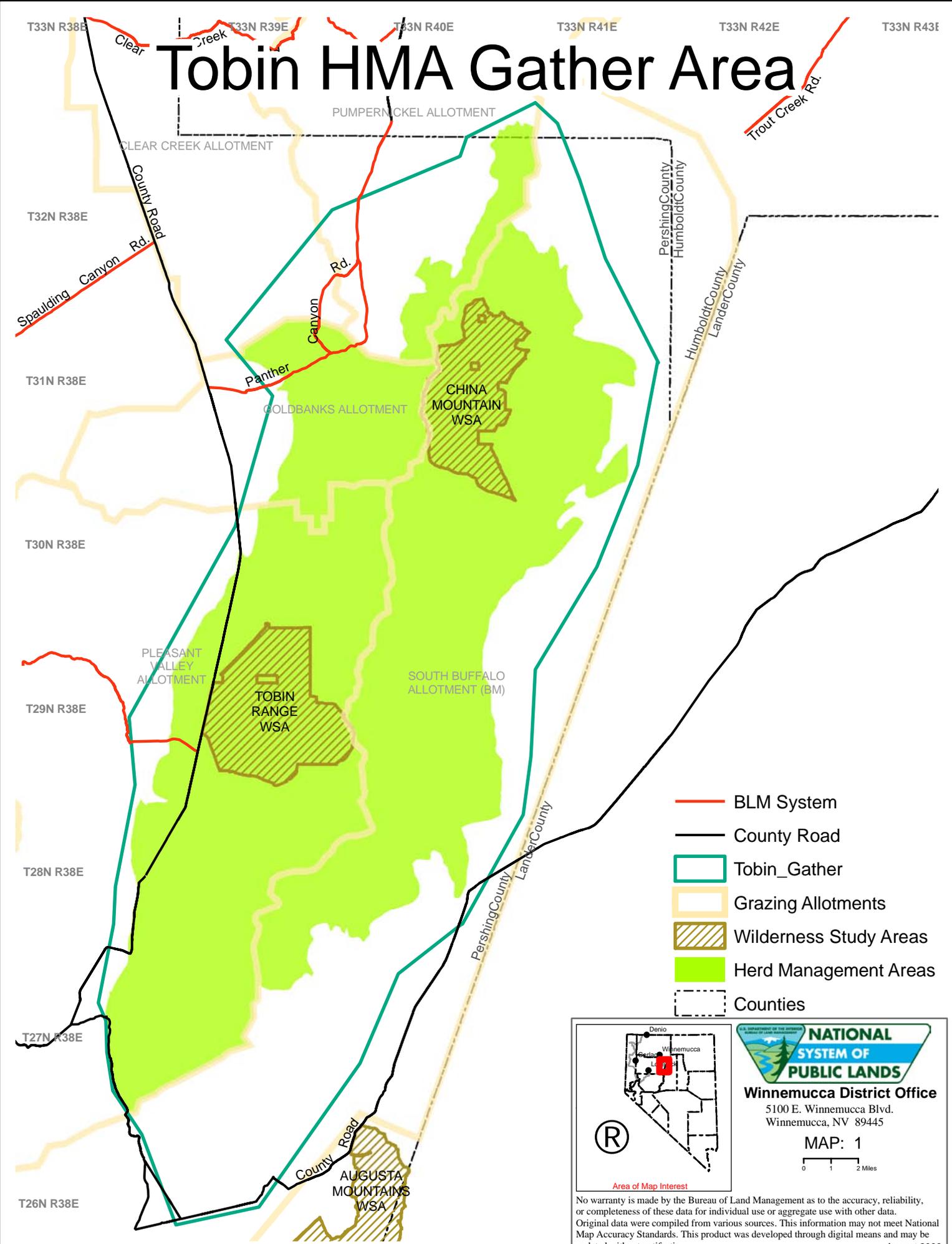
1. All vehicles used on the project will carry the following:
 - A shovel suitable for wildland firefighting.
 - An operable backpack pump of five gallon capacity.
 - An ABC fire extinguisher of at least ten pounds capacity.
 - Some sort of communications device (cell phone, satellite phone, two-way radio, etc) that can be used for wildfire notification.
2. All vehicles and auxiliary machinery will be equipped with properly functioning and baffled exhaust systems.
3. All vehicles operating in vegetation covered areas will be assured that exhaust systems are cleaned regularly-no chaff, grass, or brush in lodged in the exhaust system and skid plate, and that cross country driving be kept to a minimum.
4. No metal cutting or welding will be done in any vegetated area. All torch, welder use and metal cutting will be done on cleared soil. Vegetation will be cleared to a minimum of 15 feet surrounding any work. If possible, panels, gates, etc. that need repair, those repairs be done with coordination of the BLM project manager's concurrence in a cleared area at the holding site.
5. If a water tender is used on site, it must be equipped with an independent pump system capable of pumping at least 50 pounds of pressure into an attached hose reel and nozzle for fire suppression purposes.
6. No smoking will be permitted in vegetated areas, or near hay stacks or bales. Smoking will be inside vehicles or a designated area cleared of vegetation.
7. No flammable waste will be burned at the worksite or in vegetated areas. If there is a need to dispose of burnable waste material it will be done on a cleared site and **only after notification of Central Nevada Interagency Dispatch Center** at 775-623-1555, and the BLM Project Manager on site. No other open fires will be allowed.
8. No warming fires will be allowed at holding pens or corrals unless cleared by the BLM Project Manager.
9. During hot season gathers using helicopters, the following stipulations will be adhered to:
 - A. No hot fueling will be done
 - B. Fuel trucks will be grounded before contact is made with the helicopter.
 - C. A fire extinguisher of at least 20 pound capacity will be immediately accessible by personnel.
 - D. Fueling will be done in an area cleared of vegetation.
 - E. No smoking will be done around the helicopter or fuel tender.
10. If any fire occurs at or near the site, **Central Nevada Interagency Dispatch Center will be immediately notified at 775-623-3444. (24-hour fire emergency phone)**
11. The contractor assumes all liability for fires started during these periods by their actions or inaction.
12. Any wildfire resulting from operations by the contractor will be considered as a trespass fire and will be investigated. Possible legal actions could be billing for the suppression of the fire by the Bureau of Land Management, and the resulting fire rehabilitation costs.

Appendix D – Coordination and Consultation Notification List

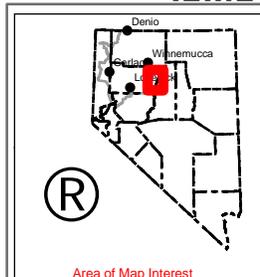
American Humane Association.
Animal Protection Institute of America.
Animal Welfare Institute. D.J. Schubert
Anthony & Associates. Jane L. Trigero
Center for Biological Diversity. Rob Mrowka
Committee For High Desert. Katie Fite
Department of Wildlife
Ellison Ranching Co.. Bill Hall
Eureka County Department of Natural Resources. Jake Tibbitts
Exemption Trust, Chester Dawson
Goemmer L&L Buffalo Ranches, LLC. Shawn & Mindy Goemmer
Humane Society of the U.S..
Humboldt County Commissioners
Int. Soc. Protection of Mustangs & Burros. Karen Sussman
Joe Saval Ranching Company LLC. James Ferrigan Jr.
Lander County PLUAC. Ray Williams Jr.
Lovelock Community. James Jurad
Marion Co. Humane Society, Inc.. Barbara Warner
N6 Board. Henry Filippini Jr.
National Mustang Association
National Wild Horse Association.
Natural Resource Defense Council.
NDOW, Game Biologist. Chris Hampson
NDOW, Habitat Supervisory Biologist. Roy Leach
Nevada Cattlemens Association. Meghan Wereley
Nevada State Clearinghouse. Krista Coulter
NV Land & Resource Company. David Buhlig
NV Wild Horse Commission. Cathy Barcomb
Pleasant Valley Livestock, LLC
Resource Concepts, Inc.. C. Rex Cleary
Snow Livestock and Grain, Gary Snow
State of Nevada. Chris Collis
Synergy Resource Solutions, Inc.. Jack Alexander
U.S. Fish & Wildlife Service. Robert Williams
Vesco Ranch
Western Watersheds Project. Barbara Hakala
Wild Horse Organized Assistance. Dawn Lappin
Wild Horse Preservation League. Bonnie & Chuck Matton
Wild Horse Sanctuary. Diane Nelson
Wild Horse Spirit. Betty Kelly
Pauline Adams
Steven Carter
Clint & Jennifer Casy
Vicki J. Cohen
Craig Downer

James Ferrigan III.
Doby George
Roger Johnson
Cindy MacDonald
Mike Marvel
Mike Mc Williams
Mandy McNitt
Bertrand & Jill Paris
Richard and Nancy Rosasco
Mike & Barbara Stremler
Gary Takacs

Tobin HMA Gather Area



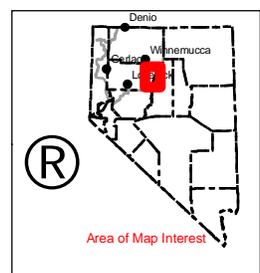
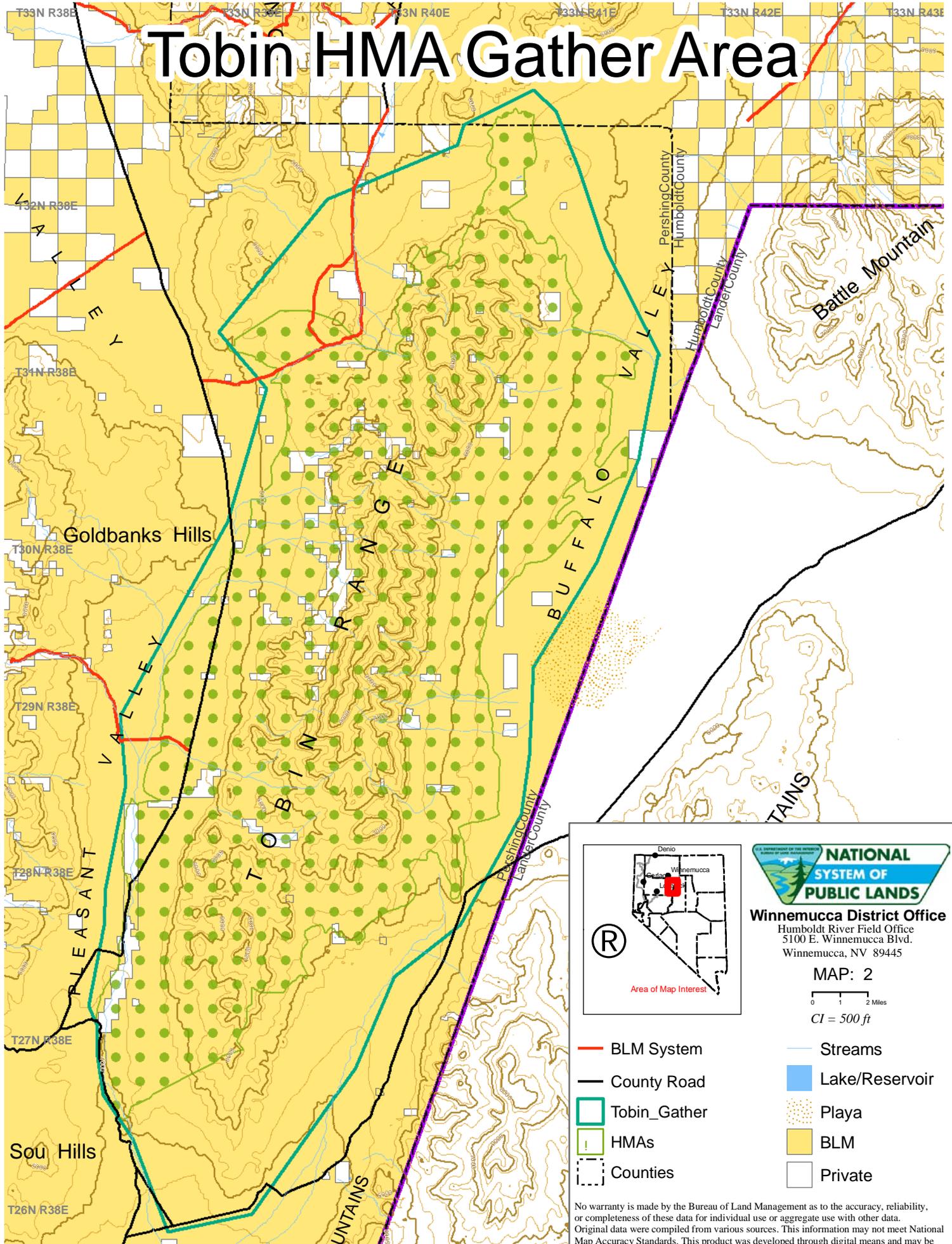
- BLM System
- County Road
- Tobin_Gather
- Grazing Allotments
- Wilderness Study Areas
- Herd Management Areas
- Counties




NATIONAL SYSTEM OF PUBLIC LANDS
Winnemucca District Office
 5100 E. Winnemucca Blvd.
 Winnemucca, NV 89445
MAP: 1
 0 1 2 Miles

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification. August 2009

Tobin HMA Gather Area



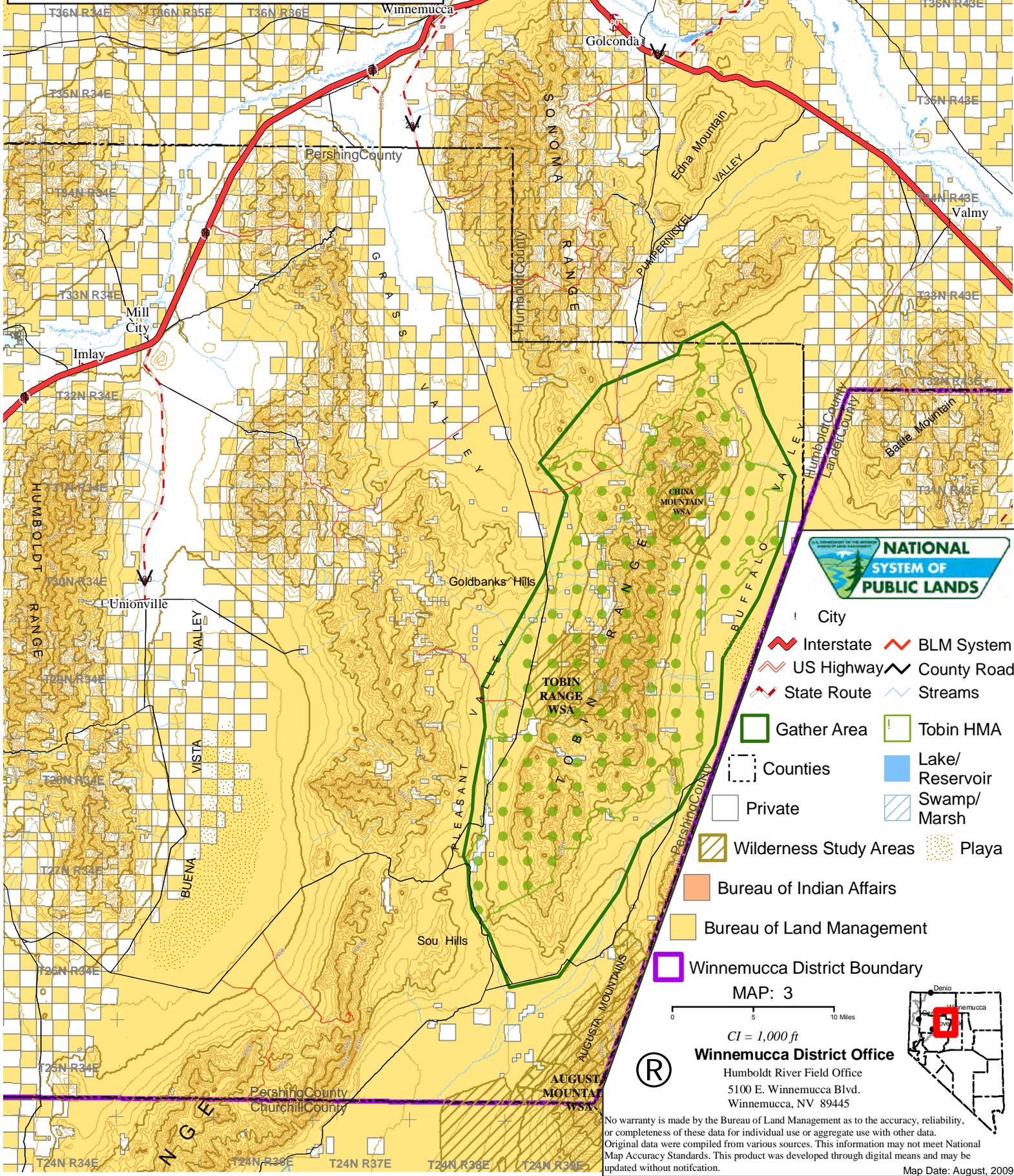
Winnemucca District Office
 Humboldt River Field Office
 5100 E. Winnemucca Blvd.
 Winnemucca, NV 89445

MAP: 2
 0 1 2 Miles
 CI = 500 ft

- BLM System
- County Road
- Tobin_Gather
- HMAs
- Counties
- Streams
- Lake/Reservoir
- Playa
- BLM
- Private

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Tobin HMA Gather General Vicinity



- ! City
- Interstate
- US Highway
- State Route
- BLM System
- County Road
- Streams
- Gather Area
- Tobin HMA
- Counties
- Lake/Reservoir
- Swamp/Marsh
- Private
- Wilderness Study Areas
- Bureau of Indian Affairs
- Bureau of Land Management
- Winnemucca District Boundary
- Playa

MAP: 3

0 5 10 Miles

CI = 1,000 ft

Winnemucca District Office
 Humboldt River Field Office
 5100 E. Winnemucca Blvd.
 Winnemucca, NV 89445

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Map Date: August, 2009

