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**Tonopah Field Office** 

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# Bullfrog Herd Management Area Wild Burro Gather Plan and Environmental Assessment DOI-BLM-NV-B020-2011-0102-EA.









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# Bullfrog HMA Wild Burro Gather Plan and Environmental Assessment

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# Bullfrog Herd Management Area Wild Burro Gather Environmental Assessment DOI-BLM-NV-B020-2011-0102-EA

# 1. Introduction

The Bureau of Land Management (BLM) Tonopah Field Office (TFO) is analyzing the effects of conducting a wild burro gather to remove excess wild burros from the Bullfrog Herd Management Area (HMA) and all burros beyond the established boundaries of the Bullfrog HMA. The proposal includes the capture and removal of excess wild burros, with wild burros residing outside the designated HMA having the highest priority for removal. Due to limited space at short-term holding facilities, the proposed action would be carried out in phases, with only 75 wild burros removed in the initial gather. Approximately 120 wild burros would remain in the Bullfrog HMA after the initial gather and the remaining excess wild burros would be removed through one or more follow-up gathers. The initial gather would begin in March 2012 and would be conducted in accordance with the Gather Plan and Standard Operating Procedures (SOPs) described in Appendix A.

The initial gather would have a goal of targeting problem areas such as wild burros in close proximity to Beatty, Nevada, near the Highway 95 corridor that runs through the HMA, and wild burros residing outside of the HMA. Depending on short-term holding space and funding availability, the BLM TFO may return to the Bullfrog HMA for one or more follow-up gathers to achieve a wild burro population at the low range of AML and to resolve issues (such as movement of wild burros outside the HMA boundaries) associated with the overpopulation of wild burros. Follow-up efforts could include helicopter -assisted trapping and/or bait/water trapping depending on time of year, where the excess burros are located, numbers to remove, personnel, and funding.

An Environmental Assessment (EA) is a "concise public document" that is designed to "briefly provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI)." This EA ensures compliance with the National Environmental Policy Act (NEPA) by providing site-specific analysis of potential direct, indirect, and cumulative effects to the human environment associated with gathering and removing excess wild burros from outside and within the Bullfrog HMA. Should a determination be made that implementation of the Proposed Action or alternative actions would not result in "significant environmental impacts" a FONSI will be prepared to document that determination, and a Decision Record issued providing the rationale for approving the chosen alternative.

By law, BLM is required to immediately remove excess animals once a determination has been made that excess animals are present and removal is necessary. In the past two decades, program goals have expanded beyond establishing a "thriving natural ecological balance" (i.e. establishing Appropriate Management Level (AML) for individual herds) to achieving and maintaining populations within the established AML so as to manage for healthy, self-sustaining wild burro populations. BLM's management of wild horses and burros must also be consistent with Standards and Guidelines for Rangeland Health and for Healthy Wild Horse and Burro Populations developed by the Mojave-Southern Great Basin Resource Advisory Council (RAC) in 2006.

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<sup>1. 40</sup> CFR § 1508.9.

# 1.1 Background

The Bullfrog HMA is located in the southernmost portion of the TFO area and includes approximately 151,782 acres. The eastern edge of the HMA borders the Nevada Testing and Training Range (NTTR), where burros move easily between both areas. The southern and western borders are defined by the TFO area boundary. The southern border is adjacent the Southern Nevada District, and the western border abuts Death Valley National Park. The town of Beatty, Nevada lies in the center of the HMA and Highway 95 splits the HMA into eastern and western portions. The area is characterized by Mojave Desert vegetation, dominated by blackbrush (*Coleogyne ramosissima*), desert needlegrass (*Achnatherum speciosum*), Indian ricegrass (*Achnatherum hymenoides*), Nevada ephedra (*Ephedra nevadensis*), burro brush (*Ambrosa dumosa*), creosote bush (*Larrea tridentate*), and fourwing saltbrush (*Atriplex canescensa*). Elevations within the HMA range from a high of 6,031 feet at Bare Mountain to a low of 3,095 feet south of Beatty. The area receives little precipitation, which is typical of the Mojave Desert Ecosystem.

The Bullfrog HMA contains habitat for the threatened desert tortoise and the sensitive Amargosa toad, as well as potential habitat for the endangered southwest willow flycatcher and the yellow-billed cuckoo.

# 1.2. Appropriate Management Level (AML)

The current AML for the Bullfrog HMA was established in 2007 through a Final Multiple Use Decision (FMUD) issued following completion of a Rangeland Health Evaluation (RHE) for the Montezuma Allotment Complex.

Through the Montezuma Complex RHE, BLM analyzed a range of monitoring data including utilization, trend, riparian functioning condition ratings, precipitation, wildlife habitat studies, and wild burro inventory data to assess rangeland health and make any necessary adjustments to AML for the Bullfrog HMA. The evaluation resulted in an analysis of carrying capacity for livestock and wild burros within these areas and identified use levels for these arid ecosystems that would prevent degradation to the vegetation and riparian resources and maintain healthy animals. Livestock grazing is authorized in only about 8% of the Bullfrog HMA; however use within this area has been negligible to non-existent in recent years.

The AML for the Bullfrog HMA was calculated from Ecological Site Inventory production data. A four-mile wide zone was identified around known water sources in the HMA. These zones represent habitat that is accessible to burros within four miles of water and are called the "Watered" portions of the HMA. "Dry" areas are outside the 4-mile water zone and are currently unusable by wild equids because of their distance from available water. However, these "dry" portions represent areas that could sustain wild burros if additional water sources could be developed for wild equid use. The AMLs established for the Bullfrog HMA in the 2007 FMUD are identified in Table 1. The interested public was involved throughout the decision-making process that led to the adoption of these AMLs.

A helicopter population inventory flight of the Bullfrog HMA conducted in February, 2010 resulted in a direct count of 124 wild burros. As indicated in the preliminary EA, the anticipated post-foaling population in 2011 was expected to be 144 wild burros. It was also noted in the Preliminary EA that an inventory flight would be conducted before the gather to confirm the estimated population.

On January 6<sup>th</sup> and 7<sup>th</sup>, 2012, a thorough inventory flight and census was conducted for the Bullfrog HMA and areas outside the HMA boundary where wild burros have established residency. The population inventory resulted in 195 wild burros being directly counted, with 42 of those found residing outside of the HMA boundary. Due to the rugged terrain and poor sightability of wild burros, the population count of 195 wild burros is believed to be an under-estimate of the actual population. Future aerial inventories will be conducted to confirm or re-evaluate the estimated population after the initial gather.

Table 1 displays the AML and most current population estimate for the HMA.

НМА	Acres	Associated Allotment	AML	Current Estimated Population <sup>2</sup>
Bullfrog	151,782	Razorback	58-91 burros	195

**Table 1. Bulfrog HMA Summary** 

# 1.3. Purpose and Need for Action

The purpose of the Proposed Action is to remove excess wild burros near Beatty, Nevada, wild burros near the Highway 95 corridor, and wild burros residing outside the boundary of the Bullfrog HMA in areas not designated for their use in order to bring the population to the low end of the established AML range. Furthermore, the action is needed 1) to protect rangeland resources from deterioration associated with an overpopulation of wild burros, and 2) to restore and maintain a thriving natural ecological balance and multiple-use relationship on the public lands consistent with the provisions of Section 3(b) (2) of the Wild Free-Roaming Horses and Burros Act of 1971 (WFRHBA).

The gather area extends south of the Bullfrog HMA onto lands administered by the BLM Southern Nevada District. Wild burros residing in this non-HMA area are likely emigrant wild burros from the Bullfrog HMA. Gather planning and operations will be in conjunction with the Southern Nevada District BLM.

Figure 1 on page 7 shows the proposed gather area.

The estimated population of 195 wild burros residing within and outside of the Bullfrog HMA exceeds the established low end of the AML range by 137 wild burros and high end of the AML range by 104 wild burros. Based on a review of information available at this time, the TFO has determined that excess wild burros are present within and outside of the Bullfrog HMA and need to be removed. Removing these excess wild burros is in compliance with the WFRHBA. The gather would 1) achieve a population of wild burros consistent with the established AML, 2) protect the wild burros from declining body condition and poor health due to a lack of forage and water, 3) restore a thriving natural ecological balance and prevent degradation of rangeland resources resulting from an overpopulation of wild burros, 4) protect habitat for the threatened desert tortoise and the sensitive Amargosa toad, and 5) decrease or eliminate public safety concerns regarding wild burros in Beatty and along the Highway 95 corridor. This assessment is based on factors including, but not limited to the following rationale:

<sup>2.</sup> The current population estimate is based on an aerial population inventory conducted during January 2012.

- The 2012 aerial inventory documented wild burro populations exceeding the established AML, with numerous wild burros residing outside the HMA boundary.
- Recurrent drought and sporadic precipitation patterns occur within the region often resulting in unfavorable conditions for healthy wild burros.
- Available water to wild burros in the HMA is scarce, and most of what is available also provides habitat for the Amargosa toad, a special status species.
- Much of the HMA is identified as desert tortoise habitat, a federally threatened species.
- Excess wild burros have contributed to some of the Standards and Guidelines for Rangeland Health not being met in accordance with the Mojave-Southern Great Basin Resource Advisory Council (RAC; 2006), particularly where use is occurring outside of the HMA boundaries. The AML for the Bullfrog HMA must be maintained for continued progress towards the Standards and Guidelines for Rangeland Health and Tonopah Resource Management Plan (RMP) Objectives.
- History of emergency gathers in the region (1996).
- History of poor wild burro health and Henneke body condition scores of 3 (thin) or less.
- Wild burros are wandering onto U.S. Highway 95 through the town of Beatty causing collisions with motorists, resulting in a public safety hazard. Multiple collisions per week have been reported at times.
- Many wild burros are residing inside the town of Beatty, Nevada searching for forage and
  water, creating hazards to citizens of Beatty, pets, motorists, and property damage. Burros
  residing in town and their interaction with the urban environment could threaten the health and
  overall well-being of the wild burros and public safety.
- The Beatty and Sawtooth fires burned 16,408 acres in 2006. Approximately 650 acres were drilled and seeded with desert wheatgrass (*Agropyron desertorum*) as part of the Fire Emergency Stabilization and Rehabilitation project. The seeding was evaluated for 3 years and the project was considered a failure. Forage resources remain extremely limited in these burned areas.

The 2007 Rangeland Health Evaluation for the Montezuma Complex thoroughly describes several of the aforementioned issues specific to the Bullfrog HMA. They include:

- 1. Extremely high burro numbers in the past led to emergency gathers.
- 2. There are few available water sources, especially on the east side of the HMA.
- 3. Inadequate fencing around Beatty has led to burro-human interactions ("Nuisance burros").
- 4. Bullfrog HMA contains habitat for the threatened Desert tortoise.

The HMA has not been gathered since the emergency removal in 1996, therefore the above mentioned issues are still current and relevant.

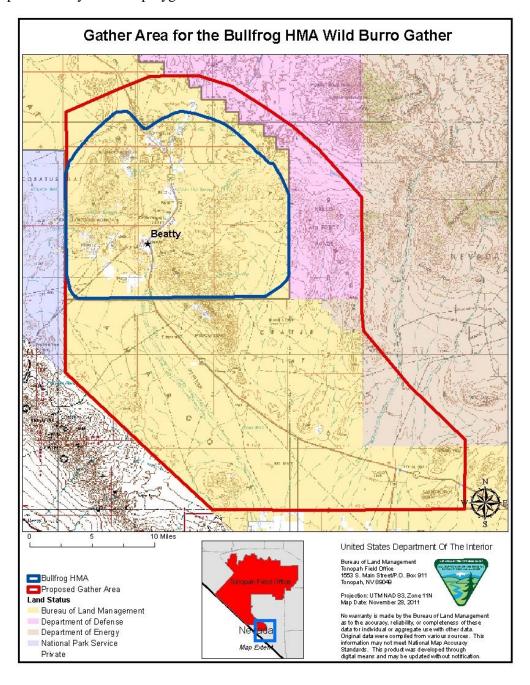
Based on the above factors, the TFO has determined that an estimated 137 excess wild burros need to be removed from within and outside the HMA boundary in order to reach the low range of AML.

The Tonopah Resource Management Plan (RMP) defines AML as "the maximum number of wild horses and/or burros to be managed within a herd management area and has been set through monitoring and evaluation or court order" (pg 15), and mandates "when the AML is exceeded, remove excess wild

horses and/or burros to a point which may allow up to three years of population increase before again reaching the AML".

Large portions of the Bullfrog HMA are dry and have no water available for wild burros. Additionally, the vegetation communities in the HMA are affected by various climatic influences such as extremely variable precipitation and undeveloped soils producing low amounts of usable forage for wild burros. Condition of the rangeland resource is detailed in the documents identified in Sections 1.7 and 3.5.

**Figure 1**. The proposed gather area for the proposed Bullfrog HMA wild burro gather. Gather area is represented by the blue polygon.



The AML needs to be achieved and maintained in order to manage the population of wild burros within the HMA designated for their use through the Tonopah RMP. Achievement of AML is also needed to prevent diminishing animal health and to maintain healthy vegetative communities that provide important habitat to wild burros and wildlife, including sensitive and threatened species. Maintaining wild burro populations consistent with the established AML would also ensure the long-term health and well-being of the wild burros and promote progress towards attainment of RAC Standards and Guidelines for Rangeland Health, and RMP Objectives.

# 43 CFR § 4700.06 Policy.

(a) Wild horses and burros shall be managed as self- sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat.

# 43 CFR § 4710.4 Constraints on Management

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

# 43 CFR § 4720.1 Removal of excess animals from public lands

Upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately.

### 43 CFR § 4740.1 Use of motor vehicles or aircraft

- (a) Motor vehicles and aircraft may be used by the authorized officer in all phases of the administration of the Act, except that no motor vehicle or aircraft, other than helicopters, shall be used for the purpose of herding or chasing wild horses or burros for capture or destruction. All such use shall be conducted in a humane manner.
- (b) Before using helicopters or motor vehicles in the management of wild horses or burros, the authorized officer shall conduct a public hearing in the area where such use is to be made.

# 1.6. Conformance with Rangeland Health Standards and Guidelines

The Proposed Action and Action Alternatives are in conformance with the Mojave-Southern Great Basin RAC Rangeland Health Standards and Guidelines which require BLM to manage wild horses and burros within the established AML range in balance with other uses. Applicable excerpts are as follows:

The standards for rangeland health will be reached and maintained by managing wild horse and burro numbers so as not to exceed Appropriate Management Levels for each Herd Management Area. Controlling wild horse and burro numbers through gathers and other control programs is essential.

Wild horses and burros within Herd Management Areas should be managed for herd viability and sustainability. Herd Management Areas should be managed to maintain a healthy ecological balance among wild horse and/or burro populations, wildlife, livestock, and vegetation.

Guideline 4.1: Wild horse and burro population levels in HMAs should not exceed AML.

Guideline 4.2: AMLs should be set to reflect the carrying capacity of the land in dry conditions based upon the most limiting factor: living space, water or forage. Management levels will not conflict with achieving or maintaining standards for soils, ecological components, or diversity of habitat and biota.

**Guideline 4.3**: Interaction with herds should be minimized. Intrusive gathers should remove sufficient numbers of animals to ensure a period between gathers that reflects national wild horse and burro management strategies.

The Mojave-Southern Great Basin RAC Rangeland Health Standards and Guidelines can be accessed at <a href="https://www.blm.gov/nv/st/en/res/resource\_advisory/mojave-southern\_grat.html">www.blm.gov/nv/st/en/res/resource\_advisory/mojave-southern\_grat.html</a> or by contacting the TFO.

The allotment associated with the Bullfrog HMA was evaluated for Rangeland Health through the evaluation process completed in 2007. It was determined through the analysis of monitoring data and evaluation of RMP and Allotment Specific Objectives that some of the Rangeland Health Standards and Guidelines were being met, and some were not. The reasons identified for Standards and Guidelines not being met included 1) frequent droughts due to highly variable weather patterns, 2) excessive use by livestock or wild burros, 3) poor soils, 4) lack of forage to support *appropriate uses* of both livestock and wild burros, and 5) stocking levels in certain areas that were too high for the resources.

As a result of these analyses, BLM determined that adjustments to the livestock management systems were necessary and that more conservative stocking rates were needed. Virtually all livestock use was excluded from the Bullfrog HMA due to limited water, forage, and to protect habitat for threatened and sensitive wildlife species. The wild burro AML was also adjusted to ensure that the wild burro population would be in balance with the limited resources in the arid region in order to maintain healthy animals, allow for improvements to habitat conditions, and to protect habitat for threatened and sensitive wildlife species. These changes were implemented in the 2007 FMUD issued subsequent to the RHE, an EA, and public decision-making process. Refer to the documents identified below in Section 1.7 for further information.

# 1.7. Other NEPA Analysis

This EA analyzes the impacts to the human environment that could result from gathering and removing excess wild burros within and outside the Bullfrog HMA. A Multiple Use Decision, Rangeland Health Evaluation, and an EA have been previously completed as part of the process used to establish AML for wild burros in the HMA. This EA tiers to the prior NEPA documents and will incorporate relevant portions of those documents by reference, where applicable. The other relevant NEPA and decision documents are identified below:

- Montezuma Complex Rangeland Health Evaluation, 2007
- Final Multiple Use Decision for the Montezuma Complex, 2007
- Montezuma Complex Rangeland Health Evaluation EA NV065-2005-042
- Tonopah RMP, October 2, 1997.

#### 1.8 Decision to be Made

The BLM TFO would determine whether to implement the proposed gather to bring the wild burro population back to AML in order to maintain population size within the established AML and avoid the deterioration of the range that can result from an overpopulation of wild burros.

The decision would not establish or adjust the AML, which was established through previous planning-level decisions. Monitoring and population inventory indicates that an excess population of wild burros exists in the Bullfrog HMA, and that animals are residing outside of HMA boundaries. These wild burros need to be removed in order to 1) preserve a thriving natural ecological balance, 2) comply with the WFRHBA, 3) help resolve the issues identified from human-burro interactions, 4) reduce burromotorist collisions, and 5) protect threatened wildlife species such as the Desert tortoise and sensitive species like the Amargosa toad. Future decisions regarding long-term management of the HMA would continue to be accomplished with public involvement through a Herd Management Area Plan, other activity level management plans specific to the HMA or Battle Mountain District Resource Management Plan Revisions. The decision would not adjust livestock use, which also has been allocated through prior planning-level processes and decisions and is already very limited within the HMA.

# 1.9. Scoping and Issue Identification

As part of the preparation of this EA, a scoping letter dated June 29, 2011 was mailed to 20 individuals, agencies and organizations on the interested public list for the Bullfrog HMA. Among these was the Nevada State Clearinghouse which made the scoping letter available for review by Nevada State Agencies. Comments were received from the following:

• Nevada Department of Wildlife (NDOW) is supportive of the gather, and removing wild burros from outside the boundaries of the HMA where wild burros may jeopardize guzzler use by desert bighorn sheep. NDOW also requests that the BLM gather to low range AML.

# 2. Description of the Proposed Action and Alternatives

The following section details the Proposed Action and Alternatives that will be analyzed in this EA, as well as alternatives considered, but not carried forward for analysis. The following alternatives are analyzed in detail:

Table 2.	Proposed	Action and	<b>Alternatives</b>
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Proposed Action	Remove all excess wild burros from within and outside the HMA boundaries to bring the population to low range AML. This would be achieved through a phased approach due to limited short-term holding space. BLM would gather and remove approximately 75 wild burros in an initial gather, with those in close proximity to Beatty, Nevada, along the Highway 95 corridor, and those residing outside of the HMA having the highest priority for removal. The remaining excess wild burros would be removed from inside the HMA in a follow-up gather(s) until a post-gather population of 58 wild burros is reached.
Alternative 1	Gather and remove wild burros from within 1 mile of Beatty, Nevada and the Highway 95 corridor through the HMA, concentrating on alleviating human-burro conflicts.
Alternative 2	Gather and remove wild burros from areas outside the designated HMA only, slowing expansion and decreasing pressure from wild burros in areas not designated for their use.
No Action	No gather or removal of wild burros.

The Proposed Action was developed to meet the Purpose and Need (i.e. to remove excess wild burros, manage wild burros within identified HMA boundaries, maintain AML and ensure a thriving natural ecological balance). It has been slightly modified from the Proposed Action analyzed in the Preliminary EA to allow for the phased removal of excess wild burros, rather than achieving the Proposed Action in a single gather and to include the option of using bait/water trapping as a supplement to or instead of a helicopter gather after the initial gather. The Proposed Action was modified due to limited short-term holding space, which only allows for the removal of 75 wild burros at this time. However, in order to achieve and maintain the low range AML, and resolve the issues associated with the overpopulation of wild burros, follow-up gathers will be needed. Again, these follow-up efforts could include helicopter assisted trapping and/or bait and water trapping.

Alternatives 1 and 2 are also responsive to two key issues identified by the Montezuma Complex RHE, BLM personnel and local agencies, and numerous members of the public.

The No Action Alternative would not achieve the identified Purpose and Need identified in Section 1.3. However, it is analyzed in this EA to provide a basis for comparison with the other action alternatives, and to assess the effects of not conducting a gather at this time. The No Action Alternative would not be consistent with the requirement under the WFRHBA to remove excess wild horses and burros from the public range, and is not in conformance with regulatory provisions for management of wild horses and burros as set forth at 43 CFR § 4700. The No Action Alternative would not result in achievement of the established AML or result in progress towards attainment of the RAC Standards and Guidelines for Rangeland Health, or Land Use Plan and RMP Objectives for the HMA and associated grazing allotment.

A trap site adoption event could be planned to occur in conjunction with the gather activities in which selected wild burros would be adopted to qualified applicants at the gather location.

# 2.1. Management Actions Common to the Proposed Action and Alternatives 1 & 2

The proposed gather would take place as early as March 2012 and would be completed in accordance with this Wild Burro Gather Plan EA and Standard Operating Procedures (SOPs) in Appendix A. The BLM would be responsible for contractor compliance to national contract specifications including SOPs.

The primary gather technique would be the helicopter-drive trapping method. The use of roping from horseback could also be used when necessary. If a further gather or gathers are needed to achieve the gather objectives, helicopter assisted trapping, bait/water trapping, or both may be used. Multiple gather sites (traps) would be used to gather wild burros. The BLM would make every effort to place gather sites in previously disturbed areas. If a new site needs to be used, a cultural resource inventory would be completed prior to using the new gather site. No gather sites would be set up near known populations of threatened, endangered, or sensitive species; or in riparian areas, or cultural resource sites. All gather sites, holding facilities, and camping areas on public lands would be recorded with Global Positioning System equipment, shared with the Battle Mountain District Invasive, Non-native Weed Coordinators, and then assigned for monitoring during the next several years for invasive, non-native weeds. All gather and handling activities (including gather site selections) would be conducted in accordance with the SOPs in Appendix A.

Following capture, wild burros would be sorted and separated by age and sex, and await transport to BLM Wild Horse and Burro (WH&B) adoption preparation or holding facilities. Once the removed animals arrive at BLM holding facilities, they would be prepared for adoption to qualified individuals who can provide them with a good home.

Herd health and characteristics data would be collected as part of continued monitoring of the wild burro herds. Other data, including sex and age distribution, condition class information (using the Henneke rating system), color, size and other information may also be recorded for all gathered wild burros. Baseline data would be collected to monitor the genetic health of the wild burros within the combined project area.

An Animal and Plant Inspection Service (APHIS) or other veterinarian may be on-site during the gather, as needed, to examine animals and make recommendations to the BLM for care and treatment of wild burros.

Any old, sick or lame wild burros unable to maintain an acceptable body condition (greater than or equal to a Henneke body condition score (BCS) of 3 or with serious physical defects such as club feet, severe limb deformities, or sway back would be humanely euthanized as an act of mercy. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Washington Office Instruction Memorandum 2009-041). Refer to: <a href="http://www.blm.gov/wo/st/en/info/regulations/Instruction Memos and Bulletins/national instruction/2009/IM\_2009-041.html">http://www.blm.gov/wo/st/en/info/regulations/Instruction Memos and Bulletins/national instruction/2009/IM\_2009-041.html</a>.

# 2.2. Actions that Differ Among the Proposed Action and Alternatives

2.2.1. Proposed Action: Remove all excess wild burros from within and outside the HMA boundaries to bring the population to low range AML. This would be achieved through a phased approach due to limited short-term holding space. BLM would gather and remove approximately 75 wild burros in an initial gather, with those in close proximity to Beatty, Nevada, along the Highway 95 corridor, and those residing outside of the HMA having the highest priority for removal. The remaining excess wild burros would be removed from inside the HMA in a follow-up gather(s) until a post-gather population of 58 wild burros is reached.

Through the Proposed Action, the primary goal would be to remove all excess wild burros through phased gather operations, with wild burros removed in the following order of priority: wild burros residing in and near the town of Beatty, along the Highway 95 corridor, outside the boundaries of the HMA, and inside the HMA. Wild burros would be removed from inside the HMA in sequential gathers until a post gather population of 58 wild burros (low end AML) is reached and all wild burros residing outside the HMA boundaries have been removed. The Proposed Action would end once the wild burro population reaches low end AML. Approximately 75 wild burros would be removed during the initial gather. Helicopter drive trapping would be used to gather excess wild burros in the initial gather, but could be subsequently supplemented in a follow-up gather(s) with bait/water trapping, in areas where this might be effective.

# 2.2.2. Alternative 1: Gather and remove wild burros from within 1 mile of Beatty, Nevada and the Highway 95 corridor through the HMA, concentrating on alleviating human-burro conflicts.

The Bullfrog HMA would be gathered emphasizing Beatty and a one mile radius of Beatty. A one mile buffer to either side of the Highway 95 corridor through the HMA would also be selected. All wild burros found in these areas would be gathered and removed, potentially alleviating concerns of public safety hazards and human-burro conflicts. Wild burros residing outside of the described areas would not be gathered, and no attempt would be made to capture these animals. Due to movement patterns and seasonal distribution, it is difficult to predict how many wild burros could be captured and removed from these areas.

# 2.2.3. Alternative 2: Gather and remove wild burros from areas outside the designated HMA only, slowing expansion and decreasing pressure from wild burros in areas not designated for their use.

Under Alternative 2 excess wild burros would be gathered and removed from areas outside the designated HMA boundaries only. This would help slow the expansion of wild burros outside of the HMA, particularly south to Amargosa Valley (Lathrop Wells). It would also reduce the pressure on resources caused by wild burros using areas not designated for their use including but not limited to guzzlers implemented for desert bighorn sheep, critical habitat for desert tortoise, and public lands administered by the National Park Service. Due to movement patterns and seasonal distribution, it is difficult to predict how many wild burros could be captured and removed from outside HMA boundaries under this alternative.

# 2.2.4. Alternative 3: No Action Alternative (No Wild Burro Gather)

Under the No Action Alternative, a wild burro gather would not be conducted for the Bullfrog HMA. Wild burro populations would not be actively managed at this time, and wild burros would not be removed from areas outside of HMA boundaries. The current population of 195 wild burros would continue to increase at an estimated rate of 16% annually. The established AML would continue to be exceeded. Additionally, implementation of the No Action Alternative would not result in progress towards attainment of the RAC Standards and Guidelines for Rangeland Health, or Land Use Objectives for the affected allotment or HMA. Wild burro conflicts in Beatty, Nevada and public safety concerns along the Highway 95 corridor would continue and likely increase as the wild burro population increases.

The No Action Alternative is in violation of the WFRHBA and is not in conformance with BLM wild horse and burro management requirements contained in 43 CFR Part 4700. The No Action Alternative would not achieve the identified Purpose and Need; however, it is analyzed in this EA to provide a basis for comparison with the other action alternatives, and to assess the effects of not conducting a gather at this time.

### 2.3. Alternatives Considered but Eliminated from Detailed Analysis

Through completion of EAs for proposed wild horse gathers in Nevada in 2010 and 2011, several alternatives have been proposed for consideration and are discussed below.

# 2.3.1. Use of Bait and/or Water Trapping

An alternative considered was to accomplish the removal of excess wild burros *primarily* through the use of bait and/or water trapping as the primary gather method. Water trapping involves the construction of gather corrals, and baiting wild burros into the corrals with the use of water. Specialized one-way gates are often used to prevent the animals from leaving the corral once inside. Bait and water trapping methods are usually only effective in areas where water is limited or absent, resulting in high motivation for wild burros to enter the trap to access them. All other water sources except the water trap source must be fenced off from the wild burros (and other range users).

The large geographic area involved and the extended time necessary to trap the wild burros under this alternative would result in a significant increase in gather cost and would make it difficult to achieve the gather objectives in a reasonable time period, particularly for the initial gather operations. The initial gather period could be extended to 1-2 months or more under this alternative. Given the impracticalities of implementing this alternative for such a large geographic area, and existing personnel and budget constraints, this alternative was eliminated from detailed study as the primary gather technique.

# 2.3.2. Letting Nature Take its Course

Some members of the public have advocated "letting nature take its course." Allowing burros to die of dehydration and starvation would be inhumane treatment and is contrary to the WFRHBA, which mandates removal of excess wild horses and burros. The damage to rangeland resources that results from excess numbers of wild burros is also contrary to the WFRHBA, which mandates the Bureau to "protect the range from the deterioration associated with overpopulation", "remove excess animals from the range so as to achieve appropriate management levels", and "to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area".

Once the vegetative and water resources are at critically low levels due to excessive utilization by an over population of wild burros, the weaker animals, the older animals, and the jennies and foals are the first to be impacted. It is likely that a majority of these animals would die from starvation and dehydration if insufficient forage and water are available. The resultant population would be heavily skewed towards the stronger jacks which would lead to significant social disruption in the HMA. By managing the public lands in this way, the vegetative and water resources would be impacted first and to the point that they have no potential for recovery and would likely be replaced mostly by annual grasses and forbs. Competition between wildlife and wild burros for forage and water resources would continue and wild burro numbers would continue to increase above the established AML.

Some wildlife species (i.e. bighorn sheep, mule deer), may not be able to compete with wild burros for resources, which could lead to the death of individual animals. Wildlife habitat conditions would deteriorate as excess wild burros reduce herbaceous vegetative cover. As the vegetation resources are over utilized to the point of no recovery wild burros would start showing signs of malnutrition and starvation which could lead to a catastrophic die off. This degree of resource impact would lead to management of wild burros at a greatly reduced level. The growing overpopulation of wild burros could threaten habitat for threatened and sensitive wildlife species. The Mojave Desert Ecosystem is fragile in nature and could take decades to recover from over-use and many wildlife species, particularly the threatened and sensitive species, may not recover. For these reasons, this alternative was eliminated from further consideration

# 2.3.3. Make On-the-Ground and Individualized Excess Wild Burro Determination Prior to Removal

An alternative to make on-the-ground and individualized excess wild burro determinations prior to removal was recommended through the public review process under the view set forth by some commenters that a tiered or phased removal of wild horses and burros from the range is mandated by the WFRHBA. Specifically, this alternative would involve a tiered gather approach, whereby BLM would first identify and remove old, sick or lame animals in order to euthanize those animals on the range prior to gathering. Second, BLM would identify and remove wild burros for which adoption demand exists by qualified individuals, such as younger burros or burros with unusual and interesting markings. Last, BLM would remove any additional excess wild burros necessary to bring the population back to AML.

This proposed alternative would only be viable in situations where the project area is contained within barriers (natural and/or manmade) which inhibit the animals' movements outside the project area, the area is readily accessible and wild burros are clearly visible, and where the number of wild burros to be removed is small enough that a targeted approach to removal can be implemented. Under the present conditions within the project area, this proposed alternative is impractical, if not impossible, as well as more disruptive to the wild burros and less humane for a variety of reasons.

First, BLM does euthanize old, sick or lame animals on the range when such animals have been identified. This occurs on an on-going basis and is not limited to gathers. During a gather, if old, sick or lame animals are found and it is clear that an animal's condition requires the animal to be put down, that animal is separated from the rest of the group that is being herded so that it can be euthanized on the range. However, wild burros that meet the criteria for humane destruction because they are old, sick or lame in most cases cannot be identified as such until they have been gathered and examined up close, so as to determine whether the animals have dental regression or damage, genetic defects (i.e. club foot), injuries (old/new), and to assess their overall body condition. Old, sick and lame burros meeting the criteria for humane euthanasia are also only a very small percentage of the total number of wild burros gathered. Due to the size of the HMA, access limitations associated with topographic and terrain features and the challenges of approaching wild burros close enough to make an individualized determination of whether an animal is old, sick or lame, it would be virtually impossible to conduct a phased culling of such wild burros on the range without actually gathering and examining the animals.

Similarly, rounding up and removing wild burros for which an adoption demand exists, before gathering any other excess wild burros would be both impractical and much more disruptive and traumatic for the animals. The size of the HMA, terrain challenges, difficulties of approaching the wild burros close enough to determine age and whether they have characteristics (such as color or markings) that make them more adoptable, the impracticalities inherent in attempting to separate the small number of adoptable wild burros from the rest of the herd, and the impacts to the wild burros from the closer contact necessary, makes such phased removal a much less desirable method for gathering excess wild burros. This approach would create a significantly higher level of disruption for the wild burros on the range and would also make it much more difficult to gather the remaining excess wild burros. This alternative was therefore eliminated from any further consideration.

# 2.3.4. Control of Wild Burro Numbers by Natural Means

This alternative would use natural means, such as natural predation, to control the wild burro population. This alternative was eliminated from further consideration because it is contrary to the WFRHBA which requires the BLM to protect the range from deterioration associated with an overpopulation of wild horses or burros. It is also inconsistent with the Tonopah RMP which directs the removal of excess wild burros as necessary to achieve and maintain AML. The alternative of using natural controls to achieve a desirable AML has not been shown to be feasible in the past. Wild burro populations in the Bullfrog HMA are not substantially regulated by predators, as evidenced by the 16% average annual increase in the wild burro populations within the HMA. In addition, wild burros are a long-lived species with high documented survival rates and are not a self-regulating species. This alternative would result in a steady increase in the wild burro populations which would continue to exceed the carrying capacity of the range until severe or unusual conditions that occur periodically—such as periodic and extreme drought—cause a catastrophic mortality of wild burros in the HMA. Refer to 2.3.2 above for more detailed information about an Alternative that would allow nature to take its course. For these reasons, this alternative was eliminated from further consideration.

# 2.3.5. Designation of the HMA to be Managed Principally for Wild Burros

Designation of the Bullfrog HMA as a "Wild Burro Range" under 43 CFR 4710.3-2 would require amendment of the Tonopah RMP, which is outside the scope of this EA. Only the BLM Director or Assistant Director (as per BLM Manual 1203: Delegation of Authority), may establish a Wild Horse and Burro Range after a full assessment of the impact on other resources through the land-use planning process. As this is not an "exclusive" designation, it potentially would not change the level of livestock grazing permitted to occur in the area. There are currently four designated Wild Horse and Burro Ranges in the western United States that are managed principally for wild horses and burros consistent with 43 CFR 4170.3-2. These are the Pryor Mountain Wild Horse Range in Montana; the Little Book Cliffs Wild Horse Range in Colorado; the Nevada Wild Horse Range and the Marietta Wild Burro Range in Nevada.

### 2.3.6. Gathering the Bullfrog HMA to Upper Range AML

A post-gather population size at the upper level of the AML would result in AML being exceeded with the next foaling season. This would be problematic for several reasons. The AML established for the HMA represents the maximum population for which a thriving natural ecological balance should be maintained. The desired post gather population represents the number of animals that should remain in the HMA following a wild burro gather in order to allow for a periodic gather cycle of approximately every 3 years and to prevent the population from exceeding the established AML between gathers. The need to gather below the upper range of AML has been recognized by the Interior Board of Land Appeals (IBLA), which has held that AML means, "that 'optimum' number of wild horses which results in a thriving natural ecological balance and avoids a deterioration of the range" (109 IBLA 119 API 1989). "Proper range management dictates removal of horses before the herd size causes damage to the range land. Thus, the optimum number of horses is somewhere below the number that would cause resource damage" (118 IBLA 75).

# 2.3.7. Remove or Reduce Livestock within the HMA

This alternative would not involve the removal of wild burros and instead addresses the excess wild burro numbers through the removal or reduction of livestock grazing within the HMA. This alternative was not brought forward for analysis because it is inconsistent with the Tonopah RMP objectives, Montezuma Complex FMUD and is inconsistent with multiple use management. Further, livestock grazing is only permitted in a small portion (about 8%) of the HMA, in which virtually no livestock use has been made in recent years even within this limited area. Therefore, removing or reducing livestock numbers in the HMA would not address any of the issues presented in this document regarding the overpopulation of wild burros.

Many of the areas within the Bullfrog HMA are not suitable for use by livestock and virtually no use occurs in the HMA. Only 8% of the HMA is permitted for use by livestock, however, in recent years grazing in the HMA has not occurred at all because forage and availability of water is not optimum for livestock use. No livestock use is permitted in desert tortoise habitat. Refer to Section 3.3 and the documents identified in Section 1.7 for more details.

The proposal to reduce livestock would not achieve the Purpose and Need identified in Section 1.3 and is not consistent with the WFRHBA, which directs the Secretary to manage wild burros in balance with other multiple uses and to immediately remove excess wild burros. Analysis of population inventory and monitoring data resulted in the determination that limited water and forage resources are available within the Bullfrog HMA. The AML established through the above referenced FMUD was based on conservative allocations in order to maintain healthy animals at a thriving natural ecological balance and allow for improvement of rangeland health. Under this alternative, wild burros would continue to reside outside HMA boundaries, AML would continue to be exceeded, and human-burro conflicts would continue.

Livestock grazing can only be reduced or eliminated following the process outlined in the regulations at 43 CFR § 4100. Such changes cannot be made through a wild horse or burro gather decision. Changes in forage allocations between livestock and wild horses and burros would have to be re-evaluated and implemented through the appropriate decision-making processes to determine whether a thriving natural ecological balance could be achieved at a higher AML and in order to modify the current multiple use relationship established in the RMP. However, even if livestock grazing were completely eliminated from the HMA, the wild burro population would continue to be in excess of available range resources and wild burros would continue to move beyond the HMA boundaries in search of food and water.

For these reasons, this alternative was dropped from detailed analysis.

# 2.3.8. Alternative capture techniques instead of helicopter capture of excess wild burros.

Within Nevada, scoping and issuance of Gather Plan EAs for wild horse and burro gathers has resulted in comments from the public requesting that the BLM capture animals through alternative methods. The following is a summary of some of those methods with information about their use.

Net gunning techniques normally used to capture big game animals also rely on helicopters.
 These methods can be safe and effective on a small scale with optimum ground conditions and access. The use of this method is not practical on a large scale and can result in additional injury

to animals, humans and impacts due to the need for cross country off-road travel to access netted animals.

- Chemical immobilization is a very specialized technique and strictly regulated. Currently, the BLM does not have sufficient expertise to implement this method and it would be impractical to use given the size of the HMA, access limitations and approachability of the burros.
- Use of wrangler on horseback to drive-trap and remove excess wild burros can be fairly effective on a small scale but due to the number of excess wild burros to be removed, the large geographic size of the HMA, and approachability of the animals, this technique would be ineffective and impractical. Wild burros often outrun and outlast domestic horses carrying riders.
- Horseback drive-trapping is also very labor intensive and can be very harmful to the domestic horses used to herd the wild horses and burros and dangerous to humans. For these reasons, this method was eliminated from further consideration.

# 3. Affected Environment and Environmental Consequences

To comply with the National Environmental Policy Act (NEPA), the Bureau of Land Management is required to address specific elements of the environment that are subject to requirements specified in statute or regulation or by executive order (BLM 1988, BLM 1997, BLM 2008). The following table outlines the elements that must be addressed in all environmental analyses, as well as other resources deemed appropriate for evaluation by the BLM, and denotes if the Proposed Action, Alternative 1, 2 or the No Action Alternative affects those elements.

Potential or expected impacts to the affected resources are discussed in the following tables. Direct impacts are those that result from the actual gather and removal of wild horses and burros. Indirect impacts are those impacts that occur once the excess animals are removed.

**Table 3a: Elements** 

ELEMENT	PRESENT YES/NO	AFFECTED YES/NO	RATIONALE
Air Quality	Yes	No	The proposed gather area is not within an area of non-attainment or areas where total suspended particulate matter exceeds Nevada air quality standards. Areas of disturbance would be small and any effects on air quality would be temporary and fleeting in nature, and would take the form of fugitive dust.
ACECs	No	No	Resource is not present.
Cultural Resources	Yes	No	Through adherence of the Standard Operating Procedures (SOPs) (Appendix A), potential impacts to cultural sites would be eliminated. Archeological clearance of gather corrals, holding corrals and others areas of potential effects would occur prior to construction. If cultural resources were encountered, those locations would not be utilized unless impacts could be avoided.
Environmental Justice	No	No	The Proposed Action or alternatives would have no effect on minority or low-income populations.
Fish Habitat	No	No	Resource is not present.
Flood Plains	No	No	Resource is not present.
Forests and Rangelands (HFRA only)	Yes	No	This project does not meet the criteria to qualify as an HFRA project.
Noxious Plant Species and Invasive Nonnative Species	Yes	Yes	Discussed in Section 3.4
Migratory Birds	Yes	Yes	Discussed in Section 3.8
Native American	No	No	There are no known Native American concerns.

ELEMENT	PRESENT YES/NO	AFFECTED YES/NO	RATIONALE
Religious Concerns			
Prime or Unique Farmlands	No	No	Resource not present.
Threatened or Endangered Species (plants and animals)	Yes	Yes	Discussed in Section 3.8.
Wastes, Hazardous or Solids	No	No	Not Present.
Water Quality	Yes	No	Gathers are temporary, surface events and there is no interaction with surface or ground water.
Wetlands and Riparian Zones	Yes	Yes	Discussed in Section 3.6
Wild and Scenic Rivers	No	No	Resource not present.
Wilderness	No	No	No Wilderness or Wilderness Study Areas are present.

Other resources of the human environment that have been considered for this EA are listed in the table below.

PRESENT AFFECTED OTHER RESOURCES RATIONALE YES/NO YES/NO Grazing/Livestock Discussed in Section 3.3. Yes Yes Management Temporary event and use of roads or powerline rights-of-way is very Land Use Authorization Yes No There would be no interference with mining or mineral claim Minerals Yes No activities. Resource is not affected by the proposed action or alternatives. There Paleontological is a minimal likelihood that resources would be present. Any surface No No Resources disturbance resulting from the proposed gather would not be sufficient to cause impacts. Temporary surface event. Mitigation if hiker or recreationists stray Recreation Yes No into area. Not a permanent, long-term impact to dispersed recreation. Very limited, short-term socio-economic impact as gather crews and Socio-Economic Values Yes No BLM employees will contribute to local economy (lodging, food, supplies, etc.) for a few days. No long-term impacts.. Yes Discussed in Section 3.7 Yes Special Status Species Yes Yes Discussed in Section 3.8 (plants and animals) Vegetation Yes Yes Discussed in Section 3.5 Resource is not affected by the proposed action or alternatives. Gather Visual Resources operations would be temporary and isolated in nature. There would Yes No be no permanent changes to the landscape. Wild horses and burros Discussed in Section 3.2 Yes Yes Wildlife Discussed in Section 3.8

Table 3b. Other Resources

### 3.1. General Setting

The Proposed Gather Area includes the 151,752-acre Bullfrog HMA which surrounds Beatty, Nevada within Nye County. The gather area would also include those areas outside of the designated HMA boundary where wild burros from the HMA have migrated and are now residing, including portions of the Southern Nevada District, south of the HMA. The eastern edge of the HMA borders the NTTR, where burros move easily between both areas. The western border is the same as the TFO area boundary, and the town of Beatty, Nevada lies directly in the center of the HMA. The area is characterized by Mojave Desert vegetation, dominated by blackbrush, desert needlegrass, Indian

ricegrass, Nevada ephedra, winterfat/white sage, and fourwing saltbrush. Elevations within the HMA range from a high of 6,031 feet at Bare Mountain to a low of 3,095 feet south of Beatty. The area is extremely arid and is characterized by limited usable forage and scarce water.



Typical habitat in the Bullfrog HMA.

Wild burros evolved in arid regions of Africa and Asia in habitat similar to the Bullfrog HMA. Their generalized browsing food habits gave them the ability to survive on poorer quality forage and very little water relative to wild horses. In contrast to wild horses, wild burros may survive during droughts on very dry, shrub dominated sites with little grass, if resource competition is limited. However, the climate, vegetation, soils, and precipitation of the HMA all combine to make an extremely harsh hot desert landscape in the driest state in the U.S.

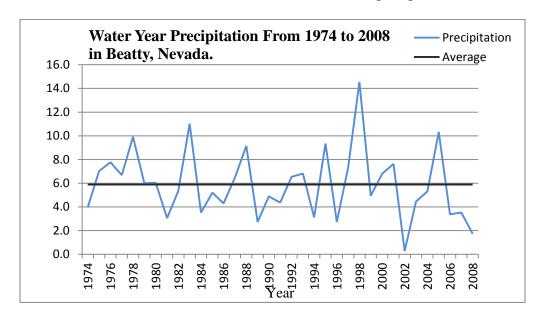
Extremes in precipitation from year to year tend to be more pronounced in southern Nye County than in northern Nevada or southern Nevada because this region is influenced by an orographic rain shadow of the California Sierra and by two different weather patterns (Continental Tropical and Maritime Polar). This causes highly variable precipitation, by year and by season (Figure 2). The effect of drought on this area can be pronounced when both weather patterns are weak for their respective traditional season. Likewise, rainfall well in excess of "normal" can result from a strong winter (maritime) pattern followed by a strong summer (continental) pattern. Soils and vegetation within the region reflect the dry conditions.

Drought is a recurrent feature of south-central Nevada. Drought should not be confused with aridity. Drought has been defined as a period when precipitation is less than 75 percent of the average amount (Society for Range Management 1989) while aridity refers to areas of low rainfall that are a permanent feature of climate.

Using this definition, from 1944 to 1984 drought occurred in 17 out of 40 years in the southwestern United States (Holecheck et al. 1995). On average drought conditions occur in one of every 3-4 years within the Bullfrog HMA and Proposed Gather Area. Klages (1942) concluded that "even slight reductions from normal precipitation can cause severe reductions in plant yield in areas below 300 mm

( $\approx$ 11.81 inches) of precipitation Two or more consecutive years of drought have far more impact on vegetation than one year of drought followed by normal or above-normal precipitation.

**Figure 2**. Water year (October 1 – September 30) precipitation near Beatty Nevada from 1974 to 2008. Data after 2008 was unavailable. Notice the extreme fluctuations in precipitation.



#### 3.2. Wild Burros

# Affected Environment

Beatty, Nevada lies in the center of Bullfrog HMA and has a population of approximately 1,000 people. Limited fencing around the town allows wild burros to move inside and reside within the city limits to take advantage of domestic water and forage resources. Over the years, TFO has received numerous letters and phone calls from frustrated citizens of Beatty. Although some citizens like the wild burros in town, other residents report wild burros causing traffic hazards, turning over garbage cans, destroying fences, yards, shrubs, grapevines, fruit trees, leaving manure in yards, aggravating dogs, and becoming aggressive to citizens. This not only creates a nuisance for the citizens, but can also result in injury to or death of wild burros.

Currently, the AML for the Bullfrog HMA is a range of 58-91 wild burros. This AML was established following a Rangeland Health Evaluation completed in 2007 that culminated in an



Wild burro in town in Beatty, Nevada entangled in a ladder. This could result in a life-threatening situation for the burro.

FMUD issued in 2007. The AML was established taking into consideration the inherent low precipitation and subsequent low producing vegetation communities, frequent drought and lack of available water for wild burros. The AML was also established to protect key forage, prevent wild burro emergencies, and protect habitat for threatened and sensitive wildlife species.

A population inventory of the Bullfrog HMA was conducted in February, 2010 and counted 124 wild burros. The post-foaling population in 2011 was expected to be 144 wild burros based on average annual rate of population increase for the Bullfrog HMA is 16%. However, on January 6<sup>th</sup> and 7<sup>th</sup>, 2012, another inventory was conducted for the Bullfrog HMA and areas outside the HMA boundary where wild burros have established residency. This inventory counted 195 wild burros of which 42 were residing outside of the HMA boundary. Due to the rugged terrain and poor sightability of wild burros, BLM believes that the 195 wild burros counted under-estimate the actual population. Future aerial inventories will be conducted to confirm or re-evaluate the estimated population.

It is anticipated that the age structure of the Bullfrog HMA wild burros resembles a normal age structure with ages ranging from foals to animals in excess of 30 years of age. The sex ratio is estimated to be approximately 50% jennies and 50% jacks with possible variations of up to 10% below or above these levels.

Genetic baseline sampling has not been completed for the Bullfrog HMA wild burros and this data (hair samples) would be collected during the proposed gather.

During the Rangeland Health Evaluation for the grazing allotments associated with the Montezuma Complex, it was determined that the over-population of wild burros had contributed to some of the Standards and Guidelines for Rangeland Health, RMP Objectives not being met. Most of the reasons included utilization levels which exceeded allowable levels, and wild burros moving outside of HMA boundaries and impacting rangeland outside of areas designated for their use.

Wild burros are able to move freely between the Bullfrog HMA to the NTTR and outside HMA boundaries in all directions, as there is no adequate fencing to restrict movement. A fence exists along the Highway 95 corridor through the HMA, splitting the HMA into an east and west portion. Most of the population resides in the western side of the HMA with populations residing outside of the HMA boundaries to the south and west. Wild burros move out of the HMA in search of food and water.

Wild burros have not maintained adequate body condition due to the inherent nature of the environment which is characterized by scarce forage and water in this region. An emergency gather was conducted in the Bullfrog and surrounding HMAs in 1996 due to lack of forage and water as a result of consecutive years of drought. Wild burros were stressed and in deteriorated body condition. All animals that could be located (417) were removed from the Bullfrog HMA at this time. During this time, there was severe utilization of rangeland resources and a dramatic lack of water. Without the removal of large numbers of wild burros, rangeland vegetation and water sources may not have recovered.

In years of normal precipitation or without consecutive years of drought, wild burros tend to maintain stable body condition in this arid region and do not experience body condition decline unless the area is enduring serious drought.

Wild burros are a long-lived species with documented high survival rates; they do not have the ability to self-regulate their population size. Predation and disease have not substantially regulated wild burro population levels within or outside the Bullfrog HMA. Throughout the HMAs administered by the Battle Mountain District, there are few predators that exist to control wild burro populations. Some mountain lion predation occurs, but it is not believed to be substantial. Coyote are not prone to prey on wild burros unless young or extremely weak. Other predators such as wolf or bear do not exist.

Wild burros in general are very resilient and adaptable animals with a metabolism that has evolved to allow them to survive and thrive in poor quality habitat (compared to their domestic counterparts). These animals are typically in top fitness, have strong bones and hooves and rarely succumb to ailments that plague domestic horses or burros. Wild burros typically do not begin to show signs of body condition decline until the habitat components are severely deficient. Once the decline begins, however, their health deteriorates rapidly.



Wild burros gathered in the September 2006 emergency gathers.

The Wild Burro Gather Plan and SOPs located in Appendix A discuss gather procedures.

# **Environmental Consequences**

The purpose of this section is to provide relevant information to the proposed gather and summarize the potential direct and indirect effects to wild burros that could occur with implementation of the Proposed Action, Alternative 1, 2 or the No Action Alternative. This section covers impacts that are common to all of the Action Alternatives, and impacts that differ among alternatives.

# <u>Proposed Action and Alternatives 1 & 2</u> <u>Direct and Indirect Impacts of the Proposed Gather – Action Alternatives</u>

The BLM TFO has been actively conducting wild horse and burro gathers since the mid 1970's. Over time, methods and procedures have been developed and refined so as to minimize stress and impacts to wild horses and burros during implementation of gathers. The capture of wild horses and burros utilizing a helicopter is the safest and most efficient method to remove large numbers of these animals from public lands. Injury and death as a direct result of the helicopter herding is minimal and occurs in less than 1% of animals gathered. In fact, most injuries or death occur *after* the animal is gathered and in the process of being sorted or loaded for transport, or while in the holding corrals. BLM staff is onsite at all times to observe the gather, monitor animal health, and coordinate the gather activities with the contractor. The SOPs outlined in Appendix A would be implemented to ensure a safe and humane gather occurred, and to minimize potential impacts to burros.

Over the past 30 years, various impacts to wild burros from gathers have been observed. Individual, direct impacts to these animals include handling stress associated with the capture, sorting, animal handling, and transportation. The intensity of these impacts varies by individual animal, and is indicated by behaviors ranging from nervous agitation to physical distress. Wild burros are very adaptable animals and would assimilate into the environment with new members quite easily. Observations made

through completion of gathers show that many of the wild burros captured acclimate quickly to the holding corral situation, becoming accustomed to water tanks and hay, as well as human presence. Wild burros are generally calm, less aggressive and sustain few injuries. Both the BLM Wild Horse and Burro Specialists and the Gather Contractor and crew are very attentive and sensitive to the needs of foals as well as all wild burros captured during gathers. Ensuring the health, safety and well-being of wild burros once captured is a priority.

Accidental death or the need to humanely euthanize animals as a direct result of gather activities is infrequent and averages less than one half to one percent of the wild horses and burros gathered (0.5-1.0%). Injuries sustained during gathers include nicks and scrapes to legs, face, or body from brush or tree limbs while being herded to the gather corrals by the helicopter. Rarely, wild burros will encounter barbed wire fences and will receive wire cuts. These injuries are not fatal and are treated with medical spray at the holding corrals where a veterinarian can examine the animal.

Wild burros generally aren't as agitated or aggressive, and are more docile than wild horses. However, injuries may still occur. Most injuries are sustained once the animal has been captured and is either within the gather corrals or holding corrals, or during transport between the facilities and during sorting. These injuries result from kicks and bites, and from animals making contact with corral panels or gates. Transport and sorting is completed as quickly and safely as possible to reduce the occurrence of fighting, and then the wild burros are moved into the large holding pens to settle in with hay and water. Injuries received during transport and sorting consist of superficial wounds of the rump, face, or legs. Despite precautions, occasionally a wild burro will make contact with panels hard enough to sustain a fatal neck fracture.

Indirect individual impacts are those impacts which occur to individual animals after the initial stress event, and may include spontaneous abortions in females, and increased social displacement and conflict in males. These impacts, like direct individual impacts, are known to occur intermittently during gather operations. Traumatic injuries usually do not result from these conflicts. These injuries typically involve a bite and/or kicking with bruises, which don't break the skin.

As part of the capture and sorting process, wild burros are examined for health, injury and other defects. BLM Euthanasia Policy IM-2009-041 is used as a guide to determine if animals meet the criteria and should be euthanized (refer to SOPs Appendix A). Animals that are euthanized for non-gather related reasons include those with old injuries (broken hip, leg) that have caused the animal to suffer from pain or prevents them from being able to travel or maintain adequate body condition; old animals that have lived a successful life on the range, but now have few teeth remaining, are in poor body condition, or are weak from old age; and burros that have congenital (genetic) or serious physical defects such as club foot, or sway back and should not be returned to the range.

Foals may be orphaned during gathers, but generally this is rare. This may occur due to:

- The mother rejects the foal. This occurs most often with young mothers or very young foals;
- The foal and mother become separated during sorting, and cannot be matched;
- The mother dies or must be humanely euthanized during the gather;
- The foal is ill, weak, or needs immediate special care that requires removal from the mother; and/or
- The mother does not produce enough milk to support the foal.

Oftentimes, foals are gathered that were already orphans on the range (prior to the gather) because the mother rejected it or died. These foals are usually in poor, unhealthy condition. Orphans encountered during gathers are cared for promptly and rarely die or have to be euthanized.

During gathers, roads and corrals may become dusty, depending upon the soils and specific conditions at the gather area. The BLM ensures that contractors mitigate any potential impacts from dust by slowing speeds on dusty roads and watering down corrals and alleyways. Despite precautions, it is possible for some animals to develop complications from dust inhalation and contract dust pneumonia. This is rare, and usually affects animals that are already weak or otherwise debilitated due to older age or poor body condition.

Wild burros usually exhibit good fitness and are able to endure the physical requirements of the gather. However, the environmental conditions and the overall health and well-being of the animals is continually monitored throughout the gather to adjust operations as necessary to protect the animals.

Often, foals are gathered that are too young to wean. These are then matched up with their mothers after being gathered. Young foals in summer months may be more prone to dehydration and complications from heat stress. Additionally, the handling, sorting and transport is a stress to the young animals and increases the chance for them to be rejected by their mothers. However, the BLM staff on site takes every precaution to assure that the wild burros are handled in a manner that reduces these concerns.

# Wild Burros Remaining in the HMA following Gather

Under all three action alternatives, some number of wild burros will remain in the HMA. It is anticipated that wild burros remaining after the gather would be undisturbed. Therefore, no age or phenotypic selection would be implemented and no animals released to the Bullfrog HMA.

The wild burros that are not captured may be temporarily disturbed and may move to a different area while the gather operations are underway. With the exception of changes to herd demographics, direct population wide impacts have proven, over the last 20 years, to be temporary in nature.

As a result of lower wild burro population density post-gather, competition for resources would be reduced, allowing wild burros to utilize preferred, quality habitat. Fighting among jacks would decrease. Injuries and death to all age classes of animals would also be reduced as competition for limited forage and water resources is decreased.

It is not expected that genetic health of the Bullfrog HMA would be substantially impacted by the Proposed Action, Alternative 1 or Alternative 2 in the short term. Smaller, isolated populations (< 200 total population size) are particularly vulnerable when the number of animals participating in breeding drops below a minimum needed level (Coates-Markle, 2000). Genetic data would be collected during the proposed gather and would allow for future monitoring of the Bullfrog HMA to ensure that the genetic health of the wild burros would not be compromised during future gathers or other management activities. Should genetic analysis indicate the need for concern, future Herd Management Area Planning documents would address the findings and would include potential solutions such as augmentation through introducing animals from similar HMAs into the Bullfrog HMA.

# Temporary Holding Facilities During Gathers

Wild burros gathered would be transported from the gather corrals (trap sites) to a temporary holding corral within the HMA in goose-neck trailers. At the temporary holding corrals wild burros would be sorted into different pens based on sex and age. The wild burros would be fed quality hay and given water. Jennies and their un-weaned foals would be kept in pens together.

At the temporary holding facility, a veterinarian examines and makes recommendations to the BLM regarding care, treatment, and if necessary, euthanasia of the recently captured wild burros. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the American Veterinary Medical Association (AVMA).

# Trap Site Adoption Event

If there is sufficient public interest, the Tonopah Field Office may hold a small trap-site adoption event in conjunction with the Stone Cabin Complex gather. A small number of wild horses (15-20) would be marked and put into separate pens and offered for adoption to pre-qualified applicants. Once adopted, the wild horses would be freeze-marked, vaccinated, dewormed and loaded into the adopter's stock trailers for transport home. All standard adoption requirements would apply. The trap site adoption would allow wild burros to be transported directly to their new homes without additional transport to BLM short term facilities and the added stress of additional handling.

# Transport, Short Term Holding, and Adoption Preparation

Captured animals would be transported from the capture/temporary holding corrals to the designated BLM short-term holding corral facility(s). From there, they would be made available for adoption.

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

Upon arrival at the short-term holding facility, recently captured wild burros are off-loaded by compartment and placed in holding pens where they are fed quality hay and given water. Most wild burros begin to eat and drink immediately and adjust rapidly to their new environment. At the short-term holding facility, a veterinarian examines each load of wild burros and provides recommendations to the BLM regarding care, treatment, and if necessary, euthanasia of the recently captured wild burros. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club feet, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the AVMA.

Wild burros in very thin condition or animals with injuries are sorted and placed in hospital pens, fed separately and/or treated for their injuries as indicated. Some of these animals are in such poor condition that it is unlikely they would have survived if left on the range. Similarly, some jennies may lose their pregnancies. Every effort is taken to help the animal make a quiet, low stress transition to captivity and domestic feed to minimize the risk of miscarriage or death.

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

At short-term corral facilities, a minimum of 400 square feet is provided per animal. Mortality at short-term holding facilities averages approximately 5% per year (GAO-09-77, Page 51), and includes animals euthanized due to a pre-existing condition; animals in extremely poor condition; animals that are injured and would not recover; animals which are unable to transition to feed; and animals which are seriously injured or accidentally die during sorting, handling, or preparation.

# **Euthanasia**

While humane euthanasia of healthy wild burros for which there is no adoption demand is required under the WFRHBA, Congress prohibited the use of appropriated funds between 1987 and 2004 and again in 2010 and 2011 for this purpose.

# Effects that differ between the Proposed Action, Alternative 1 & 2

The differences between the Proposed Action and Action Alternatives pertain to the locations from which wild burros associated with the Bullfrog HMA would be gathered, and the follow-up gather or gathers under the Proposed Action. The Proposed Action has been slightly modified from the Proposed Action analyzed in the Preliminary EA to allow for the phased removal of excess wild burros, rather than achieving the Proposed Action in a single gather and to include the option of using bait/water trapping as a supplement to or instead of a helicopter gather after the initial gather. The Proposed Action was modified due to limited short-term holding space, which only allows for the removal of 75 wild burros at this time. Due to the more limited gather area under Alternatives 1 and 2, it is unknown how many wild burros could be captured and removed under each Alternative.

Under the Proposed Action, the objective would be to remove all wild burros captured near the town of Beatty, to remove all wild burros captured near the Highway 95 corridor, to remove wild burros captured outside the HMA boundary, and removal of a sufficient number of wild burros from other areas within the HMA to achieve the low range of AML, i.e., 58 wild burros. This objective would be achieved through an initial partial gather, followed by one or more gathers until the low range of AML is reached. It is anticipated that it could take six to 10 years to complete the Proposed Action if funding or other constraints impact the BLM's ability to achieve the gather objectives in a second follow-up gather.

Gather operations following the initial gather, bait and water trapping could be used as a supplement to helicopter assisted trapping. This method would be used to target small, specific, or isolated groups of

wild burros. In these situations, personnel requirements would not be extensive, and removal numbers would not be large enough to require helicopter assistance.

Bait and/or water trapping refers to the practice in which wild burros are enticed into a temporary corral which is constructed with a one-way gate; the animals may enter, but not exit the corral. The one-way gate is locked into the open position for a few days to let the burros become accustomed to entering and exiting the corral to get to the water or bait hay. The gates are then closed to where wild burros may enter the corral but cannot exit. Bait and water trapping can be effective, but generally is relatively slow. It is oftentimes the least stressful method of capturing wild burros, however, due to the number of wild burros that need to be removed; this is not practical as the *primary* capture method.

If bait and water trapping is implemented, wild burros would be handled as little as possible. Animals would be loaded into a stock trailer from the trap, and transported to temporary holding corrals or directly to short-term holding facilities.

The primary benefit of achieving and maintaining the established AML within the HMA would be the improvement of the health and sustainability of habitat attributes. Interdisciplinary evaluation of the allotment associated with the HMA found the vegetation communities to have poor potential to provide abundant forage or to undergo substantial change or improvement due to the inherent climatic and soil attributes of the region. Achieving the low range of AML would protect forage and water resources from degradation due to excess numbers of wild burros, allowing them to improve in quality and quantity where possible.

Maintaining healthy plant communities and riparian areas would help to ensure adequate resources exist for wild burros and wildlife during periods of drought. Within the established AML, animals would be less likely to leave the HMA boundaries in search of forage and water. Reduced competition for scarce resources among wild burros and wildlife would occur. Through maintenance of AML, progress would be made towards the Mojave-Southern Great Basin RAC Standards and Guidelines for Rangeland Health and Guidelines for Wild Horse and Burro Management, Allotment Specific and RMP Objectives.

Bringing the wild burro population back to AML would maintain a thriving natural ecological balance between wild burros and other resource values and future deterioration of the range would be avoided. Managing wild burro populations in balance with the habitat and other multiple-uses would ensure that the wild burro populations are less affected by or vulnerable to drought or other climate fluctuations, and that emergency gathers are either avoided or minimized, thus reducing stress to the animals, and increasing the long-term success of these herds.

Removing all wild burros from the town of Beatty would eliminate or severely reduce the conflicts and hazards associated with human-burro interactions. If the wild burro population in the HMA is at AML, wild burros would be less likely to move into Beatty in the future.

For Alternative 1, the objective would be to gather and remove wild burros from within one-mile of Beatty, Nevada and the Highway 95 corridor through the HMA, concentrating on alleviating human-burro conflicts.

As with the proposed action, removing all wild burros from the town of Beatty would eliminate or severely reduce the conflicts and hazards associated with human-burro interaction with the citizens and tourists. Extending the priority removal boundary to a 1-mile radius around Beatty would relieve pressure on vegetation and water resources adjacent to the town limits. The 1-mile radius would also extend the amount of time that wild burros from other parts of the HMA begin to move into and reside in town again.

Using a 1-mile buffer on either side of the Highway 95 corridor through the HMA would reduce the number of vehicle-burro collisions and other burro-caused accidents along the route. Vegetation and water resources within this buffer would also experience decreased pressure, especially on Highway 95 just north of the Beatty town limits, where large numbers of wild burros current reside.

Under this Alternative, no excess wild burros would be removed from areas in the HMA outside of the mentioned target areas. Therefore, if sufficient numbers of wild burros were not encountered within the target areas, rangeland degradation and resource competition issues from an overpopulation of wild burros outside of the target areas would not be addressed or resolved.

Wild burros would continue to utilize areas outside of the HMA in areas not designated for use by wild burros. Populations of wild burros outside HMA boundaries would continue to expand. Alternative 2 involves the gather and removal of wild burros from areas outside the designated HMA only, slowing expansion and decreasing pressure from wild burros in areas not designated for their use. Under this Alternative, all wild burros moving to or residing in areas beyond the HMA boundary would be removed. This alternative would relieve pressure on resources from wild burros in areas not designated for their use. It would also stop the expansion of wild burros from the Bullfrog HMA into areas such as Death Valley National Park where no management plan for wild burros exists. Wild burros expanding into the Southern Nevada District resource area would also be restricted.

However, under Alternative 2, no wild burros would be removed from areas of human-burro conflict or areas where wild burros are creating public safety hazards. Nuisance burros in Beatty and accidents along the Highway 95 corridor would continue to occur.

No wild burros would be removed from within the Bullfrog HMA. AML would continue to be exceeded, and progress towards the attainment of the Mojave-Southern Great Basin RAC Standards for Rangeland Health and Guidelines for Wild Horse and Burro Management, Allotment Specific and RMP Objectives would not be possible.

# 3.3. Livestock Management

# Affected Environment

The purpose of this section is to assess the potential direct and indirect effects to livestock management within the associated grazing allotment(s) as a result of the Proposed Gather. The information presented here is to supply the reader with a general background of the history and degree of livestock use that occurs within the gather area.

The Bullfrog HMA is associated with the Razorback Allotment, administered by the TFO. The Razorback Allotment is divided into the South Montezuma Pasture, Scotty's Pasture, and the East

Razorback Pasture. The Bullfrog HMA contains portions of both the South Montezuma Pasture and the East Razorback Pasture. However, no grazing has been authorized inside Bullfrog HMA boundaries in the South Montezuma Pasture, and only a small portion of the East Razorback Pasture has resources allocated to livestock grazing. The entire East Razorback Pasture is nearly 25,500 acres in which only 248 total Animal Unit Months (AUM), or about 26 head of cattle are authorized.

Grazing in the East Razorback Pasture is authorized from May to January, eliminating grazing pressure from livestock during the critical growing season (February – April). The small portion of the East Razorback pasture that allocates resources to livestock inside the HMA is approximately 12,000 acres, refer to Figure 2 at the end of this section regarding where livestock grazing is permitted inside the HMA. These 12,000 acres represents about 8% of the HMA. The area of the HMA where livestock grazing is permitted is more hospitable to cattle grazing due to the relatively more gentle terrain. Other parts of the HMA contain rugged terrain with more browse production with a low density of grasses, which is more suitable for wild burros than livestock. The majority of the HMA south of the East Razorback Pasture contains habitat for the threatened desert tortoise and is closed to livestock grazing.

Prior to the 2007 RHE, the Razorback Allotment did not include the South Montezuma Pasture, and the Springdale 2 Allotment was within the boundary of the Bullfrog HMA. The RHE adjusted the boundary of the Allotments where the southern portion of the previous Montezuma Allotment became part of the Razorback Allotment. The South Montezuma Pasture and Scotty's Pasture became components of the Razorback Allotment. The Springdale 2 Allotment was combined with the East Razorback Pasture. Scotty's Pasture has been designated as a forage reserve under the administration of the lessee, and no livestock grazing is authorized in the portion of the South Montezuma Pasture that falls within the Bullfrog HMA. A Forage Reserve is an area set aside for ranchers other than the lessee to use during unfavorable conditions, including drought, fire, insects or other resource problems.

The livestock grazing allocation in the 2007 FMUD represented a 42% reduction from pre-1997 permitted AUMs in the Razorback Allotment. Other provisions of the FMUD included restrictions on use during the growing season and on the livestock herd size allowed in the pastures, maximum allowable utilization levels of 35% and rotational grazing systems. No AUMs were allocated for livestock use within the desert tortoise habitat. These changes to the livestock system were made due to the frequent droughts, low rainfall and limited potential for forage production.

Refer to the documents identified in Section 1.7 for more information about livestock use within the Proposed Gather Area.

### **Environmental Consequences**

# **Proposed Action**

The gather operations (helicopter assisted and bait and water trapping) would not directly impact livestock operations within the Razorback Allotment or within the associated pastures within the gather area. Operations involved in removing wild burros may temporarily disturb any livestock present during the removal process, though it is not expected that livestock would be encountered during gather operations. Livestock owners within the area would be notified prior to gather operations, enabling them to take precautions and avoid conflict with livestock grazing. However, it is expected that few, if any, wild burros will be gathered where livestock grazing is permitted as they generally do not use the area.

The indirect effects of achieving the established AML would include promotion of improved rangeland health throughout the Proposed Gather area. Managing wild burros within the established AML would promote a thriving natural ecological balance between wild burros and other resource values and uses, including livestock. This would allow for improvement of rangeland health as excess wild burros within the HMA are removed, along with wild burros from non-HMA areas. Wild burros would be less likely to leave the HMA and move into areas not designated for their use in search of forage or water if their population is at AML. As a result, availability and quality of forage and water resources would be maintained and improved for use by livestock.

### Alternative 1

In areas where wild burros would be gathered and removed under this Alternative any potential impacts to livestock grazing would be similar to the Proposed Action. However, the proposed gather area under this Alternative contains only a very small portion where livestock grazing is permitted. This Alternative may not allow for AML to be achieved or maintained in the Bullfrog HMA, and the benefits of managing wild burros at AML would not be achieved.

# Alternative 2

Impacts would be similar to Alternative 1, except no wild burros would be gathered or removed from inside the Bullfrog HMA. AML would continue to be exceeded. In areas outside of the Bullfrog HMA where wild burros are residing and livestock grazing is permitted, the removal of wild burros would have an indirect impact of reducing pressure on and competition for vegetation and water resources with livestock.

# No Action Alternative (No Wild Burro Gather)

The effects of implementation of the No Action Alternative would be continued increases of the wild burro population within and outside of the Bullfrog HMA. More uncontrolled increases in population size beyond the AML would result in continued use by wild burros of lands outside of HMA boundaries which would affect utilization levels of native forage and use of riparian areas. Within the HMA, use by excess wild burros would also continue and effects to rangeland health would be commensurate with population size and increasing utilization levels, causing declines in plant health and frequency of desirable key plant species, which would affect the use of these areas by permitted livestock. With decline of rangeland health, forage and water availability and quality would also decline, impacting use by livestock.

# 3.4. Noxious Plant Species, Invasive and Non-Native Species

# Affected Environment

Any surface disturbance activity can create a potential environment and opportunity for noxious and invasive plant species to establish and spread. Although a complete inventory has not been done, two noxious plant species and three invasive plant species are known to be found on public lands within the Proposed Gather Area and HMA. The noxious plant species present in the gather area, in accordance with the Nevada Noxious Weed List, are Russian knapweed (*Centaurea repens*) and salt cedar (*Tamarisk chinensis*). Halogeton (*Halogeton glomeratus*), cheatgrass (*Bromus tectorum*), and Russian thistle (*Salsola trugus*) are the other invasive plant species known to exist in the Proposed Gather Area and HMA.

# **Environmental Consequences**

# Proposed Action and Alternatives 1 & 2

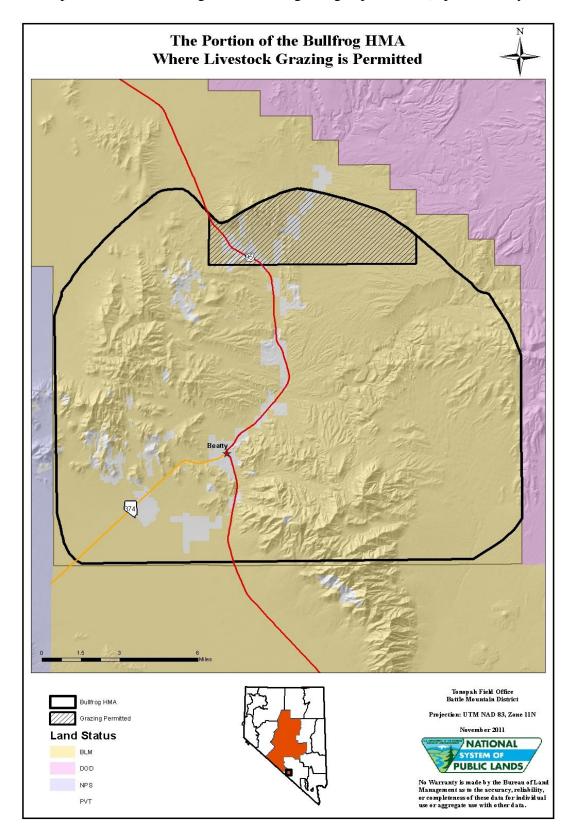
The proposed wild burro gather operations could potentially result in the direct spread of existing populations of noxious and invasive plant species. Precautions would be taken prior to the set-up of gather corrals, bait/water traps, and holding facilities. If noxious species are found, different locations would be selected to prevent the spread of seed. If bait and water trapping is implemented in the future, multiple trap locations would increase the potential spread of noxious and invasive weeds. If bait hay is needed, only certified, weed-free hay would be used. A qualified BLM specialist would examine the proposed holding facilities, gather corrals, and traps prior to construction to determine if noxious or invasive species are present.

Indirect impacts of the proposed gather operations relate to wild burro population size, as it affects ground disturbance and rangeland health. Noxious, invasive, and non-native species can increase with over-utilization of the vegetation by grazing animals or through surface disturbance. Maintaining healthy populations of native perennial plant species reduces the potential for infestation of noxious, invasive and non-native species. The projected outcome of the proposed gather would be improved conditions of the native rangeland and riparian areas throughout the gather area. As a result, the spread of noxious and invasive plant species would be reduced.

# No Action Alternative (No Wild Burro Gather)

Without completion of the proposed wild burro gather operations, ground disturbing activities associated with the gather that could cause some spread of invasive and noxious plant species would not occur. However, there would be an increased risk of spread by noxious weeds and invasive species since concentrated utilization by wild burros within the gather area would continue and potentially increase. If wild burro populations continue to exceed AML, healthy rangeland conditions would not be achieved, which could encourage the spread of invasive or noxious species, particularly along trails and near water sources.

Figure 3. The portion of the Bullfrog HMA where grazing is permitted (represented by hashed area).



# 3.5. Rangeland Vegetation Resources

# Affected Environment

Vegetation in the gather area is typical of the Mojave desert, and is dominated by Blackbrush and Hot Desert vegetation communities.

The Blackbrush vegetation community occurs in the higher elevation of the hills throughout the HMA. Blackbrush sites are often associated with shadscale (*Atriplex confertifolia*), creosote bush, burrobush, spiny menodora (*Menodora spinescens*), Nevada ephedra, spiny hopsage (*Grayia spinosa*), Anderson wolfberry (*Lycium andersonii*) and other shrubs in the Hot Desert vegetation community.

The Hot Desert vegetation community co-dominates the HMA, and occurs in the valleys and the lower elevations of the HMA. Wild burros utilize these ecological sites as they graze and browse on a variety of shrubs and grasses, but prefer burrobush. These areas are dominated by Creosote bush, burrobush, shadscale, and spiny menodora.

Other vegetation communities include Sandy Saltbrush and Saltbrush Hills. Refer to the 2007 Montezuma Complex RHE for a detailed description of the vegetation resources in the Bullfrog HMA.

In general, the soils within the Bullfrog HMA are dominated by aridisols, are poorly developed and do not support productive communities of vegetation. Some of the vegetation within the HMAs is in the 3 to 5 inch precipitation zones, and some soils are dominantly sodic and saline (high alkalinity, salty soils). Forage is extremely limited for livestock, but wild burros are more opportunistic and will utilize shrubs more readily and can maintain their health with fewer visits to water.

# Rangeland Health Standards Summary

The Allotments associated with the Montezuma Complex (Montezuma and Razorback Allotments) were evaluated for conformance with Mojave-Southern Great Basin (MSGB) RAC Standards for Rangeland Health in 2007. The MSGB Standards consist of Standard 1: Soils; Standard 2: Ecosystem Components, and; Standard 3: Habitat and Biota. These analyses determined that some of the Rangeland Health Standards were being met, some were not and some were partially met. The reasons identified for Standards not being met included drought, poor soils, and excessive use by wild horses and burros in the HMAs associated with the Allotments. Evaluation of the Tonopah RMP and Allotment Specific Objectives was also completed. As a result of these analyses, it was determined that adjustments were warranted to the livestock management systems and that more conservative stocking rates were needed. Wild horse and burro AMLs were also adjusted to ensure that the populations were in balance with the limited resources in the arid region in order to maintain healthy animals and provide improvement to the habitat. These changes were documented in FMUD issued subsequent to the Evaluation in 2007, including the establishment of the wild burro AML for the Bullfrog HMA. Refer to the documents identified in Section 1.7 for more detail.

Detailed information about the vegetation types in the Bullfrog HMA and a detailed analysis of vegetation monitoring and analysis can be found in the 2007 Montezuma Complex RHE. Because of the inherent low precipitation levels received in the Mojave Desert, and the frequency of drought occurrence, vegetation improvement can be very slow to become evident. Improvement can be further impeded and can even be precluded should these areas continue to receive over-use by excess

wild burros. Proper management of wild burros is paramount to ensure that further decline of the wild burro habitat does not occur.

Habitat for the threatened desert tortoise is utilized by wild burros in and outside of the Bullfrog HMA. Desert tortoises depend on the spring green-up period and forbs produced therein to attain adequate health and body condition to survive harsher conditions the rest of the year. If wild burros over-utilize desert tortoise habitat, food sources, particularly annual forbs, for the desert tortoise may become more scarce or nonexistent.

Many of the spring sources and riparian areas along the Amargosa River channel provide habitat for the sensitive Amargosa toad. If these sources become degraded and exploited, Amargosa toad populations could decrease. Due to the fragility of the ecosystem, and depending on the severity of degradation, these critical riparian resources may not be recoverable.

# **Environmental Consequences**

Disturbance would occur to native vegetation in and around temporary gather corrals, bait/water traps, and holding facilities due to the use of vehicles and concentration of wild burros in the immediate area. The disturbed area, however, would generally be less than one acre in size. Gather corrals, bait/water traps, and holding facility locations are usually selected in areas easily accessible to livestock trailers and standard equipment, often utilizing roads, gravel pits or other previously disturbed sites, and are accessible using existing roads. New roads are not created to construct capture corrals. Based on typical wild burro gather operations, it is estimated that approximately 2 to 4 trap-sites and 1 set of holding corrals would be needed for the initial gather within the Proposed Gather Area. During follow-up gathers, trap and corral location would likely be placed in previously used locations. If not, the disturbed area would still be less than 1 acre and any effects would be short-term and minimal.

Wild burros affect vegetation through utilization of the above ground forage, and through trampling or trailing. In general, wild burros disperse throughout the landscape and are not as apt to heavily concentrate in areas as livestock sometimes do, and typically utilize steeper terrain. A wild burro may consume 10 to 15 lbs. of forage per day to maintain its metabolic, physiological, and energy levels. Therefore, wild burros must travel various distances to locate enough forage to maintain metabolic function. An increasing herd size further increases the rate of forage depletion which could cause the plant communities to deteriorate to a lower seral stage.

#### Proposed Action

Achieving and maintaining the established AML, would benefit the vegetation by reducing the grazing and browsing pressure on the forage resources. Removal of excess wild burros would reduce the populations to levels that would be more in balance with the available water sources and forage availability.

Maintaining AML within the Proposed Gather area would prevent overgrazing, damage by trampling or pawing, and would help promote improved rangeland health. Increased cover, frequency, production, and vigor of desirable key species would also be promoted where soils are adequate. Repeated utilization during the critical growing period would not be as likely to occur, and heavy utilization would be minimized or avoided. By bringing the wild burro population within established AML, degradation of the rangeland by wild burros would be limited or avoided and more vegetation would be

available during drought years. An upward trend in key forage species would be expected if wild burro populations were maintained at AML.

### Alternative 1

Impacts to vegetation would be the same as the Proposed Action in areas where wild burros were gathered and removed. However, wild burros would only be removed from a very small portion of the HMA, and none would be removed from outside of the HMA. Therefore, AML would likely not be achieved or maintained, and benefits of a wild burro population at AML would not be realized. A downward trend in key forage species and an increase in non-desirable and noxious plants would be expected across the HMA, and in areas wild burros are using outside of designated HMA boundaries. The threat to desert tortoise and Amargosa toad habitat would continue.

# Alternative 2

Impacts to vegetation would be similar to the Proposed Action but would only be noticed outside the HMA, and would be short-lived. If no wild burros were removed from inside the HMA, the animals removed from outside of the HMA would soon be replaced as future populations exceeded AML and continued to move outside the HMA boundary. A downward trend in key forage species and an increase in non-desirable and noxious plants would be expected in areas wild burros are using outside of designated HMA boundaries. The threat to desert tortoise and Amargosa toad habitat would continue and potentially worsen inside the HMA. Future wild burro populations moving outside the HMA would again result in a degradation of vegetation in the areas bordering the HMA.

# No Action Alternative (No Wild Burro Gather)

Interdisciplinary evaluations for the Razorback Allotment showed that wild burros were contributing to poor success in achieving Rangeland Health Standards, along with Allotment Specific and RMP Objectives. Wild burro use outside of the HMA has become a rising concern, and is resulting in utilization in areas not designated for wild burro use. These impacts would continue and increase without a gather to remove excess animals from these areas. Furthermore, the TFO concluded that maintaining the wild burro population within the established AML range was needed to sustain long-term vegetation health in an arid environment with frequent droughts and limited rangeland production in the region.

The No Action Alternative would continue to allow persistent overpopulations of wild burros and the presence of animals in excess of the range's capacity to provide habitat. This in turn would cause detrimental impacts to the rangeland health (vegetation) in the gather area as a result of over-utilization and trampling of vegetation and would lead to decreased key species vigor and frequency. Key forage species would decrease within the plant communities, and undesirable species would increase. The majority of the Proposed Gather Area receives less than 6 inches of annual precipitation and has very low potential for improvement under even optimal conditions. Without gather operations to bring the population back to AML, downward trends, reductions in ecological condition, and irreparable damage to rangeland health could be expected.

## 6. Riparian-Wetland Resources and Water Quality

## Affected Environment

Riparian areas play a significant role in restoring and maintaining the chemical, physical, and biological integrity of the nation's water. Water is one of the limiting factors in the proposed gather area, and distance between springs is substantial. This results in heavy utilization of the riparian vegetation. Springs become easily degraded due to the concentrated use at water areas. In most cases, wild burros briefly visit water sources. The exception may include large open springs or meadows.

Large wild burro populations can concentrate in situations where water is limited which degrades riparian and wetland habitat. Wild burros may utilize lotic (streams) and lentic (springs) sites differently because of inherent social behaviors. Wild burros typically move away from lotic sites quickly to avoid dangerous encounters with other wild burros or predators. Lentic sites have a valley landform that is wider and capable of being viewed from further distances. These sites deteriorate faster with continuous concentrated use. In addition to potential physical impacts to riparian areas, dominant wild burros can physically exclude other wildlife and livestock species especially during periods of very limited water. Refer to the documents identified in Section 1.7 for more a detailed discussion of wild burro impacts to riparian-wetland resources and water quality.

There are few springs and water sources within the Proposed Gather Area. Riparian areas make up only a small component in the Proposed Gather area and are usually less than one acre in size. The majority are found throughout the mountainous areas and near the Amargosa River in the Proposed Gather Area. They usually consist of small patches of wet soil at seeps and springs, which are dominated by riparian grasses, sedges and rushes, but play a significant role as wildlife habitat.

The Amargosa River channel runs through the HMA but most areas along its course are private land, the majority of it fenced. However, most of the river is seasonal in nature and does not provide wild burros with a dependable source of water. Other sources of available water in the HMA are in forms of springs and seeps. Due to the limited number of springs and an overpopulation of wild burros, there is considerable pressure on available water sources, and competition with wildlife species is an increasing concern, chiefly with Amargosa toad and desert bighorn sheep.

Many wild burros move into the town of Beatty to take advantage of any water sources that may be present. These include but are not limited to bird baths, decorative pools and fountains, and water from sprinkler systems. This creates hazards for wild burros and town citizens.

In addition to providing habitat for other wildlife, many of the riparian areas throughout the gather area, springs and the Amargosa River, provide critical habitat for the sensitive Amargosa toad. Therefore, it is imperative that these riparian resources not be over-utilized or degraded by wild burros.

#### **Environmental Consequences**

The proposed gather operations would not have any direct impacts to riparian or wetland zones within the proposed gather area because gather corrals, bait/water traps, and holding corrals would not be constructed near riparian areas.

The proposed gather operations would indirectly impact riparian wetland zones in areas where wild burros were captured and removed. Utilization, trailing and trampling by wild burros in these sensitive areas would decrease, thus allowing for riparian wetland areas to improve through natural processes.

## Proposed Action

Achieving and maintaining the established AML would relieve some of the grazing and trampling pressure on the springs and riparian areas in the HMA, and would further ensure that wild burro populations are in balance with forage and water availability. Removing nuisance wild burros from the town of Beatty could reduce or even eliminate conflicts with citizens and damage to anthropogenic water sources. Removing wild burros from outside the HMA boundaries would reduce most if not all competition with wildlife species for water resources in areas not designated for wild burro use, particularly non-HMA areas where artificial water sources have been created for desert bighorn sheep. The numerous small mammals and bird species would be less impacted by wild burros.

## Alternative 1

Alternative 1 would have similar impacts as the Proposed Action in areas where wild burros were captured and removed. However, no wild burros would be removed outside the 1-mile buffered target areas or outside of HMA boundaries, so only those riparian and wetland resources inside the gather area would reap any benefits from removal of excess wild burros. Conflicts regarding wild burros in town would be resolved, though only short-term as wild burros from the rest of the HMA would eventually move back into the community of Beatty and the highway corridor. Springs and riparian resources outside of the target area and outside HMA boundaries would continue to receive concentrated wild burro use. Competition with wildlife would continue or potentially increase and wildlife habitat would be degraded.

#### Alternative 2

Impacts under this Alternative would be similar to the Proposed Action, but only visible in areas outside of the designated HMA. Competition with wildlife for water resources in areas not designated for wild burro use would be reduced. However, wild burro conflicts in town would continue, and water resources would continue receiving concentrated use inside the HMA.

## No Action Alternative (No Wild Burro Gather)

Wild burro population sizes would continue to increase in excess of the established AML at an expected rate of 16% annually. An overpopulation of excess wild burros at these levels would have consequences to the health of riparian areas within the Proposed Gather Area through overutilization, trampling erosion and potential infestation of invasive species. The No Action Alternative could cause irreparable damage to these critical wildlife habitats and to the other species that depend on these areas, particularly the Amargosa toad. Conflicts between wild burros and residents of Beatty would also continue as wild burros seek out forage and water resources inside town limits.

#### 3.7. *Soils*

## Affected Environment

Soils in the Proposed Gather Area are typical of soils found throughout the Mojave Desert and Nevada. The geophysical configuration of the gather area consists primarily of north-south trending mountain

ranges with intervening valleys and playas. Most of Nevada's mountains were originally formed from either volcanism or related, plate tectonic processes. Refer to the Natural Resource Conservations Service (NRCS) Soil Survey for Nye County 2004. Soils within the Proposed Gather Area vary widely in their physical and organic characteristics. They are described in very broad taxonomic classifications as aridisols, entisols and inceptisols.

Most of the Proposed Gather Area receives 8 inches or less of annual precipitation and soils are poorly developed, with little or no organic matter, and are shallow and well drained. Many of the ecological types within the Proposed Gather Area inherently support large proportions of bare ground in shrub interspaces.



Wild burros in the Bullfrog HMA. Notice the amounts of interspace between shrubs and lack of grasses.

#### Environmental Consequences

#### Proposed Action and Alternatives 1 & 2

Direct impacts such as soil erosion and compaction would potentially occur at gather corrals and bait/water traps which are one acre or less in size. Gather corrals are typically situated in areas of previous disturbance such as gravel pits or along roadsides. Procedures identified in the Gather Plan and SOPs would be followed to minimize impacts to soils during gather operations.

A reduction in the wild burro population would result in maintenance and improvements to vegetation communities, reduced erosion of soil by wind and water, reduced trailing, and reduced concentrations of wild burros around water sources. This would benefit soils. Avoiding overpopulations of wild burros would improve or maintain biological crusts, where present, due to reduced hoof action by wild burros.

## No Action Alternative (No Wild Burro Gather)

Existing levels of soil disturbance would continue as wild burro populations continue to increase at approximately 16% annually. Concentrated use of areas around water and trailing would increase

proportionally with increases in the population. Soils would be disturbed more frequently, and wind and water erosion would increase.

# 3.8. Threatened & Endangered Species, Special Status Species, Migratory Birds and Wildlife Affected Environment

## Threatened, Endangered and Special Status Species

Special status species include species that are listed or proposed for listing as threatened or endangered (T&E) under the Endangered Species Act (ESA), species that are candidates for listing under the ESA, species that are listed by the State of Nevada, and/or species that are on Nevada BLM's list of Sensitive Species as of July 29, 2003. Two federally listed or proposed species have potential to occur within the HMA, the Desert tortoise (Gopherus agassizii) listed as threatened, and the Southwestern Willow flycatcher (Empidonax traillii extimus) listed as Endangered under the ESA. There is one species that is a candidate for listing under the ESA that may be present in the HMA, the Yellow-Billed Cuckoo (Coccyzus americanus). The BLM Sensitive Species that is common in the HMA is the Amargosa toad, others that have potential to occur within the HMA are identified in the table below.

**Table 4. Special Status Species** 

Table 4. Special Status Species Other BLM Sensitive Species that may occur in the gather area		
Euderma maculatum	Spotted bat	
Eptesicus fuscus	Big brown bat	
Corynorhinus townsendii	Townsend's big-eared bat	
Lasionycteris noctivagans	Silver-haired bat	
Lasiurus blossevillii	Western red bat	
Myotis califoricus	California myotis	
Myotis ciliolabrum	Western small-footed myotis	
Myotis evotis	Long-eared myotis	
Myotis thysanodes	Fringed myotis	
Myotis lucifungus	Little brown myotis	
Pipistrellus Hesperus	Western pipistrelle	
Brachylagus idahoensis	Pygmy rabbit	
Myotis volans	Long-legged myotis	
Ovis canadensi nelsoni	Desert bighorn sheep	
Dark Kangaroo Mouse	Microdipodops megacephalus	
Pale Kangaroo Mouse	Microdipodops pallidus	
Birds	<b>Common Name</b>	
Aquila chrysaetos	Golden eagle	
Athene cunucularia	Burrowing owl	
Buteo regalis	Ferruginous hawk	
Lanius ludovicianus	Loggerhead shrike	

Gymnorhinus cyanocephalus	Pinyon jay
Spizella breweri	Brewer's Sparrow
Falco peregrinus	Peregrine falcon
Oreoscoptes montanus	Sage thrasher
Amphibians	Common Name
Amphibians Bufo nelsoni	Common Name Amargosa Toad

#### Migratory Birds

"Migratory bird" means any bird listed by the United States Fish & Wildlife Service (USFWS) in 50 CFR § 10.13. All native birds found commonly in the United States, with the exception of native resident game birds, are protected under the Migratory Bird Treaty Act (MBTA) (16 United States Code 703711). The MBTA prohibits taking of migratory birds, their parts, nests, eggs, and nestlings. Executive Order 13186, signed January 10, 2001, directs federal agencies to protect migratory birds by integrating bird conservation principles, measures, and practices.

Additional direction is provided within the Memorandum of Understanding (MOU) between the BLM and the USFWS dated January 17, 2001. This MOU strengthens migratory bird conservation through enhanced collaboration between the two agencies, in coordination with state, tribal, and local governments. The MOU identifies management practices that could impact populations of high priority migratory bird species including migratory bird nesting, migration, and overwintering habitats, and develops objectives and recommendations that would avoid or minimize these impacts. A variety of migratory birds use the habitat types within the Proposed Gather Area for breeding and foraging.

Potential migratory bird species that may be found within the Proposed Gather Area could include but are not limited to the Ash-throated Flycatcher, Bewick's Wren, Black-headed Grosbeak, Black-throated Gray warbler, Black-throated Sparrow, Blue-gray Gnatcatcher, Brewer's Sparrow, Brown-headed Cowbird, Bushtit, Cassin's Finch, Chipping Sparrow, Common Raven, Costa's hummingbird, Gray Flycatcher, Horned Lark, House finch, House Sparrow, House Wren, Le Conte's Thrasher, Lesser Goldfinch, Loggerhead Shrike, Mourning Dove, Northern Mockingbird, Rock Wren, Sage Sparrow, Say's Phoebe, Spotted Towhee, Swainson's thrush, Vesper Sparrow, Western Scrubjay, and the Whitecrowned sparrow (Great Basin Bird Observatory 2007).

#### **Eagles**

On July 9, 2007, the bald eagle was de-listed from the list of threatened and endangered species. BLM is coordinating with the Nevada Department of Wildlife (NDOW) to ensure compliance with state regulations regarding the bald eagle. As of August 30, 2007, BLM policy is to consider the bald eagle as a BLM Sensitive Species. After de-listing, bald eagles will continue to be protected under the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Act. Both of these laws prohibit killing, selling or otherwise harming eagles, their nests, or their eggs. In May 2007, the U.S. Fish and Wildlife Service (Service) clarified its regulations implementing the BGEPA and published the National Bald Eagle Management Guidelines. The Service has established a permit program under the BGEPA that would authorize limited take of bald and golden eagles consistent with the purpose and goal of the

BGEPA. The Service has also prepared a draft post-delisting bald eagle monitoring plan. These documents and more information about bald and golden eagle are available on the Service's website at http://www.fws.gov/migratorybirds/baldeagle.htm. Golden eagles have been documented as year-round residents of the Bullfrog HMA. Bald eagles have been documented and are likely winter foragers within the HMA.

## Wildlife

Big game species include desert bighorn sheep (Ovis canadensis nelsoni), mule deer (Odocoileus hemionus), and pronghorn antelope (Antilocapra americana). Small game species occur, such as chukar (Alectoris chukar), Gambel's quail (Callipepla gambelii), mourning dove (Zenaida macroura), and desert cottontail (Sylvilagus audoboni). Predators include the mountain lion (Felis concolor), bobcat (Links rufus), coyote (Canis latrans), gray fox (Urocyon cinereoargenteus), and kit fox (Vulpes macrotus).

There is also the basic component of non-game species of lizards, birds, and rodents. These species are found throughout the gather area.

## **Environmental Consequences**

Conducting a gather of excess wild burros would have minimal, short-term direct impacts to wildlife in the Proposed Gather Area. Individual animals of all species that may be present in or near gather corrals, bait/water traps, or holding facilities could be temporarily displaced. The possibility exists that special status plant and animal species could be disturbed during the gather activities. However, gather corrals and bait/water traps would typically be located in areas that have previously been disturbed (i.e. gravel pits), and/or would be disturbed for short periods of time (1-3 days). Once the bait/water trap and gather corrals are dismantled and the helicopter removed, animals should return to normal activities.

Should it be determined necessary by a qualified biologist, gather sites would be inventoried prior to selection to determine the presence of sensitive species. If potential impacts could not be mitigated, these areas would be avoided. There would be minimal impacts to wildlife as a result of the gather operations.

Because the proposed helicopter gather operation would occur before the primary nesting season, wild burro gather activities would not affect birds protected under the Migratory Bird Treaty Act. The proposed gather activities constitute relatively low potential for disturbance to individual nesting birds, and no potential impact to migratory bird populations near the riparian areas upon which many migratory bird species rely heavily, because no gather corrals would be located in these areas. Timing of bait/water trapping would have no effect on migratory bird nesting.

#### **Proposed Action**

Wildlife and wildlife habitat would be indirectly affected by the Proposed Action. Removal of excess wild burros and achievement of the established AML would provide the best opportunity for conservation, protection, and preservation of identified species and their habitats. Implementation of the proposed gather would reduce utilization on key forage species, improving the quantity and quality of forage available to wildlife and would decrease competition for water sources. Habitat conditions

within riparian areas and in the uplands would be expected to be maintained and improved to the benefit of most wildlife, sensitive species and migratory birds.

Competition with wildlife species such as desert bighorn sheep and overutilization of desert tortoise habitat would cease in areas outside of the HMA not designated for wild burro use. Desert tortoise would experience decreased competition for annual forbs. Springs and riparian areas critical for Amargosa toads would be protected from over-use and trampling.

Habitat for the threatened desert tortoise is utilized by wild burros in and outside of the Bullfrog HMA. Desert tortoise depend on the spring green-up period and forbs produced therein to attain adequate health and body condition to survive harsher conditions the rest of the year. If wild burros over-utilize desert tortoise habitat, food sources, particularly annual forbs, for the desert tortoise may become more scarce or nonexistent. The Proposed Action would decrease competition with the desert tortoise inside and beyond the boundaries of the Bullfrog HMA.

Many of the spring sources and riparian areas along the Amargosa River channel provide habitat for the sensitive Amargosa toad. If these sources become degraded, Amargosa toad populations could decrease. The Proposed Action would help prevent the degradation of Amargosa toad habitat inside and outside the Bullfrog HMA.

#### Alternative 1

Under Alternative 1, the benefits of wild burro removals would be similar to the Proposed Action but limited to the target area – 1-mile radius around the town of Beatty and buffer on the Highway 95 corridor -- where wild burros would be gathered and removed. AML may not be achieved or maintained in the HMA. Other areas within the HMA and areas outside of the HMA would not realize any of the benefits to wildlife expected from removing excess wild burros. Competition with wildlife at guzzlers and other water sources outside of the HMA would continue. Habitat for desert tortoise and Amargosa toads would not be protected in the HMA beyond the area adjacent to the town of Beatty and Highway corridor.

#### Alternative 2

Under Alternative 2, wildlife would only be directly impacted from gather activities in areas outside of the Bullfrog HMA. Competition with wildlife at guzzlers and other water sources outside the Bullfrog HMA would be reduced or eliminated depending on gather efficiency. AML in the HMA would not be achieved or maintained, and resource issues and competition occurring inside the HMA would continue or worsen. Habitat for desert tortoise and Amargosa toads would be degraded inside the HMA.

#### No Action Alternative (No Wild Burro Gather)

If a gather is not conducted to remove excess animals from the Proposed Gather Area and wild burro populations continue to increase, there would be severe over-use and trampling of wildlife habitat, and serious conflicts would occur between wildlife and wild burros as competition for forage and water reached higher levels.

The No Action Alternative would have no direct impact to migratory birds since the gather would not take place. However, indirect impacts would be decreased forage and cover caused by large numbers of

wild burros, which could cause a loss of preferred habitat for some species of migratory birds, threatened and sensitive species, and other wildlife.

Heavy and severe use of vegetation resources would occur, and forage would be depleted. Irreparable degradation to plant communities and sensitive riparian areas would occur. The outcome would be substantial loss of wildlife habitat. The no action alternative would result in greater degradation of habitat conditions for wildlife, BLM Sensitive Species and migratory birds as a result of excess numbers of burros impacting vegetation and riparian resources.

Competition between wild burros and wildlife in areas outside of the HMA would continue and potentially become severe.

## 3.9. Human Health and Safety

## Affected Environment

Members of the public can inadvertently wander into areas that put them in the path of wild burros that are being herded or handled during the gather operations, creating the potential for injury to wild burros and to the BLM employees and contractors conducting the gather and/or handling the wild burros as well as to the public themselves. Because these burros are wild animals, there is always the potential for injury when individuals get too close or inadvertently get in the way of gather activities.

The helicopter work is done at various heights above the ground, from as little as 10-15 feet (when herding the animals the last short distance to the gather corral) to several hundred feet (when doing a recon of the area). While helicopters are highly maneuverable and the pilots are very skilled in their operation, unknown and unexpected obstacles in their path can impact their ability to react in time to avoid members of the public. These same unknown and unexpected obstacles can impact wild burros being herded by the helicopter in that they may not be able to react and can be potentially harmed or caused to flee which can lead to injury and additional stress.

When the helicopter is working close to the ground, the rotor wash of the helicopter is a safety concern by potentially causing loose vegetation, dirt, and other objects to fly through the air which can strike or land on anyone in close proximity as well as cause decreased vision. Though rare, helicopter crashes and hard landings can and have occurred (approximately 10) over the last 30+ years while conducting wild horse and burro gathers. This necessitates the need to follow gather operations and visitor protocols (Appendix D) at every wild horse and burro gather to assure safety of all people and animals involved. Flying debris caused by a helicopter incident poses a safety concern to BLM and contractor staff, visitors, and the wild burros.

During the herding process, wild burros will try to flee if they perceive that something or someone suddenly blocks or crosses their path. Fleeing wild burros can go through wire fences, traverse unstable terrain, and go through areas that they normally don't travel in order to get away, all of which can lead them to injure people by striking or trampling them if they are in the animal's path.

Disturbances in and around the gather and holding corral have the potential to injure the government and contractor staff who are trying to sort, move and care for wild burros by causing them to be kicked, struck, and possibly trampled by the animals trying to flee. Such disturbances also have the potential for similar harm to the public themselves.

The BLM is committed to allowing access by interested members of the public to the fullest possible degree without compromising safety or the success of operations. To minimize risks to the public from helicopter operations, the gather Contractor is required to conduct all helicopter operations in a safe manner, and to comply with FAA regulations (FAR) 91.119 (Appendix B) and BLM IM No. 2010-164 (Appendix C)<sup>3</sup>. Public observations sites will also be established in locations that reduce safety risks to the public (e.g., from helicopter-related debris or from the rare helicopter crash landing, or from the potential path of gathered wild burros), to wild burros (e.g., by ensuring observers will not be in the line of vision of burros being moved to the gather site) and to contractors and BLM employees who must remain focused on the gather operations and the health and well-being of the wild burros. The Visitor Protocol and Ground Rules for public observation found in Appendix D provide the public with the opportunity to safely observe the gather operations. Every attempt will be made to identify an observation site(s) at the gather location that offers good viewing opportunities, although there may be circumstances (flat terrain, limited vegetative cover, private lands, etc.) that require viewing locations to be at greater distances from the gather site to ensure safe gather operations.

Public safety is currently an issue in the town of Beatty due to conflicts with burros. Wild burros enter town and become accustomed to foraging on lawns, and obtaining water from various sources available in residential areas. They have been responsible for property damage and vehicle collisions. Despite the fact that many Beatty residents adore the burros and appreciate their presence, the ongoing presence of wild burros within the town limits is a safety issue and must be addressed in order to avoid serious injury to the public, to the burros or damage to property

## **Environmental Consequences**

## <u>Proposed Action and Alternatives 1 and 2</u>

All helicopter operations must be in compliance with FAR 91.119. Public safety as well as that of the BLM and contractor staff is always a concern during the gather operations and is addressed through the implementation of Visitor and Ground Rules that have been used in recent gathers to ensure that the public remains at a safe distance and does not impede gather operations. Appropriate BLM staffing (public affair specialists and law enforcement officers) will be present to assure compliance with visitation protocols at the site. These measures minimize the risks to the health and safety of the public, BLM staff and contractors, and to the wild burros themselves during the gather operations.

Through the Proposed Action and Alternative 1, priority for removal would be within the town of Beatty in order to eliminate potential burro-human conflicts. By removing burros from within and close to town and the highway corridor, property damage, vehicle collisions and other conflicts would be substantially reduced or eliminated. Members of the public that like seeing the burros in close proximity in town would not have these viewing opportunities, but would be able to view them outside of town in the HMA. Because a trap-site adoption event may be planned with the gather, those Beatty residents with adequate facilities and the ability to care for a burro, would be able to adopt one of the gathered

<sup>&</sup>lt;sup>3</sup> At recent gathers, public observers have ranged in number from only a handful of individuals to a maximum of between 15-25 members of the public. At these numbers, BLM has determined that the current level of public visitation to gather operations falls below the threshold of an "open air assembly" under the FAR regulations. 14 CFR § 91.119.

burros. Under Alternative 2, burros would not be removed from the vicinity of Beatty, and existing conflicts including vehicle collisions and property damage would continue and likely increase. The risk to human safety through burro attacks or vehicle accidents would continue and could increase proportional to the population size in the HMA as burros move into town to obtain water and graze on lawns and gardens.

#### No Action Alternative (No Wild Burro Gather

There would be no gather related safety concerns for BLM employees, contractors or the general public as no gather activities would occur. The public safety concerns addressed above with human-burro conflicts in the town of Beatty would continue as described for Alternative 2 above.

## 3.10. Wild Burro Gather Mitigation Measures

This EA has analyzed the potential impacts that could occur with completion of a gather to remove excess wild burros. The following section summarizes the measures developed to ensure that these potential impacts are minimized or avoided entirely.

BLM staff is on-site at all times to observe the gather, monitor animal health, and coordinate the gather activities with the contractor. The SOPs outlined in Appendix A would be implemented to ensure that the gather is conducted in a safe and humane manner, and to minimize potential impacts to or injury of the wild burros. The BLM Wild Horse and Burro Specialists and the Gather Contractor and crew are very attentive and sensitive to the needs of all wild burros captured during gathers, and ensuring their health, safety and well-being during and after the gather is a focus and priority.

BLM staff would coordinate with the contractor on a daily basis to determine animal locations in proximity to trap corrals, and to discuss terrain, animal health, gather distances and other gather logistics to ensure animal safety.

An Animal and Plant Health Inspection Service (APHIS) or other veterinarian may be on-site during the gather, as needed, to examine animals and make recommendations to the BLM for care and treatment of wild burros. Injuries would be examined and treated if needed by a veterinarian at the holding corrals.

The gather helicopter pilot allows the wild burros to travel at their own pace for most of the distance to the gather location. The pilots are very experienced and do not place undue pressure on the wild burros until just the right time when entering the wings of the gather trap, when it is important to move the animals safely into the gather corrals and prevent them from stopping, turning back or trying to disband at the last minute. This is to avoid the need to re-gather or to rope the wild burros from horseback which could expose the wild burros to additional stress or injury. Foals separated during the gather process are safely gathered and transported to the gather corrals to be reunited with their mother.

Transport and sorting is completed as quickly and safely as possible so as to move the wild burros into the large holding pens where they can settle in with hay and water.

Any old, sick or lame animals unable to maintain an acceptable body condition or with serious physical defects such as club feet, severe limb deformities, or sway back would be humanely euthanized as an act of mercy. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Washington Office Instruction Memorandum 2009-041).

Individual animals are monitored and veterinary or supportive care is administered as needed. Electrolyte powder can be administered to the drinking water and electrolyte paste administered to individual animals if needed. The overall health and well-being of the animals is continually monitored through both summer and winter gathers to adjust gather operations as necessary to protect the animals from gather related health issues. Any orphan foals are attentively cared for through administering electrolyte solutions and/or feeding milk replacer as needed to support their nutritional needs. Foster or adoptive homes are identified to ensure good care to these young animals.

If dust becomes an issue, BLM ensures that contractors reduce speeds on dusty roads and water down corrals and alleyways.

The SOPs in Appendix A identify additional measures implemented during the completion of wild horse and burro gathers to minimize or avoid impacts to wildlife, and other resources in addition to wild burros. Gather corral sites and temporary holding facilities would be located in previously used sites or other disturbed areas whenever possible (such as gravel pits, or road pull outs or junctions). Gather areas would not be constructed near riparian areas or near infestations of noxious weeds. Potential trap sites or holding facilities would be inventoried for cultural resources and noxious weeds. If cultural resources or noxious weeds are encountered, these locations would not be utilized unless they could be modified to avoid any impacts.

Observation Protocols would be implemented to ensure the safety of the public, BLM employees and contractors and the wild burros while members of the public are in the area to observe the gather operations. These protocols are detailed in Appendix D.

# 4. Cumulative Impact Analysis

The NEPA regulations (40 CFR § 1508.7) define cumulative impacts as the 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 or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The Cumulative Effects Study Area (CESA) for this project includes the Bullfrog HMA and the South Montezuma and East Razorback Pastures of the Razorback Allotment. The time frame for analysis is from the passage of the Wild Free-Roaming Horses and Burros Act of 1971 to 2022, ten years past the proposed initial gather which is a reasonable time frame to consider potential future actions within this analysis. This provides enough time for monitoring and reviewing data to determine if RHE, RAC Standards and Guidelines, and RMP Objectives are being met.

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

According to the 1994 BLM *Guidelines for Assessing and Documenting Cumulative Impacts*, the cumulative analysis should be focused on those issues and resource values identified during scoping that

are of major importance. Accordingly, the issues of major importance that are analyzed are maintaining rangeland health and achieving and maintaining AMLs.

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

## Effects of Past, Present, and Reasonably Foreseeable Future Actions

#### **Past Actions**

The Esmeralda-Southern Nye Resource Management Plan, Record of Decision (ROD) was signed on October 10, 1986, and established the original HMA boundaries. The 1997 Tonopah Resource Management Plan brought forward these designations and established an interim herd size. The HMA boundaries are nearly identical to the original Herd Area boundaries, with minor differences due to mapping corrections.

The AML for the Bullfrog HMA was evaluated and modified through the RHE, EA and multiple-use decision identified in Section 1.7. These documents also evaluated livestock grazing systems within the allotment associated with the HMA. FMUDs issued for these areas resulted in adjustments to livestock grazing season of use, implementation of allowable use levels, herd sizes and rotational grazing systems and establishment of Forage Reserve Pastures. Through these Decisions, the total AUMs allocated to livestock was reduced by 42% in the area associated with the proposed gather. No livestock use is permitted within the Bullfrog HMA except the small portion of the East Razorback pasture in the northeastern portion of the HMA (Figure2).

The gather area has been utilized by domestic livestock since the area was settled over 100 years ago.

Historic domestic livestock and wild burro use has contributed to degradation of range condition within the gather area. However, livestock numbers within the Proposed Gather Area have been substantially reduced since the 1990's. Recreation, mineral exploration, and invasive weed treatment have had, and are expected to continue to have negligible impacts to grazing or wild burro management within the project area.

In 1990, the BLM removed 63 "nuisance" burros from within the city limits of Beatty. A gather in 1995 removed 492 wild burros. An emergency gather was completed within the Bullfrog HMA in 1996 due to severe drought where an additional 417 wild burros were removed. In 2000, the BLM attempted to remove 10 "nuisance" burros from within the city limits of Beatty, but was unsuccessful. Twelve "nuisance" wild burros were removed in 2007.

Past activities, which may have affected wild burros within the HMA primarily, include livestock grazing through the impacts on vegetation condition and availability, as well as water quality and quantity. There are mining claims in the gather area at the present time, and active exploration activities are ongoing.

#### **Present Actions**

Currently, the wild burro population within the Proposed Gather Area is estimated to be over 195 wild burros. This population exceeds the established AML range, and a substantial portion of the wild burro population resides outside of HMA boundaries. Many of these wild burros residing outside of HMA boundaries are moving out of the TFO Resource Area into the Southern Nevada District planning area. Permitted livestock use is virtually non-existent in the Proposed Gather Area due to poor habitat for livestock, because livestock grazing was eliminated from certain areas to protect threatened desert tortoise habitat, and as a result of changes to livestock grazing management implemented through the 2007 FMUD.

Currently, the BLM is in the planning process of developing 5 springs in the HMA to improve Amargosa toad habitat. The developments would include access for wild burros.

#### **Reasonably Foreseeable Future Actions**

Future activities which could occur include water developments and spring enclosures, and mineral exploration activities, and maintenance of existing and construction of new sections of transmission lines. The AML of the Bullfrog HMA could be increased as proposed in the 2007 EA and RHE if additional water sources are developed in the "dry" areas of the HMA. Any decisions regarding the appropriate level of burro use would be determined based upon inventory, use patterns, and availability and condition of water and forage, following consultation with interested public.

The future may also involve development of a Herd Management Area Plan (HMAP). Should the genetic analysis indicate concerns with genetic variability, specific treatment protocols would be developed to address these concerns such as potential augmentation of wild burros (if appropriate) from other similar HMAs.

The BLM would continue to conduct monitoring to assess progress towards meeting Rangeland Health Standards, RMP objectives and Allotment Specific Objectives. Where suitable and sustainable, wild burros would continue to be a component of the public lands, managed within a multiple use concept. Once excess wild burros have been removed and low range AML is achieved through the Proposed Action, future gathers to maintain AML could be authorized through a new decision-making process in subsequent years after the wild burro population grows beyond the high end of AML.

While there is no current expectation that amendments to the Wild Free-Roaming Horses and Burros Act would change the way wild horses and burros could be managed on the public lands, the Act has been amended three times since 1971. Therefore, there is potential for amendment as a reasonably foreseeable future action.

#### **Impacts**

Cumulative beneficial effects from the Proposed Action, Alternative 1 and Alternative 2 would include some degree of continued maintenance and improvement of the rangeland vegetation and riparian areas, which in turn would positively impact wildlife (including sensitive and threatened species), wild burro populations, and livestock as forage and water availability and quality is maintained and improved whether this occurs inside, outside, or only in targeted portions of the HMA.

The combination of the past, present, and reasonably foreseeable future actions, along with the Proposed Gather should result in more stable, healthier rangelands, healthier wild burros, and fewer multiple-use conflicts within the Bullfrog HMA.

The Proposed Gather operations would contribute to isolated areas of disturbed vegetation from the gather activities. Due to the small size or short duration of the disturbance (<2 weeks), cumulative impacts, when compared to the overall CESA, are expected to be negligible especially when identified mitigation measures are implemented.

The Proposed Action is expected to result in indirect impacts that would contribute to improved rangeland health, proportional to the number of animals on the range and location of wild burros that would be removed via the alternatives. In the long term, the achievement of AML in conjunction with other foreseeable actions would lead to improved habitat for wild burros and wildlife (including sensitive and threatened species). An overall lower population and density of wild burros across the landscape would promote recovery of native vegetation currently in a state that is less than the potential or desirable condition, as well as reduce or eliminate additional degradation to vegetation and riparian areas.

With implementation of the Proposed Action, excessive use by wild burros would not occur if the AML is achieved and maintained, and would decrease in areas described in Alternatives 1 and 2. Key forage species could improve in health, abundance and robustness, and would be more likely to set seed and reproduce, which in turn would contribute to their increase within the plant community.

As future wild burro gathers are conducted to remove excess wild burros and maintain AML, these impacts are expected to continue and result in overall improvements to the forage availability for livestock, wild burros and wildlife. Wild burro habitat would be protected from further losses of important key forage species, which would increase in frequency, vigor and production. Animal health would be maintained and the need for emergency gathers reduced through drought years.

The proposed gather operations and other foreseeable actions would begin to offset past negative trends in habitat modification by allowing for attainment of Rangeland Health Standards and RMP Objectives. When combined with past, present, and reasonably foreseeable future actions, and incorporating mitigation measures, the potential for cumulative impacts to wildlife habitat from the Proposed Gather operations would also be negligible.

The No Action Alternative would not result in any long-term cumulative benefits to any rangeland user. As the population of wild burros continues to increase, an emergency gather would be more likely to be required as the population exceeds the capacity of the range to provide adequate forage or water. This could be further compounded or accelerated by the frequent occurrence of drought and substantial precipitation extremes of the region. An emergency gather would likely result in all animals being removed from the HMA in order to prevent suffering and death of these animals.

The No Action Alternative would allow continued degradation of vegetation by an excess population of wild burros which in the long term would cause continued loss of key perennial forage species. Past impacts would not be offset, and downward trends would continue.

Vehicle collisions along US Highway 95 and conflicts with wild burros in the community of Beatty would also resume and potentially increase.

Deterioration of uplands and riparian areas resulting from an overpopulation of wild burros would continue and BLM would be unable to improve habitat for future generations of wild burros and other wildlife. Chronic and long term degradation of rangeland resources could result in irreparable damage to the arid habitat and could result in the need to discontinue management of any wild burros within the Bullfrog HMA due to degraded habitat.

Range deterioration and degradation of riparian and upland habitat in conjunction with any reasonably foreseeable projects or other management actions would not improve forage or water availability for wild burros, livestock or wildlife. In the long term, the No Action Alternative could result in further reductions of livestock numbers and wildlife within the gather area.

In light of other foreseeable actions, the No Action Alternative would result in long-term, potentially permanent and severe degradation to the health of public lands throughout the Proposed Gather Area. Cumulative impacts of the No Action Alternative, coupled with the impacts from past, present, and reasonably foreseeable actions, would hinder success in attaining RMP Objectives and Standards and Guidelines for Rangeland Health, and would preclude any improvement to the health of vegetative communities and the ecological condition of the range as a whole.

## 5. Suggested Monitoring

The BLM would continue to conduct the necessary rangeland monitoring to periodically evaluate the effects of the very limited livestock grazing and use by wild burros and wildlife, and determine if progress is being made in the attainment of multiple-use objectives and Standards for Rangeland Health. Monitoring would be in accordance with BLM policy as outlined in the *Nevada Rangeland Monitoring Handbook* and other BLM technical references. Vegetation monitoring consisting of utilization, trend, frequency, cover, production, species composition, proper functioning condition and other rangeland studies would continue.

The TFO would continue to plan for periodic inventory flights to monitor the growth and distribution of the wild burro populations within the Bullfrog HMA.

## 6. Consultation, Coordination and List of Preparers

Refer to Section 1.9 for a summary of the public scoping.

A Public hearing is held annually on a state-wide basis regarding the use of motorized vehicles, including helicopters and fixed-wing aircraft, in the management of wild horses and burros. During this meeting, the public is given the opportunity to present new information and to voice any concerns regarding the use of the motorized vehicles. The Ely District Office hosted the state-wide meeting on June 15, 2011; the current gather operation SOPs were reviewed in response to the concerns expressed and no changes to the SOPs were identified.

The Bullfrog HMA Wild Burro Gather Preliminary Environmental Assessment DOI-BLM-NV-B020-2011-0102-EA was available to the public for comments for 30 days from November 30 to December

30, 2011. Comments were received via mail and through an email account created for the Bullfrog HMA Gather EA (BullfrogHMA@blm.gov).

Comments received and the BLM's responses to those comments are summarized in Appendix E.

Several pictures have been posted online of the wild burros and habitat from the Bullfrog HMA. If you would like to view the photos, you can access them from the gather websites identified on our Battle Mountain website: <a href="http://www.blm.gov/nv/st/en/fo/battle\_mountain\_field.html">http://www.blm.gov/nv/st/en/fo/battle\_mountain\_field.html</a>. Click on the name of the gather you want to view, then on the icon with the blue and red dot under "Follow us on" on the right hand side of the screen (the Flickr icon). From there you can choose the photo collection on the right hand side.

# List of Preparers

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# References

- Anderson, J. E., and K. E. Holte. 1981. Vegetation development over 25 years without grazing on sagebrush —dominated rangeland in southeastern Idaho. J. Range Management 34, 25-29.
- Brown, J. H. and E. J. Heske. 1990. Control of a desert-grassland transistion by a keystone rodent guild. Science 250:1705-1707.
- Coates-Markle, L. 2000. Summary Recommendations, BLM Wild Horse and Burro Population Viability Forum April 1999, Ft. Collins, CO. Resource Notes 35:4pp.
- Cook, C. W., and Child, R. D. 1971. Recovery of desert plants in various states of vigor. J. Range Management 24: 339-343.
- Great Basin Bird Observatory, 2007. www.gbbo.org/index.html.
- Hart, R. H., M. J. Samuel, J. W. Waggoner Jr., M. A. Smith. 1989. Comparisons of grazing systems in Wyoming. Journal of Soil and Water Conservation, 344-347.
- Havstad, K. M., R. P. Gibbens, C. A. Knorr, and L. W. Murray. 1999. Long-term influences of shrub removal and lagomorph exclusion on the Chihuahuan Desert Vegetation dynamics. Journal of Arid Environments 42:155-166.
- Henneke et al. Equine Vet J. (1983) 15 (4), 371-2.
- Heske, E. J., J. H. Brown and S. Mistry. 1994. Long-term experimental study of Chihuahuan Desert rodent community: 13 years of competition. Ecology 75:438-445.
- Interior Board of Land Appeals 88-591, 88-638, 88-648, 88-679 at 127.
- 109 Interior Board of Land Appeals 119 API 1989.
- 118 Interior Board of Land Appeals 75.
- Klages, K. H. W. 1942. Ecological Crop Geography. Macmillan, New York.
- Milchunas, D. G. and W. K. Lauenroth. 1995. Inertia in plant community structure: state changes after cessation of nutrient-enrichment stress. Ecological Applications 5:452-458.
- Rich, T D. 2002. Using breeding land birds in the assessment of western riparian systems. Wildlife Society Bulletin. 30 (4):1128-1139.
- Singer F.J., Zeigenfuss L. 2000. Genetic Effective Population Size in the Pryor Mountain Wild Horse Herd: Implications for conserving genetics and viability goals in wild horses. U.S. Geologic Survey, Midcontinent Ecological Science Center, Ft. Collins CO. Resource Notes 29: 2 pp.
- Society for Range Management, 1989. A glossary of Terms Used in Range Management (Third ed.). Society for Range Management, Denver, Colo.
- U.S. Dept. of Agriculture, Soil Conservation Service, Soil Survey of Nye County. 2002.
- U.S. Dept. of Agriculture, Natural Resource Conservation Service (NRCS), Nevada Ecological Site Descriptions for Major Land Resource Areas (MLRA) 29.

- U.S. Dept. of Interior, Bureau of Land Management, Tonopah Field Office 1997. Tonopah Resource Management Plan and Record of Decision. Tonopah, Nevada.
- U.S. Dept. of Interior, Bureau of Land Management, Tonopah Field Office. 2007. Montezuma Complex Rangeland Health Evaluation. Tonopah, Nevada.
- U.S. Dept. of Interior, Bureau of Land Management, Tonopah Field Office. 2007. Montezuma Complex Rangeland Health Evaluation EA NV065-2005-042. Tonopah, Nevada.
- U.S. Dept. of Interior, Bureau of Land Management, Tonopah Field Office. 2007. Final Multiple Use Decision for the Montezuma Complex. Tonopah, Nevada.
- U.S. Dept. of Interior, Bureau of Land Management. 1988. 6840 Manual. Special Status Species Management. Washington. D.C.
- U.S. Dept. of Interior, Bureau of Land Management. 1996. Utilization Studies and Residual Measurements. Interagency Technical Reference, BLM/RS/ST-96/004+1730. Bureau of Land Management, National Applied Resource Sciences Center, Denver, Colo.
- U.S. Dept. of Interior, Bureau of Land Management. 1996. Sampling Vegetation Attributes. Interagency Technical Reference, BLM/RS/ST-96/002+1730. Bureau of Land Management, National Applied Resource Sciences Center, Denver, Colorado.
- U.S. Government Accountability Office. Report to the Chairman, Committee on Natural Resources, House of Representatives. Bureau of Land Management -- Effective Long-Term Options Needed to Manage Unadoptable Wild Horses. Report 09-77, October 2008.

## **Appendix A: Wild Burro Gather Plan and Standard Operating Procedures**

#### I. Gather Plan

The purpose of the gather plan is to outline the methods and procedures for conducting a gather to remove excess wild burros from public lands administered by the TFO. Implementation of the Proposed Action would require the capture and removal of approximately 137 wild burros to achieve a post-gather population of approximately 58 wild burros. A trap-site adoption event could also be scheduled to coincide with the gather activities (refer to Section 1-J).

## A. Gather Area

The Proposed Gather Area includes the Bullfrog HMA and areas outside of HMA boundaries. The HMA is approximately 150,000 acres. Refer to Figure 1 which display the HMA and the gather area.

## B. Administration of the Contract /Gather Operations

The National Wild Horse and Burro Gather Contract would be used to conduct the initial phase of the wild burro gather tentatively scheduled for the winter/spring 2012. BLM personnel would be responsible for overseeing the contract for the capture, care, aging, and temporary holding of wild burros from the capture area. BLM WH&B Specialists would be present during all aspects of the gather activities.

Standard Operating Procedures (SOPs) described within this document would be utilized for the capture and handling of wild horses and burros. SOPs have been developed over time to ensure minimal impacts associated with gathering, handling, and transporting wild horses and burros and collecting herd data.

It is estimated that 4-5 gather corrals and 1 set of central holding corrals would be necessary to complete the gather. Ideally, gather corrals would be established in areas of previous soil or vegetation disturbance (such as gravel pits, roads etc.), to avoid impacts to unaltered vegetation and soils. A cultural resources investigation would be conducted prior to the construction of gather corrals and temporary holding facilities. Refer to the SOPs, Section H for more detailed information.

A notice of intent to impound would be made public prior to the gather. Branded and/or claimed horses would be transported to a temporary holding facility. Ownership would be determined under the estray laws of the State of Nevada by a Nevada Brand Inspector. Collection of gather fees and any appropriate trespass charges would be collected per BLM policy and regulation.

An APHIS or private veterinarian would be on-call or on-site for the duration of the gather to provide recommendations to WH&B Specialists for care and treatment of sick or injured wild horses. Consultation with the veterinarian may take place prior to the euthanasia of wild horses in accordance with Washington Office Instruction Memorandum (IM 2009-041). Refer to Part H for more information about the euthanasia policy.

Precautions would be taken to ensure that young or weak horse foals are safely gathered and cared for appropriately. If a foal were determined to be an orphan, qualified adopters would be contacted immediately to provide proper care for the foal. Milk replacer formula and electrolytes would be available to care for orphan foals if necessary.

#### C. General Overview of Wild Horse and Burro Gather Methods

The helicopter gather contractor supplies and transports all equipment needed to conduct a gather to a central location where Holding Corrals are constructed. These corrals consist of six or more pens constructed of sturdy panels, with a central alleyway and working/squeeze chute in the center. Corral panels are covered with snow fencing to keep animals calm, and water tanks located within the pens. The central alley and pen arrangement

allows the BLM staff and the contractor to sort recently captured animals, separating animals to ship to the adoption facilities, and jennies and foals from jacks to prevent fighting and injury. The pen arrangement allows the contractor to off-load wild burros from stock trailers into the pens, and facilitates the loading of the burros to be transported to facilities onto large straight deck trucks.

At various locations throughout the HMA, smaller sets of gather corrals are constructed called "traps". The trap or gather corrals consists of a series of pens made out of panels, and "wings" made out of jute netting that funnel wild burros into the corrals as they are captured. Once captured, the burros are loaded into stock trailers and transported to the central Holding Corrals for sorting. Burros may remain in the gather site or on the stock trailer for no time at all, or up to an hour or more while other groups of burros are brought to the gather corrals.

The contractor utilizes a helicopter and pilot to conduct gathers. Use of a helicopter is humane, safe and effective. Methods for use of helicopter are well established, and the contract pilots very skilled. Wild burros settle down once gathered and do not appear to be more than slightly annoyed by the helicopter.

The pilot locates groups of wild burros within the HMA and guides them towards the gather corrals. In most cases, horses are allowed to travel at their own pace, and are not "pushed". Distances average 4-7 miles over mixed terrain which may consist of rolling foothills, or steeper terrain, drainages, ridges and valley bottoms. The burros often follow their own trails. The pilot and the BLM staff monitor the condition of the burros to ensure their safety, checking for signs of exhaustion, injuries etc. The contractor and pilots are very skilled at designing and building gather corrals, and safely herding the burros to them. Generally, wild burros are very fit, and recover quickly from being captured. Distances that the burros travel are modified to account for summer temperatures, snow depth, animals in weakened condition, young foals, or older/lame animals. Under ideal conditions, some burros could be herded 10 miles or more at the discretion of the COR/WH&B Specialist.

Crewmembers rush in to secure gates once the burros are within the corrals. During summer gathers, the crew often separates foals from adults at the gather site so that they may be transported to the Holding Corrals separately and avoids being injured by adult burros. Foals may be loaded into a separate stock trailer where they can have shade, water, and electrolyte if necessary. Once unloaded at the Holding Corrals, foals may be rejoined with the mothers if not old enough to wean, and monitored to ensure that all of the foals "join-up". Often paint marks are applied to the foals and mothers to assist the contractor and BLM staff in identifying pairs.

Occasionally (and more frequently for difficult to gather areas) helicopter-assisted roping is implemented, in which the pilot moves a small group of burros to the gather area, and the crewmembers rope the animals from horseback. This method often prevents overstressing the burros from repeated attempts to move them into the gather corrals. The roped burros are then led to the corrals, to awaiting stock trailers, or immobilized on the ground until they can be loaded into stock trailers.

Once burros are loaded and transported to the Holding Corrals, they are sorted by the contractor's staff and BLM employees. The contractor looks at the burro's teeth to estimate age while held in the chute, and the BLM staff documents age, color, body condition and lactation status of the burro. Aging wild burros is a process of estimation due to the type of wear that can occur to the teeth of a wild burro on the range.

Injuries are noted and treated if needed. Once sorted, the burros are given hay and unlimited water, if no health concerns exist. During this time, the BLM may consult with a veterinarian to treat sick or injured animals, or make recommendations for euthanasia.

When the pens hold enough burros to transport to the BLM adoption facility, they are loaded into the straight deck trailers that hold 35-45 wild burros depending upon their size. The trailers have three compartments so that jennies, jacks and foals can be transported separately. It may require 3-8+ hours for the wild burros to arrive at the adoption preparation facility. The TFO typically ships burros to National Wild Horse and Burro Center at

Palomino Valley near Sparks, Nevada; or may ship burros to the facility at Ridgecrest, California Arizona, Gunnison Correctional Facility in Gunnison, UT, or Indian Lakes Facility in Fallon, NV if needed.

During sorting, the BLM staff identifies the wild burro to be released back to the HMA according to the objectives for the herd. When it is time for the release, the jennies and jacks are each loaded into separate stock trailers and transported back inside the HMA near water sources, if possible. The rear of the trailer is opened up, and the burros are allowed to step off and travel back into the HMA. Sometimes the burros are released directly from the holding corrals if they are centrally located within the HMA.

Before the wild burros are transported to adoption facilities or released, hair is sampled for genetic testing. Data collected during the gather in conjunction with genetic analysis report will be incorporated into a Herd Management Area Plan (HMAP) in the future.

#### D. Data Collection

WH&B Specialists would be responsible for collecting population data. The extent to which data is collected may vary among the field offices to meet specific needs pertaining to each HMA.

#### 1) Hair Samples/Genetics Analysis

Hair samples could be collected and analyzed to establish genetic baseline data of wild burros (genetic diversity, historical origins, unique markers, and norms for the population).

WHB Specialists could collect a minimum sample size of 25 hair samples from both jennies and jacks in a ratio similar to the sex ratio released. Age would not be a defining factor in determining which animals to sample. Samples would be sent to Texas A&M University for analysis.

#### 2) Herd Health and Viability Data Collection

WHB Specialists would document information related to age, sex, color, overall health, pregnancy, or nursing status from each animal captured. An estimate of the number of burros evading capture would also be recorded.

Information on reproduction would be collected to the extent possible, through documentation of the wild burros captured during the gather, and the age of those released following the gather.

#### 3) Characteristics

WHB Specialists would record color and size of the animals, and any characteristics as to type would be noted, if determined. Any incidence of negative genetic traits (parrot mouth, club foot etc.) or other abnormalities would be noted as well.

#### 4) Condition Class

A body condition class score would be recorded based on the Henneke System. This would be recorded for the population in general and/or for specific animals if necessary.

## E. Euthanasia

The Authorized Office (or designee) will make decisions regarding euthanasia, in accordance with BLM policy as expressed in Washington Office Instructional Memorandum No. 2009-041. A veterinarian may be called to make a diagnosis and final determination. Current BLM SOP is to have a Veterinarian from APHIS on site throughout the gather to observe animal health and condition and provide input to BLM staff regarding the potential need to euthanize wild burros on gathers. Euthanasia shall be done by the most humane method available. Authority for humane euthanasia of wild horses or burros is provided by the Wild Free-Roaming Horses and Burros Act of 1971, Section 3(b)(2)(A), 43 CFR 4730.1, BLM Manual 4730 - Euthanasia of Wild horses and Burros and Disposal of Remains. The following are excerpted from IM 2009-41:

A Bureau of Land Management (BLM) authorized officer may authorize the euthanasia of a wild horse or burro in field situations (includes free-roaming horses and burros encountered during gather operations) as well as short- and long-term wild horse and burro holding facilities with any of the following conditions:

- (1) Displays a hopeless prognosis for life;
- (2) suffers from a chronic or incurable disease, injury or serious physical defect; (includes severe tooth loss or wear, severe club feet, and other severe acquired or congenital abnormalities)
- (3) would require continuous treatment for the relief of pain and suffering in a domestic setting;
- (4) is incapable of maintaining a Henneke body condition score greater than two, in its present environment:
- (5) has an acute or chronic injury, physical defect or lameness that would not allow the animal to live and interact with other horses or burros, keep up with its peers or exhibit behaviors which may be considered essential for an acceptable quality of life constantly or for the foreseeable future;
- (6) suffers an acute or chronic infectious disease where State or Federal animal health officials order the humane destruction of the animal as a disease control measure.

There are three circumstances where the authority for euthanasia would be applied in a field situation:

- (A) If an animal suffers from a condition as described in 1-6 above that causes acute pain or suffering and immediate euthanasia would be an act of mercy, the authorized officer has the authority and the obligation to promptly euthanize the animal. If the animal is euthanized during a gather operation, the authorized officer will describe the animal's condition and report the action using the gather report in the comment section that summarizes gather operations (See attachment 1). If the euthanasia is performed during routine monitoring, the Field Manager will be notified of the incident as soon as practical after returning from the field.
- (B) Older wild horses and burros encountered during gather operations should be released if, in the opinion of the authorized officer, the criteria described in 1-6 above for euthanasia do not apply, but the animals would not tolerate the stress of transportation, adoption preparation, or holding and may survive if returned to the range. This may include older animals with significant tooth wear or tooth loss that have a Henneke body condition score greater than two. However, if the authorized officer has inspected the animal's teeth and feels the animal's quality of life will suffer and include health problems due to dental abnormalities, significant tooth wear or tooth loss; the animal should be euthanized as an act of mercy.
- (C) If an animal suffers from any of the conditions listed in 1-6 above, but is not in acute pain, the authorized officer has the authority to euthanize the animal in a humane manner. The authorized officer will prepare a written statement documenting the action taken, and notify the Field Manager and State Office WH&B (WH&B) Program Lead. If available, consultation and advice from a veterinarian is recommended, especially where significant numbers of wild horses or burros are involved.

#### I. Special Stipulations

- 1) Private landowners or the proper administering agency(s) would be contacted and authorization obtained prior to setting up gather corrals on any lands which are not administered by BLM. Wherever possible, gather corrals would be constructed in such a manner as to not block vehicular access on existing roads.
- 2) Gather corrals would be constructed so that no riparian vegetation is contained within them. No vehicles would be operated on riparian vegetation or on saturated soils associated with riparian/wetland areas.
- 3) The helicopter would avoid eagles and other raptors, and would not be flown repeatedly over any identified active raptor nests. No unnecessary flying would occur over big game on their winter ranges or active fawning/calving grounds during the period of use.
- 4) Standard operating procedures in the site establishment and construction of gather corrals will avoid adverse impacts from gather corrals, construction, or operation to wildlife species, including threatened, endangered, or sensitive species.
- 5) Archeological clearance by a BLM archaeologist or District Archeology Technician of gather corrals, holding corrals, and areas of potential effects would occur prior to construction of gather corrals and holding corrals. If cultural resources were encountered, those locations would not be utilized unless they could be modified to avoid impacts. Due to the inherent nature of wild burro gathers, gather corrals and holding corrals would be identified just prior to use in the field. As a result, Cultural Resource staff would coordinate with WH&B personnel to inventory proposed locations as they are identified, and complete required documentation.
- 6) Wilderness Study Areas: When gathering wild burros from within Wilderness Study Areas (WSAs), applicable policy will be strictly adhered to. Only approved roads will be traveled on. A Wilderness Specialist or designee would be present to ensure that only inventoried ways or cherry stemmed roads are traveled on by vehicles within the WSA.

#### 7) Wildlife stipulations

The following stipulations would be applied as appropriate.

- a. Sage Grouse
  - i. Avoid active leks (strutting grounds) by 2 miles. March 1- May 15
  - ii. Avoid nesting and brood rearing areas (especially riparian areas where broods concentrate beginning usually in June) by 2 miles. April 1 August 15
  - iii. Avoid sage grouse wintering areas by 2 miles while occupied. Most known wintering grounds in the Shoshone-Eureka Resource Area occur at high elevations and are not likely to be affected. Dates vary with severity of winter
  - iv. Minimize and mitigate disturbance to the vegetation in all known sage grouse habitat.
- b. Ferruginous Hawk: Avoid active nests by 2 miles. March 15- July 1.

#### J. Trapsite Wild Burro Adoptions

Interest has been received from the public for an adoption to be planned in conjunction with this proposed gather. Scheduling of an event would be contingent upon continued public interest, available budget, and personnel. A trapsite wild burro adoption would be completed in accordance with IM NV-2001-041, which outlines requirements for adoptions during gather operations.

Prior to the beginning of the gather, the BMFO would issue news releases and send flyers to previous adopters and the interested public announcing the proposed event. The event would also be posted on the National Wild

Horse and Burro webpage. Coordination would take place with the gather contractor in advance to prevent conflicts. Applications for adoption would be accepted by the BMFO until the day of the planned event. BMFO would evaluate applications received by potential adopters, and determine qualification to adopt. Adopters that do not submit applications by the event date would not have first priority for selection of animals. A public or viewing day may be scheduled the day before or the day of the event. The event type (first-come, first-served, competitive or lottery) would be based upon the interest received from potential adopters.

BLM staff would freezemark, de-worm and vaccinate all wild burros adopted. A veterinarian would be on-site to draw blood for Coggins testing and complete health certificates. Adopted wild burros would be brand inspected by a qualified brand inspector. BLM staff would halter and load wild burros into approved stock trailers, and follow-up with compliance inspections and assistance as needed after the event.

## II. Standard Operating Procedures for Wild Horse and Burro Gathers

Gathers would be conducted by utilizing contractors from the Wild Burro Gathers-Western States Contract, or BLM personnel. The following procedures for gathering and handling wild burros 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 and Burro Aviation Management Handbook* H-4740-1 (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.

Gather corrals 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.

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

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

The following procedures and stipulations will be followed to ensure the welfare, safety, and humane treatment of wild burros in accordance with the provisions of 43 CFR Part 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 gather corral 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 corral locations as determined by the COR/PI. All gather corrals 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 who will consider terrain, physical barriers, access limitations, weather, extreme temperature (high and low), condition of the animals, urgency of the operation (animals facing drought, starvation, fire rehabilitation, etc.) and other factors. In consultation with the contractor the distance the animals travel will account for the different factors listed above and concerns with each HMA.
- 3. All gather corrals, 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. Gather corrals 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 gather corrals 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 horses and 1 foot to 6 feet for burros. 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 horses and 2 feet to 6 feet for burros.
- 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 jennies 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 gather corrals, 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 gather corrals 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 gather corrals 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. 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 final their destination from temporary holding facilities within 24 hours after capture unless prior approval is granted by the COR/PI 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/PI. Animals shall not be held in gather corrals and/or temporary holding facilities on days when there is no work being conducted except as specified by the COR/PI. 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 gather site. This determination will be at the discretion of the COR.

#### 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 gather corral. If the contractor selects this method 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. Gather corrals 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 half 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

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

#### E. Site Clearances

Personnel working at gather sites will be advised of the illegality of collecting artifacts. 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 (or designee). 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, riparian zones or weed infested areas.

#### G. Public Participation

Opportunities for public viewing (i.e. media, interested public) of gather operations would 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 representatives. 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 any time or for any reason during BLM operations (refer to Appendix F, G, and H).

## H. Responsibility and Lines of Communication

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. Dustin Hollowell, WH&B Specialist would serve as the primary COR. Alternate COR and PI(s) would be selected prior to the start of the gather. Marc Pointel, Supervisory Natural Resources and Thomas Seley, Field Manager, TFO will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, State Office, National Program Office, and BLM Holding Facility offices. All employees involved in the gather 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 Nevada State Office and Battle Mountain District Office Public Affairs Officer. These individuals will be the primary contact and will coordinate with the COR on any inquiries.

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

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

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

## Appendix B: FAA 91.119

## Appendix B: Federal Aviation Administration General Operating and Flight Rules Sec. 91.119

Part 91 GENERAL OPERATING AND FLIGHT RULES Subpart B--Flight Rules General

Sec. 91.119

Minimum safe altitudes: General.

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

- (a) Anywhere. An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.
- (b) Over congested areas. Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.
- (c) Over other than congested areas. An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.
- [ (d) Helicopters, powered parachutes, and weight-shift-control aircraft. If the operation is conducted without hazard to persons or property on the surface—
- (1) A helicopter may be operated at less than the minimums prescribed in paragraph (b) or (c) of this section, provided each person operating the helicopter complies with any routes or altitudes specifically prescribed for helicopters by the FAA; and
- (2) A powered parachute or weight-shift-control aircraft may be operated at less than the minimums prescribed in paragraph (c) of this section.]

Amdt. 91-311, Eff. 4/2/10

## Appendix C: BLM IM Number 2010-164

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT WASHINGTON, D.C. 20240 http://www.blm.gov

July 22, 2010

In Reply Refer To: 4710 (260) P

EMS TRNASMISSION 07/23/2010 Instruction Memorandum No. 2010-164

Expires: 09/30/2011

To: All Field Officials (except Alaska)

From: Assistant Director, Renewable Resources and Planning

Subject: Public Observation of Wild Horse and Burro Gathers

Program Area: Wild Horse and Burro Program

**Purpose:** The purpose of this Instruction Memorandum (IM) is to establish policy for public observation of wild horse and burro (WH&B) gathers.

**Policy/Action:** The Bureau of Land Management's (BLM's) policy is to accommodate public requests to observe a gather primarily through advance appointment, on days and at times scheduled by the authorized officer. Planning for one public observation day per week is suggested.

Specific viewing opportunities will be based on the availability of staff with the necessary expertise to safely and effectively host visitors, as well as other gather-specific considerations (e.g., weather, terrain, road access, landownership). The public should be advised that observation days are tentative and may change due to unforeseen circumstances (e.g., weather, wildfire, trap relocation, equipment repair, etc.). To ensure safety, the number of people allowed per observation day will be determined by the District Manager (DM) and/or Field Office Manager (FM) in consultation with the Contracting Officer's Representative/WH&B Specialist (COR) for the gather.

The DM/FM has the primary responsibility for effectively planning and managing public observation of the gather operation. Advance planning will:

- Ensure that the public have opportunities to safely observe wild horse gathers;
- Minimize the potential for disruption of the gather's execution;
- · Maximize the safety of the animals, visitors, and the BLM and contractor personnel;
- · Provide for successful management of visitors; and
- Ensure preparedness in the event of unanticipated situations.

The authorized officer will consider the following when planning for public observation of WH&B gather operations. Also see Attachment 1 (Best Practices When Planning for Public Observation at Gathers).

#### A. Safety Requirements

During WH&B gathers, the safety of the animals, the BLM and contractor personnel, and the public is of paramount importance. Because of the inherent risk involved in working with WH&B, the public will not be allowed inside corrals or pens or be in direct contact with the animals. Viewing opportunities during the gather

## Appendix C: Instructional Memorandum No. 2010-164

operation must always be maintained at a safe distance (e.g., when animals are being herded into or worked at the trap or temporary holding facility, including sorting, loading) to assure the safety of the animals, the BLM and contractor personnel, and the public.

Unless an emergency situation exists, the BLM's policy prohibits the transportation of members of the public in Government or Contractor-owned or leased vehicles or equipment. Therefore, observers are responsible for providing their own transportation to and from the gather site and assume all liability for such transportation.

The helicopter/aircraft is the private property of the gather contractor. Due to liability and safety concerns, Bureau policy prohibits observers from riding in or mounting cameras onto the aircraft. Should observers create unsafe flying and gathering conditions, for example, by hiring an aircraft to film or view a gather, the COR, in consultation with the gather contractor, will immediately cease gather operations.

The COR has the authority to stop the gather operation when the public engage in behavior that has the potential to result in harm or injury to the animals, employees, or other members of the public.

#### B. Planning for Public Observation at WH&B Gathers

During advance planning for public observation at WH&B gathers, the authorized officer should consult with the State External Affairs Chief or appropriate Public Affairs office. An internal communications plan will be developed for every gather (Attachment 2). It may also be helpful to prepare answers to frequently asked questions (Attachment 3).

#### C. Law Enforcement Plan

A separate Law Enforcement Plan should be developed if the need for law enforcement support is anticipated. The Law Enforcement Plan must be approved in advance by the Special Agent-In-Charge (SAC) or the State Staff Ranger of the State in which the gather is occurring.

#### **D. Temporary Closure to Public Access**

Under the authority of section 303(a) of the Federal Land Management and Policy Act (43 U.S.C. 1733(a)), 43 CFR 8360.0-7, and 43 CFR 8364.1, the authorized officer may temporarily close public lands within all or a portion of the proposed gather area to public access when necessary to protect the health and safety of the animals, the public, contractors and employees. Completion of a site-specific environmental analysis of the environmental impacts associated with the proposed closure and publication of a Federal Register Notice is required.

#### **E. Gather Contract Pre-Work Conference**

- Talk to the contractor about how many members of the public are expected and when. Discuss, and reach mutual agreement, about where best to position the public at the individual trap-sites to allow the gather to be observed, while accomplishing the gather objectives and assuring the humane treatment of the animals and the safety of the BLM and contractor personnel, and public.
- No deviation from the selected viewing location(s) should be made, unless the gather operation is being adversely impacted. The COR will consult with the gather contractor prior to making any changes in the selected viewing locations.
- The BLM's policy prohibits it from ferrying observers in the helicopter or any other mode of conveyance unless an emergency situation exists. Review this policy with the contractor during the pre-work conference.

#### F. Radio Communication

- · Assure there is effective radio communication between law enforcement personnel, gather COR or project inspectors (PIs), and other BLM staff.
- · Identify the radio frequencies to be used.
- Communication with the gather contractor is through the BLM COR or PI, and from the gather contractor to the helicopter pilot. Direct communication between BLM personnel (other than the COR) and the

## Appendix C: Instructional Memorandum No. 2010-164

helicopter pilot is not permitted, unless agreed upon by the BLM authorized officer and the contractor in advance, or the pilot is requesting information from the COR.

## **G. Pre- and Post-Action Gather Briefings**

- · Pre-briefings conducted by knowledgeable and experienced BLM staff can be helpful to the public.
- The pre-gather briefing is an opportunity to explain what individuals will see, why the BLM is conducting the gather, how the animals will be handled, etc.
- · Post-action briefings may also be helpful in interpreting and explaining what individuals saw, what happened, why certain actions were taken, etc.

#### H. Summary of Individual Roles and Responsibilities

1. District and/or Field Office Managers

DMs and/or FMs are responsible for keeping the State Director and State WH&B Lead fully informed about the gather operation. Included is working with State/local public affairs staff to prepare early alerts if needed. An additional responsibility is determining if a law enforcement presence is needed.

2. Public Affairs Staff

The local district/field office public affairs staff is responsible for working with the COR, DM/FM, other appropriate staff, the State WH&B Program Lead, and the State Office of Communications to implement the communications strategy regarding the gather.

3. Law Enforcement

Develop and execute the law enforcement plan in consultation with District/Field Office Managers, the COR/PI, and the State's Special Agent-In-Charge or State Staff Ranger.

4. Contracting Officer's Representative (COR)/Project Inspectors (PIs)

The COR and the PI's primary responsibility is to administer the contract and manage the gather. A key element of this responsibility is to assure the safe and humane handling of WH&B. The COR is also responsible for working closely with the DM/FM and Public Affairs Staff to develop the communication plan, and for maintaining a line of communication with State, District, and Field Office managers, staff and specialists on the progress of, and any issues related to, the gather operation.

**Timeframe:** This instruction memorandum is effective immediately.

**Budget Impact:** Higher labor costs will be incurred while accommodating increased interest from the public to attend gather events. The budget impacts of unanticipated situations which can occur during WH&B gathers include substantial unplanned overtime and per diem expense. Through advance planning, necessary support staff can be identified (e.g., law enforcement, public affairs, or other BLM staff) and the cost-effectiveness of various options for providing staff support can be evaluated. In situations where public interest in a gather operation is greater than anticipated, the affected state should coordinate with the national program office and headquarters for assistance with personnel and funding.

**Background:** Heightened interest from the public to observe WH&B gathers has occurred. Advance planning for public observation of gather operations can minimize the potential for unanticipated situations to occur during WH&B gathers and assure the safety of the animals, the BLM and contractor personnel, and the public.

Manual/Handbook Sections Affected: No change or affect to the BLM manuals or handbooks is required.

**Coordination:** This IM was coordinated among WO-200 and WO-260 staff, State WH&B Program Leads, field WH&B Specialists, public affairs, and law enforcement staff in the field.

**Contact:** Questions concerning this policy should be directed to Susie Stokke in the Washington Office at (202) 912-7262 or Lili Thomas in the National Program Office at (775) 861-6457.

Signed by: Bud C. Cribley Acting, Assistant Director Renewable Resources and Planning

Authenticated by: Robert M. Williams Division of IRM Governance,WO-560

## **Appendix D: Daily Visitation Protocol and Ground Rules**



# Daily Visitation Protocol and Ground Rules for the Pancake Complex Wild Horse Gather



BLM recognizes and respects the right of interested members of the public and the press to observe the Pancake Complex wild horse and burro gather. At the same time, BLM must ensure the health and safety of the public, BLM's employees and contractors, and America's wild horses. Accordingly, BLM developed these rules to maximize the opportunity for reasonable public access to the gather while ensuring that BLM's health and safety responsibilities are fulfilled. Failure to maintain safe distances from operations at the gather and temporary holding sites could result in members of the public inadvertently getting in the path of the wild horses or gather personnel, thereby placing themselves and others at risk, or causing stress and potential injury to the wild horses and burros.

The BLM and the contractor's helicopter pilot must comply with 14 CFR Part 91 of the Federal Aviation Regulations, which determines the minimum safe altitudes and distance people must be from the aircraft. To be in compliance with these regulations, the viewing location at the gather site and holding corrals must be approximately 500 feet from the operating location of the helicopter at all times. The viewing locations may vary depending on topography, terrain and other factors.

## **General Daily Protocol**

- A Wild Horse Gather Info Phone Line will be set up prior to the gather so the public can call for daily updates on gather information and statistics. Visitors are strongly encouraged to check the phone line the evening before they plan to attend the gather to confirm the gather and their tour of it is indeed taking place the next day as scheduled (weather, mechanical issues or other things may affect this) and to confirm the meeting location.
- Visitors must direct their questions/comments to either their designated BLM representative or the BLM spokesperson on site, and not engage other BLM/contractor staff and disrupt their gather duties/responsibilities professional and respectful behavior is expected of all. BLM may make the BLM staff available during down times for a Q&A session on guided pubic-observation days. However, the contractor and its staff will not be available to answer questions or interact with visitors.
- Observers must provide their own 4-wheel drive high clearance vehicle, appropriate shoes, winter clothing, food and water. Observers are prohibited from riding in government and contractor vehicles and equipment.
- Gather operations may be suspended if bad weather conditions create unsafe flying conditions.
- BLM will establish one or more observation areas, in the immediate area of the gather and holding sites, to which individuals will be directed. These areas will be placed so as to maximize the opportunity for public observation while providing for a safe and effective horse gather. The utilization of such observation areas is necessary due to the use and presence of heavy equipment and aircraft in the gather operation and the critical need to allow BLM personnel and contractors to fully focus on attending to the needs of the wild horses and burros while maintaining a safe environment for all involved. In addition, observation areas will be sited so as to protect the wild horses and burros from being spooked, startled or impacted in a manner that results in increased stress.

## Appendix D: Public Observation Protocol

- BLM will delineate observation areas with yellow caution tape (or a similar type of tape or ribbon).
- Visitors will be assigned to a specific BLM representative on guided-observation days and must stay with that person at all times.
- Visitors are NOT permitted to walk around the gather site or temporary holding facility unaccompanied by their BLM representative.
- Observers are prohibited from climbing/trespassing onto or in the trucks, equipment or corrals, which is the private property of the contractor.
- When BLM is using a helicopter or other heavy equipment in close proximity to a designated observation area, members of the public may be asked to stay by their vehicle for some time before being directed to an observation area once the use of the helicopter or the heavy machinery is complete.
- When given the signal that the helicopter is close to the gather site bringing horses in, visitors must sit down in areas specified by BLM representatives and must not move or talk as the horses are guided into the corral.
- Individuals attempting to move outside a designated observation area will be requested to move back to the designated area or to leave the site. Failure to do so may result in citation or arrest. It is important to stay within the designated observation area to safely observe the wild horse gather.
- Observers will be polite, professional and respectful to BLM managers and staff and the contractor/employees. Visitors who do not cooperate and follow the rules will be escorted off the gather site by BLM law enforcement personnel, and will be prohibited from participating in any subsequent observation days.
- BLM reserves the right to alter these rules based on changes in circumstances that may pose a risk to health, public safety or the safety of wild horses (such as weather, lightening, wildfire, etc.).

## **Public Outreach and Education Day-Specific Protocol**

• A public outreach and education day provides a more structured mechanism for interested members of the public to see the wild horse gather activities at a given site. On this day, BLM attempts to allow the public to get an overall sense of the gather process and has available staff who can answer questions that the public may have. The public rendezvous at a designated place and are escorted by BLM representatives to and from the gather site.

Maps of the gather area and major landmarks will be provided on the Bullfrog HMA gather web-page and from the TFO. Please contact the TFO gather line for updated information during the gather.

#### **Appendix E: BLM Responses to Public Comments**

No	Commenter	Comment	BLM Response		
	OPPOSED TO THE GATHER				
1	AWHPC <sup>4</sup> , TCF <sup>5</sup> , Individuals	Opposed to all removals of wild burros from the range. Forgo all wild burro removals in the Bullfrog HMA. Select the No Action Alternative. Cancel the document, revise the plan.	Comment noted. The No Action Alternative would not meet the purpose and need for gather operations and for removal of excess wild burros.		
		SUPPORT OF THE G	SATHER		
2	Individual	As much as I love burros, I support range management by adjusting populations to provide forage for all native range animals so support the adjustment in the burro population in this proposal.	Comment noted.		
3	State Historic Preservation Office	Supports the document as written.	Comment noted.		
4	Individuals	Should the BLM reach a decision to proceed with action, I support Alternative 2, which will minimize the number of burros removed from the range.	Comment noted.		
5	Nevada Department of Wildlife (NDOW)	The Department strongly supports the post-gather population of 58 wild burros within the HMA and additional removal of burros both residing within the city limits of Beatty and outside the HMA as high priority.	Comment noted.		
		GENETICS/HERDS TO	O SMALL		
6	AWHPC, individuals	The EA includes no scientific justification for or adequate analysis of the proposed impacts of the Proposed Action on the small burro herd which will be left in the HMA. Given the low AML, it is clear that the BLM intention is not to fulfill the requirement that these burros be "managed as self-sustaining populations."  The EA does not address the tremendous negative impact on the genetic viability of these herds of burros which are FEDERALLY PROTECTED.  Just 58 wild burros in the Bullfrog HMA is a dangerously low population number that will threaten the long-term health of the herds.	There is no evidence to support the claim that the proposed gather will result in the Bullfrog HMA wild burro herd being depleted to the point of irreparable genetic damage, or that the proposed gather would not allow the populations to remain self-sustaining.  It has been noted by Dr. Gus Cothran that wild burro population's quite low genetic variability compared to domestic donkeys, indicates a low population size at some point in their history.  Although genetic sampling has not been completed for the Bullfrog HMA wild burros, samples would be taken during the gather and continuous monitoring of genetic viability would be implemented. If genetic variability becomes an issue, the BLM will take the proper corrective action, such as introducing wild burros from another HMA to increase genetic diversity.		

<sup>4</sup> American Wild Horse Preservation Campaign

<sup>5</sup> The Cloud Foundation

7	TCF	Leaving only 58 wild burros is a formula for slow or relatively rapid genetic collapse, which might not be apparent for years, and by then it will be too late to preserve the herd. Per the Wild Horse and Burro Act, wild burros should be managed as "self-sustaining" populations. A self-sustaining herd is not one that is depleted to the point of irreparable genetic damage and collapse.	The established AML of 58-91 wild burros was established in consideration of available forage, water and other wildlife species in the area including threatened, and sensitive species. Neither the WFRHBA nor the Code of Federal Regulations requires the BLM to maintain genetically "viable" populations, especially where the habitat conditions are a limiting factor to wild horse population size. The long term health of the arid rangelands and of the animals takes precedence over genetic health and does not allow for management of large numbers of wild burros in this HMA  Burros within the Bullfrog HMA likely interchange with burros from the Nevada Test and Training Range and National Park Service. If genetic analysis indicates action is necessary to ensure genetic health of the burros, plans could include introducing burros from another HMA to increase genetic variability.
8	AWHPC	The EA does not provide any genetic analysis or data to analyze or present for review the genetic diversity of the herd in the HMA.	At present, no genetic analysis has been conducted in the Bullfrog HMA. Refer to comments above. Hair samples would be collected during the proposed gather in order to obtain baseline genetic information.
9	AWHPC	Unnecessarily jeopardizing the long-term viability of the Bullfrog herd is a blatant failure of the BLM to uphold the intent of the WFRHBA to manage this herd as self sustaining. Dr. Cothran is clear that avoidance of low genetic variability — through maintenance of a minimum population size of 150 to 120 animals — is the key to genetically healthy herds. The HMA's current high AML of 91 is well below the required number of burros to ensure that genetic diversity is ensured to fulfill the agency's mandate that the populations are managed as "self-sustaining populations."	The recommended population sizes put forth to ensure genetic variability are not required under the WFRHBA, its implementing regulation or policy. Though these population levels are advocated, BLM must consider all factors including but not limited to forage, water availability, climate, space, and presence of threatened, endangered and/or sensitive wildlife species that also share these fragile, arid ecosystems. Genetic viability will be preserved through genetic analysis and mitigative actions if determined to be necessary.
10	AWHPC	At minimum, the final EA should include copies and analysis of all genetic samplings and reports of burros in the Bullfrog HMA taken over the last ten years.	The Bullfrog Burro has not been gathered since the 1996 emergency gather when 417 wild burros were removed from the range. Genetic sampling has been completed in the Battle Mountain District since 2001. Because no gathers have been conducted in this HMA since then, genetic sampling has not been completed. Baseline genetic sampling will be completed during the proposed gather.
		GATHER COS	ST
11	AWHPC	The EA fails to assess impacts to social, cultural, and economic resources. The BLM must consider the legal and social factors when making land use decisions, such as setting and maintenance of AML, and failing to conduct range improvements to increase AML.  Analyze in the EA the costs to the taxpayer of possible roundup, removal, warehousing and adoptions of wild burros from this herd area as opposed to the savings of leaving them on the range	The BLM has brought forward what we believe to be the most viable options for managing this HMA, and the most responsible way to ensure the welfare of the wild burros and protection of the habitat. The WFRHBA does not authorize a cost-based decision-making process if excess horses are present. "Proper range management dictates removal of horses before the herd size causes damage to the range land." (118 IBLA 75). BLM has a responsibility per the WFRHBA to remove excess wild burros, ensuring the health of wild burros and of the rangeland.

Appendix E: Responses to Comments

	OUTSIDE HMA			
12	AWHPC	The proposed gather would fail to do anything to prevent wild burros from leaving HMAs.  It is incumbent upon the BLM to conduct range improvements to prevent burros from moving outside of the HMA.	Range improvements are beyond the scope of this analysis.  Action to prevent wild burros from leaving the HMA boundaries is outside of the scope of the analysis. Wild burros typically move outside of HMA boundaries as the population grows in excess of available habitat, leading to increased competition for resources. Monitoring and inventory data indicates that when these areas are not overpopulated, then fewer burros leave the HMA.	
13	AWHPC, individuals	Burros outside the HMA should not be removed, but rather relocated within the HMA boundaries	The existing population of burros within the HMA boundary is in excess of 153animals per the inventory conducted January 6-7, 2012. It would not be reasonable to re-locate burros from outside of the HMA into the HMA when the existing population exceeds the low AML by 89 wild burros. Experience has also shown that once animals establish residency outside of HMA boundaries, they are likely to return to those areas even if relocated back into the HMA boundaries during gathers.	
		RANGE DEGRADATION BY	WILD BURROS	
14	AWHPC	The EA has failed to establish/lacks hard monitoring data that supports the claim that burros are overpopulating the range and/or causing damage for the range.	The AML for the Bullfrog HMA was established through a Final Multiple Use Decision and EA following a Rangeland Health Evaluation in 2007. AML was established through analysis of vegetation monitoring data, precipitation patterns, and available water to ensure that management of wild burros would achieve a Thriving Natural Ecological Balance and protect fragile habitat associated with the Mojave Desert. Since the issuance of the EA and Decision, habitat conditions and constraints continue to be applicable, management objectives for the area have not changed and management of wild burros within the established AML remains necessary to prevent degradation of the range.  Refer to section 1.3 of the EA for the Purpose and Need for the gather which details the determination of excess burros exists and the reasons that the gather is needed. Per the Internal Board of Land Appeals the BLM "is not required to wait until the range is damaged before removing wild horses [or burros]. Proper range management dictates herd reduction before it causes damage to the range land. If the record establishes current resource damage or a significant threat of resource damage, removal is warranted" (118 IBLA 75).	
		EA ANALYSI	s	
15	AWHPC	The EA fails to consider that the vast majority of HMAs are over AML.	This comment is beyond the scope of this analysis. Information and data available for the Bullfrog HMA indicates that excess wild burros are present and that removal of those excess wild burros is necessary to protect rangeland resources within and outside of the HMA.	
16	AWHPC, individuals	The EA does not analyze nor even consider an alternative to control burros with only the use of fertility control treatment.  The EA is inadequate in its failure to analyze the impacts of this PZP alternative to stabilize the burro population in this area	Refer to Comment 30 below.  PZP and other fertility control formulations have not been evaluated or approved for use on wild burros. Furthermore, even if PZP were applied to wild burros in the HMA, this would not resolve the current over-population of wild burros and the limited forage and water available for that population.	

17	AWHPC	Inventory from the 2007 round-up, burro range use patterns, conditions of the	Please refer to sections 1.1, 3.1, 3.2, and 4 in the EA which summarize the data available in
17	71WIII C	current population and any site specific information is lacking in the EA	BLM's records
18	AWHPC	The EA fails to consider improving Public Observation.	This is beyond the scope of the analysis of the EA. Public observation will be in accordance with BLM IM 2010-164 and the Daily Visitation Protocol and Ground Rules found in Appendix C and Appendix D in the EA, respectively.
19	AWHPC, individuals	The EA fails to adequately consider use of bait/water trapping.	The EA clearly explains why this method of gather was removed from analysis as the primary gather method to replace helicopter drive trapping in Section 2.3.1. The Proposed Action, however, includes the potential use of bait/water trapping to supplement the helicopter gather, particularly in areas where this approach may be effective for the capture of some bands of wild burros within or outside the HMA.
20	Carla Bowers	The EA needs to show in detail the other "multiple uses" of the lands in and around the Bullfrog HMA which may present conflicts with the burros and require proper financial and other mitigation.	This comment is beyond the scope of this analysis. The EA details the other uses of the land in and around the Bullfrog HMA that may be affected by the wild burro gather, and analyzes those effects if present.
21	Carla Bowers	Analyze in the EA the significant negative impact that mismanaging this herd has on the psyche and public trust of the American people.	This comment expresses an opinion that is beyond the scope of the analysis.
22	AWHPC	The EA also fails to evaluate the impacts of the Proposed Action on recreational users of this public lands area, particularly those who enjoy burro viewing and photography.	Refer to Table 3b of the EA. It was determined that Recreation would not be affected by the proposed gather. Burros will continue to be present in the Bullfrog HMA for recreationalists to enjoy.
23	AWHPC	The EA fails to adequately evaluate procedures and consider new measures that would minimize potential stress and injury to burros during the roundup. The current "Wild Burro Gather Plan and Standard Operating Procedures" (Appendix A in the EA) was not analyzed to determine whether it is adequate or if improvements could be made to reduce potential stress and harm to the burros during the roundup. For example, the BLM must establish standard operating procedures (SOP) and criteria that is not subjective.	The Environmental Consequences portion of Section 3.2 describes the potential impacts of the Proposed Action in detail. Please also refer to Chapter 4 which analyzes potential cumulative impacts, and Section 3.10 which summarizes mitigation measures that would be used to "ensure that potential impacts are minimized or avoided completely". Appendix A, also details Standard Operating Procedures developed over the past 35 years to ensure the well-being of wild burros during gathers and maintain human safety.  Following the annual helicopter hearings, the BLM reviews SOPs for adequacy. Nothing was proposed during the 2011 hearing that would warrant change. Over the past year, various professionals of the veterinary and equine community have observed gathers and holding facilities, and followed up with reports of their findings and recommendations to BLM. For the most part, the team members found that wild horse and burro gathers are necessary, and conducted humanely. Many of the recommendations have already been implemented by BLM and the gather contractors. These reports can be viewed at these locations:  Office of Inspector General (OIG)report on the WHB program:  http://www.doioig.gov/images/stories/reports/pdf/BLM%20Wild%20Horse%20and%20Burr o%20Program%20Public.pdf  American Horse Protection Association Independent Report:  http://www.blm.gov/wo/st/en/info/newsroom/2010/december/NR_12_03_2010A.html  American Association of Equine Practitioners Report:  http://www.aaep.org/images/files/AAEP%20Report%20on%20the%20BLM%20Wild%20Horse%20&%20Burro%20Program%20Final.pdf
24	AWHPC	The EA does not claim that the Proposed Action is an emergency roundup. There is no crisis on the range. Therefore, the EA must analyze alternatives, including range improvements, which negate the need for the Proposed Action. The EA fails to provide one Alternative which negates the need for removal; but rather only	NEPA does not require the BLM to analyze alternatives that negate the need for action, nor does the WFRHBA require the BLM to consider other management actions before pursuing removal of excess wild horses or burros. The TFO evaluates range improvements and other habitat or management enhancements outside of gather EAs through project specific NEPA

		seeks to justify removal over the true need for the BLM to conduct range improvements to increase AML.	and public involvement. The WFRHBA and 4700 Regulations require the immediate removal of excess animals from the range so as to achieve appropriate management levels when a determination of the need for removal has been made. Appropriate Management Levels are established based on monitoring data and cannot be arbitrarily increased to avoid the need for removals. Through future resource monitoring efforts, if it were found that additional burros can be supported in the area without jeopardizing rangeland condition and wildlife habitat, those adjustments would be made at that time following appropriate NEPA and public involvement. The most significant limiting factors in this area are forage and water availability. The current population of wild burros is significantly over the level that the HMA can sustain, as evidenced by the movement of wild burros outside the HMA into areas not designated for their management.
25	AWHPC	The EA fails to analyze the use of Bait and/or Water Trapping and is erroneous in basing the need to utilize helicopters for the roundup. The well-being of the animals should be paramount and it is well documented that water/bait trapping is far less stressful and reduces the likelihood of injury and deaths. Given the documented difficulty of stampeding burros with helicopters and the intense stress caused to the burros, water/bait trapping should be the only method used for the capture if it is implemented.	It is a common misconception that helicopters are not a humane method of wild horse or burro capture, or that the use of helicopter results in excessive injury or death. Helicopter gathers also do not involve "stampeding" wild burros as implied by the commenter. In fact, helicopter is the safest and most efficient means of capturing wild horses and burros. Helicopter use is provided for in the 1976 Federal Land Management and Policy Act, 4700 CFRs and the WFRHBA, and has been used to gather wild horses and burros since the late 1970's. Over the course of the past 30 years, many improvements in safety and efficiency have been realized, with the welfare and care of these animals the top priority despite opinions otherwise. On average, injuries are minor and infrequent and usually occur after the animals have been gathered and are in the holding corrals. These types of injuries would also occur through bait or water trapping. Accidents that result in animals dying or needing to be euthanized as a direct result of the gather activities average less than five wild horses or burros for every 1000 gathered, which is a high success rate when gathering wild animals. See also Response to Comment 19.
26	Carla Bowers	The EA needs to show "other wildlife" usage of forage and water in the Bullfrog HMA.	This is outside of the scope of the analysis. The Affected Environment is detailed in Chapter 3 of the EA by resource, including wildlife use of habitat within the HMA.
27	Carla Bowers	The EA needs to show in detail the other "multiple uses" of the lands in & around the Bullfrog HMA which may present conflicts with the burros and require proper financial & other mitigation, i.e. projects such as mining, oil and gas, solar, wind, geothermal, pipelines, etc, some of which take MILLIONS of gallons of water from our public lands. Require these types of projects to fund water improvements & reseeding the land to support a genetically-viable number of burros on the Bullfrog HMA.	This is outside the scope of the analysis. The Affected Environment section summarizes other resources and uses of the project area in Chapter 3 of the EA. Other projects such as mining, oil and gas, solar, geothermal and wind development are analyzed in appropriate EAs and EISs in which impacts to wild horses or burros are considered if applicable. This would include direct, indirect or cumulative impacts to habitat, distribution patterns, water availability etc. It is not appropriate to analyze those impacts in a wild burro gather EA beyond the cumulative impacts analysis, where the purpose of the EA is to disclose the potential effects of the proposed gather activities.
28	Carla Bowers	Analyze in the EA the costs to the taxpayer of possible roundup, removal, warehousing & adoptions of wild burros from this herd area as opposed to the savings of leaving them on the range, implementing range improvements and range expansion, utilizing minimal one-year, dartable PZP and the economic benefits of promoting ecotourism and public education around this herd left in the wild. Beatty, NV, could become another famous little touristed rural town like Oatman, AZ, is with their prized & valued wild burro inhabitants. Take advantage of this natural & cultural resource, don't remove them.	BLM does not have the legal authority to require users of the public lands to fund range improvements for wild burro management as suggested by this commenter.  This is outside of the scope of the analysis. The BLM has brought forward what we believe to be the most viable options for managing this Complex, and the most responsible way to ensure the welfare of the wild horses and protection of the habitat. The Wild Free Roaming Horses and Burros Act (WFRHBA) does not authorize a cost-based decision-making process if excess horses are present. "Proper range management dictates removal of horses before the herd size causes damage to the range land." (118 IBLA 75). The BLM will be working with the Beatty residents, Nye County and other entities to develop long term management solutions for the burros in the Beatty area in order to avoid vehicle collisions, ensure the welfare of the burros and promote tourism if possible and if desired by the residents of

			Beatty. There will always be burros in and around Beatty, the proposed gather is intended only to remove excess animals and is needed to ensure the welfare and safety of the burros
			and the health of the fragile habitat within and around the HMA.
		GATHER AND REMOVA	
29	The Cloud Foundation	The round-up is set to take place in early March, which is a dangerous time for a helicopter round-up of wild burros. Pregnant jennies will be at risk of spontaneous abortions.	It is widely accepted that unlike wild horses, wild burros do not have a "foaling season" and can have foals year round. The EA acknowledges that this could be an "indirect impact" of the gather operations. However, the number of spontaneous abortions is very low during gather operations, and is not considered to be a significant issue during this gather.
		FERTILITY CONT	FROL
30	AWHPC, Carla Bowers, individuals	Using PZP to control population growth.	The effects of PZP fertility control are not well studied or documented for use on wild burro populations, therefore was not considered as a tool in the proposed gather. However, population growth control is not a primary concern with the Bullfrog HMA wild burro population as inherently fewer wild burros are gathered and removed than wild horses and they are more readily adopted. See also response to Comment 16.
		DATA/JUSTIFICATION FO	OR REMOVAL
31	AWHPC	The BLM has failed to provide adequate justification or scientific analysis for the Proposed Action, which involves rounding up and permanently removing 84 wild burros from within and outside the Bullfrog HMA.	The EA addresses the justification for removal in Section 1.3. The analysis of the potential impacts of the Proposed Action, as required to comply with NEPA, are detailed under the <i>Proposed Action</i> heading under each analyzed resource in the EA.
		CENSUS/INVENTOR	
32	Susan Rudnicki	Census and Population Data Questionable:  Removing 84 animals is justified by asserting the "projected future births." BLM foaling rates "expect" the population to reach 144 inside and outside the HMA – but this is speculation NOT based on scientific finding.	Refer to information in the Final EA for information about an inventory of the HMA completed January 6 and 7, 2012 to confirm the estimated population. At the issuance of the preliminary EA, the February 2010 inventory flight was the most recent flight of the entire Bullfrog HMA and BLM based its estimate of the 2011 population historical population growth rates documented for the TFO HMAs.  The direct count obtained during the January 2012 inventory found a total of 195 wild burros inside and outside the Bullfrog HMA boundaries. The count found 148 wild burros inside the HMA boundaries, which is consistent with the estimated population of 144 burros identified in the Preliminary EA. The excess population, however, exceeds the number of wild burros found solely within the HMA since wild burros have moved outside the HMA boundaries in search of food and water and are now present in areas not designated for their management.  BLM's January 2012 inventory confirms that BLM has not over-estimated the number of excess wild burros present within and outside the HMA.
33	AWHPC	The Bullfrog roundup EA states that a flyover would be done in December to get census/population numbers for the burros in and around the Bullfrog HMA. Would you please let me know what methodology was used for the census and how many burros are estimated to be in and outside of the HMA?  Thank you in advance for your response to this inquiry. I would like to include a response to this census information in our public comments.	A helicopter inventory was conducted on January 6 and 7 to cover the Bullfrog HMA and an area south of the HMA outside of the HMA boundaries, extending approximately 20 miles south and east of the HMA. Three experienced BLM observers participated in the flight. The double simultaneous count method was employed following protocol developed by the USGS. Information regarding the terrain, vegetation and other parameters were collected. The burro locations and the flight path were recorded on the helicopters GPS System. A systematic grid of the flight areas was used with transects averaging 1/4 to ½ mile apart. A direct count of 153 burros was obtained in the HMA and 42outside of the HMA boundaries

			for a total of 195 wild burros. Analysis by a statistician of the double simultaneous count data will not be available for several months.	
	PREDATOR CONTROL			
34	AWHPC, TCF, Individuals	The EA fails to analyze role of predators in achieving TNEB, and evaluate programs and activities that kill predators in and near the HMA (i.e. USDA Wildlife Services predator "control," hunting, etc.) that impacts the wild burro population and the TNEB.  Reduce mountain lion hunting and work towards managing wild burro herds naturally.	Predator control programs are managed by the USDA Wildlife Services, not the BLM. Additionally, wildlife is administered by the Nevada Department of Wildlife. The BLM has absolutely no control over wildlife population control, issuance of hunting tags or protection plans. The population growth rate for wild burros in this area indicates that predator control is not an effective means of maintaining the wild burro population at AML. See response to Comment 35 below.	
35	TCF	We are shocked that on page 15 of the EA it states "Control of Wild Burro Numbers by Natural Means: this alternative would use natural means such as natural predation to control the wild burro population. This alternative was eliminated from further consideration because it is contrary to the WFRHBA which requires the BLM to protect the range from deterioration associated with an overpopulation of wild burros. How can natural predation be contrary to the WFHBA?	Natural predation is certainly not contrary to the WFHBA. However, depending on natural predation to maintain wild burro populations when there is no evidence or documentation showing that natural predation occurs at levels necessary to maintain the AML is contrary to the WFHBA, as an overpopulation of burros and degradation of the range would continue and thriving natural ecological balance would not be maintained A long-term annual population increase averaging 16% is evidence that natural predation on this HMA is not a viable option to manage the population within the AML.	
		WATER/ RANGE IMPRO	OVEMENTS	
36	AWHPC	The BLM has allowed FOUR YEARS to pass without the development of much-needed water developments in the "dry" areas of the HMA.	Water developments and range improvements are outside the scope of this analysis. There is inherently little water available to wild burros on public lands in the area.	
37	AWHPC, individuals AWHPC TCF	The EA fails to consider and evaluate range improvements to accommodate current burro populations.  Add guzzlers on both sides of the highway so burros wouldn't have to cross the highway for water.  The EA fails to provide adequate information about water sources on the range; including how fencing and engineering of wells and springs has impacted water availability for wild burros and where water could be developed to assist in managing burros to remain within the boundaries of the HMA.  Nowhere in the EA does the BLM discuss range improvements to allow for fewer removals of wild burros.	This comment is outside of the scope of the analysis. The purpose of this EA is not to evaluate potential improvements to the range. Developing or improving waters is restricted to those waters with BLM held water rights, which are few in this area.  Fencing and engineering of wells and springs falls outside of the scope of this analysis. There are inherently very few waters available to wild burros. In fact wild burros in the Bullfrog HMA currently rely on several water sources on private land or held by private water rights.  Refer to the EA, Section 3.6 for more information about the riparian areas and water availability in the HMA. Refer to above comments.	

38	AWHPC	In essence, due to the BLM negligence to make needed range improvements and develop water sources in the "dry" areas of the HMA – burros are forced to seek water in a "limited number of springs" and "move into the town of Beatty" looking for water. The situation of the burro herd of the Bullfrog HMA is an example of the failure of the BLM to fulfill its mandate and prevent the removal of burros from the range. The first course of action the BLM must take is the development of water sources within the HMA to for burros.	The 2007 Rangeland Health Evaluation involved an analysis of waters within the Bullfrog HMA. Waters are inherently sparse in southern Nevada. Additionally, BLM does not hold water rights for many of the waters on public lands, and other water sources are on private land. The AML was established to take limited water availability into account (in addition to forage, and threatened and endangered wildlife species). The Evaluation also recognized that if additional waters were to be developed in the future that an increase in AML might be possible. The BLM is not required to develop supplemental water sources (or forage sources) for wild horses or burros under the WFRHBA. Managing populations that rely on artificially developed waters is not consistent with the Act, which directs the management to be "an integral part of the natural system of the public lands [emphasis added]." This is also not consistent with maintaining a thriving natural ecological balance. The Code of Federal Regulations (CFRs) at 4700.06 (a) require that "wild horses and burros shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat" [emphasis added]. The presupposition is that the number of animals to be managed on the range will be within the ability of the range to provide forage and water to not only wild horses and burros, but to other users as well, without resulting in resource damage. The BLM may implement water development projects in the future, if feasible, in order to help distribute burro use and reduce impacts to existing waters. In the absence of any such developments being found feasible and put into place, the wild burro population must be managed in balance with the available resources that currently exist in the HMA.		
		PERCIEVED INEQUALITY OF WILD BURROS VS. LIVESTOCI	K, LIVESTOCK NUMBERS, REDUCE LIVESTOCK		
39	Carla Bowers, Individuals	The WH&B are now restricted to a paltry 27M BLM acres and 2M USFS acres, that livestock also use. Isn't it time to allocate the WH&B their fair share of the land, forage and water to support healthy, genetically viable herds into the future as mandated by the 1971 Act.  Remove all AUMs allocated to livestock and reallocate them to burros to allow for a genetically viable herd.	Livestock are only permitted to graze in a very small portion of the Bullfrog HMA, and only 26 cattle are authorized to graze that small portion. Removal of all livestock grazing from the Bullfrog HMA would therefore have a negligible impact on resource impacts resulting from the current over-population of wild burros and the limited habitat components available for wild burros.  Neither the WFRHBA nor FLMPA require the equal allocation of wild burros and livestock on public lands. It is not a matter of choosing to manage wild horses and burros rather than domestic livestock or native wildlife. By law, BLM is required to manage wild horses and burros in a thriving natural ecological balance and multiple use relationship on the public lands and to remove excess wild burros immediately upon a determination that excess wild burros exist. Excess wild burros would be removed from the Bullfrog HMA as required under the WFRHBA in order to maintain healthy herds of wild burros on public lands, not for the benefit of livestock.		
	GENERAL				
40	AWHPC	The EA fails to adhere to the Wild Free-Roaming Horses and Burros Act	Under the WFRHBA, the BLM has a responsibility to remove excess wild horses and burros from the range to protect rangeland health and ensure a thriving natural ecological balance. Removal of excess wild burros under the Proposed Action is therefore in conformance with the WFRHBA.		
41	AWHPC	The BLM must show that the existence of the burros on the range – as opposed to other factors – are causing harm to the Thriving Natural Ecological Balance.	Refer to section 1.3 of the EA that describes the needs for the gather. AML was established through the land-use planning process through a public decision-making process that included public input. AML was established based on available water in the HMA, reflects the carrying capacity of the HMA, and was set at a level that would achieve a thriving		

			natural ecological balance and prevent range degradation. Available data shows that the current wild burro population is in excess of the level at which a thriving natural ecological balance can be maintained. Removing wild burros at this time will help ensure that there is no harm to Thriving Natural Ecological Balance. Refer to IBLA reference in Responses 11, 14, and 28 above.
42	AWHPC, TCF	Real-time cameras and GPS should be installed on the trap, the corral temporary holding pens, and on all helicopters used in roundup operations.	There are currently no requirements in the contract for the gather contractor to provide these services. Even if possible, the remoteness and lack of service in the proposed gather location would preclude the ability to transmit video in real-time. Photos and video will be posted on You Tube and Flickr. The public is welcome to attend the gather so long as the observation protocols designed to protect the safety of the public, the wild horses and BLM staff and contractors is followed.
43	AWHPC	The EA omits discussion of Adaptive Management Strategy (established by Interior Secretary Order No. 3270, March 9, 2007)	The WFRHBA requires that the BLM remove excess wild burros immediately once the determination is made that removal is necessary, thus adaptive management is not appropriate. Future management strategies will be identified during revision of the BMDO RMP and completion of an HMAP for the Bullfrog HMA with public input.
44	NDOW	Extend the gather area to include the Specter Range to protect wildlife habitat and guzzlers.	Comment noted.  TFO will be coordinating with Nellis, Las Vegas and NPS in the future to assess the entire region, and pursue further removals of burros outside of designated HMAs if necessary.
45	NDOW	Clear identification of the water sources used in the analysis to identify burro use areas and assist in the delineating the proposed gather area would help greatly in understanding gather strategy rationale.  Presently, the 4-mile distance approach around known water sources and the 5 to nearly 10 mile distances between known burro use areas may require re-evaluation of the relationship.	Identification of the water sources used to identify "watered" portions of the HMA are discussed and analyzed in the Montezuma Complex Rangeland Health Evaluation (2007) and Final Multiple Use Decision. The gather area was delineated by including the HMA, immediate areas representing "outside HMA," and the <i>reasonable</i> area south of the HMA where wild burros establishing residency have been documented.
46	NDOW	There is no contingency plan discussed to address the need for follow-up after the initial, proposed gather effort mindful of the stated probability of under-estimating the number of burros inside and outside the HMA.	The modified Proposed Action states that a phased gather approach will be incorporated so the BLM TFO can achieve wild burro populations at or near low range AML, and maintain populations within the AML range.
47	TCF, Individuals	Increase signage along the Highway 95 corridor.  Add more reflectors or "Strieter Lites."  Reducing speed limit through the HMA.  Improve fencing along the Highway 95 corridor.	Increasing signage, adding reflectors, reducing speed limits and other issues regarding travel and travel safety will need to be addressed by the Nevada Department of Transportation (NDOT).
48	Carla Bowers	Establish in the EA that this herd and all herds, are a cultural resource, not just a Natural Resource, as mandated by the 1971 Act	This issue is beyond the scope of this analysis.

49	AWHPC	The EA has failed to establish that recreational users of these public lands, specifically those who enjoy wild burro photography and viewing, will not be negatively impacted by the Proposed Action.	Be assured that there will be wild burros to view within the Bullfrog HMA and the Battle Mountain District. The post gather population of the HMA will be approximately 60 wild burros. There are also numerous HMAs in the surrounding area in which to view wild burros.  Furthermore, the BMDO administers 28 HMAs over 3.6 million acres which support over 4,000 wild horses and burros. Viewing and recreational opportunities abound. If you need information about these opportunities, please contact the Mount Lewis or Tonopah Field Offices.
50	TCF	This roundup and removal strategy contributes to higher growth rates as the burro herd endeavors to replenish its rank in order to avoid extinction.	There is no evidence that compensatory reproduction would be expected following the gather. Population increases would be expected to remain around the long-term average of 16% annual increase.
51	TCF	Burros aid in bighorn sheep survival by digging for water that can be used by all wildlife, including small mammals and birds. Burros, with their solid hooves, can more easily break frozen water and, being highly alert animals, they can signal the presence of predators.	There is no scientific documentation that we are aware of that these claims are valid.
52	TCF	By thinking of the burros as an attraction, not a nuisance, there could be long-term socio-economic benefits to the Beatty community.	This comment is beyond the scope of this analysis.
53	TCF	Reconsider bait and water trapping.	Bait and water trapping is discussed in the EA and is not practical as a replacement to helicopter gather for efficiently and humanely obtaining our gather, removal, and post-gather population objectives. The Proposed Action, however, may include some bait or water trapping as a supplement to the helicopter gather if such trapping might be effective in portions of the HMA.
54	Individual	If you must gather, do it more humanely and make sure that don't go to slaughter.	Comment noted. Wild horse and burro gathers are conducted humanely and all gathered wild horses and burros are treated humanely. Wild horses and burros removed from the range are not sent to slaughter, rather they are adopted by the public as pets and companion animals.
55	Individual	The burros have formed family groups and haphazardly removing almost half the	There is no evidence or documentation that wild burros form family groups, and that this
56	AWHPC	herd will disrupt the family unit, cause severe pain and fear.  The following portion of the "Standard Operating Procedures" is insufficient and should be corrected in the final EA:  The rate of movement and distance the animals travel shall not exceed limitations set by the COR who will consider terrain, physical barriers, access limitations, weather, extreme temperature ( high and low), condition of the animals, urgency of the operation (animals facing drought, starvation, fire rehabilitation, etc.) and other factors. In consultation with the contractor the distance the animals travel will account for the different factors listed above and concerns with each HMA.  In addition, the EA fails to consider, and the BLM Tonopah Field Office must include in the final EA, the following which would minimize stress and injury to burros during roundups:  1. Limit the distance horses/burros may be chased by a helicopter to no more than	action will cause severe pain and fear.  BLM staff is on site at the gather continuously, monitoring weather conditions and health and wellbeing of wild burros. Adjustments to gather operations are made as necessary to ensure animal health and safety. At this time, specific temperature and distance parameters have not been included in the gather contract, but left to the discretion of the BLM COR and APHIS Veterinarian recommendations to adapt gather operations to site specific conditions and animal needs.  In most cases, wild burros are in the peak of fitness as compared to domestic counterparts, and are adapted to life on the range in harsh conditions. As part of their lives, they regularly run through snow, over steep terrain and in cold and freezing conditions. They might travel 10-15 miles per day or more. Gather operations are adjusted on an hourly or daily basis if necessary based on animal health and weather conditions. In over 35 years of gathering wild burros, the BLM has routinely gathered wild horses and burros in the winter months with few complications experienced, particularly if the animal's health is not compromised by

		five (5) miles. Reduce the current limitation of the 10 mile radius to five (5) miles.  2. Require that the helicopter chase horses/burros at a pace that does not exceed the natural rate of movement of the slowest animal in the band. Every effort should be made to keep older, sick and young animals together with their bands as they are moved into the trap.  3. Establish strict parameters for suspending helicopter roundup operations during extreme weather conditions (i.e. at or below 32 degrees/freezing including chill factor).	poor body condition or emergency conditions brought on by an overpopulation of wild horses or burros in relation to available resources.
57	AWHPC	Trap sites should be located on public lands to allow public observation of roundup activities. No trap site shall be located on private lands for which the owners will not give permission for public observation of roundup activities.	The potential locations of traps are evaluated based on the needs for efficiency of the gather and safety of horses and people involved. In some cases, the only way to ensure these factors is to place the trap corrals on private land. In some cases, the limited access to the area results in private land being the best location for the operation.
58	AWHPC	The BLM must develop a new management plan that deals with the overwhelming public sentiment against the roundups and in favor of managing wild horses and burros on the range where they belong.	This is outside the scope of the analysis. The BLMs management of wild horses and burros, and the proposed gather is consistent with the requirements of the WFRHBA, 43 C.F.R. Part 4700, the Public Rangelands Improvement Act of 1978 (PRIA) and the Federal Land Policy Management Act of 1976 (FLPMA). The public has had opportunity to be involved in the decision-making process that established the wild burro AMLs and will be offered opportunity to be involved with the revision of the Battle Mountain District RMP in the near future.
59	Carla Bowers	Develop whatever needs to be done to support a minimum of 150 burros in this HMA, i.e., provide for rangeland improvements such as reseeding areas with appropriate types of forage, eliminating invasive & noxious weeds & plants on the range, improving water sources, utilizing one-year dartable PZP between Nov-Feb, etc. These improvements would be far cheaper than roundup/removal/warehousing more animals & are within the BLM authority to implement.	The existing AML was established by taking into consideration available forage and water, climate of the arid ecosystem and other resources such as wildlife. With the low amount of rainfall in this area, poorly developed soils and desert environment, it is not feasible to implement extensive rangeland seeding projects that would in all likelihood fail. These projects are rarely appropriate in this ecosystem, as evidenced by the failed fire rehabilitation efforts following wildfire in the Bullfrog HMA in 2007.
60	Debbie Coffey	Where was all the concern with protecting rangeland resources when BLM mismanagement allowed the Barrick Bullfrog Mine to cause so much contamination that it needed reclamation?	This is outside of the scope of the analysis. Following decommission of mines, site reclamation is required. Mine development on public lands follows separate regulations, specific protocols, environmental analysis, plans of operation and reclamation plans. For more information about this, contact the BLM.
61	Debbie Coffey	It seems like local residents have been more concerned about other projects, like Solar Millenium's Amargosa Valley Project, just 30 miles south of Beatty, NV, which is in the Bullfrog HMA.	This is outside of the scope of the analysis. The Solar Millenium project is not within the Bullfrog HMA or any other HMA.
62	Debbie Coffey	As you must know, solar energy uses huge amounts of water from aquifers, which will drop the water table in surrounding areas. The Solar Millenium project, which seems to be only 20 miles south of the Bullfrog HMA and may share an aquifer, is only one solar project (out of many) and it was to use about 1.3 BILLION gallons of water per year from the aquifer.	Refer to Response 61 above. Any cumulative impacts to the Bullfrog HMA would have been analyzed in the EIS for that project with mitigation developed as appropriate.
63	Jeris Turner	I have been looking over the EA, and I noticed one remark that is consistent with every one of your horse and/or burro assessments. You give the burros a poor body condition score, just as you always do the wild horses.	The references to poor body condition of burros in the EA pertain to the conditions in 1996 under extreme drought, when an emergency gather was needed to prevent widespread death due to lack of forage and water. It is important to maintain the AML in order to avoid deterioration of burro health due to overpopulation, especially in drought conditions.
64	Jeris Turner	I can understand that the burros need to be out of Beatty, but those aren't going to be moved, are they? That's where your attention should be focused: making the town and roadways safe. Leave the HMA alone otherwise.	The BLM intends to remove burros from within town if possible to prevent further conflicts. Burros will also be removed from the areas surrounding town – burros that would enter town when waters dry up in the summer months.
65	Individuals	Why is the BLM killing burros?	We have no intention of killing burros. Burros gathered from the range would be transported to BLM facilities and offered for adoption. Wild horses and burros gathered from the range are not killed or sent to slaughter.

66	TCF	Trapsite should have windbreaks and ample space for captured burros to rest and recover before being loaded onto trailers.	Windbreaks have not been deemed necessary at gather trap corrals or holding facilities as the corrals are temporary in nature, and usually wind is not an issue for the gathered burros. No equine or veterinary professional has recommended windbreaks at the trap or holding pens. Holding corrals are often shielded by terrain, and conditions are tempered by the corral panels and snow fencing. It is standard procedure to ensure wild burros have ample room in the holding pens and have adequate hay and water.
67	TCF	Suggest contact Roger Oyler, Arizona lead for WHB on the safest, most effective way to handle burros at the trap and temp. holding facility to insure they are cared for in most humane way possible.	Comment noted.
68	Individuals	Increase the AML for wild burros.	There is no data, or other justification to support an increase in the AML for wild burros in the Bullfrog HMA at this time. Refer to the EA Section 1.3. The existing AML was based on the analysis of data including forage and water availability, climate and precipitation patterns, condition of resources and other multiple uses of the area. There have been no changes that would warrant an increase in the AML.
69		Leave the Burros that are living within the Beatty Township for us to enjoy.  There is no reason why they should be removed as they bring joy to many of us here in Beatty.  They have enough of water and food to keep them strong and healthy and they have many of us here that love to see them in their natural state.	Comment noted. Refer to Section 1.3 of the EA. The TFO will be looking forward to working with the residents of Beatty, Nye County and other entities to address long term solutions to the burro management issues in the Beatty area in order to ensure burro and human safety and continued enjoyment of the burros in the area by all.
		MINIMUM FEASIBLE	E LEVEL
70	AWHPC, Carla Bowers	The WFRHBA is clear that all management should be at a "minimal feasible level" – meaning if the BLM can manage the population and maintain Thriving Natural Ecological Balance through range improvement and keeping the animals on the range, those range improvements should be done as a preventative measure to removal.  BLM is NOT following the mandate of the 1971 Act to preserve and protect the wild burros for their "welfare" as healthy, thriving herds in the wild for generations to come and to manage them at the "minimum feasible level."	"Minimally feasible level" does not refer to gathers specifically, but originates from early congressional hearings and is meant to prevent the wild horses and burros from being managed in "zoolike" settings on the public lands. "The committee wishes to emphasize that the management of the wild free-roaming horses and burros be kept to a minimum both from the aspect of reducing costs of such a program as well as to deter the possibility of "zoolike" developments. An intensive management program of breeding, branding and physical care would destroy the very concept that this legislation seeks to preserve." 92nd Congress, Senate Report 92-242, June 25, 1971.