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

McCullough Peaks HMA Bait Trap Gather

Environmental Assessment

August 2023

BLM Wyoming –Cody Field Office

DOI-BLM-WY-R020-2023-0003-EA

Cody Field Office
1002 Blackburn Street
Cody, Wyoming 82414
307-578-5900
307-578-5939(FAX)

Environmental Assessment

Introduction

Identifying Information

Project Name: McCullough Peaks HMA Bait Trap Gather

NEPA Number: DOI-BLM-WY-R020-2023-0003-EA

Type of Project: Wild Horse gather and population control measures.

Location of Proposed Action: The McCullough Peaks Herd Management Area is located in Park County, Wyoming and Bighorn County, Wyoming; see Appendix G, Map 1

Name and Location of Preparing Office:

Cody Field Office

1002 Blackburn Street.

Cody, WY 82414

Background

This Environmental Assessment (EA) has been prepared to analyze and disclose the environmental consequences of gathering and removal of wild horses and applying wild horse population control measures in the McCullough Peaks Herd Management Area (HMA). This EA analyzes both an immediate and a long term (10-year) bait trap removal (if necessary to maintain appropriate management level (AML)) and bait trapping to apply population control. The immediate bait gather and removal is proposed to occur in the fall of 2023 and/or winter of 2024. This bait gather and removal and population control action is proposed through 2033 (or as long as the BLM can reasonably conclude that no new information and no new circumstances have substantially changed in the area of analysis), as proposed by the Bureau of Land Management (BLM) Cody Field Office.

The BLM protects, manages, and controls wild horses and burros under the authority of the Wild Free-Roaming Horses and Burros Act (WFRHBA) of 1971, as amended. The WFRHBA mandates that BLM manage wild horse populations that prevent deterioration of the rangelands and help maintain a "thriving natural ecological balance" (TNEB)[1]. The 2015 Cody RMP has a management goal to "manage and maintain healthy wild horses and herds inside HMAs in a thriving natural ecological balance within the productive capacity of their habitat while preserving multiple use relationships" (GOAL BR:11). BLM accomplishes this goal by identifying the "appropriate management level" (AML) for each herd management area. An AML is generally a population range that allows the rangelands to maintain TNEB.

The 2015 Cody Record of Decision and Approved Resource Management Plan (2015 Cody RMP)

[1] The Interior Board of Land Appeals (IBLA) defined the goal for managing wild horses (or burro) population in a thriving natural ecological balance as follows: "[T]he '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.'" *Animal Protection Institute of America*, 109 IBLA 112, 115 (1989) (*citing Dahl v. Clark*, 600 F.Supp.585 (D. Nev. 1984)).

identified the AML for McCullough Peaks HMA as a population between 70 and 140 wild horses.[2] Since 2011, the herd within the McCullough Peaks HMA has been treated with Porcine Zona Pellucida vaccine (hereafter: "PZP"). However, population size has increased by an average of 2% per year due to several horses not responding to PZP treatments and because BLM allows mares to foal to provide genetic diversity to the herd. Additionally, although the life expectancy for horses in the HMA is estimated at 17 years with some mares over 20 years old. The horses within the McCullough Peaks HMA are averaging over 25 years old, five years longer than the average lifespan of a wild horse. The population size, as demonstrated in the table below, is based on direct counts of identified individuals, completed in 2023. Projected herd sizes for the years 2024-2034 are based on current management, which allows for a 2% growth rate per year. If BLM ceases managing wild horses through population control measures, wild horse herd populations typically increase by 20% per year.

Excess Determination

The 2015 Cody RMP states "management of wild horses is performed consistent with the Wild Free Roaming Horses and Burros Act of 1971, multiple use objectives in the FLPMA, and conformance with the Wyoming Standards for Healthy Rangelands, and in compliance with relevant court orders and agreements." Wild horse numbers above the AML constitute excess wild horses as described in the WFRHBA because, consistent with the 2015 Cody RMP, a population above AML will not maintain TNEB within the HMA. The BLM Cody Field Office has determined that wild horse numbers are above the AML in the McCullough Peaks HMA, and that action is necessary to remove excess animals. The 2015 Cody RMP identified the high AML as the highest number of horses that the rangeland can accommodate and still achieve a TNEB. The high AML for McCullough Peaks is 140 horses, but current population numbers are well above high AML, at 181. Therefore, under the WFRHBA and the 2015 Cody RMP, BLM must take action to remove excess wild horses and manage for self-sustaining populations of healthy, free-roaming animals in balance with other uses to achieve TNEB. To maintain TNEB, BLM also proposes to utilize population control measures to limit the growth of the McCullough Peaks HMA population.

The 2015 Cody RMP incorporated the need to manage the McCullough Peaks HMA for an appropriate management level of 70 to 140 wild horses, not counting foals (Record 4144); Manage BLM-administered land within the McCullough Peaks HMA to maintain or enhance conformance with the *Wyoming Standards for Healthy Rangelands* (BLM 1997) (Record 4146); and consider the use of natural and artificial population control measures as needed to maintain the wild horse populations within the established appropriate management level ranges (Record 4148). Maintenance of wild horse populations at initial appropriate management levels in existing HMAs would be accomplished through removals and selected application of other population control practices (2015 Cody RMP, 4-349)

Table 1. Population of the wild horse herd in the McCullough Peaks HMA in 2022, and projected population sizes for 2023-2033 to grow by 2% per year based on current factors (Zonastat-H a.k.a. PZP non responders, allowing genetic diversity and long-life expectancy).

HMA	Low AML	High AML	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
McCullough Peaks	70	140	181	185	188	192	196	200	204	208	212	216	221

[2] A summary of the 2015 Cody RMP's basis for determining the applicable AML can be found in the "Effects Analysis" subsection under the "Vegetation" heading of this document.

Purpose and Need

The purpose for this action is to achieve and maintain a wild horse population within the AML for the McCullough Peaks HMA through removal and population control measures to ensure TNEB.

The need for the action is that the wild horse population in the McCullough Peaks HMA is currently in excess of the high AML. The BLM must maintain a thriving natural ecological balance and multiple-use relationship on public lands consistent with the provisions of Section 3 of the WFRHBA, 16 U.S.C. § 1333, and Section 102 of the Federal Land Policy and Management Act (FLPMA), 43 U.S.C. § 1701. BLM is responsible for preventing unnecessary or undue degradation of public lands. 43 U.S.C. § 1732.

This EA follows the guidance provided in BLM IM No. 2019-004. This memorandum guides BLM offices to analyze various wild horse management actions to meet the Purpose of and Need for Action and to analyze management actions over multiple years. The 10-year timeframe of this EA enables BLM to determine the effectiveness of the Proposed Action at successfully achieving and/or maintaining population levels within AML for the McCullough Peaks HMA; a process at which the BLM is unlikely to be successful in a short time frame.

OBJ

Decision to be Made

The Authorized Officer (AO), the BLM Cody Field Manager, must determine whether to authorize the Proposed Action on the BLM-administered public lands and what mitigation would be applied. Any decision would not adjust AML or livestock use, including forage allocations, as these were set through previous land-use planning decisions reflected in 2015 Cody RMP.

Conformance with BLM Land Use Plans

The Proposed Action conforms to the Record of Decision (ROD) and Approved Resource Management Plan (ARMP) for the Cody Field Office (CYFO) dated September 21, 2015. The decisions in the CYFO ARMP provide general management direction and allocation of uses and resources on the public lands in the area.

This plan has been reviewed to determine if the proposed action conforms to the land use plan as required by 43 CFR 1610.5-3. The specific management records of the Cody RMP that apply are described below:

Record	Management Action Text
4144	Manage the McCullough Peaks HMA for an initial appropriate management level of 70 to 140 wild horses, not counting foals, in an attempt to maintain a population of 100 adult wild horses adjusted as necessary based upon monitoring.
4146	Manage BLM-administered land within the McCullough Peaks HMA to maintain or enhance conformance with the *Wyoming Standards for Healthy Rangelands* (BLM 1997).
4147	Employ selective removal criteria, in accordance with current national policies, during periodic gathers to increase desired genetic characteristics and avoid genetic depression.
4148	Consider the use of natural and artificial population control measures as needed to maintain the wild horse populations within the established appropriate management level ranges.

4154	Avoid wild horse gathers 6-weeks before or 6-weeks after peak foaling season. To the extent possible, conduct wild horse gathers in the fall, after peak foaling has occurred and when temperatures are lower to reduce stress on the animals.
5025	Protect vertebrate and scientifically significant paleontological resources on BLM-administered land from proposed surface-disturbing activities that could damage or destroy these resources.
5035	Implement the Potential Fossil Yield Classification (PFYC) system (Map 3-19) as a standard part of review for all surface-disturbing activities in the planning area (see Glossary).
5037	Attach standard Paleontological Resources Protection Stipulations (see Glossary) to authorizations for surface-disturbing activities in all areas, regardless of PFYC (i.e., 1 through 5).

Relationship to Statutes, Regulations, Plans, or Other Environmental Analysis

The Proposed Action and all action alternatives have been designed to conform to Federal law and regulations, consultation requirements, and other authorities that direct and provide the framework and official guidance for management of BLM lands within the Cody Field Office.

- McCullough Peaks Wild Horse Herd Area Management Plan (September 1985)

- The Proposed Action is in conformance with the Wild Free-Roaming Horse and Burro Act (WFRHBA) of 1971 Public Law 92-195, as amended.

- Wild Free-Roaming Horse and Burro Management (43 CFR 4700). Applicable excerpts are as follows:
  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…."*

- BLM Wild Horses and Burros Management Handbook, H-4700-1 (June 2010):

- Section 302 (a) and (b) of the Federal Land Policy and Management Act of 1976, the Public Rangelands Improvement Act (PRIA) of 1978 (Pub. L. 95-514, Sec. 4).
  PRIA directs the continued *"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 to other rangeland values*.

Identification of Issues and Scoping

Public Involvement

BLM notified the public of the National Environmental Policy Act (NEPA) process when the Environmental Assessment was listed on the ePlanning site in November 2022. Based on the size and routine nature of the proposed project, it was determined that external scoping was necessary. External scoping was conducted from January 9, 2023, to February 7, 2023. During the external scoping comment period 4,352 comments were submitted on the ePlanning site and although comments were

not accepted via email, a chain letter consisting of 11,193 emails were submitted during external scoping. Substantive comments submitted during external scoping were considered in the development of alternatives and issues.

Comments such as: eliminate grazing, raise the AML to accommodate the older horses to avoid gathers, horses dying natural from predation, were all considered in the alternatives developed. However, they were ultimately determined as Alternatives Considered and Eliminated from Further Analysis (pg 12). Rationale for dismissal from consideration is provided under each alternative.

Comments regarding not gathering older horses and gathering and not gathering to the high end of AML to retain genetic diversity were added to the Proposed Action.

The preliminary EA was posted on ePlanning for public comment for 30 days on July 13th. A total of 6,171 unique comments were submitted as well as 8,543 form letters. Substantive public comment and the BLM responses are located in Appendix J of this document.

Internal Scoping

The proposed action was reviewed by an interdisciplinary (ID) team. Preliminary issues were considered in order to aid in the development of the proposed action or design features. The ID-team then determined which issues warranted further consideration.

Issues Identified for Detailed Analysis

The proposed action was reviewed by an ID-team. The following issues were identified by the team:

Vegetation: How would the removal of wild horses from the McCullough Peaks HMA to reach established AML numbers impact vegetation?

Range Management: How would the removal of wild horses from the McCullough Peaks HMA to reach established AML numbers impact range and permitted livestock grazing administration?

Wild Horses: How would the removal of excess horses and implementation of new fertility control methods affect the wild horses.

Proposed Action and Alternatives

Alternative 1: No Action

Under the No Action Alternative, a gather to remove excess wild horses would not occur and would instead allow the older horses to naturally die off. The current active management to control population growth rates, utilizing Zonastat-H, a.k.a. PZP, would continue.

Alternative 2: Proposed Action

The Proposed Action would be to conduct bait trap gathers over multiple years, through 2033T[3], to remove excess horses within and around the McCullough Peaks HMA to achieve AML. Prior to the bait

[3] Management for a TNEB will require maintenance of the wild horse population within the AML and may require removal of excess animals above AML during the 10-year decision period to ensure rangeland health. A 9th circuit federal district court ruled in *Friends of Animals v. Culver*, 610 F.Supp.3d 157 (D.D.C.

trap gather, a census count will occur to determine how many horses will be removed to reach AML of 140. In subsequent years from the first gather, the BLM would maintain the population within AML through maintenance gathers if the population continues to exceed AML.

The gather would allow older horses to remain within the McCullough Peaks HMA. The BLM would continue current use of PZP, however, the Proposed Action would implement additional population growth suppression treatments with GonaCon-Equine vaccine (hereafter: "Gonacon") on mares older than 13 years old that have contributed to the genetic diversity of the herd. Additionally, Gonacon would be used on a mare after it is determined that the mare is not responding to PZP treatments after several attempts to prevent foaling, based on an analysis of previous treatments and foaling outcomes. If a mare is not responding to PZP after the normal treatment windows (i.e. 10-12 months) the BLM would first change that mare's treatment window to every 6 months; if that mare is still foaling, Gonacon would be used.

Bait Trap Gather

Initial trapping efforts will likely be conducted by BLM Staff. In subsequent years a contractor may be utilized. BLM staff familiar with the identification of the horses will help to ensure that bands will remain together, and the proper horses slated for removal are safely trapped.

Retain Older Horses

During the external scoping period, there was concern from the public that older horses within the McCullough Peaks HMA would be gathered and due to their age would immediately become sale authority horses without the possibility of adoption or would end up living in a long-term care holding

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2022), that the BLM cannot take 10 years to remove animals determined to be excess under the WFRHBA. Under the Proposed Action, the BLM would remove some excess horses immediately, in accordance with the WFRHBA, through an initial gather and in a follow-up gather(s) if it is not possible to achieve low AML in a single gather. However, the BLM's management to achieve a TNEB is not limited to removing excess animals; it also includes measures to reduce annual population growth and to allow for achievement of land health standards. These objectives require a sufficient time frame to achieve. It is unlikely that a single gather can achieve this because of limitations on gather efficiency (some animals may evade capture), logistics (e.g. weather conditions, terrain, and large geographic area to be gathered), and space or funding capacity (for holding removed animals), that may constrain the number of gathers that can be conducted annually at the national level. As a result, it often requires more than a single gather to bring a specific wild horse population to within AML. The BLM also has the need to implement and maintain population growth suppression measures to effectively maintain AML, which requires multiple applications of population growth suppression methods even after AML is achieved. For these reasons, a 10-year plan is needed to remove excess wild horses, bring the population down to AML, continue to implement population growth suppression measures to keep population growth rates low and measurably reduce the number of excess animals that would need to be removed in the future from the McCulllough Peaks HMA, and to allow for vegetative and riparian resources to exist at conditions consistent with land health standards. It is anticipated that after the initial gather, there would likely be the need for at least one or more follow-up gather(s) in order to keep the herd within AML.

facility, which can entail a high cost to support these horses. Therefore, during the initial gather, the Cody Field Office will not remove horses older than 15 years old from the McCullough Peaks HMA. In subsequent years, older horses may be removed if they become a nuisance, for safety, or in an emergency.

Population Growth Suppression Treatments (PZP and Gonacon)

Fertility control vaccines (also known as immunocontraceptives) meet BLM requirements for safety to mares and the environment (EPA 2009a, 2012). Because they work by causing an immune response in treated animals, there is no risk of hormones or toxins releasing into the food chain when a treated mare dies. The Cody Field Office has used PZP since 2011 and would utilize GonaCon-Equine to assist in the continued efforts to manage the McCullough Peaks HMA.

In any vaccine, the antigen is the stimulant to which the body responds by making antigen- specific antibodies. Those antibodies then signal to the body that a foreign molecule is present, initiating an immune response that removes the molecule or cell. Adjuvants are additional substances that are included in vaccines to elevate the level of immune response. Adjuvants help to incite recruitment of lymphocytes and other immune cells which foster a long-lasting immune response that is specific to the antigen.

Liquid emulsion vaccines can be injected by hand or remotely administered in the field using a pneumatic dart (Roelle and Ransom 2009, Rutberg et al. 2017, McCann et al. 2017) in cases where mares are relatively approachable. Use of remotely delivered (dart-delivered) vaccine is generally limited to populations where individual animals can be accurately identified and repeatedly approached within 50 meters (BLM 2010). Booster doses can be safely administered by dart. Even with repeated booster treatments of the vaccines, it is expected that most mares would eventually return to fertility, though some individual mares treated repeatedly may remain infertile. Once the herd size in a project area is at AML and population growth seems to be stabilized, BLM can make adaptive determinations as to the required frequency of new and booster treatments.

Porcine Zona Pellucida (PZP) Vaccine

PZP has been utilized in the McCullough Peaks HMA since 2011. PZP vaccines meet most of the criteria that the National Research Council (2013) used to identify promising fertility control methods, in terms of delivery method, availability, efficacy, and side effects. PZP is relatively inexpensive, meets BLM requirements for safety to mares and the environment, and is produced as the liquid PZP vaccine ZonaStat-H (or Native PZP), an EPA-registered commercial product (EPA 2012, SCC 2015).

In subsequent years, Native PZP (or currently most effective formulation) would be administered as a booster dose using the one-year liquid PZP vaccine by field or remote darting. The dart-delivered formulation produced injection-site reactions of varying intensity, though none of the observed reactions appeared debilitating to the animals (Roelle and Ransom 2009). Joonè et al. (2017a) found that injection site reactions had healed in most mares within 3 months after the booster dose, and that they did not affect movement or cause fever. Native PZP (or currently most effective formulation) would be administered by PZP certified and trained applicators in the one-year liquid dose inoculations by field darting the mares. Prior to darting, BLM will conduct an inventory of the wild horses. This would include a list of marked horses and / or a photo catalog with descriptions of the animals to assist in identifying which animals have been treated and which need to be treated. Application of fertility control treatment would be conducted in accordance with the approved standard operating and post-treatment monitoring procedures (SOPs, Appendix E).

The historically accepted hypothesis explaining PZP vaccine effectiveness posits that when injected as an antigen in vaccines, PZP causes the mare's immune system to produce antibodies that are specific to zona pellucida proteins on the surface of that mare's eggs. The antibodies bind to the mare's eggs surface proteins (Liu et al. 1989), and effectively block sperm binding and fertilization (Zoo Montana, 2000). Because treated mares do not become pregnant but other ovarian functions remain generally unchanged, PZP can cause a mare to continue having regular estrus cycles throughout the breeding season. Other research has shown, though, that there may be changes in ovarian structure and function due to PZP vaccine treatments (e.g., Joonè et al.2017b, 2017c). Research has demonstrated that contraceptive efficacy of an injected liquid PZP vaccine, such as ZonaStat-H, is approximately 90% or more for mares treated twice in one year (Turner and Kirkpatrick 2002, Turner et al. 2008).

GonaCon Vaccine

Under the proposed alternative, GonaCon may be applied to mares older than 13 years old that have contributed genetic diversity to the McCullough Peaks HMA, or to mares that have proven to be unresponsive to treatments with PZP. Taking into consideration available literature on the subject, the National Research Council concluded in their 2013 report that GonaCon-B (which is produced under the trade name GonaCon-Equine for use in feral horses and burros) was one of the most preferable methods available for contraception in wild horses and burros (NRC 2013), in terms of delivery method, availability, efficacy, and side effects. GonaCon-Equine is approved for use by authorized federal, state, tribal, public and private personnel, for application to wild and feral equids in the United States (EPA 2013, 2015).

GonaCon-Equine has been used on an increasing number of BLM-managed wild horses in over 15 HMAs throughout the west. GonaCon-Equine can be remotely administered in the field in cases where mares are relatively approachable, using a customized pneumatic dart (McCann et al. 2017). Use of remotely delivered (dart-delivered) vaccine is generally limited to populations where individual animals can be accurately identified and repeatedly approached within 50 meters or less (BLM 2010).

GonaCon is an immunocontraceptive vaccine that has been shown to provide multiple years of infertility in several wild ungulate species, including horses (Killian et al., 2008; Gray et al., 2010). GonaCon uses the gonadotropin-releasing hormone (GnRH), a small neuropeptide that performs an obligatory role in mammalian reproduction, as the vaccine antigen. When combined with an adjuvant, the GnRH vaccine stimulates a persistent immune response resulting in prolonged antibody production against GnRH, the carrier protein, and the adjuvant (Miller et al., 2008). The most direct result of successful GnRH vaccination is that it has the effect of decreasing the level of GnRH signaling in the body, as evidenced by a drop in luteinizing hormone levels, and a cessation of ovulation. The lack of estrus cycling results from successful GonaCon vaccination is similar to the typical winter period of anoestrus in open mares. As anti-GnRH antibodies decline over time, concentrations of available endogenous GnRH increase and treated animals usually regain fertility (Power et al., 2011). Baker et al. (2017) observed horses treated with GonaCon return to fertility after they were treated with a single dose: after four years, the fertility rate was indistinguishable between treated and control mares.

GonaCon-Equine vaccine is an EPA- approved treatment that is relatively inexpensive, meets BLM requirements for safety to mares and the environment, and is produced in a United States Department of Agriculture – Animal and Plant Health Inspection Service (USDA-APHIS) laboratory. As is the case with ZonaStat-H, its regulatory categorization as a 'pesticide' is consistent with regulatory framework for controlling overpopulated vertebrate animals, and in no way is meant to convey that the vaccine is lethal; the intended effect of the vaccine is only as a contraceptive. GonaCon-Equine is produced as a pharmaceutical-grade vaccine, including aseptic manufacturing technique to deliver a sterile vaccine

product (Miller et al. 2013). If stored at 4° C, the shelf life is 6 months (Miller et al 2013).

Miller et al. (2013) reviewed the vaccine for environmental safety and toxicity. When advisories on the product label (EPA 2015) are followed, the product is safe for users and the environment (EPA 2009b). GonaCon was deemed to pose low risks to the environment, so long as the product label is followed (Wang-Cahill et al. 2022).

Injection site reactions associated with immune-contraceptive treatments are possible in treated mares (Roelle and Ransom 2009). Whether injection is by hand or via darting, GonaCon-Equine is associated with some degree of inflammation, swelling, and the potential for abscesses at the injection site (Baker et al. 2018). Detailed effects of GonaCon are addressed in Appendix D.

Under the Proposed Action, the BLM would continue to apply PZP, and implement the use of GonaCon-Equine on mares older than 13 years old and that have contributed to the genetic diversity of the McCullough Peaks Herd or which are nonresponsive to PZP. The BLM would initiate new treatments to maintain contraceptive effectiveness in controlling population growth rates. Booster dose effects may lead to increased effectiveness of contraception (Baker et al. 2018), which is generally the intent. GonaCon-Equine can safely be reapplied as necessary to control the population growth rate. Even with one booster treatment of GonaCon-Equine, it is expected that most, if not all, mares would return to fertility at some point (based on results from Baker et al. 2018, although the average duration of effect after booster doses has not yet been quantified). It is unknown what would be the expected rate for the return to fertility rate in mares boosted more than once with GonaCon- Equine. However, as is true for mares treated multiple times with the PZP vaccine ZonaStat-H (Nuñez et al. 2017), lifetime infertility (i.e., sterility) may result for some mares treated multiple times with GonaCon-Equine. Once the herd size in the project area is at AML and population growth seems to be stabilized, BLM could use population planning software (i.e., PopEquus, developed by United States Geological Survey (USGS) Fort Collins Science Center, https://rconnect.usgs.gov/popequus/) to make a determination as to the required frequency of new mare treatments and mare re-treatments with GonaCon-Equine vaccine or other fertility control methods, to maintain the number of horses within AML. Because GonaCon vaccines can cause a longer period of infertility as compared to PZP, BLM would utilize GonaCon vaccines on mares that have already contributed to the genetic diversity of the McCullough Peaks Herd through offspring. This would ensure that younger mares have the opportunity to contribute to genetic diversity when needed (by skipping PZP doses) and also save costs with respect to the older mares treated with GonaCon because BLM would not need to treat older mares as often.

PZP and GonaCon Indirect Effects

One expected long-term, indirect effect on wild horses treated with fertility control, such as PZP or GonaCon would be an improvement in their overall health (Turner and Kirkpatrick 2002).

Many treated mares would not experience the biological stress of reproduction, foaling, and lactation as frequently as untreated mares. The observable measure of improved health is higher body condition scores (Nuñez et al. 2010). After a treated mare returns to fertility, her future foals would be expected to be healthier overall and would benefit from improved nutritional quality in the mare's milk. This is particularly to be expected if there is an improvement in rangeland forage quality at the same time, due to reduced wild horse population size. Past application of fertility control has shown that mares' overall health and body condition remains improved even after fertility resumes. Fertility control vaccine treatment may increase mare survival rates, leading to longer potential lifespan (Turner and Kirkpatrick 2002, Ransom et al. 2014a). To the extent that this happens, changes in lifespan and decreased foaling rates could combine to cause changes in overall age structure in a treated herd (i.e., Turner and Kirkpatrick 2002, Roelle et al. 2010), with a greater prevalence of older mares in the herd (Gross 2000).

Design Features of the Proposed Action Alternative and Best Management Practices

Design features of this project are intended to maintain the health and safety of the horses, as well as to protect other natural resources found in the herd management area.

Bait Trap Design Features

Trapping involves setting up portable panels around an area previously used in the 2013 McCullough Peaks Bait Trap Gather and baited. The portable panels would be set up to allow wild horses to go freely in and out of the corral until they have adjusted to it. When the wild horses fully adapt to the corral, it is fitted with a gate system. The adaptation of the horses creates a low stress trapping method. During this acclimation period the horses would experience some stress due to the panels being setup and perceived access restriction to the bait source. Traps would remain in place until the target numbers of animals are removed. The bait used would be weed free hay, protein tubs, and salt tubs. Implementation of management actions would begin in the fall of 2023 and would continue until environmental conditions or policy and management objective changes require new analysis of additional management actions. Additional design features are described in Appendix E (Wild Horse Gather Standard Operating Procedures (SOPs)).

Gather operations would be conducted by BLM personnel or by contractor. Genetic monitoring (following Instructional Memo (IM) 2009-062 or future updated policy guidance) would also continue following gathers. If future genetic monitoring indicates a loss of genetic diversity, the BLM would consider introduction of horses from HMAs in similar environments to maintain the projected genetic diversity. Fertility control monitoring would be conducted in accordance with the population-level fertility control treatment SOPs in Appendix E and IM 2009-090 Population Level Fertility Control Field Trials: Herd Management Area Selection, Vaccine Application, Monitoring.

A Doctor of Veterinary Medicine (DVM) would be on call for the duration of the bait trap to examine animals and make recommendations to the BLM for the care and treatment of wild horses and ensure humane treatment. Additionally, animals transported to a BLM wild horse facility are inspected by facility staff and the BLM contract Veterinarian, to observe health and ensure the animals have been cared for humanely. Comprehensive Animal Welfare Program Standards (CAWP) will be followed, Appendix I.

BLM will collect data, including; sex and age distribution, condition class information (using the Henneke rating system), color, size and other information, along with the disposition of the animal (removed or released).

The McCullough Peaks Herd was last gathered in 2013. The proposed gathers would occur between November 15 to March 15 for bait trapping when conditions are conducive to gather due to horses' responsiveness to hay. Approximately 40% of the McCullough Peaks HMA is accessible to BLM staff during winter months when conditions are conducive for conducting a bait gather. Bait gathers would conclude by March 15 in order to avoid disrupting sage grouse breeding season. Gathers would be conducted in accordance with the Wild Horse Gather Standard Operating Procedures located in Appendices E. Based on the current population inventory conducted on May 31, 2023, the Cody Field Office would remove excess horses from the population of 181 in 2023. The numbers may vary slightly after a direct population count that would be conducted prior to the bait trap gather.

If bait trap efforts are not successful in removing all excess horses during the first year, bait trap efforts will occur on subsequent years until AML has been reached. Prior to any gather activities beyond 2023, a Determination of NEPA Adequacy (DNA) Worksheet would be completed to determine if policy, the Affected Environment, or anticipated effects have changed significantly to warrant additional analysis.

The public would be notified through the BLM Press Releases.

Temporary Holding Facilities During Gathers

Wild horses that are gathered after sorting at trap site, would be transported from the gather sites to a temporary holding corral within the HMA. At the temporary holding corral, wild horses would be sorted into different pens. Mares would be identified for fertility control and treated at the corrals. The horses would be provided good quality hay and water. At the temporary holding facility, a veterinarian, when present, would provide recommendations to the BLM regarding care and treatment of recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the American Veterinary Medical Association (AVMA). Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Permanent Instruction Memorandum 2021-007 or the most current edition).

Herd health and characteristics data would be collected as part of continued monitoring of the wild horse herds. Genetic baseline data would be periodically collected to monitor the genetic diversity of the wild horse herds within the combined project area, as measured by observed heterozygosity (Ho) values based on hair follicle DNA samples (BLM 2010). The same samples may be used to analyze herd ancestry.

Gathered wild horses in the temporary holding corral that would be removed from the range would be transported to BLM off-range corrals where they would be prepared for adoption and/or sale to qualified individuals or transfer to off-range pastures or other disposition authorized by the WFRHBA.

Transport, Short-Term Holding, and Adoption Preparation

All gathered excess wild horses would be removed and transported to BLM off range corrals (ORCs, formerly short-term holding facilities) where they would be inspected by facility staff (and if needed by a contract veterinarian) to observe health conditions and ensure that the animals are being humanely cared for. Wild horses removed from the range would be transported to the receiving ORC in goose-neck stock trailers or straight-deck semi-tractor trailers. Trucks and trailers used to haul the wild horses would be inspected prior to use to ensure wild horses can be safely transported. Wild horses would be segregated by age and sex when possible and loaded into separate compartments. Mares and their un-weaned foals may be shipped together. Transportation of recently captured wild horses is limited to a maximum of ten hours.

Upon arrival, recently captured wild horses are off-loaded by compartment and placed in holding pens where they are provided good quality hay and water. Most wild horses begin to eat and drink immediately and adjust rapidly to their new situation. At the ORC, a veterinarian provides recommendations to the BLM regarding care, treatment, and if necessary, euthanasia of the recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the AVMA. Wild horses in very thin condition, or animals with injuries, are sorted and placed in separate pens, fed separately, and/or treated for their injuries.

After recently captured wild horses have transitioned to their new environment, they are prepared for adoption, sale, or transport to off-range pastures. Preparation involves freeze marking the animals with a unique identification number, vaccination against common diseases, castration, microchipping, and de-worming. At ORC facilities, a minimum of 700 square feet of space is provided per animal.

Adoption or Sale with Limitations and Off-Range Pastures

Adoption applicants are required to have at least a 400 square foot corral with panels that are at least six feet tall. Applicants are required to provide adequate shelter, feed, and water. The BLM retains title to the horse for one year and the horse and facilities are inspected. After one year, the applicant may take title to the horse at which point the horse becomes the property of the applicant. Adoptions are conducted in accordance with 43 CFR § 4750.

Wild Horses

The Cody Field Office will monitor mares that are treated with Gonacon for any side effect that would negatively affect their health, other than transient injection site reactions that are often associated with PZP or GonaCon treatments (PZP: Roelle and Ransom 2009; GonaCon: Baker et al. 2018). If it is noted that a mare treated with Gonacon is more adversely affected by this treatment, the mare will no longer be treated with Gonacon.

Historic or Cultural Resources

The easternmost, proposed holding corral, Bones Trap, has not been subject to previous inventory. Effort shall be made to re-design the location to utilize proximate existing disturbance or previous valid inventory. If this is not feasible, the location would be surveyed at the Class III level for cultural resources prior to construction. If cultural resources are encountered at the temporary holding facility, the bait trap would not be utilized.

To mitigate potential affects to unknown historic or cultural resources from ground disturbing activities, and to inform the holder of their responsibilities under ARPA, NAGPRA, and the State Protocol, cultural protections apply.

Range Administration

A minimum of four weeks advance notice of the scheduled gather should be given to livestock operators holding grazing permits within the HMA. Timing and bait trap locations used for the gather should be included in the notice to allow time for BLM staff and livestock operators to collaborate on changing rotation schedules, if needed, and to ensure livestock are away from the bait trap locations at the time of the scheduled gather.

Alternatives Considered and Eliminated from Further Analysis

The following issues were considered for detailed analysis. Based on further review it was determined that these preliminary issues did not warrant analysis in this EA.

Raising the Appropriate Management Levels for Wild Horses

Delay of a gather until the AMLs can be reevaluated is not consistent with the WFRHBA, Public Rangelands Improvement Act or FLPMA or the existing 2015 Cody RMP. The rationale given by some public commenters for raising the AML is to accommodate the horses that are living beyond the normal life expectancy and therefore stop the gather from happening all together. Severe range degradation would occur if an AML reevaluation process were initiated without gathering the excess animals and an even larger number of excess wild horses would ultimately need to be removed from the range to achieve AML or under emergency conditions to prevent the death of individual animals due to insufficient water and forage resources for the current overpopulation of wild horses. This alternative was eliminated from further consideration because it is contrary to the WFRHBA which requires the BLM to manage the rangelands to prevent the range from deterioration associated with an overpopulation of wild horses. Raising the AML to eliminate a gather does not meet the Purpose and Need to Restore a TNEB or meet Rangeland Health Standards.

Remove or Reduce Livestock Within the McCullough Peaks HMA

This alternative would involve no removal of wild horses and would instead address TNEB through removal or reduction of livestock within the complex. In essence, this alternative would simply exchange use by livestock for use by wild horses. This alternative was not brought forward for analysis because it is inconsistent with the 2015 Cody RMP, and the WFRHBA which directs the Secretary to immediately remove excess wild horses to maintain TNEB.

The proposal to reduce livestock would not meet the Purpose and Need to gather and remove excess wild horses from the McCullough Peaks. Eliminating or reducing grazing to shift forage use to wild horses would not be in conformance with the existing Land Use Plans and is contrary to the BLM's multiple-use mission as outlined in FLPMA and would be inconsistent with the WFRHBA and PRIA. It was Congress' intent to manage wild horses and burros as one of the many uses of the public lands, not a single use. Therefore, the BLM is required to manage wild horses and burros in a manner designed to achieve a TNEB between wild horse and burro populations, wildlife, domestic livestock, vegetation and other uses.

Information about the Congress' intent is found in the Senate Conference Report (92-242) which. accompanies the 1971 WFRHBA (Senate Bill 1116): "*The principal goal of this legislation is to provide for the protection of the animals from man and not the single use management of areas for the benefit of wild free-roaming horses and burros. It is the intent of the committee that the wild free-roaming horses and burros be specifically incorporated as a component of the multiple-use plans governing the use of the public lands.*"

Furthermore, simply re-allocating livestock Animal Unit Months (AUMs) to increase the wild horse AMLs would not achieve a TNEB. Livestock can be confined to specific pastures, limited to specific periods of use, and specific seasons-of-use so as to minimize impacts to vegetation during the critical growing season and to riparian zones during the summer months. Conversely, wild horses are present year-round and their impacts to rangeland resources cannot be controlled through establishment of a grazing system. Thus, impacts from wild horses can only be addressed by limiting their numbers to a level that does not adversely impact rangeland resources and other multiple uses.

Livestock grazing can only be reduced or eliminated through provisions identified within regulations at 43 CFR § 4100 and must be consistent with multiple use allocations set forth in Land Use Plans (LUPs)/RMPs. Such changes to livestock grazing cannot be made through a wild horse gather decision and are only possible if BLM first revises the LUPs to allocate livestock forage to wild horses and to eliminate or reduce livestock grazing. Because this alternative is inconsistent with the Cody Field Office RMP, it would first require an amendment to the RMP, which is outside the scope of this EA.

Wild Horse 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 range deterioration associated with an overpopulation of wild horses. None of the significant natural predators from native ranges of the wild equids in Europe, Asia, and Africa — wolves, brown bears, and African lions — exist at all, or in high numbers, on the wild horse ranges in the western United States. The McCullough Peaks HMA does not contain the suitable habitat to support the life cycle of predators such as mountain lions, grizzly bear, and wolves in numbers great enough to limit wild horse population size. This, and the use of fertility control vaccines, probably contribute to the long-life expectancy of the McCullough Peaks Herd.

Affected Environment and Environmental Effects

General Setting and Geographic Scope of the Project Area

The McCullough Peaks HMA encompasses 113,938 acres of land managed by the BLM, 5,809 acres of state lands and 789 acres of private lands. The HMA is bordered on the north by the portions of the Peaks 1064 allotment: Whistle Creek Allotment and East/West Allotment boundary, on the east by State Hwy 32, on the south by US HWY 14 and on the west by the allotment boundary the Red Point Allotment, Whistle Creek Allotment and a natural barrier in the Peaks 1064 Allotment.

The climate is typical of a cold desert with annual precipitation averaging five to nine inches. Topography is highly variable, ranging from mostly flat to rolling foothills carved by drainages, to colorful badlands and desert mountains featuring steep slopes and canyons.

The northern portion of the HMA is designated as Greater Sage Grouse General Habitat whereas the southern portion of the HMA is designated as Greater Sage Grouse Priority Habitat. Table 2 shows the existing vegetation type based on the current Landfire Existing Vegetation Type data set (https://landfire.gov/evt.php).

Table 2. Most prevalent vegetation type within the McCullough Peaks HMA.

Greater Sage Grouse General Habitat - McCullough Peaks HMA*

Landfire Existing Vegetation Type	Acres
Big Sagebrush Shrubland and Steppe	42,216
Salt Desert Scrub	36,529
Sparse Vegetation	9,768
Introduced Annual Grassland	1,282
Introduced Upland Vegetation-Shrub	916
Grassland	884
Introduced Annual and Biennial Forbland	530
Desert Scrub	502
Low Sagebrush Shrubland and Steppe	229
Limber Pine Woodland	171
Introduced Riparian Vegetation	141

*Shows the most prevalent vegetation type

Greater Sage Grouse Priority Habitat - McCullough Peaks HMA*

Landfire Existing Vegetation Type	Acres
Big Sagebrush Shrubland and Steppe	16,029
Salt Desert Scrub	4,530
Introduced Annual Grassland	2,110
Grassland	1,858
Sparse Vegetation	1,626
Introduced Riparian Vegetation	211
Introduced Upland Vegetation-Shrub	159
Introduced Annual and Biennial Forbland	157
Desert Scrub	132
Greasewood Shrubland	103

*Shows the most prevalent vegetation type

Population modeling (PopEquus) was completed for the proposed action and alternatives to analyze how the alternatives would affect the wild horse populations. Analysis included removal of excess wild horses with fertility control. The primary objective of the modeling was to identify if any of the alternatives "crash" the population or cause extremely low population numbers or growth rates. The results of population modeling show that minimum population levels and growth rates would be within reasonable levels and adverse impacts to the population would not be likely under The Proposed Action and No Action Alternatives. Graphic and tabular results are displayed in detail in Appendix F & G.

Resources Considered and Eliminated from Further Analysis

Resources and features not present and not discussed in this EA are listed in Appendix A.

Resources Brought Forward for Analysis

Vegetation

Issue(s) Identified

How would the removal of wild horses from the McCullough Peaks HMA to reach established AML numbers impact native vegetation?

Affected Environment

An ecological site inventory (ESI) has not been completed for the entire McCullough Peaks HMA, however, much of the HMA area has had ESI completed, which provides valuable information for which ecological sites are found in most of the HMA. Based on ESI, soils surveys, existing trend studies, vegetative cover, and the appropriate range site information, the majority of public land acres in the HMA are comprised of Clay and Silty clay loam badland soil sites. Approximately two-thirds of the herd area is badland-type soils with vegetation communities comprised of saltbush, sagebrush, and perennial grass. The remaining one-third is a sagebrush-grass mixture. Dominant grass species found within the HMA include bluebunch wheatgrass, western wheatgrass, Sandberg's bluegrass, needle and thread, bottlebrush squirreltail, Indian ricegrass, and blue grama. Dominant shrub species found within the HMA include Wyoming big sagebrush, Nuttall's saltbush, and greasewood, along with a variety of forbs and subshrubs.

The loamy, shallow loamy, and sandy sites should be, and are, dominated by mid-sized key cool season bunchgrasses such as bluebunch wheatgrass, needle-and-thread grass, Indian ricegrass, and sand dropseed. Shrubs consist mainly of Wyoming big sagebrush, rabbit brush, Gardner sage, spiny hop sage, and winterfat in the HMA. Generally, species such as blue grama, inland sedge, prairie June grass, red threeawn, and Sandberg's bluegrass should constitute a small part of these ecological sites, usually less than 5% individually and 15% of the production collectively. The vegetation in the HMA is dominated by mid-sized cool season bunchgrasses as indicated by current monitoring studies. The exception to this is in some areas within the HMA that have converted to become dominated by blue grama from historic grazing use.

The saline upland and impervious clay sites are supporting perennial grasses such as bottlebrush squirrel tail, Indian ricegrass, and Sandberg's bluegrass. Some of the more common shrubs on these two sites are birds foot sagebrush, bud sagebrush, Gardner saltbush, and winterfat.

Effects

Alternative 1: No Action

Under the No Action Alternative, the horse gather would not occur, and the wild horse population would continue to increase. Wild horse populations continuing above the target AML may reduce available native vegetation at rates that exceed carrying capacity of the area for wild horses, wildlife, and livestock use. Per the RMP, horse management planning documents call for the McCullough Peaks HMA to support 70 to 140 total head of wild horses (1,050 to 2,100 animal unit months [AUMs]), to maintain an average of 100 adult wild horses in the HMA (1,500 AUMs). An AUM is the amount of forage necessary for the sustenance of one cow or its equivalent for a period of 1 month; however, as determined in the 1985 McCullough Peaks Wild Horse Herd Area Management Plan (BLM 1985) and the NRCS National Range and Pasture Handbook (NRCS 2003) the BLM bases its appropriate management level calculations on 1.25 AUMs per horse per month. Excessive use and removal of available native vegetation would change the ecosystem dynamics of the area such that plant species that are less desirable to wildlife, wild horses, and livestock become the dominant species available. In addition, bare ground persists and/or invasive or non-native species begin to outcompete natives and grow in abundance. These effects describe a foreseeable failure of the HMA to achieve TNEB.

Alternative 2: Proposed Action
Under the Proposed Action Alternative, the initial wild horse bait trap gather would occur with the goal of reaching target AML numbers. The proposed action would be in accordance with the WFRHBA of, "The Secretary shall manage wild free-roaming horses and burros in a manner that is designed to achieve and maintain a thriving natural ecological balance on public lands." Therefore, in order to maintain a thriving a natural ecological balance that is beneficial to wild horses, wildlife, livestock, and vegetation to protect the range from deterioration associated with overpopulation, the proposed action is allow for the gather of excess horses.

Compared to the no action alternative, there would be decreased impacts on native vegetation as a whole, and rangeland health would be expected to improve. Some concentrated impacts to native vegetation would occur around temporary bait trap and holding locations by disturbing vegetation from gather operations such as trap setup and removal, vehicle use, captured horse hoof action, etc. However, these effects would be temporary and the vegetation on the trap locations would be expected to recover over time. Long-term effects of removing horses in excess of the target AML would be beneficial to native vegetation by reducing direct grazing pressure, as well as reducing indirect effects (such as benefit to livestock grazing or watershed function) caused by wild horse surface disturbance and vegetation removal.

Range Administration

Issue(s) Identified

How would the removal of wild horses from the McCullough Peaks HMA to reach established AML numbers impact range and grazing administration?

Affected Environment

The McCullough Peaks HMA encompasses six grazing allotments which provide seasonal grazing for cattle: Red Point (03067), Reclamation 15 (03088), Reclamation (00666), East/West (01060), Whistle Creek (01002) and Peaks (01064). Grazing permits/leases for these allotments are held by three different operators. Rotational grazing management strategies have been implemented on the allotments in the HMA, and livestock grazing is authorized within the HMA throughout the year, depending on the allotment and terms of each permit/lease. Grazing authorizations allow for certain

amounts of forage to be utilized by cattle based on carrying capacity estimates which incorporates additional use by wildlife and wild horse populations using the target AML ranges. The amount of forage utilized by livestock is quantified Animal Unit Months (AUM), which is defined as the amount of forage necessary for the sustenance of one cow, or its equivalent for a period of 1 month.

The following figure shows the active livestock grazing preference for the allotments within the HMA.

Allotment Name & Number	Active AUMs
Reclamation #00666	292
Whistle Creek #01002	718
East-West #01060	3885
Red Point #03067 (HMA)*	602*
Reclamation 15 #03088	275
Peaks #01064**	407**

*The Red Point allotment has one pasture which falls outside of the HMA. The noted 602 AUMs reflect the active preference for the North and Middle Pastures, which are located within the HMA, while excluding the South Pasture from the Active AUM total as it is not located in the HMA.

**The Peaks Allotment has one Pasture which is mostly within the HMA (Deer Creek Pasture), and approximately 1/3 of the Shoshone Pasture is in the HMA. The Willwood Dam Pasture, and the remaining 2/3 of the Shoshone Pasture are outside the HMA. The above active grazing preference indicates the Active AUMs within the Deer Creek and 1/3 of the Shoshone Pastures of Peaks Allotment.

Effects

Alternative 1: No Action
Under the No Action Alternative, the wild horse population would continue to exceed AML, thereby reducing forage available for livestock grazing. Continued growth of the wild horse population may result in rangeland health degradation by excessive vegetation removal, surface disturbance, and soil compaction, which would cause the BLM to reassess permitted livestock stocking rates. Degradation in rangeland health and subsequent reduction in available forage for livestock utilization may cause the BLM to make changes to grazing permits that would reflect a reduction in allowed AUMs authorized to livestock operators; thereby impacting permittees/leases.

Alternative 2: Proposed Action
Under the Proposed Action, the wild horse population within the McCullough Peaks HMA would be reduced using bait trap methods to remove excess horses until the upper level is reached within the AML range. Removal of horses within the HMA would allow for wildlife, wild horse, and livestock utilization to remain relatively consistent to levels determined appropriate when the wild horse population is within the target AML. However, per the Proposed Action, bait trapping would take place on the Red Point (03067), Reclamation (00666), East/West (01060), and Whistle Creek (01002) Allotments. Bait trapping operations would not be expected to adversely impact permitted livestock grazing; however, the use of a bait-trap capture method may temporarily interfere with livestock grazing rotation schedules and forage utilization during the time of the horse gather. Coordination with grazing permittees would be needed to modify grazing rotations to minimize impacts to grazing for fall/winter seasons to avoid setting up bait traps in pastures where livestock are actively grazing.

Reduction of the wild horse population within the McCullough Peaks HMA to the AML would be expected to help maintain and possibly improve rangeland/vegetation community conditions within the previously mentioned allotments. Thus, providing positive impacts to vegetation resources which would benefit both livestock grazing in conjunction with wild horse grazing.

Wild Horses

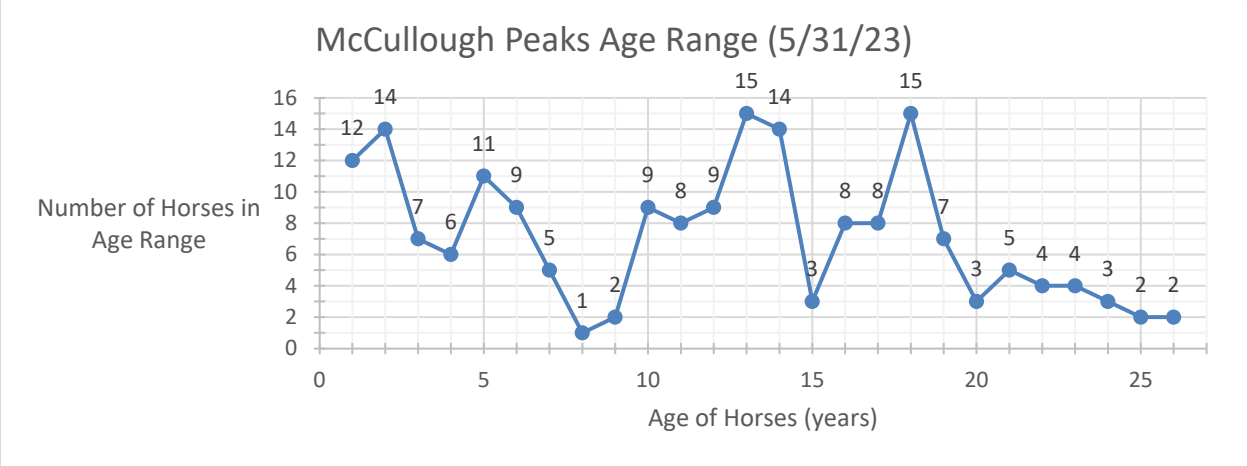
Issue(s) Identified

How would the removal of excess horses and implementation of new fertility control methods affect the wild horses.

Affected Environment

The current population of the McCullough Peaks HMA, based on a direct census ground count of identifiable individuals (May 31, 2023), is 181 horses. The sex ratio is 40:60 (stallions: mares), perhaps because PZP-treated mares have generally greater longevity than stallions. An indirect effect of PZP discussed previously, Fertility control vaccine treatment may increase mare survival rates, leading to longer potential lifespan (Turner and Kirkpatrick 2002, Ransom et al. 2014a). The AML of the McCullough Peaks HMA is 70-140 horses. Due to the general lack of natural predators, the horses within the McCullough Peaks may also be living longer than horses in areas with natural predators. Other factors such as the availability of water sources within the HMA, sustainable forage and mild winters could also have contributed to the horses living longer. Figure 1 shows the age range of the horses within the McCullough Peaks.

Figure 1. Current Age Range of the horses within the McCullough Peaks HMA.



The McCullough Peaks Herd is unusual in the fact that the herd is well documented by the BLM and the local public. This allows the BLM to know exactly how many horses are within the HMA, true age of each horse, location of bands within the HMA, genealogy, and any injuries the horses may have incurred due to natural behavior. This information is invaluable and can improve the effective management of the McCullough Peaks Herd.

Since 2011, the population has been managed by PZP to control the population growth to 2%. The BLM will continue to use PZP, however several mares have not responded to PZP treatments and continue to give birth every year. The BLM is considering and hoping that selective use of other vaccine treatments (GonaCon) will allow the mares that do not respond to PZP an opportunity to no longer be submitted to the stress of giving birth every year. Detailed effects of GonaCon are located in Appendix D.

Table 3. Population growth of the McCullough Peaks herd since the population has been managed with PZP since 2011(note, a gather was conducted in 2009 and a bait trap gather in 2013).

Year	Population	Population Growth‡	Percent Growth
2009	207	-	-
2010	110	-97	-47%
2011	124	14	13%
2012	143	19	15%
2013	151	8	6%
2014	141	-10	-7%
2015	140	-1	-1%
2016	154	14	10%
2017	154	0	0%
2018	164	10	6%
2019	164	0	0%
2020	167	3	2%
2021	172	5	3%
2022	179	7	4%
2023	181	2	1%

‡ Population Growth is based on census counts in the Spring.

* Foals born that year are not included in the population counts.

Effects

Alternative 1: No Action
Under this alternative, a bait trap gather would not be conducted and the herd would continue to be over the AML. Allowing the horses to naturally die off may take several years and although the McCullough Peaks has shown a 2% growth rate, the population would still be over the approved AML of 140 horses and would continue to grow.

PZP would be the only fertility control treatment and would not allow the Cody Field Office to utilize current and newer treatments methods.

Alternative 2: Proposed Action
The Proposed Action of bait trapping horses and retaining the older population of horses would allow the herd to be within AML. By reaching AML, this would ensure the Cody Field Office is in compliance with management record 4144 of the 2015 Cody RMP. This would put the herd at the upper level of AML. With an older population of horses that represent 13% of the current population and a 2% growth in population per year, this strategy would allow the BLM to manage this population at the upper end of AML. This would ensure that the McCullough Peaks HMA is within AML.

The Proposed Action to utilize Gonacon, in addition to PZP, would allow the Cody Field Office additional means to control the population of the herd that is currently not available to be used. This would allow the Cody Field Office to treat mares that have not responded to PZP treatments with another alternative

to ensure that the mares are not submitted to the stress of giving birth every year. The mares that are not responding to PZP treatments represent 3% of the total mares currently on the range, but contribute to a much higher fraction of foals born per year. By utilizing additional forms of fertility control it would allow the Cody Field Office to be current with new treatment opportunities to control the population as opposed to the No Action Alternative where we are only utilizing one method. Therefore, under the Proposed Action, this would allow the Cody Field Office to treat each mare with the best option to ensure the population is effectively managed.

List of Preparers

The following Cody Field Office personnel reviewed or have been contacted with regard to this EA.

Name	Title	Responsible for
Abel Guevara	Wildlife Biologist	Project Lead; Air Quality/Climate Change; Greenhouse Gas Emissions; Environmental Justice; Farmlands (Prime or Unique); Wildlife (including Sage-grouse, BLM Sensitive Species, Migratory Birds, Socioeconomics, Threatened, Endangered Candidate Animal Species, Wild Horses and Burros.
Cara Blank	Realty Specialist	Lands/Access
Steve Clark	Fisheries Biologist	Fisheries; Hydrologic Conditions; Water Resources/Quality (drinking/surface/ground)
Kierson Crume	Archaeologist	Historic or Cultural Resources
Sage Decker	Range Technician (Fire)	Invasive Species/Noxious Weeds
Jim Gates	Forester	Woodland/Forestry
Tim Haas	Fire Management Specialist (Fuels)	Fuels/Fire Management
Destin Harrell	Wildlife Biologist	Threatened, Endangered, Candidate or BLM Sensitive Plant Species
Brandi Hecker	Natural Resource Specialist	Fluid Mineral Resources (Surface); Public Health and Safety
Alison Howard	Petroleum Engineer	Energy Production (Subsurface)
Alicia Hummel	Rangeland Management Specialist	Floodplains; Soils; Wetlands/Riparian Zones
Gretchen Hurley	Geologist	Geology and Minerals, Paleontology, Hazardous Materials
Lindsay Mabee	Rangeland Management Specialist	Range Administration, Native Vegetation
Bryan McKenzie	Rangeland Management Specialist	Cave and Karst
Adam Stephens	Rangeland Management Specialist	Range Administration, Native Vegetation
Rick Tryder	Outdoor Recreation Planner	Areas of Critical Environmental Concern; BLM Natural Areas; Recreation; Wild and Scenic Rivers; Wilderness/WSA; Visual Resources' Areas with Wilderness Characteristics; Travel and Transportation.

Appendix A – Resources Considered and Eliminated From Further Analysis

The following resources and features were considered and eliminated from further analysis in this EA:

- Air Quality/Climate Change
- Areas of Critical Environmental Concern
- Areas with Wilderness Characteristics
- BLM Natural Areas
- Cave and Karst
- Energy Production (Subsurface)
- Environmental Justice
- Farmlands (Prime or Unique)
- Fisheries
- Fluid Mineral Resources (Surface)
- Fuels\Fire Management
- Geology and Minerals
- Greenhouse Gas Emissions
- Invasive Species/Noxious Weeds
- Lands/Access
- Native American Religious Concerns
- Migratory Birds
- Soils
- Threatened, Endangered, Candidate or BLM Sensitive Plant Species
- Threatened, Endangered, Candidate Animal Species
- Wastes (hazardous materials, hazardous wastes, and solid wastes)
- Water Resources/Quality (drinking/surface/ground)
- Wetlands/Riparian Zones
- Wild and Scenic Rivers
- Wilderness/WSA
- Woodland/Forestry

Resources and features present in the project area but not affected by the proposed action or alternatives include:

Resource/Feature Present	**Rationale for Determination**
Greater Sage Grouse and associated habitat	The bait trapping will occur during the winter months and trap locations are along roads, which contains little to no sage brush, to allow for easy access to transport gathered horses to off range facilities. This will not impact Greater Sage-Grouse due to the trapping locations and timing of the trapping operations.
Historic or Cultural Resources	Impacts occur to historic properties when a proposed project would alter any of the qualities of that property that qualify it for inclusion in the NRHP. Potential impacts from the Proposed Action and No Action include physical

Resource/Feature Present	Rationale for Determination
	destruction of or damage to all or part of a property or introduction of visual or atmospheric elements that diminish the integrity of a property's significant features. Unknown historic or cultural resources may be affected by surface disturbing activities. As no historic or cultural resources were identified within the APE, the current proposal received a No Historic Properties Affected assessment of effect as per the Wyoming State Protocol (WyoTrack#: DBU_WY_2023_580).
Paleontology	This project is situated in the Eocene Willwood Formation, with a Potential Fossil Yield Classification (PYFC) of 5 (a very high potential for the occurrence of vertebrate and scientifically significant paleontological resources), therefore, in the event of a potential discovery of such resources on the land surface within the project area, the three paleontological resources protection stipulations are required to be applied to this project. The stipulations are listed below. Paleontological Resources Protection Stipulations 1. Collecting: The project proponent/Operator is responsible for informing all persons associated with this project including employees, contractors, and subcontractors under their direction that they shall be subject to prosecution for damaging, altering, excavating, or removing any vertebrate fossils or other scientifically significant paleontological resources from the project area. Collection of vertebrate fossils (bones, teeth, turtle shells) or other scientifically significant paleontological resources is prohibited without a permit. Unlawful removal, damage, or vandalism of paleontological resources will be prosecuted by federal law enforcement personnel. 2. Discovery: If vertebrate or other scientifically significant paleontological resources (fossils) are discovered on BLM-administered land during operations, the Operator shall suspend

Resource/Feature Present	Rationale for Determination
	operations that could disturb the materials, stabilize, and protect the site, and immediately contact the BLM Cody Field Office Manager (Authorized Officer). The Authorized Officer would arrange for evaluation of the find within an agreed timeframe and determine the need for any mitigation actions that may be necessary. Any mitigation would be developed in consultation with the Operator, who may be responsible for the cost of site evaluation and mitigation of project effects to the site. If the operator can avoid disturbing a discovered site, there is no need to suspend operations; however, the discovery shall be immediately brought to the attention of the Authorized Officer. 3. Avoidance: All vertebrate or scientifically significant paleontological resources found as a result of the project/action will be avoided during operations. Avoidance in this case means "No action or disturbance within a distance of at least 100 feet of the outer edge of the paleontological locality."
Public Health and Safety	Opportunities for public viewing (i.e., media, interested public) of gather operations will be made available to the extent possible; however, the primary considerations will be to protect the health, safety and welfare of the animals being gathered and the personnel involved. The public must adhere to guidance from the on-site BLM representative. It is BLM policy that the public will not be allowed to come into direct contact with wild horses or burros being held in BLM facilities. Only authorized BLM personnel or contractors may enter the corrals or directly handle the animals. The general public may not enter the corrals or directly handle the animals at any time or for any reason during BLM operations.
Recreation	Recreation in the project would be temporarily impacted during bait trapping activities. However, this impact on recreation should be greatly reduced since bait trapping would occur during times with the least amount of recreation

Resource/Feature Present	Rationale for Determination
	use in the McCullough Peaks. The timing of November 1 to February 28 is also outside of the main commercial tourism window, thus reducing impacts to Special Recreation Permits (SRP's). The public will access a gravel road maintained by the natural gas companies to access their infrastructure when the road is plowed. BLM would plow the access roads to the traps, if there are horses within the traps that need to be shipped to off range corrals, law enforcement would need to ensure the public could not interfere with shipping horses. The traps would be moved to more remote locations within McCullough Peaks HMA after the target number of excess horses have been gathered so the traps would not be set the entire length Proposed Action timeframe. The slight reduction of wild horse numbers would affect public viewing opportunities.
Socioeconomics	The proposed action would retain horses at the upper limit of AML. This will still provide the public the opportunity to view the wild horses.
Terrestrial Wildlife	The McCullough Peaks HMA is within a migratory corridor for Pronghorn Antelope, the trapping efforts will not affect migratory pronghorn due to the trapping efforts will be conducted during the winter months after pronghorn have migrated through the HMA.
Travel and Transportation	No new user created roads will be established. Existing trails and roads will be utilized for the bait trap gather.
Visual Resources	The project area falls within Visual Resource Management (VRM) Class II: The objective of VRM Class II is to retain the existing character of the landscape. The level of change to the landscape should be low. Any changes should repeat the basic elements found in the natural features of the landscape- form, line, color, & texture. Management activities may be seen but should not attract attention of the observer.

Appendix B – List of References & Authorities Cited

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Appendix C – Acronyms and Abbreviations

AML- Appropriate Management Level
AO – Authorized Officer
APE – Area of Potential Effect
ARMP – Approved Resource Management Plan
AUM – Animal unit month
AVMA – American Veterinary Medical Association
BLM – Bureau of Land Management
CAWP – Comprehensive Animal Welfare Program
CFR – Code of Federal Regulations
CYFO – Cody Field Office
DNA – Determination of NEPA Adequacy
DVM – Doctor of Veterinary Medicine
EA – Environmental Assessment
ESI – Ecological Site Inventory
FLPMA – Federal Land Policy and Management Act
FONSI – Finding of No Significant Impact
FSH – Follicle-stimulating hormone
GnRH – Gonadotropin-releasing hormone
HMA – Herd Management Area
HO – observed heterozygosity
ID – Interdisciplinary
IM – Instructional Memo
LH – Luteinizing Hormone
LUP – Land Use Plans
NEPA – National Environmental Policy Act
NRPH – National Register of Historic Places
ORC – Off Range Corrals
PRIA – Public Rangelands Improvement Act
PYFC – Potential Fossil Yield Classification
PZP – Porcine Zona Pellucida
ROD – Record of Decision
SHPO – State Historical Preservation Office
SOP – Standard Operating Procedures
SRP – Special Recreation Permit
TNEB – Thriving Natural Ecological Balance
USDA-APHIS – United States Department of Agriculture-Animal and Plant Health Inspection Service
USGS – United States Geological Survey
VRM – Visual Resource Management
WFRHBA – Wild Free- Roaming Horses and Burros Act
WHB – Wild Horse and Burro
WySHPO – Wyoming State Historical Preservation Office

Appendix D – Detailed Effects of Gonacon

GonaCon-Equine is one of several vaccines that have been engineered to create an immune response to the gonadotropin releasing hormone peptide (GnRH). GnRH is a small peptide that plays an important role in signaling the production of other hormones involved in reproduction in both sexes. When combined with an adjuvant, a GnRH vaccine stimulates a persistent immune response resulting in prolonged antibody production against GnRH, the carrier protein, and the adjuvant (Miller et al. 2008). The most direct result of successful GnRH vaccination is that it has the effect of decreasing the level of GnRH signaling in the body, as evidenced by a drop in luteinizing hormone levels, and a cessation of ovulation.

GnRH is highly conserved across mammalian taxa, so some inferences about the mechanism and effects of GonaCon- Equine in horses can be made from studies that used different anti-GnRH vaccines, in horses and other taxa. Other
commercially available anti-GnRH vaccines include: Improvac (Imboden et al. 2006, Botha et al. 2008, Janett et al. 2009a, Janett et al. 2009b, Schulman et al. 2013, Dalmau et al. 2015, Nolan et al. 2018c), made in South Africa; Equity (Elhay et al. 2007), made in Australia; Improvest, for use in swine (Bohrer et al. 2014); Repro-BLOC (Boedeker et al. 2011); and Bopriva, for use in cows (Balet et al. 2014). Of these, GonaCon-Equine, Improvac, and Equity are specifically intended for horses. Other anti-GnRH vaccine formulations have also been tested, but did not become trademarked products (e.g., Goodloe 1991, Dalin et al 2002, Stout et al. 2003, Donovan et al. 2013, Schaut et al. 2018, Yao et al. 2018). The effectiveness and side-effects of these various anti-GnRH vaccines may not be the same as would be expected from GonaCon-Equine use in horses. Results could differ as a result of differences in the preparation of the GnRH antigen, and the choice of adjuvant used to stimulate the immune response. For some formulations of anti-GnRH vaccines, a booster dose is required to elicit a contraceptive response, though GonaCon can cause short-term contraception in a fraction of treated animals from one dose (Powers et al. 2011, Gionfriddo et al. 2011a, Baker et al. 2013, Miller et al 2013). At the 2023 WHB Advisory Board meeting in Phoenix, Arizona, the BLM presented data showing that mares treated with a hand-injected booster dose of GonaCon 30 days after receiving a hand-injected primer dose had an approximate 85% contraceptive efficacy in the first year after treatment, which is more effective than the expected efficacy from a single dose of GonaCon-Equine (BLM 2022).

GonaCon can provide multiple years of infertility in several wild ungulate species, including horses (Killian et al. 2008, Gray et al. 2010). The lack of estrus cycling those results from successful GonaCon vaccination has been compared to typical winter period of anoestrus in open mares. As anti-GnRH antibodies decline over time, concentrations of available endogenous GnRH increase and treated animals usually regain fertility (Power et al. 2011).

Females that are successfully contracepted by GnRH vaccination enter a state similar to anestrus, have a lack of or incomplete follicle maturation, and no ovarian cycling (Botha et al. 2008, Nolan et al. 2018c). A leading hypothesis is that anti-GnRH antibodies bind GnRH in the hypothalamus – pituitary 'portal vessels,' preventing GnRH from binding to GnRH- specific binding sites on gonadotroph cells in the pituitary, thereby limiting the production of gonadotropin hormones, particularly luteinizing hormone (LH) and, to a lesser degree, follicle-stimulating hormone (FSH) (Powers et al. 2011, NAS 2013). This reduction in LH (and FSH), and a corresponding lack of ovulation, has been measured in response to treatment with anti-GnRH vaccines (Boedeker et al. 2011, Garza et al. 1986).

Females successfully treated with anti-GnRH vaccines have reduced progesterone levels (Garza et al. 1986, Stout et al. 2003, Imboden et al. 2006, Elhay 2007, Botha et al. 2008, Killian et al. 2008, Miller et al. 2008, Janett et al. 2009, Schulman et al. 2013, Balet et al 2014, Dalmau et al. 2015) and β-17 estradiol levels (Elhay et al. 2007), but no great decrease in estrogen levels (Balet et al. 2014). Reductions in progesterone do not occur immediately after the primer dose but can take several weeks or months to develop (Elhay et al. 2007, Botha et al. 2008, Schulman et al. 2013, Dalmau et al. 2015). This indicates that ovulation is not occurring and

corpora lutea, formed from post-ovulation follicular tissue, are not being established.

Antibody titer measurements are proximate measures of the antibody concentration in the blood specific to a given antigen. Anti-GnRH titers generally correlate with a suppressed reproduction system (Gionfriddo et al. 2011a, Powers et al. 2011). Various studies have attempted to identify a relationship between anti-GnRH titer levels and infertility, but that relationship has not been universally predictable or consistent. The time length that titer levels stay high appears to correlate with the length of suppressed reproduction (Dalin et al. 2002, Levy et al. 2011, Donovan et al. 2013, Powers et al. 2011). For example, Goodloe (1991) noted that mares did produce elevated titers and had suppressed follicular development for 11-13 weeks after treatment, but that all treated mares ovulated after the titer levels declined. Similarly, Elhay (2007) found that high initial titers correlated with longer-lasting ovarian and behavioral anoestrus. However, Powers et al. (2011) did not identify a threshold level of titer that was consistently indicative of suppressed reproduction despite seeing a strong correlation between antibody concentration and infertility, nor did Schulman et al. (2013) find a clear relationship between titer levels and mare acyclicity.

In many cases, young animals appear to have higher immune responses, and stronger contraceptive effects of anti-GnRH vaccines than older animals (Brown et al. 1994, Curtis et al. 2001, Stout et al. 2003, Schulman et al. 2013). Vaccinating with GonaCon at too young an age, though, may prevent effectiveness; Gionfriddo et al. (2011a) observed weak effects in 3–4-month-old fawns. It has not been possible to predict which individuals of a given age class will have long-lasting immune responses to the GonaCon vaccine. Gray (2010) noted that mares in poor body condition tended to have lower contraceptive efficacy in response to GonaCon-B. Miller et al. (2013) suggested that higher parasite loads might have explained a lower immune response in free-roaming horses than had been observed in a captive trial. At this time it is unclear what the most important factors affecting efficacy are, but that does not prevent one from concluding that GonaCon can be an effective immunocontraceptive.

Several studies have monitored animal health after immunization against GnRH. GonaCon treated mares did not have any measurable difference in uterine edema (Killian 2006, 2008). Powers et al. (2011, 2013) noted no differences in blood chemistry except a mildly elevated fibrinogen level in some GonaCon treated elk. In that study, one sham-treated elk and one GonaCon treated elk each developed leukocytosis, suggesting that there may have been a causal link between the adjuvant and the effect. Curtis et al. (2008) found persistent granulomas at GonaCon-KHL injection sites three years after injection, and reduced ovary weights in treated females. Yoder and Miller (2010) found no difference in blood chemistry between GonaCon treated and control prairie dogs. One of 15 GonaCon treated cats died without explanation, and with no determination about cause of death possible based on necropsy or histology (Levy et al. 2011). Other anti-GnRH vaccine formulations have led to no detectable adverse effects (in elephants; Boedeker et al. 2011), though Imboden et al. (2006) speculated that young treated animals might conceivably have impaired hypothalamic or pituitary function.

Kirkpatrick et al. (2011) raised concerns that anti-GnRH vaccines could lead to adverse effects in other organ systems outside the reproductive system. GnRH receptors have been identified in tissues outside of the pituitary system, including in the testes and placenta (Khodr and Siler-Khodr 1980), ovary (Hsueh and Erickson 1979), bladder (Coit et al. 2009), heart (Dong et al. 2011), and central nervous system, so it is plausible that reductions in circulating GnRH levels could inhibit physiological processes in those organ systems. Kirkpatrick et al. (2011) noted elevated cardiological risks to human patients taking GnRH agonists (such as leuprolide), but the National Academy of Sciences (2013) concluded that the mechanism and results of GnRH agonists would be expected to be different from that of anti-GnRH antibodies; the former flood GnRH receptors, while the latter deprive receptors of GnRH.

Behavioral Effects

The result that GonaCon treated mares may have suppressed estrous cycles throughout the breeding season can lead treated mares to behave in ways that are functionally similar to pregnant mares. Where it is successful in

mares, GonaCon and other anti-GnRH vaccines are expected to induce fewer estrous cycles when compared to non-pregnant control mares. This has been observed in many studies (Garza et al. 1986, Curtis et al. 2001, Dalin et al. 2002, Killian et al. 2006, Dalmau et al. 2015). Females treated with GonaCon had fewer estrous cycles than control or PZP-treated mares (Killian et al. 2006) or deer (Curtis et al. 2001). Thus, any concerns about PZP treated mares receiving more courting and breeding behaviors from stallions (Nuñez et al. 2009, Ransom et al. 2010) are not generally expected to be a concern for mares treated with anti-GnRH vaccines (Botha et al. 2008).

Ransom et al. (2014b) and Baker et al. (2018) found that GonaCon treated mares had similar rates of reproductive behaviors that were similar to those of pregnant mares. Among other potential causes, the reduction in progesterone levels in treated females may lead to a reduction in behaviors associated with reproduction. Despite this, some females treated with GonaCon or other anti-GnRH vaccines did continue to exhibit reproductive behaviors, albeit at irregular intervals and durations (Dalin et al. 2002, Stout et al. 2003, Imboden et al. 2006), which is a result that is similar to spayed (ovariectomized) mares (Asa et al. 1980). Gray et al. (2009a) and Baker et al. (2018) found no difference in sexual behaviors in mares treated with GonaCon and untreated mares. When progesterone levels are low, small changes in estradiol concentration can foster reproductive estrous behaviors (Imboden et al. 2006). Owners of anti-GnRH vaccine treated mares reported a reduced number of estrous-related behaviors under saddle (Donovan et al. 2013). Treated mares may refrain from reproductive behavior even after ovaries return to cyclicity (Elhay et al. 2007). Studies in elk found that GonaCon treated cows had equal levels of precopulatory behaviors as controls (Powers et al. 2011), though bull elk paid more attention to treated cows late in the breeding season, after control cows were already pregnant (Powers et al. 2011).

Stallion herding of mares, and harem switching by mares are two behaviors related to reproduction that might change as a result of contraception. Ransom et al. (2014b) observed a 50% decrease in herding behavior by stallions after the free-roaming horse population at Theodore Roosevelt National Park was reduced via a gather, and mares there were treated with GonaCon-B. The increased harem tending behaviors by stallions were directed to both treated and control mores. It is difficult to separate any effect of GonaCon in this study from changes in horse density and forage following horse removals.

With respect to treatment with GonaCon or other anti-GnRH vaccines, it is probably less likely that treated mares will switch harems at higher rates than untreated animals, because treated mares are similar to pregnant mares in their behaviors (Ransom et al. 2014b). Indeed, Gray et al. (2009a) found no difference in band fidelity in a free-roaming population of horses with GonaCon treated mares, despite differences in foal production between treated and untreated mares. Ransom et al. (2014b) actually found increased levels of band fidelity after treatment, though this may have been partially a result of changes in overall horse density and forage availability.

Gray et al. (2009a) and Ransom et al. (2014b) monitored non-reproductive behaviors in GonaCon treated populations of free-roaming horses. Gray et al. (2009a) found no difference between treated and untreated mares in terms of activity budget, sexual behavior, proximity of mares to stallions, or aggression. Ransom et al. (2014b) found only minimal differences between treated and untreated mare time budgets, but those differences were consistent with differences in the metabolic demands of pregnancy and lactation in untreated mares, as opposed to non-pregnant treated mares.

Low Potential for any Evolution of Immune Response

One concern that has been raised with regards to genetic diversity is that treatment with immunocontraceptives could possibly lead to an evolutionary increase in the frequency of individuals whose genetic composition fosters weak immune responses (Cooper and Larson 2006, Ransom et al. 2014a). Based on principles of population genetics, likely application rates in wild horse and burro metapopulations, and on currently available knowledge, it appears unlikely that BLM's application of fertility control vaccines would cause biologically

significant, population-level evolutionary changes in the capacity to mount healthy immune responses, for reasons noted below.

In well-monitored wild horse herds that have been treated with PZP vaccine for many years, there have been a small number of mares that are 'non-responders' – that is, they continue to be fertile despite multiple treatments with ZonaStat-H PZP vaccine (i.e., BLM 2023). To the extent that this outcome may be partly attributable to genes, then for such 'non-responder' genes to spread widely in the population, both heritability and the selection coefficient must be high. Many factors influence the strength of a vaccinated individual's immune response, potentially including genetics, but also nutrition, body condition, and prior immune responses to pathogens or other antigens (Powers et al. 2013). The premise of the concern (Cooper and Larson 2006, Ransom et al. 2014a) is based on an assumption that lack of immune response to any given fertility control vaccine is a highly heritable trait, that the great majority of mares in a population would be treated with immunocontraceptives, that treated 'non-responder' mares would give birth to a far greater number of foals than other treated mares, and that the result would be an increasing frequency of the poor immune response associated trait over time in a population of vaccine-treated animals. Cooper and Herbert (2001) reviewed the topic, in the context of concerns about the long-term effectiveness of immunocontraceptives as a control agent for exotic eutherian species in Australia. They argue that imunocontraception could be a strong selective pressure, and that selecting for reproduction in individuals with poor immune response could lead to a general decline in immune function in populations where such evolution takes place. Other authors have also speculated that differences in antibody titer responses could be partially due to genetic differences between animals (Curtis et al. 2001, Herbert and Trigg 2005). However, Magiafolou et al. (2013) clarify that if the variation in immune response is due to environmental factors (i.e., body condition, social rank) and not due to genetic factors, then there will be no expected effect of the immune phenotype on future generations. It is possible that general health, as measured by body condition, can have a causal role in determining immune response, with animals in poor condition demonstrating poor immune reactions (NAS 2013).

Correlations between physical factors and immune response would not preclude, though, that there could also be a heritable response to immunocontraception. In studies not directly related to immunocontraception, immune response has been shown to be heritable (Kean et al. 1994, Sarker et al. 1999). Predictions about the long-term, population-level evolutionary response to immunocontraceptive treatments have been largely speculative up to this point, with outcomes likely to depend on several factors, including: the strength of the genetic predisposition to not respond to the fertility control vaccine; the heritability of that gene or genes; the initial prevalence of that gene or genes; the number of mares treated with a primer dose of the vaccine (which generally has a short-acting effect); the number of mares treated with one or more booster doses of the vaccine; and the actual size of the genetically-interacting metapopulation of horses within which the vaccine treatment takes place.

One recent study attempted to quantify the heritability of a decreased response to fertility control vaccine-induced duration of infertility and the pattern of single nucleotide polymorphisms (SNPs) in the genomes of feral mares in Theodore Roosevelt National Park. SNPs can be associated with DNA variants in nearby coding regions, due to linkage. 53 mares were treated with the GonaCon-Equine immunocontraception vaccine, and 25 were not. Almost all of the GonaCon treated mares became infertile for at least one year. The researchers found a correlation between a more rapid return to fertility and several SNPs. The SNPs that were correlated with a more rapid return to fertility are not known to be located in coding regions of genes that influence immune response, but based on the location of those SNPs the researchers suggested that there may be an association with genes that may influence immune response. The researchers estimated that the heritability for genetic effects on the duration of GonaCon effectiveness in feral horse mares was $h2 = 0.27$ (SE = 0.23). They characterized this level of heritability as 'moderate.' There are several reasons to expect that in any single managed herd of wild horses, there would be the potential for only a relatively low strength of selection promoting the genes identified in the paper. Almost all of those treated mares became infertile for some time, even though certain SNPs were correlated with a marginally faster return to fertility. The fact that

immunocontraception with GonaCon still reduced fertility in treated mares is indicative of a weaker selection potential than if treated mares with those SNPs had remained entirely fertile. These reasons include the only 'moderate' levels of heritability identified by Thompson et al. (2022), the expectation that mares treated multiple times should experience additional duration of effect after each dose, the likelihood that an essentially random selection of mares in the herd would not be treated at all with an immunocontraceptive, the possible non-genetic causes that treated mares may return to fertility, and the large genetic effective population size of wild horse metapopulations that is characterized across multiple HMAs and complexes. The results from Thompson et al. (2022) would not be expected substantively to change expectations about the effects of potentially heritable immune responses to immuncontraceptive vaccines. Thompson et al. (2022) based their results on mares that were treated twice with GonaCon-Equine. While some treated mares may carry genes that marginally decrease vaccine effectiveness and cause them to return to fertility faster, there may also be other treated mares who do not carry those genes but experience poor vaccine due to environmental or other causes. Of course, any mares that are not treated with immunocontraceptives would be expected to contribute more foals to the herd than treated mares, and the choice of which mares happen to be treated or not be treated would be essentially random with respect to the SNPs identified. In their conclusions, Thompson et al. (2022) suggest that wild horse managers should not rely solely on immunocontraceptive methods for herd management; in the three HMAs under consideration in this EA, gathers and immunocontraception are both considered for use in the Proposed Action. Therefore, the continued presence of untreated and other reproducing mares is likely to reduce any risk of long-term evolutionary reduction in immune function in these herds.

Although a few, generally isolated, feral horse populations have been treated with high fractions of mares receiving PZP immunocontraception for long-term population control (e.g., Assateague Island National Park, and Pryor Mountains Herd Management Area), the BLM is unaware of any studies that tested for changes in immune competence in those areas.

Appendix E – Gather Operations Standard Operating Procedures

The McCullough Peaks Gather would be conducted via Bait Trap by utilizing BLM personnel and/or contractor. The following procedures for gathering and handling wild horses would apply whether contractor or BLM personnel conduct a gather.

Prior to the Bait Trap operation, the BLM will provide for a pre-capture evaluation of existing conditions in the gather area(s). The evaluation will include animal conditions, prevailing temperatures, snow depth, road conditions, and acceptable capture locations in relation to animal distribution. The evaluation will determine whether the proposed activities will necessitate the presence of a licensed DVM during operations. If it is determined that a large number of animals may need to be euthanized or capture operations could be facilitated by a DVM, these services would be arranged before the capture would proceed. BLM personnel assisting with the bait trapping will be apprised of all conditions and will be given instructions regarding the capture and handling of animals to ensure their health and welfare is protected in accordance to IM 2020-002 Wild Horse and Burro Comprehensive Animal Welfare Program. Additionally, all BLM personnel assisting with the gather must complete the CAWP training and provide certificate of training completion.. Capture sites and temporary sorting/holding facilities will be located to reduce the likelihood of injury and stress to the animals, and to minimize potential damage to the natural resources of the area. Wherever possible, capture sites would be located on or near existing roads to limit ground disturbance. All capture sites and sorting/holding facility locations must be approved by the Authorized Officer prior to construction. Capture sites would be located to cause as little injury and stress to the animals, and as little damage to the natural resources of the area, as possible. Sites would be located on or near existing roads. Additional capture sites may be required, as determined by the Authorized Officer, to relieve stress to the animals caused by specific conditions at the time of the gather (i.e., dust, rocky terrain, temperatures, etc.). The primary capture methods used in the performance of gather operations include Bait Trapping. This capture method involves utilizing bait (food/mineral) to lure wild horses into a temporary corral.

Capture Methods used in the McCullough Peaks Gather

1. The primary concern of the BLM personnel is the safe and humane handling of all animals captured. All capture attempts shall incorporate the following: All capture sites and sorting/holding facilities locations must be approved by the Authorized Officer prior to construction.

2. All traps, wings, and sorting/holding facilities shall be constructed, maintained, and operated to handle the animals in a safe and humane manner and be in accordance with the following:

a. Captures sites and sorting/holding facilities shall be constructed of portable panels, the top of which shall not be less than 72 inches high for horses and 60 inches for burros, and the bottom rail of which shall not be more than 12 inches from ground level. All traps and sorting/holding facilities shall be oval or round in design.

b. All loading chute sides shall be a minimum of 6 feet high and shall be fully covered, plywood, metal without holes larger than 2”x4”. C. All runways shall be a minimum of 30 feet long and a minimum of 6 feet high for horses, and 5 feet high for burros, and shall be covered with plywood, burlap, plastic snow fence or like material a minimum of 1 foot to 5 feet above ground level for burros and 1 foot to 6 feet for horses. The location of the government furnished portable fly chute to restrain, age, or provide additional care for the animals shall be placed in the runway in a manner as instructed by or in concurrence with the Authorized Officer.

d. All crowding pens including the gates leading to the runways shall be covered with a material which prevents the animals from seeing out (plywood, burlap, plastic snow fence, etc.) and shall be covered a minimum of 1 foot to 5 feet above ground level for burros and 2 feet to 6 feet for horses.

e. All pens and runways used for the movement and handling of animals shall be connected with hinged self-locking or sliding gates.

5. Alternate pens, within the sorting/holding facility shall be constructed by BLM Personnel or contractor to separate mares with small foals, sick and injured animals, estrays or other animals the BLM Personnel determines need to be housed in a separate pen from the other animals. Animals shall be sorted as to age, number, size, temperament, sex, and condition when in the sorting/holding facility so as to minimize, to the extent possible, injury due to fighting and trampling. Under normal conditions, the government would require that animals be restrained for

the purpose of determining an animal's age, sex, or other necessary procedures. However, The Cody Field Office is familiar with all the horses within the McCullough Peaks herd, therefore the need to restrain the horses will not be necessary. Alternate pens shall be constructed by BLM personnel or contractor to hold animals if the specific gathering requires that animals be released back into the capture area(s).

6. BLM Personnel or contractor shall provide animals held in the traps and/or sorting/holding facilities with a continuous supply of fresh clean water at a minimum rate of 10 gallons per animal per day. Animals held for 10 hours or more in the traps or sorting/holding facilities shall be provided good quality hay at the rate of not less than two pounds of hay per 100 pounds of estimated body weight per day. BLM Personnel or contractor would supply certified weed free hay if required by State, County, and Federal regulation.

7. It is the responsibility of the BLM, in coordination with BLM Law Enforcement, to provide security to prevent loss, injury, or death of captured animals until delivery to final destination.

8. The BLM Personnel will assess sick or injured animals and determine if treatment is necessary. The Authorized Officer would determine if animals must be euthanized and provide for the destruction of such animals. BLM Personnel may be required to humanely euthanize animals in the field and to dispose of the carcasses.

9. Animals shall be transported to their final destination from temporary sorting/holding facilities as quickly as possible after capture unless prior approval is granted by the Authorized Officer for unusual circumstances. Animals to be released back into the McCullough Peaks HMA following gather operations may be held up to 30 days or as directed by the Authorized Officer. Animals shall not be held in traps and/or temporary sorting/holding facilities on days when there is no work being conducted except as specified by the Authorized Officer. BLM Personnel shall schedule shipments of animals to arrive at final destination between 7:00 a.m. and 4:00 p.m. No shipments shall be scheduled to arrive at final destination on Sunday and Federal holidays, unless prior approval has been obtained by the Authorized Officer. Animals shall not be allowed to remain standing on trucks while not in transport for a combined period of greater than three (3) hours in any 24-hour period. Animals that are to be released back into the capture area may need to be transported back to the original trap site. This determination would be at the discretion of the Cody Field Office horse specialist.

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

1. Gather attempts may be accomplished by utilizing bait (feed, water, mineral licks) to lure animals into a temporary trap, t h e following applies:

a. Finger gates shall not be constructed of materials such as "T" posts, sharpened willows, etc., that may be injurious to animals.

b. All trigger and/or trip gate devices must be approved by the COR/PI prior to capture of animals.

c. Traps shall be checked a minimum of once every 10 hours.

Use of Motorized Equipment

1. All motorized equipment employed in the transportation of captured animals shall comply with appropriate State and Federal laws and regulations applicable to the humane transportation of animals.

2. All motorized equipment, tractor-trailers, and stock trailers shall be in good repair, of adequate rated capacity, and operated so as to ensure that captured animals are transported without undue risk or injury. Equipment will need to be washed to remove invasive species seed.

3. Only tractor-trailers or stock trailers with a covered top shall be allowed for transporting animals from capture site site(s) to temporary sorting/holding facilities, and from temporary sorting/holding facilities to final destination(s). Sides or stock racks of all trailers used for transporting animals shall be a minimum height of 6 feet 6 inches from the floor. Single deck tractor-trailers 40 feet or longer shall have two (2) partition gates providing three (3) compartments within the trailer to separate animals. Tractor-trailers less than 40 feet shall have at least one partition gate providing two (2) compartments within the trailer to separate the animals. Compartments in all tractor-trailers shall be of equal size plus or minus 10 percent. Each partition shall be a minimum of 6 feet high and shall have a minimum 5-foot-wide swinging gate. The use of double deck tractor-trailers is unacceptable and shall not be allowed.

4. All tractor-trailers used to transport animals to final destination(s) shall be equipped with at least one (1) door at the rear end of the trailer, which is capable of sliding either horizontally or vertically. The rear door(s) of tractor-

trailers and stock trailers must be capable of opening the full width of the trailer. Panels facing the inside of all trailers must be free of sharp edges, protrusions or holes that could cause injury to the animals. The material facing the inside of all trailers must be strong enough so that the animals cannot push their hooves through the side.
5. Floors of tractor-trailers, stock trailers and loading chutes shall be covered and maintained with wood shavings to prevent the animals from slipping.
6. Animals to be loaded and transported in any trailer shall be as directed by the Authorized Officer and may include limitations on numbers according to age, size, sex, temperament, and animal condition. The following minimum square feet per animal shall be allowed in all trailers:

11 square feet per adult horse (1.4 linear foot in an 8-foot-wide trailer).
8 square feet per adult burro (1.0 linear foot in an 8-foot-wide trailer).
6 square feet per horse foal (.75 linear foot in an 8-foot-wide trailer).
4 square feet per burro foal (.50 linear feet in an 8-foot-wide trailer).

7. The Authorized Officer shall consider the condition and size of the animals, weather conditions, distance to be transported, or other factors when planning for the movement of captured animals.
8. If the Authorized Officer determines that dust conditions are such that the animals could be endangered during transportation, the Contractor will be instructed to adjust speed of transporting vehicles.

Treatment of Injured or Sick; Disposition of Terminal Animals

BLM Personnel would determine if treatment of sick or injured animals. A veterinarian may be called to make a diagnosis and consult with BLM, the final determination will be made by the BLM wild horse specialist. Destruction would be done by the most humane method available. Authority for humane destruction of wild horses is provided by the Wild Free-Roaming Horse and Burro Act of 1971, Section 3(b)(2)(A), 43 CFR 4730.1, BLM Manual 4730 – Destruction of Wild Horses and Burros and Disposal of Remains and is in accordance with BLM policy as expressed in Permanent Instruction Memorandum Ho. 2021-007 (Revised)

The Authorized officer would determine if injured animals must be destroyed and provide for destruction of such animals. BLM Personnel will dispose of the carcasses as directed by the Authorized Officer in accordance with state and county laws.
The carcasses of the animals that die or must be destroyed as a result of any infectious, contagious, or parasitic disease would be disposed of by burial to a depth of at least 3 feet.
The carcasses of the animals that must be destroyed as a result of age, injury, lameness, or noncontagious disease or illness would be disposed of by removing them from the capture site or sorting/holding corral and placing them in an inconspicuous location to minimize visual impacts.
Carcasses would not be placed in drainages regardless of drainage size or downstream destination.

Site Clearances

Personnel working at gather sites will be advised of the illegality of collecting artifacts. Prior to setting up a capture site or temporary sorting/holding facility on a site not previously cleared or disturbed, BLM will conduct all necessary clearances (archaeological, T&E, etc). All proposed site(s) must be inspected by a government archaeologist. Once archaeological clearance has been obtained, the capture site or temporary sorting/holding facility may be set up.
No personnel working at gather sites may excavate, remove, damage, or otherwise alter or deface or attempt to excavate, remove, damage or otherwise alter or deface any archaeological resource located on public lands. New capture sites and temporary holding/sorting facilities would be constructed outside RHCA or weed infested areas.

Public Participation

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

handle the animals. The general public may not enter the corrals, climb on or lean through corrals, or directly handle the animals at any time or for any reason during BLM operations.

Responsibility and Lines of Communication

Incident Command

Authorized Officer: Cade Powell, Field Manager, Cody Field Office
Incident Commander: June Wendlandt, Wild Horse and Burro Specialist, BLM WY State Office.
Project Lead/COR: Abel Guevara, Wildlife Biologist, Cody Field Office.
Public Affairs Lead:_Sarah Beckwith
Law Enforcement Lead: Robert Lind

The Project Lead will have the direct responsibility to ensure the Bait Trap is in compliance with SOPs. The Project Lead will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, State Office, National Program Office, and BLM Sorting/holding Facility offices. All employees involved in the gather operations will keep the best interests of the animals at the forefront at all times.

All publicity, formal public contact and inquiries will be handled through the BLM Wyoming State Office and the Wind River Bighorn Basin District Public Affairs Officer. These individuals will be the primary contact and will coordinate with the Project Lead on any inquiries.

The Project Lead would coordinate with the BLM Corrals to ensure animals are being transported from the sorting/holding facility in a safe and humane manner and are arriving in good condition.

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

Additional requirements for personnel conducting gather operations also include:

1. Electric prods (hotshots) would not be used routinely on horses. They can be used when animal or human safety is in jeopardy or as a last resort. Handlers do not constantly carry prods. Prods are picked up only when necessary and then put away. Electric prods are never applied to sensitive areas such as the eyes.
2. Electric prod use will not be disguised but used openly and transparently.
3. Handling aids, including electric prods and flags will not be used abusively.
4. Flagging will be used strategically, as excessive flagging desensitizes the animal and becomes useless if used too much.
5. Gates and doors will not be deliberately slammed or shut on horses passing through.
6. Excessive yelling and unnecessary noises will not be utilized in the loading and unloading process.
7. There will be no hitting, kicking, or striking a horse.
8. Loading or unloading of transport vehicles is performed during daylight hours, or supplemental light will be provided in the area to facilitate visibility.
9. Holes, gaps, or openings will be eliminated in the loading/unloading area to avoid injury.
10. Transport vehicles will be properly aligned with the loading/unloading ramps or docks. No gaps will exist between the unloading/loading docks or ramps and the bottom or floor of the trailer's exit. No gaps will exist between the trailer and the side walls of the unloading area, whereby a horse's limbs or head can become stuck or injured.

Fertility Control Treatment SOPs common to all vaccine types

Identification

Animals intended for treatment must be clearly, individually identifiable to allow for positive identification during subsequent management activities. Identification may be accomplished by photography using aa telephoto lens and high-quality digital camera as a record of treated individuals.

Safety

Safety for both humans and animals is the primary consideration in all elements of fertility control

vaccine use. Administration of any vaccine must follow all safety guidance and label guidelines on applicable EPA labeling.

Injection Site
For hand-injection, delivery of the vaccine should be by intramuscular injection, while the animal is standing still, into the left or right side, above the imaginary line that connects the point of the hip (hook bone) and the point of the buttocks (pin bone): this is the hip / upper gluteal area. For dart-based injection, delivery of the vaccine should be by intramuscular
injection, while the animal is standing still, into the left or right thigh areas (lower gluteal / biceps femoralis).

Monitoring and Tracking of Treatments

1. Estimation of population size and growth rates (in most cases, using aerial surveys) should be conducted periodically after treatments.
2. Population growth rates of some herds selected for intensive monitoring may be estimated every year post-treatment using aerial surveys. If, during routine HMA field monitoring (on-the-ground), data describing adult to foal ratios can be collected, these data should also be shared with HQ-261.
3. Field applicators should record all pertinent data relating to identification of treated animals (including photographs if animals are not freeze-marked) and date of treatment, lot number(s) of the vaccine, quantity of vaccine issued, the quantity used, the date of vaccination, disposition of any unused vaccine, the date disposed, the number of treated mares by HMA, field office, and State along with the microchip numbers and freeze-mark(s) applied by HMA and date. A summary narrative and data sheets will be forwarded to HQ-261 annually (Reno, Nevada). A copy of the form and data sheets and any photos taken should be maintained at the field office.

HQ-261 will maintain records sent from field offices, on the quantity of PZP issued, the quantity used, disposition of any unused PZP, the number of treated mares by HMA, field office, and State along with the freeze-mark(s) applied by HMA and date.

PZP Vaccine SOPs

1. PZP vaccine would be administered by trained BLM personnel.

2. The fertility control drug is administered with two separate injections: (1) a liquid dose of PZP is administered using an 18-gauge needle primarily by hand injection; (2) the pellets are preloaded into a 14-gauge needle. These are loaded on the end of a trocar (dry syringe with a metal rod) which is loaded into the jab-stick which then pushes the pellets into the breeding mares being returned to the range. The pellets and liquid are designed to release the PZP over time similar to a time-release cold capsule.

3. Delivery of the vaccine would be as an intramuscular injection while the mares are restrained in a working chute. Half a cubic centimeter (cc) of the PZP vaccine would be emulsified with half a cc of adjuvant (a compound that stimulates antibody production) and loaded into the delivery system. The pellets would be loaded into the jab-stick for the second injection. With each injection, the liquid and pellets would be propelled into the left hindquarters of the mare, just below the imaginary line that connects the point of the hip and the point of the buttocks.

4. All treated mares would be freeze marked on the hip and / or chipped to enable researchers to positively identify the

Animals during the research project as part of the data collection phase.

5. At a minimum, monitoring of reproductive rates using helicopter flyovers will be conducted in years two through four by checking for the presence or absence of foals. The flight scheduled for year four

will also assist in determining the percentage of mares that have returned to fertility. In addition, field monitoring will be routinely conducted as part of other regular ground-based monitoring activities.

6. A field data sheet will be used by the field applicators to record all the pertinent data relating to identification of the mare including a photograph when possible, date of treatment, type of treatment (1 or 2 year vaccine, adjuvant used) and HMA. The original form with the data sheets will be forwarded to the Authorized Officer at the National Program Office (NPO) in Reno, Nevada. A copy of the form and data sheets and any photos taken will be maintained at the district office.

7. A tracking system will be maintained by NPO detailing the quantity of PZP issued, the quantity used, and disposition of any unused PZP, the number of treated mares by HMA, district office, and state along with the freeze-mark and
/ or chip applied by HMA.

8. The field office will assure that treated mares do not enter the adoption market for 3 years following treatment. In the rare instance, due to unforeseen circumstances, that treated mare(s) are removed from an HMA before 3 years have lapsed, they will be maintained in either a BLM facility or BLM-contracted Long-Term Pastures (LTPs) until expiration of the 3-year holding period. In the event it is necessary to remove treated mares, their removal and disposition will be coordinated through NPO. After expiration of the 3-year holding period, the animal may be placed in the adoption program or sent to long-term pastures.

PZP Remote Darting SOPs

1. PZP vaccine would be administered through darting by trained BLM personnel or collaborating partners only. For any darting operation, the designated personnel must have successfully completed a nationally recognized wildlife darting course and who have documented and successful experience darting wildlife under field conditions.
2. All mares targeted for treatment will be clearly identifiable through photographs to enable darters and HMA managers to positively identify the animals during the project and at the time of removal during subsequent gathers.
3. Mares that have never been treated would receive 0.5 cc of PZP vaccine emulsified with 0.5 cc of Freund's Modified Adjuvant (FMA) and loaded into darts at the time a decision has been made to dart a specific mare. Mares identified for re-treatment receive 0.5 cc of the PZP vaccine emulsified with 0.5 cc of Freund's Incomplete Adjuvant (FIA).
4. The liquid dose of PZP vaccine is administered using 1.0 cc Pneu-Darts with 1.25" or 1.5" barbless needles fired from either Dan Inject®, Pneu-Dart® X-Caliber or Palmer® Cap-Chur rifle.
5. Only designated darters would mix the vaccine/adjuvant and prepare the emulsion. Vaccine-adjuvant emulsion would be loaded into darts at the darting site and delivered by means of an appropriate CO_2 powered or cartridge darting delivery system.
6. Delivery of the vaccine would be by intramuscular injection into the left or right hip/gluteal muscles while the mare is standing still.
7. Safety for both humans and the horse is the foremost consideration in deciding to dart a mare. Safe darting distances would depend on the skill and ability of the darter, and the particular model of dart gun being utilized. No attempt would be taken when other persons are within a 30-m radius of the target

animal.

8. No attempts would be taken in high wind or when the horse is standing at an angle where the dart could miss the hip/gluteal region and hit the rib cage. The ideal is when the dart would strike the skin of the horse at a perfect 90° angle.
9. If a loaded dart is not used within two hours of the time of loading, the contents would be transferred to a new dart before attempting another horse. If the dart is not used before the end of the day, it would be stored under refrigeration and the contents transferred to another dart the next day. Refrigerated darts would not be used in the field.
10. No more than two people should be present at the time of a darting. The second person is responsible for locating fired darts. The second person should also be responsible for identifying the horse and keeping onlookers at a safe distance.
11. To the extent possible, all darting would be carried out in a discrete manner. However, if darting is to be done within view of non-participants or members of the public, an explanation of the nature of the project would be carried out either immediately before or after the darting.
12. Attempts will be made to recover all darts. To the extent possible, all darts which are discharged and drop from the horse at the darting site would be recovered before another darting occurs. In exceptional situations, the site of a lost dart may be noted and marked, and recovery efforts made at a later time. All discharged darts would be examined after recovery in order to determine if the charge fired and the plunger fully expelled the vaccine. Personnel conducting darting operations should be equipped with a two-way radio or cell phone to provide a communications link with the Project Veterinarian for advice and/or assistance. In the event of a veterinary emergency, darting personnel would immediately contact the Project Veterinarian, providing all available information concerning the nature and location of the incident.
13. In the event that a dart strikes a bone or imbeds in soft tissue and does not dislodge, the darter would follow the affected horse until the dart falls out or the horse can no longer be found. The darter would be responsible for daily observation of the horse until the situation is resolved.

GonaCon SOPs

GonaCon-Equine vaccine (USDA Pocatello Storage Depot, Pocatello, ID; Spay First!, Inc., Oklahoma City, OK) is distributed as preloaded doses (2 mL) in labeled syringes.

Delivering GonaCon by Hand-Injection of GonaCon

1. GonaCon-Equine vaccine is administered by hand-injection to mares that are appropriately immobilized or restrained. Important: label instructions must be followed for this product. Females identified for treatment application are hand-injected with an intramuscular injection of Gona-Equine vaccine (2 ml) in the lower gluteal musculature using a hand-held, luer-lock syringe (18-gauge, 3.8 cm needle). The syringe is made of transparent plastic with the barrel showing graduated marks indicating the volume of the vaccine in the syringe. This facilitates the visual assessment of the quantity of vaccine injected into the animal without the need to weigh the syringes. Pre-loaded syringes should be kept refrigerated overnight and then set out the morning of application at room temperature. They should not be allowed to get too warm or cold during the day.
2. The vaccine is distributed as preloaded doses (2 mL) in labeled syringes. Upon receipt, the vaccine should be kept refrigerated (4° C) until use. Do not freeze. The vaccine has a 6-month shelf-life from the time of production and the expiration date will be noted on each syringe that is provided.
3. Although infrequent, hand-injections to immobilized or restrained horses can result in partial delivery of the vaccine due to inexperienced personnel and/or unexpected movement of the horse. As a precaution, order extra doses of the vaccine. For hand-injection application, assume a 10% failure rate and increase

the original quantity accordingly.

4. Examine each syringe before and after injection and visually determine approximately how much vaccine was injected. A full dose is considered 90% (1.8 ml) or greater of the original 2 ml dose. Ensure a full dose is administered.

5. It is recommended that all treated mares be photographed to facilitate identification by individual markings, RFID chip, and/or freeze-marked on the hip or neck to positively identify the animals as a GonaCon-Equine vaccinated mare during field observations or subsequent gathers.

Preparation of Darts for GonaCon Remote Delivery:

General practice guidelines for darting operations, as noted above for dart-delivery of ZonaStat-H, should be followed for dart-delivery of GonaCon-Equine.

1. The vaccine is distributed as preloaded doses (2 mL) in labeled syringes. Upon receipt, the vaccine should be kept refrigerated (4° C) until use. Do not freeze. The vaccine has a 6-month shelf-life from the time of production and the expiration date will be noted on each syringe that is provided. Important: label instructions must be followed for this product.

2. Although infrequent, dart injections can result in partial injections of the vaccine, and shots are missed. As a

precaution, it is recommended that extra doses of the vaccine be ordered to accommodate failed delivery (~15 %). To determine the amount of vaccine delivered, the dart must be weighed before loading, and before and after delivery in the field.

3. For best results, darts with a gel barb should be used. (i.e. 2 cc Pneu-Dart brand darts configured with Slow-inject technology, 3.81 cm long 14 ga.tri-port needles, and gel collars positioned 1.27 cm ahead of the ferrule).

4. Wearing latex gloves, darts are numbered and filled with vaccine by attaching a loading needle (7.62 cm;

provided by dart manufacturer) to the syringe containing vaccine and placing the needle into the cannula of the dart to the fullest depth possible. Slowly depress the syringe plunger and begin filling the dart. Periodically, tap the dart on a hard surface to dislodge air bubbles trapped within the vaccine. Due to the viscous nature of the fluid, air entrapment typically results in a maximum of approximately 1.8 ml of vaccine being loaded in the dart. The dart is filled to max once a small amount of the vaccine can be seen at the tri-ports.

5. Important! Do not load and refrigerate darts the night before application. When exposed to moisture and condensation, the edges of gel barbs soften, begin to dissolve, and will not hold the dart in the muscle tissue long enough for full injection of the vaccine. The dart needs to remain in the muscle tissue for a minimum of 1 minute to achieve dependable full injection. Sharp gel barbs are critical.

6. Darts (configured specifically as described above) can be loaded in the field and stored in a cooler prior to application. Darts loaded, but not used can be maintained in a cooler at about 4° C and used the next day, but do not store in a refrigerator or any other container likely to cause condensation.

Administering the GonaCon Vaccine Remotely (via Darting):

1- For initial and booster treatments, mares would ideally receive 2.0 ml of GonaCon-Equine. However, experience has demonstrated that only 1.8 ml of vaccine can typically be loaded into 2 cc darts, and

this dose has proven
successful. Calculations below reflect a 1.8 ml dose.

2- With each injection, the vaccine should be injected into the left or right hind quarters of the mare, above the imaginary line that connects the point of the hip (hook bone) and the point of the buttocks (pin bone).

3- Darts should be weighed to the nearest hundredth gram by electronic scale when empty, when loaded with

vaccine, and after discharge, to ensure that 90% (1.62 ml) of the vaccine has been injected. Animals receiving <50% should be darted with another full dose; those receiving >50% but <90% should receive a half dose (1 ml). All darts should be weighed to verify a combination of ≥1.62 ml has been administered. Therefore, every effort should be made to recover darts after they have fallen from animals.

4- A booster vaccine may be administered after the first injection to improve efficacy of the product over subsequent years.

5- Free ranging animals may be photographed using a telephoto lens and high-quality digital receiver as a record oftreated individuals, and the injection site can be recorded on data sheets to facilitate identification by animal markings and potential injection scars.

Appendix F – PopEquus Results (Proposed Action Alternatives)

PopEquus (1.0.1) Basic Tool – Simulation Report

07 July 2023 09:38:48

Settings

You simulated 3 management alternatives using the *PopEquus* Basic Tool: GonaCon, Removals, ZonaStat-H. You assumed a starting population size of 181 horses, a mean annual population growth rate of 2, and a capture probability during management (e.g.,bait gather) of 0.23. You also assumed that the target population size range for the population (i.e., Appropriate Management Level) was 70-140 horses, and that removals aimed for a target population size of 140. You simulated populations over a 10-year projection interval, and you performed 10 replicate projections.

Results

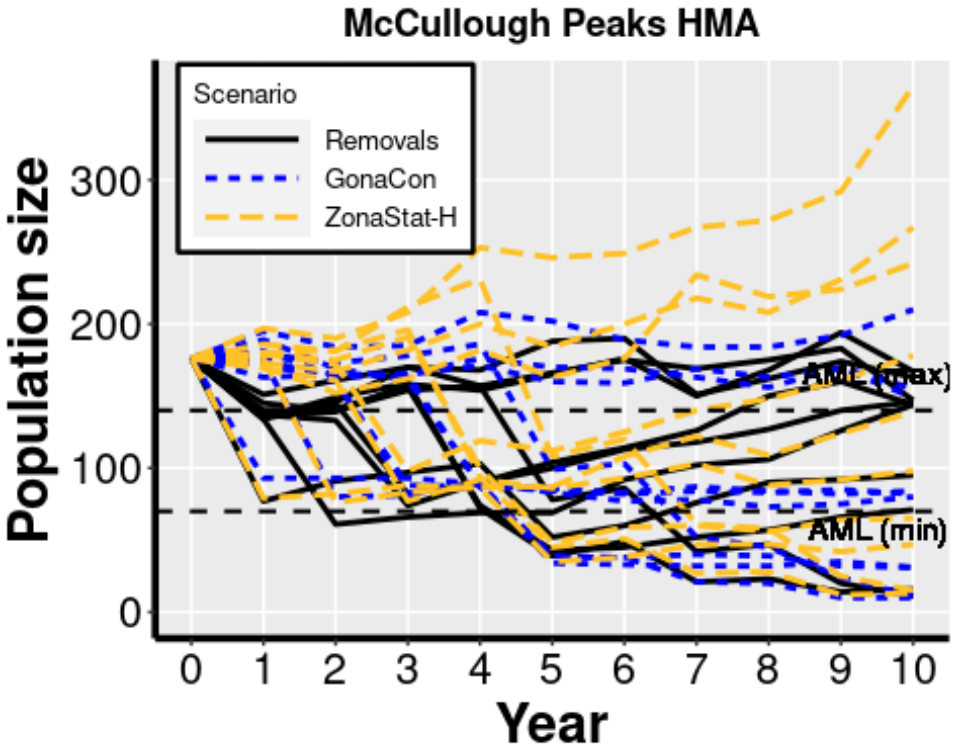
Simulation outcomes can be summarized with a table(s) describing mean values among replicates for relevant metrics. Metrics include: population size in the final year of the projection interval ('Final population size'), average population size across all years ('Mean population size'), proportion of replicates that ended within the AML (i.e., the likelihood that an alternative yielded AML in the final year; 'AML probability'), proportion of replicates that ended above the persistence threshold ('Persistence probability'), total number of horses gathered ('Number gathered'), total number of horses removed ('Number removed'), total number of horses treated ('Number treated'), cost of management in the Herd Management Area (HMA) in millions of USD ['On-range cost ($ million)'], and total cost of management, including costs incurred at the HMA and in holding facilities ['Total cost ($ million)']. Values in parentheses are 95% confidence intervals.

Alternative	Final population size	Overall mean population size	AML probability
Removals	110 (12-166)	121 (81-167)	0.20
GonaCon	84 (10-198)	119 (72-186)	0.30
ZonaStat-H	143 (13-343)	141 (75-237)	0.20

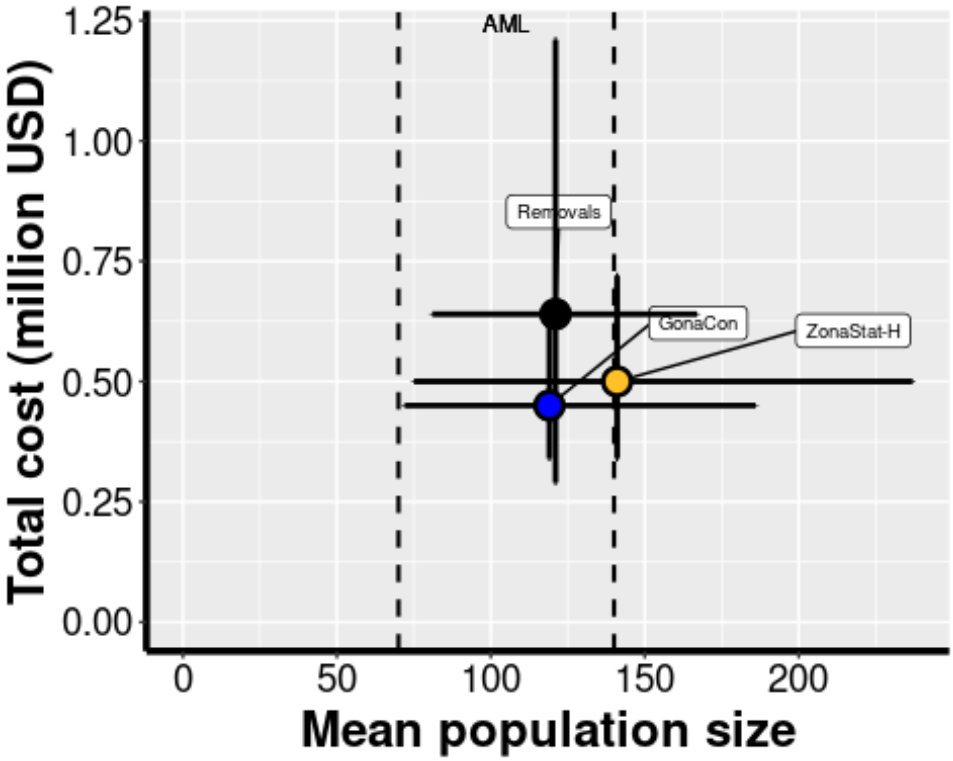
Alternative	Persistence probability	Number gathered	Number removed	Number treated
Removals	0.80	308 (137-543)	75 (38-144)	0 (0-0)
GonaCon	0.80	394 (288-565)	0 (0-0)	187 (133-270)
ZonaStat-H	0.80	453 (296-690)	0 (0-0)	199 (124-309)

Alternative	On-range cost ($ million)	Off-range cost ($ million)	Total cost ($ million)
Removals	0.32 (0.14-0.55)	0.32 (0.15-0.66)	0.64 (0.29-1.21)
GonaCon	0.45 (0.34-0.62)	0.00 (0.00-0.00)	0.45 (0.34-0.62)
ZonaStat-H	0.50 (0.34-0.72)	0.00 (0.00-0.00)	0.50 (0.34-0.72)

A graph of population size through time can be used to visualize effects of management alternatives on population size. Different colored lines indicate management alternatives simulated by the user; for each alternative, individual lines are different simulation replicates, that vary due to random chance. Dashed horizontal black lines indicate the minimum and maximum target population size range (i.e., AML).



Individuals might be interested in identifying a management alternative(s) that achieves the reduction or maintenance of a population within the target population size range (i.e., AML) while also incurring lower direct costs relative to other options. We can visualize the relationship between predicted population size and direct costs of management by graphing the overall mean population size (number of horses) on the x-axis and total cost of management (millions of USD) on the y-axis predicted by each alternative. Points are mean predictions among replicates and are colored by scenario (as in in the first graph); horizontal and vertical lines from points represent 95% confidence intervals in predicted population size and cost, respectively, for each scenario. While this graph does not account for all factors that might be important during management decisions, the graph provides a useful illustration of the trade-off between predicted population size and total direct cost of management resulting from the simulated alternatives.



Summary

The alternative that yielded the smallest average population size was:

```
## [1] "GonaCon"
```

The alternative that incurred the lowest direct costs ‘on range’ (other than ‘no management’) over the next 10 years was:

```
## [1] "Removals"
```

The alternative that incurred the lowest total direct costs across the sum of ‘on range’ and ‘off range’ (other than ‘no management’) over the next 35 years was:

```
## [1] "GonaCon"
```

Among the alternatives that achieved population size within Appropriate Management Levels, the alternative that incurred the lowest total direct costs across the sum of ‘on range’ and ‘off range’ was:

```
## [1] "Removals"
```

Note: results from the simulations may not be the sole basis for a management decision. The model does not explicitly account for or consider multiple uses on public lands, local land use planning considerations, ecological costs of horses on ecosystems, or other important values. The results presented here reflect considerations related to population size, amount of management, and fiscal costs of management that were estimated, given the input parameters and alternatives specified.

Appendix G – PopEquus Results (Removals and Zonastat) *

*PopEquus requires 2 management alternatives.

***PopEquus* (1.0.1) Basic Tool - Simulation Report**

07 July 2023 10:27:20

Settings

You simulated 2 management alternatives using the *PopEquus* Basic Tool: Removals, ZonaStat-H. You assumed a starting population size of 181 horses, a mean annual population growth rate of 2, and a capture probability during management (e.g., bait gather) of 0.23. You also assumed that the target population size range for the population (i.e., Appropriate Management Level) was 70-140 horses, and that removals aimed for a target population size of 140. You simulated populations over a 10-year projection interval, and you performed 10 replicate projections.

Results

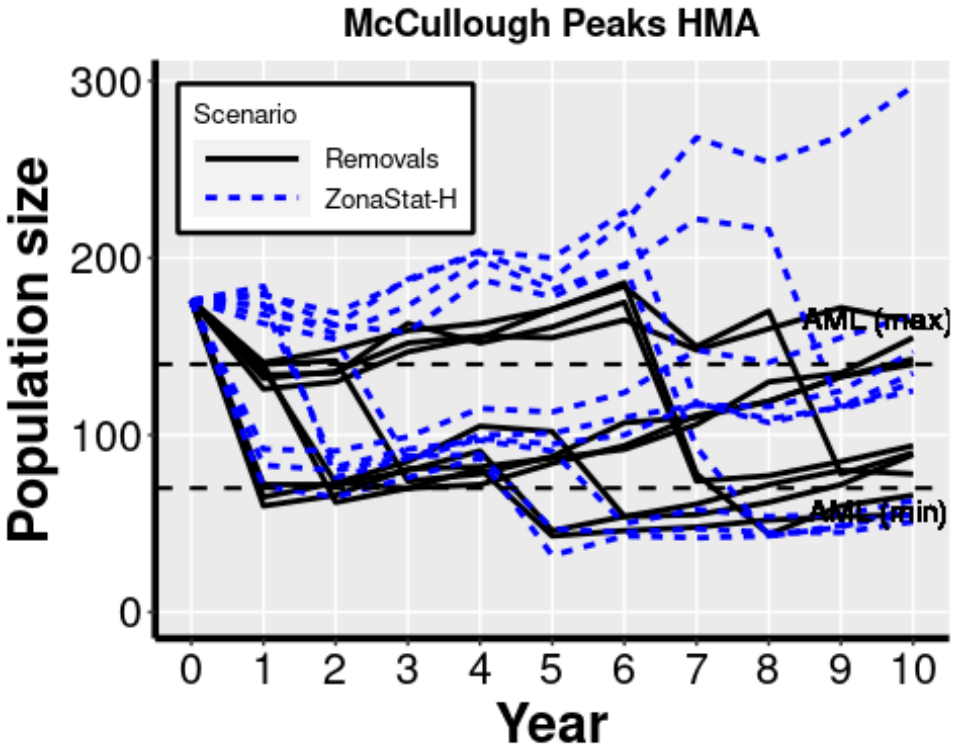
Simulation outcomes can be summarized with a table(s) describing mean values among replicates for relevant metrics. Metrics include: population size in the final year of the projection interval ('Final population size'), average population size across all years ('Mean population size'), proportion of replicates that ended within the AML (i.e., the likelihood that an alternative yielded AML in the final year; 'AML probability'), proportion of replicates that ended above the persistence threshold ('Persistence probability'), total number of horses gathered ('Number gathered'), total number of horses removed ('Number removed'), total number of horses treated ('Number treated'), cost of management in the Herd Management Area (HMA) in millions of USD ['On-range cost ($ million)'], and total cost of management, including costs incurred at the HMA and in holding facilities ['Total cost ($ million)']. Values in parentheses are 95% confidence intervals.

Alternative	Final population size	Overall mean population size	AML probability
Removals	107 (57-162)	113 (71-154)	0.40
ZonaStat-H	123 (52-268)	130 (68-209)	0.30

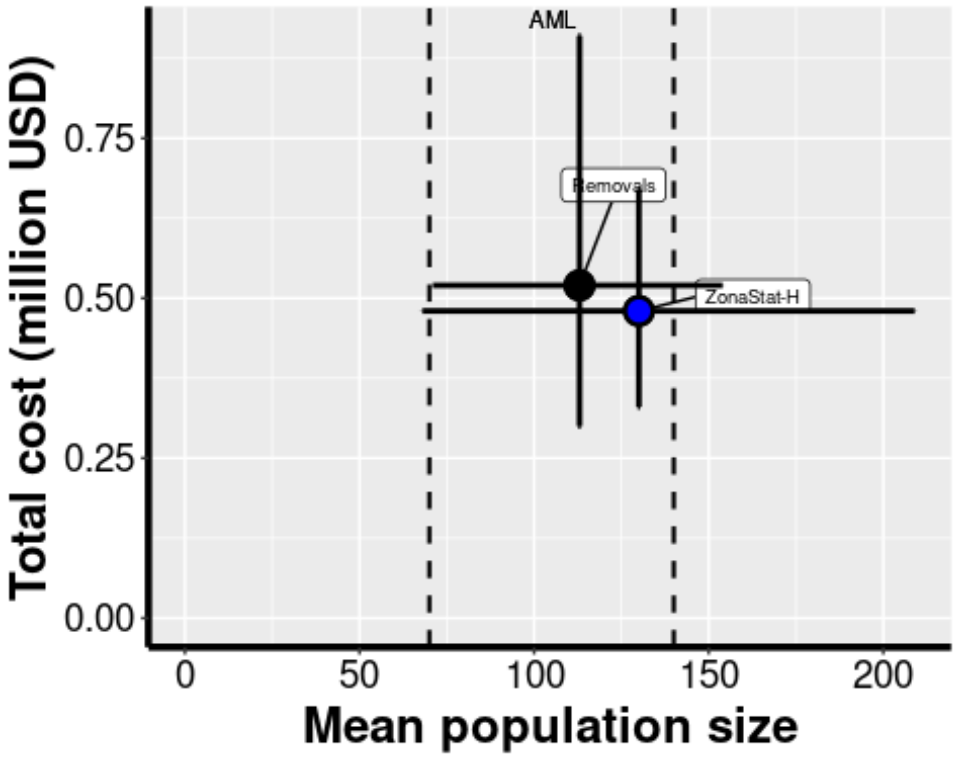
Alternative	Persistence probability	Number gathered	Number removed	Number treated
Removals	1.00	252 (137-485)	60 (38-98)	0 (0-0)
ZonaStat-H	1.00	429 (279-640)	0 (0-0)	193 (120-290)

Alternative	On-range cost ($ million)	Off-range cost ($ million)	Total cost ($ million)
Removals	0.26 (0.14-0.50)	0.26 (0.16-0.41)	0.52 (0.30-0.91)
ZonaStat-H	0.48 (0.33-0.67)	0.00 (0.00-0.00)	0.48 (0.33-0.67)

A graph of population size through time can be used to visualize effects of management alternatives on population size. Different colored lines indicate management alternatives simulated by the user; for each alternative, individual lines are different simulation replicates, that vary due to random chance. Dashed horizontal black lines indicate the minimum and maximum target population size range (i.e., AML).



Individuals might be interested in identifying a management alternative(s) that achieves the reduction or maintenance of a population within the target population size range (i.e., AML) while also incurring lower direct costs relative to other options. We can visualize the relationship between predicted population size and direct costs of management by graphing the overall mean population size (number of horses) on the x-axis and total cost of management (millions of USD) on the y-axis predicted by each alternative. Points are mean predictions among replicates and are colored by scenario (as in in the first graph); horizontal and vertical lines from points represent 95% confidence intervals in predicted population size and cost, respectively, for each scenario. While this graph does not account for all factors that might be important during management decisions, the graph provides a useful illustration of the trade-off between predicted population size and total direct cost of management resulting from the simulated alternatives.



Summary

The alternative that yielded the smallest average population size was:

```
## [1] "Removals"
```

The alternative that incurred the lowest direct costs ‘on range’ (other than ‘no management’) over the next 10 years was:

```
## [1] "Removals"
```

The alternative that incurred the lowest total direct costs across the sum of ‘on range’ and ‘off range’ (other than ‘no management’) over the next 35 years was:

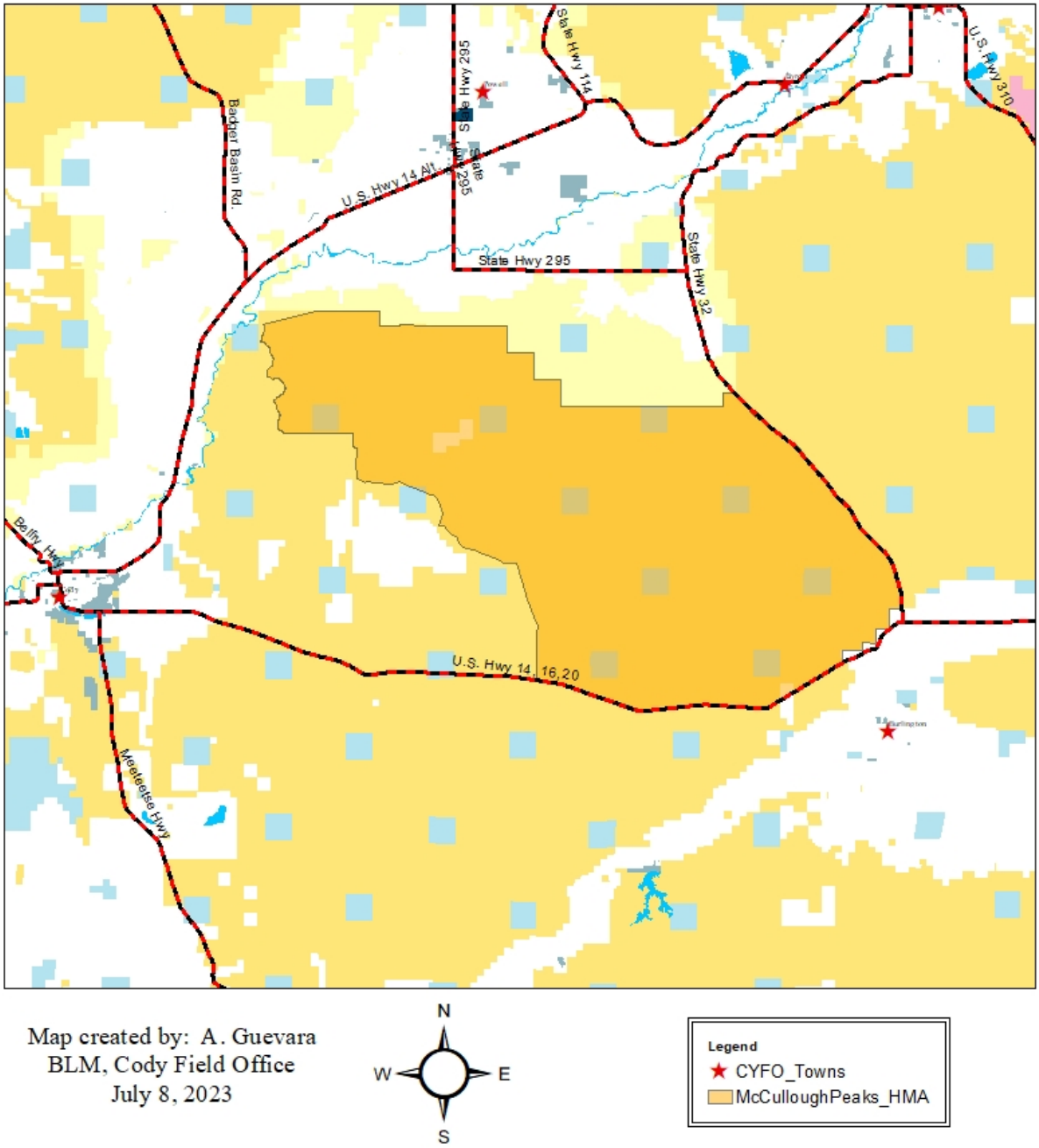
```
## [1] "ZonaStat-H"
```

Among the alternatives that achieved population size within Appropriate Management Levels, the alternative that incurred the lowest total direct costs across the sum of ‘on range’ and ‘off range’ was:

```
## [1] "Removals"
```

Note: results from the simulations may not be the sole basis for a management decision. The model does not explicitly account for or consider multiple uses on public lands, local land use planning considerations, ecological costs of horses on ecosystems, or other important values. The results presented here reflect considerations related to population size, amount of management, and fiscal costs of management that were estimated, given the input parameters and alternatives specified.

Appendix H – Map of McCullough Peaks Herd Management Area



No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by BLM.

ATTACHMENT 1: 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

C. 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**)

D. 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**)

E. 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**)

F. 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

G. 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**)

H. Care

1. Feeding and Watering

V VI Adult WH&Bs held in traps or temporary holding pens for longer than 12 hours
. VII must be fed every morning and evening with water available at all times other
VIII than when animals are being sorted or worked. (**major)**

IX X Water must be provided at a minimum rate of ten gallons per 1000 pound animal
. XI per day, adjusted accordingly for larger or smaller horses, burros and foals, and
XII environmental conditions, with each trough placed in a separate location of the
XIII pen (i.e. troughs at opposite ends of the pen). . (**major**)

XI XV Good quality hay must be fed at a minimum rate of 20 pounds per 1000 pound
. XVI adult animal per day, adjusted accordingly for larger or smaller horses, burros and
XVII foals. (**major**)

XVXIX XX Hay must not contain poisonous weeds or toxic substances. (**major**)
.

XXXXII XXIII Hay placement must allow all WH&Bs to eat simultaneously.
i. (**major**)

XX XXV When water or feed deprivation conditions exist on the range prior to the gather,
. XXVII the Lead COR/COR/PI should adjust the watering and feeding arrangements in
XX XXIX consultation with the onsite veterinarian as necessary to provide for the needs of
XX XXXI 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)

I. 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

J. 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)

K. 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)

L. 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. (**majo**r)
    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

M. 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)

N. 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**)

O. 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

P. 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)

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

Responsibilities

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.5	Determine number of attempts that can be made to capture the missing half of a mare/foal pair that has become separated.
II.B.6	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.

Appendix K – Response to Public Comments

Comment Number	Comment Type	Comment Text	Response
1	Beyond Scope	Appropriations bill prohibits wild horse slaughter and prioritizes humane fertility control and management WASHINGTON (July 28, 2023) — Today, the American Wild Horse Campaign (AWHC) commends the U.S. Senate Committee on Appropriations for advancing bipartisan language, included in its Fiscal Year (FY) 2024 Interior, Environment, and Related Agencies funding bill and its accompanying report, to protect wild horses and burros from slaughter, and direct key reforms to the Bureau of Land Management (BLM)'s Wild Horse and Burro Program. The Committee further called for the increased use of fertility control vaccines, and allocated $11 million of the agency's budget toward this humane, proven management method. Combined with House appropriations legislation marked up last week that also prioritizes humane fertility control and directs the BLM to evaluate alternatives to controversial helicopter roundups, the legislation lays the groundwork for a seismic shift in the way the agency manages wild horses. The committee's action comes amidst the federal government's summer helicopter roundup season, with the largest operation of the season still ongoing in the Antelope Complex in Nevada. To date, 21 horses and foals (baby horses) have died, most suffering broken necks and legs during the first two weeks of the roundup operation. A stallion suffered a horrific broken leg after escaping from a trap. The injury was caught on video by AWHC's humane roundup observers and sparked national outrage. "We applaud Senate Appropriations Chairwoman Patty Murray (D-WA), Vice Chair Susan Collins (R-ME), Interior Subcommittee Chair Jeff Merkley (D-OR), and Ranking Member Lisa Murkowski (R-AK) for directing meaningful improvements to the wild horse and burro programs at the BLM, including a strong emphasis on fertility control vaccines" said Holly Gann Bice, director of government relations for AWHC. "The appropriate use of fertility control vaccines will stabilize horse populations and help end the ongoing cycle of removing and confining horses in overcrowded holding facilities. Fertility control vaccines are a key component of successful, humane, and fiscally responsible wild horse population management." Significant measures in the bill and report language include: • Prohibition on selling horses and burros for slaughter. • Prohibition on destroying healthy and unadopted wild horses and burros. • Increasing use of fertility control and dedicating $11 million to its implementation. • Measurable objectives in reducing population growth with fertility control •	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
		Provisions to continue adoptions and other aspects of the program, while "fully implementing and enforcing" safeguards. AWHC notes that improved enforcement of safeguards would better protect wild horses and burros from roundup fatalities and abuse of the adoption incentive program, which the New York Times exposed as a pipeline to slaughter for "truckloads" of wild horses and burros after an AWHC investigation .[comment end]	
2	Beyond Scope	Latest studies in the UK have found that Equines contribute to the welfare of natural habitats. Stretching from the Highlands of Scotland to Cornwall equines benefit the land rather than destroy it. "ponies nibble tightly down to the ground creating grassland lawns" Dorset Re-wilding project "Equines are selective grazers, creating vegetation mosaics with shortly grazed patches interspersed with areas of undisturbed vegetation, and they can be useful for slowing down scrub encroachment through browsing.." Wildlife and Countryside Trust Wild horses play a crucial role in shaping natural habitats. From grazing through to trampling, wallowing and scenting, their influence benefits a multitude of species. Re-wilding Britain.org.uk Wyoming is approximately 251,489 sq km, while United Kingdom is approximately 243,610 sq km, making United Kingdom 96.87% the size of Wyoming. You can't say you haven't got the space! Photos on social media of the McCullough herd show well rounded ponies in good body condition. They have evolved to survive in these less than hospitable environments and their numbers are self -regulating based on available forage. The numbers of this small herd have only increased by 2% in the last five years. This shows the validity of the PZP solution. This herd is clearly a candidate for watch and monitor on an individual basis. The McCullough Heights herd will be irretrievably damaged by the roundups and bringing their numbers down to below 150 will make their population unviable. The extreme measures that are being used in the roundups are not only cruel but also counterproductive the maintenance of a healthy population. Please read the latest research on the welfare of wild herds carried out in Australia and published by the National Center for Biotechnology	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
		information under many titles but specifically “Mental experiences in Wild Animals: Scientifically Validating Measurable Welfare Indicators in Free-Roaming Horses” which shows the impact of sustained trauma on horses. Even the US General Accounting office agrees the roundups are not financially viable. When 3% of the Country’s beef is costing $100 millionto produce and untold suffering, it is time to change the mandate. The McCullough Heights horses ask for nothing except to be left in peace, to live wild and free as their ancestors have done and maybe bring some peace to the people who watch them living the life they were born to. The world is watching to see what the US is made of.	
3	Beyond Scope	CATTLE when they eat grass, wrap their tongues around it and rip it out by the roots. It can't grow back and leads to desertification of the area. When horses eat, they nip grass off just above the roots....the grass can grow back. As well, horses cannot digest grass seed.....it passes through the horse and is deposited back on the ground in its own packet of fertilizer. More horses = better, healthier grasslands. Giving in to the cattlemen will only ruin the area for the steers and the rest of the wildlife, and make the park unattractive to tourists.	This is beyond the scope of this EA. No future action is needed.
4	Beyond Scope	In hopes of recommending or circling back to potential resolutions, I have included a few documentations: https://westgov.org/images/files/WGA-PR-2021-05-Wild-Horse-and-Burro-Management.pdf https://www.tsln.com/news/private-land-public-wild-horses-blm-seeks-private-ranches-to-maintain-wild-horses/ https://www.blm.gov/press-release/blm-announces-new-opportunity-partnerships-support-management-wild-horses-and-burros https://www.blm.gov/policy/im-2018-052	This is beyond the scope of this EA. No future action is needed.
5	Beyond Scope	Do not remove the wild Mcollough Peak horses. They belong to the U S taxpayers. We want their heritage to live on in the park. The horses are the reason we go to TRNP. Leave them in peace.	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
6	Beyond Scope	Why doesn't BLM do more for the land itself instead of getting rid of horses? Land management is what is suppose to be done and it isn't. You let farmer/Ranchers free graze those lands and they contribute nothing back to it! And the solution is to round up and remove horses. There is a better solution to this issue! Should find someone to do the actual job thats stated in the title "Land Management"!!!	This is beyond the scope of this EA. No future action is needed.
7	Beyond Scope	The use of helicopters has got to stop and these roundups!!. It is inhumane to traumatize these horses!!	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
8	Beyond Scope	This is an amendment to my previous comment. In my previous comment I asked for consideration of changing the livestock use rather than horse herd reduction. In reading further through the proposal document, I can find only that this suggestion is rejected out of hand because it "would first require an amendment to the RMP, which is outside the scope of this EA." While an amendment to the RMP "may be outside the scope of this RMP" the suggestion still deserves explanation and clarification for the public before being summarily dismissed. I need context and full factual knowledge of competing demands for the land use by the various entities elucidated in the phrase "multi-use." Beyond the dismissive comment, the author of this proposed Bait Trap Gather needs to succinctly frame an "explanation as to why changes to livestock grazing cannot be made through a wild horse decision and arguments such as Livestock grazing can only be reduced or eliminated through provisions identified within regulations at 43 CFR § 4100 and must be consistent with multiple use allocations set forth in Land Use Plans (LUPs)/RMPs." The BLM is asking for public comment. Therefore, our public comments deserve to appreciate the full context of what is implied by the term multi-use land. If the BLM find the AML for the wild horses unsustainable above 140, then other livestock uses and impacts must be articulated so as to provide the full context to the plan. Saying that the impact from wild horses can only addressed by limiting their numbers so as to not adversely infringe on other land uses is a hollow and dismissive argument when those other uses and their impacts are not clearly delineated. Refusing to articulate a rationale for limiting cattle grazing because the suggestion is "inconsistent" with the Cody Office RMP only elucidates the point that, as an informed reader, information is being withheld from this discussion that I require to make an informed public comment.	This is beyond the scope of this EA. No future action is needed.
9	Beyond Scope	Please end this horrific roundup of these amazing creatures. It is an inhumane way with horses dying needlessly by helicopters running them to exhaustion. Foals are terrified and getting injured, sometimes killed. How can this be happening? There are thousands of acres of land. These horses are not causing destruction and everyone knows it. Please put an end to this!	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
10	Beyond Scope	The senseless & barbaric means of helicopter round-ups & eradicating wild horses & burros leaves a sickening feeling in my gut. These iconic creatures are a legendary image & part of our Ameican history!! There are other means of birth control & herd management to balance a stable & sustainable environment. Please, please can't BLM be creative & use them?	This is beyond the scope of this EA. No future action is needed.
11	Beyond Scope	https://www.corollawildhorses.com/ OUR MISSION To protect, conserve, and responsibly manage the herd of Corolla wild horses (Bankers) roaming freely on the northernmost Currituck Outer Banks, and to promote the continued preservation of this land as a permanent sanctuary for horses designated as the State Horse and defined as a cultural treasure by the state of North Carolina. Thank you for your time and consideration.	This is beyond the scope of this EA. No future action is needed.
12	Beyond Scope	Rounding up the horse with helicopters is cruel and unjust with horses being killed in the effort (see what happened recently in Nevada)	This is beyond the scope of this EA. No future action is needed.
13	Beyond Scope	Title: Unleashing Destruction: The Impending Threat to our Wild Horses In the heart of our natural landscapes, a battle of survival rages on – a battle that pits the majestic spirit of wild horses against the cold machinery of human progress. As we stand on the precipice of eliminating half of a 181-strong herd of wild horses, we must acknowledge the irreversible damage that will be inflicted upon not only these creatures but also the very essence of our planet's wild beauty. These horses embody theamed heart of nature itself, their hooves pounding in harmony with the rhythm of the land. Yet, their existence hangs in the balance as encroaching development and shortsighted policies threaten their very existence. Here are the reasons why this impending loss would be an irreparable blow to the herd: Ecosystem Stewardship: Wild horses are key players in maintaining a balanced ecosystem. Their grazing patterns help prevent vegetation overgrowth, creating habitats conducive to the survival of countless other species. Removing a substantial portion of the herd would disrupt this delicate equilibrium, potentially causing a domino effect of environmental consequences. Cultural Heritage: These horses represent a living link to our historical and cultural past. They embody the untamed spirit of freedom that has inspired generations. Their eradication would rob us of a tangible connection to our heritage, reducing us to mere spectators in the erosion of our own legacy. Genetic Diversity: Every wild horse is a genetic masterpiece, honed by centuries of adaptation to their	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
		environment. Eliminating a significant portion of the herd would deplete the gene pool, reducing the herd's overall resilience to changing conditions and threatening their long-term survival. Ecotourism and Education: Wild horses draw ecotourists, wildlife enthusiasts, and students of nature to observe and learn about these magnificent creatures. The loss of half the herd would deprive future generations of the chance to witness firsthand the beauty and splendor of these animals and to foster a sense of stewardship for the natural world. Symbol of Freedom: Wild horses are a symbol of untamed freedom, embodying the spirit of resilience against all odds. Their eradication would be a crushing blow to the very concept of living in harmony with nature and respecting the wildness that makes our planet unique. Ethical Responsibility: As stewards of this planet, we bear the ethical responsibility to safeguard the well-being of all its inhabitants. The impending culling of these horses flies in the face of this responsibility, sacrificing innocent lives for short-term gains. In the face of this looming tragedy, we must challenge ourselves to prioritize the preservation of these wild horses and the irreplaceable value they bring to our world. Let us not be the generation that extinguishes the flame of wildness, but rather the one that protects and nurtures it for the generations yet to come. It is time to make a stand for these noble creatures and the irreplaceable legacy they represent – before it's too late. Those pictures I sent you are the image I made for selling t-shirts for the love of horses and I would certainely make some with our beautiful and powerful wild horses, let them togheter, those are our's, take care of them please... Please, take a look at this video join at the end of my comment, hoping this video will open your mind and heart to sacred life. https://youtu.be/j88QqS5ag4A	
14	Beyond Scope	Please rethink your decision to do the inhumane helicopter gathers on our wild horses. We want to have wild horses for future generations to enjoy. We don't want our dollars going to pay for them sitting in feed lots. It doesn't work adopting them out, they just end up in kill pens.	This is beyond the scope of this EA. No future action is needed.
15	Beyond Scope	Please reply with info about this trap. Why is this necessary?	This is beyond the scope of this EA. No future action is needed.
16	Beyond Scope	Vote NO on the Bill before you.	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
17	Beyond Scope	Please stop the inhumane helicopter roundups. There are more humane ways to control the horse population. Grazing livestock need to go. They are ruining our forests and deserts. Please work with The Cloud Foundation and the American Wild Horse Campaign to do this right. Con: Cattle Grazing Is Incompatible with Conservation https://baynature.org/article/con-cattle-grazing-is-incompatible-with-conservation/ The article paints damaging overgrazing as an artifact of the past. Yet most of the damage wrought by livestock — such as degradation of stream function, riparian habitat and biodiversity — is ongoing. The science is conclusive on this damage. Too many native ecosystems in our public parks and watershed lands continue to be degraded by cattle. And many studies document how removing cattle can restore trout populations, native songbirds, wildflowers and amphibians.	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
18	Beyond Scope	(9) The Health and Well-Being of our American Wild horses needs to be of utmost importance. Currently, there are over 62,000 wild horses standing in short and long-term holding pens, ripped away from their homes, families, to a depressing life of standing around in dirt pens, and being cared for by the US taxpayer dollars. Many BLM holding facilities are understaffed, breeding grounds for diseases, and only a small number of horses ever get adopted. In Colorado at Canon City State Prison where 3000 horses can be held (July 2023, there are currently 1600 horses), Alan Bittner, Colorado BLM Deputy Director shared with me last week that 3 staff positions are unfilled. Hence, currently, I have concerns about the health and care of horses in this facility. The Wild Horse Inmate Training program (WHIP) in the Canon City Horse Holding Facility was terminated by the prison in May 2021, so no formally trained/supervised prison inmates are working with these horses. Inadequate numbers of employed BLM staff has been a problem throughout the BLM holding facilities and even at the private ranch holding BLM facilities. This was a major problem in Wheatland and Rock Springs Holding pens in Wyoming last year (2022) too according to June Winland, BLM Horse and Burro Lead in Wyoming. Last year, the BLM Colorado and Wyoming Horse Holding facilities were engulfed with diseases (Strangles, Influenza, Herpes Viruses, etc.) which killed a significant number of horses, quarantined/closed facilities and more. Truly the BLM does not have adequate staffing to humanely care of the horses in these facilities nor get these horses available for timely adoption events. In Colorado, wild horses are taking years to be at an adoption event due to limited BLM staff and diseases. Please leave the McCullough Peaks Horse on the range for the health safety. “NO ACTION; NO REMOVAL”.	This is beyond the scope of this EA. No future action is needed.
19	Beyond Scope	Those are just a couple key points you could use to back your comment, But make sure to keep your comments civil and respectful. You can visit, saveourwildhorses.net for alot of great facts to go with backing up your comment submission. You have seen each and everday that these horses or more than just animals. They are families. They show emotions, have drama, and show compassion. No different then anyone's daily life. I hope and pray that with our words, that they continue to always be...WILD & FREE!!	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
20	Beyond Scope	Those are just a couple key points you could use to back your comment, But make sure to keep your comments civil and respectful. You can visit, saveourwildhorses.net for alot of great facts to go with backing up your comment submission. You have seen each and everday that these horses or more than just animals. They are families. They show emotions, have drama, and show compassion. No different then anyone's daily life. I hope and pray that with our words, that they continue to always be...WILD & FREE	This is beyond the scope of this EA. No future action is needed.
21	Beyond Scope	Please leave the wild horses alone- they are living in peace and not bothering anyone.	This is beyond the scope of this EA. No future action is needed.
22	Beyond Scope	Please stop the helicopter round ups.	This is beyond the scope of this EA. No future action is needed.
23	Beyond Scope	o whom it may or may not concern. We have to be accountable for our actions as humans. In our adulthood, we forget innocence, and are all consumed by business and money. Ask a child if this is right or wrong and that answer can be my vote. Let us perserve our morals while the world is seemingly loosing its mind.	This is beyond the scope of this EA. No future action is needed.
24	Beyond Scope	What is the proof that the current population or future population increase will be detrimental to the environment in which the horses live. The land these horses live in seem to have sustained them for quite some time and they look healthy in the pictures. If tax payer dollars are being used for this event that is planned cannot they be used to feed and care for the horses without destroying them. Where is the actual proof this is a NECESSITY?	This is beyond the scope of this EA. No future action is needed.
25	Beyond Scope	KEEP THE MCCULLOUGH HERD TOGETHER. NO MORE BRUTAL HELICOPTER OR ANY OTHER ROUNDUPS. THANK YOU. JUST. STOP. Gina Obrien.	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
26	Beyond Scope	If the Pryor Mountain herd population is eventually reduced to only 98 horses, the herd will no longer be genetically viable. Dr. Gus Cothran, leading horse geneticist and professor emeritus at the Texas A&M School of Veterinary Medicine, states that, at a minimum, herd size must be maintained at 150 horses to ensure genetic viability and a healthy population. Lower population numbers lead to more in-breeding, resulting in the population being vulnerable to multiple health problems. According to the BLM's own Wild Horse and Burro Handbook, "A minimum population size of 50 effective breeding animals (i.e., a total population size of about 150-200 animals) is currently recommended to maintain an acceptable level of genetic diversity within reproducing WH&B populations (Cothran 2009)". If the Demijohn Flats and Sorenson Expansion/Pasture allotments are added to the range in its entirety, the Pryor Mountain Wild Horse Herd Area could easily support the current population and more.	This is beyond the scope of this EA. No future action is needed.
27	Beyond Scope	Hello, We live in Indiana. The first time we saw these magnificent horses we fell to our knees in awe. We stayed and watched for hours. Something we never forget and took many pictures of. We stayed in medora campground. Our hearts were full of love for these horses that we planned a trip to come back again. Two years later we were back! Those horses bring visitors to Theodore National Park. The horses are magestic. Please keep these horses in the park.	This is beyond the scope of this EA. No future action is needed.
28	Beyond Scope	–Assure us that helicopter trapping will be immediately discontinued at all locations. Planned and safe bait-trapping must be used by experts, if done at all. This aspect of maintaining the herds needs to be studied to devise a safe approach that does not damage these animals. Slow, deliberate, and careful management of these wonderful creatures must be the ONLY option for going forward.	This is beyond the scope of this EA. No future action is needed.
29	Beyond Scope	Blues should have been protected! This was criminal and disgusting what has happened to him!	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
30	Beyond Scope	ttention BLM Officials regarding the Proposed Action Alternative for the McCullough Peaks Herd of Wild Horses: First I want to say how I love visiting the State of Wyoming from my current home in Colorado. I go on guided fishing trips there all the time. I have no trouble spending money in the state but now my added hobby has been to schedule visits to observe the wild herds of horses. As a American who spends money in the state, I do not want to see this part of the wonder of Wyoming vanish.	This is beyond the scope of this EA. No future action is needed.
31	Beyond Scope	ttention BLM officials concerning McCullough Peaks Herd; I have visited the great state of Wyoming on many occasions and I am always in awe of the mountains, lakes and rivers along with its wildlife habitat. I have been to Salt Wells, and Rock Creek, and my next trip is to visit McCullough Peaks and Pryor Mountain to see the horses in their natural and free roaming areas. I come with a large group of people several times a year and we support WY businesses by lodging, dining, and other activities such as fishing.	This is beyond the scope of this EA. No future action is needed.
32	Beyond Scope	I am a physician and trained biologist. I know a thing or two about the management wildlife on our public lands. Please strongly consider my voice on this issue. Sincerely, Dr. Louis Scannura Former Clinical Associate Professor, Southern Illinois University School of Medicine.	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
33	Beyond Scope	I see no real reason for the BLM to take these horses from the life long environment. The land is, as I understand public land that these wild horses have been on for many many years. To "round them up" using helicopters is inhumane. This process is very harmful to every horse, regardless of age, and then to put them in cages where they end up getting various illnesses, and are separated from their family members which is mentally damaging. The BLM appears to want to have access to the property they have called home for generations to allow beef farmers to use for free. I don't have horses but when you see the fear in their eyes, the fright of losing a foal or other family members it breaks my heart. If you must "round them up" get your people out there and use horses to get them, just like it was done many years ago. I feel the BLM has their priorities all wrong. The horses are the ones that need protection and the beef farmers can use their own land for feeding their cattle. There should be an in depth investigation within BLM and those farmers to see why BLM is so willing to destroy generations of wild horses and not protect them. I have placed calls to several so called government officials to see if they would step in and help these beautiful wild horses but they all seem to pawn my inquiry off to some non BLM official citing they can't get involved. I don't believe they "can't get involved" it appears to be a choice they are making, turning a blind eye to this horrible situation. The situation with BLM and the horses reminds me of the days when our government ran off all the native Americans from their land taking it for other people and look where they are today. Living in poor conditions and trying to keep their families together. I am sure we have many people who don't realize what is happening in the western states with these horses and the horrible treatment they receive in the hands of the BLM. I live in Pinehurst, North Carolina.	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
34	Beyond Scope	The fore mentioned and admitted list of comments by Carol Walker are sound and completely well thought out. She has so much experience with these herds, and I encourage BLM to understand that her comments come from hours of equine study, keen knowledge and massive amounts of data and proven statistics. I request a more informed BLM and a more respectful BLM. To our horses and our public lands. BLM shall understand that to stop the use of helicopters on any public lands for rounding up wild horses is right and respectful of our America. This approach s out of date and there is not a truthful need given for using this method to the American Taxpayer. I have studied my ch information regarding the proven use of -PZP. It is THE ONLY proven and acceptable drug for use on our American Legends the National WILD horses. All others are not voted on by the American Public and I have proven knowledge. GongaCon is not acceptable and can cause much more negative damage to these herds. I request that BLM acknowledges much of this proven information and more. I would like to see them be mindful of our horses as a National gift and to be treated as such. I am sincerely disheartened and repeatedly upset by the amount of misinformation and lies that BLM uses from day to day to say they are protecting our horses. They are acting as they did when they were originally formed to protect the lands. The current American tax payers need to see a vibrant healthy attitude towards our public lands and our horses. These are our resources, and I know we can set a beyyer examole and exemplify more in our modern times and terms. I would like to see an honest discussion and attention with Carol Walkers information as pertinent documents and I would like to see a new attitude to correct the past harms in treatments of our wild horses and lands. The helicopters need to stop. The negative information and hidden agenda needs to stop. I am available to coordinate, to meet with both sides, to evaluate and to create a workable plan for the future of our countries well being including the safety of our wild horses. I respectfully request acknowledgement of your receipt of these current writings and comments. Thank you! Sincerely, Sarah Smith	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
35	Beyond Scope	I am a US taxpayer. I am appalled at this practice. Teddy Roosevelt brought these wild horses to his namesake park. How can you even consider removing them when the man that the preserve is named after brought them there!!! I don't even understand how they can be considered live stock! Are the deer, Elk, Buffalo, Rabbit Live stock?? That is ridiculous. This is such cruel treatment of Wild Mustangs which are supposed to be protected by law just like the Bald Eagle. Stop the plan to remove them or to limit the herd to an unhealthy number.	This is beyond the scope of this EA. No future action is needed.
36	Beyond Scope	"It is the policy of Congress that wild free-roaming horses and burros shall be protected from capture, branding, harassment, or death; and to accomplish this they are to be considered in the area where presently found, as an integral part of the natural system of the public lands." That is just one part of the 1971 The Wild and Free-Roaming Horse and Burro Act. It also mandated 53.8 million acres of public land for mustangs and burros in 377 herd management areas. In 2022, however, we found that mustangs and burros occupied less than 26.9 million acres of public land on fewer than 177 HMAs and it continues to dwindle each year. The Bureau of Land Management has taken away 26.9 million acres (half). To put it another way, mustangs are present on just 17 percent of the herd management areas while livestock are currently allocated more than 75 percent. Why? Why does the Bureau of Land Management continue to defend livestock grazing when it's a well-known fact that a) livestock are not native (and, at the minimum wild horses are a reintroduced species) and b) cattle eat 10-times more forage and drink 3-times more water per day than mustangs and they displace native wildlife and decimate our public lands with their grazing patterns? Is it the money? It's always the money. You might not think it, but wild mustangs bring in revenue. When I visited Wyoming this past May and stayed four nights in Cody, I met people from Hawaii, Georgia, the east coast, South Africa, and other places — all of us there to observe the wild horses. And that was just three days. That's income for Cody and the entire state of Wyoming in tourism dollars. I, too, traveled thousands of miles to do so. I'm tired of my tax dollars going toward inhumane and dangerous roundups. I'm tired of my taxpayer money being spent by an arm of the government that has zero oversight. Since 2006, at least $53.2 million has been spent on these roundups and bait-trapping. More than $87 million since 2010 for short-term holding corrals and in excess of $333 million for long-term holding since 2004. Enough. It's time to stop the round ups. Which, by	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
		the way — in McCullough Peaks, at 120,344 acres with maybe 200 wild horses tops in it (several who are older) — is plenty big for that number of wild horses. The grass is green, there's water. And the horses contribute to the ecosystem where the livestock do not. Anything less than what's there right now will put these mustangs into a tailspin of demise. At a minimum, mustang herd sizes must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged in the Bureau of Land Management's Wild Horse and Burro handbook. Taking the herd down to just 70 horses will put the entire herd's future at risk. Why do you insist on these roundups in the first place? It goes against everything in the Act. You can also work with organizations (there are many) with viable alternatives to maintain healthy, wild horses that roam free on the ranges across the U.S. and bring in millions in tourism money each year. Please note, I am against the McCullough Peaks round up, if that wasn't obvious. Also against the use of GonaCon-Equine as a contraceptive method. Carrie Zukoski St. Louis, Missouri	
37	Issues, Alternatives	Also please consider the No Action Alternative since the BLM has been using PZP for some time and it has been effective.	The No Action Alternative has been fully analyzed and considered in the EA.
38	Issues, Alternatives	I am in the midst of reading through your EA for the McCulloughs, on page 11 & 12 under the header, Raising the Appropriate Management Levels for Wild Horses that "Severe range degradation would occur if an AML re-evaluation process were initiated without gathering the excess animals...", however, I am not finding where in the EA there is discussion of range degradation, or any information or data showing measurements of range conditions, for cattle or horses. I would like to see your range monitoring information as it seems to be missing from the EA?	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
39	Fertility Control/Sex Ratio Skewing	With the regard to the issue of alternate fertility control for non-responding mares, there are currently 3 mares on the range that continue to foal even while receiving PZP. These mares are reaching the end of their reproductive years and will most likely not add many new foals to the population. With the use of PZ P, the population growth rate at McCullough Peaks is 2% per year. With such a low growth rate, alternative methods of fertility control, such as GonaCon, should not be used on these 3 mares or any other mares in this herd. Given concerns about its potential for permanent sterilization and injection site abscesses, GonaCon should not be considered as an alternative fertility treatment. PZP has been used to effectively manage this herd since 2011 and its use should continue into the future.	The EA includes a detailed review of published scientific literature on Gonacon's mechanism of action and behavioral effects and potential impacts of the prospective use of Gonacon were analyzed in the EA with literature reviews. Gonacon-Equine would be used on mares that are not responsive to PZP
40	Fertility Control/Sex Ratio Skewing	2) Limit Population Growth Suppression Treatment to PZP. It is very evident that the McCullough Peaks HMA has had great success with PZP. The small gathers will provide time for the Cody Field Office to thoroughly analyze the PZP Treatment/Reproduction record to analyze and determine ways to further improve efficacy. The Cody Field Office has had tremendous success with PZP. You do not need to introduce Gonacon.	See comment response for comment #39

Comment Number	Comment Type	Comment Text	Response
41	Fertility Control/Sex Ratio Skewing	or almost a decade now Cody BLM has run a resoundingly successful PZP/Darting program that has kept the growth rate of this herd to 2%. That's a rate well below the rate of other HMAs that don't administer PZP. Then Covid happened. For two years Covid protocol disrupted BLM workers from doing their darting responsibilities effectively, resulting in a momentarily 6% increase of foal births. Plotted on a graph without the backstory of a world health crisis factored in, that data could be construed as a wild horse population explosion. Or that the on-range birth control program is failing. Neither of those reasons are sound. Nor is the solution the EA is giving to round up these horses. Logic does not support answering a once in a lifetime health event that threw a momentary monkey wrench in an otherwise lauded track record Cody BLM exhibited in humanely maintaining wild horse numbers on the range with PZP with an expensive gather. A costly solution that roughly drains taxpayers of their funds at a staggering rate of approximately $138,462,000 per fiscal year. While maintaining the consistent use of the successful PZP program costs a mere $1000 over the lifetime per single female wild horse. And with a 1/3 of the McCullough Peaks herd population made up of older or "senior" horses, between natural attrition, harsh Wyoming winters, and the resumed consistent PZP implementation this herd will organically reduce to the top end of the BLM's targeted AML guideline parameter of 140 horses within a few years, if not sooner.	Thank you for your response, an explanation of a surge in population growth is based on a global pandemic, it is beyond the scope of the EA The comment of allowing the population to reach AML via natural attrition was discussed in the EA as Wild Horse Numbers controlled by natural means under the Alternative Considered and Eliminated from Further Analysis.
42	Fertility Control/Sex Ratio Skewing	PZP has been used effectively in this herd since 2011. There is no reason to use GonaCon, which sterilizes mares after 2 injections. The 3 mares that have not responded to PZP do not constitute a reason for a change in protocol. GonaCon should NEVER be used on wild mares.	See comment response for comment #39

Comment Number	Comment Type	Comment Text	Response
43	Fertility Control/Sex Ratio Skewing	I understand there are a few older mares who have and tend to reject the native PZP immunization, i.e. mare Tuff (17 this year), mare Taboo (17 this year). Though I understand the reasoning for wanting to use GonaCon, I would like to request that other safer alternatives are resourced out prior to using GonaCon. Also, considering their age, they are coming towards the end of their reproductive years. Using a sterilant like GonaCon, could end up being more harmful for them. So please, if possible, us another alternative measure that doesn't involve sterilant, spaying, or IUD's, to these mares, and let them be as they come to the end of the reproductive years.	See comment response for comment #39
44	Fertility Control/Sex Ratio Skewing	GonaCon should never be considered as a fertility treatment for the mares at McCullough Peaks. PZP has been used successfully since 2011 and should continue to be used for population management.	See comment response for comment #39
45	Fertility Control/Sex Ratio Skewing	In the event that BLM approves trapping, we ask that BLM personnel familiar with the herd conduct the trapping operations and not outside contractors.	This has been address in Appendix E - Gather Operations Standard Operating Procedures.
46	Fertility Control/Sex Ratio Skewing	In the event that BLM does trap, the roads during this time period will likely experience inaccessible time periods. This means that the trapped horses could be left without food, shelter or water to perish for days or weeks during impassible weather conditions.	IM 2020-002 Wild Horse and Burro Comprehensive Animal Welfare Program will be followed to ensure the health and safety of the wild horses. This is discussed in Appendix E - Gather Operations Standard Operating Procedures.
47	Fertility Control/Sex Ratio Skewing	We also suggest that GonaCon should be used to treat only those mares over the age of 13 that have not responded to treatments with PZP (ie. those mares that have produced more than two foals after being successfully treated with PZP in multiple years). It is our understanding that there are currently 3 mares within the McCullough Peaks herd that meet those stipulations.	See comment response for comment #39
48	Fertility Control/Sex Ratio Skewing	Please continue wild horse fertility control at McCullough Peaks, WY. –Because of the longer-term research and use behind PZP and PZP-22, I encourage the use of these well-proven immuno-contraceptive vaccines as often as possible.	The BLM will continue to use PZP Zonastat H as a fertility control tool to manage the McCullough Peaks herd

Comment Number	Comment Type	Comment Text	Response
49	Fertility Control/Sex Ratio Skewing	I suggest continuing to scale up the existing, successful fertility control program immediately, and not waiting to attain the Appropriate Management Level (AML) before enhancing this important work.	The BLM will continue to apply fertility control within the McCullough Peaks HMA through 2033 (or as long as the BLM can reasonably conlude that no new information and no new circumstances have substantially changed in the area of analysis).
50	Fertility Control/Sex Ratio Skewing	While I understand that adjusting AML is outside of the scope of an Environmental Assessment (EA), because the Herd Management Area is currently only 41 horses above high AML, I suggest a conservative approach to the removal of horses from this range. Since fertility control is being utilized and since both short- and long-term BLM off-range holding facilities are at or above capacity, allowing the herd to maintain at slightly above AML seems reasonable. Fertility control will catch up and reduction of the herd can be reached through a combination of natural attrition and fewer births.	Natural Attrition was discussed in Wild Horse Numbers Controlled by Natural Means under Alternatives Considered and Eliminated from Further Analysis

Comment Number	Comment Type	Comment Text	Response
51	Fertility Control/Sex Ratio Skewing	) With regard to the use of additional population growth suppression treatments, this EA outlines three conflicting plans for use of GonaCon on mares at McCullough Peaks as follows: - "Continue current use of PZP, but use GonaCon on mares older than 13 years old that have contributed to the genetic diversity of the herd." (Page 6 of EA) - "Continue current use of PZP, but use GonaCon on mares that have contributed to the genetic diversity of the herd." It is noted in this instance that there is no age stipulation for the mares. (Page 8 of EA) - "The BLM will continue to use PZP, however, several mares have not responded to PZP treatments and continue to give birth every year. The BLM is considering and hoping that other vaccine treatments (GonaCon) will allow the mares that do not respond to PZP an opportunity to no longer be submitted to the stress of giving birth every year." (Page 17 of EA) The January 9 Scoping Notice for McCullough Peaks mentioned the possible use of GonaCon for mares that continued to foal even when treated with PZP (i.e. non-responding mares). Currently, there are only three known non-responding mares at McCullough Peaks; all over 14 years of age. It is unclear when reading this EA, what the plans are for use of GonaCon at McCullough Peaks. If the BLM uses GonaCon on any and all mares that have contributed to the genetic diversity of the herd, they will be moving the herd one step closer to obsolescence. Given concerns about is potential for permanent sterilization and injection site abscesses, GonaCon should never be considered as an additional or alternative fertility treatment for any mares at McCullough Peaks. PZP has been used to effectively manage this herd since 2011 and its use should continue into the future. If continued reproduction from the three non-responding mares remains a concern, a stricter schedule for field darting with PZP should be implemented with input from personnel at the Science and Conservation Center in Billings, Montana. PZP-22 is also suggested as an alternative for these non-responders as it has been proven to be longer acting in preventing conception. With regard to continuous PZP use, there appears to be at least seven mare	See response for comment #39 and #48

Comment Number	Comment Type	Comment Text	Response
52	Fertility Control/Sex Ratio Skewing	The Appropriate Management Level (AML) at McCullough Peaks is 70-140 horses, with the current population at 181 horses. The EA outlines gathering and removing excess wild horses through bait trapping to bring the herd numbers down to AML, however, the EA is unclear as to how many horses will be left on the range after the removal. If herd numbers are brought down to AML, the herd won't be genetically viable. Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged in the BLM's own Wild Horse and Burro Handbook.	As stated in the EA, it is not expected that genetic health would be impacted by the action alternatives. The proposed action of gathering horses to the high AML range of 140 horses should provide for acceptable genetic diverstiy and if need be will be monitored with further genetic testing. If it is determined there is a problem with genetic diversity, the BLM would work with Dr. Gus Cothran to develop plans to maintain and further improve genetic health of the wild horses.
53	Fertility Control/Sex Ratio Skewing	It is imperative that only trained BLM personnel, familiar with the McCullough Peaks herd, conduct bait trapping operations, without the involvement of contractors.	See response for comment #46

Comment Number	Comment Type	Comment Text	Response
54	Fertility Control/Sex Ratio Skewing	With regard to the use of additional population growth suppression treatments, this EA outlines three conflicting plans for use of GonaCon in conjunction with PZP on mares at McCullough Peaks as follows: GonaCon use on mares older than 13 years that have contributed to the genetic diversity of the herd; GonaCon used on mares that have contributed to the genetic diversity of the herd (no age stipulation), and Gonacon used on PZP non-responders only.[[comment:17-1; 204.05, 204.16]comment end] If the BLM uses GonaCon on all mares that have contributed to the herd's genetic diversity, they will be moving the herd one step closer to obsolescence. Given concerns about the potential for permanent sterilization and injection site abscesses, GonaCon should never be considered as a fertility treatment for any mares at McCullough Peaks. PZP has been used successfully since 2011 and should continue to be used for population management.	See response for comment #45
55	Fertility Control/Sex Ratio Skewing	This herd has been managed w/PZP since 2011 and because of this, the population has been kept at manageable levels.	This is beyond the scope of this EA. No future action is needed.
56	Fertility Control/Sex Ratio Skewing	(1) PZP should continue to be used not GonaCon. After talking extensively with Paul Griffin, BLM Fertility Specialist in Fort Collins, Colorado, he indicated that GonaCon should only be used if the ultimate GOAL is to permanently "sterile" the wild mares. After 2 administrations of GonaCon, the mares could be sterilized, and this will ultimately adversely impact this herds viability and could lead to extinction of the horses in McCullough Peaks.	See response for comment #45
57	Fertility Control/Sex Ratio Skewing	The WDA encourages BLM to analyze and implement surgical sterilization as a means of control as identified in our scoping comments.	This is beyond the scope of this EA. No future action is needed.
58	Fertility Control/Sex Ratio Skewing	- The EA outlines three conflicting plans for the implementation of GonaCon, stating that some mares were unresponsive to the PZP fertility control vaccine. According to volunteers who assist with the BLM's current program, there are only known to be three mares that have been unresponsive to the vaccine. Further, the McCullough Peaks herd has only experienced a 1% growth rate in 2023, half of the agency's goal of 2%.	See response for comment #45

Comment Number	Comment Type	Comment Text	Response
59	Fertility Control/Sex Ratio Skewing	The use of GonaCon is lacking in scientific studies and should not be used in a non-research capacity.	See response for comment #45
60	Fertility Control/Sex Ratio Skewing	Use of GonaCon: The BLM goes into depth talking about the use of GonaCon on this herd even though they have a successful birth control program already in place since 2011 using PZP. The excuse is there are mares who do not respond to PZP and foal anyway – there are 3, all over the age of 14. This does not constitute a reason for alarm and change in protocol.The EA outlines three different conflicting plans for the use of GonaCon – one plan is just use it on the non-responding mares, the next is use it on mares over 13 who have foaled, the next is use it on any mares who have contributed genetically to the herd. GonaCon is a sterilant. After 2 doses the mares can become completely sterile. There are also issues with abscesses at the injection site. GonaCon should NEVER be used on wild mares.	See response for comment #45
61	Fertility Control/Sex Ratio Skewing	Because of the longer-term research and use behind PZP and PZP-22, we encourage the use of these well-proven immuno-contraceptive vaccines as often as possible. –We suggest continuing to scale up the existing, successful fertility control program immediately, and not waiting to attain the Appropriate Management Level (AML) before enhancing this important work.	This is beyond the scope of this EA. No future action is needed.
62	Fertility Control/Sex Ratio Skewing	*The diversity of the herd will be affected if you remove a significant number of horses or use GonaCon on all the mares, surely killing off these magnificent creatures. PZP has worked effectively and could still be used to keep the population of horses down.	This is beyond the scope of this EA. No future action is needed.

Comment Number	Comment Type	Comment Text	Response
63	Fertility Control/Sex Ratio Skewing	–Please employ a conservative approach to this herd with the safety and the efficacy of the horse herd in mind. It is understandable that adjusting AML is outside of the scope of an Environmental Assessment (EA), but because the Herd Management Area is currently only 41 horses above high AML, I advise a conservative approach to both the control and management of horses on this range. Since fertility control is being utilized and as the long- and short-term BLM off-range holding facilities are at or above capacity (as an aside, you need to reconsider and rethink this problem through this at all levels), allowing the herd to maintain their numbers at slightly above AML seems to be a reasonable route to take. 'Control' of the herd can be achieved through a combination of natural attrition and (then) fewer births and eventually---fertility control efforts will take hold. Slow, deliberate management of all horse herds with preservation and safety in mind should be the KEY to all aspects of your efforts.	See response for comment #51
64	Fertility Control/Sex Ratio Skewing	BLM is proposing to use Gonacon for birth control on the mares at McCullough Peaks. It would essentially whittle the herd down to numbers so low within a few short years that the herd would no longer exist. PZP has been successful for birth control since 2011 so why change what works?	See response for comment #39
65	Fertility Control/Sex Ratio Skewing	1) I encourge the use of well proven immunocontraceptives like PZP and PZP-22 as often as possible.	This is beyond the scope of this EA. No future action is needed.
66	Fertility Control/Sex Ratio Skewing	2) I suggest increasing the already successful fertility control program immediately. Do not wait to attain Appropriate Management Level (AML) before enhancing this important work.	This is beyond the scope of this EA. No future action is needed.
67	Fertility Control/Sex Ratio Skewing	4) I suggest a conservative approach to the removal of horses from this range. Fertility control is being utilized and BLM facilities are at, or above capacity; allowing the herd to maintain at slightly above AML seems reasonable. Fertility control will catch up and reduction of the herd can be reached through a combination of natural attrition and fewer births.	See response for comment #51

Comment Number	Comment Type	Comment Text	Response
68	Fertility Control/Sex Ratio Skewing	As for the use of GonaCon the intention and parameters are undefined. The EA p6 states to be used on mares older than 13 that have contributed to the herd genetically.This would imply that those mares offspring have survived and have also reproduced and so on and that these records are available for public review. EA p8 states mares that have contributed but does not specify an age. EA p17 states for use on several mares that have not responded to PZP. EA p19 states it will allow the CFO to treat each mare as individually needed. There are only 3 non responders all of them are over 14yrs and there are several mares that have never successfully foaled. Because of known risks with GonaCon for potential sterilization, serious abscessing and potential for behavioral changes in the mares, GonaCon should never be used. Instead BLM should continue to use PZP with timely, consistent darting and thorough record keeping. For the 3 non responding mares PZP22 should be utilized.	See response for comment #39
69	Fertility Control/Sex Ratio Skewing	Regarding gather methods only the use of Cody BLM staff and volunteers should be utilized as outside agents do not know these horses. The incorrect horse could be given fertility control that could potentially sterilize and individuals could be misidentified and removed off of the range in error.	See response for comment #46
70	Fertility Control/Sex Ratio Skewing	PZP should be the preferred "population control" method.	This is beyond the scope of this EA. No future action is needed.
71	Fertility Control/Sex Ratio Skewing	The EA presents conflicting plans for using GonaCon and PZP to control population growth among mares at McCullough Peaks. Using GonaCon on all mares contributing to genetic diversity may threaten the herd's future. PZP, proven successful since 2011, should continue as the preferred method for population management.	See response for comment #48

Comment Number	Comment Type	Comment Text	Response
72	Helicopter Gathers/Bait Trapping	I urge the Cody Field Office to utilize a cautious approach to move the McCullough Peaks HMA towards the high end of AML. This is possible using the Proposed Action with these two modifications. 1) Small Gathers: There is no indication of how many horses will be removed in the 2023 gather. I suggest the use of small gathers over a ten-year period to move towards the high end of AML. This will allow a cautious reduction of the current number without the possible, irreversible loss of genetic diversity which could occur with one large reduction of the population. The Cody Field Office has the knowledge and skills to conduct bait traps effectively. This allows the possibility of careful small gathers through time to achieve the goal towards the high end of AML.	The Proposed Action states: "Prior to the bait trap gather, a census count will occur to determine how many horses will be removed to reach AML of 140."
73	Helicopter Gathers/Bait Trapping	WHY is this Bait Trapping scheduled for November 2023 – March 2024. This is winter! Traps should be emptied and closed with the onset of winter weather for the health and safety of the horses. IF Bait Trapping is still scheduled, then BLM staff and volunteers should be used---NOT contractors. BLM staff know the horses best, and it would be safer and more humane to do the bait trapping “in house.” It will also be more financially practical.	See response for comment #46
74	Helicopter Gathers/Bait Trapping	We should not use traps as many roads become impassable and unplowable leaving horses trapped for weeks at a time, to die in pain. Only BLM workers who know the area and the herd well should be doing any rounding up/euthanizing. Please no contractors.	See response for comment #46
75	Helicopter Gathers/Bait Trapping	The bait trapping is scheduled to start late fall of 2023 and continue through late winter 2024. Bait traps are to be checked every 10 hours and to have fresh hay and water at all times. Please reconsider this during the winter when the roads and and will become impassable and trapped horses will suffer or even worse.	See response for comment #46

Comment Number	Comment Type	Comment Text	Response
76	Helicopter Gathers/Bait Trapping	Furthermore, impacts caused by livestock grazing should be factored in when monitoring range condition. It is our observation that the Thriving Natural Ecological Balance is showing improvement in recent years. That said, we recognize that the current system of BLM management makes it necessary to consider removal of some horses from the HMA. We request that the Cody Field Office proceed with any removal of horses in a moderated fashion. We suggest that removals be done in increments, with monitoring of the population of each increment. horses and monitoring of range conditions to be considered before selling the target numbers for removal for	Thank you for the comment.
77	Helicopter Gathers/Bait Trapping	We note that the preliminary EA's Proposed Action does not clearly state the targets for the number of horses to be removed or the mares that will be treated with GonaCon. Our suggestions, which are in large part based upon the current age classes of the McCullough Peaks herd and the probability that there will be extensive age-related attrition of the herd during the next five years, are to be conservative in selling a target number for the removal of horses, and to strictly limit the use of GonaCon. Recognizing that the BLM is committed to removing some horses, we submit that a target of 21(or fewer) horses to be removed in 2024 is reasonable.	See response for comment #72
78	Helicopter Gathers/Bait Trapping	We note an inconsistency in the dates for starting and finishing the bait trap 9ather. That should be easily corrected. We suggest Nov. 1 through Feb. 28 as appropriate dates.	Thank you for the comment.
79	Helicopter Gathers/Bait Trapping	the bait trapping should be conducted only by BLM personnel familiar with the McCullough Peaks herd and without the involvement of contractors. The bait trapping should also be paused or postponed once winter weather arrives. The roads can become completely impassable even with plowing. Horses within the traps may perish in the trap without shelter, water, and enough food. This is a likely scenario due to the rapid weather changes prone to the area.	See response for comment #46

Comment Number	Comment Type	Comment Text	Response
80	Helicopter Gathers/Bait Trapping	The proposed bait trapping would start during fall 2023 and could continue through February/March 2024. As per the EA, the BLM will check bait traps at a minimum of once every 10 hours, with horses in traps provided a continuous supply of fresh water and hay. As necessary, roads to the traps will be plowed to allow access. Because of the extreme winter weather at McCullough Peaks HMA, roads can be inaccessible for days or weeks at a time. Plowing is often not possible. If horses are stuck in traps during a winter storm without food, water or shelter, they could perish. Because of this, all bait trapping operations should cease, with traps closed, during the onset of winter weather.	See response for comment #46
81	Helicopter Gathers/Bait Trapping	Time of Year: The proposed start of the Bait Trapping will be November 2023 – March 2024. This is winter. The BLM is supposed to check the bait trap every 10 hours and provide food and water to the horses trapped. However, in my experience, because of strong and harsh winter storms the traps may become inaccessible even with plowing for days or weeks at a time. The horses could die if not given food or water. Traps should be emptied and closed with the onset of winter weather for the health and safety of the horses.	See response for comment #46
82	Helicopter Gathers/Bait Trapping	The bait trapping would start in fall 2022 and could continue through winter. The extreme winter weather at McCullough Peaks HMA could make roads impassable for weeks or days at a time, causing the horses that are trapped to be stuck without food or water, and possibly perishing	See response for comment #46
83	Helicopter Gathers/Bait Trapping	*Baiting and trapping wild horses during the winter will be inhumane because snow may inhibit anyone from checking those traps causing starvation and dehydration.	See response for comment #46
84	Helicopter Gathers/Bait Trapping	he EA's timeline for bait trapping is unrealistic. The proposed bait trapping is scheduled to start in the fall of 2023 and into February/March 2024. Due to harsh weather conditions it is not feasible to access and check the bait traps in the winter and if horses are stuck in the traps during harsh winter storms without food, water or shelter, they could die	See response for comment #46

Comment Number	Comment Type	Comment Text	Response
85	Helicopter Gathers/Bait Trapping	From an ethical standpoint, the plan to continue baiting throughout the winter months risks trapping horses without shelter, food, or water should the access routes become snowed in -- as they inevitably will.	See response for comment #46
86	Helicopter Gathers/Bait Trapping	the bait trapping should be conducted only by BLM personnel familiar with the McCullough Peaks herd and without the involvement of contractors. The bait trapping should also be paused or postponed once winter weather arrives. The roads can become completely impassable even with plowing. Horses within the traps may perish in the trap without shelter, water, and enough food. This is a likely scenario due to the rapid weather changes prone to the area.	See response for comment #46
87	Helicopter Gathers/Bait Trapping	Regarding gather methods only the use of Cody BLM staff and volunteers should be utilized as outside agents do not know these horses. The incorrect horse could be given fertility control that could potentially sterilize and individuals could be misidentified and removed off of the range in error.	See response for comment #46
88	Helicopter Gathers/Bait Trapping	Additionally the EA does not clearly state an end date to the gather or how emergency winter conditions will be handled in a severe snow storm when the horses lives could be a risk.	See response for comment #46
89	Helicopter Gathers/Bait Trapping	There should be no proposed bait trapping in the winter month, due to extreme winter weather at McCullough Peaks HMA, roads can be inaccessible for days or weeks at a time. Plowing is often not possible this means horses will be trapped without food, water or shelter during harsh weather when BLM is unable to access the traps. That is an unacceptable humane management practice.	See response for comment #46
90	Helicopter Gathers/Bait Trapping	Proposed trapping during winter months puts the hoses in danger of death from starvation, lack of water & exposure. Roads are often impassable so none can get to the animals in traps.	See response for comment #46
91	Helicopter Gathers/Bait Trapping	In the EA the targeted number of horses to be removed is not clearly stated. "Traps would remain in place until the targeted number of animals are removed." (Pg. 9) What is that targeted number? I would expect that any casualties during the time of trapping (November 2023 – March 2024) would count as removed too.	See response for comment #46

Comment Number	Comment Type	Comment Text	Response
92	Helicopter Gathers/Bait Trapping	Bait trapping is scheduled from fall 2023 to February/March 2024, but the harsh winter weather in McCullough Peaks poses risks to trapped horses. Due to accessibility issues during winter storms, bait trapping operations should be suspended during such conditions.	See response for comment #46
93	Helicopter Gathers/Bait Trapping	Also, I am not understanding why are we doing a round up through the winter months? If roads are not passable, horses stuck in these bait traps starve to death. How humane is that? Especially done by a human hand. Why would we even consider such an act?!	See response for comment #46
94	Humane Treatment of Wild Horses	The ages of the horses to remain on the HMA after the removal is also a concern and could play a role in the herd's eventual extinction under the EA. Of the 179 horses at McCullough Peaks, 59 are greater than 15 years of age, with 22 of them over the age of 20. Of the 22 horses over 20 years old, five of them are more than 24 years old. The horses over 24 years are in ill health and will probably not survive another winter. Eleven horses were lost during the winter of 2022-23, with nine of these horses over 15 years old. Those horses are likely to stop reproducing and die in the near future, which has not been taken into consideration in the EA. It is our position that any horse over 15 years of age should be left on the range, since older horses are notoriously difficult to find homes for. As a result, they become sale authority animals at risk of going to slaughter.	Thank you for the comment.

Comment Number	Comment Type	Comment Text	Response
95	Humane Treatment of Wild Horses	If bait trapping is to begin in the fall of 2023 and continue through to Feb or March 2024 how are you going to protect and care for those horses in the bait trap during the cold, windy and snowy winter? It is stated that the traps will be checked every 10 hours. By whom? Is someone living close to a bait trap? How will the person/people responsible for caring for those horses get to the bait trap when there are winter storms? In the mountains the weather is very harsh during the winter months and the snow is deep. When the horses are free to roam they can go to locations where they stand a better chance of surviving a bad winter storm. When they are stuck in one place that is not possible. How will the wild horses be humanely cared for in a bait trap during a harsh winter storm? If the welfare of the wild horses is important to the BLM (re: comments on older horses having lameness, physical injury or serious physical defect would be humanely euthanized) why would the horses be kept in bait traps during the winter? Is leaving them in a pen to potentially freeze to death humane? Or without food and water during a winter storm because the weather is so bad no one can drive/fly in to check on the horses?	See response for comment #46
96	Humane Treatment of Wild Horses	PLEASE Keep the Older Horses on the Range: I'm sure many of them will have "tooth loss or wear" which the BLM states will be used as a reason to euthanize them…but I'm also sure they will thrive just fine in freedom on the range. 59 of the horses on this range are over 15 years old and 22 of them are over 20 years old. I don't know of any horse, domestic or wild, that does not have "tooth loss or wear." There will be a natural attrition rate for these aging horses over the next few years. With so many of the horses at the upper end of their lifespan and with only 2% yearly growth rate, it is likely that the herd, if left alone, will achieve AML naturally in a few years with no need for a roundup and removal.	See response for comment #51
97	Humane Treatment of Wild Horses	The bait trapping is scheduled to start late fall of 2023 and continue through late winter 2024. Bait traps are to be checked every 10 hours and to have fresh hay and water at all times. Please reconsider this during the winter when the roads and and will become impassable and trapped horses will suffer or even worse.	See response for comment #46

Comment Number	Comment Type	Comment Text	Response
98	Humane Treatment of Wild Horses	I understand there are a few older mares who have and tend to reject the native PZP immunization, i.e. mare Tuff (17 this year), mare Taboo (17 this year). Though I understand the reasoning for wanting to use GonaCon, I would like to request that other safer alternatives are resourced out prior to using GonaCon. Also, considering their age, they are coming towards the end of their reproductive years. Using a sterilant like GonaCon, could end up being more harmful for them. So please, if possible, us another alternative measure that doesn't involve sterilant, spaying, or IUD's, to these mares, and let them be as they come to the end of the reproductive years.	The EA includes a detailed review of published scientific literature on Gonacon's mechanism of action and behavioral effects and potential impacts of the prospective use of Gonacon were analyzed in the EA with literature reviews. Gonacon-Equine would be used on mares that are not responsive to PZP
99	Humane Treatment of Wild Horses	In the event that BLM does trap, the roads during this time period will likely experience inaccessible time periods. This means that the trapped horses could be left without food, shelter or water to perish for days or weeks during impassible weather conditions.	See response for comment #46
100	Humane Treatment of Wild Horses	the bait trapping should be conducted only by BLM personnel familiar with the McCullough Peaks herd and without the involvement of contractors. The bait trapping should also be paused or postponed once winter weather arrives. The roads can become completely impassable even with plowing. Horses within the traps may perish in the trap without shelter, water, and enough food. This is a likely scenario due to the rapid weather changes prone to the area.	See response for comment #46

Comment Number	Comment Type	Comment Text	Response
101	Humane Treatment of Wild Horses	The EA states that the older population of horses (20 years of age and above) living within the McCullough Peaks HMA will not be removed. The EA also states that any animals affected by a chronic disease, injury, lameness or serious physical defect, such as severe tooth loss or wear would be humanely euthanized. Horses are categorized as “seniors” beginning at 15 years of age, and at that time they begin to experience tooth loss/wear and would be more likely to present with lameness or injury. If horses in this age range are trapped, we can infer that those with age-related issues will be euthanized. Older horses make up 1/3 of the population and, it is feared that a high percentage of these horses will be killed, thus negating the BLM’s proposed action that older horses remain on the range. Issues that are indicators of a horse’s senior status, should not be considered as criteria for euthanasia for any of the McCullough Peaks herd.	Thank you for the comment. Per SOP 8 in Appendix E: A veterinarian will make a recommendation to the BLM regarding care and treatment, however, the BLM's "Authorized Officer would determine if animals must be euthanized and provide for the destruction of such animals."
102	Humane Treatment of Wild Horses	Cut the herd by 15 horses, selecting them with the help of specialists and people very familiar to the herd. They will help identify the ones that will cause the least impact on the herd’s function. Maybe the youngest, could they possibly be taken by farmers/individual as work/leisure horses ? Do not “remove” the ones that will likely not survive the winter anyways, let nature take care of them as they will also supply food for local carnivores. That should bring the total number within the limit of 150 that is scientifically accepted as the minimum to keep the herd genetically viable.	The 2015 Cody RMP has defined the AML for the HMA will be 70-140. In order to change the AML, and RMP Amendment would be needed and that is outside the scope of this action.
103	Humane Treatment of Wild Horses	(4) The EA states that “Older Horses” will be kept on the range. I have been in-person at numerous helicopter roundups in Colorado, followed others in western states, and many older horses are oftentimes euthanized by the BLM contracted vets if they are found with a variety of conditions (clubbed foot, warned down teeth, congenital abnormalities, lameness, cancer in the eye, etc.). Many of these older horses will have some of these conditions, can live successfully/peacefully in their senior years on the range. They do not need to be euthanized. Please allow them to die of natural causes on the range.	Thank you for the comment.

Comment Number	Comment Type	Comment Text	Response
104	Humane Treatment of Wild Horses	Keeping the Older Horses on the Range: Supposedly none of the wild horses over 20 years old under the Proposed Action will be removed. However, "At the temporary holding facility, a veterinarian, when present, would provide recommendations to the BLM regarding care and treatment of recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the American Veterinary Medical Association (AVMA)." So if 30 wild horses have any of these conditions, they will not be left on the range but will be killed. This is not keeping them on the range and allowing them to live out their lives. And I challenge anyone to find an older horse whose teeth are not worn down.	See reponse to comment #101
105	Humane Treatment of Wild Horses	Older horses make up 1/3 of the herd. The EA states that older horses will remain on the range, but if any of these horses are affected by a chronic disease, injury, lameness, serious physical defect, or even severe tooth loss, they would be euthanized. Older horses have health issues, meaning because of being older they would be euthanized, even though the EMA states they will remain on the range	Wild horses are humanely euthanized only in situations where a captured animal is affected by a chronic or incurable disease, injury, lameness or serious physical defect, consistent with BLM Instruction Memorandum 2015-70.
106	Humane Treatment of Wild Horses	It is also proposed that euthanization be used on 'senior' horses (age 15 and over) if they are showing signs of old age common at that stage. We have over 20 real seniors over 20 in the herd right now that most are not expected to survive the winter. The process of 'death by natural causes' is not calculated in the amount of horses gathered.	See response for comment #105
107	Humane Treatment of Wild Horses	he EA's timeline for bait trapping is unrealistic. The proposed bait trapping is scheduled to start in the fall of 2023 and into February/March 2024. Due to harsh weather conditions it is not feasible to access and check the bait traps in the winter and if horses are stuck in the traps during harsh winter storms without food, water or shelter, they could die	See response for comment #46

Comment Number	Comment Type	Comment Text	Response
108	Humane Treatment of Wild Horses	the bait trapping should be conducted only by BLM personnel familiar with the McCullough Peaks herd and without the involvement of contractors. The bait trapping should also be paused or postponed once winter weather arrives. The roads can become completely impassable even with plowing. Horses within the traps may perish in the trap without shelter, water, and enough food. This is a likely scenario due to the rapid weather changes prone to the area.	See response for comment #46
109	Humane Treatment of Wild Horses	The EA is unclear of its intent regarding euthanasia of any older or injured horses with chronic conditions. The definition of older horses was not quantified.	See response for comment #105
110	Humane Treatment of Wild Horses	The EA p6 states the CFO will not remove the older population of horses however the EA p10 states any horses with injury, lameness, physical defects such as severe tooth loss or wear would be euthanized. Most wild horses by the age of 15 will show dental wear along with old injures from the hazards of living wild on the range and therefore should not be euthanized.	See response for comment #113
111	Humane Treatment of Wild Horses	Proposed trapping during winter months puts the hoses in danger of death from starvation, lack of water & exposure. Roads are often impassable so none can get to the animals in traps.	See response for comment #46
112	Humane Treatment of Wild Horses	There should be no proposed bait trapping in the winter month, due to extreme winter weather at McCullough Peaks HMA, roads can be inaccessible for days or weeks at a time. Plowing is often not possible this means horses will be trapped without food, water or shelter during harsh weather when BLM is unable to access the traps. That is an unacceptable humane management practice.	See response for comment #46
113	Humane Treatment of Wild Horses	The EA proposes immediate trapping efforts “most likely” by BLM staff and in subsequent years by a contractor. I strongly urge you never to hire a contractor for any kind of gather at the McCullough Peaks HMA. As you stated the horses are well known and documented by BLM and the local public. They have been managed with the help of an exceptional local group of dedicated volunteers (Friends of a Legacy FOAL). Efforts should be made to build on this existing team work and involve them even more. BLM staff and volunteers know the horses best. This is safer and more humane than bringing in an outside contractor.	The BLM Authorized Officer will be responsible for deciding who will preform the gather.

Comment Number	Comment Type	Comment Text	Response
114	Humane Treatment of Wild Horses	The intend to retain older horses on the range conflicts with the outlined protocol how captured horses will be evaluated at the trap site, in temporary holding and at ORC and humanely euthanized when they are affected by a chronic disease, injury, lameness or any other serious defect such as tooth wear or loss, impaired vision, club foot etc. I am very concerned, will there be any senior horse 15 years or older that does not have any of such issues? Older horses make up 1/3 of the population and I fear many of those if trapped would be euthanized. But before killing any of those well known and well loved senior horses I urge you to reach out and make those available to sanctuaries who with the financial help of the caring public would allow them to live out their lives in dignity. As an example: several special needs horses from different HMAs live at a well known sanctuary in OR after local BLM staff reached out. Such cooperation doesn't cost BLM anything but improves publicity.	See response for comment #113
115	Humane Treatment of Wild Horses	The EA states that older horses won't be removed, but those with chronic issues may be euthanized. Since senior status indicators should not be criteria for euthanasia, this poses a concern for the 1/3 of the population consisting of older horses.	See response for comment #113

Comment Number	Comment Type	Comment Text	Response
116	Wild Horses vs Livestock	• The logical thing to do is retire the livestock grazing leases on HMA property. That will eliminate the HUNDREDS of cattle grazing & depleting the resources on that land. This should not be a decision decided upon by money.	Reducing livestock or increasing AML were alternatives considered and eliminated from further analysis. The reduction of AUMs was not analyzed in the EA because it would not be in conformance with the Cody Field Office RMP. It is also inconsistent with the Wild Free-Roaming Horses and Burros Act of 1971, which directs the Secretary to immediately remove excess wild horses when a determination i smade that such removal is necessary. Furthermore, livestock grazing can only be reduced or eliminated if BLM follows regulations at 43 CFR 4100. The BLM is mandated to manage for a thriving natural ecological blance and protect the range from deterioration while preserving multiple use relationships such as livestock grazing. The removal or reduction of livestock would not address resource concerns in the HMA that have been directly linked to the current overpopulation of wild horses and burros, including in areas that are not being grazed by livestock.

Comment Number	Comment Type	Comment Text	Response
117	Wild Horses vs Livestock	The BLM should conduct a science-based evaluation of the impacts of livestock grazing vis-à-vis rangeland health before any wild horses are permanently removed from McCullough Peaks. If that evaluation results in the conclusion that overgrazing is, in fact, occurring on the McCullough Peaks HMA, the BLM should reduce the AUMs allocated to commercial livestock as its first step. Any plan undertaken by the BLM should consider and invoke, if necessary, the BLM's authority under the Wild Free-Roaming Horses and Burros Act of 1971 and 43 CFR Sec. 4710.5 to eliminate or reduce livestock AUMs as an alternative to the proposed gather and removal.	See response for comment #116
118	Wild Horses vs Livestock	In order for the AML to be raised to a more sustaining and realistic population of 150-250 horses, I believe that the retiring of the grazing permits for the McCullough Peaks HMA needs to be pushed through, and managing the area as such, a Horse Management Area and wildlife sanctuary. By retiring the permits, it saves tax dollars, eliminates the impacts of native forage life, and allowing the horses to have full range of their water resources, as well as other wildlife in the area. The ongoing grazing permits not only inhibits the horse's abilities to have access to all their allotted resources in the HMA, but it also has a conflict in the pronghorn migratory route, which goes through the McCullough Peaks HMA. Large amounts of donations have been submitted in the past for reservoir reclamations throughout the HMA, fencing repairs, etc. Those funds for reclamations and structural repairs and management should not be taken advantage of by livestock owners and their cattle by means of grazing permits.	See response for comment #116

Comment Number	Comment Type	Comment Text	Response
119	Wild Horses vs Livestock	It has come to our attention that as a prerequisite to performing a gather, a detailed analysis should be made which demonstrates that the population of wild horses is having a negative impact on the habitat. Because the Preliminary EA, as written, fails to provide that analysis, we request that it be redrafted and reissued for public review and comment. We make this request because the current draft of the EAt fails to analyze available resource monitoring data as required by BLM directives. The following directives are found in the BLM Handbook, H-4700-1; Wild Horses and Burros Management Handbook: Page 30, GENERAL: The authorized officer is required to identify, plan, collect and analyze the resource monitoring data necessaiy to prepare resource man gement plans, plan amendments, gather plans, herd management area plans or other associated environmental documents through which WH&B management decisions are made. Inventory (monitoring) shall be completed in order to determine: * If an overpopulation of WH&B exists and action is needed to remove the excess animals. * WH&B AML1s; and * IfAML's should be achieved by removal of the excess animals or other appropriate means. Monitoring data is needed to support AML establishment and decisions to remove excess WH&B. Various rulings from the Interior Board of Land Appeals (IBLA) underscore the need to base WH&B management decisions on the result of monitoring.	See response for comment #116
120	Wild Horses vs Livestock	Livestock grazing leases in the HMA should be retired. The ranchers who graze hapless livestock on our public lands are responsible for degrading the range.	See response for comment #116
121	Wild Horses vs Livestock	Please retire the grazing leases on HMA proprties.	See response for comment #116

Comment Number	Comment Type	Comment Text	Response
122	Wild Horses vs Livestock	(3) The BLM Environmental Assessment talks about “Range Degradation” and it is my understanding that no formal assessment of the range has been conducted. There is tons of research in the literature that indicated that cattle adversely impact the range and a blanket statement by the BLM saying that 178 wild horses are causing “any” deterioration compared the cattle needs to be documented first. With only 178 wild horses on the range, the total acreage would suggest that each horse could have at least 600 acres to graze on. The EA does not talk about the number of private cattle on the range, the permitted allotments for private rancher and the damage cattle does to the range.	See response for comment #116
123	Wild Horses vs Livestock	- Maintain the current wild horse population without removals by implementing reductions to the thousands of livestock currently grazing within the HMA pursuant to 43 C.F.R. 4710.5(a). The BLM has a statutory mandate to protect wild horses, while livestock grazing is permitted only at the discretion of the Interior Department. Livestock grazing is not required to fulfill the agency's "multiple use" mandate. Further, it is far more cost-effective to curtail taxpayer-subsidized commercial livestock grazing in this area than it is to permanently remove wild horses from the range; and	See response for comment #116
124	Wild Horses vs Livestock	The EA fails to provide data showing there is land degradation on the McCullough Peaks HMA and fails to consider the true impact of livestock grazing in the area.	See response for comment #116
125	Wild Horses vs Livestock	EA p15 in summary states longterm effects of removing horses in excess of HMA would benefit livestock grazing. An evaluation of the impacts of livestock grazing is required to determine rangeland health.There is no current data providing details on the livestock grazing for this HMA.This is needed prior to any wild horse removals. If the range is degrading BLM has the authority to first limit livestock grazing and is not legally required to first remove any wild horses on Public Lands, HMAs.	See response for comment #116

Comment Number	Comment Type	Comment Text	Response
126	Wild Horses vs Livestock	It is assumed that any number of excess horses are responsible for range degradation. Where is the proof for that? To evaluate the rangeland health the management needs to evaluate the effect that grazing of cattle and sheep has. Those animals are not part of the native fauna but are on public lands in very large numbers. What are the AMLs for cattle and sheep? Not to consider their impact on rangeland degradation is distorting the impact the wild horses have.	The reduction of AUMs was not analyzed in the EA because it would not be in conformance with the Cody Field Office RMP. It is also inconsistent with the Wild Free-Roaming Horses and Burros Act of 1971, which directs the Secretary to immediately remove excess wild horses when a determination i smade that such removal is necessary. Furthermore, livestock grazing can only be reduced or eliminated if BLM follows regulations at 43 CFR 4100. The BLM is mandated to manage for a thriving natural ecological blance and protect the range from deterioration while preserving multiple use relationships such as livestock grazing. The removal or reduction of livestock would not address resource concerns in the HMA that have been directly linked to the current overpopulation of wild horses and burros, including in areas that are not being grazed by livestock.
127	AML / TNEB	• 120,000 acres is more than enough land for the present McCullough Peaks horse population, while natural resources remain healthy. In fact, I believe the AML should actually be raised to 250 horses, while resources would continue to remain healthy.	See response for comment #102

Comment Number	Comment Type	Comment Text	Response
128	AML / TNEB	The Appropriate Management Level (AML) at McCullough Peaks is 70-140 horses, with the current population at 181 horses. If herd numbers are reduced to low AML, the herd will lose its genetic viability and be vulnerable to catastrophic loss or eventual extinction through attrition. Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at minimum, herd size must be maintained at 150 horses to ensure genetic viability. Indeed, this minimum size is acknowledged in the BLM's own Wild Horse and Burro Handbook. The vast McCullough Peaks range, with its ample space and abundant forage, can easily support many more horses than what the BLM has established as the AML. Rather than reduce the herd, the BLM should consider raising the AML for the HMA to its current size and manage future population growth with reversible and safe fertility control, namely, PZP. As you are aware, the National Academy of Sciences stated in its 2013 review of the BLM's wild horse and burro program that AMLs are not based on scientific evidence and the basis for arriving at the AML figures was largely unknown and lacking in transparency. It appears that AML is little more than a contrived figure made up by the BLM in consultation with the livestock industry and bears no relation to the actual carrying capacity of the wild horse and burro HMAs.	See response for comment #102
129	AML / TNEB	I am urging you to reconsider your proposed AML of just 70 horses and raise it to the upper end of your AML of at least 150. Lowering the number to just 70 animals will make the heard genetically unviable according to Dr. Gus Cothran, professor emeritus at Texas A&M School of Veterinary Medicine. He states that herd size must be maintained at not less than 150 animals in order to keep the genetic viability of herd.	See response for comment #102
130	AML / TNEB	How many horses will be left on these lands? According to Dr. Gus Cothran (I'm sure you are aware of his name & statements on herd size & genetically viability) a number of no less than 150 horses need to remain. His statements are also acknowledged in the BLM's Wild Horse & Burro Handbook.	See response for comment #102
131	AML / TNEB	The BLM's Wild Horse and Burro book states that herd size should not be less than 150 to keep the genetic diversity of the herd.	See response for comment #102

Comment Number	Comment Type	Comment Text	Response
132	AML / TNEB	The Purpose and Need statement states that under the WFRHBA the BLM "must take action to remove excess wild horses to achieve TNEB." This is nothing new as that law has been in effect since 1971. What is new, is this push from the federal level to get the HMAs to AML. I understand the need for federal compliance, but not through a reactive response to the current pressures especially that could negatively impact the intended purpose of the WFRHBA to protect "wild free-roaming horses as living symbols of the historic and pioneer spirit of the West." I believe a strong, plan to move towards AML will meet federal mandates as well as protect the long-term future of the wild horses of the McCullough Peaks.	See response for comment #102
133	AML / TNEB	The most important issue to consider in effective management is Genetic Viability. The BLM should leave enough horses in the herd to remain genetically viable. The Appropriate Management Level for this herd is 70-140, with the current population size at 178. Dr. Gus Cothren, the leading geneticist on wild horses says that in order to remain genetically viable, there must be 150 breeding aged adults in the herd. Removing 68 or more wild horses will severely impact the ability of the herd to remain genetically viable and the BLM's solution of bringing in horses from other herds to solve this problem is absurd and cruel.	See response for comment #102
134	AML / TNEB	It's quite likely that these horses will be within AML within a couple of years, due to the age of the herd and present growth rate of 2%.	The comment of allowing the population to reach AML via natural attrition was discussed in the EA as Wild Horse Numbers controlled by natural means under the Alternative Considered and Eliminated from Further Analysis.

Comment Number	Comment Type	Comment Text	Response
135	AML / TNEB	Considering that proper management has maintain the last 12 years, with only 2% growth annually whereas in other areas, there are upwards of 25% growth annually. The AML, which is an arbitrary number, for the McCullough Peaks HMA is 70-140 horses in an area that has over 109,000 acres. This area could sustain roughly 675 horses, but I understand the fact that this is a wildlife sanctuary for Sage Grouse as well as a migratory zone for pronghorn. So, understanding and realizing that, I would request in raising the AML to 150-250 horses. Which keeps the horses at a well-managed population and keeping the areas food and water resources healthy.	See response for comment #102
136	AML / TNEB	In order for the AML to be raised to a more sustaining and realistic population of 150-250 horses, I believe that the retiring of the grazing permits for the McCullough Peaks HMA needs to be pushed through, and managing the area as such, a Horse Management Area and wildlife sanctuary. By retiring the permits, it saves tax dollars, eliminates the impacts of native forage life, and allowing the horses to have full range of their water resources, as well as other wildlife in the area. The ongoing grazing permits not only inhibits the horse's abilities to have access to all their allotted resources in the HMA, but it also has a conflict in the pronghorn migratory route, which goes through the McCullough Peaks HMA. Large amounts of donations have been submitted in the past for reservoir reclamations throughout the HMA, fencing repairs, etc. Those funds for reclamations and structural repairs and management should not be taken advantage of by livestock owners and their cattle by means of grazing permits.	See response for comment #116
137	AML / TNEB	If herd numbers are brought down to the Appropriate Management Level, the herd won't be genetically viable. Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged in the BLM's own Wild Horse and Burro Handbook.	See response for comment #102
138	AML / TNEB	The herd is presently within the appropriate range, per the BLM Wild Horse and Burro Guide. Removal of horses and excessive use of birth suppression will result in a genetically inviable population.	See response for comment #52

Comment Number	Comment Type	Comment Text	Response
139	AML / TNEB	Also from BLM Handbook H-4700-1, page 47, Section 7.1.2: "Justifying a removal based on nothing more than the established AML is not acceptable." The premise that the AML for the McCullough Peaks herd should remain as specified by the RMP, written in 2015, raises the question as to whether or not range conditions have changed during the last 8 years. We submit that range condition should be shown to be deteriorating prior to the removal of any horses.	See response for comment #102

Comment Number	Comment Type	Comment Text	Response
140	AML / TNEB	Furthermore, impacts caused by livestock grazing should be factored in when monitoring range condition. It is our observation that the Thriving Natural Ecological Balance is showing improvement in recent years. That said, we recognize that the current system of BLM management makes it necessary to consider removal of some horses from the HMA. We request that the Cody Field Office proceed with any removal of horses in a moderated fashion. We suggest that removals be done in increments, with monitoring of the population of each increment. horses and monitoring of range conditions to be considered before selling the target numbers for removal for	Per the EA: "This EA analyzes both an immediate and a long term (10-year) bait trap removal (if necessary to maintain appropriate management level (AML)) and bait trapping to apply population control." Addtionally per the EA: "The BLM protects, manages, and controls wild horses and burros under the authority of the Wild Free-Roaming Horses and Burros Act (WFRHBA) of 1971, as amended. The WFRHBA mandates that BLM manage wild horse populations that prevent deterioration of the rangelands and help maintain a "thriving natural ecological balance" (TNEB) . The 2015 Cody RMP has a management goal to "manage and maintain healthy wild horses and herds inside HMAs in a thriving natural ecological balance within the productive capacity of their habitat while preserving multiple use relationships" (GOAL BR:11). BLM accomplishes this goal by identifying the "appropriate management level" (AML) for each herd management area. An AML is generally a population range that allows the rangelands to maintain TNEB."

Comment Number	Comment Type	Comment Text	Response
141	AML / TNEB	Proposal of raising the AML to 180-250 horses (MP HMA is 120,000 acres which is plenty of land for that population, and will also insure that the natural resources remain healthy.	See response for comment #102
142	AML / TNEB	The current population for McMullough Peaks is at 181 horses. The EA outlines gathering and removing horses will bring it down to AML, however, the EA is unclear as to how many horses will be left on the range after the removal. If numbers are brought down to AML, the herd won't be genetically viable. Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged in the BLM's own Wild Horse and Burro Handbook.	See response for comment #102
143	AML / TNEB	The McCulluogh herd needs 150 horses to maintain genetic viability, this is according to the BLM burrow and wild horse handbook.	See response for comment #102
144	AML / TNEB	I suggest continuing to scale up the existing, successful fertility control program immediately, and not waiting to attain the Appropriate Management Level (AML) before enhancing this important work.	Thank you for your comment. No reponse required.
145	AML / TNEB	Dr. Gus Cothran, Professor at Texas A&M School of Veterinary Medicine says that a herds numbers should maintain between 150 - 250 in order for the herd to remain genetically viable. By taking the numbers below 150, BLM is pretty much insuring the wild hor	Thank you for your comment. No reponse required.
146	AML / TNEB	On page 9 of the EA it states "If future genetic monitoring indicates a loss of genetic diversity, the BLM would consider introduction of horses from HMAs in similar environments to maintain the projected genetic diversity." Bringing the numbers of wild horses at McCullough Peaks down to a level that does not support genetic diversity is unacceptable. The population has been successfully managed with PZP since 2011 with 2023 seeing only a 1% growth rate. Continuing the current population management strategy, the "No Action Alternative", will allow the population to remain genetically diverse without the need to introduce horses from other HMAs.	See response for comment #52

Comment Number	Comment Type	Comment Text	Response
147	AML / TNEB	The current Appropriate Management Level (AML) at McCullough Peaks is 70-140 horses. The BLM records the current wild horse population in the EA as 181 on 05/31/23, when the official count was performed. The EA outlines gathering and removing excess wild horses through bait trapping, to bring the herd numbers down to AML, however, the EA is unclear as to how many horses will be left on the range after the gather. Conflicting final numbers mentioned within the EA are as follows: - AML (70-140 horses) - 100 horses -High AML/Upper Limit of AML (140 horses) Neither of these three possibilities will leave the herd genetically viable. Dr. Gus Cothran, leading horse geneticist and Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability and a healthy population. Lower population numbers lead to more in-breeding, resulting in the population being vulnerable to multiple health problems. According to the BLM's own Wild Horse and Burro Handbook "A minimum population size of 50 effective breeding animals (i.e., a total population size of about 150-200 animals) is currently recommended to maintain an acceptable level of genetic diversity within reproducing WH&B populations (Cothran, 2009)".	See comment reponse for comment #155
148	AML / TNEB	The most important being that you say this herd can hold 141 horses which is less than what you publish as the number to make the population genetically viable, so what is the long term management plan to solve this issue?	See comment reponse for comment #155
149	AML / TNEB	Please consider that the appropriate management level is 70-140 horses. Currently the estimate is 181 horses before the loss over the winter of 2022-2023. 150 horses are needed to maintain genetic viability as stated in the Wild Horse and Burro Handbook by the BLM.	See comment reponse for comment #155
150	AML / TNEB	comment	FORM letter - comment responses have already been addressed in this appendix

Comment Number	Comment Type	Comment Text	Response
151	AML / TNEB	It is well established, including in the BLM Handbook, that the minimum requirements for genetic viability in a wild horse herd are at least 150 horses. The herd's Appropriate Management Level (AML) is unscientifically and inappropriately set at 70-150 horses by the BLM.	See comment response for comment #240
152	AML / TNEB	However, given the age of the horses in the McCullough Peaks Hers and the 2% yearly growth rate, if left alone this herd would achieve the AML naturally in a few years.	See response for comment #134
153	AML / TNEB	1. Do not remove the McCullough Peaks wild horses down to the law AML levels of 70/140 horses. This will destroy the genetic viability of the herd, and could likely lead to herd eradication.	See response for comment #102
154	AML / TNEB	Update the AML to reflect the necessary genetic diversity for a herd to 150/250 horses.	See response for comment #102
155	AML / TNEB	Cut the herd by 15 horses, selecting them with the help of specialists and people very familiar to the herd. They will help identify the ones that will cause the least impact on the herd's function. Maybe the youngest, could they possibly be taken by farmers/individual as work/leisure horses ? Do not "remove" the ones that will likely not survive the winter anyways, let nature take care of them as they will also supply food for local carnivores. That should bring the total number within the limit of 150 that is scientifically accepted as the minimum to keep the herd genetically viable.	See repsonse for comment #102 for AML numbers. See response for comment #52 for genetic health/diversity
156	AML / TNEB	Please raise the McCullough Peaks wild horse AML to 180 up to 250.	See response for comment #102
157	AML / TNEB	* What number of horses on the landscape is deemed adequate to maintain acceptable genetic diversity?	See repsonse for comment #102 for AML numbers. See response for comment #52 for genetic health/diversity

Comment Number	Comment Type	Comment Text	Response
158	AML / TNEB	WDA strongly encourages the BLM to strive to maintain the HMA at the lower end of AML, while still maintaining genetic diversity through introduction of horses from other HMAs. Maintaining the HMA closer to low AML will allow for management on the landscape to more readily meet Rangeland Health Standards. By maintaining healthy rangelands and low AML, BIM will not be obligated to make quick or knee jerk management decisions if conditions decline and/or population numbers start to rise over high AML.	See repsonse for comment #102 for AML numbers. See response for comment #52 for genetic health/diversity
159	AML / TNEB	Increase the Appropriate Management Level (AML) in this HMA to accommodate the current population, by making forage adjustments, if necessary, pursuant to CFR 43 C.F.R. 4710.5(a) to ensure that wild horses are given equitable usage of our public lands.	See response for comment #102
160	Genetics	AML in the HMA are between 70 and 140 head of wild horses with the current population at 181. Proposed bait and trap methods will remove excesses horses while releasing older horses to remain in the herd. Older horses are often unadoptable and live out the remainder of their years in holding facilities at a considerable expense. Additionally, BLM plans on maintaining the HMA at the high end of allowable AML. Managing the HMA at high AML is proposed to provide genetic diversity within the population. WDA has the following questions for BLM to consider and include in the EA analysis: * Has adequate genetic diversity within the herd already been determined?	See repsonse for comment #102 for AML numbers. See response for comment #52 for genetic health/diversity
161	AML / TNEB	To ensure genetic viability for the herd, there needs to be at least 150 horses remaining as per research done.	See response for comment #52
162	AML / TNEB	Genetic Viability: The Appropriate Management Level for this herd is 70-140, with the current population size at 178. Dr. Gus Cothren, the leading geneticist on wild horses says that in order to remain genetically viable, there must be 150 breeding aged adults in the herd. Removing 68 or more wild horses will severely impact the ability of the herd to remain genetically viable and the BLM's solution of bringing in horses from other herds to solve this problem is absurd and cruel. They should leave enough horses in the herd to remain genetically viable.	See response for comment #52

Comment Number	Comment Type	Comment Text	Response
163	AML / TNEB	Because of the longer-term research and use behind PZP and PZP-22, we encourage the use of these well-proven immuno-contraceptive vaccines as often as possible. –We suggest continuing to scale up the existing, successful fertility control program immediately, and not waiting to attain the Appropriate Management Level (AML) before enhancing this important work.	See response for comment #49
164	AML / TNEB	While we understand that adjusting AML is outside of the scope of an Environmental Assessment (EA), because the Herd Management Area is currently only 41 horses above high AML, we advise a conservative approach to the removal of horses from this range. Since fertility control is being utilized and since both short- and long-term BLM off-range holding facilities are at or above capacity, allowing the herd to maintain at slightly above AML seems reasonable. Fertility control will catch up and reduction of the herd can be reached through a combination of natural attrition and fewer births.	See response for comment #134
165	AML / TNEB	If herd numbers are brought down to AML, the herd will not be genetically viable	See response for comment #52
166	AML / TNEB	The Appropriate Management Level at McCullough Peaks should be increased to 90 to 160 horses. Reasons: (A) Dr. Gus Cothran, Professor Emeritus Texas A&M School Vet Medicine states herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged by BLM's wild horses handbook.	See response for comment #52
167	AML / TNEB	–Please employ a conservative approach to this herd with the safety and the efficacy of the horse herd in mind. It is understandable that adjusting AML is outside of the scope of an Environmental Assessment (EA), but because the Herd Management Area is currently only 41 horses above high AML, I advise a conservative approach to both the control and management of horses on this range. Since fertility control is being utilized and as the long- and short-term BLM off-range holding facilities are at or above capacity (as an aside, you need to reconsider and rethink this problem through this at all levels), allowing the herd to maintain their numbers at slightly above AML seems to be a reasonable route to take. 'Control' of the herd can be achieved through a combination of natural attrition and (then) fewer births and eventually---fertility control efforts will take hold. Slow, deliberate management of all horse herds with preservation and safety in mind should be the KEY to all aspects of your efforts.	See response for comment #134

Comment Number	Comment Type	Comment Text	Response
168	AML / TNEB	*The population of the McCullough herd may fall within AML over the next few years. There is no reason to bait and trap these horses if this occurs.	See response for comment #134
169	hgb	Dr. Gus Cothran, Professor at Texas A&M School of Veterinary Medicine says that a herds numbers should maintain between 150 - 250 in order for the herd to remain genetically viable. By taking the numbers below 150, BLM is pretty much insuring the wild horse's demise of McCullough Peaks.	See response for comment #52
170	AML / TNEB	An AML of only 70 horses for that size of land, allots 1,179 acres PER HORSE. This is a massive amount of land for one horse, and therefore the horses should be allowed to remain. Currently there is ONE wild horse per 672 acres (this range could easily support this herd + another 100 horses), and if the cattle were gone, we could have up to 700 wild horses on this land!	Reducing livestock or increasing AML were alternatives considered and eliminated from further analysis. The reduction of AUMs was not analyzed in the EA because it would not be in conformance with the Cody Field Office RMP. It is also inconsistent with the Wild Free-Roaming Horses and Burros Act of 1971, which directs the Secretary to immediately remove excess wild horses when a determination i smade that such removal is necessary. Furthermore, livestock grazing can only be reduced or eliminated if BLM follows regulations at 43 CFR 4100. The BLM is mandated to manage for a thriving natural ecological blance and protect the range from deterioration while preserving multiple use relationships such as livestock grazing. The removal or reduction of livestock would not address resource concerns in the HMA that have been directly linked to the current overpopulation of wild horses and burros, including in areas that are not being grazed by livestock.

Comment Number	Comment Type	Comment Text	Response
171	AML / TNEB	2) I suggest increasing the already successful fertility control program immediately. Do not wait to attain Appropriate Management Level (AML) before enhancing this important work.	The BLM will continue to apply fertility control within the McCullough Peaks HMA through 2033 (or as long as the BLM can reasonably conlude that no new information and no new circumstances have substantially changed in the area of analysis).
172	AML / TNEB	Reducing the number of our wild horses to just 70 puts the entire herd at risk for survival since genetic differentiation will no longer be viable. Reducing the herd to 70, effectively eliminates the ENTIRE herd.	See response for comment #72
173	AML / TNEB	After reading the McCullough Peaks HMA Bait Trap Gather Environmental Assessment (EA), I disagree with the plan to reduce the population of horses from 181 down to 70-140. The plan does not discuss the number of horses that will be left on the HMA after the removals. There have been many studies showing that in order to ensure genetic viability the horse herd size must be at least 150 horses. This fact is stated by the Bureau of Land Management's own Wild Horse and Burro Handbook.	See response for comment #72
174	AML / TNEB	The BLM plan to bait trap and remove an inordinately large proportion of the beloved McCullough Peaks wild horse herd is unjustifiable, scientifically, ethically, and democratically. In terms of genetic diversity, a leading Texas A&M veterinary research professor has established that any number below 150 individuals is too low to maintain a healthy, viable herd -- and the BLM's own horse and burro management guidebook concurs, leading to the conclusion that the BLM has ignored its own official guidelines.	See response for comment #52
175	AML / TNEB	Please consider that the appropriate management level is 70-140 horses. Currently the estimate is 181 horses before the loss over the winter of 2022-2023. 150 horses are needed to maintain genetic viability as stated in the Wild Horse and Burro Handbook by the BLM.	See response for comment #102

Comment Number	Comment Type	Comment Text	Response
176	AML / TNEB	After review of the EA the "Proposed Action Alternative" is not clear or transparent and the current need for a gather to maintain the TNCB has not been proven.	Excess Determination is discussed in the Background information and explains that "Wild horse numbers ave the AML consitutes excess wild horses as described in the WFRHBA because consistent with the 2015 Cody RMP, a population above the AML will not maintain TNEB within the HMA." The proposed action is removing excess horses.
177	AML / TNEB	A definative number of horses to be gathered is contradicted stating each: the AML of 70-140, 100 and high AML.	See response for comment #72
178	AML / TNEB	It is extremely unclear what the number of expected removal of Wild Horses during this bait and trap event. This herd has exceptional genetic viability, according to Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged in the BLM's own Wild Horse and Burro Handbook.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity
179	AML / TNEB	The Appropriate Management Level (AML) at McCullough Peaks is 70-140 horses, with the current population of 180 horses. The EA outlines gathering and removing excess wild horses through bait trapping to bring the herd numbers down to AML, however, the EA is unclear as to how many horses will be left on the range after removal. If hers numbers are brought down to AML, the herd will not be genetically viable, Dr. Gus Cothran, Professor Emeritus at the Texas A&M school of veterinary medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity
180	AML / TNEB	McCullough Peaks currently has 181 horses, exceeding the recommended Appropriate Management Level (AML) of 70-140 horses. The plan is to use bait trapping to reduce the number, but the exact post-removal horse count is unclear. To maintain genetic viability, experts suggest a minimum of 150 horses should remain, as stated in the BLM's Wild Horse and Burro Handbook.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity

Comment Number	Comment Type	Comment Text	Response
181	Long Term Holding	The intend to retain older horses on the range conflicts with the outlined protocol how captured horses will be evaluated at the trap site, in temporary holding and at ORC and humanely euthanized when they are affected by a chronic disease, injury, lameness or any other serious defect such as tooth wear or loss, impaired vision, club foot etc. I am very concerned, will there be any senior horse 15 years or older that does not have any of such issues? Older horses make up 1/3 of the population and I fear many of those if trapped would be euthanized. But before killing any of those well known and well loved senior horses I urge you to reach out and make those available to sanctuaries who with the financial help of the caring public would allow them to live out their lives in dignity. As an example: several special needs horses from different HMAs live at a well known sanctuary in OR after local BLM staff reached out. Such cooperation doesn't cost BLM anything but improves publicity.	The Wild Free-Roaming Horses and Burros (WHB) Act includes euthanasia as a management tool, Congress for several decades has included appropriations language that prohibits the use of appropriated funds for the purpose of euthanasia and sale without limitation. While the Board advises the BLM with potential future actions. This does not mean the BLM has to/or will follow the recommendations of the Board. As such, it is speculative and beyond the scope of this EA. See response for comment #185 for current policy See response for comment #101 for SOP Humane Treatment
182	Health and Safety of Horses	The bait trapping is scheduled to start late fall of 2023 and continue through late winter 2024. Bait traps are to be checked every 10 hours and to have fresh hay and water at all times. Please reconsider this during the winter when the roads and and will become impassable and trapped horses will suffer or even worse.	See response for comment #46
183	Health and Safety of Horses	Older horses make up 1/3 of the wild horse population. The BLM has indicated intent to euthanize "senior" (age 15 and up). Euthanasia of these horses is not necessary and could potentially eliminate many of the 59 horses age 15 and above based on BLM criteria interpretation of "lameness, disease, injury, tooth loss or wear".	See comment reponse for comment #192

Comment Number	Comment Type	Comment Text	Response
184	Health and Safety of Horses	The EA states that the older population of horses (20 years of age and above) living within the McCullough Peaks HMA will not be removed. The EA also states that any animals affected by a chronic disease, injury, lameness or serious physical defect, such as severe tooth loss or wear would be humanely euthanized. Horses are categorized as “seniors” beginning at 15 years of age, and at that time they begin to experience tooth loss/wear and would be more likely to present with lameness or injury. If horses in this age range are trapped, we can infer that those with age-related issues will be euthanized. Older horses make up 1/3 of the population and, it is feared that a high percentage of these horses will be killed, thus negating the BLM’s proposed action that older horses remain on the range. Issues that are indicators of a horse’s senior status, should not be considered as criteria for euthanasia for any of the McCullough Peaks herd.	See comment reponse for comment #192
185	Health and Safety of Horses	3. All the older horses (15+ yrs) to remain on the range so they might live out their lives with their families and live wild and free. Do not remove them simply to euthanize them due to "pre existing conditions" , despite surviving in the wild without issue.	BLM’s current management policy includes: control of wild horse and burro population size within AML, the removal of excess wild horses and burros from public lands when needed to preserve and maintain a thriving natural ecological balance and multiple-use relationship on the public lands in that area, and the placement of removed horses in good care through the adoption process. At this time, animals are humanely euthanized only in situations where a captured animal is affected by a chronic or incurable disease, injury, lameness, or serious physical defect, consistent with BLM Instruction Memorandum 2015-070.

Comment Number	Comment Type	Comment Text	Response
186	Health and Safety of Horses	(4) The EA states that "Older Horses" will be kept on the range. I have been in-person at numerous helicopter roundups in Colorado, followed others in western states, and many older horses are oftentimes euthanized by the BLM contracted vets if they are found with a variety of conditions (clubbed foot, warned down teeth, congenital abnormalities, lameness, cancer in the eye, etc.). Many of these older horses will have some of these conditions, can live successfully/peacefully in their senior years on the range. They do not need to be euthanized. Please allow them to die of natural causes on the range.	See comment reponse for comment #192
187	Health and Safety of Horses	Keeping the Older Horses on the Range: Supposedly none of the wild horses over 20 years old under the Proposed Action will be removed. However, "At the temporary holding facility, a veterinarian, when present, would provide recommendations to the BLM regarding care and treatment of recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the American Veterinary Medical Association (AVMA)." So if 30 wild horses have any of these conditions, they will not be left on the range but will be killed. This is not keeping them on the range and allowing them to live out their lives. And I challenge anyone to find an older horse whose teeth are not worn down.	See comment reponse for comment #192
188	Census / Population Growth Rates / Foal Crop	The ages of the horses to remain on the HMA after the removal is also a concern and could play a role in the herd's eventual extinction under the EA. Of the 179 horses at McCullough Peaks, 59 are greater than 15 years of age, with 22 of them over the age of 20. Of the 22 horses over 20 years old, five of them are more than 24 years old. The horses over 24 years are in ill health and will probably not survive another winter. Eleven horses were lost during the winter of 2022-23, with nine of these horses over 15 years old. Those horses are likely to stop reproducing and die in the near future, which has not been taken into consideration in the EA. It is our position that any horse over 15 years of age should be left on the range, since older horses are notoriously difficult to find homes for. As a result, they become sale authority animals at risk of going to slaughter.	See comment reponse for comment #192

Comment Number	Comment Type	Comment Text	Response
189	Census / Population Growth Rates / Foal Crop	In addition, there is a fairly high number of elder horses within this herd. With a total population of 179 horses, 23 are greater than 20 years hold and 40 are between 15-20 years old. Due to the number of elder horses, it is believed that natural attrition will decrease the herd size significantly within the next few years. Along with the removal of excess horses, this would bring the population well below the threshold genetically viable. Therefore, keeping the population at or above 150 animals is crucial.	Per the Proposed Action older horses will be left within the HMA, however, Per SOP #8 in Appendix E the veterinarian will asses sick or injured animals and the BLM Authorized Officer will determine if the animals must be euthanized.
190	Census / Population Growth Rates / Foal Crop	Secondly, the growth rate of 2% is extremely commendable. This shows that past management has been very successful and should be continued with no major changes needed. The chart on page 3 shows a projected population growth at the rate of 2%. However, it would have been helpful to see the previous year's population to understand the population growth leading to the current population of 181.	Table 4, page 18 shows the population growth rate since 2009.

Comment Number	Comment Type	Comment Text	Response
191	Census / Population Growth Rates / Foal Crop	or almost a decade now Cody BLM has run a resoundingly successful PZP/Darting program that has kept the growth rate of this herd to 2%. That's a rate well below the rate of other HMAs that don't administer PZP. Then Covid happened. For two years Covid protocol disrupted BLM workers from doing their darting responsibilities effectively, resulting in a momentarily 6% increase of foal births. Plotted on a graph without the backstory of a world health crisis factored in, that data could be construed as a wild horse population explosion. Or that the on-range birth control program is failing. Neither of those reasons are sound. Nor is the solution the EA is giving to round up these horses. Logic does not support answering a once in a lifetime health event that threw a momentary monkey wrench in an otherwise lauded track record Cody BLM exhibited in humanely maintaining wild horse numbers on the range with PZP with an expensive gather. A costly solution that roughly drains taxpayers of their funds at a staggering rate of approximately $138,462,000 per fiscal year. While maintaining the consistent use of the successful PZP program costs a mere $1000 over the lifetime per single female wild horse. And with a 1/3 of the McCullough Peaks herd population made up of older or "senior" horses, between natural attrition, harsh Wyoming winters, and the resumed consistent PZP implementation this herd will organically reduce to the top end of the BLM's targeted AML guideline parameter of 140 horses within a few years, if not sooner.	Thank you for your response, an explanation of a surge in population growth is based on a global pandemic, it is beyond the scope of the EA See response for comment #134 for natural attrition
192	Census / Population Growth Rates / Foal Crop	PLEASE Keep the Older Horses on the Range: I'm sure many of them will have "tooth loss or wear" which the BLM states will be used as a reason to euthanize them…but I'm also sure they will thrive just fine in freedom on the range. 59 of the horses on this range are over 15 years old and 22 of them are over 20 years old. I don't know of any horse, domestic or wild, that does not have "tooth loss or wear." There will be a natural attrition rate for these aging horses over the next few years. With so many of the horses at the upper end of their lifespan and with only 2% yearly growth rate, it is likely that the herd, if left alone, will achieve AML naturally in a few years with no need for a roundup and removal.	See comment reponse for comment #200

Comment Number	Comment Type	Comment Text	Response
193	Census / Population Growth Rates / Foal Crop	I would also recommend delaying the idea of a proposed gather due to the age of the population of the horses. Quite a few of the horses in the population are above the age of 16, and some are even above the age of 20. Allowing the horses to live out their lives on the range and passing on by either old age or the harsh winters, will also help with the population without any gather happening.	See comment reponse for comment #200
194	Census / Population Growth Rates / Foal Crop	Considering that proper management has maintain the last 12 years, with only 2% growth annually whereas in other areas, there are upwards of 25% growth annually. The AML, which is an arbitrary number, for the McCullough Peaks HMA is 70-140 horses in an area that has over 109,000 acres. This area could sustain roughly 675 horses, but I understand the fact that this is a wildlife sanctuary for Sage Grouse as well as a migratory zone for pronghorn. So, understanding and realizing that, I would request in raising the AML to 150-250 horses. Which keeps the horses at a well-managed population and keeping the areas food and water resources healthy.	See response for comment #102
195	Census / Population Growth Rates / Foal Crop	11 horses perished during the winter of 2022-2023. Of the 181 horses at McCullough's Peaks, 22 are over the age of 20 years of age and 5 are over 24 years of age. When the current rate of attrition is coupled with the 2% average yearly growth rate, the population of adult horses at the Peaks may fall within the appropriate range naturally over the next few years, negating the need for bait trap removal.	See response for comment #134
196	Census / Population Growth Rates / Foal Crop	As to determining how many horses should be removed in subsequent years, we propose that those decisions should be based upon the results of field monitoring of the horse population, as well as range condition monitoring. Field monitoring is preferable to monitoring from either helicopter or airplane as it is less costly and it causes less stress to the horses. If monitoring results for the year 2024 show a decline in the population (ie. less than 160 adult horses), then removals should be delayed at least one year, with future monitoring to be utilized in determining the need for any future removals. Plans for future removals should be made available for public review and for public comments.	Thank you for the comment. No reponse required.

Comment Number	Comment Type	Comment Text	Response
197	Genetics	On page 9 of the EA it states "If future genetic monitoring indicates a loss of genetic diversity, the BLM would consider introduction of horses from HMAs in similar environments to maintain the projected genetic diversity." Bringing the numbers of wild horses at McCullough Peaks down to a level that does not support genetic diversity is unacceptable. The population has been successfully managed with PZP since 2011 with 2023 seeing only a 1% growth rate. Continuing the current population management strategy, the "No Action Alternative", will allow the population to remain genetically diverse without the need to introduce horses from other HMAs.	Genetic monitoring will be conducted in accordance with the 4700 Wild Horses and Burros Managemement Handbook and IM 2009-062 to ensure that the herds maintain adequate genetic diversity. The periodic introduction of new breeding individuals from other areas is an option if genetic monitoring indicates that it is warranted.
198	Census / Population Growth Rates / Foal Crop	Lastly, 59 horses are over 15 so are phasing out of the reproduction phase with many of them having the potential to die any given winter. Currently the growth rate is lower than death rate so why not see if the herd naturally approaches carrying capacity without destroying wild horses that have done nothing but exist?	See comment reponse for comment #200
199	Census / Population Growth Rates / Foal Crop	Currently the growth rate is lower than death rate so why not see if the herd naturally approaches carrying capacity without destroying wild horses that have done nothing but exist?	See response for comment #134
200	Census / Population Growth Rates / Foal Crop	The age of the horses within the herd needs to be considered as well. Horses are classified as seniors at the age of 15 years. Within this herd 59 are over the age of 15, 22 are over the age of 20. 5 horses are over the age of 24. Thus the natural die off rate would place the herd in the AML potentially in a years time.	See response for comment #134
201	Census / Population Growth Rates / Foal Crop	Of the 181 horses at McCullough Peaks, 59 are greater than 15 years of age with 22 of them over the age of 20. Of the 22 horses over 20 years of age, 5 of them are more than 24 years old. The horses over 24 years of age are in ill health and will probably not survive another winter. Eleven horses were lost during the winter of 2022/2023, with 9 of these horses over 15 years of age. In assessing the condition of the remaining older horses, it is possible that the McCullough Peaks herd could lose 15-20 older horses this winter. When the current rate of attrition is coupled with the 2% average yearly growth rate, the population of adult horses at McCullough Peaks may well fall within AML over the next few years, thus negating the need for a bait trap removal.	See response for comment #134

Comment Number	Comment Type	Comment Text	Response
202	Census / Population Growth Rates / Foal Crop	The HMA has about 60 horses older than 15 and about 23 over 20. Many may not naturally survive this winter. With the current population management, normal attrition over the next few years will bring the herd size too low. This herd requires that the BLM increase, not decrease, the herd size due to upcoming future losses of older horses.	See response for comment #102
203	Census / Population Growth Rates / Foal Crop	However, given the age of the horses in the McCullough Peaks Hers and the 2% yearly growth rate, if left alone this herd would achieve the AML naturally in a few years.	See response for comment #134
204	Census / Population Growth Rates / Foal Crop	I support the "No Action Alternative" concerning the McCullough Peak horse herd. The current rate of attrition,combined with the 2% average growth rate,the adult population of horses at the McCullough Peaks may fall within AML in a few years. With the projected decrease in horse numbers, this would negate the need for bait trap removal.	See response for comment #134
205	Census / Population Growth Rates / Foal Crop	3. All the older horses (15+ yrs) to remain on the range so they might live out their lives with their families and live wild and free. Do not remove them simply to euthanize them due to "pre existing conditions" , despite surviving in the wild without issue.	See response for comment #134
206	Census / Population Growth Rates / Foal Crop	There are currently 181 horses at McCullough Peaks, with 59 over 15 years old and 22 horses over the age of 20. Five of these are over 24 years old and are in declining health due to their age. It is unlikely that they will survive another winter. It is quite possible that the herd could lose 15-20 horses. When the current rate of attrition is coupled with the 2 % average yearly growth rate, the population of adult horses in McCullough Peaks could very well fall with the Appropriate Management level over the next few years	See response for comment #134
207	Census / Population Growth Rates / Foal Crop	- Nearly 60 of the 181 horses in the Herd Management Area (HMA) are over 15-years of age and 22 are over the age of 20. Many of these senior animals are no longer reproducing and many will not survive the winter of 2023, dying naturally in the wild. There is no need for removals to reach the proposed AML.	See response for comment #134

Comment Number	Comment Type	Comment Text	Response
208	Census / Population Growth Rates / Foal Crop	Ageing Population: There are currently 178 wild horses in the MCCullough Peaks Herd. 59 of them are over 15 years old and 22 of them are over 20 years old. It is possible that over 15 horses will pass away over this coming winter. With so many of the horses at the upper end of their lifespan and with only 2% yearly growth rate, it is likely that the herd, if left alone, will achieve AML naturally in a few years with no need for a roundup and removal.	See response for comment #134
209	Census / Population Growth Rates / Foal Crop	Is it possible to just leave them alone. I fear if you reduce the heard to 150 you will have an even smaller gene pool to work with.	See response for comment #134
210	Census / Population Growth Rates / Foal Crop	While we understand that adjusting AML is outside of the scope of an Environmental Assessment (EA), because the Herd Management Area is currently only 41 horses above high AML, we advise a conservative approach to the removal of horses from this range. Since fertility control is being utilized and since both short- and long-term BLM off-range holding facilities are at or above capacity, allowing the herd to maintain at slightly above AML seems reasonable. Fertility control will catch up and reduction of the herd can be reached through a combination of natural attrition and fewer births.	See response for comment #134
211	Census / Population Growth Rates / Foal Crop	Of the 181 horses at McCullough Peaks, 59 are greater than 15 years of age with 22 of them over 20. Of those 22, 5 are over 24 years old. Eleven horses were lost during the winter of 2022/2023, with nine of those horses over the age of 15. It is possible that the herd could loose 15-20 older horses this coming winter. When the current rate of attrition is coupled with the 2 percent average yearly growth rate, the population of adult horses may fall within AML over the next few years, negating the need for a bait trap removal and thus saving our taxpayer dollars.	See response for comment #134

Comment Number	Comment Type	Comment Text	Response
212	Census / Population Growth Rates / Foal Crop	–Please employ a conservative approach to this herd with the safety and the efficacy of the horse herd in mind. It is understandable that adjusting AML is outside of the scope of an Environmental Assessment (EA), but because the Herd Management Area is currently only 41 horses above high AML, I advise a conservative approach to both the control and management of horses on this range. Since fertility control is being utilized and as the long- and short-term BLM off-range holding facilities are at or above capacity (as an aside, you need to reconsider and rethink this problem through this at all levels), allowing the herd to maintain their numbers at slightly above AML seems to be a reasonable route to take. 'Control' of the herd can be achieved through a combination of natural attrition and (then) fewer births and eventually---fertility control efforts will take hold. Slow, deliberate management of all horse herds with preservation and safety in mind should be the KEY to all aspects of your efforts.	See response for comment #134
213	Census / Population Growth Rates / Foal Crop	There are many senior (about 1/3 of the herd) horses in the range, this alone means that not only should they be allowed to stay for their own benefit, they should stay for the benefit of the herd since it's growth rate is only 2% annually.	See response for comment #134
214	Census / Population Growth Rates / Foal Crop	Due to the current rate of attrition and the average herd growth of 2%, the population of adult horses at McCullough Peaks HMA appears to be declining over the next several years, so there is no need for removal at this time. 11 horses were lost during the winter of 2022/2023 and 9 of these horses were over 15 years of age.	See response for comment #134
215	Census / Population Growth Rates / Foal Crop	The age of the horses within the herd needs to be considered as well. Horses are classified as seniors at the age of 15 years. Within this herd 59 are over the age of 15, 22 are over the age of 20. 5 horses are over the age of 24. Thus the natural die off rate would place the herd in the AML potentially in a years time.	See response for comment #134

Comment Number	Comment Type	Comment Text	Response
216	Census / Population Growth Rates / Foal Crop	There are currently less than 181 wild horses on the McCullough Peaks HMA. Currently 59 horses are over 15yrs of age with 22 of them over the age of 20. Out of the 22 horses over 20 yrs old, 5 of them are mares more than 24 yrs old and will not be contributing to the future herd population. In the winter of 2022/2023 11 herd members were lost;9 stallions all over the age of 15,1 mare and 1 foal. With the current use of PZP the population growth reported EA p18 table 4 was a mere 1% this year. McCullough Peaks herd has maintained a very low growth rate over the past 10yrs. Table 4 also shows numerous years of negative population growth since 2011 with BLMs use of PZP. With the low growth rate and an elderly population any additional factors such as a gather to AML or alternative fertility control could jeopardize the genetic viability of the McCullough Peaks wild horses.	See response for comment #134
217	Census / Population Growth Rates / Foal Crop	Also, with so many of the horses at McCullough Peaks being of an advanced age and with continued use of PZP, the horse population could fall within acceptable management levels naturally over the next few years.	See response for comment #134
218	Census / Population Growth Rates / Foal Crop	Currently, 59 horses at McCullough Peaks are over 15 years old, and 22 of them are over 20 years old. With the winter attrition rate and the average yearly growth rate, the population may reach AML in the next few years, making bait trapping unnecessary.	See response for comment #134

Comment Number	Comment Type	Comment Text	Response
219	HMA Monitoring Data	It has come to our attention that as a prerequisite to performing a gather, a detailed analysis should be made which demonstrates that the population of wild horses is having a negative impact on the habitat. Because the Preliminary EA, as written, fails to provide that analysis, we request that it be redrafted and reissued for public review and comment. We make this request because the current draft of the EAt fails to analyze available resource monitoring data as required by BLM directives. The following directives are found in the BLM Handbook, H-4700-1; Wild Horses and Burros Management Handbook: Page 30, GENERAL: The authorized officer is required to identify, plan, collect and analyze the resource monitoring data necessaiy to prepare resource man gement plans, plan amendments, gather plans, herd management area plans or other associated environmental documents through which WH&B management decisions are made. Inventory (monitoring) shall be completed in order to determine: * If an overpopulation of WH&B exists and action is needed to remove the excess animals. * WH&B AML1s; and * IfAML's should be achieved by removal of the excess animals or other appropriate means. Monitoring data is needed to support AML establishment and decisions to remove excess WH&B. Various rulings from the Interior Board of Land Appeals (IBLA) underscore the need to base WH&B management decisions on the result of monitoring.	Per the Background section of the EA: "The WFRHBA mandates that BLM manage wild horse populations that prevent deterioration of the rangelands and help maintain a “thriving natural ecological balance” (TNEB) . The 2015 Cody RMP has a management goal to “manage and maintain healthy wild horses and herds inside HMAs in a thriving natural ecological balance within the productive capacity of their habitat while preserving multiple use relationships” (GOAL BR:11). BLM accomplishes this goal by identifying the “appropriate management level” (AML) for each herd management area. An AML is generally a population range that allows the rangelands to maintain TNEB."

Comment Number	Comment Type	Comment Text	Response
220	AML / TNEB	The Appropriate Management Level (AML) at McCullough Peaks is 70-140 horses, with the current population at 181 horses. If herd numbers are reduced to low AML, the herd will lose its genetic viability and be vulnerable to catastrophic loss or eventual extinction through attrition. Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at minimum, herd size must be maintained at 150 horses to ensure genetic viability. Indeed, this minimum size is acknowledged in the BLM's own Wild Horse and Burro Handbook. The vast McCullough Peaks range, with its ample space and abundant forage, can easily support many more horses than what the BLM has established as the AML. Rather than reduce the herd, the BLM should consider raising the AML for the HMA to its current size and manage future population growth with reversible and safe fertility control, namely, PZP. As you are aware, the National Academy of Sciences stated in its 2013 review of the BLM's wild horse and burro program that AMLs are not based on scientific evidence and the basis for arriving at the AML figures was largely unknown and lacking in transparency. It appears that AML is little more than a contrived figure made up by the BLM in consultation with the livestock industry and bears no relation to the actual carrying capacity of the wild horse and burro HMAs.	Establishing or modifying the AML is outside the scope of this analysis. AMLs were established through prior separate decision-making processes. The AML was set in the 2015 Cody RMP. Public involvement was asked for and accepted during review of that RMP. See Chapter 1 of the EA. Available data confirms that wild horse numbers are currently in excess of the level at which a thriving natural ecological balance can be maintained. "AML is not generally established or adjusted as part of the gather [or population management] planning (NEPA) process due to the in-depth and complex nature of the analysis required" (Wild Horses and Burros Management Handbook, H-4700-1, p. 47). In this instance, a review of AML does not meet the purpose and need of the EA. The authorized officer has not elected to formally review AML but is, instead, proposing gathers, removals, and fertility control application to return and maintain the wild horse population to within appropriate management level and achieve TNEB. Raising the wild horse AML was an issue considered but not analyzed in detail in the EA. The Federal Land Policy and Management Act (FLPMA) requires that an action under consideration be in conformance with the applicable BLM land use plan(s) (43 U.S.C. 1732(a)), and be consistent with other federal, state, and local laws and policies to

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			the maximum extent possible (43 U.S.C. l 712(c)(9)). The FLPMA also provides that the public lands be managed under principles of multiple use and sustained yield to protect the quality of scenic, ecological, environmental, and archeological values; to preserve and protect public lands in their natural condition; to provide feed and habitat for wildlife and livestock; and to provide for outdoor recreation (43 U.S.C. l 701(a)(8) and 1732(a)). The FLPMA does not require any specific allocations of forage between livestock and wild horses. The 2015 Cody RMP and Record of Decision set the appropriate management level for wild horses within McCullough Peaks HMA. The proposed action is consistent with the applicable regulations at 43 CFR 4700 and as well as FLPMA. In 43 CFR 4710.3-1 Herd Management Areas I states: "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 with other uses of the public and adjacent private lands, and the constraints contained in 4710.4." Livestock grazing and wild horses are both uses authorized to occur on BLM administered land in the McCullough Peaks HMA under the WFRHBA and Taylor Grazing Act. The WFRHBA specifically directs BLM

Comment Number	Comment Type	Comment Text	Response
			to manage wild horses as one of the multiple uses of public lands, rather than as the primary use of those lands. The Taylor Grazing Act authorizes the use of rangelands for livestock grazing, the Wild Horse & Burro Act established HMAs and provided protection for WH&B in conjunction with multiple use (such as for livestock grazing).
221	Genetics	I am urging you to reconsider your proposed AML of just 70 horses and raise it to the upper end of your AML of at least 150. Lowering the number to just 70 animals will make the heard genetically unviable according to Dr. Gus Cothran, professor emeritus at Texas A&M School of Veterinary Medicine. He states that herd size must be maintained at not less than 150 animals in order to keep the genetic viability of herd.	According to the Wild Horse and Burro Management Handbook H4700-1 section 4.4.63 Herd Size, A minimum population size of 50 effective breeding animals (i.e., a total population size of about 150-200 animals) is currently recommended to maintain an acceptable level of genetic diversity within reproducing WH&B populations (Cothran, 2009). This numer is required to keep the rate of loss of genetic variation at 1 percent per generation. Animal interchange between adjacent HMAs with smaller population sizes may reduce the need for maintaining

Comment Number	Comment Type	Comment Text	Response
			populations of this size within each individual HMA. Research has not yet established a recommended minimum breeding herd size for burros.
222	Genetics	In addition, there is a fairly high number of elder horses within this herd. With a total population of 179 horses, 23 are greater than 20 years hold and 40 are between 15-20 years old. Due to the number of elder horses, it is believed that natural attrition will decrease the herd size significantly within the next few years. Along with the removal of excess horses, this would bring the population well below the threshold genetically viable. Therefore, keeping the population at or above 150 animals is crucial.	See response for comment #134 for natural attrition See response for comment #197 for genetic monitoring
223	Genetics	The BLM's Wild Horse and Burro book states that herd size should not be less than 150 to keep the genetic diversity of the herd.	See response for comment #52
224	Genetics	The most important issue to consider in effective management is Genetic Viability. The BLM should leave enough horses in the herd to remain genetically viable. The Appropriate Management Level for this herd is 70-140, with the current population size at 178. Dr. Gus Cothren, the leading geneticist on wild horses says that in order to remain genetically viable, there must be 150 breeding aged adults in the herd. Removing 68 or more wild horses will severely impact the ability of the herd to remain genetically viable and the BLM's solution of bringing in horses from other herds to solve this problem is absurd and cruel.	See response for comment #197 for genetic monitoring See response for comment #52 for genetic health/diversity
225	Genetics	Reducing the herd size could lead to a reduction in genetic diversity within the population. A smaller gene pool can make the herd more susceptible to diseases, decrease adaptation to environmental changes, and limit overall genetic health. A genetically diverse herd is generally better equipped to withstand challenges and maintain a healthy population over the long term.	See response for comment #52

Comment Number	Comment Type	Comment Text	Response
226	Genetics	If herd numbers are brought down to the Appropriate Management Level, the herd won't be genetically viable. Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged in the BLM's own Wild Horse and Burro Handbook.	See response for comment #52
227	Genetics	The herd is presently within the appropriate range, per the BLM Wild Horse and Burro Guide. Removal of horses and excessive use of birth suppression will result in a genetically inviable population.	Thank you for your comment. No reponse required.
228	Genetics	The current population for McMullough Peaks is at 181 horses. The EA outlines gathering and removing horses will bring it down to AML, however, the EA is unclear as to how many horses will be left on the range after the removal. If numbers are brought down to AML, the herd won't be genetically viable. Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged in the BLM's own Wild Horse and Burro Handbook.	See response for comment #52
229	Genetics	The McCulluogh herd needs 150 horses to maintain genetic viability, this is according to the BLM burrow and wild horse handbook.	Thank you for your comment. No reponse required.
230	Genetics	Is it possible to just leave them alone. I fear if you reduce the heard to 150 you will have an even smaller gene pool to work with.	Thank you for your comment. No reponse required.

Comment Number	Comment Type	Comment Text	Response
231	Genetics	The current Appropriate Management Level (AML) at McCullough Peaks is 70-140 horses. The BLM records the current wild horse population in the EA as 181 on 05/31/23, when the official count was performed. The EA outlines gathering and removing excess wild horses through bait trapping, to bring the herd numbers down to AML, however, the EA is unclear as to how many horses will be left on the range after the gather. Conflicting final numbers mentioned within the EA are as follows: - AML (70-140 horses) - 100 horses -High AML/Upper Limit of AML (140 horses) Neither of these three possibilities will leave the herd genetically viable. Dr. Gus Cothran, leading horse geneticist and Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability and a healthy population. Lower population numbers lead to more in-breeding, resulting in the population being vulnerable to multiple health problems. According to the BLM's own Wild Horse and Burro Handbook "A minimum population size of 50 effective breeding animals (i.e., a total population size of about 150-200 animals) is currently recommended to maintain an acceptable level of genetic diversity within reproducing WH&B populations (Cothran, 2009)".	See response for comment #197 for genetic monitoring See response for comment #52 for genetic health/diversity
232	Genetics	On page 9 of the EA it states "If future genetic monitoring indicates a loss of genetic diversity, the BLM would consider introduction of horses from HMAs in similar environments to maintain the projected genetic diversity." Bringing the numbers of wild horses at McCullough Peaks down to a level that does not support genetic diversity is unacceptable. The population has been successfully managed with PZP since 2011 with 2023 seeing only a 1% growth rate. Continuing the current population management strategy, the "No Action Alternative", will allow the population to remain genetically diverse without the need to introduce horses from other HMAs.	See response for comment #197 for genetic monitoring See response for comment #52 for genetic health/diversity
233	Genetics	The most important being that you say this herd can hold 141 horses which is less than what you publish as the number to make the population genetically viable, so what is the long term management plan to solve this issue?	See response for comment #52

Comment Number	Comment Type	Comment Text	Response
234	Genetics	Please consider that the appropriate management level is 70-140 horses. Currently the estimate is 181 horses before the loss over the winter of 2022-2023. 150 horses are needed to maintain genetic viability as stated in the Wild Horse and Burro Handbook by the BLM.	Thank you for your comment. No reponse required.
235	Genetics	The Appropriate Management Level (AML) at McCullough Peaks is 70-140 horses, with the current population at 181 horses. The EA outlines gathering and removing excess wild horses through bait trapping to bring the herd numbers down to AML, however, the EA is unclear as to how many horses will be left on the range after the removal. If herd numbers are brought down to AML, the herd won't be genetically viable. Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged in the BLM's own Wild Horse and Burro Handbook.	See reponse for comment #72
236	Genetics	It is well established, including in the BLM Handbook, that the minimum requirements for genetic viability in a wild horse herd are at least 150 horses. The herd's Appropriate Management Level (AML) is unscientifically and inappropriately set at 70-150 horses by the BLM.	See reponse for comment #72
237	Genetics	1. Do not remove the McCullough Peaks wild horses down to the law AML levels of 70/140 horses. This will destroy the genetic viability of the herd, and could likely lead to herd eradication.	Thank you for your comment. No reponse required.
238	Genetics	Cut the herd by 15 horses, selecting them with the help of specialists and people very familiar to the herd. They will help identify the ones that will cause the least impact on the herd's function. Maybe the youngest, could they possibly be taken by farmers/individual as work/leisure horses ? Do not "remove" the ones that will likely not survive the winter anyways, let nature take care of them as they will also supply food for local carnivores. That should bring the total number within the limit of 150 that is scientifically accepted as the minimum to keep the herd genetically viable.	See reponse for comment #72

Comment Number	Comment Type	Comment Text	Response
239	Genetics	AML in the HMA are between 70 and 140 head of wild horses with the current population at 181. Proposed bait and trap methods will remove excesses horses while releasing older horses to remain in the herd. Older horses are often unadoptable and live out the remainder of their years in holding facilities at a considerable expense. Additionally, BLM plans on maintaining the HMA at the high end of allowable AML. Managing the HMA at high AML is proposed to provide genetic diversity within the population. WDA has the following questions for BLM to consider and include in the EA analysis: * Has adequate genetic diversity within the herd already been determined?	See response for comment #52
240	Genetics	* What number of horses on the landscape is deemed adequate to maintain acceptable genetic diversity?	According to the Wild Horse and Burron Management Handbook H4700-1 section 4.4.63 Herd Size, A minimum population size of 50 effective breeding animals (i.e., a total population size of about 150-200 animals) is currently recommended to maintain an acceptable level of genetic diversity within reproducing WH&B populations (Cothran, 2009). This numer is required to keep the rate of loss of genetic variation at 1 percent per generation. Animal interchange between adjacent HMAs with smaller population sizes may reduce the need for maintaining populations of this size within each individual HMA. Research has not yet established a recommended minimum breeding herd size for burros.
241	Genetics	To ensure genetic viability for the herd, there needs to be at least 150 horses remaining as per research done.	See response for comment #52

Comment Number	Comment Type	Comment Text	Response
242	Genetics	Genetic Viability: The Appropriate Management Level for this herd is 70-140, with the current population size at 178. Dr. Gus Cothren, the leading geneticist on wild horses says that in order to remain genetically viable, there must be 150 breeding aged adults in the herd. Removing 68 or more wild horses will severely impact the ability of the herd to remain genetically viable and the BLM's solution of bringing in horses from other herds to solve this problem is absurd and cruel. They should leave enough horses in the herd to remain genetically viable.	See response for comment #52
243	Genetics	Is it possible to just leave them alone. I fear if you reduce the heard to 150 you will have an even smaller gene pool to work with.	Thank you for your comment. No reponse required.
244	Genetics	If herd numbers are brought down to AML, the herd will not be genetically viable	Thank you for your comment. No reponse required.
245	Genetics	The Appropriate Management Level at McCullough Peaks should be increased to 90 to 160 horses. Reasons: (A) Dr. Gus Cothran, Professor Emeritus Texas A&M School Vet Medicine states herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged by BLM's wild horses handbook.	See response for comment #52
246	Genetics	Dr. Gus Cothran, Professor at Texas A&M School of Veterinary Medicine says that a herds numbers should maintain between 150 - 250 in order for the herd to remain genetically viable. By taking the numbers below 150, BLM is pretty much insuring the wild horse's demise of McCullough Peaks.	See response for comment #52
247	Genetics	Reducing the number of our wild horses to just 70 puts the entire herd at risk for survival since genetic differentiation will no longer be viable. Reducing the herd to 70, effectively eliminates the ENTIRE herd.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity
248	Genetics	After reading the McCullough Peaks HMA Bait Trap Gather Environmental Assessment (EA), I disagree with the plan to reduce the population of horses from 181 down to 70-140. The plan does not discuss the number of horses that will be left on the HMA after the removals. There have been many studies showing that in order to ensure genetic viability the horse herd size must be at least 150 horses. This fact is stated by the Bureau of Land Management's own Wild Horse and Burro Handbook.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity

Comment Number	Comment Type	Comment Text	Response
249	Genetics	The BLM plan to bait trap and remove an inordinately large proportion of the beloved McCullough Peaks wild horse herd is unjustifiable, scientifically, ethically, and democratically. In terms of genetic diversity, a leading Texas A&M veterinary research professor has established that any number below 150 individuals is too low to maintain a healthy, viable herd -- and the BLM's own horse and burro management guidebook concurs, leading to the conclusion that the BLM has ignored its own official guidelines.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity
250	Genetics	Please consider that the appropriate management level is 70-140 horses. Currently the estimate is 181 horses before the loss over the winter of 2022-2023. 150 horses are needed to maintain genetic viability as stated in the Wild Horse and Burro Handbook by the BLM.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity
251	Genetics	There was not an analysis factoring future attrition due to herd age and how this will effect the herd genetically. Any gather bringing the McCullough Peaks aging horse population below the minimum recommended herd size of 150-200 to maintain genetic viability would place this herd at risk.	See response for comment #134 for natural attrition See response for comment #52 for genetic health/diversity
252	Genetics	The EA p9 states that in the future introducing horses from other HMAs to bolster the McCullough Peaks herd would be considered if needed to maintain genetic viability. If BLM is considering this action then it is acknowledging that reducing the herd size to even the high AML could be placing the genetic health of this herd in jeopardy.	See response for comment #52
253	Genetics	It is extremely unclear what the number of expected removal of Wild Horses during this bait and trap event. This herd has exceptional genetic viability, according to Dr. Gus Cothran, Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability. This fact is acknowledged in the BLM's own Wild Horse and Burro Handbook.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity

Comment Number	Comment Type	Comment Text	Response
254	Genetics	The Appropriate Management Level (AML) at McCullough Peaks is 70-140 horses, with the current population of 180 horses. The EA outlines gathering and removing excess wild horses through bait trapping to bring the herd numbers down to AML, however, the EA is unclear as to how many horses will be left on the range after removal. If hers numbers are brought down to AML, the herd will not be genetically viable, Dr. Gus Cothran, Professor Emeritus at the Texas A&M school of veterinary medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity
255	Genetics	McCullough Peaks currently has 181 horses, exceeding the recommended Appropriate Management Level (AML) of 70-140 horses. The plan is to use bait trapping to reduce the number, but the exact post-removal horse count is unclear. To maintain genetic viability, experts suggest a minimum of 150 horses should remain, as stated in the BLM's Wild Horse and Burro Handbook.	See reponse for comment #72 for removal numbers See response for comment #52 for genetic health/diversity
256	Slaughter of Wild Horses	The ages of the horses to remain on the HMA after the removal is also a concern and could play a role in the herd's eventual extinction under the EA. Of the 179 horses at McCullough Peaks, 59 are greater than 15 years of age, with 22 of them over the age of 20. Of the 22 horses over 20 years old, five of them are more than 24 years old. The horses over 24 years are in ill health and will probably not survive another winter. Eleven horses were lost during the winter of 2022-23, with nine of these horses over 15 years old. Those horses are likely to stop reproducing and die in the near future, which has not been taken into consideration in the EA. It is our position that any horse over 15 years of age should be left on the range, since older horses are notoriously difficult to find homes for. As a result, they become sale authority animals at risk of going to slaughter.	See response for comment #134 for natural attrition See response for comment #52 for genetic health/diversity
257	Slaughter of Wild Horses	These wild horses do not belong in a BLM holding facility nor do they deserve to be "adopted" out and then a year later end up in the slaughter pipeline, sent to Mexico and killed. Or, if they are old, then they are sold and also end up in the slaughter pipeline, sent to Mexico, and killed.	The BLM follows current policy and directives, and considers a variety of factors in determining which horses should be removed and which horses should be released back into the HMA.

Comment Number	Comment Type	Comment Text	Response
			There is no "slaughter pipeline". Healthy excess animals are not euthanized following a gather, but are instead offered for adoption, sale with limitations, or are cared for at long-term holding facilities. Thank you for your comment. The BLM recognizes the personal values attributed to wild horses, including those within the McCullough Peaks HMA and notes commenter's expressed opinion. Specific data or information was not provided in this comment to assist the BLM in refining its EA analysis.
258	Public Viewing	Tourism for viewing horses is a major factor. Reducing numbers and disrupting the social structure will impact viewing opportunities. Also, many people value wild horses and see them as an important part of America's natural heritage. Significant reductions in the herd size could lead to public outcry and impact the overall perception of wildlife management policies, even affecting tourism and regional economies.	See reponse for comment #72 for removal numbers Maintaining the population at the AML of 140 horses would still provide ample opportunity for the public to view the horses. Thank you for your comment.
259	Rangeland Health	The EA states that the BLM must manage the rangelands to prevent the range from deterioration associated with an overpopulation of wild horses. The BLM has provided no data indicating the rangeland is deteriorating and without these data, there is no rationale for the proposed gather. In addition, there is no analysis provided for the impact of livestock grazing on the rangeland. An evaluation of the impact of livestock grazing is required to determine rangeland health before any wild horses are permanently removed from McCullough Peaks.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
260	Rangeland Health	While the BLM claims the removal operation is necessary to prevent rangeland degradation, there is no evidence presented that the horses are actually causing any harm. Indeed, at its current size, the McCullough Peaks herd averages just one horse per 611 acres on its HMA. This can hardly be considered "overpopulated," and it is certainly not capable of causing any significant degradation of the range. In addition, the EA fails to discuss the livestock currently being grazed on the HMA, or the impacts of the six grazing allotments and the allocation of the bulk of the AUMs to livestock.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
261	Rangeland Health	Where is the data to show deterioration of range land due to overpopulation of wild horses ?	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
262	Rangeland Health	It is interesting that there is no scientific data to support the theory that wild horses cause the destruction of the rangeland. In fact, if this is a concern, it would be useful to compare scientific data on the consequences of cattle grazing as compared to wild horse foraging.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
263	Rangeland Health	There is also the concerning matter of absent data in the Environmental Assessment. While the EA declares that the BLM must manage the rangelands to prevent the range from deterioration associated with an overpopulation of wild horses, the BLM gives no data indicating the rangeland is, in fact, deteriorating. Also omitted is any research given on the negative impact of livestock grazing on the rangeland, which is a requirement to determine rangeland health before a single wild horse is permanently removed from McCullough Peaks.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
264	Rangeland Health	1) BLM's current biological management procedures are adequate for the carrying capacity of available land. The BLM has provided no data indicating the rangeland is deteriorating	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
265	Rangeland Health	Regarding Range Degradation: There is no analysis AT ALL in this document showing range deterioration cause by the wild horses being over AML. There is no data whatsoever on effects of wild horse use and then no data AT ALL about the grazing of cattle on the range and the degradation to the land that this has caused and continues to cause. There needs to be factual documentation of rangeland health and the impact of wild horses AND livestock BEFORE this actually qualifies as a legitimate Environmental Assessment.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
266	Rangeland Health	The EA states that the BLM must manage the rangelands to prevent the range from deterioration associated with an overpopulation of wild horses. The BLM has provided no data indicating the rangeland is deteriorating and without these data, there is no rationale for the proposed gather. In addition, there is no analysis provided for the impact of livestock grazing on the rangeland. An evaluation of the impact of livestock grazing is required to determine rangeland health before any wild horses are permanently removed from McCullough Peaks.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
267	Rangeland Health	The BLM has not provided any information that the rangelands are in deterioration, thus there is no argument for decreasing the herd based on the lack of merit to this claim.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
268	Rangeland Health	It has come to our attention that as a prerequisite to performing a gather, a detailed analysis should be made which demonstrates that the population of wild horses is having a negative impact on the habitat. Because the Preliminary EA, as written, fails to provide that analysis, we request that it be redrafted and reissued for public review and comment. We make this request because the current draft of the EAt fails to analyze available resource monitoring data as required by BLM directives. The following directives are found in the BLM Handbook, H-4700-1; Wild Horses and Burros Management Handbook: Page 30, GENERAL: The authorized officer is required to identify, plan, collect and analyze the resource monitoring data necessaiy to prepare resource man gement plans, plan amendments, gather plans, herd management area plans or other associated environmental documents through which WH&B management decisions are made. Inventory (monitoring) shall be completed in order to determine: * If an overpopulation of WH&B exists and action is needed to remove the excess animals. * WH&B AML1s; and * IfAML's should be achieved by removal of the excess animals or other appropriate means. Monitoring data is needed to support AML establishment and decisions to remove excess WH&B. Various rulings from the Interior Board of Land Appeals (IBLA) underscore the need to base WH&B management decisions on the result of monitoring.	See response for comment #219
269	Rangeland Health	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
270	Rangeland Health	The next issue is we have not seen any proof that the range-land is being negatively impacted by the current herd size, where is that?	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
271	Rangeland Health	Further consideration needs to be the condition of the rangeland. No assement has been provided indicating the livestock affect on the range nor the horses. The impact of livestock and horses both needs to be addressed before a round up occurs.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
272	Rangeland Health	The EA states that the BLM must manage the rangelands to prevent the range from deterioration associated with an overpopulation of wild horses. The BLM has provided no data indicating the rangeland is deteriorating and without these data, there is no rationale for the proposed gather. In addition, there is no analysis provided for the impact of livestock grazing on the rangeland. An evaluation of the impact of livestock grazing is required to determine rangeland health before any wild horses are permanently removed from McCullough Peaks.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
273	Rangeland Health	Please stop this plan until an analysis of livestock grazing on this range has been completed and evidence that any deterioration of rangeland has occurred.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
274	Rangeland Health	Livestock grazing leases in the HMA should be retired. The ranchers who graze hapless livestock on our public lands are responsible for degrading the range.	Reducing livestock was an alternative considered and eliminated from further analysis. The reduction of AUMs was not analyzed in the EA because it would not be in conformance with the Cody Field Office RMP. It is also inconsistent with the Wild Free-Roaming Horses and Burros Act of 1971, which directs the Secretary to immediately remove excess wild horses when a determination i smade that such removal is necessary. Furthermore, livestock grazing can only be reduced or eliminated if BLM follows regulations at 43 CFR 4100. The BLM is mandated to manage for a thriving natural ecological blance and protect the range from deterioration while preserving multiple use relationships such as livestock grazing. The removal or reduction of livestock would not address resource concerns in the HMA that have been directly linked to the current overpopulation of wild horses and burros, including in areas that are not being grazed by livestock.
275	Rangeland Health	The EA states that the BLM must manage the rangelands to prevent the range from deterioration associated with an overpopulation of wild horses. The BLM has provided no data indicating the rangeland is deteriorating and without these data, there is no rationale for the proposed gather. In addition, there is no analysis provided for the impact of livestock grazing on the rangeland. An evaluation of the impact of livestock grazing is required to determine rangeland health before any wild horses are permanently removed from McCullough Peaks.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
276	Rangeland Health	(3) The BLM Environmental Assessment talks about "Range Degradation" and it is my understanding that no formal assessment of the range has been conducted. There is tons of research in the literature that indicated that cattle adversely impact the range and a blanket statement by the BLM saying that 178 wild horses are causing "any" deterioration compared the cattle needs to be documented first. With only 178 wild horses on the range, the total acreage would suggest that each horse could have at least 600 acres to graze on. The EA does not talk about the number of private cattle on the range, the permitted allotments for private rancher and the damage cattle does to the range.	See response for comment #126
277	Rangeland Health	WDA strongly encourages the BLM to strive to maintain the HMA at the lower end of AML, while still maintaining genetic diversity through introduction of horses from other HMAs. Maintaining the HMA closer to low AML will allow for management on the landscape to more readily meet Rangeland Health Standards. By maintaining healthy rangelands and low AML, BIM will not be obligated to make quick or knee jerk management decisions if conditions decline and/or population numbers start to rise over high AML.	See response for comment #52
278	Rangeland Health	The EA fails to provide data showing there is land degradation on the McCullough Peaks HMA and fails to consider the true impact of livestock grazing in the area.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
279	Rangeland Health	Range Degradation: There is no analysis at all in this document showing range deterioration cause by the wild horses being over AML. There is no data whatsoever on effects of wild horse use and then no data at all about the grazing of cattle on the range and the degradation to the land that this has caused and continues to cause. There needs to be documentation of rangeland health and the impact of wild horses AND livestock before this actually qualifies as a legitimate Environmental Assessment.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
280	Rangeland Health	The BLM has not provided data indicating that the rangeland is deteriorating. Also, an evaluation of livestock and their affects on rangeland health is required before any wild horses are permanently removed from McCullough Peaks.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
281	Rangeland Health	*There is no data that suggests range land has deteriorated because of the wild horses. The examination of livestock grazing needs to be considered before removing any horse.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
282	Rangeland Health	The EA is incorrect in stating that the HMA is overpopulated with wild horses who are causing the range to deteriorate. The EA provided no discussion or contributing causes of range deterioration that is caused by the significant livestock grazing on the range. There needs to be a full evaluation of range deterioration and a look at all contributing factors before the BLM can say that horses are the main cause and require removal from McCullough Peaks.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
283	Rangeland Health	A particularly troubling indicator of this plan's lack of scientific rigor is the absence of environmental impact studies that provide any data whatsoever to show the effect these wild horses have had on the available rangeland resources.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
284	Rangeland Health	Further consideration needs to be the condition of the rangeland. No assement has been provided indicating the livestock affect on the range nor the horses. The impact of livestock and horses both needs to be addressed before a round up occurs.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
285	Rangeland Health	The EA p12 &13 state potential rangeland deterioration as reasoning for the permanent removal of the McCullough Peaks wild horses. There is no evidence or completed rangeland studies showing rangeland deterioration resulting specifically from the wild horses that could not have been caused by grazing livestock.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
286	Rangeland Health	EA p15 in summary states longterm effects of removing horses in excess of HMA would benefit livestock grazing. An evaluation of the impacts of livestock grazing is required to determine rangeland health.There is no current data providing details on the livestock grazing for this HMA.This is needed prior to any wild horse removals. If the range is degrading BLM has the authority to first limit livestock grazing and is not legally required to first remove any wild horses on Public Lands, HMAs.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
287	Rangeland Health	I have many issues with the proposed "management" of this herd. There is no info on how the herd negatively affects the land vs livestock grazing. Without that, there's no need to remove any of these horses.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
288	Rangeland Health	I have seen no data indicating the rangeland is deteriorating and without these data, there is no rationale for the proposed gather. In addition, there is no analysis provided for the impact of livestock grazing on the rangeland. An evaluation of the impact of livestock grazing is required to determine rangeland health before any wild horses are permanently removed from McCullough Peaks.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
289	Rangeland Health	Also, BLM has provided no data indicating that range land is deteriorating and without this data, there is no rationale for the proposed gather. There is also no analysis provided for the impact of livestock grazing on the rangeland. An eval hog the impact of livestock grazing is required to determine rangeland health before any wild horses are permanently removed from McCullough Peaks (or anywhere for that matter)	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB

Comment Number	Comment Type	Comment Text	Response
290	Rangeland Health	I understand that part of the rationale for the removal of wild horses is degradation of the range, but how the impact of livestock grazing on the land is not being considered doesn't make any sense.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
291	Rangeland Health	The proposed gather is aimed at preventing overpopulation-induced rangeland deterioration, but there's no evidence of such deterioration provided by the BLM. An analysis of the impact of livestock grazing on the rangeland is necessary before any permanent removal of wild horses.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
292	Rangeland Health	It is assumed that any number of excess horses are responsible for range degradation. Where is the proof for that? To evaluate the rangeland health the management needs to evaluate the effect that grazing of cattle and sheep has. Those animals are not part of the native fauna but are on public lands in very large numbers. What are the AMLs for cattle and sheep? Not to consider their impact on rangeland degradation is distorting the impact the wild horses have.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
293	State, County, Municipal	Following are the Wyoming Department of Agriculture (WDA) comments regarding the Environmental Assessment (EA) for McCullough Peaks HMA Bait Trap Gather EA (HMA) within the Bureau of Land Management (BLM) Cody Field Office (CFO). Our comments are specific to our mission: dedication to the promotion and enhancement of Wyoming's agriculture, natural resources and quality of life. As the proposed project could affect our industry, citizens, and natural resources it is important that you continue to inform us of proposed actions and decisions and continue to provide the opportunity to communicate pertinent issues and concerns. The Proposed Action will utilize several methods to remove and control excess wild horses within the HMA. The methods include bait trapping, to gather and remove wild horses, and the continued use of fertility control methods (PZP, Gonna Con), to reduce and maintain wild horse populations at appropriate management levels (AML).	Thank you for your comment. The BLM will issue a press release for the initial gather and any additional NEPA for the McCullough Peaks HMA.

Comment Number	Comment Type	Comment Text	Response
294	State, County, Municipal	The staff of the Wyoming Game and Fish Department (Department) has reviewed the environmental assessment (EA) for the proposed use of future wild horse bait trap gathers and fertility control measures needed in the McCullough Peaks Herd Management Area (HMA) in Bighorn and Park Counties. The Department is statutorily charged with managing and protecting all Wyoming wildlife (W.S. 23-1-103). Pursuant to our mission, we offer the following comments for your consideration. The Department supports the Bureau of Land Management's removal of excess wild horses and population control measures to maintain horse numbers in the McCullough Peaks HMA within the appropriate management level range. We previously provided comments for the proposed action during the scoping process in WER2130.03 (please see attached). The Department has no additional terrestrial or aquatic habitat concerns pertaining to the activities as proposed. Thank you for the opportunity to comment.	Thank you for your comment. No reponse required.
295	Interest Groups, Stakeholders	Please accept the attached public comment from Oregon Wild Horse Organization, Wild Horse Observers Association, Citizens Against Equine Slaughter and the individuals who signed it.	Thank you for your comment. No reponse required.

Comment Number	Comment Type	Comment Text	Response
296	Interest Groups, Stakeholders	Comments by: Return to Freedom Wild Horse Conservation Humane Society of the United States Humane Society Legislative Fund August 12, 2023 The Bureau of Land Management is soliciting comments for the McCullough Peaks HMA Bait Trap Gather Preliminary Environmental Assessment (EA). The AML is between 70 and 140 horses. The herd has been treated with PZP since 2011. The current number of horses is 181. The proposed action is to utilize bait trapping to remove excess horses and remain "within AML" (EA, p. 6) and to continue and expand the types of fertility control treatments. The population grows at 2% per year. For more than half a century, the Humane Society of the United States (HSUS) has advocated for America's wild horses and burros, starting in the late 1950s when we partnered with the legendary Velma Johnston (aka "Wild Horse Annie") and other animal protection groups to end the mass killings of wild horses and burros on public lands which culminated in the passage of the Wild Free-Roaming Horses and Burros Act of 1971 (P.L. 92-195). Since then, the HSUS and the Humane Society Legislative Fund (HSLF) has partnered with groups like RTF to lobby, litigate, and advocate for greater protections and more humane management of these animals. The HSUS has also played a critical role in the development and implementation of safe, proven, humane, and effective contraception methods for managing wild horse and burro populations on our public lands. We respectfully submit our comments, below: Comments to Proposed Action: FERTILITY CONTROL METHODOLOGIES (Continued use of PZP, addition of GonaCon for older mares) We appreciate a plan which is centered around proven, safe and humane fertility control vaccines, with a focus on non-permanent population control methods. These are the modalities that garner the most public support. Because of the longer term research and use behind PZP and PZP-22, we encourage the use of these well-proven immuno-contraceptive vaccines as often as possible. McCullough Peaks EA Comments to the EA by RTF, HSUS, HSLF August 9, 2023 UTILIZATION OF BAIT TRAPPING * Initial use of BLM staff, as opposed to contractors (EA, p. 6): BLM staff have the greatest on-the-ground knowledge and appreciation for the animals and the local conditions under with which those animals live. We appreciate BLM's direct oversight and management of this facet of the management plan. * Retain older horses (EA, p. 6): The interested public expressed concern that if older horses were captured, they would not be eligible for adoption placement and would be sold. BLM took this under advisement and will leave older horses on range. This is an agreeable nod to public involvement being actualized, with the participating public able to feel	Thank you for your comment. The BLM will continue to use the best available science to manage the wild horses within the McCullough Peaks HMA. Please refer to response to comment #143 regarding talking point RETAINING HERD AT UPPER LEVEL AML OR AS IS

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300	General Public	Reference: Project Number DOI-BLM-WY-R020-2023-0003-EA. BLM Cody Field Office Attn: Abel Guevara, Wildlife Biologist 1002 Blackburn Street Cody, WY 82414 After reviewing the McCullough Peaks HMA Bait Trap Gather Environmental Assessment (DOI-BLM-WY-R020-0003-EA), I support the "No Action Alternative" with regards to the McCullough Peaks herd. Under this action, a gather to remove excess wild horses would not occur and PZP Immunocontraceptive Vaccine (PZP) would continue to be used as a means to manage population growth rates. I do not support the BLM's "Proposed Action Alternative" which includes bait trapping to remove excess horses to achieve AML; implementation of GonaCon for use on mares in the herd, and maintaining AML in the future through maintenance gathers. I believe this alternative will result in the eventual extinction of the McCullough Peaks horses and ignores the public's interest in seeing this beloved and iconic herd thrive for generations to come. It must be noted that the BLM recorded the McCullough Peaks population in the EA as 181 wild horses as part of the official population inventory performed on 05/31/23. Due to the presumed death of additional horses, the total number of horses on the range is currently 177. Because another count will be performed before the proposed bait trapping operations begin, the number of 181 will stand for use in this response. Reasons for my decision to support the "No Action Alternative" are presented below. 1) The current Appropriate Management Level (AML) at McCullough Peaks is 70-140 horses. The BLM records the current wild horse population in the EA as 181 on 05/31/23, when the official count was performed. The EA outlines gathering and removing excess wild horses through bait trapping, to bring the herd numbers down to AML, however, the EA is unclear as to how many horses will be left on the range after the gather. Conflicting final numbers mentioned within the EA are as follows: - AML (70-140 horses) - 100 horses -High AML/Upper Limit of AML (140 horses) Neither of these three possibilities will leave the herd genetically viable. Dr. Gus Cothran, leading horse geneticist and Professor Emeritus at the Texas A&M School of Veterinary Medicine, states that at a minimum, herd size must be maintained at 150 horses to ensure genetic viability and a healthy population. Lower population numbers lead to more in-breeding, resulting in the population being vulnerable to multiple health problems. According to the BLM's own Wild Horse and Burro Handbook "A minimum population size of 50 effective breeding animals (i.e., a total population size of about 150-200 animals) is currently recommended to maintain an acceptable level of genetic diversity within reproducing WH&B populations	See comment response for comment #50 for talking point 5 See comment response for comment #101 for talking point 6 See comment response for comment #113 for talking point 7 For talking point 8: The draft EA outlined the proposed action and the EA's analysis encompasses gathering and removing of excess wild horses and burros over a period of 10 years. Under the proposed action, to meet the purpose and need of maintaining the wild horse and burro population within AML, it is likely multiple gathers would need to occur. The proposal for a 10-year gather plan is consistent with other BLM gather decisions in both Wyoming and other states. In response to talking point 9, as stated in the "Public Involvment" section of the EA, the external scoping comments were considered in the development of alternatives and issues. See comment response for comment #2 for talking point 10.

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		(Cothran, 2009)". On page 9 of the EA it states "If future genetic monitoring indicates a loss of genetic diversity, the BLM would consider introduction of horses from HMAs in similar environments to maintain the projected genetic diversity." Bringing the numbers of wild horses at McCullough Peaks down to a level that does not support genetic diversity is unacceptable. The population has been successfully managed with PZP since 2011 with 2023 seeing only a 1% growth rate. Continuing the current population management strategy, the "No Action Alternative", will allow the population to remain genetically diverse without the need to introduce horses from other HMAs. 2) With regard to the use of additional population growth suppression treatments, this EA outlines three conflicting plans for use of GonaCon on mares at McCullough Peaks as follows: - "Continue current use of PZP, but use GonaCon on mares older than 13 years old that have contributed to the genetic diversity of the herd." (Page 6 of EA) - "Continue current use of PZP, but use GonaCon on mares that have contributed to the genetic diversity of the herd." It is noted in this instance that there is no age stipulation for the mares. (Page 8 of EA) - "The BLM will continue to use PZP, however, several mares have not responded to PZP treatments and continue to give birth every year. The BLM is considering and hoping that other vaccine treatments (GonaCon) will allow the mares that do not respond to PZP an opportunity to no longer be submitted to the stress of giving birth every year." (Page 17 of EA) The January 9 Scoping Notice for McCullough Peaks mentioned the possible use of GonaCon for mares that continued to foal even when treated with PZP (i.e. non-responding mares). Currently, there are only three known non-responding mares at McCullough Peaks; all over 14 years of age. It is unclear when reading this EA, what the plans are for use of GonaCon at McCullough Peaks. If the BLM uses GonaCon on any and all mares that have contributed to the genetic diversity of the herd, they will be moving the herd one step closer to obsolescence. Given concerns about is potential for permanent sterilization and injection site abscesses, GonaCon should never be considered as an additional or alternative fertility treatment for any mares at McCullough Peaks. PZP has been used to effectively manage this herd since 2011 and its use should continue into the future. If continued reproduction from the three non-responding mares remains a concern, a stricter schedule for field darting with PZP should be implemented with input from personnel at the Science and Conservation Center in Billings, Montana. PZP-22 is also suggested as an alternative for these non-responders as it has been proven to be longer acting in preventing conception.	

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		With regard to continuous PZP use, there appears to be at least seven mares at McCullough Peaks that have never foaled, and may perhaps be sterile, possibly due to PZP. This includes: Taurus, Sanita, Onyx, Black Beauty, Neka, Seminole, and Sunrise. All these mares were born around the time that the PZP program was initiated and all are between 11-13 years or age. These are only anecdotal field observations, as I have no access to the BLM's specific data on darting or foaling, but it is possible that their individual immune systems reacted differently to the administration of PZP, thus rendering them sterile. This unexpected effect could work to balance out population growth on a herd-wide scale. It is requested that the fertility of these mares be further evaluated and if this hypothesis proves correct, the potential infertility of these breeding age mares should be factored into any projected growth rate for the herd. 3) On page 13 of the EA it is stated that the BLM must "manage the rangelands to prevent the range from deterioration associated with an overpopulation of wild horses", however, the BLM has provided no data nor any other indication that the rangeland is indeed undergoing deterioration. If there is no indication of deterioration, nor data to support this theory, what is the rationale for the proposed gather? While the BLM claims the removal operation is necessary to prevent rangeland degradation, there is no evidence presented that the horses are actually causing any harm. Indeed, at its current size, the McCullough Peaks herd averages just one horse per 611 acres on its HMA. This can hardly be considered "overpopulated," and it is certainly not capable of causing any significant degradation of the range. In addition, the EA fails to discuss the livestock currently being grazed on the HMA and the allocation of the bulk of the AUMs to livestock. In short, the BLM is proposing a gather and removal of wild horses that are valued by the American public without any evidence of overgrazing and without any analysis of livestock impacts. The EA should include a detailed look at these questions preliminary to its decision, and without it, the EA is fundamentally flawed. The BLM should conduct a science-based evaluation of the impacts of livestock grazing and rangeland health before any wild horses are permanently removed from McCullough Peaks. If that evaluation results in the conclusion that overgrazing is, in fact, occurring on the McCullough Peaks HMA, the BLM should reduce the AUMs allocated to commercial livestock as its first step. Any plan undertaken by the BLM should consider and invoke, if necessary, the BLM's authority under the Wild Free-Roaming Horses and Burros Act of 1971 and 43 CFR Sec. 4710.5 to eliminate or reduce livestock AUMs as an alternative to the proposed gather and	

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		removal. 4) It is stated on page 6 of the EA that "Cody Field Office will not remove the older population of horses living within the McCullough Peaks HMA." At this time, 59 horses at McCullough Peaks are greater than 15 years of age with 22 of them over the age of 20. Page 18 of the EA states that "the older population of horses represents 13% of the current population", which would indicate that the "older population of horses" are horses over the age of 20. The EA also states on page 10 that "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 Association (AVMA)." Horses are categorized as "seniors" beginning at 15 years of age and at that time they begin to experience tooth loss and wear and would be more likely to present with lameness or injury. If horses in this age range are caught in the bait trap and examined, it can be inferred that those with age-related issues will be euthanized as outlined in the EA. Since these senior horses make up one-third of the population, it is feared that a high percentage of these senior horses will be removed from the population immediately, thus negating the statement that members of the older population will be allowed to remain on the range. Issues that are indicators of a horse's senior status (i.e., severe tooth loss or wear, lameness, etc.) should not be considered as criteria for euthanasia for any of the McCullough Peaks herd. 5) The aging population of horses at McCullough Peaks is extremely concerning. Population numbers will continue to plummet as natural attrition of older horses decrease the herd size significantly over the next few years. This expected die off will drop the population to dangerously low numbers, well below the requirements for genetic viability, even without the proposed bait trap removal. There are currently 181 adult horses at McCullough Peaks (yearling to 26 years old). Of these 181 horses, 59 are greater than 15 years of age with 22 of them over the age of 20. Of the 22 horses over 20 years of age, 5 of them are more than 24 years old. These horses over 24 years of age (all mares) appear to be in ill health and will, most likely, not survive another winter. Eleven horses were lost during the winter of 2022/2023: 9 stallions, 1 mare and 1 newborn foal. Of the horses lost, 9 were over 15 years of age. In assessing the condition of the remaining older horses, it is possible that the McCullough Peaks herd could lose approximately 15-20 older horses into the spring of 2024. When this current rate of attrition is coupled with the 2% average yearly growth rate, the population of adult horses at McCullough Peaks will fall within AML over the next few years,	

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		thus negating the need for a costly bait trap removal. 6) The start date of the proposed bait trapping is recorded in the EA as during fall 2023, sometime around November 1, 2023. The end date of the proposed bait trapping is difficult to determine when reviewing the EA as there are conflicting timelines listed. Page 9 of the EA states "Implementation of management actions would begin in the fall of 2023 and would continue until environmental conditions or policy and management objective changes require new analysis of additional management actions". It is unclear if the "environmental conditions" noted in the statement above refer to winter weather conditions. If that is the case, we could infer that because the traps cannot be accessed during winter weather, they would be closed so that horses would not be left inside the traps unattended, without food, water or shelter, for extended periods of time. Conversely, page 10 of the EA states "The proposed gathers would occur between November 15 and March 15 for bait trapping when conditions are conducive to gather due to the horse's responsiveness to hay. Approximately 40% of the McCullough Peaks HMA is accessible to BLM staff during winter months when conditions are conducive to conducting a bait gather. Bait gathers would conclude by March 15 in order to avoid disrupting sage grouse breeding season". This scenario would draw one to conclude that bait trapping would continue through the winter months. In addition, the table on page 23 of the EA, states that the timing of the gather is November 1 to February 28 and "BLM would plow the access roads to the traps, if there are horses within the trap that need to be shipped to off range corrals". This would imply that trapping would continue during winter weather with horses remaining in the traps during storms. Appendix E-Gather Operations Standard Operating Procedures (page 32 of EA) states that "BLM Personnel shall provide animals held in traps with a continuous supply of fresh clean water at a minimum rate of 10 gallons per animal per day. Animals held for 10 hours or more in the traps shall be provided good quality hay at the rate of not less than two pounds of hay per 100 pounds of estimated body weight per day". In addition, page 33 of the EA states that "Traps shall be checked a minimum of once every 10 hours." Because of the extreme winter weather experienced at McCullough Peaks HMA, roads and two tracks can be inaccessible for days or weeks at a time. Plowing would not be possible on interior roads within the HMA as plowing is often impossible even on main highways. When the McCullough Peaks HMA experiences winter storm activity with high winds causing extreme snow drifting, it is unreasonable to expect BLM personnel to be able to access any horses	

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		contained in the traps every 10 hours to ensure they have sufficient water and food. If horses are stuck in the traps during a winter storm without food water or shelter, they could perish. Because of this, all bait trapping operations should cease, with traps closed, during the onset of winter weather. In addition, it is concerning that BLM personnel will not be on site while bait trapping is inprocess. Horses could be injured while entering or while inside traps, necessitating the need for on-site personnel to ensure that the process runs smoothly with no injuries incurred. 7) The EA states that BLM staff familiar with identification of the horses will most likely conduct immediate bait trapping operations. The EA also states on page 6 that "In subsequent years a contractor may be utilized" and on page 9 that "gather operations would be conducted by BLM personnel or a contractor". A contractor should never be utilized to perform bait trapping at McCullough Peaks since they don't have the BLM's detailed knowledge of these horses. BLM staff members know each horse's age, history and genealogy and as stated on page 6 of the EA "will help ensure that family bands will remain together and the proper horses slated for removal are safely trapped". Because contractors lack this essential information related to the McCullough Peaks herd it is imperative that only trained BLM staff members, familiar with these horses, conduct any bait trapping operations. 8) What is presented in this EA is a 10-year plan, meaning that for all the actions the BLM are planning to take over the next 10 years, this is the only opportunity they are giving for the public to comment. This is a violation of NEPA, the National Environmental Policy Act. The BLM needs to give the public an opportunity to comment each time they are taking action against the McCullough Peaks Herd. 9) The Environmental Assessment (DOI-BLM-WY-R020-0003-EA) is confusing and contradictory as written and is lacking requisite information. It does not indicate how many horses will be removed from the HMA and there are three contradictory plans for how GonaCon will be used. In addition, there are no guidelines outlining how the bait trapping will be performed, including during bad weather. There is also no analysis of the range conditions, and the contributions of the livestock and/or the horses to these conditions. There is no analysis of or response to the over 4000 public comments received during the Scoping process. Because of these numerous inconsistencies, this document should be rewritten and resubmitted prior to the start of any gather. 10) Given the McCullough Peak herd's popularity with wild horse photographers, enthusiasts, and tourists, the BLM should consider the positive economic impacts these animals bring to the communities and businesses in the	

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		area. Wild horse tourism and experiences bring people to local communities who patronize the local hotels, restaurants, gas stations, and other businesses. All these economic benefits to local communities will be lost if the BLM's plan takes effect, because under the BLM's proposed plan, the McCullough Peaks herd is likely to become extinct. For the reasons listed above, I urge the BLM to leave the McCullough Peaks herd intact, manage the population with an eye toward long-term genetic viability and health, prioritize horses and wildlife over livestock, and use only safe, reversible PZP if and when population management becomes necessary. Thank you for consideration of these comments. Sandy Sisti	

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301	Federal Laws	The BLM should conduct a science-based evaluation of the impacts of livestock grazing vis-à-vis rangeland health before any wild horses are permanently removed from McCullough Peaks. If that evaluation results in the conclusion that overgrazing is, in fact, occurring on the McCullough Peaks HMA, the BLM should reduce the AUMs allocated to commercial livestock as its first step. Any plan undertaken by the BLM should consider and invoke, if necessary, the BLM's authority under the Wild Free-Roaming Horses and Burros Act of 1971 and 43 CFR Sec. 4710.5 to eliminate or reduce livestock AUMs as an alternative to the proposed gather and removal.	See response for comment #185 regarding the proposed action. See response for comment #233 regarding TNEB
302	Federal Laws	Increase the Appropriate Management Level (AML) in this HMA to accommodate the current population, by making forage adjustments, if necessary, pursuant to CFR 43 C.F.R. 4710.5(a) to ensure that wild horses are given equitable usage of our public lands.	See response for comment #102

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303	Federal Laws	- Maintain the current wild horse population without removals by implementing reductions to the thousands of livestock currently grazing within the HMA pursuant to 43 C.F.R. 4710.5(a). The BLM has a statutory mandate to protect wild horses, while livestock grazing is permitted only at the discretion of the Interior Department. Livestock grazing is not required to fulfill the agency's "multiple use" mandate. Further, it is far more cost-effective to curtail taxpayer-subsidized commercial livestock grazing in this area than it is to permanently remove wild horses from the range; and	Reducing livestock was an alternative considered and eliminated from further analysis. The reduction of AUMs was not analyzed in the EA because it would not be in conformance with the Cody Field Office RMP. It is also inconsistent with the Wild Free-Roaming Horses and Burros Act of 1971, which directs the Secretary to immediately remove excess wild horses when a determination i smade that such removal is necessary. Furthermore, livestock grazing can only be reduced or eliminated if BLM follows regulations at 43 CFR 4100. The BLM is mandated to manage for a thriving natural ecological blance and protect the range from deterioration while preserving multiple use relationships such as livestock grazing. The removal or reduction of livestock would not address resource concerns in the HMA that have been directly linked to the current overpopulation of wild horses and burros, including in areas that are not being grazed by livestock.

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304	NEPA	• There should be a routine plan in place for the management of these horses. The current 10-year plan is not adequate, and I believe it is a violation of NEPA.	The draft EA outlined the proposed action and the EA's analysis encompasses gathering and removing of excess wild horses and burros over a period of 10 years. Under the proposed action, to meet the purpose and need of maintaining the wild horse and burro population within AML, it is likely multiple gathers would need to occur. The proposal for a 10-year gather plan is consistent with other BLM gather decisions in both Wyoming and other states.
305	NEPA	I recently discovered that a 10 year plan is proposed for the management of the McCullough Peaks Herd, I do beleive that this is in violation of the National Enviornmental Policy Act because it would prohibit comments from the public during that time.	See response for comment #304
306	NEPA	Please ditch 10 year wild horse management plan which is in violation of NEPA.	See response for comment #304
307	NEPA	(8) In the EA, the BLM wants to make a "10-year plan". It is my understanding that this is a violation of the National Environmental Policy Act. The BLM needs to prepare Scoping and Environment Assessment every time it decides to do anything to wild horses in this HMA.	See response for comment #304
308	NEPA	A 10 Year Plan Does Not Comply with NEPA: In this document the BLM proposes to make this a 10 year plan, so that they can continue to remove horses over 10 years without coming back to the public for comments on their plan. This is a violation of the National Environmental Policy Act, which is supposed to determine if their actions have significant environmental effects. The BLM needs to prepare Scoping and an Environmental Assessment each time it takes an action against the horses.	See response for comment #304
309	Comment Period Extension	Hi, my name is celeste husar from Pittsburgh, PA and I would like to comment on the inhumane roundup scheduled for the mccoullough peaks herd. We were asked to comment, yet the glitch was never corrected for people with cell phones even though you have been informed. That is unconscionable. That is what NEPA is all about. I think you should extend the comment period.	Thank you for your comment. The BLM will not extend the public comment period.