United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Green River District, Price Field Office
125 South 600 West
Price, UT 84501
http://www.blm.gov/ut/st/en/fo/price.html

IN REPLY REFER TO:
4710.3/4710.4/ 4720 (UT-652B)

DECISION RECORD (DR)
Sinbad Herd Management Area
Wild Burro Gather and Removal and Research Plan (2016)
DOI-BLM-UT-G020-2015-050-EA

INTRODUCTION

The Sinbad Herd Management Area is approximately 99,241 acres of Federal and State lands located 30 miles west of Green River, Utah (Map 1). The wild burros primarily use the open benches and parks with some use of the wooded breaks and canyon areas in the winter.

The Bureau of Land Management (BLM) Price Field Office (PFO) has proposed the Sinbad Wild Burro Gather and Removal and Research Plan to gather and remove excess wild burros from within and outside the Sinbad Herd Management Area (HMA). In addition, conduct research that would include: 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. As well as development of a hybrid double observer sightability model, utilizing two aerial infrared surveys that use distance sampling, tracking radio collars fitted on 30 burros released back to the HMA and up to six helicopter based inventory flights.

BLM has prepared an Environmental Assessment (EA) to analyze the environmental impacts associated with the proposed capture, removal and research measures. Refer to **DOI-BLM-UT-G020-2015-050-EA.**

ALTERNATIVES INCLUDING THE PROPOSED ACTION

The PFO Interdisciplinary Team analyzed two alternative actions:

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.

No other alternatives were determined to be reasonable in meeting the purpose and need as stated in Chapter 1 of the EA (DOI-BLM-UT-G020-2015-050-EA). See Chapter 2 of the EA for alternatives eliminated from further analysis.

The Proposed Action

The current population of wild burros within the Sinbad HMA is estimated at 220 head. This number is based on an aerial population inventory conducted June 6, 2014 using the double observer method.

Approximately 130 excess wild burros will need to be removed before June 1, 2016 to achieve the gather objectives within the HMA. Based on past gather success in the Sinbad HMA area, only 60-70% of the population can be gathered in a single year, which would be between 130 and 150 head. This will allow for follow up monitoring and regular population inventories to be conducted twice annually over the next 4-5 years during development of a hybrid double observer sightability model, as well as continuous monitoring of individuals and data collection on the population that can be used for future planning efforts within the Sinbad HMA and bureau wide.

The Proposed Action includes utilizing the Comprehensive Animal Welfare Program (CAWP) and Design Features (contained in DOI-BLM- UT-G020-2015-050-EA). These measures are incorporated into the project plan design. The Design Features include:

- Multiple capture sites (traps) may be used to capture wild burros from the HMA.
- Whenever possible, capture sites will be located in previously disturbed areas. Generally, these activity sites will be small (less than one half acre) in size.
- No new roads will be constructed.
- No trap sites will be located on areas where threatened, endangered, and special status species occur without clearance.
- All capture and handling activities will be conducted in accordance with the most current policies and procedures of the BLM.
- During capture operations, safety precautions will be taken to protect all personnel, animals, and property involved in the process from injury or damage.
- Only authorized personnel will be allowed on site during the removal operation.
- No hazardous material will 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.

In addition, the PFO personnel will collect and maintain data. A population inventory will be conducted twice annually for the next five years on the HMA as part of the Sentinel Demography work being completed. Vegetation monitoring studies (rangeland health, trend and utilization) will continue to be conducted in conjunction with livestock, wildlife and wild burro use.

The No Action

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.

PUBLIC INVOLVEMENT

Public Involvement was initiated on this Proposed Action on September 9, 2015 by posting on the BLM ePlanning web page.

A Draft Environmental Assessment (EA) for the Sinbad Wild Burro Gather and Removal and Research Plan DOI-BLM-UT-G020-2015-050-EA was made available to the public at the Price Field Office and on-line at http://www.ut.blm.gov/st/en/prog/wild_horse_and_burro.html or on the e-Planning web page at https://eplanning.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do; for a 30-day review/comment period beginning on December 11, 2015 and ending January 11, 2016. Written comments were received from 3 individuals by mail or fax. Comments were received from the State of Utah and Emery County. E-mail comments and form letters were received from approximately 5,080 individuals. Approximately 5,046 of these letters were in a form letter format. The comments that were received after January 11, 2016 were not accepted. Many of these comments contained overlapping issues/concerns which were consolidated into 160 comments and 21 distinct topics.

Refer to Appendix D of Sinbad Wild Burro Gather and Removal and Research Plan EA for a detailed summary of the comments received and how BLM used these comments in preparing the EA. The final Sinbad Wild Burro Gather and Removal and Research Plan DOI-BLM-UT-G020-2015-050-EA are available on the BLM's web site at http://www.ut.blm.gov/ or by contacting the Price Field Office.

The Utah State Office initiated public involvement at a public hearing about the use of helicopters and motorized vehicles to capture and transport wild horses (or burros) on December 8, 2015 in Price, Utah. This meeting was advertised in papers and radio stations statewide. The meeting was attended by 5 members of the public who submitted their comments at the meeting. In addition, the Utah State Office received approximately 10 comments by e-mail on the "Use of Motorized Vehicles for WHB". All the comments submitted from the public were considered during the development of this document. The BLM reviewed the CAWP in response to the views and issues expressed at the hearing and determined that no changes to the CAWP were warranted. The majority of the comments received were directed more toward the policies and regulations that are used to manage wild horses and burros. The comments were shared with the National Program Office for Wild Horse and Burros.

DECISION

After reviewing all the facts and considering public comments on the EA, it is my decision to implement the Proposed Action (Alternative 1) as described in the Final Environmental Assessment for the Sinbad Wild Burro Gather and Removal and Research (**DOI-BLM- UT-G020-2015-050-EA**).

This decision is effective immediately pursuant to 43 CFR 4770.3(c).

RATIONALE

As determined by an interdisciplinary team analysis (contained in DOI-BLM- UT-G020-2015-050-EA), excess wild burros are present within the Sinbad HMA and need to be removed to restore a thriving natural ecological balance. The current estimated population of 220 wild burros is 272% of the AML established through prior BLM decisions. In addition, analysis of ongoing monitoring data indicates that wild burros are degrading rangeland health through heavy and severe utilization levels, in localized areas. The perennial key forage species have exhibited minimal growth in 2015 and perennial grasses did not grow in some locations. Heavy utilization levels by wild burros due to an overpopulation of wild burros in excess of AML have further compounded the issue.

In addition to degradation of the rangeland and lack of forage, the wild burros are also competing heavily with native wildlife including big horn sheep, and pronghorn, which also depend on these areas for forage and water. The current population of wild burros is in excess of established AML that is authorized within the HMA. In order to allow for drought recovery and upward trends in rangeland health, protect wildlife habitat, ensure long term health and success of wild burros and prevent widespread starvation and death of individual animals due to lack of forage during future seasons, gathers must be conducted to remove

excess wild burros.

The gather is needed to not only remove excess wild burros, but also to implement population studies to gain additional information on burro movement patterns, range use, habitat selection, survival, fertility, fecundity and recruitment rates. As well as development of a Hybrid Double Observer Sightability Model. The gather is necessary to remove excess wild burros and to bring the wild burro population to near the established AML range in order to achieve and maintain a thriving natural ecological balance between wild burros and other multiple uses as required under Section 1333(a) of the 1971 Wild Free Roaming Horse and Burro Act (WFRHBA) and Section 302(b) of the Federal Land Policy and Management Act of 1976.

The BLM is required to manage multiple uses to avoid degradation of public rangelands, and the removal of excess wild burros is necessary to protect rangeland resources from deterioration or impacts associated with the current overpopulation of wild burros within the Sinbad HMA. This action will help reduce the population size to near the AML of 50-70 head, gain additional information on burro movement patterns, range use, habitat selection, and survival, fertility, fecundity and recruitment rates. As well as development of a Hybrid Double Observer Sightability Model.

The Proposed Action is in conformance with the BLM's *Price Resource Management Plan (RMP)* approved October, 2008. As discussed, the alternative will remove approximately 130 burros, as well as release approximately 30 head back to the HMA carrying radio and GPS collars to be monitored along with other identified individuals to assist the BLM in development of a hybrid double observer sightability model, utilizing infrared surveys as well as up to 6 helicopter based inventory flights. 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, habitat selection, and social behavior studies.

Leaving excess wild burros on the range under the No Action Alternative would not comply with the WFRHBA or applicable regulations and Bureau policy, nor will it comply with the Price Resource Management Plan (RMP) approved October, 2008. The No Action Alternative will allow continued deterioration of rangeland resources, including vegetative, soil and riparian resources, and could potentially result in the irreversible loss of native vegetative communities. Wild burros will continue to relocate in increasing numbers to areas outside the HMA boundaries due to competition for limited water, forage and space within the HMA, adversely impacting public land resources not designated for wild burro management. The No Action Alternative also increases the likelihood of emergency conditions occurring, which is expected to lead to the death or suffering of individual animals or to an emergency gather in order to prevent suffering or death due to insufficient forage or water.

In summary, implementation of this decision will:

- Remove approximately 130 burros, bringing the Sinbad HMA near AML.
- Return 30 Jennies carrying Radio and GPS collars along with enough jacks to maintain a 50/50 sex ratio on the HMA.
- Assist in the development of a Hybrid Double Observer Sightability Model, utilizing the returned burros, two aerial infrared utilizing distances sampling, as well as up to six helicopter based inventory flights.
- Collection of 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, habitat selection; and social behavior studies.
- Promote the improvement of wild burro habitat within the Sinbad HMA by allowing rangeland health to improve by avoiding negative impacts to rangeland resources from an overpopulation of wild burros. This will ensure that significant progress towards maintaining the Standards for

Rangeland Health occurs and also ensure healthy populations of wild burros are maintained in a thriving ecological balance for generations.

AUTHORITY

The authority for this Decision is contained in Section 1333(a) of the 1971 Free-Roaming Wild Horse and Burro Act, Section 302(b) of the Federal Land Policy and Management Act (FLPMA) of 1976, and Code of Federal Regulations (CFR) at 43 CFR §4700.

APPEAL PROCEDURES

This decision may be appealed to the Interior Board of Land Appeals, Office of Hearings and Appeals, in accordance with provisions found at 43 CFR Part 4.

If you wish to appeal this decision, it may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with 43 CFR part 4. If you appeal, your appeal must **also** be filed with the Bureau of Land Management at the following address:

Ahmed Mohsen
Field Manager
BLM-Price Field Office
125 S. 600 W.
Price, Utah 84501

Your appeal must be filed within thirty (30) days from receipt or issuance of this decision. The appellant has the burden of showing that the decision appealed from is in error. If you wish to file a petition pursuant to regulation 43 CFR 4.21 (58 FR 4942, January 19, 1993) for a stay (suspension) of the decision during the time that your appeal is being reviewed by the Board, the petition for stay must accompany your notice of appeal. Copies of the notice of appeal and petition for a stay must also be submitted to:

Interior Board of Land Appeals
Office of Hearing and Appeals
801 N. Quincy Street, Suite 300
Arlington, VA 22203

A copy must also be sent to the appropriate office of the Field Solicitor at the same time the original documents are filed with the above office:

Office of the Regional Solicitor
6201 Federal Building
125 South State Street
Salt Lake City, UT 84138-1180

If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. A petition for a stay is required to show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied.
2. The likelihood of the appellants success on the merits.
3. The likelihood of immediate and irreparable harm if the stay is not granted.
4. Whether the public interest favors granting the stay.

The Office of Hearings and Appeals regulations do not provide for electronic filing of appeals, therefore they will not be accepted.

Ahmed Mohsen
Field Manager
Price Field Office

2/9/2016
Date

Attachment
DOI-BLM-UT-G020-2015-050-EA
Finding of No Significant Impact (DOI-BLM-UT-G020-2015-050-EA)

United States Department of the Interior
Bureau of Land Management

Finding of No Significant Impact
Environmental Assessment
DOI-BLM-UTG020-2015-050-EA

February, 2016

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

Location: Sinbad Herd Management Area
T. 20 - 23 S., R. 11 - 13 E.,

Applicants: *Bureau of Land Management / 125 S. 600 W., Price, UT*

Price Field Office
125 South 600 West
Price, Utah 84501
Phone: 435-636-3600
Fax: 435-636-3657

BLM

FINDING OF NO SIGNIFICANT IMPACT
Environmental Assessment
DOI-BLM-UTG020-2015-050-EA

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

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that the proposal as outlined in Alternative 1, will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

Ahmed Mohsen, Field Manager
Price Field Office

2/9/16
Date

United States Department of the Interior
Bureau of Land Management

February 9, 2016

Environmental Assessment DOI-BLM-UTG020-2015-050

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

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

Sinbad Wild Burro Gather and Research Plan (2016)
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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). Burros (ie Donkeys) have been shown to have a territorial social system. Group composition and size, dominance relationships, and access to breeding vary considerably among populations (McDonnell, 1998). 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 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 inventory 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 near 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)[1]. 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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[1] 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. AI., 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 was made available for a 30 day public comment period from December 11th until January 11th by posting in the public rooms in the Price Field Office and Utah State BLM Office. The Notice described the Proposed Action and solicited public input *(see Appendix C)*.

As required by regulation [43 CFR 4740.1(b)], a public hearing was held in Price, Utah on December 8, 2015 and discussed the use of helicopters and motorized vehicles in the management of Utah BLM's wild horses and burros. This meeting was advertised in papers and radio stations statewide. This specific gather was discussed 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 or in Appendix D .

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.

TABLE 1. Estimated population, capture and removal numbers.

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

**The estimated population is based on an aerial population inventory completed in June of 2014. A double observer method was used. A total of 160 burros in 23 bands were identified during the inventory. The flight path that was followed was uploaded into Ag-nav, which also recorded the actual flight path. A population increase of 8% was added for the foaling crop of 2014 and 2015. Based on the National Academy of Science (NAS) report released in 2013 the estimated population could be 20%-30% lower than the actual population.*

The management emphasis would be to maintain wild burros near AML through capture and removal operations, collect information on herd characteristics, conduct research, determine herd health, reestablish historic population parameters and maintain a thriving ecological balance with the other resources within the HMA. The information gained from these actions would then be used in future management of wild burros within the PFO and BLM. No WinEquus modeling is required as per Instruction Memorandum No. 2010-135 "the model is not designed for use on burro."

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, 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.

- 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.

Design Features to Minimize Impacts

- Multiple capture sites (traps) may be used to capture wild burros from the HMA.
- Whenever possible, capture sites will be located in previously disturbed areas. Generally, these activity sites will be small (less than one half acre) in size.
- No new roads will be constructed.
- No trap sites will be located on areas where threatened, endangered, and special status species occur without clearance.

- All capture and handling activities will be conducted in accordance with the most current policies and procedures of the BLM.
- Comprehensive Animal Welfare Program for the Wild Horse and Burro Gathers will be followed.
- During capture operations, safety precautions will be taken to protect all personnel, animals, and property involved in the process from injury or damage.
- Only authorized personnel will be allowed on site during the removal operation.
- The proper administering agency(s) will be contacted and authorization obtained prior to setting up traps on any lands which are not administered by BLM.
- Wherever possible, traps will be constructed in such a manner as to not block vehicular access on existing roads.
- Traps will be constructed so that no riparian vegetation in contained within them. No vehicles will be operated on riparian vegetation or on saturated soils associated with riparian/wetland areas.
- The helicopter will avoid eagles and other raptors, and will not be flown repeatedly over any identified active raptor nests.
- No unnecessary flying will occur over big game on their winter ranges or active fawning grounds during the period of use.
- 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.
- Weed free hay will be used in trap sites and temporary holding facilities located on BLM-administered lands.

Additional design features are described in Appendix E. Standards from the Comprehensive Animal Welfare Program for wild horse and burro gathers are contained in Appendix B.

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 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.

ALTERNATIVE -5: Remove or Reduce Livestock within the HMA
This alternative would involve no removal of wild burros and instead address the excess wild burro numbers through the removal or reduction of livestock within the HMA. This alternative was not brought forward for detailed analysis because it is outside of the scope of the proposed action, is inconsistent with the Price RMP and the Wild Horse and Burro Act, which directs the Secretary to immediately remove excess wild burros, and is inconsistent with multiple use management. Livestock grazing can only be reduced following the process outlined in the regulations found at 43 CFR Part 4100. Several reductions and changes have been made to livestock grazing within allotments associated with the Sinbad HMA through this process. The elimination of livestock grazing in an area would require an amendment to the Price RMP. Such changes to livestock grazing cannot be made through a wild burro gather decision.

Livestock permit renewals were completed from 2002 – 2008 on the majority of the allotments within the Sinbad HMA. The permit renewal on the Mexican Bend allotment has not been completed. Each of these renewals had environmental assessments and decision records completed. These decisions established stocking rates for livestock, established seasons of use, areas of use, kind and class of livestock and management actions to improve livestock

distribution. These management actions included the establishment of grazing systems, allowable use levels, salting and herding practices. Livestock grazing continues to be evaluated for allotments and use areas within the Sinbad HMA. Monitoring and evaluation of livestock grazing is in accordance with the Price RMP.

Rangeland studies and monitoring programs will be continued and/or initiated to determine if rangeland management objectives are being achieved and if proposed grazing use levels must be adjusted. This monitoring program will continue on all allotments. Particular attention will be given those areas where there is high resource conflict or there is the possibility of rapid improvement or deterioration of the rangeland resources. The concentration of rangeland monitoring will be on those allotments in the "I" category.

The monitoring program will evaluate changes in range condition and trend which includes determination of plant vigor, plant character, plant density, plant phenology, ground cover and degree of forage utilization on key species. Four primary studies will be used in this evaluation: (1) actual grazing use, (2) forage utilization, (3) range trend, and (4) climate analysis. In addition, data on wildlife habitat, riparian vegetation, and watershed condition will be collected and used as needed. When results of studies are evaluated and it is determined that the objectives are not being achieved on a specific allotment, modifications could include changes in grazing systems, livestock numbers, season of use, additional rangeland developments, or any combination of these alternatives.

The BLM is currently authorized to remove livestock from the HMA, "if necessary to provide habitat for wild horses or burros, to implement herd management actions, or to protect wild horses or burros from disease, harassment or injury" under CFR 4710.5. This authority is usually applied in cases of emergency and not for general management of wild horses or burros in a manner that would be inconsistent with the land-use plan and the separate decisions establishing the appropriate levels of livestock grazing and wild horse use, respectively. Available data also indicates that wild horse use – including where livestock use has been excluded – has resulted in excessive vegetative utilization and impacts to rangelands that are recovering from wildfire or where fuels reduction treatments have been completed.

ALTERNATIVE -6: Bait or Water Trap Only

An alternative considered but eliminated from detailed analysis was use of bait and/or water trapping as the primary gathering method. The use of bait and water trapping, though effective in specific areas and circumstances, would not be timely, cost-effective or practical as the primary gather method for this HMA due to the size of the area and the remoteness of many of the water sources. However, water or bait trapping may be used to achieve the desired goals of Alternative 1 if gather efficiencies are too low using a helicopter, a helicopter gather cannot be scheduled or to help maintain AML once achieved. This alternative was dismissed from detailed study as a primary gather method for the following reasons: (1) the project area is too large to effectively use this gather method; (2) road access for vehicles to potential trapping locations necessary to get equipment in/out as well as to safely transport gathered wild burros is limited; and (3) the presence of scattered water sources on both state and public lands inside and outside the HMA would make it almost impossible to restrict wild burro access to the extent necessary to effectively gather and remove the excess animals through bait and/or water trapping to achieve management goals.

ALTERNATIVE -7: Wild Burro Numbers Controlled by Natural Means

This alternative was eliminated from further consideration because it is contrary to the

WFRHBA which requires the BLM to prevent the range from deterioration associated with an overpopulation of wild burros. It is also inconsistent with the Price RMP, which directs that Price Field Office BLM conduct gathers as necessary to achieve and maintain the AML. The 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 documented foal survival rates exceeding 95% and they are not a self-regulating species. 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 blizzards or extreme drought-- caused catastrophic mortality of wild burros.

ALTERNATIVE -8: Use Alternative Capture Techniques Instead of Helicopters to Capture Excess Wild Burros

An alternative using capture methods other than helicopters and bait/water trapping was suggested by the public. As no specific alternative methods were suggested, the BLM identified chemical immobilization, net gunning, and wrangler/horseback drive trapping as potential methods for gathering burros. Net gunning techniques normally used to capture big game also rely on helicopters. Chemical immobilization is a very specialized technique and strictly regulated. Currently, the BLM does not have sufficient expertise to implement either of these methods and they would be impractical to use given the size of the Sinbad HMA, access limitations and approachability of the burros.

Use of wrangler on horseback drive-trapping to remove excess wild burros can be fairly effective on a small scale, but due to the number of excess burros to be removed, the large geographic size of the Sinbad HMA, access limitations and approachability of the burros this technique would be ineffective and impractical. Horseback drive-trapping is also very labor intensive and can be very harmful to the domestic horses and the wranglers used to herd the wild burros. For these reasons, this alternative was eliminated from further consideration.

ALTERNATIVE -9: Gather the HMA to the AML Lower Limit

A post-gather population size at the lower level of the AML range would result in the remaining population being so few as to be able to collar enough Jennies to accomplish the objectives of the study protocols. This would be unacceptable for several reasons.

To be able to collar 30 Jennies and retain the 50/50 sex ratio on the HMA the BLM would have to capture 100% of the burros on the HMA. As discussed in Alternative 4: Complete Gather of all Wild Burros, this is not feasible. Not to mention that once the burros have been gathered the BLM would return 30 Jennies and 30 Jacks to retain the 50/50 ratio which would automatically push the population to mid AML.

This alternative would also not allow for an adequate sample size for the hybrid double observer sightability inventory method that is being developed as well as the demography studies that are proposed.

2.3 Summary

The alternatives being addressed in this document cover a reasonable range of alternatives for meeting the purpose and need. No other alternatives have been developed by the public or the Price Field Office staff at this time.

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

3.3.1 Livestock Grazing

The Sinbad Herd Area (HA) lies within the Big Pond, Black Dragon, Box Flat, Iron Wash, Mexican Bend and North Sinbad Allotments (Map 2). The Box Flat grazing allotment occurs outside of the Sinbad Herd Management Area (HMA). Burros cannot access the Box Flat Allotment due to a 2,000 ft vertical cliff that is impassable. Due to the lack of burros occurring within the Box Flat allotment it is not carried forward in further analysis. The Iron Wash allotment occurs within the boundary of the HA and HMA. The only reason the HMA is within the Iron Wash allotment is due to a mapping discrepancy, where the allotment boundary is on the west side of the San Rafael Reef and the HMA boundary is on the east side of the reef. The burros occasionally move into the portion of the HA within the Iron Wash allotment when burro

numbers are in excess of established AML. These burros have been known to move back and forth through the reef in several locations.

The Big Pond, Black Dragon, Iron Wash, 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.

TABLE 2. Grazing allotment numbers, season of use, and AUMs

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	
Iron Wash (35031) North Pasture	232	Cattle	11/1	4/15	1,266
Mexican Bend (35045)	151	Cattle	11/12	05/25	980
North Sinbad (35056)	505	Cattle	11/01	05/10	3,189
TOTAL	**2,386**				**10,899**

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 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 Iron Wash portion of the HMA was completed in 2006; using the Multi-response Block Procedure, for data collected since 1984. The overall long term trend for the Iron Wash 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.

Frequency data for the Mexican Bend portion of the HMA has not been completed due to lack of data.

Rangeland Health Assessments were completed on 4 of the 5 grazing allotments within the HMA area from 2002 through 2008. The Mexican Bend allotment has not been assessed. Nested Frequency, utilization, Rangeland Health Assessments, actual use, climate, etc. were utilized to determine whether the Standards and Guidelines for Healthy Rangelands were being achieved. Without exception all of the allotments that occur within the Sinbad HMA were not meeting one Standard. All assessments determined that the Clean Water standard was not being met due to the San Rafael River being listed on Utah's 303(d) report to congress as exceeding water quality standards for Total Dissolved Solids (TDS). The other three standards for Upland Soils, Riparian Areas, and Native Species were determined to be meeting standards. Due to the Upland Soils and Riparian Areas meeting standards for Rangeland Health it indicates that they are not contributing to the high level of TDS in the San Rafael River. The final determination points to agricultural returns upstream from the allotments as the major contributor of TDS to the San Rafael River.

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.

3.3.3 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, see Map 2 for distribution. 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^{+} 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 20th 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.

The burros have been concentrated on the south side of the HMA for about 10 years now, with a few burros moving back and forth to the North side of the HMA. Typically the burros will move out into the ridgelines, canyons, and breaks of the HMA during the winter where they can utilize snow as their main water source. During the spring, summer and fall the burros will move back into the open parks and bowls. This is the period of time when the burros are readily seen from Interstate 70.

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. AI., 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. A public notice describing the Proposed Action and soliciting public input was released on 12/11/15.

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 *Native American Graves Protection and Repatriation Act, the American Indian Religious Freedom Act,* 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	Received no response from SITLA to Draft EA.
Emery County Commissioners	Consult with County.	Received comment letter on Draft EA
Rainbow Glass Ranch	Permittee within the Big Pond and Black Dragon Allotments.	Received no response to Draft EA
Clyde and Darlene Magnuson	Permittee within the Mexican Bend Allotment.	Received no response to Draft EA
Hugh and Sherrie Grange	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
Newel Lynn Nelson	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
Peter & Tiana McElprang	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
Clif R. & Breezie McElprang	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
William R. & Dixie Allred	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
Alan Jensen and Family	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
Lee McElprang	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
Nielson Ranches	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
Thomas R. McElprang	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
Lee or Leon McElprang	Permittee within the North Sinbad Allotment.	Received no response to Draft EA
Deniz Bolbol, American Wild Horse Preservation Campaign / Wild Horse Defenders	Consult with identified Interested Publics	Received comment letter on Draft EA
Neda Demayo, Return to Freedom	Consult with identified Interested Publics	Received no response to Draft EA
Mathew Dillon, Pryor Mountain Wild Mustang Center	Consult with identified Interested Publics	Received no response to Draft EA
Kathy Greg	Consult with identified Interested Publics	Received comment letter on Draft EA
D.J. Schubert, Animal Welfare Institute	Consult with identified Interested Publics	Received no response to Draft EA
Ginger Kathrens, Cloud Foundation	Consult with identified Interested Publics	During the comment period for the EA, requested to be added to the PFO list of interested public concerning WH&B management. Will receive a copy of all final documents for this project and future proposals.

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 Draft Environmental Assessment (EA) for the Sinbad Wild Burro Gather and Research Plan (2016) DOI-BLM-UTG020-2015-0050-EA was made available to the public at the Price Field Office and on-line at http;//www.blm.gov.ut/st/en/prog/wild_horse_and_burro.html or on the e-Planning web page at: https://eplanning.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do; for a 30-day review/comment period beginning on

December 11th, 2015 and Ending January 11th, 2016. The comments received during this period were summarized and addressed in Appendix D.

All comments received on the Draft Environmental Assessment (EA) for the Sinbad Wild Burro Gather and Research Plan DOI-BLM-UTG020-2015-005-EA during the 30 day comment period were reviewed and considered prior to finalizing this EA. Letters, faxes, and e-mails ere received both in support of and in opposition to the gather plans. Numerous form letters were also received. These are letters that are generated from a singular website from a non-governmental organization, such as an animal advocacy group. Comments identified in the form letters were considered along with the rest of the comments received, but as one collective comment letter. Form letters are not counted as separate comments due to their duplicative nature. However, where individuals added their own comments to the form, the personalized comments were considered as separately submitted comments.

Although the BLM's review of public comments did not indicate that substantive changes to the conclusions presented in the Draft EA were warranted, they did lead to changes throughout the document to better explain and clarify BLM's analysis in response to comments, which resulted in a more comprehensive and complete document.

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	Consult with USO for program conformance and coordination within State

	Specialist, Utah State Office (USO)	
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:

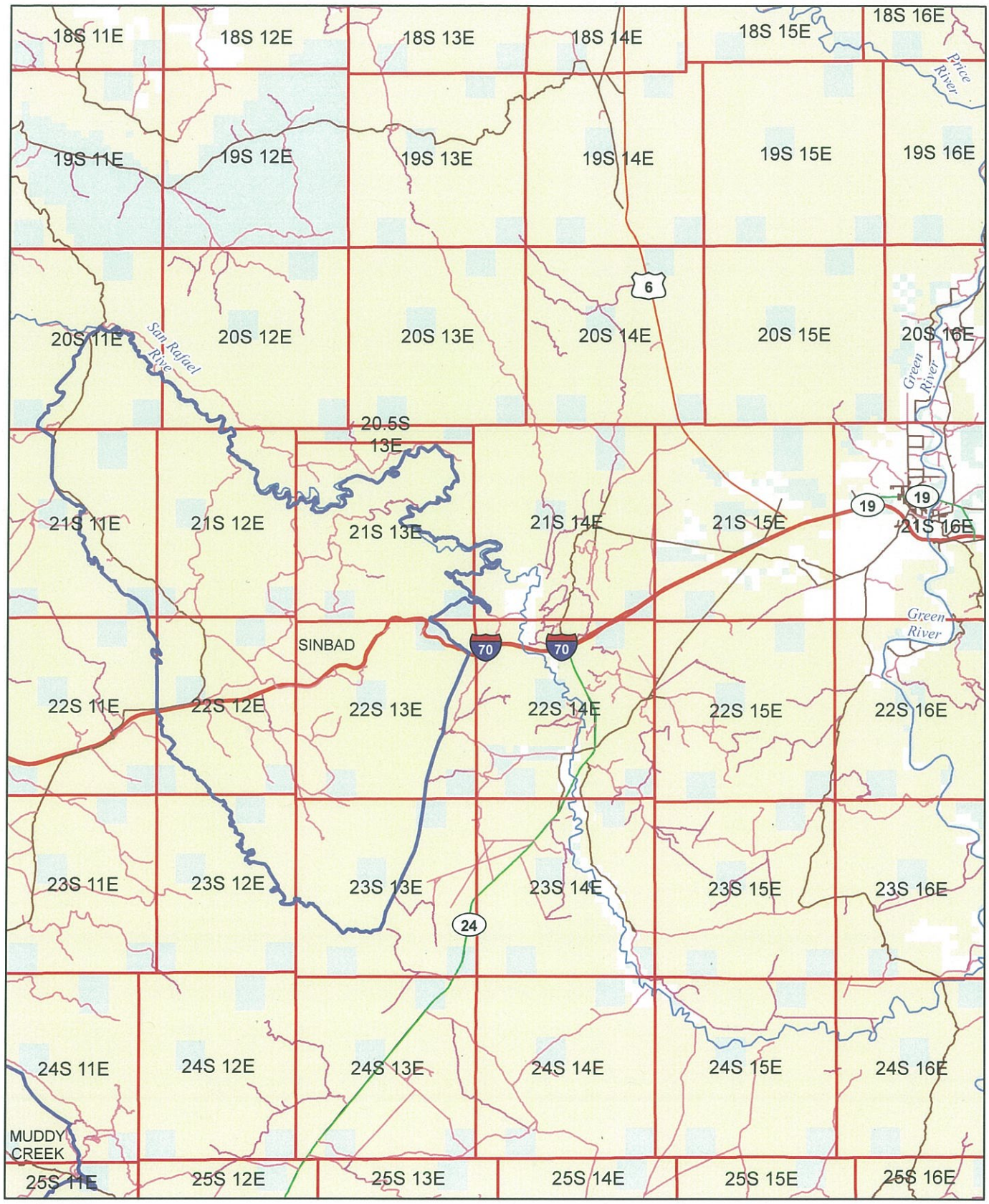
AML – Appropriate Management Level
AO – Authorized Officer
APHIS – Animal and Plant Health Inspection Service
AUM – Animal Unit Month
BLM – Bureau of Land Management
CFR – Code of Federal Regulations
DR – Decision Record
EA – Environmental Assessment
EIS – Environmental Impact Statement
Fis – Estimated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

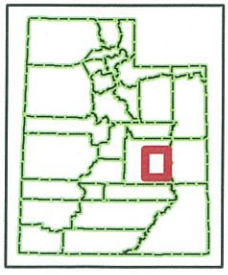
APPENDICES:

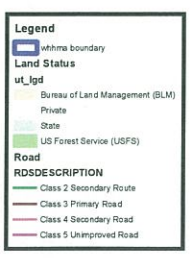
APPENDIX A: - Interdisciplinary Team Analysis Record Checklist
APPENDIX B: - Comprehensive Animal Welfare Program (Welfare Assessment Standards for Gathers)
APPENDIX C: - Public Notice describing the Proposed Action
APPENDIX D: - Public Comments and Responses
APPENDIX E: - Additional Design Features

Sinbad HMA General Location

December 01, 2015







Map 1

0 3 6 12 Miles

N W E S

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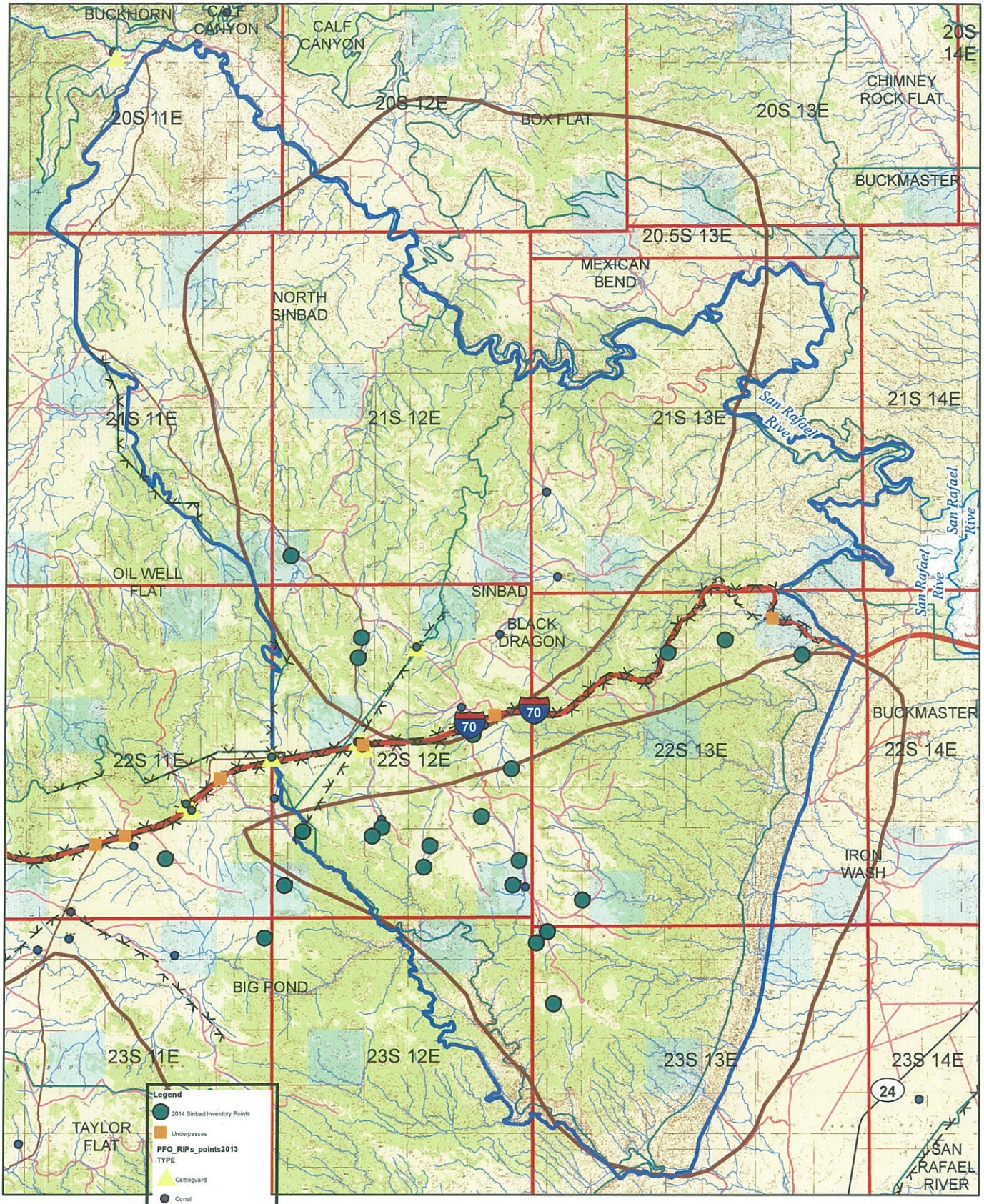
PRICE FIELD OFFICE

Sinbad HMA

February 05, 2016



Map 2

0 1.5 3 6 Miles

N W E S

BLM

PRICE FIELD OFFICE

- DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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INTERDISCIPLINARY TEAM CHECKLIST

Project Title: Sinbad Burro Gather

NEPA Log Number: \DOI-BLM-UTG020-2015-050

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
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
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 determined. Based on the nature of the action, GHG emissions are expected to be minimal.	Jeffrey Brower	5/18/15
NI	Environmental Justice	There are no minority or low income populations that would be adversely effected by implementation of the Proposed	Mike Tweddell	06/12/15

Determi-nation	Resource	Rationale for Determination*	Signature	Date
		Action.		
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 decrease the opportunity for transmission of disease. Therefore, providing 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
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.	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
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

Determi-nation	Resource	Rationale for Determination*	Signature	Date
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
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	Josh Winkler	06/15/15

Determi-nation	Resource	Rationale for Determination*	Signature	Date
		will be removed upon completion of the gather. This will have no impacts to VRM in the long term.		
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:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator		2/9/16	
Authorized Officer		2/9/16	

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

CONTENTS

Welfare Assessment Standards

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 10ºF or above 95ºF without approval of the Lead COR/COR/PI. Burro captures must not be conducted when ambient temperature is below 10ºF or above 100ºF without approval of the Lead COR/COR/PI. The Lead COR/COR/PI will not approve captures when the ambient temperature exceeds 105 ºF. (**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

Section	Documentation
II.B.5	Helicopter contact with any WH&B.
II.C.2	Roping of any WH&B.
III.B.3.a and III.B.4.b	Reason for allowing longer than four hours to reunite foals with mares/jennies. Does not apply if foals are being weaned.
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

Section	Responsibility
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.

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U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Bureau of Land Management Utah News

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For Immediate Release
December 11, 2015

Media Contact: Lisa Reid, (435)743-3128

BLM Seeks Public Comment on Environmental Analysis for Wild Burro Gather in Southeastern Utah

Price, Utah—The Bureau of Land Management (BLM) Price Field Office is seeking public comment on an Environmental Assessment (EA) analyzing proposed wild burro gather, removal and conduct research on burro behavior, ecology in coordination with the USGS.

The Sinbad HMA is approximately 99,241 acres of Federal and State lands located 30 miles west of Green River, Utah. 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.

The EA analyzes a proposal to gather and remove excess wild burros and conduct non-invasive research for a period of five years. The EA, including maps, is available on line at: http://www.blm.gov/ut/st/en/prog/wild_horse_and_burro.html or on the e-Planning web page at: https://eplanning.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do; search for project name "Sinbad."

Written comments will be accepted by letter or email until January 11, 2016. Please note that the most useful comments are those that contain new technical or scientific information relevant to the proposed action. Comments should be as specific as possible. Comments which contain only opinions or preferences will not receive a formal response but may be considered in the BLM decision-making process. Please reference "Sinbad Wild Burro Gather EA" when submitting comments.

Written comments may be mailed or emailed using the following:

Mail
BLM Price Field Office
Attn: Price Field Office Manager
125 S. 600 W.
Price, UT 84501

Email
blm_ut_pr_mail@blm.gov

Before including an address, phone number, email address, or other personal identifying information in any comments, be aware that the entire comment—including personal identifying information—may be made publicly available at any time. Requests to withhold personal identifying information from public review can be submitted, but the BLM cannot guarantee that it will be able to do so. The BLM will not consider anonymous comments. All submissions from organizations and businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be available for public inspection in their entirety.

For additional EA-specific information, please contact Mike Tweddell at (435)636-3600. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to leave a message or question with the above individual. The FIRS is available 24 hours a day, seven days a week. Replies are provided during normal business hours.

The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. In Fiscal Year 2013, the BLM generated $4.7 billion in receipts from public lands.

-BLM-

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Appendix D. Comments and Responses

A preliminary environmental assessment was made available to interested individuals, agencies and groups for a 30 day public review and comment period that opened on December 11, 2015 and closed on January 11th 2016. Written comments were received from 3 individuals by mail or fax. Comments were received by the State of Utah and Emery County. E-mail comments and form letters were received from approximately 5,084 individuals. Approximately 5,046 of these letters were in a form letter format. Comments received after January 11, 2016 were not accepted. Many of these comments contained overlapping issues/concerns which were consolidated into 160 comments and 21 distinct topics. Below is a detailed summary of the comments received and how BLM used these comments in preparing the final environmental assessment. In addressing the comments the references are to the Draft EA unless otherwise specified. Any additions or modifications to comments are included in [brackets] for clarity.

No.	Commenter	Comment	BLM Response
A. Supporting			
1	The Cloud Foundation	We support your efforts to better understand burro behavior, ecology, migratory patterns, social interactions, rate of reproduction and foal survival. For over 10 years, TCF has encouraged BLM to put money into these kinds of valuable activities. Yet, BLM budgets have consistently short---changed "on the range management," instead focusing time and money on roundups, removal and warehousing, a pattern which has left an unprecedented number of wild horse and even burros in dirt corrals.	Comment Noted
2	Emery County Farm Bureau	I am writing in regards to the "Sinbad Wild Burro Gather Plan EA" specifically to encourage the BLM to remove excess "wild burros" from the Sinbad HMA, and to conduct research necessary to find an appropriate means of keeping the wild burro population within the AML, currently set at 60 animals. The most current population estimate of 220 animals (over 3.5 times the AML) is unsustainable and causing significant ecological damage to the public lands and economic harm to grazing permittees.	Comment Noted
3	Emery County Farm Bureau	I am also supportive of conducting research to better understand burro populations and to identify management methods that may help keep populations at a healthy level. Research on and an understanding of wild burros is	Comment Noted

		very limited, the opportunity to conduct research and gain improved understanding of burro behavior, reproduction, nutritional requirements and more will be helpful not only in managing the Sinbad herd but other herds across the western US. Livestock managers understand the importance of proper stocking rates on both animal and range health. The same holds true for burros. Research and better understanding of burro populations can help managers better manage and maintain appropriate stocking rates (population levels). This will improve range conditions which will not only benefit the health of the wild burros but other wildlife as well as domestic livestock.	
4	State of Utah	The State of Utah has reviewed the Sinbad Wild Burro Gather and Research Plan Environmental Assessment (EA), and supports BLM's proposed wild burro gather, removal, and research project in order to manage the wild burro populations inhabiting portions of Emery County, Utah. The gathering of wild burros in the Sinbad Management Area is essential for reducing burro numbers to the appropriate management level (AML).	Comment Noted
B. Funding			
5	P. Lanigan	As this is a USGS project and they have undoubtedly planned for all scenarios, the staffing of bait traps should be coming out of USGS budget not BLM. Their researchers are going to have to observe the wild burros daily, therefore, checking the traps daily shouldn't be an effort for a prescribed and pre-planned roundup.	This comment is outside the scope of this document.
6	AWHPC	The BLM understands the high economic costs associated with the proposal to removal burros from the range and keep them in short-/long-term government holding facilities. Indeed, the BLM has repeatedly emphasized that the agency practice of rounding up and warehousing wild horses and burros is not fiscally sus-	This comment is outside the scope of this document.

		tainable.	
7	AWHPC	It is imperative that the BLM establish high scientific standards before spending hundreds of thousands of tax-payer dollars on "research." The current "research" as outlined in the EA would not render meaningful data regarding wild burro behaviors for the reasons previously stated and would waste $150,000 of taxpayers' money.	The BLM has brought forward what we believe to be the most viable options for managing the Sinbad HMA, and the most responsible way to ensure the welfare of the wild burros and protection of habitat. The Wild Free Roaming Horses and Burros Act (WFRHBA) does not authorize a cost-based decision-making process if excess horses or burros are present. "Proper range management dictates removal of horses and burros before the herd size causes damage to the rangeland (118 IBLA 75)." With regard to public opposition of wild horse and burro gathers, comments received from the public are used as a means to improve management and ensure that issues have been identified and addressed. BLM has a responsibility per WFRHBA to remove excess wild horses and burros, ensuring the health of the wild horses, burros and the rangeland.
8	AWHPC form letter from individuals	It is imperative that the BLM establish high scientific standards before spending hundreds of thousands of tax-payer dollars on "research." The current "research" as outlined in the EA would not render meaningful data regarding wild burro behaviors for the reasons previously stated.	
9	C. Roe	The draft EA proposes a long-term scientific study of wild burros that would help fill the lack of scientific knowledge of their fertility, social behavior and other factors. Such a study is long overdue. However, it must be conducted in the natural environment of the Sinbad burro herd, as would be any valid wildlife study. Removing the burros prior to doing such a study would be not only damaging but a waste of taxpayer money. Maintaining burros in the wild costs less than $500 a year. Maintaining those removed in holding pens costs an estimated $20,000 a year. (Calculating the actual cost-benefit of removal/maintenance vs. natural habitat maintenance would enhance the BLM's assessment.) But more importantly, the study proposed in the draft EA would have little scientific or managerial value if it is not based on field research. Conducting the research after a removal would compromise the data, since neither the BLM nor the U.S. Geological Survey would be able to determine whether the test results and data collected represented natural behavior or the result of human disturbance and interference.	
C. Alternatives			

10	The Cloud Foundation	Absent in this Draft EA, we believe, is a nuanced range of management alternatives for the Sinbad Wild Burro Herd Management Area. Basically, you present only two alternatives: 1. Roundup, Removal and Research. 2. Do nothing. We believe this represents an inadequate range of options per the requirements of NEPA, which requires a true "range of alternatives." We suggest that other alternatives which include only non-invasive techniques: i.e. field observation, photographic catalogs, fecal analysis, etc.	Refer to Section 2.2, it shows alternatives that were reviewed and not carried through the document because they did not meet the needs or requirements of the proposal. Alternatives as suggested which include non-invasive techniques: i.e. field observation, photographic catalogs, fecal analysis, etc… would not require NEPA review to the depth of an EA as analyzed. It would require NEPA review through what is called a Categorical Exclusion and would not be required to be released for public review prior to implementation.
11	C. Roe	The two alternatives examined by the EA - removal then research or no action - must be expanded. Most critically, the agency needs in-depth field research to inventory and understand the wild burro population, social organization, ecology, and reproduction rates, as well as their range impact as compared to that of other animals in the Sinbad HMA. Such a study should implement the PZP immunocontraceptive for select jennets to identify ways to better manage the Sinbad herd population — and to provide additional baseline data on the effectiveness of this vaccine on wild burros. The NAS has recommended the use of the PZP vaccine as an alternative to roundups which, besides collateral damage, result in increased reproduction rates. A viable alternative should also include steps to reduce livestock grazing to prevent range deterioration and to ensure the protection of wild burros mandated by the Wild Free-Roaming Horses and Burros Act of 1971.	
D. Gather Methods			
12	Puller Lanigan	If you (USGS) are concerned about normal wild burro behavior, then bait trapping would be a far more humane method of quietly capturing family bands.	The WFRHBA mandates the gather and removal of wild horses and burros and specifically authorizes the use of helicopters in Section 9 of the Act. *–In administering this Act, the Secretary may use or contract for the use of helicopters or, for the purpose of transporting captured animals, motor vehicles. Such use shall be*
13	The Cloud Foundation	If capture is essential we advocate for use of bait trapping, which is much more humane than helicopter drive	

		trapping.	*undertaken only after a public hearing and under the direct supervision of the Secretary or of a duly authorized official or employee of the Department"* [emphasis added]. The Public Rangelands Improvement Act (PRIA) of 1978 (Pub. L 95-514, Sec 4, Oct. 25, 1978, 92 Stat. 1805.) also addresses this issue with the direction to *"continue the policy of protecting wild free-roaming horses and burros from capture, branding harassment, or death, while at the same time facilitating the removal and disposal of excess wild free-roaming horses and burros which pose a threat to themselves and their habitat and other rangeland values* [emphasis added]. The proposed action would allow the use of both bait trapping and or helicopter gather of burros. Dependent on time of year, and availability of resources, etc…
14	The Cloud Foundation	The method of capture for removal and collaring seems up in the air and is not clearly defined but we are guessing that for expediency, a helicopter company will be called in. We hope we are wrong and you will opt for the more benign use of bait or water trapping which will yield more accurate analysis of how the burros use the Sinbad HMA. This should be analyzed as an alternative: bait trapping vs helicopter drive trapping.	
15	The Cloud Foundation	Please analyze bait/water trapping vs. helicopter drive trapping. Driving burros into traps that are miles from where they are foraging is counterproductive to understanding their real behavior.	
16	The Cloud Foundation	If helicopter drive trapping is chosen, we advise using the more experienced of the available contractors.	This comment is beyond the scope of this document and is outside the hands of the decision maker.
17	C. Roe	The draft EA does not seriously analyze the adverse impacts of rounding up the Sinbad burros using helicopters or other motorized vehicles. Burros are not genetically constituted to run like horses or deer. Burro bands are territorial. In the face of danger, they will stand and assess the situation. Rather than stampede, they typically scatter when threatened by mechanized vehicles. The damage done to wild horses by helicopter "gathers" has been widely documented. This EA fails to analyze the potential trauma to burros by using this same methodology, beyond a cursory statement that, for example, it can cause "spontaneous abortions" by jennets, and that any harm from helicopter roundups would be "temporary." Videos from past burro roundups have shown contractors kicking the burros, possibly from frustration over their refusal to move. Additional harm that bears serious examination includes the death or maiming of burro foals from running to catch up with their families;	The proposed action, section 4.2.1.3 of the draft EA, the CAWP and Appendix E (found in the final EA), address your concerns. Handling of horses and burros has changed over the past and is always improving. Required training through the CAWP for contractors, hired hands, and BLM personnel is ongoing to ensure the safety of the animals, the contractors, BLM personnel and public.

		damage to burros by collision with motorized vehicles or entrapment in fences and corrals; damage from heightened aggression among burro jacks from confinement in holding pens; and the long-term impact of removing mature jennets and their acquired knowledge of survival skills and habitat venues, thereby weakening the viability of the remaining, now fragmented herd.	
E. Alternative Methods			
18	J. Lynch	It fails to propose alternative, less destructive, traumatic and unnecessarily expensive actions/methodologies that could be implemented.	Please review Chapter 2 of the EA, especially the alternatives no carried forward for analysis in the final EA.
19	K. Gregg	One obvious issue is that the study will be done on this Sinbad site-specific wild burro herd and therefore will not be adequate for decisions on all wild burro herds. Another issue is that the information hoped to be discovered in the proposed research study is already available to the BLM. Perhaps the Price field office is unaware that the BLM has a data base of all wild burros captured from all HMAs for past years. That data includes breakdowns of sex and age among other things. Therefore, using that already existing data, the BLM would not only provide foaling rates and survival of foals to yearling age but would supply approximate ages of all burros in all areas to which the BLM is the custodian to therefore supply a far more overall and accurate scientific database of wild burros than this proposed "research". Consequently this highly dangerous and inhumane collaring of wild burros is unnecessary.	There has been very little research on wild burros or domestic donkeys, or on their ancestor the African wild ass. Particularly no detailed research on burros has occurred within the last 10 years. This field research study on their behavior and ecology using observations and radio collars is therefore important to provide information that can inform future management. Due to the necessity of using radio telemetry and visually marking individuals with freeze marks it is not possible to conduct this research without any human interference. Once the marks have been applied, though, human interference will be at a minimum for the next four years, to avoid influencing their demography, habitat use, and behavior.
F. Use of Collars			
20	The Cloud Foundation	As presented, we do not the support the use of collars which will jeopardize the health and ability of the burros to conduct their lives in a normal way, thereby skewing the research. Will you be monitoring true burro behavior by observing collared females? Can the collars be remotely removed?	Past radio-collar studies on wild horses and burros did not have timed drop-off mechanisms, or remotely-triggered drop-off mechanisms. The radio collars in this study will have both types of mechanism on each collar. The timed drop-off mechanisms will drop off after a programmed time span has elapsed. The remotely-

		How will you know to trigger the collars to come off if a jenny is being attacked? I imagine if the collar does not move for a period of time you'll go investigate? How quickly will you be able to be on the scene to check out a problem? Can you conduct much of the research without the collars? Scat dogs are brilliant at finding droppings and can be trained to find only burro nuggets. Subsequent fecal analysis can reveal sex, health and the individual burros. Have you looked into this innovative technique?	triggered drop-off mechanisms can cause a collar to fall off whenever a researcher or BLM staff member sends a radio signal to the radio collar. Frequent observations (at least once a month year-round) will allow for researchers or BLM staff to check on the health of every radio collared animal. Preliminary data from a captive trial of radio collars on wild horses and burros at Pauls Valley, Oklahoma, has shown that the designs that will be used in this study are safe (USGS, preliminary data), in that they cause minimal abrasion of the skin or fur. Collars moved on animal's necks, but there was no evidence that they tighten. The width of the radio collar bands that will be used in the present research is narrower than was used in the studies noted that took place in the 1980s. Scat sniffing dogs, and fecal sampling in general, can be effective tools in monitoring population genetics. An ongoing USGS research project is assessing the accuracy of fecal DNA sampling for estimating population abundance of wild horses, in addition to genetic parameters. Fecal samples of known individuals will be gathered as part of this research study in order to determine pregnancy rates, and paternity of foals. While fecal samples can provide a great deal of information about individuals and populations, they can be expensive to process, do not give any information about behavior, and do not provide the same detailed data on space use as GPS collars and visual observations of radio-collared animals. Given that the collars will be snugly fitted around the neck of any radio collared animals, any tree branch or piece of shrub that may somehow be caught between the neck and collar would be expected to be of small diameter and, thus, easily broken by the animal. The regular extension and retraction of the neck should then allow for any broken piece of wood to fall from the animal.
21	AWHPC	The EA acknowledges that jacks are likely to bite at the collar; this will jeopardize the wellbeing of jennies especially during mating season. The EA states that the neck collars will be fitted on the jennies' necks "snugly" which further raises concerns about the collars becoming imbedded in the jennies' necks as occurred with the BLM neck collar program in Nevada during the 1980s. As the EA describes there is a "higher risk" that the burros will get entangled with brush and trees "due to the potential of the collars to get stuck on a tree branch." In fact, burros may intentionally rub the collar on trees, bushes, etc. in an effort to remove the collar and these actions will likely increase the already high risk of getting caught on forage or even fencing in the HMA. This radio collar experiment is premature as "Due to the lack of trees in pen trials this risk is not yet quantified." The EA fails to provide any safety measures of regular weekly or daily monitoring of jennies fitted with radio collars. The inadequacy of the EA is highlighted because had the EA adequately analyzed the data and risks involved with this neck radio collar experiment it could not have reasonably been included it in the proposed action based on the plethora of missing data and research, deleterious effects associated with neck radio collars and	

		the utter lack of scientific rational behind gathering natural wild burro behavioral data *after* a large-scale removal.	
22	J. Lynch	The EA fails to incorporate the details of a failed BLM radio collar research project conducted on wild horses in Nevada in the 1980's which resulted in many injuries and fatalities. Those data must be disclosed and analyzed to outline how such occurrence will be prevented in future agency action, including this proposed one.	
23	AWHPC	…the EA fails to incorporate the details of the BLM data, information and research that resulted from implementing radio collar research on wild horses in Nevada in the 1980s and other BLM radio collar projects. The EA must disclose and analyze that BLM-sourced data -including the resulting harm that occurred to the collared horses, deaths, euthanasia, etc. The EA inadequately address how such deleterious effects of neck radio collaring of burros will be addressed or prevented (with the exception that jacks will not be subjected to the experimental use of neck radio collars).	
24	K. Gregg	The EA fails to incorporate the details of the BLM fiasco that resulted from implementing radio collar research on wild horses in Nevada in the 1980s. I found no purpose and need explanation within the EA for the so-called proposed "research". The only purpose for this "research" that I am aware of is the funding that has been offered. In itself, funding for research does not constitute any "purpose or need" as is required by NEPA for proposed actions. Using a stretch of the imagination, the only possible "need" for research on these burros would be 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" and "develop new population estimation techniques	

		for burros that can be applied widely across their range".	
25	AWHPC form letter from Individuals	The EA fails to incorporate the details of the BLM fiasco that resulted from implementing radio collar research on wild horses in Nevada in the 1980's. That data should be disclosed – the resulting harm that occurred to the collared horses, death, euthanasia, etc. – and analyzed to outline how such occurrence will be prevented in future agency actions, including this proposed one.	
26	K. Gregg	…in the 1980s similar "research" was done on wild horses with devastating results including collars being embedded into the wild horses' flesh and some ultimate deaths caused by this collaring procedure. I provide you here with the report link and some highly relevant excerpts from the report.	
27	K. Gregg	The use of both radio and marker collars is a widely accepted practice in large-animal field studies. Based on extensive experience with these devices, no adverse effects were anticipated. Between 1987 and 1989, however, a number of horses involved in the study suffered injuries to their necks and ears that were caused by the collars used to locate and identify the experimental animals. Serious questions have been raised concerning the deaths of some of these animals, the nature and extent of the wounds, and possible changes in behavior of the animals as a result of collar problems.	
28	AWHPC	The EA cites "radio collar technology has been in regular use in other ungulate species for over 40 years" as a rational for the proposed experiment of putting neck radio collars on jennies yet the EA fails to provide scientific rational how this radio collar technology in "other ungulate species" applies to wild jennies. The EA gives scant consideration to the unnecessary harm and potentially death that this experiment might cause Sinbad jennies. The	

		EA completely fails to provide any scientific rational to implement the risky proposed action based on the limited scientific justification or data provided.	
29	C. Roe	The potential harm from the proposed use of radio collars is superficially discussed in the draft EA. In order to determine if this methodology should be used, a full disclosure should be made of the results of radio collar research in other wild equine herds, including the harm done to collared wild horses in Nevada in the 1980s. These results should be analyzed, and procedures proposed to prevent such adverse effects in any future BLM actions	
30	AWHPC	The EA fails to disclose, analyze or take a hard look at (1) any science supporting the removal of 60% or 130 burros and alternative management actions that could be implemented to achieve the stated objective and mitigate the need for this highly invasive, large-scale removal and (2) the available data and science behind the radio collar research in wild equids and the alternative actions/methodologies that could be implemented to achieve the stated objectives	30 radio collared female burros are required for two reasons. First, they are required in order to form an adequate sample size of aerial survey observations for improving the accuracy and precision of aerial survey methods for burros. Second, they are required in order to allow for an adequate sample size of monitored individuals, from which the researchers will be able to achieve statistically reliable estimates of behavioral patterns, demographic rates, and habitat use metrics. Several commenters made remarks that implied that there is no need for radio collaring in order to achieve a scientific study of behavioral patterns, demographic rates, and habitat use patterns. Studies that rely only on animals that are easily observable are, however, prone to bias. Bias in this context is the result of not having an adequate sample of the population being studied, with the result that any inferences about behavior, demography, or habitat use, would not be applicable to the population as a whole, but only to those individuals who happen to be easily found by human observers. There is much reason to believe that many burros in this population are not commonly encountered or easily seen by on-the-ground observers. The topography is rugged, vegetative cover is extensive in many areas, and burros can be elusive.
31	Sherry Oster (AWHPC form letter from Individuals)	This EA fails to adequately analyze the proposed actions (1) science supporting the removal of 60% or 130 burros and the alternative management actions that could be implemented to achieve the stated objective and (2) science behind the radio collar research and the alternative actions/methodologies that could be implemented to achieve the stated objective	
32	J. Lynch	It fails to provide adequate scientific basis or analysis to support the proposal to remove 130 burros (or 60% of the current resident population). It also fails to propose or analyze alternative management actions which could be implemented to achieve the stated objective. It also fails to provide an ade-	

		quate scientific rationale for the proposed radio collar research proposal, a proposal which is doomed to failure because the remaining population would be so strongly and traumatically affected by the proposed massive roundup and removal that any results would be skewed and could not be presented as typical of a wild population of burros.	Radio telemetry (and GPS telemetry) is the only approach now available for reliably determining the location of an individual at any time. It is critical for researchers to make unbiased observations in a way that is applicable to the whole population being studied. Having a large sample of radio collared jennies will allow researchers to locate the entire collared sample of jennies on a regular schedule, and to make observations about other burros (collared and uncollared) that are associated with those collared jennies. Insofar as any jenny or jack that was handled and then returned to the wild will have a unique, freeze-marked, numerical hip brand, the researchers will be able to identify all burros individually. Observations will include any non-marked burros that are part of the population, but that were not captured. In this way, regular relocation of a large sample of radio-collared burros will allow for inference to the larger population. GPS collars also provide a unique opportunity to collect information about movements and habitat use with a high number of locations, including nighttime locations. We acknowledge that we can not rule out the possibility that a burro may be harmed by a radio collar, or that all radio collars will work 100% of the time. Technical failure is always a risk with any equipment. The benefits to BLM wild burro management of learning from the proposed studies, however, have been deemed to outweigh what BLM believes will be a relatively small potential risk to collared animals. Preliminary data from a captive field trial of radio collars on burros (USGS preliminary data) indicated that collars had minimal effect on the behavior of burros, and caused minimal or no rubbing to the fur or skin. Radio collars have been used on all other wild North American ungulates in order to conduct similar research, and have also been used to gather similar data on Asiatic wild asses and zebras. The ability to locate radio collared animals is also of central importance for im-

			proving the aerial survey methods for wild burros. In the context of this study, researchers will be able to determine which radio collared burros were detected during the visual search portion of a double-observer aerial survey, and which were not seen by any observer. For those groups not seen by any observer during the visual search portion of the survey but in which there is a radio-collared burro, the researchers will be able to record the physical attributes of the groups that were missed, including but not limited to group size, degree of vegetative cover, and distance from the survey transect line. This information will allow for the creation of a statistical model that describes the probability of burro groups to be detected or not detected by observers on aerial surveys and, as a corollary, which will be useful to more accurately estimate the population size of burros based on aerial survey data.
33	E. Pompei	There is no valid scientific reasoning that supports rounding up and or removing animals from their natural environment in order to document and study true behavior and ecology. True behavior and ecology can only be observed in the wild NOT under artificial conditions. None of the proposed research can be accurately completed through the process of rounding up and or removing the burros. It can ONLY be accomplished by observing them in the wild and under zero human influence.	Wild burros exist in managed populations. The WFRHBA and 43 CFR part 4700 makes clear that WH&B on BLM lands are to be managed in balance with other uses and the productive capacity of their habitat. Legal precedence has established that the goal of WH&B management should be to maintain a thriving ecological balance between WH&B populations, wildlife, livestock and vegetation, and to protect the range from the deterioration associated with overpopulation of wild horses and burros. In the context of the framework established by federal law, the BLM is not in the position to allow any burro population to remain unregulated. In most burro populations, native predators are lacking or not numerous enough to limit burro population growth rates; as a result, zero human influence is not an option. Left unchecked, burro population growth may cause vegetation and soil degradation, affecting native wildlife species and other rangeland ecosystem attributes. Many commenters made remarks that suggest that any results pertaining to de-
34	AWHPC	We join thousands of American who strongly oppose the removal of burros from the Sinbad HMA. The Sinbad burros are *literally* one of the last health wild burro populations in the United States. This herd is THE PRIME BURRO POPULATION for the study of natural wild burro behaviors at the current population level based on the minimal management of the herd (and relatively few roundups over the past two decades). The BLM and USGS need to responsibly conduct research in order to create studies that	

		will yield meaningful data – the proposed action will not achieve this.	mographic rates, behavioral patterns, or habitat use patterns will not be valid because observations related to those rates or patterns will be made in a population of burros that will have recently been reduced, via trapping and removal. The implication or stated contention of these comments is that a population of burros that has recently been gathered and whose numbers have been reduced: is inherently unfit for study; would not be representative of other wild burro populations; is not a 'natural' population of burros; would reflect skewed demographic and behavioral data. Although the gather and removal of burros may affect their behavior over the short-term, the research study will enable these effects to be examined in comparison with data gathered over the subsequent three years. This does not invalidate the research, but adds to our knowledge of this species. Furthermore burros tend to have a fission-fusion social system, meaning that they do not have stable social groups beyond a jenny and her recent offspring. BLM gladly acknowledges suggestions that additional data would be useful about burro populations under many circumstances, including both before and after gathers. BLM does not, however, accept the contention that the study of a population that has recently been gathered and had many individuals removed would be invalid, or not of research value. At no point in the EA did BLM indicate that a goal of the proposed research was to document burro demography and behavior in a population that is grossly higher than the target populations indicated by AML. BLM aims to manage populations of wild horse and burros within the population range defined by the low and high ends of AML. As such, BLM might value more highly those studies related to demographic rates, behavioral patterns and habitat use patterns in populations that are closer to AML, rather than grossly higher than AML. BLM disagrees with the implication of the comments that demographic
35	J. Lynch (AWHPC form letter from Individuals)	The radio collar research, as outlined in the EA, is not based on a scientifically rigorous protocol that would render any resulting data meaningful. That would be a tremendous waste of agency staff time and taxpayer dollars. Instead, the radio collar research should be implemented without the proposed large-scale removal in order to gather meaningful, statistically sound data about natural, undisturbed wild burro behaviors. ***The proposed large-scale removal of burros PRIOR to initiating a "research" study on reproduction, movement, social behaviors, range use, etc renders any behavioral "research" meaningless because it is impossible for the BLM or USGS to determine whether the behaviors, reproduction, etc. are "natural" or the result of the large-scale removal.*** If the BLM or USGS are interested in gathering scientifically sound data on burro behaviors, reproduction, etc. the study must be done before there is any dramatic human-initiated interference; otherwise, it is impossible to determine whether those behaviors are "natural" or are a "response behavior" to the human-initiated disruption.	
36	J. Lynch	I also object to the proposal, because the stated goal of the post- "gather" research plan is fatally flawed from its inception, as it does not take into account the fact that a massive roundup and removal of more than half of the few burros living in this enormous area will inevitably have a massive impact on the behavior of those individuals allowed to remain.	
37	J. Lynch	I also object to the plan because burros are well-adapted to semi-arid environments and have a minimal environmental impact on such areas, especially when one considers how truly de minimus a population of 220 burros in an area of 154 square miles is to begin	

		with.	rates or behaviors after a gather and removal are 'unnatural.' Given the fact that some degree of removals has been and will continue to be a necessary part of wild burro management until such time as populations are approximately within AML and population growth rates can be reduced, the condition of a population as having been recently gathered and reduced in size is not atypical of wild burro populations. In addition to their use in the collecting of statistically unbiased behavioral, demographic, and habitat use data, radio-collared animals will be essential for the development and testing of an improved statistical model applicable to burro aerial surveys, the latter alone being sufficient reason to continue with radio collaring after the gather.
38	C. Locus	154 square miles is more than enough space for thousands, if not tens of thousands of wild equines. You are mandated to PROTECT wild equines, not to decimate and "manage" their herds to extinction.	
39	P. Lanigan	Frequent removals will further skew any data that USGS hopes to seek on 'normal' wild burro behavior. Round-ups will impact 'normal' wild burro behavior since bands will be fractured and animals forced to seek new bands and herds and jacks with new jennies will be forced to breed them.	
40	C. Locus	…study them AFTER you remove 60% at taxpayer expense? You will not see normal behavior after breaking up family units and terrorizing them. Don't waste that money! How would YOU behave after being chased by helicopter, and your friends and family seized and taken away?	
41	AWHPC	The EA fails to consider conducting the behavior research for a 2-3 year period without altering the population in order to obtain sound data. The Sinbad HMA is the optimal herd of wild burros for a behavioral study because of the limited removals in the HMA over the past two decades. The EA fails to disclose and analyze the available scientific data available within the BLM related to conduct radio collar research which has occurred over time in the agency history. The proposed action is not based on best-practices or a scientifically rigorous protocol that would render meaningful data; alternatively, the radio collar research should be implemented without the proposed large-scale removal in order to gather meaningful, statistically sound data about natural, undisturbed wild burro behaviors. The proposed large-scale removal of burros PRIOR to initiating a "research" study on reproduction, movement, social behaviors, range use, etc renders any behavioral "research" meaningless	

		because it is impossible for the BLM or USGS to determine what the natural behaviors might be given the behaviors, reproductive rate, etc observed after the roundup will be skewed due to the large-scale removal.	
42	AWHPC	If the BLM or USGS are interested in gathering scientifically sound data on burro behaviors, reproduction, etc. the study must be conducted for at least 2-3 years prior to any human initiated interference or removal; otherwise, it is impossible to determine whether the observed behaviors or data are "natural" or are a "response behavior" to the human-initiated disruption.	
43	AWHPC	The EA failed to take a hard look at existing scientific data that outlines natural wild burro movements, behaviors, activities that may or likely will cause radio collars to move and tighten on the jennies' necks, including but not limited to the movements made by mating jennies: "*The particular elements of estrus in the jenny include: lowered head with neck extended forward .... This is the opening and closing of the mouth with the lips relaxed, the head and neck lowered and extended forward ...*" [McDonnell, 1998]	There has been very little research on wild burros or domestic donkeys, or on their ancestor the African wild ass. Particularly no detailed research on burros has occurred within the last 10 years. This field research study on their behavior and ecology using observations and radio collars is therefore important to provide information that can inform future management. Due to the necessity of using radio telemetry and visually marking individuals with freeze marks it is not possible to conduct this research without any human interference. Once the marks have been applied, though, human interference will be at a minimum for the next four years, to avoid influencing their demography, habitat use, and behavior. Lowering the head causes the circumference of the neck to be reduced, so any behavior that includes lowering the neck is not at all expected to cause a tightening of the radio collar on the neck. The collars are fit when the animal has its head in an upright position (i.e. when the neck is largest). Estrus behaviors were observed in the jennies at Pauls Valley, and were unaffected by presence of a collar. Although no trees were present in the pasture during the captive trial, grooming behaviors including rubbing were recorded; uncollared burros tended to rub on objects more than collared burros.
G. Number of Burros Gathered			

44	Emery County	Emery County encourages the BLM to modify the Proposed Action removal number of burros to at least 150, and as many as 200 animals instead of the proposed number of 130. The removal of 130 animals is not consistent with the Price Field Office Goals, Objectives, and Management Decisions stated in the PFO Resource Management Plan (RMP) of 2008. If the proposed number of animals removed from the HMA in the Proposed Action remains 130, the action by the BLM PFO will be out of compliance with its own RMP.	The PFO acknowledges that the proposal does not reduce the burro population to AML as set in the RMP. But as stated in the RMP, Decision WHB 2 – Allow wild horse and burro research as long as other wild horse and burro objectives are met. It may be argued that the proposed action does not meet the AML objective. But the proposal moves the Sinbad HMA closer to the AML than it currently is or will be without the proposed action as written. The proposal as written acknowledges that the BLM will most likely not be able to capture all of the burros within the HMA.
H. Wild Burro Numbers Vs. Livestock Numbers			
45	E. Lipilina	I have reviewed the EA draft proposal to remove around 60% of the estimated burro herd. MY CONCERN is that 12 of 20 consultants were permittees, ranches.	Permittees within any allotment are notified of any action that occurs within the allotment they are permitted for. Anyone else that would like to be added to the list of interested publics just need turn in a request of the area they would like to be included in and why.
46	E. Lipilina	The EA fails to state what the current amount of forage allocated for Burros. On the other hand, the EA attempts to establish that burros "stress the vegetation". The proposal will increase the cattle to burro ratio to 160:1	Please see section 1.2, 3.3.2.3, and 4.2.1.3 of the draft EA, as well as RMP decisions, WHB-10, 12 and 13.
47	E. Lipilina	The BLM horse and burro program, as it's is named should prioritize needs of the 200 or so burros over the needs of grazers that are sold for meat.	This comment is outside the scope of this document. A majority of the HMA is Pinyon-Juniper woodland, Rock outcrop, steep rock slopes or inaccessible canyons, which produces virtually no forage and as a result is considered unsuitable for grazing by any large ungulate. Neither the WFRHBA nor FLPMA require the equal allocation of wild horses and livestock on public lands. It is not a matter of Choosing to manage wild horses and burros rather than domestic livestock or native wildlife. By law, BLM is required to manage wild horses and burros in a thriving natural ecological balance and multiple use relationship on the public lands and to remove excess wild horses and burros immediately upon a determina-
48	Sherry Oster J. Lynch (AWHPC form letter from Individuals)	I urge the BLM to analyze alternative methods for achieving the stated goal of range health by reducing livestock grazing in the HMA as per 43 CFR 4710.5 which gives BLM the authority to reduce livestock grazing in order to make forage available for burros in HMAs. Protection of burros in MANDATED by congress, while livestock grazing is authorized entirely at the discretion of the Interior Department.	
49	AWHPC	The EA fails to consider or analyze the alternative to accommodate current wild burro numbers by temporarily or permanently reducing or eliminating livestock grazing pursuant to 43 C.F.R. 4710.5(a). This regulation allows the	

		BLM to temporarily or permanently close a public land area to livestock grazing *"If necessary to provide habitat for wild horses or burros, to implement herd management actions, or to protect wild horses or burros, to implement herd management actions, or to protect wild horses or burros from disease, harassment or injury.* This alternative would forgo or greatly reduce removals and accommodate current wild burro numbers by using the agency's Adaptive Management (see more below on Adaptive Management) mandate and its discretion under 43 C.F.R. 4710.3-2 and 43 C.F.R. 4710.5(a), which allows for the reduction or elimination of grazing for privately-held animals in order to improve conditions and forage availability for wild horses or burros.	tion that excess wild horses or burros exist. Excess wild horses and burros are being removed as required by the WFRHBA in order to maintain healthy herds of wild horses and burros on public lands, not for the benefit of livestock. Removal of livestock would not be in conformance with the existing Land Use Plan and is contrary to the BLM's multiple-use mission as outlined in the 1976 Federal Land Management and Policy Act (FLPMA) and PRIA, and would be inconsistent with the WFRHBA, which directs the Secretary to immediately remove excess wild horses and burros. Additionally this would only be effective for the very short term as the horse and burro population would continue to increase. Eventually the HMA and adjacent lands would no longer be capable of supporting the horse and burro populations. Livestock adjustments have been made through other actions and documents. The purpose of the EA is not to adjust livestock use. There is no requirement by WFRHBA or the regulations to reduce or eliminate livestock as a means to restore TNEB Administration of livestock grazing on public lands fall under 43 CFR subpart D, Group 4100. Livestock grazing on public lands is also provided for in the Taylor Grazing act of 1934. No leased livestock, graze within the Sinbad HMA, all livestock are permitted. As per 43CFR 4710.5 as cited: "(a) If necessary…" does not mean it is mandatory. (b) No domestic horses are permitted within the wild horse of burro HMAs in the Price Field Office. (c) refers back to (a) and is not mandatory.
50	Sherry Oster (AWHPC form letter from Individuals)	I request that you to revise the EA and implement an alternative that reduces livestock grazing to accommodate the current burro population and implement the radio collar research using a scientifically sound protocol with a non-compromised baseline burro population.	
51	AWHPC	The BLM must consider and analyze the societal opposition to the removal of burros. Over the past few years, the BLM has received hundreds of thousands of letters from American citizens opposing roundups and in favor of reform of the Wild Horse and Burro Program, including a shift away from roundup and removal toward on-the-range management of wild horses and burros, as well as in favor of re-slicing the resource allocation pie to give horses and burros a fairer share of resources by decreasing or eliminating livestock grazing in HMAs.	
52	K. Gregg M. Farabee	Wild horses and burros are legally *DESIGNATED* on the Herd Management Area (HMA) and livestock are only *PERMITTED*. Definition of the word "designated" is to "set aside for" or "assign" or "authorize". Definition	

		of "permit" is to "allow" or "let" or "tolerate". The Wild Horse and Burro lands and resources are set aside for, and assigned and authorized for, the use of wild horses and burros whereas the livestock is only allowed and tolerated and let to use the public range resources. While commercial livestock grazing is permitted on public lands, it is not a requirement under the agency's multiple use mandate as outlined in the Federal Land Policy and Management Act of 1976 (FLPMA). Public land private grazing clearly is a privilege not a right, while the BLM is mandated by law to protect wild horses and burros.	
53	Oregonian Wild Horse & Burro Association Susan Carter Val Hogsett	THE Code of Federal Regulations dictates removal of "leased" livestock grazing with in the HMAs that were established for Wild Horses and Burros, who, protected under the FRWHBA, take precedence. §43 CFR 4710.5 Closure to livestock grazing. (a) If necessary to provide habitat for wild horses or burros, to implement herd management actions, or to protect wild horses or burros, to implement herd management actions, or to protect wild horses or burros from disease, harassment or injury, the authorized officer may close appropriate areas of the public lands to grazing use by all or a particular kind of livestock. (b) All public lands inhabited by wild horses or burros shall be closed to grazing under permit or lease by domestic horses and burros. (c) Closure may be temporary or permanent. After appropriate public consultation, a Notice of Closure shall be issued to affected and interested parties. No removal of Burros should be undertaken prior to temporary or permanent closure of livestock grazing. If after removal of livestock, it is found that forage is still being impacted, a birth-control program could be enacted.	

54	AWHPC J. Lynch (AWHPC form letter from Individuals)	According to the EA, livestock grazing in the HMA EXCEEDS burro grazing at the current population level, despite the reduction in livestock grazing in the HMA due to drought. The NAS report stated: "The committee could not identify a science-based rationale used by BLM to allocate forage and habitat resources to various uses within the constraints of protecting rangeland health and listed species and given the multiple-use mandate." [NAS page 303]	
55	C. Roe	The BLM's Appropriate Management Level (AML), the population target that forms the base assumption of the proposed herd reduction, is an arbitrarily assigned figure that raises many more questions. The NAS report stated: "The committee could not identify a science-based rationale used by BLM to allocate forage and habitat resources to various uses within the constraints of protecting rangeland health and listed species and given the multiple-use mandate." [NAS page 303]	
56	J. Lynch	The proposal would not substantially reduce livestock grazing. Livestock vastly outnumber burros in the area, and they also have a far greater per capita impact, as domestic livestock such as cattle and sheep are far less well-adapted to semi-arid environments such as that found in the Sinbad HMA of Utah, and they therefore consume far more forage and water resources individually than do burros, animals which are well-adapted even to desert regions. ***Because of these facts, no proposal which fails to substantially reduce livestock grazing in this area to environmentally sustainable levels can hope to succeed in protecting rangeland quality.***	
57	The Cloud Foundation	Burros on their legally designated herd management areas are taking a back seat to privately owned cattle in the Sinbad HMA. Privately-owned and publically subsidized livestock are allocated the lion's share of the AUMs	

		(9633 AUMs cattle versus 300 AUMs burros at 50 burros, or 1320 AUMs at the current estimated population of 220). Burros are allocated only 3% of forage compared to cattle with 97%. Even at the current estimated population of 220, burros are receiving 13.7% of forage versus 86.3% for cattle. This unfair allocation of resources is unacceptable to most wild horse and burro advocates. Note we calculated the comparison of AUM allocation based on .5 for a burro and 1.0 for a cow and her 6 month-old calf.	
58	Marjorie Farabee	Each of the leases I found had livestock numbers ranging from over 200 to 600 head using up all the AML that should rightfully go to our wild burros and the wildlife of the area.	
59	AWHPC	The EA inaccurately states, "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…." In** fact the removal of burros is not needed to "protect rangeland resources" or to "restore a thriving natural ecological balance" (TNEB) or to restore a "multiple use relationship on public lands" because the elimination or reduction of livestock grazing would meet all three objectives. The rangeland resources could be protected, TNEB could be restored and BLM multiple use mandate would be satisfied even if livestock were permanently eliminated because multiple use does not mandate that every use is implemented at every site. In fact, BLM has routinely eliminated HMA lands from wild horse/burro use and still managed to legally adhere to its "multiple use" mandate.	
60	C. Roe	According to the draft EA, the Sinbad HMA wild burro herd is currently too	

		large to this drought-stressed range; the EA states the need to "protect rangeland resources from further deterioration." Yet the EA contains no evidence that burro grazing causes range degradation in this HMA. Livestock grazing in the HMA massively exceeds burro grazing at the current level (2,154 cattle, or 9,633 AUMs); the draft EA contains no recommendation for bringing these two populations into appropriate balance. It has long been recognized that the primary cause of degradation in rangeland resources is poorly managed domestic livestock grazing. "BLM frequently used the lack of detailed carrying capacity and range monitoring data to explain why it has not taken action to reduce widely recognized overgrazing by domestic livestock." (GAO-1990 RCED-90-110)	
61	AWHPC	The EA proposed action (which is based on the need to restore a thriving natural ecological balance) fails to analyze the current AUM system utilized by the BLM. In fact, the BLM AUM system is inadequate and it underquantifies the amount of forage being consumed by the cows permitted to graze in the HMA and thereby inaccurately scapegoats wild burros for over utilization of the range. Scientific data shows (see Attachment 3) that in fact the quantity of forage associated with an AUM does not feed the average cow/calf pair based on the increased size of cows compared to the size of cows when the AUM system was first created. Therefore, the BLM comparison that a cow/calf pair consumes the same forage as 3 burros in one month is inaccurate, not based on science and under-calculates the true impact that livestock grazing has on the range. The EA must examine and assess this new information in relationship to determination that the current burro population is over utilizing the range. In addition, the underquantified forage consumption by cows must be evaluated cumulatively given that livestock have grazed in the area in recent years. The EA must reassess the forage consumed	The scientific data cited is a position paper written by John Carter with the Western Watershed Project. The document provided shows not proof that it was peer reviewed nor approved for publication by anyone other than WWP. As such it is not considered a scientific document but a position paper.

		by cows in the HMA in order to determine the proportional use of the range and which species, domestic cows or wild burros, is having impact on the range condition.	
62	Utah Department of Agriculture and Food (UDAF)	Burros are grazers, with a preference for grasses and soft vegetation, but will also browse, and consume bark and even creosote bushes in arid environments.[7] As the EA states "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."[8] Burros consume forage that has been allocated to and paid for by livestock producers. This is creating extreme economic hardship for ranchers and agricultural producers in Utah. Burros have also been documented damaging private property and state property because they are moving off of federal lands in search of resources that they have depleted on public lands.	Through the Price RMP and previous planning documents the burros within the Sinbad HMA had forage allocated specifically for them. As such they are not consuming forage that has been allocated to livestock. Burros within the Sinbad HMA have not been documented moving off of federal lands or documented damaging private property. As such this comment is beyond the scope of the EA.
63	UDAF	Over grazing by burros has a negative effect on livestock. There is a competition for limited resources. If the range is not maintained in proper condition then grazing is limited or suspended outright. A loss in AUMs will cause direct economic harm to Utah's ranchers and the rural communities. On average an AUM is worth $50 dollars in direct economic activity. With a modest multiplier of two, those AUMs are worth $100 in economic activity. Ending grazing and retiring permits because of over grazing by burros would result in significant ongoing economic losses. Additionally, the loss of these important grazing permits will cause livestock operations to go out of business. Ranching and ranches are vital to rural communities in Utah. These losses will be absolutely staggering to the families, businesses, local governments and communities. Alternative 2 in the EA should include an analysis	This comment is outside the scope of the EA. Any analysis of economic loss would be grossly inadequate for Alternative 2. Analysis of any affected AUMs on an annual basis would be too variable to be accurate. If the BLM was to carry forward an alternative that completely removed livestock from the range the analysis would be valid and needed. However as stated in section 2.2, Alternative 5 of the final EA; "the alternative was not brought forward for detailed analysis because it is outside the scope of the proposed action."

		of these economic impacts to local communities.	
64	UDAF	Another issue that must be considered is the spreading of diseases due to overpopulation. Wild burros can be infected by and/or spread diseases to livestock and native wildlife. This is especially concerning to livestock producers. Some diseases of concern include Tetanus, Equine Herpesvirus, West Nile Virus, Rabies, Distemper, Brucellosis, Anthrax, and Foot and Mouth Disease. Preventing or limiting interaction between burros, livestock, and native wildlife is critical to limit the spread of disease.[9] The best way to prevent the spread of these diseases is to reduce the burro population. Further research into inoculation of wild burros is also needed. The EA should include an analysis of the benefits to preventing disease with a well-managed burro population.	The ID Team Checklist addresses and identifies the benefit of reducing burro populations in regards to wildlife (i.e. disease, competition, etc.) No further analysis is required in the EA. As part of the gather operations burros are checked for diseases and vaccinated against those regularly found in equines. As a closed population, any diseases that the burros may be found to have would have to have been introduced from another source.
I. Fencing and Cattle Guards			
65	K. Gregg M. Farabee	I found no mention of fencing and cross-fencing within the Sinbad HMA. This appears to be another opportune "oversight" by the BLM although highly relevant to genetic health of the Sinbad burro herd. The total population of the herd becomes almost irrelevant if the gene pool cannot intermingle due to fence division of the herd as a whole. According to the EA and maps and google earth, the Sinbad HMA is divided multiple times by allotment fencing, gates and cattle guards. This information must be provided to the public for consideration and cannot be another item conveniently swept under the rug by BLM in the EA.	Other than the fence along Interstate-70, there is one fenceline within the Sinbad HMA. That is the fence between the Black Dragon and North Sinbad Grazing Allotments. The Fenceline is approximately 3 ½ miles long and has 2 cattleguards with gates as well. The Burros can go through the gates when livestock are not present, as well as go around the ends of the fence where they meet drainages. This is easily seen on Google Earth in T. 22 S., R 12 E., Sec 29, where the burro trails go through a gate and around the end of the fenceline. Any other fencelines in the area form the boundaries of the HMA itself, or are outside the HMA boundaries.
66	Sherry Oster	There is no mention of fencing and cross fencing within the Sinbad HMA, although highly relevant to genetic health of the Sinbad burro herd. The total population of the herd becomes almost irrelevant if the gene pool cannot intermingle due to fence division 瞬 晴 鞆 乾 靭 靹 梧 瞬	A revised map (Map 2) with fence lines, gates, cattle guards, and reservoirs will be included in the final EA. Note: This will not be an all-inclusive mapping of all water sources. The San Rafael is rich in what are referred to as rock tanks. Those rock tanks range in size from as small as less than 5 gallon to more than 1000 gallon of

		EA and maps and google earth, the Sinbad HMA is divided multiple times by allotment fencing, gates and cattle guards. This information must be provided to the public for consideration.	water. No water sources within the Sinbad HMA are fenced off from burros.
67	AWHPC	[The EA failed to provide:] Information (including maps) regarding fencing within the HMA, when fencing is open or closed, information about water sources and the availability of those water sources, whether water sources are available to livestock but fenced off from burros, and all other pertinent information that contributes to the burros' usage of the HMA.	
J. Grazing Allotments			
68	K. Gregg M. Farabee	There appears to be an error or misrepresentation in the EA of the livestock grazing allotments on the Sinbad Wild Burro HMA. The EA (page 14) lists only the Big Pond, Black Dragon, Mexican Bend and North Sinbad grazing allotments as being on the Sinbad HMA. Careful review of the BLM RAS Geocommunicator map shows these four plus additional large portions of the Box Flat grazing allotment and the Iron Wash grazing allotment. Were these omissions an error or a misrepresentation by the BLM RAS Geocommunicator system or by the BLM Price field office or both? Either way, it is a falsification to the public of the honest facts about livestock grazing within the boundary of the Sinbad Wild Burro Herd Management Area. This EA cannot be considered an accurate accounting to the public and therefore cannot be approved or signed or put into action until this is corrected and supplied to the public for review and comment in a corrected and legitimate EA. If for no other reason than this; the EA as currently written must be nullified until this contradictory and therefore illegal portion of the proposal is corrected. The National Environmental Policy Act (NEPA) requires that to ensure that environmental assessment statements reflect a careful consideration of the available science,	The Sinbad Herd Area polygon depicted in the BLM RAS Geocommunicator map does extend into the Box Flat and Iron Wash Grazing Allotments. However the Sinbad Herd Management Area Boundary area does not. The original Herd Area boundaries drawn in 1971 do not take into account topography, which the HMA Boundary does. The HA boundaries are considered General areas where Horse or burros may be found in 1971. In the case of Box Flat, burros would have to scale 2000 ft. vertical cliffs to access the allotment. As far as the Iron Wash Allotment is concerned the burros have to cross the San Rafael Reef to access that area. Occasionally they do, but the BLM is not managing them in that area as part of the Herd Management Area if they do.

		and that areas of disagreement or uncertainty are flagged rather than being swept under the carpet.	
69	Sherry Oster	The following grazing allotments on the Sinbad Herd Management Area are not mentioned in the EA. Box Flat grazing allotment Iron Wash grazing allotment This EA cannot be considered an accurate accounting to the public and therefore cannot be approved or signed or put into action until this is corrected and supplied to the public for review and comment in a corrected and legitimate EA.	
70	AWHPC	The EA fails to disclose or analyze the current rangeland health within the HMA and the primary impacts (both long- and short-term) to rangeland health. The EA terms as "static" the overall long-term rangeland health trend for the Black Dragon, Big Pond, North Sinbad allotments within the HMA – yet no description of the rangeland health assessments for these allotments is provided, no data regarding the "static" trend, and no mention whatsoever of the Mexican Bend allotment, the Iron Wash allotment, the Box Flat allotment.	The EA has been updated to show Rangeland Health data that has been collected within the HMA in section 3.3.1 of the final EA.
K. Impacts of Gather on Wild Burros / Viability			
71	Susan Carter Val Hogsett	The AML is too low for viable genetic diversity and will destroy genetic herd health.	The determination of the productive capacity of the Sinbad HMA and of the multiple other land uses for that area was addressed in the Price Resource Management Plan EIS-UT070-2002-11, signed October 2008; which established, among other things, the appropriate management level (AML) for the Sinbad HMA population of burros. Changes in the AML are beyond the scope of this EA. The current population size of burros on the Sinbad HMA is greater than levels that would be consistent with those management directives. The proposed population size after gather and removal of burros is larger than the high end of AML only because it is necessary to have a representative sample of the burro population for the behavioral and ecological research. In total, 90 ani-
72	K. Gregg	The Appropriate Management Level (AML) for this HMA should be increased to at least the current or a higher population level. The current population level of the HMA is dangerously low and inadequate to ensure the genetic health of these historically significant herds. Even more concerning, the current and artificially low AML reflects the grossly inequitable distribution of forage resources in the HMA - far more forage being allocated to privately owned domestic livestock than to federally protected wild burros. Although I am aware that this EA will not change the AML for wild burros, I	

		require the BLM to initiate the land use processes necessary to INCREASE the AML by decreasing permitted levels of livestock grazing and this alternative must be considered within this EA.	mals (30 collared and 15 uncollared jennies and 45 jacks, representing all sex and age classes) will be left or returned to the range after the gather.
73	E. Lipilina	Take pictures learn more about the burro, save tax payer money and don't remove any burros from the 99,210 acres they're legally allowed to be on. The current AML of 50-70 burros is unacceptable and dangerously low. The cattle numbers must be reduced, not burro.	
74	P. Lanigan	I would like to say that 80 animals is below genetic viability. This has been reported by both Dr. Gus Cothrans and UC-Davis.	Please see the Proposed Action, section 2.1, and Appendix E. The proposed action leaves 90 head of burros, well above the current AML. The proposed action also includes collection of additional data on individuals, such as Hair Samples to be submitted for further genetic analysis to monitor the genetic health of the herd. It also allows for research on collection of fecal DNA. This population is not considered to be at risk of having low genetic diversity at this time, and is expected to have adequate population growth after the gather and removal to reduce the chance of significant loss of genetic diversity. Genetic samples (hair follicles) will be taken from all animals returned to the range. These samples will be analyzed to examine genetic parameters of the population. Ongoing monitoring of genetic diversity is an aspect of BLM's wild horse and burro management, including at the Sinbad HMA. If, in the future, it is determined that genetic diversity in the Sinbad HMA is such that the risk of inbreeding is dangerously high, BLM could bring burros from other populations, to augment the genetic diversity in Sinbad HMA. A rule of thumb is that inbreeding can be counteracted by the addition of one migrant per generation, but slightly more may be required depending on the population (Mills and Allendorf. 1996. Conservation Biology 10:1509-1518). The gen-
75	C. Roe	The proposed alternative involves rounding up 200 burros out of a population of 220, permanently removing 130 of that population and leaving only 60 wild burros in the Sinbad Herd Management Area (HMA). Before even considering such a population target or the proposed action, it is essential to know the genetic diversity of the Sinbad wild burro herd. The draft EA refers to a genetic analysis based on only 30 individual burros from the 2001 roundup, a limited and dated data base. Because of the unique characteristics of this herd, a current baseline genetic diversity study should be done on the Sinbad herd. The full implications of such a study should be taken into account when calculating the proposed reduction rate.	
76	The Cloud Foundation	Removing the majority of the animals is short-sighted from a behavioural study stand point and is a clear threat to their genetic variability.	
77	The Cloud Foundation	On page 7 of the Draft EA, you refer to setting management for a "viable wild burro herd of 50 to 70 animals in the Sinbad HMA on 99, 210 acres." There can be no such viability in a herd this small.	
78	The Cloud Foundation	According to the best science available over decades of genetic testing of nearly every burro and wild horse herd in the West by E. Gus Cothran, PHd., an Ne of 50 is recommended as the bare	

		minimum to achieve and maintain minimal genetic health standards. The Ne represents the active breeding population. Generally the active breeders are 1/3 to ¼ of the total herd size, hence the need for a minimum of 150-200 burros or wild horses to maintain minimum genetic health standards.	eration time is typically the average age of the breeding individuals, which may be on the order of from 5-10 years in burros. Therefore, even if burros in the Sinbad HMA were maintained at a population size between the current low AML and high AML (which is not being proposed in this action), given that relatively long generation time, BLM would have adequate opportunity to avoid inbreeding in the Sinbad HMA burros, if necessary, by moving individuals into the population. Minimum viable population sizes are typically determined with regards to the viability of rare and endangered species, or evolutionarily significant units of a species (Moritz. 1996. Trends in Ecology and Evolution 9:373-375). The demographic population of burros in Sinbad HMA is not genetically monophyletic, and does not constitute an evolutionarily significant unit. The genetic composition of Sinbad HMA burros reflects a number of domestic burro source populations, which may help to explain the high genetic diversity now found there. Sinbad HMA is not, however, unique with respect to burros in other HMAs. In their textbook, "Introduction to Conservation Genetics," Frankham, Ballou, and Briscoe (2002) suggest that Fst values above 0.15 are indicative of significant genetic differentiation between sub-populations. Using that cutoff for pairwise Fst values, the burros in the Sinbad HMA are not significantly differentiable from burros in 13 of the 24 other HMAs listed in the National Academies of Science 2013 report, Table F-1. Even if we were to accept an even lower measure of 0.10 as an Fst cutoff to delineate significant differentiation, the burros in the Sinbad HMA are still genetically close to burros in 8 of the 24 other HMAs listed in that table.
79	K. Gregg M. Farabee	A leader in the field of equine population genetics, Dr. Cothran has collected blood and hair samples from equines around the world, and also analyzes blood samples from U.S. wild horses and burros for the BLM. Dr. Cothran suggests that managing wild horses at low population levels makes them vulnerable to long-range loss of genetic diversity. This is the same problem that plagues many endangered species around the world. But, just how small is too small? At what point do wild horse and burro populations suffer the risk of irreparable genetic damage? Based on his DNA analysis, Dr. Cothran believes that the **minimum** size for both wild horse and burro herds is between 150-200 animals. Within a herd this size, about 100 animals will be of breeding age. Of those 100, approximately 50 animals would comprise the genetic effective population size. That is, these 50 animals are those that are actually contributing their genes to the next generation. A higher number would decrease the chances for inbreeding; the higher the number, the lower the occurrence of inbreeding.	
80	K. Gregg M. Farabee	Rather than manipulate the genetics with outside introductions, it is far more prudent, scientifically sound, and less expensive to simply allow existing populations to increase to genetically viable levels. This may require rewriting management plans, decreasing	Allowing the existing population to increase to genetically viable levels and …Rewriting the management plan is beyond the scope of the proposed action. …Decreasing the available AUM's for livestock grazing in the herd area boundaries is beyond the scope of the proposed

		the available AUM's for livestock grazing in the herd areas, expanding herd area boundaries, or simply allowing levels to rise naturally over time within each area in jeopardy.	action and in direct violation of the Taylor Grazing Act. …Expanding the herd area boundaries is beyond the scope of the proposed action and in violation of the Wild Horse and Burro Act. …or simply allowing levels to rise naturally over time within each area… this is not sustainable. BLM is mandated to manage for multiple resources. Allowing one resource to grow unchecked is not good for the population itself, the other users, the vegetation, the soil or the water.
81	C. Roe	In his presentation to the NAS Panel on the BLM Wild Horse and Burro Program, Dr. Cothran warned that managing wild equines at low population levels makes them vulnerable to long-term loss of genetic diversity. Based on his DNA analysis, Dr. Cothran calculates that the minimum size for both wild horse and burro herds is between 150-200 animals. The proposed removal rate would fall far below this minimum, placing the herd in jeopardy. The previously cited NAS study concurs with this serious concern: "BLM may also need to assess whether the AMLs set for burros can sustain a genetically healthy total population" [NAS, page 304]. The draft EA fails to incorporate these serious concerns into its goals or proposed methodology.	The Using Science to Improve the BLM Wild Horse and Burro Program A Way Forward published by the National Research Council of the Nation Academies is being used by BLM to develop new procedures and policies in the management of wild horses and burros. Some of the recommendation made by this report have been implemented (ex. population inventory methods) while others are being reviewed or developed within the laws, regulations, policies, budgets and other limits that were not considered by the report. However, there is no requirement for BLM to follow or implement any or all of the recommendation made in that report.
82	The Cloud Foundation	You state that the Sinbad Burro herd is isolated. In other words, there are no other herds that interchange with the Sinbad burros making it even more critical to raise the AML to 150-200 burros. This calculates to roughly one burro per 2,500 acres, certainly a modest population considering the mandate of 43 CFR 4700.0 (a-c) Policy which requires that BLM manage wild horses and burros as "self-sustaining populations…") The current AML does not allow for a self-sustaining population of burros. Removing all but 50 burros puts a marginally healthy herd at risk. As you report from Dr Cothran: *"The Sinbad*	Raising the AML is outside the scope of the proposed action. The proposed action does not remove all but 50 burros from the Sinbad HMA. In fact it would leave a minimum of 90 burros within the HMA, which is 30 head above the current AML and will assist in maintaining the genetic viability of the herd.

		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).	
83	Sherry Oster AWHPC form letter from individuals	The current BLM methodology for management of burro populations is based on the roundup and removal system -- whereby burros are removed from the range leaving behind a small number of animals in the wild. It is well documented that this methodology has created a genetic crisis for burros in the wild due to the BLM's maintaining burro populations at such low numbers that they are forced to inbreed or go extinct in one generation. Because the Sinbad burro herd has only been rounded up three times in the last 22 years, it is the only BLM-managed burro herd tested showing no genetic signs of inbreeding; this massive removal jeopardizes that and is likely to force burros to inbreed due to the dramatic reduction in population.	As comments have mentioned the Sinbad herd has only been gathered 3 times in 22 years. As such and as shown by genetic data previously collected from the Sinbad HMA the population contractions that have occurred do not show an increased incidence of inbreeding. To ensure that the Sinbad HMA has not or will not in the future suffer from inbreeding, additional genetic data will be collected during the gather as well as during the study period to monitor the genetic well-being of the herd.
84	C. Roe	The current BLM policy for management of burro populations relies upon the costly, counterproductive roundup and removal system, under which burros are removed from the range leaving behind a small number of animals in the wild. The wild burro population in the Western U.S., once thriving, has been reduced to small, fragmented herds. This policy has created a genetic crisis for burros in the wild, as burro populations are maintained at such low numbers and so confined that they are unable to interchange genetically.	

85	K. Gregg M. Farabee	The burro populations managed by the Bureau of Land Management (BLM) are in crisis -- genetic crisis -- based on years of managing the animals at such low numbers that they are forced to inbreed. Now the BLM Price Field Office in Utah proposes to round up and remove 130 of the 220 burros currently living in the Sinbad Herd Management Area (HMA) -- reducing the population to just 90 burros allowed to live on more than 154 square miles of public lands. Once again, the BLM is forcing another burro population to inbreed and is twisting the NAS' scientific recommendations to fit its own ill-conceived, business-as-usual management based on roundups and removals. The BLM it must stop jeopardizing the well being of our burros -- stop forcing them to inbreed their way to extinction.	
86	AWHPC	The current BLM methodology for management of burro populations is based on the roundup and removal system – whereby burros are removed from the range leaving behind a small number of animals in the wild. It is well documented that this methodology has created a genetic crisis for burros in the wild due to the BLM's maintaining burro populations at such low numbers that they are forced to inbreed.	
87	J. Lynch	The current BLM methodology for management of burro populations is based on the failed roundup and removal system -- whereby burros are removed from the range leaving behind a small number of animals in the wild. The National Academy of Sciences has found that such removals have led not to a reduction in total numbers in the past, but rather to an increase in reproduction rates. It is also well documented that this methodology has created a genetic crisis for burros in the wild due to the BLM's maintaining burro populations at such low numbers that they are forced to inbreed or go extinct in one generation.	

88	AWHPC Sherry Oster (AWHPC form letter from Individuals)	The proposed massive removal of 130 of 220 burros currently living in the Sinbad Herd Management Area (HMA) continues this mismanagement policy and will force the animals left in the wild to inbreed -- jeopardizing their long term viability and genetic health.	
89	J. Lynch	***The proposal would result in higher rates of reproduction as well as inbreeding*** among the 90 burros which the Price FO proposes to allow to remain in the area.	
90	AWHPC J. Lynch S. Oster (AWHPC form letter from Individuals)	BLM removal of animals from the range causes populations to grow "at high rates because their numbers are held below levels affected by food limitation and density dependence" and triggers "compensatory population growth" (e.g. increased reproduction) [NAS, page 5]	The Using Science to Improve the BLM Wild Horse and Burro Program A Way Forward published by the National Research Council of the Nation Academies is being used by BLM to develop new procedures and policies in the management of wild horses and burros. Some of the recommendation made by this report have been implemented (ex. population inventory methods) while others are being reviewed or developed within the laws, regulations, policies, budgets and other limits that were not considered by the report. However, there is no requirement for BLM to follow or implement any or all of the recommendation made in that report.
91	C. Roe	(b) "BLM removal of animals from the range causes populations to grow "at high rates because their numbers are held below levels affected by food limitation and density dependence." (c) Such large-scale removal, states the National Academy of Sciences review, triggers "compensatory population growth." (NAS, p. 5)	
92	AWHPC	The EA fails to even consider the devastating impact that this proposed LARGE-SCALE removal will have not only on the remaining burros themselves – impacting their behaviors, reproduction, etc. – but also on the results of its study of the Sinbad burro population, which will be significantly compromised by the roundup.	
93	AWHPC	The EA fails to adequately analyze the proposed action of conducting a large-scale removal prior to implementing a behavior research project. The EA fails to consider that the removal of burros will undeniably SKEW the behaviors of burros in the HMA thereby rendering the study meaningless	

94	K. Gregg M. Farabee	The BLM fails to realize or even consider the devastating impact that this proposed very large scale removal will have on the individual remaining burros themselves -- impacting their behaviors and reproduction -- but on the entire Sinbad burro herd. As usual, the BLM claims to be conducting this "research" in line with the National Academy of Science (NAS) report -- but it completely ignores the NAS' determination that reproduction rates are increased as a result of these types of large-scale removals. This is commonly known as compensatory reproduction.	
95	Individual	Please consider the devastating impact that this proposed LARGE-SCALE removal will have not only on the remaining burros themselves -- impacting their behaviors, reproduction, etc. -- but also on the results of the study of the Sinbad burro population, which will be decimated and compromised by the roundup. Do NOT completely ignore the NAS' determination that reproduction rates are INCREASED as a result of these types of large-scale removals! Instead, limit livestock grazing even more, limit this surplus, unneccesary livestock production, just enriching a few, at the expense of nature and those animals who belong here!	
96	AWHPC J. Lynch (AWHPC form letter from Individuals)	The 2013 National Academy of Sciences (NAS) "Using Science to Improve the BLM Wild Horse and Burro Program" review stated: Due to the low number of burros on the range "removing burros permanently from the range could jeopardize the genetic health of the total population" [NAS page 304]; "BLM may also need to assess whether the AMLs set for burros can sustain a genetically healthy total population" [NAS, page 304];	
97	Sherry Oster	The 2013 National Academy of Science (NAS) "Using Science to Improve the BLM Wild Horse and Burro Program" review stated: Due to the	

		low number of burros on the range "removing burros permanently from the range could jeopardize the genetic health of the total population" [NAS page 304];	
98	C. Roe	The BLM management policy underlying this EA was brought into serious question by the 2013 National Academy of Sciences (NAS) report, "Using Science to Improve the BLM Wild Horse and Burro Program." The NAS review stated: (a) That due to the low number of burros on the range "removing burros permanently from the range could jeopardize the genetic health of the total population" [NAS, p. 304];	
99	AWHPC	While the EA makes scant reference to NAS quotes – the EA fails to take a hard look at the information behind the NAS recommendations. Each of the NAS points made above, while stated in the EA, fall upon deaf ears at the BLM – either because the BLM personnel does not care or does not understand the meaning of the NAS recommendations. Despite these NAS findings, the EA unbelievable states, "Reduction of wild burros should increase the availability of forage plants … which ought to release the remaining population from pressure due to inadequate food availability." Then at the same time the EA claims that the proposed research would "quantify annual survival rates."	
100	Sherry Oster K. Gregg M. Farabee	At 50% variability, a population is considered "challenged." These facts led the National Academy of Sciences (NAS) to warn in its 2013 report that "removing burros permanently from the range could jeopardize the genetic health of the total population." The NAS investigation also concluded that the BLM "may need to assess whether the AMLs [Allowable Management Levels] set for burros can sustain a genetically healthy total population."	
101	AWHPC	At 50% variability, a population is considered "challenged." These facts led the NAS to warn in its 2013 report	

		that "removing burros permanently from the range could jeopardize the genetic health of the total population." The EA fails to consider the NAS report also noted that: BLM "**may need to assess whether the AMLs [Allowable Management Levels] set for burros can sustain a genetically healthy total population**." BLM must utilize "**A participatory adaptive-management process for the setting and adjustment of AMLs**…" "Environmental variability and change, **changes in social values**, and the discovery of new information **require that AMLs be adaptable**." (NAS p12 and 253) "…management should engage interested and affected parties and **also be responsive to public attitudes and preferences**." (NAS p292)	
102	K. Gregg M. Farabee S. Oster	When the statistics for wild burro herds are isolated from wild horse numbers the picture is even more dismal for burros. Of the 56 Herd Management Areas (HMAs) containing wild burros, only 14 still maintain borderline genetically viable populations. Under BLM management plans, only five of these HMAs (only 9% of them) allow for a truly genetically viable population of 150 animals or more. Even the Marietta Wild Burro Range of west central Nevada, the only Congressionally designated wild burro range in the country, has nowhere near the number of burros required to maintain a genetically viable population. Just 85 burros are allowed under the current BLM management plan for this remote area that extends over 66,500 acres.	This comment is outside the scope of this document.
103	AWHPC	While the EA states "The issue of 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." And the EA	Dr. Cothran's comment as stated was made in a general sense and not directed at the Sinbad herd. As comments have mentioned the Sinbad herd has only been gathered 3 times in 22 years. As such and as shown by genetic data previously collected from the Sinbad HMA the population contractions that have occurred do

		states that "the population would grow at 8% per year based on past inventory and removal data." The fact the Sinbad burro herd has only been rounded up three times in the last 22 years makes it a model HMA to study natural wild burro behaviors as the burros are in their current numbers. In addition, the minimal number of roundups in this HMA further supports what wildlife biologists already know – removals increase reproductive rates. **This limited removal over the past 22 years is also to be credited for the Sinbad HMA to be the only BLM-managed burro herd tested showing no genetic signs of inbreeding**; the proposed massive removal jeopardizes all this and is likely to force burros to inbreed due to the significant reduction in population.	not show an increased incidence of inbreeding. To ensure that the Sinbad HMA has not or will not in the near future suffer from inbreeding, additional genetic data will be collected during the gather as well as during the study period to monitor the genetic well-being of the herd.
104	J. Lynch	Because the Sinbad burro herd has only been rounded up three times in the last 22 years, it is the only BLM-managed burro herd tested showing no genetic signs of inbreeding; this massive removal jeopardizes that fact and is likely to force burros to inbreed due to the dramatic reduction in population. The proposed massive removal of 130 of 220 burros currently living in the Sinbad Herd Management Area (HMA) continues a failed mismanagement policy and would force the animals left in the wild to inbreed -- jeopardizing their long-term viability and genetic health. Surely the BLM cannot wish to create a situation under which burros are at risk of accelerated inbreeding at taxpayer expense.	
105	C. Roe	The Sinbad burro herd has only been rounded up three times in the last 22 years, and as noted in the draft EA, may well be one of the only remaining BLM-managed burro herd that shows no significant signs of inbreeding. The draft EA cites a study by Professor Gus Cothran, an expert in wild burro DNA; Dr. Cothran indicates that the Sinbad herd shows some resemblances to the endangered Poitou donkeys of	

		France. The proposed massive removal jeopardizes the unique biological status of the Sinbad herd. Permanently removing 130 or 220 burros now living in this HMA will force those left in the wild to inbreed. This drastic reduction in population will jeopardize the herd's genetic health, causing irreparable harm. It is also likely to create a spike in population, contradicting the core goal of the proposed action.	
106	AWHPC	The EA fails to consider the BLM's own equine geneticist Dr. Cothran: *"The burros, I think, have in many case had more severe population contractions [aka. roundups] probably more inbreeding because of the smaller numbers on the land."* Source: https://www.youtube.com/watch?v=f5HTuKtVMVg	
107	AWHPC K. Gregg S. Oster M. Farabee	The BLM's lead equine geneticist, Dr. Gus Cothran, a clinical professor of Veterinary Medicine and Biomedical Sciences at Texas A&M University, has stated that the U.S. burro population is at a genetic breaking point thanks to the many BLM roundups (euphemistically referred to as "population contractions") that have reduced the population to tiny, fragmented herds, resulting in a situation that has caused a dangerous increase in inbreeding. In fact, many burro populations have only a 20 percent (20%) genetic variability factor compared to a healthy genetic variability of 70%.	
L. AML			
108	The Cloud Foundation	On page 8 you quote local officials in the area saying "Emery County supports continuation of established grazing rights on public lands and opposes measures designed to curtail them, except where dictated by sound science." Clearly, sound science falls on the side of minimum population sizes. The recent National Academy of Science report should be a wake up call for BLM. We urge you to include in your range of alternatives, the alternative of	The adjustment of the AML for the Sinbad HMA was addressed in the Price Resource Management Framework Plan EIS-UT070-2002-11, signed October, 2008. The Using Science to Improve the BLM Wild Horse and Burro Program A Way Forward published by the National Research Council of the Nation Academies is being used by BLM to develop new procedures and policies in the management of wild horses and burros. Some of

		raising the Burro AML to accommodate a genetically viable herd. We urge you to analyze this alternative and to more fairly allocate enough forage to support a genetically viable burro herd in their legally designated Herd Management Area.	the recommendation made by this report have been implemented (ex. population inventory methods) while others are being reviewed or developed within the laws, regulations, policies, budgets and other limits that were not considered by the report. However, there is no requirement for BLM to follow or implement any or all of the recommendation made in that report.
109	AWHPC	[The EA failed to provide:] Disclosure of the data utilized to determine the establishment of AML for the HMA and whether the conditions have changed which would follow NAS recommendations of utilizing Adaptive Management to reassess AMLs in the EA. Include a complete list of all interested parties consulted when establishing AML and all scientific data used to set AML.	
110	AWHPC	While the EA notes that the BLM Price RMP dated October 2008 states "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." The EA completely fails to take a hard look at re-evaluating the AML in light of the fact that the Sinbad HMA is one of the last genetically healthy burro herds under BLM management and is a prime candidate to study natural wild burro behaviors because this herd has had minimal management and human intervention (e.g. roundups).	
111	K. Gregg M. Farabee	In order to uphold the letter and the spirit of the Wild Free Roaming Burros Act of 1971 and protect wild burros (and horses) as "natural components" of the lands on which they are found, the BLM must increase Allowable Management Levels (AMLs) for wild burro populations. If this proposal activates, we will henceforth have one of our few remaining wild burro herds that is not safe on its own range. The burros need to be protected as the law states they will be and yet the Bureau of Land Management (BLM) continues to insist on managing the once healthy and thriving burro population in the western United States into to a crisis	

		situation.	
112	UDWR	UDWR recognizes the need for gathering and removing excess wild burros, and conducting the proposed research. Alternative-I, as currently configured, however, will not remove enough burros to adequately address the burro population problem in light of the AML. The burro population is estimated at 220 animals, while the approved AML for this management area is 50 to 70 burros. The current proposal is to remove 130 burros and collar 30 jennies for research. If only 130 burros are removed from the population, the burro population will still be 90 animals, substantially in excess of the AML. With average annual reproduction of eight percent, more burros than 130 need to be removed to meet the project purpose and need. UDWR recommends removing at least 170 burros to get the burro population managed down to the lower end of the AML.	The target population of the proposed action takes into account the difficulty the BLM has encountered in trying to gather ALL the burros from an HMA, especially an HMA with the topography like Sinbad. The proposed action utilizes 30 jennies to track and monitor, to gather data on individuals and determine movement and interaction with other individuals. To do so and maintain a proper sex ratio we may have to release additional jacks as well. For this reason we have set a target capture of 200 burros to allow for the known possibility of missed burros. The PFO acknowledges that the proposal does not reduce the burro population to AML as set in the RMP. But as stated in the RMP, Decision WHB 2 – Allow wild horse and burro research as long as other wild horse and burro objectives are met. It may be argued that the proposed action does not meet the AML objective. But the proposal moves the Sinbad HMA closer to the AML than it currently is or will be without the proposed action as written. The proposal as written acknowledges that the BLM will most likely not be able to capture all of the burros within the HMA.
113	Emery County Farm Bureau	It is important to note that the proposal to remove 130 animals does not bring the total population into compliance with the AML of 60. The proposal leaves the total number at 90. I would hope that consideration will be given as to how to bring the population into full compliance with the AML.	
M. Data Used			
114	E. Lipilina	BLM and USGS must coordinate to use cost effective ways to study burros and wild horses management effects on wildfire ecology. Wildfire ecology and these HMAS needs serious study since horses and burros may prove beneficial. The EA should include consultation with Wild fire coalitions and USGS ecologist, and less ranchers with grazing permits.	In other HMAs that have wildfires regularly this may be effective. The incidence of fires within the Sinbad HMA is less than 1 every 10 years, and those are usually started by vehicles overheating along Interstate 70, and rarely leave the I-70 corridor.
115	E. Lipilina	While the consultant of BLM specializing in aerial study, the EA fails to include built in inaccuracy of aerial counting methods, and the actual number of burros can be less than 220.	As part of the research being conducted, the use of double observer inventory counts and data from the collared burros will be utilized to build a model to help determine how accurate the counts truly are. Depending on environmental conditions, as many as 30%-70% of wild burros

			may be missed during a standard helicopter survey (Little and Grissom 1999, BLM 2000) (Schoenecker 2015a).
116	E. Lipilina	The EA opens with acknowledging stark differences between wild horses and burros "both socially and behaviorally" yet it goes on to apply wild horse fertility guidelines to burros. A lack of knowledge of burros growth rates is also stated, yet somehow later in the same document a hard figure of 8% growth rate is assumed.	The accepted national average growth rate is 20%. The 8% growth rate comes from data collected during previous inventory counts of the Sinbad HMA, which identified foal burros.
117	AWHPC	[The EA failed to provide:] Rangeland assessment reports and results (and full assessments should be provided in the Appendix) for each the past five years for all areas in the HMA (including pastures, allotments, etc) – including all rangeland assessments used for the renewal of livestock permits, annual actual use of permitted livestock AUMs for each of the past five years (to better understand the cumulative impacts of livestock grazing on the HMA rangeland health), etc.	The information requested is summarized in sections 3.3.1, and 3.3.2, and 3.3.3 of the final EA.
118	AWHPC	[The EA failed to provide:] Methodology used to differentiate livestock usage impacts from burro impacts. The EA states that "forage within close proximity of water sources is depleted" yet it does not describe the cause of that depletion or offer any data that the permitted cattle (which are known to congregate and degradate water sources) are the cause of the degradation near water sources, etc.	This comment is a misrepresentation of what the EA actually says. The draft EA in Section 3.3.2.3 last paragraph states "As forage within close proximity of water sources is depleted the wild burros will need to range greater distances for forage." Within the Sinbad HMA the burros typically will move out into the ridgelines, canyons, and breaks of the HMA during winter where they can utilize snow as their main source of water. This period of time is when the livestock are allowed on the HMA. During the spring, summer and fall the livestock are no longer on the HMA and the burros will move into the open parks and bowls which typically have man-made reservoirs. The livestock are typically removed prior to spring green up. So when the forage in close proximity to the water sources becomes depleted it is most likely due to the burros.
N. Compliance with NEPA			
119	M. Farabee	At its most basic level, NEPA requires that the decision-makers, as well as the public, be fully informed, i.e. "that environmental information is available to	The public was notified of the Sinbad Burro Gather on September 9, 2015 through the BLM's national NEPA register at https://eplanning.blm.gov/epl-front-

		public officials and citizens before decisions are made and before action is taken." 40 C.F.R. § 1500.l(b). NEPA ensures that the agency "will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger [public] audience." Robertson v. Methow Valley Citizens Council. This must be available and analyzed in the EA before a Record of Decision or Finding of No Significant Impact can be completed or published or signed.	office/eplanning/lup/lup_register.do Furthermore, a Draft Environmental Assessment was released to the public for a 30-day public comment period. A press release was sent out and published on the BLM Utah State Office website. That comment period lasted from December 11, 2015 until January 11, 2016. No decision will be signed until all comments are fully addressed. As a result of these public notification and involvement steps taken, BLM has acted in full compliance with the National Environmental Policy Act.
120	C. Roe	The Draft Sinbad EA fails to provide comprehensive evaluation either of the proposed actions or the assumptions behind these two limited alternatives. The EA also fails to examine the principle alternative action that would enable a valid, scientifically useful research project on the Sinbad herd while doing no harm to that wild burro population: that is, to begin by conducting scientific research in the burro's natural habitat. The EA does not take into account the science questioning the removal of the majority of this biologically unique wild burro herd. It ignores the potential damage that would be done to individual burros, burro bands and the viability of the herd by the proposed action of massive roundup and removal of the majority of the Sinbad wild burro population. Its proposed management action is based on an arbitrary population target and a faulty understanding of wild burro ecology and range impact.	Refer to sections 2.1, 2.2, 3.2, 3.3, and 4.2.
O. Citations			
121	E. Lipilina	The cited studies from 1970s and another from 1991 from the other side of the world, literally, would be considered irrelevant now by an educated person. Antiquated studies should not be used to base any decisions on 2016 wild burro plans.	"Antiquated" studies may be the best data available. The age of some of the research cited and inferences made from other species is what is pushing the research proposal. The BLM agrees we need better data, hence the proposed research.
122	AWHPC	The EA fails to consider science readily available that states "*Several years of census data and range evaluation prior*	Actually the proposed action falls right in line with the literature that AWHPC cited. As noted in section 1.2 of the EA, an in-

		to and following management reductions would allow integrating estimates of population growth and survival with demography. … Effective management of feral burros requires more life history data, especially on rates of increase, age-specific survival, causes of variation in sex ratio, and variation in demographic characteristics among populations." (see Attachment 1).	ventory flight was completed in June, 2014, as well as a planned inventory flight and infrared flight would be completed pregather and post gather (See proposed action section 2.1). Range monitoring data is collected regularly within the HMA and is summarized in section 3.3.2.2 of the draft EA.
123	AWHPC	Indeed, scientific study of wild burros outlines the complex social structure and importance of population density within an area: *"Feral and free-ranging domestic donkeys (Equus minus) have a territorial social system (Klingel, 1977; Woodward, 1979; McCort, 1980; Henry et al., 1991) as opposed to the harem system typical of horses and some zebras (Klingel, 1975). The composition and degree of stability of territorial groups varies with particular populations studied.... In contrast to this simple territorial system, populations have been identified in which jennies tend to stay within particular territories and have a more stable affiliation with the breeding male and other jennies in the territory, in a semi-harem type territorial breeding group (McCort, 1980)."* (see Attachment 2).	The EA did not list McCort (1980) in the Bibliography, because McCort (1980) was not cited directly within the EA. McCort (1980) is an unpublished doctorate dissertation. Some Jennies do tend to stay within particular territories and have a more stable affiliation with the breeding male and other jennies, but as McCort (1980) states "the composition and degree of stability of territorial groups varies with particular populations studied." McCort was also cited within the submitted article by McDonnell (1998) that, "In some populations, there are groups in which subordinate males are allowed to breed some of the jennies within the territory of a dominant jack" While this literature is interesting and somewhat informative, it is also conflicting because it suggests social dynamic results differ by population. Because social organization has not yet been studied in this herd (Sinbad), it was not useful for the EA. However, the PFO was able to utilize the commentary by McDonnell, 1998. The article was cited in section 1.2 of the EA and added to the bibliography. Burros (ie Donkeys) "have been shown to have a territorial social system. Group composition and size, dominance relationships, and access to breeding vary considerably among populations" (McDonnell, 1998).
124	AWHPC	The EA failed to adequately include for disclosure, review and analysis research and available data on wild burros as evident by the EA's short bibliography which fails to incorporate readily available scientific papers on the Internet. For example, the EA failed to consider the social structure of burros: "*In summary, **donkeys have a territorial social system**. Group composition and size, dominance relationships, and access to breeding vary considerably among populations studied.*" Or "*…populations have been identified in which jennies tend to stay within particular territories and have a more stable affiliation with the breeding male and other jennies in the territory, in a semi-harem type territorial breeding group*	

		(McCort, 1980)." As stated above, that burro social behaviors may be site specific (see Attachment 2) – but burro social behaviors are likely to be dependent on the density of the burro population in a given area, yet the EA failed to consider this type of available data on social behavior of wild burros which has direct implications for the proposed action. Additional research is likely available through the BLM Wild Horse and Burro Program Advisory Board members who have a specialization in the scientific research community. Yet the EA failed to include basic, cursory research and based the proposed action on incomplete, inaccurate information.	
125	C. Roe	The proposed roundup and removal professes to achieve the AML requiring a herd reduction to 60 burros; yet the BLM's AML is apparently based on an outdated calculation of animal units (AU's). It has long been documented that the range management profession has failed to adequately examine the AU and understand the concept as one that needs to be based on range impact, rather than specific forage demand. (Gregory Perrier, "The Animal Unit as an Ecological Concept," Rangeland 18.1, February 1996)	The EA states that the AML is 60. The proposal however is to gather and remove down to approximately 90. As Perrier stated in his Viewpoint article, "From the 1950's,…attempts have been made to define the unit more precisely." These attempts have all failed. Debating the concept and use of the AU is beyond the scope of this document.
126	C. Roe	Knowledge of burro forage requirements, ecology and range impact would warrant a drastically revised AML. Burros are notoriously light grazers whose ecological footprint is very different from that of the cow (upon which the AU concept was initially developed) or the horse. Science has long established that donkeys are more efficient at digesting food than horses and, as a consequence, can thrive on less forage than a similar sized pony. Donkeys need to eat approximately 1.5 percent of their body weight per day in dry matter, compared with the 2-2.5 percent body weight consumption rate for horses. It is not fully understood why donkeys are such efficient digesters, but it may be due to the microbial popu-	As Smith and Pearson are cited on page 5 of the submitted article, "The energy cost of maintenance and work in donkeys has not been as comprehensively researched as in other species…" So the argument that science has long established that donkeys are more efficient at digesting food than horses is questionable. However the research that Smith and Pearson refer to is a driving factor in some of the research that is proposed within the Sinbad HMA. Additional information is needed to address the management of the burro herds.

		lation in their large intestine, or to longer gut retention time. (Smith and Pearson, "Review of factors affecting the survival of donkeys in semi-arid regions of sub-Saharan Africa," Tropical Animal Health, November 2005)	
127	C. Roe	Unlike cattle, wild burros as well as horses graze different parts of the range-land from livestock. E.g., whereas cattle tend to congregate around watering sites often causing soil erosion, burros and mustangs do not linger near ponds or streams. They graze more upland sites, and their searches for water in drought-affected and desert habitats can be highly beneficial. For example, in the Sonoran desert burros often dig water holes a meter deep that will subsequently be used by other wildlife species. Moreover, the idea that burro grazing causes erosion of native grasses or the increase of exotic plant species has no basis in fact. Burros have extremely diverse appetites; they eat thistles and other weed-like plants that could, if unchecked, be invasive. According to a study of wild burro grazing in desert habitat, "it is possible that the cessation of burros grazing could actually increase non-preferred species in some areas." (Scott Abella, "Systematic Review of Wild Burro Grazing Efficiencies on Mojave Desert Vegetation," Environmental Management, Department of the Interior, 2/27/2008)	Unfortunately most of this statement is based on opinion. The Sinbad burros as well as the Muddy Creek Horses have been found to congregate around watering sites, causing soil erosion. Horses and burros are well known for trying to paw at a water source to turn up water. Quite often they have been found to have compacted sediment into the spring source shutting it off even further. Cessation of burro grazing suggests that the author is discussing full removal of all burros within an area. As stated in the proposed action and in response to multiple comments, the proposed action is to actually leave 90 head of burros, well above the AML.
128	Sherry Oster	Submitted Literature: Conservation Issues for Wild Zebra, Asses, and Horses in Africa and Asia, By Patricia D. Moehlman Chair, World Conservation Union (IUCN), Species Survival Commission, Equid Specialist Group.	The included background information for the documents submitted does not make any ties to the proposed action, or alternatives addressed. As such the submitted documents are outside the scope of the EA.
129	M. Farabee K. Gregg	Submitted Literature: Costs and Consequences: The Real Price of Livestock Grazing on America's Public Lands.	
130	K. Gregg	Submitted Literature: Welfare Ranching: The subsidized Destruction of the American West Assessing the Full Cost of the federal Grazing Program, Karyn Moskowitz,	

		Center for Biological Diversity, October 2002.	
P. Interstate 70			
131	Wild Horse Freedom Federation	It appears that the Sinbad HMA is divided into three segments? Two pieces on the eastern side which are on both sides of highway 70 and another separate section to the west and south of the highway? Are these three segments all part of the Sinbad HMA?	The Southern portion that is south of the interstate about 15+ miles was originally part of the Sinbad HMA. It holds horses, the horses within that portion of the old HMA interchange with horses in the Muddy Creek HMA. Through a planning decision made in 2008 the horse portion of the Sinbad HMA was combined with the Muddy Creek HMA. The Sinbad Burro HMA is both North and South of Interstate 70. The old Herd Area boundaries which are pretty much circles on a map don't touch. Which makes them seem like separate units. The updated HMA boundary combines the two, and follows natural barriers/ fence lines.
132	Sherry Oster	Another concern not mentioned in the EA is that fact that Highway 70 cuts through the Sinbad HMA. Although there is an underground tunnel, there appears to be cattle guards at both ends, which would make passage most probably impossible for the Burros, thereby further negatively impacting genetic diversity. Burros are far too intelligent to risk trying to jump over a cattle guard…they know better than to try.	The underpass in question does have cattle guards on both ends, but it also has gates that can be left open. However several other underpasses along the Interstate 70 corridor within the Sinbad HMA allow for burro passage. As part of the study work planned we hope to determine which underpasses are being utilized and to what extent.
133	Marjorie Farabee	The trouble for preserving these unique and superior burros is their lack of access to one another. While it has been pointed out that there are underpasses to hwy 70, google maps shows that each of these underpasses has a cattle guard which would prevent passage of burros from one side of the HMA to the other.	
Q. Oil Shale and Tar Sands			
134	Sherry Oster	There is no mention of the fact that the Sinbad HMA is located within the Oil Shale and Tar Sands Study Area and I did not see Richfield Gas and Oil Company listed as "interested parties contacted". This document states very clearly "the management of wild horse and burro	The Sinbad HMA is within the Oil Shale and Tar Sands Study Area EIS. However, there are no current leases, active development, preparation of or reclamation of active developments in the Sinbad HMA. The Record of Decision for Oil Shale / Tar Sands (2005) designates only four

		herds is not compatible within those portions of commercial tar sands lease areas" and might be impacted by the following activities: (1) undergoing active development (2) in preparation for a future development phase (3) undergoing reclamation after development (4) occupied by long-term surface facilities, such as office buildings, laboratories, retorts, and parking lots. Animals would likely be displaced from the areas of commercial development, and, depending on the conditions in the individual HMA, it might be necessary to reduce herd numbers to match forage availability on the undisturbed portion(s) of the HMA If horses emigrate out of HMA boundaries because of the disturbance within the HMA, they could be removed via the capture and adoption program." http://ostseis.anl.gov/documents/peis2012/chp/OSTS_Chapter_3.pdf http://www.riversimulator.org/Resources/BLM/OSTSdeis/OSTSfinal.pdf	acres of oil shale for development within the PFO. See Appendix A, page A-7 of the EIS. <u>There are no areas considered suitable within the PFO</u> which states: ". . . surface mining will only be allowed in areas where the overburden is 0 to 500 ft. thick, because 500 ft is assumed to be the maximum amount of overburden where surface mining can occur using today's technologies. With the Price RMP planning area, there are no areas where the overburden is 0 to 500 ft thick." In short, any sort of OSTS development for the PFO is off the table because (1) only 4 acres are designated - which is so small that it isn't worth it from an economic point of view, and (2) the rest of the OSTS has too much overburden that would have to be removed.
135	K. Gregg M. Farabee	This Sinbad HMA EA completely ignored a very major relevant and motivating piece of the Sinbad Wild Burro HMA capture and removal plan. This piece is the Richfield Tar Sands proposal and plan. Information can be found at these links: http://www.oilandgasbmps.org/docs/UT33-RichfieldFinalPlan.pdf and http://www.riversimulator.org/Resources/BLM/OSTSdeis/OSTSfinal.pdf	
R. CAWP			
136	AWHPC	The Comprehensive Animal Welfare Program (CAWP) for Wild Horses and Burros – Standards, June 30, 2015" is woefully inadequate in establishing humane standards for the treatment of wild horses and burros during a BLM removal operations.	See Appendix E for Additional Design Features
137	AWHPC	If a helicopter is selected as part of the Proposed Action, the EA must consider, analyze and implement humane	This comment is beyond the scope of this document. BLM policy is not set by the individual office or decision maker.

		standards as outlined in the attached Standard Operating Procedure (SOP) (Attachment 4). In addition, if the BLM moves forward with the proposed action that includes the use of helicopters to roundup burros, the final EA must analyze existing information available to determine the improvements that should be made to reduce potential stress and harm to the burros during roundup. Merely citing the CAWP as BLM policy does not sufficiently meet the National Environmental Policy Act (NEPA) requirements that the agency consider meaningful alternatives presented by the public. The EA must consider information to minimize stress and injury to burros during roundups must be analyzed including the following: i. Limit the distance burros may be chased by a helicopter to no more than five (5) miles. ii. Require that the helicopter not chase/move burros at a pace that exceeds the natural rate of movement of that specific animal. Every effort should be made to keep older, sick, young animals together with their companions or mothers as they are moved to the trap. The helicopter should not move or capture compromised, old, weak, or young animals. iii. Establish strict parameters for suspending helicopter roundup operations in temperatures below freezing (32 degrees F) or over 90 degrees F. The EA/CAWP designated 10 degree minimum and 105 degree maximum temperatures for helicopter roundups is blatantly inhumane. Even those in the livestock industry would not treat their cattle and sheep the way the BLM CAWP has outlined for our supposedly "federally-protected" wild horses and burros are treated by the BLM.	See Appendix E for Additional Design Features
138	AWHPC	Dr. Temple Grandin and her associate Mr. Deesing, Arizona equine veterinarian Dr. Hutchinson, Dr. Gerretson and	This comment is beyond the scope of this document. Policy is not set by the individual office or decision maker.

		the HSUS agree that animals should not be rounded up when temperatures reach or exceed 90 degrees (F). We urge the BLM to prioritize the well being of the burros by establishing and implementing a science-based policy whereby roundup activities cease when temperatures reach 90 degrees as recommended by the experts.	
139	AWHPC	Improved public observation of all agency actions. The BLM is well aware of the significant public interest in the agency's management of wild horses and burros and its management of these protected animals. Indeed the NAS specifically recommended to the BLM to improve the transparency of its management of the Wild Horse and Burro Program. The treatment of the burros and agency transparency are paramount.	This comment is outside the scope of this document. There are current BLM policies that address this issue and will be followed if gather, removal operations occur. See Appendix E for Additional Design Features.
140	AWHPC	Removal of wild horses and burros from public lands negatively impacts the human environment for those who enjoy observing, photographing and researching these animals. The BLM must ensure that all operations are located on public lands to allow public observation of all activities. No government operations should be located on private lands for which the owners will not give permission for public observation of activities.	Operations within the Sinbad HMA will be conducted on public lands. There are not private lands on the Sinbad HMA.
141	Individual	The plan fails to include possible benefit and truly non-invasive study of the burros by installing active infrared sensors.	Refer to section 3.3.2.3 and 4.2.1.3 of the draft EA and Safety in Appendix E of the Final EA. Public observation of the gather activities and temporary holding facilities on public lands will be allowed with some provisions to protect the public, those working on the project, and wild burros. The provisions are necessary to reduce the injuries and possible death of wild burros, persons working on the project, and the public. The PFO has always tried to provide the public with the best viewing opportunities while providing for safety of all and the wild burros. There are currently no requirements in the contract for the gather contractor to pro-
142	AWHPC	Real-time cameras with GPS should be installed on all vehicles, aircraft and/or helicopters used in operations and video should be live streamed on the Internet. This will improve the transparency of roundup operations and enable the BLM and public to monitor the direct impact motorized vehicle usage has on burros and the environment.	
143	AWHPC	Real-time cameras should be installed on any traps, corrals and temporary holding pens, again, so that BLM personnel, public and media can monitor	

		the entire roundup operation and treatment of the horses/burros.	vide real-time camera services. The current helicopter contract states: "Under no circumstances will the public or media or media equipment be allowed in or on the gather helicopter or on the trap or holding equipment." Use of real-time cameras may cause additional distractions during the operation that would endanger the crews and wild burros. Even if possible, the remoteness and lack of service in the proposed gather location may preclude the ability to transmit video in real-time. Photos and video will be posted on You Tube and Flickr. The public is welcome to attend the gather as long as visitation protocol is followed. Remote camera systems are not adequate tools for determining the behavioral patterns of study animals, as animals are only recorded when they come in the path of the camera's focal area. This means that the timing and location of observations is haphazard. Remote cameras are not useful in improving the aerial survey methods for burros. The research project does include the testing of aerially-mounted infrared sensors in aerial surveys. The project will test the accuracy of infrared-based aerial surveys, but it would be premature at this time to conclude that that method leads to accurate measures of burro population size.
144	AWHPC	The recommendation of real-time cameras is also supported by a report commissioned by Cattoor Livestock Roundup, a long-time roundup contractor hired by the BLM which states, "**Video monitoring of animal operations is a good way to ensure humane handling is taking place on a daily basis**. Video cameras mounted in helicopters and in the capture and holding pens can also render the activists videos as simply nothing more than proof that your business 'walks the walk' when it comes to upholding animal welfare standards." The report was prepared by Mark J. Deesing, Animal Behavior & Facilities Design consultant for Grandin Livestock Handling System. Deesing, an assistant to the highly-regarded livestock industry consultant Dr. Temple Grandin. Video cameras will improve the transparency of the operations and enable the BLM and public to monitor the direct impact motorized vehicle usage has on burros and the environment. AWHPC would be happy to provide technical assistance and financial assistance to establish these real-time cameras as described above.	
S. Use of PZP			
145	The Cloud Foundation	Burros could also be boostered for PZP in the trap via remotely delivered darts. Recapture several weeks later would allow for the delivery of a booster dart. No Handling is necessary.	As per section 2.2; page 12 of the Draft EA. The use of Immunocontraceptives on burros has had very limited research completed. Pen trials of Immunocontraceptive use on burros may be planned for research studies in the near future. The aim of the research study is to examine the behavior and demography of a free-ranging, untreated population. Administration of PZP would compromise data collected on natural rates of fertility and fecundity.
146	Individual	If overpopulation (unlikely at this point) is a concern, then PZP can be applied to burro jennies. USGS can then attach their presumably breakaway radio collars and the band can be released.	
147	AWHPC	[The EA failed to:] Analyze and identify as the proposed action a PZP fertility control program to humanely manage the burro population and to conduct PZP-burro research. The EA	

		acknowledges that the Sinbad burros quality as per BLM IM 2009-090 to participate in a fertility control program. Yet, the EA states that the lack of data on the use of PZP in burros is the reason a PZP-burro research study was not included for the Sinbad HMA. In fact, the BLM's lack of data on the application of PZP to burros *supports* the inclusion of a PZP program for the Sinbad HMA. On one hand, the EA claims that application of fertility control would "change the fertility rates" but on the other hand the EA ignores the NAS findings that removals increase recruitment rates (e.g. "fertility rates"). It appears the BLM and USGS area intentionally designing a "research study" to exaggerate the reproductive rate of wild burros and skew burro behaviors. The EA fails to take a hard look at accommodating the present burro population and reduce its numbers over time though implementation of a PZP fertility control program. The goal of the PZP fertility control program should be to avoid the removal of burros.	
T. Adaptive Management			
148	AWHPC	The EA fails to fully analyze and consider the BLM Adaptive Management in order to consider alternative actions to mitigate public concerns and controversy surrounding the proposed action. Interior Secretary order No. 3270 issued March 9, 2007 established agency policy to incorporate Adaptive Management into agency management programs. Under this policy, land use decisions can be adjusted in order to meet environmental, social and economic goals; to increase scientific knowledge; and to decrease tensions among stakeholders. There are numerous reasons why the BLM should apply its Adaptive Management policy to the management of the HMA.	The Sinbad Wild Burro Gather and Research Plan is an exercise in Adaptive Management. As stated in the submitted comment, "Under this policy, land use decisions can be adjusted in order to meet environmental, social and economic goals; to increase scientific knowledge; and to decrease tensions among stakeholders." Within the gather and research plan the land use decision of the AML for the Sinbad HMA has specifically not been met. The purpose of which is to increase scientific knowledge of the burros by being able to monitor a larger population than the AML allows for, yet try and reduce the tensions among the stakeholders such as the Wild Horse and Burro interest groups and the Livestock operators. An improved understanding of habitat use and demographic rates, also will be gained through the proposed research, and will

			facilitate improved management of wild burros.
U. Misc			
149	The Cloud Foundation	We Recommend that wild burros in Sinbad be studied in situ. Find out through solid ground observation the habits, reproduction, mortality, ranges, movements, and behavior of what may be the only genetically viable burro herd at present. Use innovative techniques to locate and identify the animals like scat dogs. We have not mentioned drones but it is likely they might be use for initial location of groups of burros.	The Price Field Office has made attempts in the past to use remotely-operated drones in vegetation studies. There were logistical difficulties posed by existing FAA regulations, such as the need to operate any drone within a line-of-sight distance. This makes drones unsuitable for widespread usage in collecting data on burros. Moreover, the use of drones for visual observation of burros would suffer from the same drawback that faces studies that rely on visual observation. Namely, the sample of observable burros may be different from the population as a whole, but radio collared burros can always be found, and the burros they are associating with can also be documented at the time that radio collared burros are observed.
150	AWHPC	[The EA fails to provide:] Mapping depicting the location of the burros in and outside the HMA, fence lines and water sources and all census data regarding the number of the burros.	The final EA contains (map 2) which include, fencelines, water sources, Underpasses, and the recent inventory distribution of burros.
151	Sherry Oster	How is it that Monsanto sits on a board that oversees Wild Horse & Burro sterilization or contraception.	This comment is outside the scope of this document.
152	AWHPC	[The EA fails to provide:] Economic costs of the long- and short-term and long-term costs associated with the capture, removal and warehousing of burros targeted for removal;	The BLM has brought forward what we believe to be the most viable options for managing the Sinbad HMA, and the most responsible way to ensure the welfare of the wild burros and protection of habitat. The Wild Free Roaming Horses and Burros Act (WFRHBA) does not authorize a cost-based decision-making process if excess horses or burros are present. "Proper range management dictates removal of horses and burros before the herd size causes damage to the rangeland (118 IBLA 75)." With regard to public opposition of wild horse and burro gathers, comments received from the public are used as a means to improve management and ensure that issues have been identified and addressed. BLM has a responsibility per WFRHBA to remove excess wild horses and burros, ensuring the
153	AWHPC	While there is no current crisis on the range in the HMA, the agency is facing an escalating fiscal crisis off-the-range as a result of the mass removal of wild horses and burros from the range and the stockpiling of captured mustangs and burros in government holding facilities. Any proposal that includes the permanent removal of burros – including those removed from outside HMAs, instead of the relocation the burros to the HMA – will add animals put in taxpayer-funded holding facilities. These factors must be disclosed and analyzed in the EA.	

			health of the wild horses, burros and the rangeland.
154	AWHPC	[The EA fails to provide an:] Inventory of burros in government holding facilities, the length of time burros spent in short-term holding and the number of burros adopted annually for each of the past five years.	This comment is outside the scope of this document.
155	AWHPC	The EA appears to base its "scientific" rational for the proposed action on the hired guns at USGS – trying to deflect the lack of scientific integrity of the proposed action on USGS. Yet, the EA fails to provide any data that supports circumventing standard scientific review of this EA merely because USGS has been paid by the BLM to work with the agency to conduct this action.	The proposals were subject to scientific review through the USGS prior even to submission to the BLM.
156	K. Gregg M. Farabee	Our society relies heavily on the ability to produce and exchange legitimate and trustworthy documents. As shown and explained within my public comment letter, it is clear that the BLM has falsified and refused to include highly relevant data which by law must be provided to the public in the environmental assessment. May I suggest you read and understand this important legal explanation of Title 18 or the United States Code regarding falsification of legal documents.	Comment Noted. As part of the NEPA process a draft document is made available to the public for review to ensure we have not missed concerns that the public has. It gives the BLM a chance to address the public concerns and clarify information that may have not been clear to the passing reader.
157	Individuals	Please also consider the comments below from Ginger Kathrens, a wildlife specialist. 1. Recommend BLM do field research to determine burros' habits and behavior--using non-invasive techniques to gather information. 2. Do NOT put collars on 30 jennies, as they can get caught in pinions and junipers, injuring and/or killing them. The jacks can injure or kill the jennies wearing these alien collars. 3. Maintain a genetically viable herd of 150-200. 4. Conduct all removals using bait or water trapping--no helicopters.	See response to comment #10, 20, 78, 13, 14 & 15 submitted by the Cloud Foundation.
158	C. Roe	The proposed study of wild burros will, if carefully designed and conducted, yield important and precedent-	The proposal is not precedent setting or the first of its kind. Nor are effects of gathering wild horses highly uncertain or

		setting results. In light of the above concerns, the cost consideration, and the biological importance of the Sinbad wild burro herd, the BLM should develop an Environmental Impact Statement in order to thoroughly examine a range of alternatives and engage broad civic participation, thereby creating the groundwork for applying higher standards of methodology and for gaining greater public acceptance.	involve unique or unknown risks. There have been hundreds of like actions that have occur since the passage of the 1971 Wild Free-Roaming Horses and Burros Act that have been evaluated in environmental assessments and none were found to require an EIS. Nothing in the report referred to the scientific community being in dispute about the proposed action or is it controversial in the scientific community.
159	Emery County Farm Bureau	It has been brought to my attention that over the past several years there has been an increase in the growth of Broom Snakeweed on the areas most frequently grazed by burros in the Sinbad HMA. While I do not have specific data to support this claim, it would be worth investigating to see if there really is more Broom Snakeweed in the burro areas than in adjacent areas, and if burros are responsible for the increase. Broom Snakeweed is of minimal value to wildlife and livestock and its proliferation would be detrimental to the range.	As part of the range monitoring program within the Price Field Office individual species such as Broom Snakeweed are identified and tracked over time through the Nested Frequency plots we have throughout the office. See section 3.3.2.2 of the draft EA for any information on the nested frequency data.
160	Utah Division of Wildlife Resources	Impacts to wildlife from elevated burro populations (above the AML) should be addressed as a distinct issue in this EA. Big game animals, particularly desert bighorn sheep and also pronghorn, compete with burros for available water, forage, and space. Habitat for desert bighorn sheep and pronghorn has already been affected by patterns of low precipitation, and vegetation conditions have deteriorated through the area. Gathering burros from the Sinbad vicinity to bring wild burro populations back within AML should help improve habitat conditions for desert bighorn sheep and pronghorn.	The BLM is not analyzing to increase the burro population in this EA. The purpose and need is to reduce the population and therefore reduce the potential for impacts to bighorn and pronghorn. Since there are no major impacts (only benefits) from reducing the burro population in regards to wildlife, further analysis is not required.

APPENDIX E. Additional Design Features

National Selective Removal Policy

- Gather operations will be conducted in accordance with the Comprehensive Animal Welfare Program for Wild Horse and Burro Gathers (CAWP) described in Appendix B and/or the National Wild Horse Gather Contract as adjusted or amended through the National and State wild horse and burro program direction.
- When gather objectives require gather efficiencies o f 50-80% or more of the animals to be captured from multiple gather sites (traps) within the HMA, the helicopter drive method and helicopter assisted r oping from ho rseback wi ll b e t he pr imary gather methods used. Post-gather, every effort will be made to return released animals (if any) to the same general area from which they were gathered.
- Bait and/or water trapping may be used provided the gather operations timeframe is consistent with current animal and resource conditions. Bait and/or water trapping may also be selected as the primary method to maintain the population within AML and other special circumstances as appropriate.
- An Animal and Plant Inspection Service (APHIS) or other licensed veterinarian may be on-site during gathers, as needed, to examine animals and make recommendations to BLM for care and treatment of wild burros. Decisions to humanely euthanize animals in field situations will be made in conformance with BLM policy.
- Data including sex and age distribution, reproduction, survival, condition class information (using the Henneke rating system), color, size, and other information may also be recorded, along with the disposition of that animal (removed or released). Hair and/or blood samples will be acquired in accordance with current guidance (IM # 2009-062), to determine whether BLMs management is maintaining acceptable genetic diversity (avoiding inbreeding depression).

Data Collection

Wild burro herd data which may be collected inc ludes 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).

Wild Horse and Burro Specialists would be responsible for collecting population data. Data collected during the gather and adoption preparation operations may be used to determine which individual wild burros would be selected for return to the HMA and would aid in future analysis in Herd Management Area Plans. The extent to which data is collected would vary to meet specific needs pertaining to the HMA. The following data may be collected:

1. Collecting Blood and Hair Samples:
   Unless there is a previously recognized concern regarding low genetic diversity in a particular herd, it is not necessary to collect genetic information at every gather. Typical herds should be sampled every ten to 15 years (two to three gather cycles). The Sinbad HMA is due to have genetic information collected.

   Hair samples would be collected and analyzed to compare with established genetic baseline data (genetic diversity, historical origins, unique markers, and norms for the population). The samples would be collected from the animals released back into the HMAs and from some of the animals removed from the HMA.

   Minimum sample size is 25 animals or 25% of the post-gather populations, not to exceed 100 animals per

HMA or separate breeding population. A sample is defined as 30 hairs with roots (about the diameter of a pencil). Hair samples would be taken from both Jennies and Jacks. Age would not be a defining factor in determining which animals to sample.

The test would consist of looking at 29 systems (17 typing and 12 DNA). The data would be compared to similar data from both domestic and other wild burro populations. The primary value of this data is to compare it to baseline samples to identify genetic drift and any narrowing of diversity through inbreeding. A sample of DNA would be preserved for each horse tested.
Samples would be sent to Dr. Gus Cothran at the College of Veterinary Medicine at Texas A& M University for analysis. BLM qualified personnel would collect the hair samples.

Blood and/or hair samples may be taken for the purposes of furthering genetic ancestry studies and incorporation into the Herd Management Area Plans (HMAPs).

2. Herd Health and Viability Data Collection
   Data related to age, sex, color, overall health, pregnancy, or nursing status would be collected from each animal captured. The sex and age of each release animal gathered would be recorded during sorting procedures at the gather holding facility and/or at the preparation facility. An estimate of the number, sex and age of burros evading capture would also be recorded.

   Information on reproduction and survival would be collected to the extent possible, through documentation of the wild burros captured during the gather, and the age of those released following the gather. In addition, blood or hair samples may be collected from individuals within the herd for health records and/or viability data collection.

3. Characteristics:
   Color and size of the animals would be recorded. Any characteristics as to type (or similarities to domestic breeds) would be noted if determined. The genetic analysis would provide a comparison of domestic breeds with the wild burros sampled. Any incidence of negative genetic traits (parrot mouth, club feet etc.) or other abnormalities would be noted as well. A representative population of wild burros would be selected for release.

4. Condition Class:
   A body condition class score would be recorded based on the Henneke System.

5. Other Data:
   Other data such as temperament may be collected as determined by the Authorized Officer or Wild Horse Specialist.

Radio Collaring and Tagging

Radio collaring and tagging may be used to do research on habitat interactions, seasonal use of ranges, survival and density dependence, recruitment, fecundity, fertility, population growth and other subjects of value to the management of free-roaming wild burros.

During the gather burros would be fitted with Global Positioning System (GPS) and/or Very High Frequency (VHF) radio collars. Collars would be placed on adult horses that are 3 years of age or older and that have a Henneke body condition score of 4 or greater. The design and vendor of the collar would be based on the results of the ongoing USGS radio collar study at the BLM Pauls Valley adoption facility in Oklahoma. All radio collars would have a manual release mechanism in case of emergency, and a timed

release which will be programmed to release at the end of the planned study time. No collars would remain on wild burros indefinitely. If the collar drop-off mechanism fails at the end of the study, radio collars would be removed by capturing the individual burro to remove collars manually, or in a management gather.

Temporary Holding Facilities During Gathers

Wild burros gathered would be transported from the trap sites to a temporary holding corral near the HMA in goose-neck trailers or straight-deck semi-tractor trailers. At the temporary holding corral, the wild burros will be aged and sorted into different pens based on sex. The burros would be provided an ample supply of good quality hay and water. Mares and their un-weaned foals would be kept in pens together. All horses identified for retention in the HMA would be penned separately from those animals identified for removal as excess.

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

Transport, Short Term Holding, and Adoption Preparation

Wild burros removed from the range as excess would be transported to the receiving short-term holding facility in a goose-neck stock trailer or straight-deck semi-tractor trailers. Trucks and trailers used to haul the wild burros would be inspected prior to use to ensure wild burros could be safely transported. Wild burros would be segregated by age and sex when possible and loaded into separate compartments. Jennies and their un-weaned foals may be shipped together depending on age and size of foals. Jennies and un-weaned foals would not be separated for longer than 12 hours. Transportation of recently captured wild burros would be limited to a maximum of 8 hours.

Upon arrival, recently captured wild burros would be off-loaded by compartment and placed in holding pens where they would be fed good quality hay and water. Most wild burros begin to eat and drink immediately and adjust rapidly to their new situation. At the short-term holding facility, a veterinarian would provide recommendations to the BLM regarding care, treatment, and if necessary, euthanasia of the re cently c aptured wild burros. Any animals a ffected by a ch ronic or incurable disease, in jury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) that was not diagnosed previously at the temporary holding corrals at the gather site would be humanely euthanized using methods acceptable to the AVMA. Wild burros in very thin condition or animals with injuries are sorted and placed in hospital pens, fed separately and/or treated for their injuries. Recently captured wild burros, generally jennies, in very thin condition may have difficulty transitioning to feed. A small percentage of animals can die during this transition; however, some of these animals are in such poor condition that it is unlikely they would have survived if left on the range. At short-term corral facilities, a minimum of 700 square feet is provided per animal.

After recently captured wild burros have transitioned to their new environment, they are prepared for adoption or sale. Preparation involves freeze-marking the animals with a unique identification number, vaccination against common diseases, castration, and de-worming.

Public Participation

Prior to conducting a gather, a communication plan or similar document summarizing the procedures to follow when media or interested public request information or viewing opportunities during the gather should be prepared.

The public must adhere to guidance from the agency representative and viewing must be prearranged.

Safety

Safety of BLM employees, contractors, members of the public, and the wild burros will be given primary consideration. The following safety measures will be used by the Authorized Officer and all others involved in the operation as the basis for evaluating safety performance and for safety discussions during the daily briefings:

A briefing between all parties involved in the gather will be conducted each morning.

All BLM personnel, contractors and volunteers will wear protective clothing suitable for work of this nature. BLM will alert observers of the requirement to dress properly (see Wild Horse and Burro Operational Hazards, BLM file 4720, UT-067). BLM will assure that members of the public are in safe observation areas. Observation protocols and ground rules will be developed for the public and will be enforced to keep both public and BLM personnel in a safe environment.

The handling of hazardous, or potentially hazardous materials such as liquid nitrogen and vaccination needles will be accomplished in a safe and conscientious manner by BLM personnel or the contract veterinarian.

Responsibility and Lines of Communication

The local WH&B Specialist / Project Manager from the PFO, have the direct responsibility to ensure/make sure that Instruction Memorandum # 2013-060 Wild Horse and Burro Gather: Management by Incident Command System is followed.

Gather Research Coordinator (GCR) from the PFO, will have the direct responsibility to ensure compliance with all data collection and sampling. The GCR will also ensure appropriate communication with Field Office Manager, WO260 National Research Coordinator, College of Veterinary Medicine at Texas A&M University, and Animal Plant Health Inspection Service (APHIS).

The PFO Assistant Manager will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, State Office, and Delta Wild Horse Corrals.

All employees involved in the gathering operations will keep the best interests of the animals at the forefront at all times.