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**Sinbad Wild Burro Gather and Research Plan (2016)**

*Location: Sinbad Wild Burro Herd Management Area*  
*Applicant/Address: Price Field Office*  
*125 S. 600 W.*  
*Price UT, 84501*

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U.S. Department of the Interior  
Bureau of Land Management  
Price Field Office  
125 South 600 West  
Phone: (435)636-3600  
FAX: (435)636-3655

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# **Sinbad Wild Burro Gather and Research Plan (2016)**

## **DOI-BLM-UT-G020-2015-0050-EA**

### **1.0 PURPOSE & NEED**

#### **1.1 Introduction**

This Environmental Assessment (EA) has been prepared to analyze actions specifically relative to the Bureau of Land Management (BLM) proposal to gather burros and conduct proposed burro research within the Sinbad Herd Management Area (HMA) after January 2016. The EA is a site-specific analysis of potential impacts that could result with the implementation of a proposed action or alternatives to the proposed action. The EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any “significant” impacts could result from the analyzed actions. “Significance” is defined by NEPA and is found in regulation 40 Code of Federal Regulations (CFR) 1508.27. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of “Finding of No Significant Impact” (FONSI). A Decision Record (DR), which includes a FONSI statement, is a document that briefly presents the reasons why implementations of the proposed action will not result in “significant” environmental impacts (effects) beyond those already addressed in the Price Resource Management Plan (RMP) (*October, 2008*). If the decision maker determines that this project has “significant” impacts following the analysis in the EA, then an EIS would be prepared for the project. If not, a Decision Record may be signed for the EA approving the alternative selected.

#### **1.2 Background**

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

Throughout this period, BLM experience has grown, and the knowledge of the effects of current and past management on wild horses and burros has increased. For example, wild horses have been shown to be capable of 18 to 25% increases in numbers annually. This can result in a doubling of the wild horse population about every 3 years. There is less published information about wild burros, but similar population growth rates have been reported for wild burros in the U.S. (Woodward and Ohmart 1976, Norment and Douglas 1977) and for feral donkeys in Australia (Choquenot 1991), but more information would be needed to determine whether those rates are typical. There is remarkably little published literature on the wild burro, despite our long association with them as a domesticated species. Management of burros has been impaired by this lack of knowledge, particularly because what little research has been conducted indicates that they are both socially and behaviorally very different from wild horses (Schoenecker et al., 2015b). At the same time, nationwide awareness and attention on wild burro management has grown. As these factors have come together, the emphasis of the wild horse and burro program has shifted.

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

In October of 2008, the BLM signed the Price Resource Management Plan (RMP) which adjusted the AML for wild burros, changed management objectives and gave direction for the future management of the Sinbad HMA. The AML was based on monitoring data and followed a thorough public review. The current AML is set at 60 head with management goals set for the population of not less than 50 and not more than 70 burros. Vegetative data was analyzed by the BLM to test the validity and adequacy of the AML in relation to current adjudication levels of forage on the grazing allotments that encompass the Sinbad HMA. It was determined that with the current adjudication of 3,000 AUMs to wild horses and burros, the AML of 60 head of wild burros within the Sinbad HMA is correct. The issue of genetic viability within the HMA is of concern to the Price BLM, due to the relatively low AML, the number of animals available to maintain genetic variability, coupled with the relative isolation of this population from other populations of wild burros. Additional information about genetic diversity, including analysis of hair or fecal samples, will continue to be gathered from the wild burros in this area in conjunction with scheduled gather operations. This genetic data could be used to refine AML numbers, forage adjudication, and any future considerations of moving burros from other populations into the Sinbad population, during future planning.

A population census of the area was conducted on June 26, 2014 that resulted in a current estimated population of 220 burros on the HMA, as of October 1, 2015. This current estimated population size is the result of that estimated population size, and the expectation that the population would grow at 8% per year based on past inventory and removal data.

### **1.3 Purpose and Need for the Proposed Action**

The purpose of the action is to achieve and maintain wild burro AML within the Sinbad HMA. Wild burros are notoriously difficult to count accurately. Their coat color blends in with surrounding vegetation, they stand still when overflown, and often occur alone or in small groups that are difficult to detect. As a result, existing survey methods and analyses may not provide accurate and precise population size estimates. The BLM, in coordination with the United States Geological Survey (USGS) Fort Collins Science Center, would test population estimation techniques for burros, and identify and develop new population estimation techniques for burros that can be applied widely across their range.

BLM wild burros are a variety of the African wild ass, *Equus africanus asinus*. Domestic burros are believed to have been brought to the American Southwest in the early sixteenth century by Spanish explorers (Abella, 2008) and were used by many people in many tasks in the centuries since. Some of these animals escaped or were deliberately turned out, forming herds of wild burros. There is remarkably little published literature on the wild burro, despite our long association with them as a species. Almost all the research conducted on wild burros was in the 1970s and 1980s, and there are even fewer studies on the African wild ass. BLM management of burros has been impaired by this lack of peer-reviewed scientific publications, particularly because what little research has been conducted indicates that they are both socially and behaviorally very different from wild horses, and exhibit different habitat use and diet. The proposed action would also include collecting information for research on herd characteristics. This work would be done by USGS and Colorado State University researchers to determine herd demographic rates, movement rates, and habitat use. This would include quantifying the wild burro fertility, fecundity (reproductive rate), recruitment rate, age-specific survival and mortality,

habitat selection, movements, range use, and behavior and ecology at the scale of both individuals and the total population.

This combined action is needed in order to achieve and maintain a population size within the established AML, in order to protect rangeland resources from further deterioration associated with the current population and restore a thriving natural ecological balance and multiple use relationship on public lands in the area consistent with the provisions of Section 3 (b) (2) of the Wild Free-Roaming Horses and Burros Act of 1971 (WFRHBA)<sup>1</sup>. It is also needed to assist the BLM in development of more accurate wild burro population estimation techniques that can be applied program-wide, and to improve the BLM's understanding of wild burro population dynamics.

In 2013 the National Academy of Science (NAS) released a report titled "Using Science to Improve the BLM Wild Horse and Burro Program, A Way Forward". One of the recommendations in the NAS Report was: "The committee... recommends the identification of sentinel populations and HMAs. ... Select HMAs representative of diverse ecological settings could be studied more intensively to improve assessment of population dynamics and ecosystem responses to changes in animal density, management interventions, and variation in seasonal weather and trends in climate. ... The committee ... encourages BLM to continue working with USGS and perhaps ecologists in academic institutions on the identification of and research of representative HMAs for both horses and burros." The demographic, movement, and habitat use research proposed as part of the proposed action is in direct response to the NAS recommendation and would establish the Sinbad burro herd as one of these sentinel populations.

#### **1.4 Conformance with BLM Land Use Plan(s)**

Plan Conformance: The proposed action and alternatives have been reviewed and found to be in conformance with one or more of the following BLM Land Use Plans and the associated decision(s):

Price Resource Management Plan, October 2008,

The following RMP decisions specifically apply to management of the Sinbad HMA:

WHB-1; Manage populations for appropriate age and sex ratios, genetic viability, adaptability, and adoptability as well as to maintain AMLs on established HMAs

WHB-2; Allow wild horse and burro research as long as other wild horse and burro program goals are met.

WHB-3; HMA boundaries have been adjusted on the Range Creek, Muddy Creek and Sinbad HMAs to match the natural and manmade barriers that existed when the Wild Free-Roaming Horse and Burro Act was passed in 1971 that separate or restrict wild horse and burro movement.

WHB-4; Wild horses and burros will be managed in three HMAs – Range Creek (horses), Muddy Creek (horses), and Sinbad (burros).

WHB-5; The current portion of the Sinbad HMA that supports horses has been combined with the Muddy Creek HMA. The area of the Sinbad HMA that supports burros will remain the Sinbad HMA.

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<sup>1</sup> The Interior Board of Land Appeals (IBLA) defined the goal for managing wild horse (or burro) populations in a thriving natural ecological balance as follows: "As the court stated in *Dahl vs. Clark*, supra at 594, the 'benchmark test' for determining the suitable number of wild horses on the public range is 'thriving natural ecological balance.' In the words of the conference committee which adopted this standard: 'The goal of WH&B management should be to maintain a thriving ecological balance (TNEB) between WH&B populations, wildlife, livestock and vegetation, and to protect the range from the deterioration associated with overpopulation of wild horses and burros.'"

WHB-7; The AML will be periodically evaluated and subject to adjustment in HMA plans and Environmental Assessments for gathers based on monitoring data and best science methods.

WHB-10; Set management for a viable wild burro herd of 50 to 70 animals in the Sinbad HMA on 99,210 acres

The proposed action and alternatives are also consistent with the North San Rafael Swell Habitat Management Plan (NSRSHMP), approved in 1997.

The proposed action and alternatives are in conformance with the Fundamentals of Rangeland Health (43 CFR 4180) and Utah's Standards for Rangeland Health and Guidelines for Grazing Management which addresses watersheds, ecological conditions, water quality, and habitat for special status species.

### **1.5 Relationship to Statutes, Regulations, or other Plans**

The Proposed Action and alternatives are in conformance with Public Law 92-195 (WFRHBA) as amended by Public Law 94-579 (FLPMA), and Public Law 95-514 (Public Rangelands Improvement Act [PRIA] of 1978. WFRHBA, as amended, requires the protection, management, and control of wild free-roaming horses and burros on public lands. The preparation and transport of wild horses and burros will be conducted in conformance with all applicable state statutes.

The Proposed Action and alternative(s) are in conformance with all applicable regulations at 43 Code of Federal Regulations (CFR) § 4700 and BLM policies. The following excerpts from 43 CFR relating to the protection, management, and control of wild horses under the administration of the BLM included are:

- **43 CFR 4700.0-2 Objectives**

Management of wild horses and burros as an integral part of the natural ecosystem of the public lands under the principle of multiple use.

- **43 CFR 4700.0-6(a-c) Policy**

Requires that BLM manage wild horses and burros "...as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat ... consider comparably with other resource values ..." while at the same time "...maintaining free-roaming behavior."

- **43 CFR 4700.06(e) Policy**

Healthy excess wild horses and burros for which an adoption demand by qualified individuals exists shall be made available at adoption centers for private maintenance and care.

- **43 CFR 4710.3-1 Herd management areas.**

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

- **43 CFR 4710.4 Constraints on management.**

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

The proposed action and alternatives are in conformance with the Fundamentals of Rangeland Health (43 CFR 4180) and Utah's Standards for Rangeland Health and Guidelines for Grazing Management which addresses watersheds, ecological conditions, water quality and habitat for special status species.

The proposed action and alternatives are consistent with the North San Rafael Swell Habitat Management Plan approved June 2, 1997.

The Interior Board of Land Appeals (IBLA) through case No. 118 IBLA 75 (Animal Protection Institute Et. Al., 1991) has pointed out that in concurrence with The Wild Free-Roaming Horse And Burro Act of 1971 (Public Law 92-195) "excess animals" must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area (16 U.S.C. 1332(1)(1988). Regulations found in 43 CFR 4700.0-6(a) directs that wild horses be managed in balance with other uses and the productive capacity of their habitat. The proposed action is in conformance with both the above mentioned case law and regulations.

The Proposed Action and alternatives are in conformance with Decision Records and Finding of No Significant Impacts for the EA#UT-067-89-18 Black Dragon Wild Burro Removal, EA#UT-067-96-16 Sinbad HMA Wild Burro Gather, EA#UT-070-2001-29 Sinbad HMA Wild Burro Gather and Removal, and DNA# UT-070-2008-082 Sinbad Emergency Wild Horse and Burro Gather.

The proposed action and alternatives are consistent with the Emery County General Plan update signed, August, 2004, which states: "Emery County supports the wise use, conservation and protection of the nation's public lands and the resources associated with these lands, including prudent and appropriate management prescriptions established to achieve wise use." The General Plan goes on to say "Emery County supports continuation of established grazing rights on public lands and opposes measures designed to curtail them, except where dictated by sound science."

All federal actions must be reviewed to determine their probable effect on threatened and endangered plants and animals (the Endangered Species Act).

Executive Order 13212 directs the BLM to consider the President's National Energy Policy and adverse impacts the alternatives may have on energy development.

All supplemental authorizations contained in Appendix 1 of the National NEPA Handbook 1790-1.

### **1.6 Identification of Issues**

Consultation and coordination with BLM, State Historic Preservation Office (SHPO), the Utah Division of Wildlife Resources (UDWR), US Fish & Wildlife Service (USFWS), Native American Indian tribes and routine business contacts with livestock operators and others, have underscored the need for the BLM to maintain wild horse and burro populations within the AML.

Public involvement was initiated on the Proposed Action on September 9, 2015 by posting on the ePlanning web page. The EA will be made available for a 30 day public comment period.

As required by regulation [43 CFR 4740.1(b)], a public hearing is scheduled to be held in Price, Utah on December 8, 2015 and would discuss the use of helicopters and motorized vehicles in the management of Utah BLM's wild horses and burros. This meeting will be advertised in papers and radio stations statewide. This specific gather will be addressed at that public meeting. Similar meetings have been held each year in Utah since the passage of Federal Land Policy and Management Act of 1976. Comments received from the Preliminary Environmental Assessment (EA) for the Sinbad Wild Burro Gather and Research Plan DOI-BLM-UT-G020-2015-050-EA and at the aforementioned public meetings were considered and, if applicable, were addressed in management actions, NEPA documents, and decision documents using the most current direction from the National Wild Horse and Burro Program. The critical elements and other constituents of the human environment incorporate most of the public's concerns. The remaining concerns will be addressed under appropriate sections of this EA.

The following issues were identified as a result of consultation/coordination and internal scoping relative to the BLM's management of wild burros in the planning area ([see Appendix A](#)):

#### **1.6.1 Livestock Grazing**

- Potential competition for available forage and water resources,
- Potential for temporary displacement or disturbance

#### **1.6.2 Vegetation**

- Expected forage utilization;
- Potential impacts to vegetation resources.

#### **1.6.3 Wild Burros**

1. Impacts to individual wild burros and the herd. Measurement indicators for this issue include:

- Expected impacts to individual wild burros from handling stress
- Potential effects to genetic diversity
- Potential impacts to animal health and condition

2. A need to collect research data on known individuals within a population. Measurement indicators for the issue include:

- Development of high-accuracy inventory methods specific to burros
- Development of information on fertility rates, mortality rates, movements, and habitat use
- Projected population size and annual growth rate (population modeling)
- Projected gather frequency
- Projected number of excess animals to be removed and placed in the adoption, sale, and short and long-term holding pipelines over the next 10 years

## **1.7 Issues Considered But Not Addressed Further**

### **1.7.1 Cultural Resources**

Previous review for Cultural Resources within the Sinbad HMA was completed for the 1995(EA#UT-067-94-29), 1999(EA#UT-066-98-30), 2000(EA#UT-070-2000-98), 2008(DNA# UT-070-2008-082), and 2009(EA# UTG022-2009-0076) wild burro gathers with appropriate consultation and NEPA, as well as the Big Pond Allotment Grazing Permit Renewal (EA# UT-070-2005-021), Black Dragon Allotment Grazing Permit Renewal (EA# UT-070-2001-072) and the North Sinbad Allotment Grazing Permit Renewal (EA# UT-070-2007-016).

Prior to their use, each site (trap location, temporary holding facility, or camp location) would receive a class 3 cultural clearance. If during the course of the clearance, it is determined that there are cultural resource concerns, an alternate site would be chosen. There are one campsite, three trap locations and one temporary holding facility at present that have previously been cleared for Cultural Resources and used. If during the course of the gather a new trap location is determined to be needed a class 3 cultural clearance would be completed prior to use.

### **1.8 Summary**

This chapter has presented the Purpose and Need of the proposed project, as well as the relevant issues, i.e., those elements that could be affected by the implementation of the proposed project. In order to meet the purpose and need of the proposed project in a way that resolves the issues, the BLM has developed a range of action alternatives. These alternatives, as well as a no action alternative, are presented in Chapter 2. The potential environmental impacts or consequences resulting from the implementation of each alternative are then analyzed in Chapter 4 for each of the identified issues.

## 2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

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

Alternative 1: Proposed Action – Gather and remove excess wild burros and conduct proposed research.

Alternative 2: No Action – Continue existing management. No gathers or research.

### 2.1 Alternative -1: Proposed Action – Gather and remove excess wild burros and conduct proposed research.

The Bureau of Land Management is proposing to reduce the current population of the Sinbad Herd Management Area (HMA) to AML through capture and removal of the excess wild burros. The proposed gather would capture up to 200 and permanently remove 130 excess wild burros from the HMA. The gather and removal numbers are based on the estimated population of burros after the foaling period for burros (October 1, 2015). Capture and removal numbers are outlined in Table 1.

HMA	Population	Capture #'s	Removal #'s
Sinbad	220	200	130

The management emphasis would be to maintain wild burro AML through capture and removal operations, collect information on herd characteristics, conduct research, determine herd health and reestablish historic population parameters.

Research done in coordination with USGS would include:

Development of a hybrid double observer sightability model (Griffin et al 2014, Schoenecker and Lubow, *in press*) as well as two aerial infrared surveys that use distance sampling (Kissell and Nimmo 2011); tracking radio collars fitted on 30 burros released back to the HMA after the gather, which will consist of up to six helicopter based inventory flights, pre-gather and post-gather.

Additional research that may be done within the HMA includes: noninvasive analysis of fecal DNA for genetics and fecal estradiol for pregnancy testing; estimation of survival, fertility, fecundity, and recruitment rates; quantification of movement patterns, range use, and habitat selection; and social behavior studies.

- Gather operations would be conducted in accordance with BLM Washington Office Instruction Memorandum (IM) 2015-151 and the Comprehensive Animal Welfare Program (CAWP) described in Appendix B. Previously used and authorized capture techniques include helicopter round up, roping, water and bait trapping, and other methods as approved by BLM Manual 4700 and the authorized officer, and would include multiple gather sites. Selection of capture techniques would be based on several factors including herd health and season of the year to maximize gather success and minimize herd impacts. Prior to their use, each site would receive a class 3 cultural clearance. If during the course of the clearance, it is determined that there are cultural

resource concerns, an alternate site would be chosen. To the extent possible, previously used and cleared sites would be selected.

- During capture operations, safety precautions would be taken to protect all personnel, animals, and property involved in the process from injury or damage. Only authorized personnel would be allowed on site during the removal operations. Included in the “capture and removal” operations would be sorting individual burros as to their age, sex, temperament and /or physical condition, and to return selected animals to the range.
- During gather operations, the Lead Contracting Officers Representative (COR), as delegated by the Authorized Officer (AO) prior to the gather, will authorize the release or euthanasia of any wild horse or burro that they believe will not tolerate the handling stress associated with transportation, adoption preparation, or holding. No wild horse or burro should be released or shipped to a preparation or other facility with a preexisting condition that requires immediate euthanasia as an act of mercy. The Incident Commander (IC) or COR should, as an act of mercy and after consultation with the on-site veterinarian, euthanize any animal that meets any of the conditions described in BLM Washington Office IM 2015-070.
- Wild burro herd data which may be collected during the gather operations includes data to determine population characteristics (age/sex/color/etc.), assess herd health (pregnancy/parasite loading/physical condition/etc.), and determine herd history and genetic profile (hair sampling, IM 2009-062). Radio collars will be fitted on 30 burros, to enable USGS researchers to estimate population demographic rates and improve aerial survey methods.
- No hazardous materials would be used, produced, transported or stored in conjunction with this proposed action. Small amounts of carefully managed chemicals may be used to treat sick or injured animals at the capture sites.
- Best Management Practices will be followed prior to and during gather operations. All vehicles and equipment will be free of mud and debris prior to entering BLM administered lands, and saddle horses will be fed certified weed free hay for 72 hours prior to the gather and during the gather to reduce the potential introduction of Invasive/Noxious weed species.

**ALTERNATIVE -2: No Action – Continue existing management. No gathers or research.**

This alternative consists of no direct management of wild burro numbers. Population of wild burros would continue to increase. Wild burros would be allowed to regulate their numbers naturally through old age, predation, disease, genetic-inbreeding and forage, water and space availability. Gather operations would not be used to directly manage the wild burro population. No research would take place, and no information would be obtained on wild burro ecology.

## **2.2 Alternatives Considered, but Eliminated from Further Analysis**

### **Alternative -3: Wild Burro Management with the use of Immunocontraceptive Vaccines**

The use of fertility control within the Sinbad HMA is potentially a viable option to reduce population growth rates. Managers should base decisions to apply fertility control within specific HMAs on available herd demographics. The following provides some guidelines for when

fertility control should be applied in wild horses (BLM WO Instructional Memorandum 2009-090):

- If annual herd growth rates are typically greater than 5%;
- If post gather herd size is estimated to be greater than 50 animals;
- If treatment of at least 50% of all breeding-age mares left on the range is possible. A treatment of up to 90% of remaining mares is encouraged in order to maximize treatment effects.

If the logistics of a gather or herd distribution will not allow these conditions to be met, then fertility control should not be applied.

If the guidelines above for wild horses are transferred to wild burro management, the Sinbad HMA does meet all 3 criteria for use of fertility control. The herd is of a population size well above 50 head, and would remain well over that amount after application of fertility control. Treatment of more than 50% of the jennies is a viable option; BLM would need to capture at least 185 head of burros to treat 50% or more of the remaining jennies.

However, the use of immunocontraceptives on burros has had very limited research completed, and IM 2009-090 referenced above was written specifically for use on horses. Pen trials of immunocontraceptive use on burros may be planned for research studies in the near future.

This alternative would be incompatible with a study of wild burro ecology and demographic rates, because a population growth suppression method will necessarily change the fertility rates of treated jennies, so any results would not be representative of typical wild burro populations.

**ALTERNATIVE -4: Complete Gather of all Wild Burros in the Sinbad HMA.**

This alternative would involve capturing all wild burros located inside the Sinbad HMA. This would allow the total population to be sorted & aged by size, sex, temperament, and/or physical condition, thus allowing selected animals to be returned to the range. This would allow for the correction of unusual population age structure, removal of individuals with apparent deleterious genetic conditions, maintenance of herd structure, and composition and maintenance of the long-term herd viability.

This alternative was eliminated from further consideration due to the inability to actually capture all the animals without enormous expense and increased stress to the burros. Gathers conducted in 1996, 2001 & 2008 have proven that, due primarily to the dense tree cover and rough broken terrain that occurs on the HMA, it is very difficult to gather any more than 80% of the population.

## **3.0 AFFECTED ENVIRONMENT**

### **3.1 Introduction**

This chapter presents the potentially affected existing environment (i.e., the physical, biological, social, and economic values and resources) of the impact area as identified in the Interdisciplinary Team Analysis Record Checklist (found in [Appendix A](#)) and presented in Chapter 1 of this assessment. This chapter provides the baseline for comparison of impacts/consequences described in Chapter 4.

### **3.2 General Setting**

The Sinbad HMA is approximately 99,241 acres of Federal and State lands located 30 miles west of Green River, Utah ([Map 1](#)). It extends up to 19 miles on both sides of I-70 from the San Rafael Reef to Eagle Canyon. Access is provided to the HMA via Interstate 70 and then by county and BLM roads. Annual precipitation is approximately 8.5 inches, with an average 5 inches coming during the summer (May through September). Precipitation as of May 2015 was 0.25 inches or 4 percent of normal at the Head of Sinbad Belfort weather station, according to data collected since 1983. Temperatures in Emery, Utah range from an average monthly high of 78 degrees Fahrenheit in the summer to 10 degrees in the winter (WRCC, 2009). Of the 99,241 acres in the HMA approximately 89,465 are public land acres and 9,776 acres are state lands. The topography of the HMA is typical of the San Rafael Swell area, varying from extremely rough to fairly level terrain on limestone benches. The steep sided mesas and deeply incised drainages in the northern and southeastern portions on the HMA could potentially create problems gathering burros. The wild burros are thought to primarily use the open benches and parks, but do apparently use wooded areas occasionally.

The HMA ranges from 4,400 to 7,000 feet in elevation, and supports vegetation types ranging from pinyon and juniper woodland to desert shrub. The Pinion/Juniper vegetation type dominates the HMA and can be dense with minimal under story forage. Open grass parks have an understory of needle-and-thread grass and Indian ricegrass as the primary forage species.

The HMA has several undeveloped springs and seeps that are used as water sources by the wild burros, as well as 7 reservoirs, multiple rock tanks. The San Rafael River, itself, is accessible in some locations. Most of the developed water sources are in fair condition, with most in need of general maintenance.

### **3.3 Resources/Issues Brought Forward for Analysis:**

Three resource/issues were identified through the ID team process with potential to be affected: Livestock Grazing, Vegetation, Wild Burros

#### **3.3.2.1 Livestock Grazing**

The Big Pond, Black Dragon, Mexican Bend and North Sinbad Allotments encompass the Sinbad HMA. Livestock grazing use on all the affected grazing allotments was held to less than 70 percent of permitted use during the 2014-2015 grazing period, due to drought conditions that limited forage and water sources. Overlap of areas of use between wild burros and livestock does occur on specific sites on all the allotments causing competition for forage, water and space. Wild burros, wildlife, and livestock compete directly for the same space, water and forage resources. Yearlong wild burro grazing reduces forage availability for livestock. Grazing by excess wild burros during the critical growing season and during drought conditions can reduce forage production, vigor, reproduction, and availability for several years.

The seasons of use and Animal Units Months (AUMs) for the affected allotments are listed below in Table 2.

Allotment	Livestock		Season of Use		AUMs
	No.	Kind	From	To	
Black Dragon (35004)	521	Cattle	10/16	02/28	3,223
	446	Cattle	03/01	04/30	
Big Pond (45002)	329	Cattle	10/01	03/31	2,241
	202	Cattle	05/11	06/20	
North Sinbad (35056)	505	Cattle	11/01	05/10	3,189
Mexican Bend (35045)	151	Cattle	11/12	05/25	980
<b>TOTAL</b>	<b>2,154</b>				<b>9,633</b>

Utilization levels on the HMA have been heavy south of the interstate on most of the uplands near reservoirs and adjacent to trail heads coming out of the canyons where rock tanks are found (BLM 4700 Files).

### 3.3.2.2 Vegetation

The HMA ranges from 4,400 to 7,000 feet in elevation, and supports vegetation types ranging from mixed conifer to salt desert shrub, and grasslands. The salt desert shrub vegetation type dominates the HMA. Primary forage species are Indian ricegrass, Needle and Thread, galletta, sand dropseed, winter fat, and fourwing saltbush.

Historical trend photo/cover data were collected intermittently between the late 1960's and mid 1980's. This data has limited value due to age and intermittent nature of the data. In addition, data collection methods appeared to vary between years. Frequency trend studies were established at several locations within the HMA in the early 1980's. Data has been collected from these studies as part of the monitoring program for the Price Field Office.

Analysis of the Frequency data for the Black Dragon portion of the HMA was completed in December, 2012; using the Multi-response Block Procedure, for data collected since 1992. The overall long term trend for the Black Dragon portion of the HMA is static.

Analysis of the Frequency data for the Big Pond portion of the HMA was completed in December, 2015; using the Multi-response Block Procedure, for data collected since 1985. The overall long term trend for the Big Pond portion of the HMA is static.

Analysis of the Frequency data for the North Sinbad portion of the HMA was completed in December, 2015; using the Multi-response Block Procedure, for data collected since 1998. The overall long term trend for the North Sinbad portion of the HMA is static.

Rangeland resources are currently being affected within the herd area due to lower than normal precipitation 6 out of the last 10 years which has reduced vegetative growth and vigor. The southern portion of the HMA is in severe vegetative stress. Utilization of primary forage species over the majority of the HMA was nearly 90 percent for last year's growth (BLM 4700 Files).

The National Oceanic and Atmospheric Administration (NOAA), Long Term Palmer Drought Index November 3, 2015) and Price Field Office precipitation data all place the HMA in a "Moderate Drought" condition class.

### 3.3.2.3 Wild Burros

As described earlier, the current AML that is set for the area is 60 burros with no less than 50, and no more than 70 burros. There have been 3 gathers conducted in the last 22 years, in 1996, 2001, and 2008 on the current Sinbad HMA. During the most recent gather in 2008, eighty four wild burros were gathered, and all were removed. The dominant burro color phenotype in the HMA is Black.

An inventory flight was completed in June 2014 using the Simultaneous double-observer method, in coordination with USGS. 160 individuals were observed with an estimated population of 187 burros expected in the HMA at that time (Griffin, 2015). There are an estimated 201 wild burros within the HMA at present with an expected number of 14 foals being produced by October of 2015. The HMA has an estimated average 8 percent annual reproductive rate as seen from inventory and gather reports (BLM, 4700 Files). Due to previous gathers the majority of the burros are anticipated to be less than 10 years of age, with burros as old as 20<sup>+</sup> years being found.

Genetic analysis from 30 individuals gathered during the 2001 gather showed that genetic variability of the Sinbad herd is relatively high. "The Sinbad population is the only feral burro herd yet tested where *Ho* (Observed Heterozygosity) is higher than *He* (Expected Heterozygosity) which yields a negative *Fis* (Estimated Inbreeding Level,  $(=1-Ho/He)$ ) value. This negative *Fis* indicates there is no evidence of inbreeding within this population" (Cothran, 2002).

Dr. Cothran (Cothran, 2002) goes on to state that, "The Sinbad burro population had its greatest similarity with the Poutou donkey among the domestic breeds. The Poutou is a very rare French breed that was used for draft mule production mainly prior to the 20<sup>th</sup> century. It is unlikely that this breed has any direct relationship to the Sinbad population". The Poitou is known for its size, large ears, and black or brown coat with a grey underbelly and white nose and eye rings. A Poitou never has a cross upon his shoulders or back. Poitou's are also known for their "bourailloux" or coat of great length (OSU, 2010). Through cross breeding, genetic mutation, etc... the Sinbad burros may have gained or retained some of the characteristics of the Poitou (i.e. the brown/black coat and white nose and eye rings) but a few burros within the HMA also show characteristics of the standard Jack (grey body with a black cross upon his shoulders and back). One thing is for certain, none of the burros within the Sinbad HMA have a bourailloux.

Rangeland resources and wild burro health have been and are currently being affected within the Sinbad HMA, due to drought and wild burro overpopulation. Excess wild burros above AML have reduced available water and forage, resulting in increased competition for available resources.

As forage within close proximity of water sources is depleted the wild burros will need to range greater distances for forage. The distance the animals must travel over steep rugged terrain can result in body condition decline of the animals.

## **4.0 ENVIRONMENTAL IMPACTS**

### **4.1 Introduction:**

This chapter will assess the environmental impacts (either positive or negative) on the components of the human environment either affected or potentially affected by the Proposed Action and alternatives. Direct impacts are those that result from the actual gather and removal of wild burros on the Sinbad HMA. Indirect impacts are those impacts that exist once the animals are gathered or removed. By contrast, cumulative impacts 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 actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

### **4.2 Direct/Indirect Impacts:**

#### **4.2.1 Alternative 1 - Wild Burro Management without the use of Immunocontraceptive Vaccines:**

##### **4.2.1.1 Livestock Grazing**

Competition for forage and water between wild burros and livestock would be directly reduced, limiting concerted management on the affected grazing allotment.

A reduced population of wild burros within the Sinbad HMA would reduce wild burro utilization of the forage resource below its present level, keeping it in line with management objectives and the amount of forage allocated for wild burros. A balanced demand for forage would help maintain the vigor of vegetation, allow for seedling establishment, maintain ground cover, and thereby maintain a thriving natural ecological balance. This would avoid range deterioration, particularly in future drought years.

##### **4.2.1.2 Vegetation**

Direct impacts to the vegetation would include disturbance of native vegetation immediately in and around temporary trap sites, and holding, sorting and animal handling facilities. Impacts are created by vehicle traffic, and hoof action of penned burros and can be locally severe in the immediate vicinity of the corrals or holding facilities. Generally, these activity sites would be small (less than one half acre) in size. Since most trap sites and holding facilities are re-used during recurring wild burro gather operations, any impacts would remain site specific and isolated in nature. In addition, most trap sites or holding facilities are selected to enable easy access by transportation vehicles and logistical support equipment and would therefore generally be near or on roads, pullouts, water haul sites or other flat spots which were previously disturbed. Generally within one to two months of capture operations disturbance within the trap location is not visible. These common practices would minimize the cumulative effects of these impacts.

Indirect impacts would be associated with improvements in range and forage condition and long term maintenance of habitat quality.

#### 4.2.1.3 Wild Burros

Through implementation of the proposed action, the population of wild burros in the Sinbad HMA would be maintained towards the upper limit of the AML that was identified in the Resource Management Plan (RMP). The Proposed Action would gather up to 200 burros.

Impacts take the form of direct and indirect impacts and may occur on either the individual or the population as a whole. Direct individual impacts are those impacts which occur to individual burros and are immediately associated with implementation of the Proposed Action. These impacts include: handling stress associated with the roundup, capture, sorting, animal handling, radio collar fitting, and transportation of the animals. The intensity of these impacts varies by individual, and are indicated by behaviors ranging from nervous agitation to physical distress. Mortality of individuals from the effects of capture and handling is infrequent but may be expected to occur in one half to one percent of burros gathered in a given round-up.

Treatment area selection protocols have been developed with the CAWP (*Appendix B*) which would minimize impacts associated with handling stress. There are no indications that these direct impacts persist beyond a short time following the stress event. Handling protocols related to radio collar placement have been reviewed and approved by the USGS Institutional Animal Care and Use Committee (USGS 2015a, Schoenecker and King 2015).

Indirect individual impacts are those impacts which occur to individual burros after the initial stress event. Indirect individual impacts may include spontaneous abortions in jennies, and increased social displacement and conflict in jacks. These impacts, like direct individual impacts, are known to occur intermittently during wild burro gather operations. An example of an indirect individual impact would be the brief skirmish which occurs with older jacks following sorting and release into the jack pen which lasts less than two minutes and ends when one jack retreats. Traumatic injuries do not occur in most cases, however, they do occur. These injuries typically involve a bite and/or kicking with bruises which don't break the skin. Like direct individual impacts, the frequency of occurrence of these impacts among a population varies with the individuals. Spontaneous abortion events among jennies following captures are not common, and if they occur they very rarely result in complications or adverse effects on the dam's health or wellbeing.

Population-wide direct impacts are immediate effects which would occur during or immediately following implementation of the Proposed Action. The social structure of burros, which lacks stable harem breeding units, combined with year-round breeding (BLM SRP, 2005); would not be expected to be impacted to the extent normally anticipated with a wild horse gather. Most anticipated impacts to burro populations would be short term (less than 1 year), but some would be long term (greater than one year). These impacts will be discussed within this EA.

For jennies, the normal recurrent physiological stress due to reproduction starts as early as age 2 and continues until as late as age 15 or 16, and sometimes as late as 20. Jacks are not thought to experience any physiological stress from reproductive behaviors, other than the effort required to maintain a territory. Physiological stress due to reproduction is based on the degree, duration, and timing of biologically demanding activities during the annual reproductive cycle.

For jennies, the greatest physiological stress due to reproduction is during the last trimester of pregnancy, foaling and lactation. In wild burro populations, this occurs year round. For jacks, the physiological stress due to reproductive activities may occur throughout the year-round breeding season. This peak of reproductive activity is in the late spring and early summer. At that time, jacks may recover more rapidly than jennies, and may have a lower relative energy deficit than jennies.

The susceptibility of the older herd members to extreme climatic events may depend on their age. Generally, annual survival rates of burros are thought to be very high (exceeding 98%) for mature animals, and lower for very young. This annual survival rate declines again at some older age. The research included as part of the proposed action in Alternative 1 would quantify annual survival rates for wild burros of different age classes in this population.

Similarly, reproductive success also declines at some age. The threshold age at which susceptibility to extreme events and reproductive senescence has not been established, but may become more clear as a result of the proposed action in Alternative 1. It is reasonable to assume that a very young or very old population may be, more prone to a catastrophic die-off as a result of reduced resistance to disease, lowered body condition, and/or reduced reproductive capacity.

Population-wide indirect impacts would not appear immediately as a tangible effect and are more difficult to quantify.

A reduction of wild burros should increase the availability of forage plants that are preferred by burros, which ought to release the remaining population from pressure due to inadequate food availability. Reduced competition for forage and water between livestock, wildlife and wild burros would be expected to result in an improved natural ecological balance by avoiding range deterioration. However, “free-ranging horse populations are often limited by removals to levels below food-limited carrying capacity, so population growth rate could be increased by the removals through compensatory population growth related to decreased competition for forage (NAS, 2013).”

The proposed inventory flights and additional monitoring protocols identified are within the BLM monitoring protocols already in place. The inventory flights would temporarily affect all burros within the HMA for a short period of time, most likely only a few minutes while the aircraft flies over and counts identified animals or groups of animals.

Identified burros that have collars placed on them would be the most affected. The long term efficacy of the collars (>1 year) has not been tested in burros, but radio collar technology has been in regular use in other ungulate species for over 40 years (Kenward, 2001). It is possible that the collared burros may have a higher risk of entanglement with brush and trees due to the potential of the collars to get stuck on a tree branch. This risk will be reduced by a careful fitting of the collar to the individual’s neck. The collars have been designed to reduce this risk by allowing them to be snugly fit to the burro’s neck. Due to the lack of trees in pen trials this risk is not yet quantified. Collars used will also be enabled with a remote release so that BLM and USGS observers can remove the collar if the need arises, (i.e. a severe sore that won’t heal or the collar is pulled over an ear). While every effort has been made to develop a collar that is safe and comfortable, and experienced personnel will fit them on wild burro jennies as part of this study,

we cannot rule out the possibility of a catastrophe or mortality of a burro jenny wearing a collar as part of the field test of radio collars. The collar may be identified as a foreign object and may subject the wearer to different types of attention from other burros, such as biting the collar. However, no differences in behavior were found between radio collared and uncollared burros in a pasture trial conducted in early 2015 (USGS unpublished data). There is anecdotal evidence that jacks may bite, grab, and hold on to radio collars during fights, so no radio collars will be placed on jacks. It is possible that jacks may bite collars that are on jennies.

#### **4.2.1.4 Mitigation**

The Proposed Action incorporates a BLM standard set of CAWP guidelines ([Appendix B](#)) which have been developed over time. These SOPs were developed as impacts were identified and represent the "best methods" for reducing impacts associated with gathering, handling, and transporting animals, and collecting herd data. All other mitigation measures were addressed previously in the proposed action. Additional mitigation measures are not warranted.

#### **4.2.1.5 Cumulative Impacts**

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 sizeable actions taking place over a period of time.

Past, present and reasonably foreseeable activities which would be expected to contribute to the cumulative impacts of implementing the Proposed Action include: Past wild burro selective removal gather which may have altered the structure and composition of the Sinbad HMA, continuing livestock grazing in the Black Dragon and other adjacent grazing allotments, continuing wildlife grazing, continuing wildlife management (adjustment of population numbers), and continued development of (mining/recreational) infrastructure. These past, present and reasonably foreseeable activities would be expected to generate cumulative impacts to the Proposed Action by influencing the habitat quality abundance and continuity for the Sinbad HMA wild burros.

The past events in these areas have created the current wild burro population with its associated structure and composition, and have shaped the patterns of use found today in the herd. Continued development of these parameters would be expected to result in small annual changes in herd structure and behavior with small changes in habitat use over time. These impacts would be expected to be marked by relatively large changes occurring rather slowly over time. The Price Field Office would continue to identify these impacts as they occur, and mitigate them as needed on a project specific basis to maintain habitat quality. At the same time, the burros in this HMA would be expected to continue to adapt to these small changes to availability and distribution of critical habitat components (food, water, shelter, space). The Proposed Action would contribute to the cumulative impacts of these past and foreseeable future actions by bringing the herd back to the upper end of AML, and establishing a process whereby biological and/or genetic issues associated with herd or habitat fragmentation would become apparent sooner, and mitigating measures could be implemented quicker.

#### **4.2.1.6 Monitoring Plan**

Monitoring procedures to address specific habitat variables have been established in the Bureau's 4400 and 1734 series handbooks. These monitoring protocols are the accepted Bureau methodologies for collecting habitat based information to determine achievement of habitat based objectives and the standards for rangeland health as developed by the Utah Resource Advisory Council. Specific habitat monitoring procedures and key area selection has already occurred. These methodologies and sites would continue to be used under this Proposed Action. Species monitoring protocols and data collection methods have been established by equine professionals and researchers who initiated the first round of these studies (animal handling techniques). Bureau practices are based on these procedures which are incorporated into both the Proposed Action and alternatives as animal handling techniques. These animal handling techniques would be sufficient to determine the short- and long-term effects of implementing the Proposed Action or alternatives.

#### **4.2.2 Alternative 2: No Action - No Gather and Removal.**

##### **4.2.2.1 Livestock Grazing**

Direct impacts from not managing burros within the Sinbad HMA would have a negative effect on livestock grazing within the identified grazing allotments. Increased numbers of burros would adversely affect vegetative resources, which burros, livestock and wildlife compete for, as well as an increased competition for water resources and an increasingly negative impact upon the springs and streams. This would result in a reduced carrying capacity.

##### **4.2.2.2 Vegetation**

Direct and Indirect impacts would include disturbance of native vegetation immediately around all waters sources, as well as across the entire HMA from an increase in burro use. Impacts would be created by hoof action as the burros travel to and from water as well as disturbance created by the foraging of the burros on individual plants. This is an ongoing impact to vegetation but would be increased exponentially by allowing the burro herd to continue growing until the population density was so great as to cause some reduction in population growth due to starvation and reduced survival of foals as the body condition of jennies declines (i.e., self-regulation of the population).

##### **4.2.2.3 Wild Burros**

The Interior Board of Land Appeals (IBLA) through case No. 118 IBLA 75 (Animal Protection Institute Et. Al., 1991) has pointed out that in concurrence with The Wild Free-Roaming Burro And Burro Act of 1971 (Public Law 92-195) "excess animals" must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area (16 U.S.C. 1332(t)(1988)).

Alternative 2 is contrary to the WFRHBA which requires the BLM to "prevent the range from deterioration associated with the overpopulation" of wild burros and "preserve and maintain a thriving natural ecological balance and multiple use relationships in that area". It is also inconsistent with the Price Field Office RMP, which directs the Price Field Office BLM to conduct gathers as necessary to achieve and maintain AML. This alternative of using natural controls to achieve a desirable AML has not been shown to be feasible in the past. Wild burros in the Sinbad HMA are not substantially regulated by predators. In addition, wild burros are a long-lived species with expected foal survival rates that may exceed 95%. There is no mechanism of self-regulation in this species, other than through the action of limited forage availability and,

ultimately, starvation. This alternative would result in a steady increase in numbers which would continually exceed the carrying capacity of the range until severe and unusual conditions that occur periodically – such as large snow storm events or extreme drought – cause catastrophic mortality of wild burros.

“Literature clearly demonstrates that density dependence due to food limitations will reduce population growth rates in equids and other large herbivores through reduced fecundity and survival. The total annual population increment will decline at higher densities. Some of the reduction in annual population increment at high densities will probably be due to reduced fertility, and much of the reduction can also be expected to be due to increased mortality. The literature and the case studies show that although density dependence can regulate population sizes, responses will probably include increased numbers of animals in poor body condition and high numbers of animals dying from starvation (NAS, 2013).”

#### **4.2.2.4 Mitigation**

None identified

#### **4.2.2.5 Cumulative Impacts**

Cumulative Impacts related to the No Action Alternative would be as stated above, as numbers of burros' increase it would adversely affect vegetative resources, which burros, livestock and wildlife compete for, as well as an increased competition for water resources and impact upon the springs and streams. This would result in a reduced carrying capacity of the area, as well as increased erosion and reduced functioning condition of the riparian and upland areas. The burros would be expected to continue population growth until the range was catastrophically overgrazed, which would eventually be reflected in reductions to the grazing permits, as well as a very likely eventual die-off of a substantial fraction of the wild burros and other wildlife in the area, which would be exacerbated if there were a drought or a harsh winter.

#### **4.2.2.6 Monitoring Plan**

None identified above the standard monitoring completed for rangeland management.

**5.0 CONSULTATION AND COORDINATION:**

As described earlier, a public hearing is held annually on the use of helicopters and motorized vehicles to capture wild horses. During this meeting, the public is given the opportunity to present new information and to voice any concerns regarding the use of these methods to capture wild horses. This process has been in place for over 20 years, and relevant issues associated with these methods have been addressed in the CAWP (*Appendix B*).

Other public meetings have been held and public comment has been solicited on multiple occasions during the formulation of other documents related to the management of wild horses and burros. This input has been carefully considered and has guided the development of this Proposed Action and alternatives. The following concerns were identified in these past meetings.

The capture methodologies currently employed, and proposed for continuation under the Proposed Action and alternatives, have been reviewed in detail. Comments pertaining to this aspect of wild burro management have included concerns over the rate at which burros are herded to the trap site, the methods for transporting animals, and the numbers of burros which are captured using various types of capture. BLM developed policy and practices which addressed each of these concerns. These policies/practices have become standard procedure.

**5.1 Introduction:**

The issue identification section of Chapter 1 identifies those issues analyzed in detail in Chapter 4. Appendix A provides the rationale for issues that were considered but not analyzed further. The issues were identified through the public and agency involvement process described in sections 5.2 and 5.3 below.

PUBLIC NOTICE AND AVAILABILITY

Public involvement was initiated on this Proposed Action on September 9, 2015 by posting on the ePlanning web page. A 30 day public comment period will be offered.

**5.2 Persons, Groups, and Agencies Consulted:**

**Table 5-2:**

**List of all Persons, Agencies and Organizations Consulted for Purposes of this EA**

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
Native American Tribes interested in projects within the Price Field Office: Northwestern Band of Shoshoni Nation, Paiute Indian Tribe of Utah, Navajo Nation, Ute Indian Tribe, Hopi Tribe, Southern Ute Tribe, Ute Mountain Ute Tribe, Pueblo of Zuni, Pueblo of Jemez, Shoshone Bannock Tribes, Eastern Shoshone Tribe	Consultation for undertaking, as required by the <i>Native American Graves Protection and Repatriation Act</i> , the <i>American Indian Religious Freedom Act</i> , and various executive orders (e.g., Executive Order 13007)	Identified tribes were notified by letter dated 08/11/2015. The BLM has not received any letters expressing Native American concerns with the project.

Ronald G. Torgerson, State of Utah, State and Institutional Trust Lands Administration, Renewable Resource Specialist	Consult with SITLA as the agency in control of state lands within the project area	
Emery County Commissioners	Consult with County.	
Rainbow Glass Ranch	Permittee within the Big Pond and Black Dragon Allotments.	
Clyde and Darlene Magnuson	Permittee within the Mexican Bend Allotment.	
Hugh and Sherrie Grange	Permittee within the North Sinbad Allotment.	
Newel Lynn Nelson	Permittee within the North Sinbad Allotment.	
Peter & Tiana McElprang	Permittee within the North Sinbad Allotment.	
Clif R. & Breezie McElprang	Permittee within the North Sinbad Allotment.	
William R. & Dixie Allred	Permittee within the North Sinbad Allotment.	
Alan Jensen and Family	Permittee within the North Sinbad Allotment.	
Lee McElprang	Permittee within the North Sinbad Allotment.	
Nielson Ranches	Permittee within the North Sinbad Allotment.	
Thomas R. McElprang	Permittee within the North Sinbad Allotment.	
Lee or Leon McElprang	Permittee within the North Sinbad Allotment.	
Deniz Bolbol, American Wild Horse Preservation Campaign / Wild Horse Defenders	Consult with identified Interested Publics	
Neda Demayo, Return to Freedom	Consult with identified Interested Publics	
Mathew Dillon, Pryor Mountain Wild Mustang Center	Consult with identified Interested Publics	
Kathy Greg	Consult with identified Interested Publics	
D.J. Schubert, Animal Welfare Institute	Consult with identified Interested Publics	

### 5.3 Summary of Public Participation

During preparation of the EA, the public was notified of the proposed action by posting on the ePlanning web page on September 9, 2015. A 30 day public comment period will be offered.

#### 5.3.1 Comment Analysis

## 5.4 List of Preparers

### 5.4.1 BLM

Name	Title	Responsible for the Following Section(s) of this Document
Mike Tweddell	Range Management Specialist/Wild Horse and Burro Specialist, (PFO).	Project lead and provided information on plan conformance, range/grazing, vegetation, wild horse issues, environmental justice and socioeconomics.
Kelly Buckner	Environmental Coordinator, (PFO).	Reviewed this document for format and National Environmental Policy Act (NEPA) conformance
Jared Reese	Wildlife Biologist, (PFO).	Contributed information pertaining to Threatened and Endangered animals and Wildlife
Amber Koski	Archaeologist, (PFO).	Contributed information pertaining to Cultural and Native American Religious Concerns
Josh Winkler	Recreation Planner, (PFO).	Contributed information on VRM, Recreation, and Wild and Scenic Rivers
Dana Truman	Range Management Specialist, (PFO).	Contributed information pertaining to Threatened and Endangered plants, Invasive, Non-native species, Vegetation and Riparian
Jeffery Brower	Hydrologist (PFO)	Contributed information on Air Quality, Floodplains, Water Quality, Soils, Wastes (hazardous of solid).
Matt Blocker	Recreation Planner (PFO)	Contributed information on ACECs, Wilderness, and Wilderness characteristics
Chris Conrad	Natural Resource Specialist (PFO)	Contributed information on Geology/ Mineral Resources
Mike Leschin	Paleontologist (PFO)	Contributed information on Paleontological resources
Josh Relph	Fuels Coordinator (PFO)	Contributed information on Fuels / Fire Management
Connie Leschin	Realty Specialist (PFO)	Contributed information on Lands / Access
V. Gus Warr	Wild Horse and Burro Specialist, Utah State Office (USO)	Consult with USO for program conformance and coordination within State
Paul Griffin	WH&B Program Research Coordinator, Washington Office	Contributed information pertaining to scientific literature and proposed research
Katherine Schoenecker	USGS Investigator, Fort Collins	Contributed information pertaining to scientific literature and proposed research
Bryan Fuell	WH&B Program Branch Chief (On Range), Washington Office	Consult with WO for program conformance

## 6.0 REFERENCES AND ACRONYMS

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## 6.2 List of Acronyms Used in this EA:

AML – Appropriate Management Level	IM – Information Memorandum
AO – Authorized Officer	MFP – Management Framework Plan
APHIS – Animal and Plant Health Inspection Service	NEPA – National Environmental Policy Act
AUM – Animal Unit Month	NOAA – National Oceanic and Atmospheric Administration
BLM – Bureau of Land Management	NPO – National Program Office
CFR – Code of Federal Regulations	NSRSHMP - North San Rafael Swell Habitat Management Plan
DR – Decision Record	PFO – Price Field Office
EA – Environmental Assessment	PZP – Porcine Zona Pellucidae
EIS – Environmental Impact Statement	RMP – Price Resource Management Plan
Fis – Estimated Inbreeding Level	SOP – Standard Operating Procedures
FONSI – Finding of No Significant Impact	UDWR – Utah Division of Wildlife Resources
He – Expected Heterozygosity	USFWS – United States Fish & Wildlife Services
Ho – Observed Heterozygosity	USO – Utah State Office
HMA – Herd Management Area	
HMAP – Herd Management Area Plan	
IBLA – Interior Board of Land Appeals	

### **APPENDICES:**

**APPENDIX A: - Interdisciplinary Team Analysis Record Checklist**

**APPENDIX B: - Comprehensive Animal Welfare Program (Welfare Assessment Standards for Gathers)**

## INTERDISCIPLINARY TEAM CHECKLIST

**Project Title:** Sinbad Burro Gather  
**NEPA Log Number:** DOI-BLM-UT-G020-2015-0050-EA  
**File/Serial Number:** 4720 / UT-652B  
**Project Leader:** Mike Tweddell

**DETERMINATION OF STAFF:** *(Choose one of the following abbreviated options for the left column)*

NP = not present in the area impacted by the proposed or alternative actions  
 NI = present, but not affected to a degree that detailed analysis is required  
 PI = present with potential for relevant impact that need to be analyzed in detail in the EA  
 NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

Determination	Resource	Rationale for Determination*	Signature	Date
<b>RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)</b>				
NI	Air Quality	Overall, air quality in the project area is considered to be in attainment of the NAAQS. There are no regulatory monitoring data for the project area. Dust emissions currently occur from vehicles utilizing the subject roads. It is anticipated that the incremental change from this project's alternatives would be so small as to be undetectable by both models and monitors.	Jeffrey Brower	5/18/15
NI	Areas of Critical Environmental Concern	After review of GIS records and the Approved RMP there are the I-70 and San Rafael Canyon ACECs and within the project area. The proposed action and short term nature of the activity will have no impacts on the ACEC's.	Josh Winkler	06/15/15
NP	BLM Natural Areas**	There are no BLM Natural Areas within the proposed project area as per GIS and RMP review	Matt Blocker	6/4/15
NP	BLM Sensitive Animal Species	BLM sensitive animal species are not known to be present within the project area as per GIS/Map review.	Jared Reese	6/4/15
NP	BLM Sensitive Plant Species	After review of BLM records there are no known populations or habitat within the project area for BLM sensitive plants.	Karl Ivory	06/15/15
NI	Cultural Resources	The Area of Potential Effect for the proposed Sinbad Burro gather includes those areas selected for stationing. If stations are located on previously disturbed areas, does not incorporate sand stone walls, or cliff faces and is less than 50 acres, an intensive cultural resource inventory would be waived. Based on the above mentioned stipulations a determination of "no historic properties affected" is made pursuant to 36CFR800 Section 106.	Amber Koski	5/29/2015
NI	Greenhouse Gas Emissions**	There are currently no regulatory standards for controlling GHG emissions or accepted analytical methods for evaluating project specific impacts related to GHG emissions. As a consequence, the impacts of site-specific proposals cannot be	Jeffrey Brower	5/18/15

Determination	Resource	Rationale for Determination*	Signature	Date
		determined. Based on the nature of the action, GHG emissions are expected to be minimal.		
NI	Environmental Justice	There are no minority or low income populations that would be adversely effected by implementation of the Proposed Action.	Mike Tweddell	06/12/15
NP	Farmlands (Prime or Unique)	According to the NRCS soils surveys and knowledge of the soils, there are no prime and unique soils mapped within the project area.	Jeffrey Brower	5/18/15
NI	Fish and Wildlife Excluding USFW Designated Species and BLM Sensitive Species	The primary wildlife species of concern in this area are Desert Bighorn Sheep, Mule Deer and Pronghorn Antelope. Other wildlife found in the area includes coyotes, mountain lions, cottontails, ravens, golden eagles, and great basin gopher snakes. Removal of the burros would reduce the competition for forage, water, and habitat and provide more opportunities to sustain the local wildlife populations.	Jared Reese	6/4/15
NI	Floodplains	After an inspection of USGS 7.5 minute maps of the area, it is determined no floodplains as defined by EO 11988, FEMA, or Corps of Engineers will be affected by this project.	Jeffrey Brower	5/18/15
NI	Fuels/Fire Management	There are no continuous fuel sources present.	Mike Tweddell	12/02/15
NI	Geology / Mineral Resources/Energy Production	Considering the non-invasive and temporary nature of the proposal, there will be no negative impacts to Solid or Fluid Mineral Resources.	Chris Conrad	May 18, 2015
NI	Hydrologic Conditions**	Hydrologic conditions would not be affected by this project because all disturbances would be widely dispersed.	Jeffrey Brower	5/18/15
NI	Invasive Species/Noxious Weeds (EO 13112)	Surface disturbing activities have the potential to introduce/spread invasive species/noxious weeds. There are no known noxious weeds within the project area. Cheatgrass, halogeton and Russian thistle are invasive species that are present within the project area. Negligible impacts to invasive species/noxious weeds are expected because the proposed holding facilities are located in previously disturbed locations. It will be required to follow Best Management Practices such as power washing equipment and vehicles to remove any mud or debris prior to entering BLM administered lands. Horses and other animals will be required to be cleaned and be free of any mud and vegetative materials before entering BLM administered lands. Horses are required to be fed certified noxious weed free hay for a minimum of 72 hours prior to entering BLM administered lands and any hay fed to horses while on BLM administered lands will be required to be certified noxious weed free.	Stephanie Bauer	6/12/15
PI/NI	Lands/Access	A review of LR2000 and the Master Title Plats showed that the proposed action is compatible with the existing land use and authorized right-of-ways. The UDOT would need to be consulted with to ensure that the reclamation they have conducted would not be impacted.	Connie Leschin	5/29/2015
PI	Livestock Grazing	Livestock compete with wild Burros for available forage and water resources. Depending on timing of gather could cause temporary displacement or disturbance of livestock.	Mike Tweddell	05/21/15

<b>Determination</b>	<b>Resource</b>	<b>Rationale for Determination*</b>	<b>Signature</b>	<b>Date</b>
NI	Migratory Birds	There are a few mapped areas of important migratory bird breeding habitat but these location are located on the outskirts of the project area and disturbance should be minimal. Although migratory birds would use the project area, no special status migratory birds are known to be in this area, therefore no special stipulations are needed.	Jared Reese	6/4/15
NI	Native American Religious Concerns	Tribes need to be notified. Identified tribes were notified by letter dated 08/11/2015. The BLM has not received any letters expressing Native American concerns with the project.	Amber Koski	5/29/2015
NI	Paleontology	Minimal Surface disturbance, low likelihood of occurrence of Paleontological resources due to parent materials	Michael Leschin	5/20/15
NI	Rangeland Health Standards	The proposed action has been evaluated in light of Utah BLMs Standards for Rangeland Health and the Guidelines for Grazing Management. A Rangeland Health assessment was conducted on the HMA in June of 2008. The management on the HMA was found to be and continues to be consistent with achieving and adhering to the Standards and Guidelines.	Mike Tweddell	05/21/15
NI	Recreation	The proposed action is located in the San Rafael Special Recreation Management Area (SRMA). The short term gather and minimal use of the area will have no impacts or effects on recreation users in the area.	Josh Winkler	06/15/15
NI	Socio-Economics	Implementation of the Proposed Action would have no measureable social or economic impacts because the project is relatively small in scope when compared to the larger economy of the area.	Mike Tweddell	06/12/15
NI	Soils	Soils conditions would not be affected by this project because all disturbances would be widely dispersed.	Jeffrey Brower	5/18/15
NP	Threatened, Endangered or Candidate Plant Species	After review of BLM records there are no known populations or habitat within the project area for BLM T and E plants.	Karl Ivory	06/15/15
NI	Threatened, Endangered or Candidate Animal Species	No effect – because, after GIS review, there are no known occurrences of federally listed or candidate species in the project area. There is no designated critical habitat present either. There would be no surface water depletion that would affect federally listed fish species that occur downstream.	Jared Reese	6/4/15
NI	Wastes (hazardous or solid)	No chemicals subject to reporting under SARA Title III will be used, produced, stored, transported, or disposed of annually in association with the project. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the project.  Trash would be confined in a covered container and disposed of in an approved landfill. No burning of any waste will occur due to this project. Human waste will be disposed of in an appropriate manner in an approved sewage treatment center.	Jeffrey Brower	5/18/15
NI	Water Resources/Quality (drinking/surface/ground)	No impact to water quality due to the small size of this project.	Jeffrey Brower	5/18/15

<b>Determination</b>	<b>Resource</b>	<b>Rationale for Determination*</b>	<b>Signature</b>	<b>Date</b>
NI	Wetlands/Riparian Zones	After an inspection of USGS 7.5 minute maps of the area, it is determined there are no wetlands/riparian areas that would be affected by this project.	Jeffrey Brower	5/18/15
NP	Wild and Scenic Rivers	There are no Wild and Scenic Rivers within the project area as per review of RMP/GIS maps.	Matt Blocker	6/4/15
NP	Wilderness/WSA	There are no Wilderness/WSAs within the project area as per review of RMP/GIS maps.	Matt Blocker	6/4/15
NP	Woodland / Forestry	There are no merchantable woodland/forestry products within the project area.	Stephanie Bauer	6/12/15
PI	Vegetation Excluding USFW Designated Species and BLM Sensitive Species	Impacts expected are a result of over utilization of forage species, and potential impacts to vegetation from disturbance associated with proposed gather.	Mike Tweddell	05/21/15
NI	Visual Resources	The proposed action is located within the VRM I, II and III. The temporary gathering sites are short term in nature and will be removed upon completion of the gather. This will have no impacts to VRM in the long term.	Josh Winkler	06/15/15
PI	Wild Horses and Burros	Expected impacts from the proposed action to individual burros and the herd include handling stress, effects to genetic diversity, animal health, and condition.	Mike Tweddell	05/21/15
NP	Areas with Wilderness Characteristics**	There are no areas with Wilderness Characteristics or Wildlands within the project area as per review of RMP/GIS maps.	Matt Blocker	6/4/15

**FINAL REVIEW:**

<b>Reviewer Title</b>	<b>Signature</b>	<b>Date</b>	<b>Comments</b>
Environmental Coordinator			
Authorized Officer			

**COMPREHENSIVE ANIMAL WELFARE PROGRAM  
FOR WILD HORSE AND BURRO GATHERS**

**STANDARDS**

Developed by

The Bureau of Land Management  
Wild Horse and Burro Program

in collaboration with

Carolyn L. Stull, PhD  
Kathryn E. Holcomb, PhD  
University of California, Davis  
School of Veterinary Medicine

June 30, 2015

# WELFARE ASSESSMENT STANDARDS for GATHERS

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# STANDARDS

## Standard Definitions

**Major Standard:** Impacts the health or welfare of WH&Bs. Relates to an alterable equipment or facility standard or procedure. Appropriate wording is “must,” “unacceptable,” “prohibited.”

**Minor Standard:** unlikely to affect WH&Bs health or welfare or involves an uncontrollable situation. Appropriate wording is “should.”

**Lead COR** = Lead Contracting Officer’s Representative

**COR** = Contracting Officer’s Representative

**PI** = Project Inspector

**WH&Bs** = Wild horses and burros

## I. FACILITY DESIGN

### A. Trap Site and Temporary Holding Facility

1. The trap site and temporary holding facility must be constructed of stout materials and must be maintained in proper working condition, including gates that swing freely and latch or tie easily. (**major**)
2. The trap site should be moved close to WH&B locations whenever possible to minimize the distance the animals need to travel.(minor)
3. If jute is hung on the fence posts of an existing wire fence in the trap wing, the wire should be either be rolled up or let down for the entire length of the jute in such a way that minimizes the possibility of entanglement by WH&Bs unless otherwise approved by the Lead COR/COR/PI. (minor)
4. Fence panels in pens and alleys must be not less than 6 feet high for horses, 5 feet high for burros, and the bottom rail must not be more than 12 inches from ground level. (**major**)

5. The temporary holding facility must have a sufficient number of pens available to sort WH&Bs according to gender, age, number, temperament, or physical condition. **(major)**
  - a. All pens must be assembled with capability for expansion. **(major)**
  - b. Alternate pens must be made available for the following: **(major)**
    - 1) WH&Bs that are weak or debilitated
    - 2) Mares/jennies with dependent foals
  - c. WH&Bs in pens at the temporary holding facility should be maintained at a proper stocking density such that when at rest all WH&Bs occupy no more than half the pen area. (minor)
6. An appropriate chute designed for restraining WH&Bs must be available for necessary procedures at the temporary holding facility. This does not apply to bait trapping operations unless directed by the Lead COR/COR/PI. **(major)**
7. There must be no holes, gaps or openings, protruding surfaces, or sharp edges present in fence panels or other structures that may cause escape or possible injury. **(major)**
8. Padding must be installed on the overhead bars of all gates and chutes used in single file alleys. **(major)**
9. Hinged, self-latching gates must be used in all pens and alleys except for entry gates into the trap, which may be secured with tie ropes. **(major)**
10. Finger gates (one-way funnel gates) used in bait trapping must be constructed of materials approved by the Lead COR/COR/PI. Finger gates must not be constructed of materials that have sharp ends that may cause injuries to WH&Bs, such as "T" posts, sharpened willows, etc. **(major)**
11. Water must be provided at a minimum rate of ten gallons per 1000 pound animal per day, adjusted accordingly for larger or smaller horses, burros and foals, and environmental conditions, with each trough placed in a separate location of the pen (i.e. troughs at opposite ends of the pen). Water must be refilled at least every morning and evening. **(major)**
12. The design of pens at the trap site and temporary holding facility should be constructed with rounded corners. (minor)

13. All gates and panels in the animal holding and handling pens and alleys of the trap site must be covered with materials such as plywood, snow fence, tarps, burlap, etc. approximately 48” in height to provide a visual barrier for the animals. All materials must be secured in place. **(major)**

These guidelines apply:

- a. For exterior fences, material covering panels and gates must extend from the top of the panel or gate toward the ground. **(major )**
- b. For alleys and small internal handling pens, material covering panels and gates should extend from no more than 12 inches below the top of the panel or gate toward the ground to facilitate visibility of animals and the use of flags and paddles during sorting. (minor)
- c. The initial capture pen may be left uncovered as necessary to encourage animals to enter the first pen of the trap. (minor)

14. Non-essential personnel and equipment must be located to minimize disturbance of WH&Bs. **(major)**

15. Trash, debris, and reflective or noisy objects should be eliminated from the trap site and temporary holding facility. (minor)

#### **B. Loading and Unloading Areas**

1. Facilities in areas for loading and unloading WH&Bs at the trap site or temporary holding facility must be maintained in a safe and proper working condition, including gates that swing freely and latch or tie easily. **(major)**
2. The side panels of the loading chute must be a minimum of 6 feet high and fully covered with materials such as plywood or metal without holes that may cause injury. **(major)**
3. There must be no holes, gaps or openings, protruding surfaces, or sharp edges present in fence panels or other structures that may cause escape or possible injury. **(major)**
4. All gates and doors must open and close easily and latch securely. **(major)**

5. Loading and unloading ramps must have a non-slip surface and be maintained in a safe and proper working condition to prevent slips and falls. Examples of non-slip flooring would include, but not be limited to, rubber mats, sand, shavings, and steel reinforcement rods built into ramp. There must be no holes in the flooring or items that can cause an animal to trip. **(major)**
6. Trailers must be properly aligned with loading and unloading chutes and panels such that no gaps exist between the chute/panel and floor or sides of the trailer creating a situation where a WH&B could injure itself. **(major)**
7. Stock trailers should be positioned for loading or unloading such that there is no more than 12” clearance between the ground and floor of the trailer for burros and 18” for horses. (minor)

## **II. CAPTURE TECHNIQUE**

### **A. Capture Techniques**

1. WH&Bs gathered on a routine basis for removal or return to range must be captured by the following approved procedures under direction of the Lead COR/COR/PI. **(major)**
  - a. Helicopter
  - b. Bait trapping
2. WH&Bs must not be captured by snares or net gunning. **(major)**
3. Chemical immobilization must only be used for capture under exceptional circumstances and under the direct supervision of an on-site veterinarian experienced with the technique. **(major)**

### **B. Helicopter Drive Trapping**

1. The helicopter must be operated using pressure and release methods to herd the animals in a desired direction and should not repeatedly evoke erratic behavior in the WH&Bs causing injury or exhaustion. Animals must not be pursued to a point of exhaustion; the on-site veterinarian must examine WH&Bs for signs of exhaustion. **(major)**

2. The rate of movement and distance the animals travel must not exceed limitations set by the Lead COR/COR/PI who will consider terrain, physical barriers, access limitations, weather, condition of the animals, urgency of the operation (animals facing drought, starvation, fire, etc.) and other factors. **(major)**
  - a. WH&Bs that are weak or debilitated must be identified by BLM staff or the contractors. Appropriate gather and handling methods should be used according to the direction of the Lead COR/COR/PI. **(major)**
  - b. The appropriate herding distance and rate of movement must be determined on a case-by-case basis considering the weakest or smallest animal in the group (e.g., foals, pregnant mares, or horses that are weakened by body condition, age, or poor health) and the range and environmental conditions present. **(major)**
  - c. Rate of movement and distance travelled must not result in exhaustion at the trap site, with the exception of animals requiring capture that have an existing severely compromised condition prior to gather. Where compromised animals cannot be left on the range or where doing so would only serve to prolong their suffering, euthanasia will be performed in accordance with BLM policy. **(major)**
3. WH&Bs must not be pursued repeatedly by the helicopter such that the rate of movement and distance travelled exceeds the limitation set by the Lead COR/COR/PI. Abandoning the pursuit or alternative capture methods may be considered by the Lead COR/COR/PI in these cases. **(major)**
4. When WH&Bs are herded through a fence line en route to the trap, the Lead COR/COR/PI must be notified by the contractor. The Lead COR/COR/PI must determine the appropriate width of the opening that the fence is let down to allow for safe passage through the opening. The Lead COR/COR/PI must decide if existing fence lines require marking to increase visibility to WH&Bs. **(major)**
5. The helicopter must not come into physical contact with any WH&B. The physical contact of any WH&B by helicopter must be documented by Lead COR/COR/PI along with the circumstances. **(major)**
6. WH&Bs may escape or evade the gather site while being moved by the helicopter. If there are mare/dependent foal pairs in a group being brought to a trap and half of an identified pair is thought to have evaded capture, multiple attempts by helicopter may

- be used to bring the missing half of the pair to the trap or to facilitate capture by roping. In these instances, animal condition and fatigue must be evaluated by the Lead COR/COR/PI or on-site veterinarian on a case-by-case basis to determine the number of attempts that can be made to capture an animal. (**major**)
7. Horse captures must not be conducted when ambient temperature at the trap site is below 10°F or above 95°F without approval of the Lead COR/COR/PI. Burro captures must not be conducted when ambient temperature is below 10°F or above 100°F without approval of the Lead COR/COR/PI. The Lead COR/COR/PI will not approve captures when the ambient temperature exceeds 105 °F. (**major**)

### C. Roping

1. The roping of any WH&B must be approved prior to the procedure by the Lead COR/COR/PI. (**major**).
2. The roping of any WH&B must be documented by the Lead COR/COR/PI along with the circumstances. WH&Bs may be roped under circumstances which include but are not limited to the following: reunite a mare or jenny and her dependent foal; capture nuisance, injured or sick WH&Bs or those that require euthanasia; environmental reasons such as deep snow or traps that cannot be set up due to location or environmentally sensitive designation; and public and animal safety or legal mandates for removal. (**major**)
3. Ropers should dally the rope to their saddle horn such that animals can be brought to a stop as slowly as possible and must not tie the rope hard and fast to the saddle so as to intentionally jerk animals off their feet. (**major**)
4. WH&Bs that are roped and tied down in recumbency must be continuously observed and monitored by an attendant at a maximum of 100 feet from the animal. (**major**)
5. WH&Bs that are roped and tied down in recumbency must be untied within 30 minutes. (**major**)
6. If the animal is tied down within the wings of the trap, helicopter drive trapping within the wings will cease until the tied-down animal is removed. (**major**)
7. Sleds, slide boards, or slip sheets must be placed underneath the animal's body to move and/or load recumbent WH&Bs. (**major**)

8. Halters and ropes tied to a WH&B may be used to roll, turn, position or load a recumbent animal, but a WH&B must not be dragged across the ground by a halter or rope attached to its body while in a recumbent position. **(major)**
9. Animals captured by roping must be evaluated by the on-site/on-call veterinarian within four hours after capture, marked for identification at the trap site, and be re-evaluated periodically as deemed necessary by the on-site/on-call veterinarian. **(major)**

#### **D. Bait Trapping**

1. WH&Bs may be lured into a temporary trap using bait (feed, mineral supplement, water) or sexual attractants (mares/jennies in heat) with the following requirements:
  - a. The period of time water sources other than in the trap site are inaccessible must not adversely affect the wellbeing of WH&Bs, wildlife or livestock, as determined by the Lead COR/COR/PI. **(major)**
  - b. Unattended traps must not be left unobserved for more than 12 hours. **(major)**
  - c. Mares/jennies and their dependent foals must not be separated unless for safe transport. **(major)**
  - d. WH&Bs held for more than 12 hours must be provided with accessible clean water at a minimum rate of ten gallons per 1000 pound animal per day, adjusted accordingly for larger or smaller horses, burros and foals and environmental conditions. **(major)**
  - e. WH&Bs held for more than 12 hours must be provided good quality hay at a minimum rate of 20 pounds per 1000 pound adult animal per day, adjusted accordingly for larger or smaller horses, burros and foals. **(major)**
    - 1) Hay must not contain poisonous weeds, debris, or toxic substances. **(major)**
    - 2) Hay placement must allow all WH&Bs to eat simultaneously. **(major)**

### **III. WILD HORSE AND BURRO CARE**

#### **A. Veterinarian**

1. On-site veterinary support must be provided for all helicopter gathers and on-site or on-call support must be provided for bait trapping. **(major)**

2. Veterinary support must be under the direction of the Lead COR/COR/PI. The on-site/on-call veterinarian will provide consultation on matters related to WH&B health, handling, welfare, and euthanasia at the request of the Lead COR/COR/PI. All decisions regarding medical treatment or euthanasia will be made by the on-site Lead COR/COR/PI. **(major)**

## **B. Care**

1. Feeding and Watering
  - a. Adult WH&Bs held in traps or temporary holding pens for longer than 12 hours must be fed every morning and evening with water available at all times other than when animals are being sorted or worked. **(major)**
  - b. Water must be provided at a minimum rate of ten gallons per 1000 pound animal per day, adjusted accordingly for larger or smaller horses, burros and foals, and environmental conditions, with each trough placed in a separate location of the pen (i.e. troughs at opposite ends of the pen). **(major)**
  - c. Good quality hay must be fed at a minimum rate of 20 pounds per 1000 pound adult animal per day, adjusted accordingly for larger or smaller horses, burros and foals. **(major)**
    - i. Hay must not contain poisonous weeds or toxic substances. **(major)**
    - ii. Hay placement must allow all WH&Bs to eat simultaneously. **(major)**
  - d. When water or feed deprivation conditions exist on the range prior to the gather, the Lead COR/COR/PI should adjust the watering and feeding arrangements in consultation with the onsite veterinarian as necessary to provide for the needs of the animals. **(minor)**
2. Dust abatement
  - a. Dust abatement by spraying the ground with water must be employed when necessary at the trap site and temporary holding facility. **(major)**

3. Trap Site
  - a. Dependent foals or weak/debilitated animals must be separated from other WH&Bs at the trap site to avoid injuries during transportation to the temporary holding facility. Separation of dependent foals from mares must not exceed four hours unless the Lead COR/COR/PI authorizes a longer time or a decision is made to wean the foals. (**major**)
4. Temporary Holding Facility
  - a. All WH&Bs in confinement must be observed at least once daily to identify sick or injured WH&Bs and ensure adequate food and water. (**major**)
  - b. Foals must be reunited with their mares/jennies at the temporary holding facility within four hours of capture unless the Lead COR/COR/PI authorizes a longer time or foals are old enough to be weaned during the gather. (**major**)
  - c. Non-ambulatory WH&Bs must be located in a pen separate from the general population and must be examined by the BLM horse specialist and/or on-call or on-site veterinarian as soon as possible, no more than four hours after recumbency is observed. Unless otherwise directed by a veterinarian, hay and water must be accessible to an animal within six hours after recumbency. (**major**)
  - d. Alternate pens must be made available for the following: (**major**)
    - 1) WH&Bs that are weak or debilitated
    - 2) Mares/jennies with dependent foals
  - e. Aggressive WH&Bs causing serious injury to other animals should be identified and relocated into alternate pens when possible. (minor)
  - f. WH&Bs in pens at the temporary holding facility should be maintained at a proper stocking density such that when at rest all WH&Bs occupy no more than half the pen area. (minor)

### C. Biosecurity

1. Health records for all saddle and pilot horses used on WH&B gathers must be provided to the Lead COR/COR/PI prior to joining a gather, including: **(major)**
  - a. Certificate of Veterinary Inspection (Health Certificate, within 30 days).
  - b. Proof of:
    - 1) A negative test for equine infectious anemia (Coggins or EIA ELISA test) within 12 months.
    - 2) Vaccination for tetanus, eastern and western equine encephalomyelitis, West Nile virus, equine herpes virus, influenza, *Streptococcus equi*, and rabies within 12 months.
2. Saddle horses, pilot horses and mares used for bait trapping lures must not be removed from the gather operation (such as for an equestrian event) and allowed to return unless they have been observed to be free from signs of infectious disease for a period of at least three weeks and a new Certificate of Veterinary Examination is obtained after three weeks and prior to returning to the gather. **(major)**
3. WH&Bs, saddle horses, and pilot horses showing signs of infectious disease must be examined by the on-site/on-call veterinarian. **(major)**
  - a. Any saddle or pilot horses showing signs of infectious disease (fever, nasal discharge, or illness) must be removed from service and isolated from other animals on the gather until such time as the horse is free from signs of infectious disease and approved by the on-site/on-call veterinarian to return to the gather. **(major)**
  - b. Groups of WH&Bs showing signs of infectious disease should not be mixed with groups of healthy WH&Bs at the temporary holding facility, or during transport. **(minor)**
4. Horses not involved with gather operations should remain at least 300 yards from WH&Bs, saddle horses, and pilot horses being actively used on a gather. **(minor)**

## IV. HANDLING

### A. Willful Acts of Abuse

1. Hitting, kicking, striking, or beating any WH&B in an abusive manner is prohibited. **(major)**
2. Dragging a recumbent WH&B without a sled, slide board or slip sheet is prohibited. Ropes used for moving the recumbent animal must be attached to the sled, slide board or slip sheet unless being loaded as specified in Section II. C. 8. **(major)**
3. There should be no deliberate driving of WH&Bs into other animals, closed gates, panels, or other equipment. (minor)
4. There should be no deliberate slamming of gates and doors on WH&Bs. (minor)
5. There should be no excessive noise (e.g., constant yelling) or sudden activity causing WH&Bs to become unnecessarily flighty, disturbed or agitated. (minor)

### B. General Handling

1. All sorting, loading or unloading of WH&Bs during gathers must be performed during daylight hours except when unforeseen circumstances develop and the Lead COR/CO/PI approves the use of supplemental light. **(major)**
2. WH&Bs should be handled to enter runways or chutes in a forward direction. (minor)
3. WH&Bs should not remain in single-file alleyways, runways, or chutes longer than 30 minutes. (minor)
4. Equipment except for helicopters should be operated and located in a manner to minimize flighty behavior . (minor)

### C. Handling Aids

1. Handling aids such as flags and shaker paddles must be the primary tools for driving and moving WH&Bs during handling and transport procedures. Contact of the flag or paddle end of primary handling aids with a WH&B is allowed. Ropes looped around the hindquarters may be used from horseback or on foot to assist in moving an animal forward or during loading. **(major)**

2. Electric prods must not be used routinely as a driving aid or handling tool. Electric prods may be used in limited circumstances only if the following guidelines are followed:
  - a. Electric prods must only be a commercially available make and model that uses DC battery power and batteries should be fully charged at all times. **(major)**
  - b. The electric prod device must never be disguised or concealed. **(major)**
  - c. Electric prods must only be used after three attempts using other handling aids (flag, shaker paddle, voice or body position) have been tried unsuccessfully to move the WH&Bs. **(major)**
  - d. Electric prods must only be picked up when intended to deliver a stimulus; these devices must not be constantly carried by the handlers. **(major)**
  - e. Space in front of an animal must be available to move the WH&B forward prior to application of the electric prod. **(major)**
  - f. Electric prods must never be applied to the face, genitals, anus, or underside of the tail of a WH&B. **(major)**
  - g. Electric prods must not be applied to any one WH&B more than three times during a procedure (e.g., sorting, loading) except in extreme cases with approval of the Lead COR/COR/PI. Each exception must be approved at the time by the Lead COR/COR/PI. **(major)**
  - h. Any electric prod use that may be necessary must be documented daily by the Lead COR/COR/PI including time of day, circumstances, handler, location (trap site or temporary holding facility), and any injuries (to WH&B or human). **(major)**

## V. TRANSPORTATION

### A. General

1. All sorting, loading, or unloading of WH&Bs during gathers must be performed during daylight hours except when unforeseen circumstances develop and the Lead COR/CO/PI approves the use of supplemental light. **(major)**

2. WH&Bs identified for removal should be shipped from the temporary holding facility to a BLM facility within 48 hours. (minor)
  - a. Shipping delays for animals that are being held for release to range or potential on-site adoption must be approved by the Lead COR/COR/PI. (**major**)
3. Shipping should occur in the following order of priority; 1) debilitated animals, 2) pairs, 3) weanlings, 4) dry mares and 5) studs. (minor)
4. Planned
5. transport time to the BLM preparation facility from the trap site or temporary holding facility must not exceed 10 hours. (**major**)
6. WH&Bs should not wait in stock trailers and/or semi-trailers at a standstill for more than a combined period of three hours during the entire journey. (minor)

## **B. Vehicles**

1. Straight-deck trailers and stock trailers must be used for transporting WH&Bs. (**major**)
  - a. Two-tiered or double deck trailers are prohibited. (**major**)
  - b. Transport vehicles for WH&Bs must have a covered roof or overhead bars containing them such that WH&Bs cannot escape. (**major**)
2. WH&Bs must have adequate headroom during loading and unloading and must be able to maintain a normal posture with all four feet on the floor during transport without contacting the roof or overhead bars. (**major**)
3. The width and height of all gates and doors must allow WH&Bs to move through freely. (**major**)
4. All gates and doors must open and close easily and be able to be secured in a closed position. (**major**)
5. The rear door(s) of the trailers must be capable of opening the full width of the trailer. (**major**)
6. Loading and unloading ramps must have a non-slip surface and be maintained in proper working condition to prevent slips and falls. (**major**)

7. Transport vehicles more than 18 feet and less than 40 feet in length must have a minimum of one partition gate providing two compartments; transport vehicles 40 feet or longer must have at least two partition gates to provide a minimum of three compartments. **(major)**
8. All partitions and panels inside of trailers must be free of sharp edges or holes that could cause injury to WH&Bs. **(major)**
9. The inner lining of all trailers must be strong enough to withstand failure by kicking that would lead to injuries. **(major)**
10. Partition gates in transport vehicles should be used to distribute the load into compartments during travel. (minor)
11. Surfaces and floors of trailers must be cleaned of dirt, manure and other organic matter prior to the beginning of a gather. **(major)**

### **C. Care of WH&Bs during Transport Procedures**

1. WH&Bs that are loaded and transported from the temporary holding facility to the BLM preparation facility must be fit to endure travel. **(major)**
  - a. WH&Bs that are non-ambulatory, blind in both eyes, or severely injured must not be loaded and shipped unless it is to receive immediate veterinary care or euthanasia. **(major)**
  - b. WH&Bs that are weak or debilitated must not be transported without approval of the Lead COR/COR/PI in consultation with the on-site veterinarian. Appropriate actions for their care during transport must be taken according to direction of the Lead COR/COR/PI. **(major)**
2. WH&Bs should be sorted prior to transport to ensure compatibility and minimize aggressive behavior that may cause injury. (minor)
3. Trailers must be loaded using the minimum space allowance in all compartments as follows: **(major)**
  - a. 12 square feet per adult horse.
  - b. 6.0 square feet per dependent horse foal.
  - c. 8.0 square feet per adult burro.
  - d. 4.0 square feet per dependent burro foal.

4. The Lead COR/COR/PI in consultation with the receiving Facility Manager must document any WH&B that is recumbent or dead upon arrival at the destination.  
(major)
  - a. Non-ambulatory or recumbent WH&Bs must be evaluated on the trailer and either euthanized or removed from the trailers using a sled, slide board or slip sheet.  
(major)
5. Saddle horses must not be transported in the same compartment with WH&Bs.  
(major)

## **VI. EUTHANASIA OR DEATH**

### **A. Euthanasia Procedure during Gather Operations**

1. An authorized, properly trained, and experienced person as well as a firearm appropriate for the circumstances must be available at all times during gather operations. When the travel time between the trap site and temporary holding facility exceeds one hour or if radio or cellular communication is not reliable, provisions for euthanasia must be in place at both the trap site and temporary holding facility during the gather operation. (major)
2. Euthanasia must be performed according to American Veterinary Medical Association euthanasia guidelines (2013) using methods of gunshot or injection of an approved euthanasia agent. (major)
3. The decision to euthanize and method of euthanasia must be directed by the Authorized Officer or their Authorized Representative(s) that include but are not limited to the Lead COR/COR/PI who must be on site and may consult with the on-site/on-call veterinarian. (major)
4. Photos needed to document an animal's condition should be taken prior to the animal being euthanized. No photos of animals that have been euthanized should be taken. An exception is when a veterinarian or the Lead COR/COR/PI may want to document certain findings discovered during a postmortem examination or necropsy. (minor)
5. Any WH&B that dies or is euthanized must be documented by the Lead COR/COR/PI including time of day, circumstances, euthanasia method, location, a

- description of the age, gender, and color of the animal and the reason the animal was euthanized. (**major**)
6. The on-site/on-call veterinarian should review the history and conduct a postmortem physical examination of any WH&B that dies or is euthanized during the gather operation. A necropsy should be performed whenever feasible if the cause of death is unknown. (minor)

## **B. Carcass Disposal**

1. The Lead COR/COR/PI must ensure that appropriate equipment is available for the timely disposal of carcasses when necessary on the range, at the trap site, and temporary holding facility. (**major**)
2. Disposal of carcasses must be in accordance with state and local laws. (**major**)
3. WH&Bs euthanized with a barbiturate euthanasia agent must be buried or otherwise disposed of properly. (**major**)
4. Carcasses left on the range should not be placed in washes or riparian areas where future runoff may carry debris into ponds or waterways. Trenches or holes for buried animals should be dug so the bottom of the hole is at least 6 feet above the water table and 4-6 feet of level earth covers the top of the carcass with additional dirt mounded on top where possible. (minor)

**CAWP**  
**REQUIRED DOCUMENTATION AND RESPONSIBILITIES OF LEAD**  
**COR/COR/PI**

**Required Documentation**

<b>Section</b>	<b>Documentation</b>
II.B.5	Helicopter contact with any WH&B.
II.C.2	Roping of any WH&B.
III.B.3.a and	Reason for allowing longer than four hours to reunite foals with mares/jennies. Does not apply if foals are being weaned.
III.B.4.b	
III.C.1	Health status of all saddle and pilot horses.
IV.C.2.h	All uses of electric prod.
V.C.4	Any WH&B that is recumbent or dead upon arrival at destination following transport.
VI.A.5	Any WH&B that dies or is euthanized during gather operation.

**Responsibilities**

<b>Section</b>	<b>Responsibility</b>
I.A.10	Approve materials used in construction of finger gates in bait trapping
II.A.1	Direct gather procedures using approved gather technique.
II.B. 2	Determine rate of movement and distance limitations for WH&B helicopter gather.
II.B.2.a	Direct appropriate gather/handling methods for weak or debilitated WH&B.
II.B.3	Determine whether to abandon pursuit or use other capture method in order to avoid repeated pursuit of WH&B.
II.B.4	Determine width and need for visibility marking when using opening in fence en route to trap.
II.B.6	Determine number of attempts that can be made to capture the missing half of a mare/foal pair that has become separated.
II.B.7	Determine whether to proceed with gather when ambient temperature is outside the range of 10°F to 95°F for horses or 10°F to 100°F for burros.
II.C.1	Approve roping of any WH&B.
II.D.1.a	Determine period of time that water outside a bait trap is inaccessible such that wellbeing of WH&Bs, wildlife, or livestock is not adversely affected.
III.A.2	Direct and consult with on-site/on-call veterinarian on any matters related to WH&B health, handling, welfare and euthanasia.

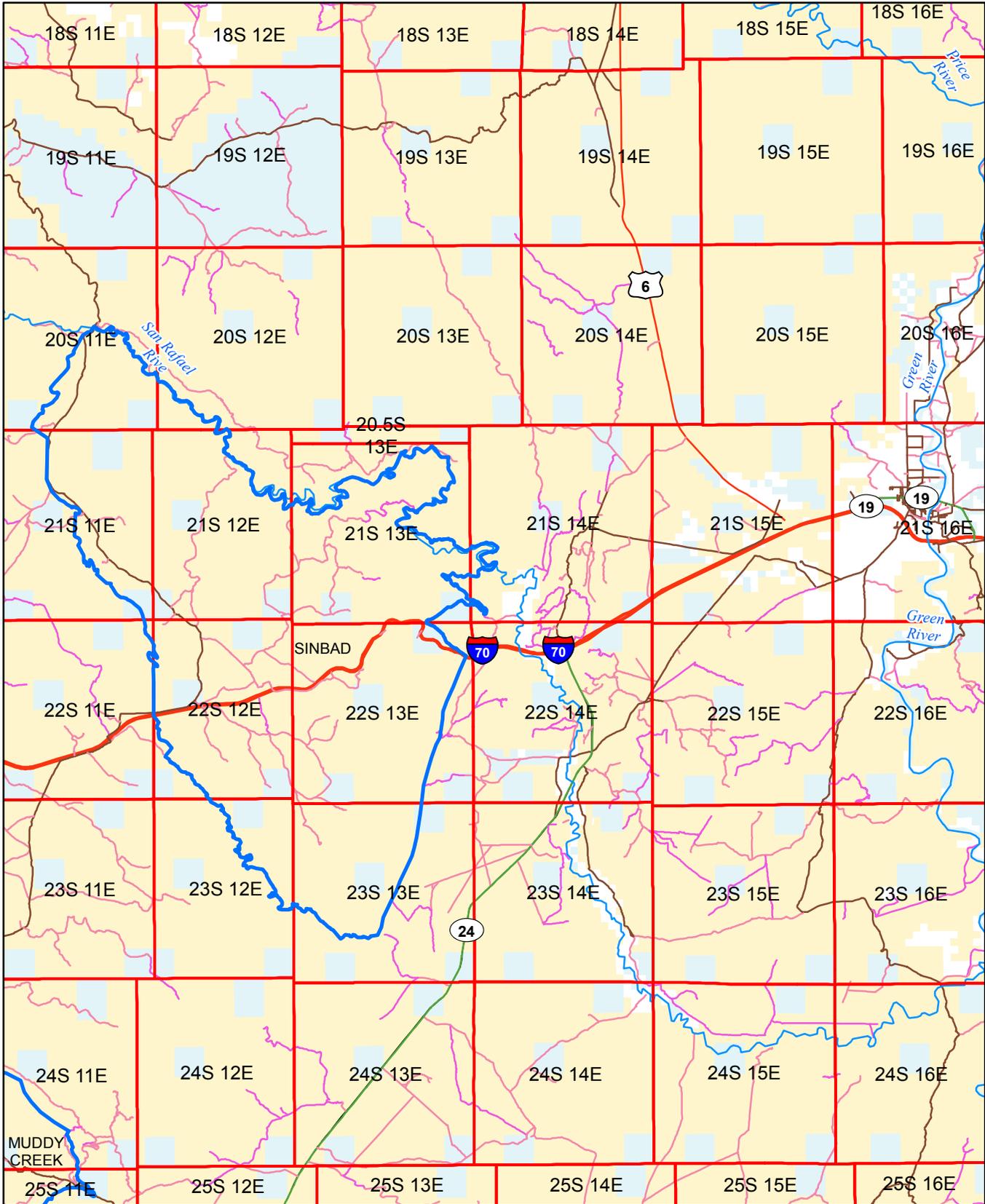
- III.B.1.e Adjust feed/water as necessary, in consultation with onsite/on call veterinarian, to provide for needs of animals when water or feed deprivation conditions exist on range.
- III.B.4.c Determine provision of water and hay to non-ambulatory animals.
- IV.C.2.g Approve use of electric prod more than three times, for exceptional cases only.
- V.A.1 Approve sorting, loading, or unloading at night with use of supplemental light.
- V.A.2.a Approve shipping delays of greater than 48 hours from temporary holding facility to BLM facility.
- V.C.1.b Approve of transport and care during transport for weak or debilitated WH&B.
- VI.A.3 Direct decision regarding euthanasia and method of euthanasia for any WH&B; may consult with on-site/on-call veterinarian.
- VI.B.1 Ensure that appropriate equipment is available for carcass disposal.



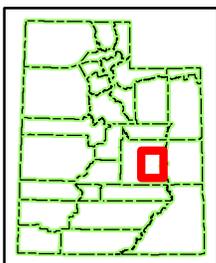
# Sinbad HMA General Location

December 01, 2015

BLM



PRICE FIELD OFFICE



Legend	
	whma boundary
<b>Land Status</b>	
	Bureau of Land Management (BLM)
	Private
	State
	US Forest Service (USFS)
<b>Road</b>	
	Class 2 Secondary Route
	Class 3 Primary Road
	Class 4 Secondary Road
	Class 5 Unimproved Road

Map 1



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