United States Department of the Interior
Bureau of Land Management

Pryor Mountain Wild Horse Range Bait/Water Trapping Gather Environmental Assessment
DOI-BLM-MT-0010-2015-0018-EA
Tiered to the
Pryor Mountain Wild Horse Range Environmental Assessment MT-010-08-24
And Herd Management Area Plan May 2009

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The Bureau of Land Management is responsible for the stewardship of our public lands. It is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people for all times. Management is based on the principles of multiple-use and sustained yield of our nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation; rangelands; timber; minerals; watershed; fish and wildlife; wilderness; air; and scenic, scientific and cultural values.

BLM/MT/PL-08/12

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1.0 BACKGROUND INFORMATION

1.1 Introduction

The Bureau of Land Management (BLM), Billings Field Office (BiFO) received numerous comment letters to the Preliminary Environmental Assessment (EA). Some parties provided information regarding herd demographics and kinship and were used to refine alternatives. After review and analysis of comments within the scope of the EA, along with questions and suggestions presented from interested parties, adjustments were made to the action alternatives of this EA and have been incorporated. All changes and additions to the document are highlighted in gray to help interested parties follow the additions and changes from the preliminary document. Comments are addressed in the consultation and coordination section of this document.

After review and analysis of comments provided by the public during the comment period in from May 6, 2015 to June 6, 2015 this Environmental Assessment (EA) has been designed in part from scoping comments from April 2015, from members of the public, data review, and collection, and BLM interdisciplinary team review.

This EA is tiered to the 2009 Pryor Mountain Wild Horse Range/Territory EA (MT-010-08-24) and Herd Management Area Plan (HMAP) in accordance with the Council on Environmental Quality (CEQ) regulations, 40 CFR 1502.2, and incorporates by reference all the descriptions of the affected environment and impacts analyzed in the 2009 HMAP and EA and subsequent Finding of No Significant Impact (FONSI) and Decision Record (DR). This EA also incorporates by reference Pryor Mountain Wild Horse Range Fertility Control Tiered Environmental Assesment December 2010 DOI-BLM-MT-010-2011-004-EA and the Pryor Mountain Wild Horse Range Fertility Control Tiered Environmental Assesment December 2015 DOI-BLM-MT-010-2015-0006-EA that are tiered to the 2009 PMWHR and HMAP EA. The HMAP and EA with FONSI and DR, along with the tiered Fertility Control EA with FONSI and DR are available on the BLM BiFO website at:
http://www.blm.gov/mt/st/en/fo/billings_field_office/wildhorses/pryorherd.html

This EA has been prepared to analyze the impacts associated to wild horses and other identified resources from conducting or not conducting a bait/water gather operation.

Incorporation by reference and tiering provide opportunities to reduce paperwork and redundant analysis in the National Environmental Policy Act (NEPA) process. When incorporating by reference, the author refers to other available documents that cover similar issues, effects, and/or resources considered in the NEPA analysis that is being prepared. Incorporation by reference allows brief summarizations of relevant portions of other documents rather than repeating them.

Tiering is a form of incorporation by reference that refers to previous EAs or Environmental Impact Statements (EIS). Incorporation by reference is a necessary step in tiering, but tiering is not the same as incorporation by reference. Tiering allows for narrowing the scope of the subsequent analysis and focuses on issues that are ripe for decision-making, while incorporation by reference does not. Only EAs or EISs may be tiered to, whereas one may incorporate by reference from any type of document.

Tiering uses the coverage of general matters in broader NEPA documents in subsequent, narrower NEPA documents (40 CFR 1508.28, 40 CFR 1502.20). This allows the tiered NEPA document to narrow the range of alternatives and concentrate solely on the issues not already addressed. Tiering is appropriate when the analysis for the proposed action will be a more site-specific or project-specific refinement or extension of the existing NEPA document.

The author may tier to a NEPA document for a broader action when the narrower action is clearly consistent with the decision associated with the broader action. In the tiered document, there is no need to reexamine alternatives analyzed in the broader document. The tiered document is focused on those issues and mitigation measures specifically relevant to the narrower action but not analyzed in sufficient detail in the broader document.

1.2 Management Situation

After analyzing the monitoring data collected since the 2012 PMWHR non-helicopter gather, and comparing to the annual wild horse population in 2013, 2014, and the current 2015 population, the BLM has determined that excess wild horses are present in the PMWHR. BLM has also considered the monitoring results from 2010 (post 2009 gather) and 2013 (post 2012 gather). The BLM's monitoring data was compared to forage utilization objectives within the HMAP which is 45% use. Monitoring data showed that use levels were closer to the objective in 2010 and 2013 when wild horse population was closer to the AML. This data further reaffirms the current AML of 90 to120 wild horses (excluding current year's foals) as determined in the 2009 EA and HMAP and subsequent FONSI and DR.

Monitoring data confirms that the use patterns are shifting primarily due to the installation of guzzlers from 2010, water developments on low elevation springs, and wild horses limited to the boundaries of the PMWHR/Territory. Greater interchange of bands is occurring since the HMAP implementation of a 50/50 sex ratio rather than a 70/30. Heavy use is being measured in the mid-slope due to wild horse use. Although this is identified as part of the HMAP of an area where additional grazing should occur, the current population of 170 wild horses is beyond the capacity of the range in order to protect it from deterioration.

Implementation of the HMAP continues to occur as nine water catchment sites consisting of 12 guzzlers are installed and collecting water, along with one catchment trough system on Sykes Ridge. Another catch pond has been completed on Burnt Timber Ridge south of Cheyenne Flat. One seep was developed on Bad Pass road to ensure year-round water, and two riparian protection and water enhancement projects were completed at Cottonwood Spring and Little Sykes riparian areas. Fertility control has been conducted from 2011 to 2015, with 70-80% of the mares treated each year (depending on demographics). A livestock drift fence was completed at Sykes entrance to keep livestock out of the wild horse range, and the USFS repaired the north boundary fence.

As part of the implementation of the HMAP, the Pryor Mountain Wild Horse Range Prescribed Fire EA and DR/FONSI was issued March 2014. This action is designed to return the fire regime to a more natural state with smaller more frequent fires that would not be catastrophic in scale,

while simultaneously improving forest health habitat for wildlife resources, wild horses, and watershed protection. The need is also to promote a more natural regime to protect the wilderness values present within the wilderness study areas. This action is currently under litigation; limited handwork is being implemented pending a ruling.

A Fertility Control EA and FONSI/DR signed March 18, 2015 was designed from monitoring results primarily from the 2011-2015 fertility applications. It was also designed to ensure more effective fertility control treatments are part of regular management. Interior Board of Land Appeals made two orders from two appeals and petitions for stay. Implementation of the decision began in May 2015.

Wild horse population recruitment under current management and fertility control treatments has been reduced from 17.5% to 8%. This is equates to about 15-18 foals born annually with 12-15 surviving to 1 years of age. Implementation of fertility control has a minimum of one year lapse time until population results are realized. Currently darting for 2015 is in essence complete. In 2015, 15-18 foals are anticipated to be born. In 2016, 15-18 foals are also anticipated due to the one year time lapse. The Fertility Control Decision signed March 18, 2015 began implementation. Considering there is a minimum of one year lag time between treatments and effect the results of which could not be fully realized until 2017.

The HMAP DR stated, "The population will not be taken to the low range of AML when fertility control is utilized." Currently, a fertility control program designed to last until from 2011-2015 as part of the HMAP has been completed. When fertility control is in effect the BLM is managing for 120 wild horses (excluding current year's foals). The proposed action and alternative is designed to help protect rangelands from deterioration and maintain a thriving natural ecological balance and multiple-use relationships, as described in the HMAP. The gather techniques and implementation would be described and analyzed in two action alternatives based upon public input obtained during the scoping process.

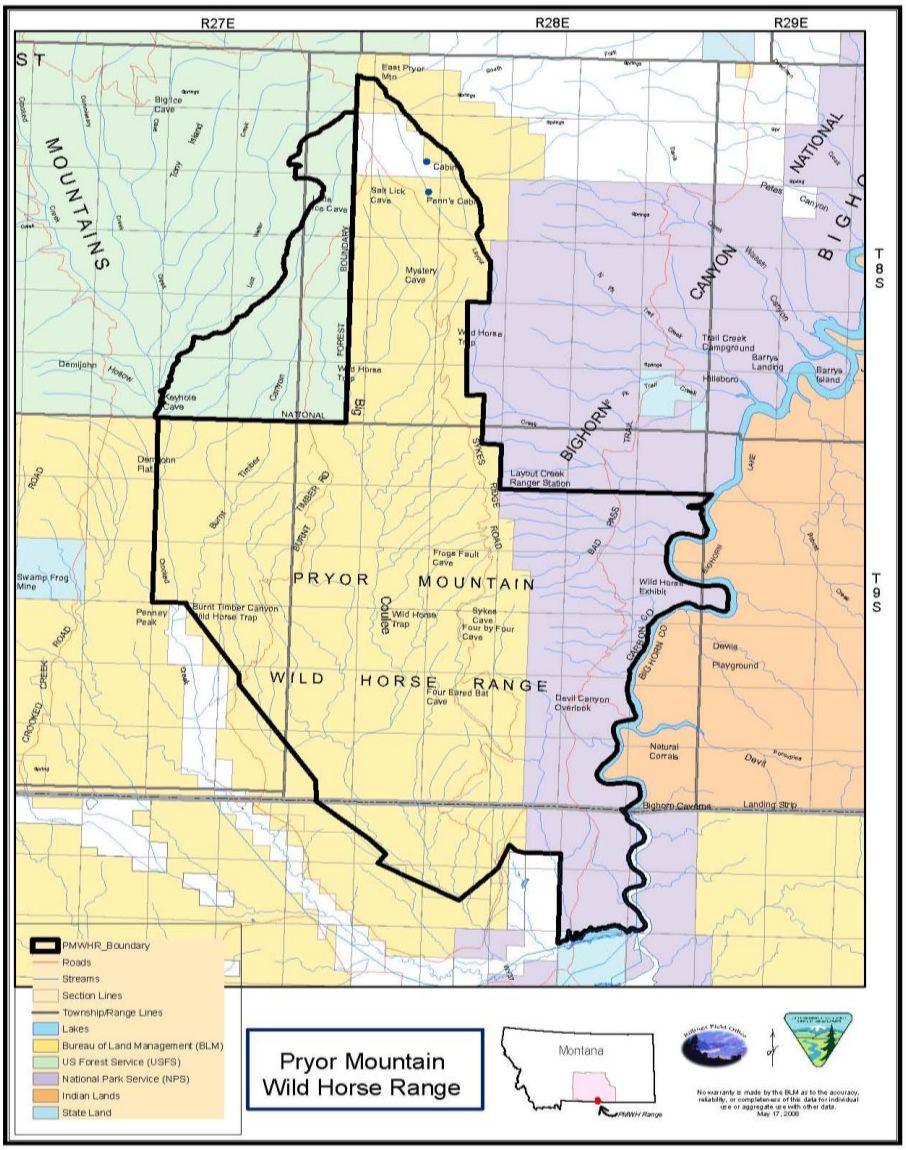
The Bureau of Land Management (BLM) Billings Field Office (BiFO) proposes to gather and remove excess wild horses that have potential for adoption from the Pryor Mountain Wild Horse Range (PMWHR) using bait/water/foot herding gather techniques. Even with the use of fertility control the BLM has measured heavy and severe utilization of vegetation forage species and has determined excess wild horses are present on the range. The use patterns of the wild horses within the PMWHR have been shifting for a majority of the population since the last gather and range degradation continues in the same areas.

The gather would begin in the summer of 2015 as soon as the EA and decision process is complete and environmental conditions allow. The Proposed Action and Alternative A are designed to help protect rangelands from deterioration from an overpopulation of wild horses and help maintain a thriving natural ecological balance and multiple-use relationships. The method of capture would be water/bait-trapping and limited herding using temporary traps of portable panels throughout selected sites within the PMWHR. After capture in the trap, excess wild horses would be sorted off from their band and transported to the Britton Springs administrative site where they would be prepared and offered for adoption or placed in training.

1.3 Location

The project area is located in southeastern Carbon County, Montana, and northern Big Horn County, Wyoming, in the PMWHR (see Map 1). The area is approximately 50 to 70 miles south of Billings, Montana, and 10 miles north of Lovell, Wyoming. Elevations range from 3,850 feet to 8,750 feet above sea level.

Map 1. Pryor Mountain Wild Horse Range



1.4 Purpose and Need

The purpose of the Proposed Action and Alternative A is to help meet the goals and objectives of the 2009 PMWHR HMAP by helping to maintain the wild horse AML. The HMAP states ""The population would be managed using a combination of population control techniques including gathers, fertility control, natural means or a combination of prescriptions." The action is needed because BLM has determined excess wild horses are present on the range. The current population of wild horses is approximately 170 animals. Concurrent inventory done during Fertility Control Zonastat-H treatments conducted since January of 2015 by the BLM and NPS personnel have monitored and classified wild horses present on the range (see Appendix 2). The BLM has measured heavy and severe utilization of vegetation forage species from wild horse grazing on primarily on the BLM lands upper elevations, mid slope and lower elevations of the PMWHR. The HMAP identified the AML at 90-120 wild horses as the carrying capacity in order to maintain ecological stability of the range, and protect the range from deterioration.

The Proposed Action and Alternative in this EA is needed to help maintain wild horse herd numbers at levels consistent with the AML, to make progress toward standards of rangeland health, and to achieve objectives and decisions authorized in the 2009 PMWHR EA and HMAP. The Proposed Action is needed to help maintain the population in a thriving natural ecological balance by maintaining wild horse population within the confines of their habitat because BLM has re-affirmed the AML. The need is also to analyze the impacts to wild horses and other resources and values associated with bait and or water trapping, or some herding.

Wild horse population recruitment under current management and fertility control treatments from 2011 through 2014 has been reduced from 17.5% to 8%. This equates to about 15-18 foals born annually with 12-15 surviving to 1 years of age. Implementation of fertility control has a minimum of one year lapse time until population results are realized. Current fertility control applications for 2015 are nearly completed. In 2015 15-18 foals are anticipated to be born. In 2016 15-18 foals are also anticipated due to the one year time lapse. The outcomes from the Fertility Control Decision signed March 18, 2015 would not be realized until 2017 at the soonest.

Decision to be made through EA: The BLM will decide whether or not to gather and remove excess wild horses or how to implement a gather(s) from the PMWHR in order to make progress towards maintaining the appropriate management level, achieve a thriving natural ecological balance, and make progress towards standards of rangeland health, through water and bait trapping with herding.

1.5 Relationship to Planning

The proposed population control is in conformance with the Billings Resource Management Plan Final EIS (1984) Record of Decision (ROD) objectives to manage for a balance between a healthy population of wild horses and improvements in range condition, wildlife habitat, and watershed condition.

The 2009 Pryor Mountain Wild Horse Range Environmental Assesment (MT-010-08-24) and Herd Management Area Plan and and Finding of No Significant Impact (FONSI) Decision

Record (May 2009) analyzed and documented the need to manage the wild horse population between 90-120 wild horses. The HMAP states " manage the herd within AML either through removals, fertility control, natural means, or a combination of methods." The Decision Record states: "The population will not be taken to the low range of AML when fertility control is utilized."

The proposed action is in conformance with the Wild Free-Roaming Horses and Burros Act of 1971 (PL 92-195 as amended) and with all applicable regulations at 43 CFR (Code of Federal Regulations) 4700, 36 CFR 222, and policies outlined by the BLM and USFS. The BLM is the lead agency for coordinating and implementing wild horse management in the Pryor Mountains.

The Wild Free-Roaming Horses and Burros Act of 1971 (Public Law 92-195) as amended, Section 1333 (b) (1), states that the Secretaries of the Interior and Agriculture shall "determine appropriate management levels of wild free-roaming horses and burros on areas of public lands; and determine whether appropriate management levels should be achieved by the removal or destruction of excess animals, or other options (such as sterilization or natural controls on population levels)." According to 43 CFR 4700.0-6, "Wild horses shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat." In addition, 36 CFR 222.21 states that wild horses within USFS territories be administered to "maintain a thriving ecological balance considering them an integral component of the multiple-use resources, and regulating their population and accompanying need for forage and habitat in correlation with uses recognized under the Multiple–Use Sustained Yield Act of 1960."

1.6 Scoping and Public Comment

A public scoping period was held from April 13 to April 24, 2015 "For Capturing and Removal of Excess Wild Horses in the Pryor Mountains." The public was asked to provide input that would help the BLM develop a proposed action and alternatives, further identify issues, potential environmental consequences, mitigation opportunities, monitoring or provide information, data, or analysis to be used in development of an EA. The scoping comments and information provided by the public were used to further develop the proposed action, alternatives and analysis and mitigation related to the potential effects of a wild horse gather. Issues identified during scoping that have not already been addressed in the 2009 PMWHR HMAP are discussed below.

A public comment period for the Preliminary EA was held from May 5th to June 5, 2015. The public was asked to provide comments in order to further revise the EA or FONSI as appropriate. No new issues were identified that weren't brought forward from the scoping process, though there have been some refinements to Issues Identified and Studied in Detail.

1.7 Issues Identified and Studied in Detail

BLMs Most Recent Genetic Analysis Conducted by Dr Gus Cothran

This analysis is based upon samples provided from removed horses in the summer of 2012. Dr. Cothran processes these samples for the BLM and it is BLM data and information. The horses removed during the 2012 gather were individuals from highly represented and interrelated bloodlines. Removal was based upon kinship or "bloodlines" as identified in the HMAP. Seven mare/foal pairs were sampled along with numerous siblings and half siblings. Only one mare and her foal from a rare line were removed in 2012 and that was due to health concerns. Although Dr. Cothran's report is very factual on the genetic analysis and BLM does not dispute Dr. Cothrans expertise as an equine geneticist the interpretation is lacking information about the herd demographics and kinship. The organization with the kinship expertise and information is the Pryor Mountain Wild Mustang Center which provided much advice on lineage. In contrast, the BLM believes the results let us know we did in fact remove the correct horses in 2012.

Removal in Conflict with Fertility Control

Implementation of fertility control has a minimum of one year lapse time until population results are realized. Currently, darting for 2015 is in essence complete. In 2015, 15-18 foals are anticipated to be born. In 2016 15-18 foals are also anticipated due to the one year time lapse. The outcomes of the Fertility Control Decision signed March 18, 2015 could not be realized until 2017 at the soonest. Even if 8% recruitment is continued until fertility control adjustments are realized, along with regular die-off by 2017 there could be 194 wild horses. This is a number of wild horses that cannot be sustained within the PMWHR. Even if a large die-off of older animals were to occur and fertility control is being applied, the population level over the next several years is not foreseeably sustainable.

Removal is not large enough to reach the AML/ Removal of Young Horses Bottleneck The population

The Billings Field Office received adequate funding for a gather operation with a removal of up to 30 wild horses. The identification of wild horses ages 1, 2 and 3 is due to the size of the cohort as well as the higher likely hood that younger animals would adjust to a domestic setting more readily. Removal of older horses would result in animals being offered for adoption that do not adjust to domestic setting. Horses over the age of 10 are subject to sale authority that BLM MT/DKs can sale no more than 4 animals at a time. This would also lead to the need to send horses to off range pastures, which has limited space. Even if 60% of the 1, 2, and 3 year old cohort were to be removed, post gather demographics of this cohort would be balanced with the other age classes from the 2012 gather in regards to numbers and sex ratios. The cohorts would potentially look similar in the future if fertility control is successful at balancing recruitment with death loss.

Smaller Removals over Multiple Years Based on Annual Demographics.

Many comments received had a component asking the BLM to conduct smaller more frequent gathers rather than larger removals every two to three years. Alternative A has been further developed to analyze this sort of an action incorporating information provided to BLM during the public comment period.

2.0 DESCRIPTION OF THE PROPOSED ACTION and ALTERNATIVES

This EA focuses on the Proposed Action, Alternative A, and a No Action alternative. There are no issues to resolve through other action alternatives since no unresolved issues have been identified. The No Action alternative is considered and analyzed to provide a baseline for comparison of the impacts from the Proposed Action and Alternative A.

2.1 Proposed Action

The BLM would capture numerous individual horses and bands; then, selectively remove up to 25 excess wild horses in accordance with the PMWHR HMAP, beginning in summer 2015. The proposed action would consist of removing excess animals targeting the 1-3 year old cohorts through a combination of bait and water trapping, along with some possible herding to move congregated animals away from or towards traps. The removal would be conducted to the most feasible extent with the removal considerations identified in the HMAP and to meet herd characteristics objectives. Page 27 of the HMAP states:

2. Herd Characteristics Objective
Manage the population for a phenotype reminiscent of a Colonial Spanish Type horse in order to prevent the loss "Spanish" characteristics.
Manage for a balanced sex ratio.
Manage for an age structure with the core breeding population primarily composed of 5-10 year old animals (bell curve).
Manage to maintain rare or unusual (for the Pryors) colors in order to prevent any one color becoming dominant or being eliminated.
Manage to prevent bloodlines from being eliminated while maintaining a core breeding population.

3. Selective Removal Considerations

Remove wild horses with the following considerations:

1. Horses not exhibiting phenotypic "Colonial Spanish Type" utilizing the Colonial Spanish Horse Type Matrix (Appendix X) which score 4 or 5

2. Horses that score 3 utilizing the Colonial Spanish Horse Type Matrix (Appendix X) which are genetically well represented on the range.

3. Animals under five years old which are genetically well represented on the range.

4. Animals between 11 and 15 years old which have contributed genetically and are not band Stallions.

5. Animals between 5-10 years old.

6. Animals 16 and over

7. No animals over 20

These cohorts of 1, 2, and 3 year olds were identified as the target age group for removal since they are young animals that would more readily adjust to a domestic setting, this age class of animals currently makes up nearly 30% of the current population.

Herd health and animal characteristics data would be collected as part of continued monitoring of the wild horse herd. Genetic samples would be taken from removed animals to continue monitoring of herd health and to track genetic variation through hair samples from the tail or mane consistent with current accepted policy and protocol.

Multiple trap sites would be used to capture the wild horses. The traps would consist of portable panel pens set up either at water sources or areas frequented by wild horses. Hay or other attractants (such as mineral or processed cubes i.e cake) would be used to lure horses to the area. Prior to any wild horses being captured, the trap or bait may be in place to accustom wild horses to their presence. When a band of horses or individuals enters the trap, the gate would be closed by BLM or other government personnel. Any animals not identified for removal would be released back onto the range. When an animal is captured and must be held for the day before being transported to Britton Springs, the animal(s) would be provided with feed and water at the trap site. Trap sites would most likely be placed at Sykes Spring, Bad Pass Seep, Near Krueger Pond, and with clearance from NPS, on Mustang Flat and Crooked Creek Bay. Other sites such as Cottonwood Spring may be used as necessary based upon flow and success of the operation in an adaptive management manner. Other areas would be used as opportunities allow such as Sykes Ridge road. Water sources such as guzzlers, springs may be temporarily closed to encourage horses to move to an area or other water source where they can be safely trapped. If animals show signs of water deprivation and don't move waters will be re-opened. Animals identified for removal would be sorted at the trap site and transported to Britton Springs Administrative Site and corrals with horse or stock trailers pulled behind trucks. Excess wild horses would be prepared for adoption at the Britton Springs Corrals. This would entail veterinarian examination and care, permanent freezemark placed on the left side of the neck, vaccinations, feed and care, and gelding. The animals would be offered for adoption at Britton Springs Corrals or sent to training and/or offered on the internet for pick-up at Britton Springs.

Appropriate site-specific clearance and review for cultural resources and species of concern would be conducted at each trap site prior to set up (if an area is not previously utilized or is

without developments on site). The trap sites would be located in previously disturbed areas. The areas would be monitored for noxious weeds over the next several years. All sites would be assessed for post gather reseeding. All capture and handling activities (including capture site selection) would be conducted in accordance with the standard operating procedures (SOPs) found in Appendix I.

2.2. Alternative A

This would consist of an annual incremental gather of excess wild horses by selectively removing wild horses in accordance with the PMWHR HMAP, beginning in summer 2015. The herd would be evaluated to determine which excess animals would be removed annually. The gather would begin in 2015 with 15-20 excess wild horses removed. The following years as the herd is monitored annually and classified (which is done concurrent with fertility treatments and typically completed by June) the death loss and recruitment would be compared. The out years after 2015 would concentrate on one year olds for excess animals to be removed. The excess animals removed would consist of any animals that weren't captured the previous year, one year olds that were born to young mare's ages 2, 3, 4 that are under fertility control, mares ages 10 and older that are under PZP treatments and have had two offspring and lastly yearlings from mares ages 5-9 that have at least two offspring. This would continue until recruitment and death loss balance and forage use objectives were being met. The primary window for gather operations would be summer, however as opportunities arise it could occur any time of year on a limited basis. All other actions in Alternative A would be the same as same as the proposed action except non-excess animals could be relocated to other areas of the range for genetic exchange.

2.3. No Action Alternative

The no action alternative is required by the National Environmental Policy Act (NEPA) to provide a baseline for impact analysis.

Under this alternative, a gather to remove excess wild horses would not occur this year and fertility control would continue. Collection of herd and range monitoring data would continue.

2.4 Alternative Considered but Eliminated From Further Analysis

2.4.1 No Removals and No Fertility Control

This is an alternative suggested by Friends of Animals. Under this alternative no population management would occur within the PMWHR. Wild Horses would be allowed to reproduce until a population crash controls their numbers. Under this alternative there would be no way to ensure any population outcome other than after the population crash occurs as new bottleneck is created for the remaining animals. Horses would be allowed to exhaust all resources, multiple use relationships would be ignored, and the public could observe horses in lower body conditon until a crash occurs and individuals perish.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the affected environment and analyzes impacts to the components of the human environment either affected or potentially affected by the Proposed Action, Alternative A and the No Action alternative.

The 2009 PMWHR EA and HMAP identified and analyzed the effects to the environment. For a complete description of the affected environment and environmental consequences, see pages 44-85 of the Pryor Mountain Wild Horse Range/Territory Environmental Assessment and Herd Management Area Plan May 2009.
http://www.blm.gov/mt/st/en/fo/billings_field_office/wildhorses/pryorherd.html
For this EA the impact analysis for the Proposed Action and Alternative A are designed to only analyze potential impacts associated with conducting or not conducting a gather(s).

3.1 Critical Elements of the Human Environment

Certain resources are protected by specific laws, regulations, or policies (e.g., Executive Orders). BLM refers to these resources as "Critical Elements of the Human Environment" and addresses them in all EAs. Those Critical Elements that are identified below as being present and potentially affected would be analyzed further in this chapter. The affected environment and environmental impacts are described for all resources, including Critical Elements, which are potentially affected by the proposed action.

Table 1 - Critical Elements

Determi-nation*	Resource	Rationale for Determination
NI	Air Quality	The proposed action would have no impact on these values.
PI	Areas of Critical Environmental Concern	The East Pryor Mountains were designated as an ACEC in March 1999 to conserve the area for wild horses, paleontological values, recreational use, and fish and wildlife habitat The proposed action should have no impact on these values.
PI	Cultural Resources	The proposed action could impact these resources; however, a cultural survey would be conducted on any trap sites not previously inventoried.
NP	Environmental Justice	The proposed action would have no effect on minority or economically disadvantaged people or populations.
NP	Farmlands (Prime or Unique)	There are no prime or unique farmlands within the area.
NP	Floodplains	There are no floodplains within the area.
PI	Invasive, Non-native Species	The proposed action has the potential to create soil disturbance allowing for establishment of invasive or noxious plants.
NP	Native American Religious Concerns	The proposed action would have no impact on these values.

Table 1 - Critical Elements		
Determi-nation*	**Resource**	**Rationale for Determination**
PI	Threatened, Endangered or Candidate Plant Species	Areas with these plants would be avoided or trap sites modified.
NP	Threatened, Endangered or Candidate Animal Species	The proposed action would have no impact on these values. The PMWHR is not within a sage grouse core area.
NP	Wastes (hazardous or solid)	There are no hazardous or solid wastes located within the planning area.
NP	Water Quality (drinking/ground)	The proposed action would have no effect on ground or drinking water.
NI	Wetlands/Riparian Zones	The proposed action would have no impact on these values as no trapping would occur within riparian areas.
NP	Wild and Scenic Rivers	There are no Wild and Scenic Rivers located within the project area.
PI	Wilderness	The BLM is prohibited from taking any actions within or adjacent to Wilderness Study Areas that would impair the wilderness characteristics or prevent an area from potentially being designated Wilderness. Actions could have minor, short-term impacts on wilderness attributes but the effects would not be irreversible or irretrievable.
* NP = not present in the area impacted by the proposed or alternative actions NI = present, but not affected to a degree that detailed analysis is required PI = present with potential for impact.		

3.2 Wild Horses

Affected Environment

The affected environment is described and incorporated by reference from the 2009 PMWHR EA and HMAP and the tiered Fertility Control EA of 2013 (Note: please see definition of "by reference" on page 4). In addition to the affected environment in the HMAP since 2009 the population of wild horses, has continued to increase. See Appendix II.

The current demographics of the herd are shown in Appendix III. This includes all ages, disposition and fertility control treatments. In addition the affected environment for Alternative A is the entire herd and any recruitment in the years following 2015.

Spanish Phenotype (as defined in HMAP) animals (over 3) are still on the range post 2012 gather, the Spanish characteristics are already retained in the herd. Table 2 for the proposed action and Table 3 for Alternative A are developed partially from specific recommendations provided to the BLM from the Pryor Mountain Wild Mustang Center, The Cloud Foundation, Alessandro Pitterman, Rachal Reeves, Sarah Griffin, and Abbie Branchflower through comments. Table 2 places these cohorts into tiers for better identification for removal considerations. Tier one is composed of wild horses whose removal would maintain the objectives for the herd primarily by balancing representation and

sex ratios. Tier two is composed of animals whose removal would also meet the objectives for the herd, but perhaps with other circumstances such as a tier one horse is not captured or if the dam of the identified horses would most likely have more opportunities to produce more foals due to her age and fertility control prescription. Tier two wild horses from young dams* would be priority in for removal. Tier one and two horses would be the focus for removal. Tier three is animals whose removal may make it more difficult to meet herd objectives in the future. Horses from three would only be removed if one and two tier horses are not located where they can be captured or cannot be captured in sufficient numbers after gather operations are approaching the end of the season or for health concerns.

Table 2

Tier 1	Tier2	Tier 3
201405 Oglala(m) has an older sister that should be kept on the range	201411 Okami(m) alternate to sibling Maelstrom is tier alternate.	201404 Oracle(f) only offspring of dam Hataali
201414 Olivia (f) preferred to remove based upon being a yearling her sister is a 3 year old	201413 Odakota (m) can be substituted for Naolin	201420-Okiotak no siblings
201417 Ojai(m) offspring of a very prolific mare Washakie	(201110) Oklahoma dam was identified for removal in 2012	201410 Outlaw lady (f) part of small bloodline
201402 Orlando(m) offspring of Greta siblings are females on the Dryhead	201307 Nirvana(f) alternate to her sister Olivia	201412 Oro(m) only offspring of dam.
201408 Ohanzee(m) higher priority than other siblings due to their color and sex.	201308 Naara (f) older brother McKeahnie higher priority.	201419 Orielle(f) only offspring potentially missing
201401 Orion(m) offspring of Waif a well-represented mare.	201311 Norma (f) offspring of Greta small line but lots of offspring.	201418 Oceana (f) only offspring no siblings
201407 Oak(m) good probability line bred from sire	201317 Nina(f) well represented but female on the Dryhead	201309 Niobrara (f) her brother Maelstrom is a higher priority Okami is alternate for Maelstrom
201403 Oregon(f) possibly line bred and from a well-represented line.	201306 Niyaha(f) has bloodline identified for retention on female line, sire line limited.	201301 Noble (m) rare color small bloodline
201304 Nye (f) has a hernia.	201313 Naolin(m) can be substituted for Odakota	201203 Nodin (m) small line
201302 Norte (f) well represented line.	201315 Nova(f) Only offspring of Kitalpha who was identified for removal in 2012.	201312 Nickle (m) only offspring of dam Fools Gold.

201316 Nahwa (m) Offspring of Wahsakie a well-represented line.	201206 Montana(m) brother Oak is a higher priority	201305 Nimbus (f) female of rare color
201212 Mckeahnie(m) has a priority for removal than his sibling Naara	201205 Moenkopi (m) sister Nye has hernia and is higher priority for removal	201203 Maia (f) only offspring of dam Hera
201208 Mesa(f) although offspring of Sapo and a small line she has other offspring on the range and mother is a non-responder to PZP	201207 Millicent (f) Offspring of Greta has numerous siblings lower priority	201217 Meriwether(m) small bloodline but not the last.
201210 Maelstrom(m) his siblings are higher priority for retention.	201211 Mica(m) alternate to Ohanzee from a well-represented line but he retains unique color	201202 Missoula (f) limited amount of mares on the Dryhead
	201201 Morgana(f) higher priority than sibling Oglala for retention.	201214 Malpais (m) only offspring of his dam
	201209 Miocene (m) Small bloodline	201225 Manuelita(f) only offspring of dam.
	201214 Mercuria(f) only offspring of Jewel but from a large bloodline and dam was identified for removal in2012	
	201213 Moorcraft(m) limited siblings both Brumby and Jackson have been successful horses.	

Environmental Impacts

Assumptions for analysis of the Proposed Action: This impact analysis for the proposed action assumes that a 100 percent capture rate would be attained for removal purposes. Only the impacts to wild horses from gathering are analyzed as all other population impacts have been analyzed in the 2009 HMAP and are incorporated by reference. This section only analyzes the impacts from conducting a bait/water and foot herding gather as the 2009 PMWHR EA and HMAP already disclosed the impacts of management utilizing a combination of methods including removals. Population modeling occurred within the HMAP and is incorporated by reference. The model shows the effects of managing for 90-120 wild horses within the 2009 HMAP won't cause a population "crash".

The proposed action would utilize herd characteristics objectives and the removal considerations from the 2009 HMAP (page 27) when removing individual animals to the most feasible extent possible. Animals within the ages 1-3 year olds would be the target population including any foals that may be with a mare in this age class. The current population is approximately 170.

Herd characteristic objectives have previously been analyzed in the 2009 HMAP and are incorporated by reference. The Standard Operating Procedures (Appendix I) for handling are incorporated as part of the Proposed Action and Alternative A.

Proposed Action – Under the proposed action, excess wild horses would be captured and removed from the PMWHR utilizing a combination of bait and water trapping. Herding (on foot or horseback) could be used in conjunction with the two techniques but not for actual capture off of horseback, rather for moving congregated animals away from trap sites, herding animals toward trap sites, or locating animals. Traps would be constructed of portable steel panels typically consisting of 15 to 25 twelve foot long by foot six foot high placed either around a water trough (water trapping) or in an area with regular wild horse use for bait trapping. The traps would be constructed in a manner that allows wild horses to initially move freely through them until they are accustomed to their presence. The traps could be designed either in the shape of a "key hole", the letter "Q", "P" or clover with a side pen to hold captured wild horses until ready for transport to Britton Springs Corrals for adoption preparation. The traps would also have an alley attached for loading captured excess wild horses onto horse/stock trailers and pulled behind appropriate motorized vehicles

Prior to capture, trap sites could be baited before panels are set up to allow for wild horses to become accustom to coming into an area for feed, salt or other attractant. Once the panels are set up, two sides would be left open to allow wild horses to walk through or not completely closed with one side open. When trapping occurs one side would be closed off and wild horses would only be allowed to enter one side. That side would have a panel or a gate that would be closed by personnel at the trap as a wild horse identified for removal enters, or a band with a member(s) in it identified for removal enters. Once captured the wild horse(s) identified as excess would be sorted from other wild horses and either immediately loaded in a horse/stock trailer and transported to Britton Springs, or sorted into the holding pen to await transport. Excess wild horses would be prepared for adoption at the Britton Springs Corrals. This would entail veterinarian examination and care, permanent freezemark placed on the left side of the neck, vaccinations, feed and care, and males gelded (excluding any foals). The animals would be offered for adoption to qualified applicants at Britton Springs Corrals or on the internet for pickup at Britton Springs a later time or placed into training for later adoption.

Water trapping would occur in the low elevation areas of the wild horse range. Water traps would be designed similar to a bait trap, except only one entrance would be in place with the initial panel setup. A water trap would leave a much wider opening initially to allow wild horses to enter and drink without creating a situation where the horses are unwilling to drink due to the presence of the panels. As the wild horses become more accustom to the panels the mouth or opening would be slowly closed until there is only a gate or one panel for an opening. Once an identified animal is inside the trap, the gate would be closed by personnel tending the trap. After capture, the impacts would be the same as described above for a bait trap. In order to concentrate wild horses in the low country and provide for better safety and faster capture the troughs at Cottonwood Spring, Little Sykes Springs, guzzlers, and portions of layout creek could be temporarily closed to wild horse use with panels to move animals to other water sources for capture. If water deprivation due to a lack of movement by wild horses to other waters is detected the waters would be re-opened

During the initial setup, game cameras would be placed on each trap to help monitor wild horse use and determine when to begin capture operations. The use of a saddle horse or horses to locate wild horses (especially in the low country) and/or herd wild horses away from bait sites would be a minimally used tool. Based upon past experience by BLM personnel through monitoring on horseback or herding animals back to the PMWHR, wild horses are responsive to a saddle horse but not agitated nor flighty. This tool would be utilized as needed.

Impacts to individual animals could occur as a result of stress associated with the gather, capture, processing, and transportation of animals. The intensity of these impacts would vary by individual and would be indicated by behaviors ranging from nervous agitation to physical distress. Sometimes hitting panels or trailers or interaction with other wild horses in a confined space can result in bruising scrapes or cuts. Mortality to individuals from this impact is infrequent but can occur. Serious injury (such as broken legs or neck) that requires euthanasia from these actions can occur but is rare. A wild horse hasn't died or been euthanized due to gather activities since 1994 on the PMWHR. Other impacts to individual wild horses include separation of members of individual bands and removal of animals from the population.

Population-wide impacts could occur during or immediately following implementation of the proposed action. Potential impacts include the displacement of bands during capture and the associated re-dispersal, modification of herd demographics (age and sex ratios), temporary separation of members of individual bands of horses, reestablishment of bands following release, bands moving to different waters and the removal of animals from the population. With the exception of changes to herd demographics (removed individuals), direct population-wide impacts would be temporary in nature with most, if not all, impacts disappearing with release.

Indirect impacts can occur to horses after the initial stress event and could include increased social displacement or increased conflict between studs. These impacts are known to occur intermittently during wild horse gather operations. Traumatic injuries could occur and typically involve biting and/or kicking bruises.

Less competition for forage and water resources would reduce stress and promote healthier animals. The proposed action would also allow for the continued collection of information on herd characteristics, determination of herd health through direct examination of animals, and collect genetic samples for monitoring of genetic variation. The action would make progress towards bringing the population close to the AML.

Assumptions for analysis of Alternative A: This impact analysis for Alternative A assumes a fertility control protocol is in place and applied annually. 100 percent capture rate would be attained for removal purposes. Only the impacts to wild horses from gathering are analyzed as all other population impacts have been analyzed in the 2009 HMAP and are incorporated by reference. This section only analyzes the impacts from conducting a bait/water and foot herding gather as the 2009 PMWHR EA and HMAP already disclosed the impacts of management utilizing a combination of methods including removals. Population modeling occurred within the HMAP and is incorporated by reference. The model shows the effects of managing for 90-120 wild horses within the 2009 HMAP won't cause a population "crash".

The Alternative A would utilize herd characteristics objectives and the removal considerations from the 2009 HMAP (page 27) when removing individual animals to the most feasible extent possible. Animals for removal are ages 1-3 in year one and concentrate on yearlings in the following years. The current population is approximately 170. Herd characteristic objectives have previously been analyzed in the 2009 HMAP and are incorporated by reference. The Standard Operating Procedures (Appendix I) for handling are incorporated as part of the Proposed Action and Alternative A.

Alternative A – This would consist of an annual incremental gather of excess wild horses selectively removing wild horses in accordance with the PMWHR HMAP, beginning in summer 2015. The herd would be evaluated to determine which excess animals would be removed annually. The gather would begin in 2015 with 15-20 excess wild horses removed. The following years as the herd is monitored annually and classified (which is done concurrent with fertility treatments and typically completed by June) the death loss and recruitment would be compared. The out years after 2015 would concentrate on one year olds for excess animals to be removed. The excess animals removed would consist of any animals that weren't captured the previous year, one year olds that were born to young mares ages 2, 3, 4 that are under fertility control, mares ages 10 and older that are under PZP treatments and have had two offspring and lastly yearlings from mares ages 5-9 that have at least two offspring. This would continue until recruitment and death loss balance out and forage use objectives were being met. The primary window for gather operations would be summer, however as opportunities arise it could occur any time of year on a limited basis. All other actions in Alternative A would be the same as same as the proposed action except non-excess animals could be relocated to other areas of the range for genetic exchange.

This alternative would be implemented in the following manner: In 2015 up to 20 excess wild horses would be removed see (table 2 above).

In the following years monitoring of the herd during fertility control treatments would continue. Removal of excess wild horses would be focused on yearlings born to mare's ages 2, 3 and 4 and 10 and older that are under fertility control and have had a foal outside of the 5-9 year old window. Further out any two year old that was not gathered as a yearling would also be available for removal. This age group would be the focus due to 5-9 years olds not being under fertility control treatment unless they meet a specific threshold as identified in Environmental Assessment DOI-BLM-MT-010-2015-006-EA which is incorporated by reference. This would entail 6-12 excess wild horses removed annually until recruitment and death loss balance and forage use objectives were being met. Removal operations could be suspended annually or resumed annually based upon the number of yearlings present in relation to recruitment and death loss balancing and forage use objectives being met.

No Action Alternative – Under the no action alternative, excess wild horses would not be removed from the PMWHR at this time. The animals would not be subject to the individual direct or indirect impacts as a result of a bait/water gather operation. The population would remain above the AML, though most likely growing at a lower rate if fertility control is occurring. However, even with fertility control the herd would be close to 200 wild horses by 2017. At a future date the population would require a helicopter gather as bait/water trapping

gather would be infeasible. This alternative alone would not protect the range from deterioration associated with overpopulation, and preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area. Adopting this alternative would most likely result in the need for a helicopter gather in the future which would result in a greater level of impacts to the wild horse population and individuals. The impacts to the horses themselves from the population expansion is more fighting and more injured wild horses as well as reduced body condition as forage resources are limited and have to be spread to more animals.

3.3 Rangeland Health, Vegetation, and Soils

Affected Environment

A description of the affected environment is described and incorporated by reference from the 2009 PMWHR HMAP. In addition to the affected environment described in the HMAP, heavy utilization is occurring in the upper elevations and lower elevations of the wild horse range. The HMAP objective for forage utilization is to not allow more than 45% use in order to maintain or increase the composition of cool season perennial grasses within the plant communities. Based upon monitoring data collected in 2012, 2013, 2014, 2015 the use objective was being met in the Dryhead, parts of the of the lower elevation areas, and has continued to be met in the mid-elevation areas until recently, but not met in the high elevation areas of the wild horse range due to over-utilization by wild horses. The use patterns of the wild horses have shifted as more time is being spent in the mid-slope areas due to guzzlers.

Monitoring data was collected in 2012, 2013, 2014, and 2015 using the key forage plant method. Key forage plant method, also known as Landscape Appearance method, was used for the range utilization monitoring collected since 2012 when the last gather occurred. This method is an ocular reconnaissance study designed to capture forage utilization levels. This method employs the use of range utilization cages to assist the observer's ability to determine what growth occurred in relation to exclusion of grazing. These cages help prevent observation bias that could occur from year to year variability in weather patterns that directly correlate to plant production and phenology. When using this method a random directional transect is run at a study site where a reading is taken at several points. At each point a classification rating is assigned from six classes and placed on the data sheet. After the data is collected the mid-point of each use class is multiplied by the frequency of points within that use class by forage species. All values are then summed and divided by the total number of points to equal the utilization level.

In order for objectives rangeland health to be realized use levels on forage species need to be at judicious levels. An objective in the HMAP (which is incorporated by reference) is to maintain a use level of no more than 45% in order to allow these species the opportunity to persist within the system. As species are used at heavy and severe levels annually they lose robustness providing less cover, exposing more soil, allowing less palatable species to dominate which leads to increase soil loss and forage loss over time. As this is occurring Rangeland Health objectives cannot be realized.

Objective of the HMAP to modify patterns is starting to be realized. Conversely, monitoring data is showing that 170 head of wild horses even with the use pattern shifts is too many to meet objectives. This monitoring data affirms the current population is too high and that the AML of 120 wild horses is still appropriate over the long term. Table 3 summarizes key forage plant range utilization data (post 2012 gather).

Table 3: Utilization Summary

Date Collected	Measured use	Location
9/19/2012	68%	Key Area C-19 Lone Pine
9/19/2012	80%	South Pens Meadow
9/19/2012	56%	South B.T. Pens Meadow
9/19/2012	66%	Area Q USFS
3/28//2013	Severe use	South Turkey Flat
3/28/2013	84%	Key Area C-20 Turkey Flat
3/28/2013	62%	Mid-Turkey Flat
5/23/2013	56%	Cheyenne Flat
5/23/2013	51%	Key Area C-18
9/2/2014	82%	South B.T. Pens
9/2/2014	48%	Area Q F.S.
9/2/2014	58%	Key Area C-19 Lone Pine
9/2/2014	76%	South Pens Meadow
9/24/2014	42%	Key Area C-21 Sykes Ridge
9/24/2014	Slight Use	Four Ear Bat cave
9/24/2014	28%	Mine guzzler
9/24/2014	Slight use	Key Area C-18
9/24/2014	41%	Cheyenne Flat
9/24/2014	No use	Cheyenne USFS
4/17/2015	68%	South Turkey Flat
4/17/2015	52%	Mid-Turkey Flat
4/17/2015	84%	Key Area C-20 Turkey Flat
4/21/2015	30%	East Mustang Flat
4/21/2015	22%	Key Area C-23 Mustang Flat
4/23/2015	60%	Four Ear bat Cave
4/23/2015	64%	Key Area C-21 Sykes Ridge
4/24/2015	70%	Mine guzzler
4/28/2015	49%	Key Area C-18

Environmental Impacts

Proposed Action – Removing excess wild horses to help make progress towards the AML would help bring the population in balance with multiple-use relationships in order to help achieve a thriving natural ecological balance. It would reduce stress on vegetation communities and be in compliance with the Wild Free-Roaming Horses and Burros Act, Standards for Rangeland Health, and land use plan management objectives. Rangeland health and vegetative resources would stabilize with the reduced population. Vegetative species would experience a smaller area of over-utilization by wild horses, which would lead to healthier, more vigorous forage plants and plant communities. This would result in an increase in forage availability, vegetation density,

vigor, productivity, cover, and plant reproduction. Plant communities would become more resilient to disturbances such as wildfire, drought, and grazing.
Overall, soil conditions would improve if wild horse numbers were reduced on a landscape level. Less compaction would occur in riparian areas where the soils are most susceptible. Compression impacts to biological soil crusts from horses would be lessened over the area, and crust cover on the highly calcareous soils would increase. Following wild horse removal, increased vegetative and biological soil crust cover would reduce wind and water erosion.

Impacts to vegetation and soils with implementation of the proposed action would include disturbance of native vegetation immediately in and around temporary trap sites. Impacts would be by vehicle traffic and the hoof action of penned horses and would be locally severe in the immediate vicinity of the corrals or holding facilities. Generally, the activity sites would be small (less than one-half acre) in size. Soil compaction, localized wind erosion, and destruction of biological soil crusts, where present, would occur at the trap sites. Since most trap sites and holding facilities would be re-used during recurring wild horse gather operations, any impacts would remain site-specific and isolated in nature. In addition, most trap sites would be selected to enable easy access by transportation vehicles and logistical support equipment and would generally be adjacent to or on roads, pullouts, water developments, or other flat spots that were previously disturbed. Vehicles used in the horse gather would also cause soil compaction and increased erosion in a small area. By adhering to the SOPs (Appendix II), adverse impacts to soils would be minimized.

Alternative A –The impacts under this alternative would be similar to the proposed action, except impacts for a shorter duration, over multiple years would occur as gather operations are repeated. The area impacted around each trap site most likely would be a larger area as it would be used annually. As the population is reduced annually there would be more opportunities to adjust as based upon horse demographics and use patterns.

No Action Alternative – Under the no action alternative, wild horse population would grow 8% in 2015 and 2016. By 2017 the population would be near 200 wild horses. Concentrated wild horse use in parts of the PMWHR would adversely impact soils and vegetation health. With a shift in use patterns, areas in the mid-slope that have not had heavy use would now have heavy use annually. As native plant health deteriorates and plants are lost, soil erosion would increase. Continued heavy forage utilization by wild horses, at the lowest and highest elevation areas would cause further compaction, reduced infiltration, increased runoff and erosion, and loss of biological soil crusts. Compaction caused impacts would be greatest on moist soils and soils with few surface coarse fragments. The greatest disturbance impacts to crusts would occur when the soils are dry and on highly calcareous sites. The shallow soils typical of this region cannot tolerate much loss without losing productivity and reducing the ability to be re-vegetated with native plants. Invasive, non-native plant species would increase and invade new areas following increased soil disturbance and reduced native plant vigor and abundance. Wild horses likely transport weed propagules, and this transport would increase as horse numbers increase. This would lead to both a shift in plant composition towards weedy or invasive species and an irreplaceable loss of topsoil and productivity due to erosion. With the no action alternative, the severe localized trampling associated with trap sites would not occur, but this alternative would not make progress towards achieving and maintaining a thriving natural ecological balance.

3.4 Noxious and Invasive Plants

Affected Environment

Noxious weeds known to exist within the area are Spotted knapweed along the Burnt Timber road and tamarisk (salt cedar) along low elevation coulees and riparian zones.

Invasive plants include Russian olive, tamarisk cheatgrass, mustards, and halogeton. These plants occur primarily in the low elevation areas and in isolated occurrences within the mid-slope areas.

Environmental Impacts

Proposed Action – The proposed gather could promote the spread of existing noxious or invasive weed species. This could occur if vehicles drive through infestations and spread seed into previously weed-free areas. Certified weed-free hay would be used for bait-trapping and feeding captured horses. If noxious weeds are found, the facilities would be moved to another location. Any off-road equipment exposed to weed infestations would be cleaned before moving into weed-free areas. All trap sites, or other areas used for support of the gather on public lands would be monitored for weeds during the next several years.

Alternative A –The impacts from this alternative would be similar to the proposed action.

No Action Alternative – Under this alternative, the wild horse gather would not take place. The likelihood of noxious weeds being spread by gather operations would not exist. However, continued overgrazing of the present plant communities could lead to an expansion of noxious weeds and invasive non-native species due to an excessive population of wild horses on the PMWHR.

3.5 Wildlife, Including Migratory Birds

Affected Environment

The primary big game species found in the PMWHR are mule deer, Rocky Mountain bighorn sheep, elk, and black bear. Mule deer are the most abundant of these species and most widely distributed. The sagebrush, juniper/mountain mahogany belt at lower elevations in the southern foothills is considered crucial mule deer winter range. The bighorn sheep population declined during the mid-1990's from a peak of about 211 animals to ~100 animals at present. (Wockner et al. 2004). According to BLM and Montana Fish, Wildlife, and Parks observations, elk do not utilize the area on a regular basis. The elk primarily utilize the national forest to the west and north, but have occasionally been observed in the spring and summer on the meadows on the north end of PMWHR. Black bear are abundant in the north central portions of PMWHR where the terrain is rugged and forested. Mountain lions have also been observed on the PMWHR. The gray wolf has been reported in the area north of the PMWHR.

The Pryor Mountains support the most diverse bat fauna in Montana. Ten bat species have been documented and the potential exists for the presence of additional species (Hendricks, P., C. Currier and J. Carlson, 2004), (Bats of the Billings Field Office in south-central Montana, with Emphasis on the Pryor Mountains), and (Montana Natural Heritage Program, Helena, MT 19 pp. and appendices.)

Upland game birds include blue grouse, greater sage-grouse, and ring-necked pheasant. Blue grouse occur in the timbered portions of the PMWHR. Greater sage-grouse may occur in the southern and eastern part of the PMWHR. There are no greater sage-grouse lek (display/ breeding) sites documented on PMWHR from BLM and Montana Fish, Wildlife, and Parks inventories. Pheasants occur in the southern area near cultivated fields. None of these species are considered abundant.

Neotropical migratory bird use is heaviest during spring and summer months. Nesting usually occurs in late May, June, and early July, depending on elevation.

Environmental Impacts

Proposed Action – Individual animals of all species could be disturbed or displaced during gather operations, especially using water traps. Small mammals, birds, and reptiles would be displaced at trap sites, but this would only be for short windows of time. No impact to animal populations exists as a result of gather operations, as waters would be closed in a manner that allows wildlife access.

Removing excess wild horses from the PMWHR would result in reduced competition between wild horses and wildlife, especially large mammals, for available forage, cover, and water resources. Managing wild horses at the AML would result in improved habitat conditions for all species of wildlife by increasing herbaceous vegetative cover in the uplands and improving vegetation and water quality. During water trapping operations, the presence of activity and new temporary features, such as panels, could make wildlife wary and not come to water. This could lead to wildlife stress.

Alternative A – Under this alternative the impacts would be similar to the proposed action. Additional stress could occur as gather operations would be extended.

No Action Alternative – Individual animals would not be disturbed or displaced under the no action alternative. Competition between terrestrial big game wildlife and wild horses for forage is minimal. Competition at water resources would remain the same as wild horses exceed the AML. Wild horses are aggressive around water sources and some wildlife may not be able to compete. Wildlife habitat for non-terrestrial big-game would deteriorate as wild horse numbers above AML reduce herbaceous vegetative cover. This could result in lower nesting success for ground nesting migratory birds and blue grouse.

3.6 Special Status Plant and Animal Species (federally listed, proposed, or candidate threatened or endangered species; State listed species; and BLM sensitive species)

Affected Environment

Timbered areas within the national forest boundary in the Pryor Mountains are designated as unoccupied Canada lynx habitat. The proposed gather does not include any designated or proposed lynx critical habitat. There are no known threatened and endangered (T&E) species or their habitat in the Pryor Mountains. Recently, the peregrine falcon has been delisted from the T&E species status.

Several BLM and Montana state sensitive species occur in the area. These include the peregrine falcon, a possible gray wolf occurrence, Yellowstone cutthroat trout in Crooked Creek, spotted bat (*Euderma maculatum*), pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Plecotus townsendi*). USFS sensitive species include long-eared myotis (*Myotis erotis*) and Baird's sparrow (*Ammondromus bairdii*).
Fifteen special status species plants occur in the PMWHR.

This list of plants has not changed since the PMWHR HMAP and is incorporated by reference. All are categorized as Bureau Sensitive Species and one species as both BLM and USFS sensitive (*Shoshonea*). There are no known or suspected federally listed plant species in the wild horse range.

Environmental Impacts

Proposed Action – Trap sites and holding corrals would not be located where sensitive plant and animal species are known to occur. There would be no impact to populations of special status species as a result of gather operations.

Removing excess wild horses from the PMWHR and managing wild horses closer to the AML, less than the current population would result in improved habitat conditions for all special status animal species by increasing herbaceous vegetative cover in the uplands and improving riparian vegetation and water quality in springs and seeps.

Alternative A – Same as the Proposed Action.

No Action Alternative – Individual animals would not be disturbed or displaced because gather operations would not occur under the no action alternative. Habitat conditions for all special status animal species would continue to deteriorate as wild horse numbers above the AML reduce herbaceous vegetative cover.

3.7 Wilderness

Affected Environment

Three BLM areas and one NPS area partially within the wild horse range were recommended for wilderness in August 1991 and December 1981. The recommendations followed a wilderness study process that considered resource values, present and projected future uses, public input, manageability as wilderness, environmental consequences of designating or not designating the areas as wilderness, and mineral surveys. As a result, the following wilderness study areas (WSAs) continue to be managed so as not to impair the wilderness values identified in the study: Burnt Timber Canyon WSA, Pryor Mountain WSA, Big Horn Tack-On WSA, and Bighorn Canyon National Recreation Area WSA. WSA designation automatically defaults to a Class I visual resource management (VRM) classification. Class I VRM does not allow for management actions that would impair the viewshed.

There are 3,430 acres within the Burnt Timber Canyon WSA recommended as suitable for wilderness designation. The WSA is bounded by USFS lands on the north, and it adjoins the USFS 9,520-acre Lost Water Canyon WSA. The area encompasses an extremely rugged and isolated portion of Crooked Creek Canyon, which has remained relatively free of modern human influences. The WSA is predominantly natural and offers outstanding opportunities for solitude and primitive recreation.

Burnt Timber Canyon WSA exhibits unique outstanding geologic and scenic values. The major canyon and rugged side canyons cut through several hundred feet to the Pryor Mountain limestone strata. These deep canyons contain numerous caves, rock overhangs, and natural alcoves that provide opportunities for exploration.

Canyon bottoms are deep and profusely vegetated. They are difficult to traverse but offer outstanding opportunities for solitude and isolation. The ridges and canyon rims are open and sparsely vegetated. These ridge tops constitute about 10 percent of the total WSA area. The ruggedness of the area provides a real challenge to the foot traveler. Dense canyon-bottom vegetation, steep talus slopes, and steep canyon walls make foot traffic difficult. The WSA has outstanding opportunities for photography, rock climbing, nature study, backpacking, spelunking, and hiking.

The major drainage, Crooked Creek, supports a genetically pure strain of native cutthroat trout. The creek is not considered an outstanding fishery because the trout are small, and dense brush restricts ready stream access; however, the native trout species have a very high intrinsic value. The BLM installed a fish barrier in the upper reaches of Crooked Creek in the summer of 2007 to protect this species.

All but 430 acres of the Burnt Timber WSA lies within the Pryor Mountain Wild Horse Range (PMWHR). The WSA also is inhabited by bighorn sheep, mule deer and black bear, though big game hunting is quite restricted by topography and dense vegetation.

A portion of the Burnt Timber WSA, the Demi-John Flat Archeological District, is noted for its numerous stone rings and rock cairn alignments, the Tillet Fossil Area/Crooked Creek Natural Area, has been evaluated as having outstanding interpretive potential and picturesque geologic formations created by the Crooked Creek drainage.

The rough broken topography precludes most uses, and timber harvesting is not allowed in land-use plan decisions. The decision to protect timber in the WSA is primarily due to topography and limited production. The WSA is rated for having low potential for mineral development, and is rated low to moderate for energy resource potential. No development is projected due to low potential and other resource considerations.

The Pryor Mountain WSA (12,575 acres) includes 4,352 acres in Wyoming. This WSA contains some of the most rugged, isolated portions of the Pryor Mountain Range. The wide expanses and topographic screening in this area offer outstanding wilderness values. This unit is in the heart of the PMWHR, and the supplemental attribute of the free-roaming wild horse herd enhances the wilderness characteristics of the area. Human activity is well-distributed throughout the WSA. Vegetation and topographic screening significantly limit any detraction from the WSA's extensive natural setting. Cottonwood Spring is located within this WSA, trapping is unlikely to occur there.

Topographic features are rough, broken, highly varied, and provide excellent opportunities for isolation and solitude. Elevation changes rapidly within the Pryor Mountain WSA, dropping from 8,400 to 3,800 feet in less than 13 miles. The southern aspect provides a vast panorama. Opportunities for nature photography, rock climbing, hiking, backpacking, nature study, and viewing a variety of multi-colored erosional geologic features are outstanding. The WSA contains a wide spectrum of geologic and biotic features, ranging from elements typical of desert environments to those found only in sub-alpine mountainous settings.

Conflicts with other resource uses in the Pryor Mountain WSA are minimal. Topography severely limits any potential cross country vehicle travel. Commercial timber harvesting in the WSA is not allowed. No livestock use is authorized in the WSA, nor any oil and gas leases. The development potential for petroleum resources is rated low to moderate.

The Big Horn Tack-On WSA and Bighorn Canyon National Recreation Management Area WSA is a narrow strip of land averaging nine miles in length and less than one to two miles in width. It is located between the Sykes Ridge Road on the west and the Bighorn Canyon National Recreation Area power line access road to the east. On BLM land, the area is 2,470 acres with an additional 353 acres in Wyoming. In the BCNRA, the area is 8,101 acres; less than half of that is within the PMWHR.

This WSA is primarily in a natural state with a few dispersed, but fairly well-screened, human intrusions. These consist of uranium exploration pits, a wild horse trap in the northern portion along the west boundary road, vehicle ways, one in the north and one in the south, and the power line on the southeast.

Environmental Impacts

Proposed Action – Temporary impacts to opportunities for solitude could occur during gather operations due to the possible noise of increased vehicle traffic and activity around the WSAs. Those impacts would cease when the gather was completed. No surface impacts within wilderness are anticipated to occur during the gather since all trap sites and holding facilities would be placed outside WSAs, except possibly Cottonwood Spring. Access to Cottonwood Spring would be along Big Coulee. Vehicles would not drive outside the active wash for access and gather operations. The trap would be made with portable panels adjacent to the old corrals and riparian exclosure at the water trough. No new surface disturbance or permanent features would occur as the area has an active erosion cycle down the coulee. Repeated traffic from Big Coulee to Cottonwood Spring could impact a visitor's experience of solitude during gather operations.

Alternative A – Under this alternative, operations would occur within the WSA at cottonwood spring eventually.

No Action Alternative – No impacts would occur to wilderness due to gather operations; however, impacts to wilderness values of naturalness could be threatened through the continued population growth of wild horses. These impacts would result in long-term degradation to the natural environment. To some, the sight of heavy horse trails, trampled vegetation, and areas of high erosion detract from the wilderness experience.

3.8 Cultural Resources/Paleontological Resources

Affected Environment

The Pryor Mountains contain a rich prehistoric and historic archaeological record. The prehistoric archaeological types of sites located in the Pryor Mountains include, but are not limited to: quarry sites, rock art sites, rock shelter/cave sites, vision quest sites, lithic scatters, rock cairns/rock alignments, tipi rings, drive sites, wooden structure habitation sites, occupation sites, and hunting related sites. The historic archaeological types of sites located in the Pryor Mountains include, but are not limited to: rail lines, lime kilns, ranching-related sites, wooden structure habitation sites (cabins), historic trails, horse traps, homesteads, etc. Traditional cultural properties (TCP) are found throughout the area. The Dryhead Overlook and Sykes Ridge are the primary areas for TCP within the affected environment. These areas have been used for generations by Crow tribal members for traditional uses, ceremonies, and vision quest sites.

Direct impacts that could occur where wild horses concentrate include trampling, chiseling, and churning of site soils, cultural features, and artifacts; artifact breakage; and impacts from standing, leaning, and rubbing against above-ground features, structures, and rock art. Indirect impacts could include soil erosion, gullying, and increased potential for unlawful collection and vandalism. In areas where cultural site presence coincides with areas of wild horse concentration, continued grazing could contribute to substantial ground disturbance and cause cumulative, long-term, irreversible adverse effects to historic properties.

Environmental Impacts

Proposed Action – No impacts to cultural/paleontological resources would be anticipated to occur from gather operations since all trap sites and holding facilities would be inventoried to Class III intensive inventory standards for cultural resources prior to setup. Trap sites and holding facilities would be located on previously disturbed areas. If cultural resources are encountered at proposed trap sites or holding facilities, those locations would not be utilized unless it could be modified to avoid impacts to cultural resources. Once the gather is completed, reduced horse numbers would result in less hoof action around riparian spring areas where cultural resources tend to occur in higher frequency. This could lead to decreased damage to cultural resources by wild horses.

Alternative A – Same as the proposed action.

No Action Alternative – Under this alternative, the wild horse gather would not take place and therefore, no trap sites or holding facilities would be constructed. There would be no possibility that cultural resources would be damaged as a result of horse gather operations; however, higher numbers of wild horses above the AML could cause damage to cultural resources due to trampling, especially around water sources where the occurrence of cultural resources can often be high.

3.9 Recreation

Affected Environment

Recreation-related visitation has been increasing in the Pryor Mountains over the last several years and that trend is expected to continue. The area is composed of USFS, BLM, and NPS lands. Visitor logs at Penn's Cabin, located on the top of East Pryor Mountain, indicate an increase in visitor use, especially in the past five years. The logs also show an increase in both foreign and domestic visitors.

Recreation opportunities are primarily wild horse viewing during the warmer months of the year, especially during foaling season. Other opportunities include, but are not limited to, bear, deer and small game hunting, hiking, and snowmobiling. Motorized use is limited to designated roads. The area is largely managed for dispersed recreation. Hiking opportunities in the Pryor Mountains are excellent. However, there are no maintained trails for hiking or off-highway vehicle use. Other uses include camping, horseback riding, photography, sightseeing and wildlife viewing. There are several caves, some of which are large enough to explore. Special recreation permits are becoming more prevalent as more people wish to pay for the opportunity to participate in guided or organized activities on public lands. Wild horse photography tours, viewing tours, and cattle drives are the primary recreation-permitted activities. These activities provide a gateway for future visitation by an ever growing segment of the public.

Environmental Impacts

Proposed Action - Opportunities to view and photograph wild horses would be slightly diminished because excess wild horses would be removed from the range. Opportunities from

other recreation activities would be expected to be unchanged. Gather operations should be completed prior to the rifle hunting season, thus eliminating any potential conflicts with sportsmen. However, if operations are not complete, there would be minimal disruption of hunting activities since most trapping would occur in areas with more human use and activity.

Alternative A – Impacts are the same as the proposed action.

No Action - There would be no impacts to recreational wild horse observation under this alternative. However, the view-shed may become diminished over time as vegetative and riparian areas became more degraded from excess wild horse use.

3.10 Social Values and Economic Considerations

Affected Environment

A social value for the resource (outside of other resources analyzed above) within the PMWHR could include viewing wild horses, wildlife, or other features of the landscape. This type of value, also known as a non-use value, cannot necessarily be quantified, but rather a recognition of these social values. This value could include the idea that something is still out there or how the thought of something makes a group or an individual feel including what is ethical. Conversely the value that wild horses should be subservient to other resources such as wilderness and wildlife is not quantifiable but also apparent from comments received.

The economic costs associated with the management of the PMWHR are limited to the area and the wild horses themselves.

Proposed Action and Alternative A – Under these action alternatives, people's social values or ideas would be heightened should they consider that a value for wild horses that they cannot overgraze, do not have impacts to rangelands, or will suffer emotional distress from gather operations. People may feel that their values or system of beliefs are being challenged, as opposed to an action that is designed to manage a herd of wild horses and resources within the PMWHR. Conversely, the social value people hold for multiple-use on public lands may be re-affirmed with these actions.

No direct economic impact would exist to individuals since wild horses cannot be used for commercial purposes, and wild horses would continue to be present after a gather operation. However, costs associated with a gather would include public consultation, environmental assessments, potential legal challenges, gather operations themselves, subsequent feed and care of excess animals, and an adoption event.

No Action – Under the no action alternative, fertility control Zonastat-H would continue to be applied to 70-80% of the mares or possibly up to 90%. The value of a non-gather means for population control would be affirmed in the near future Parties that would litigate against the use of fertility control have a different value for its use, as the no action is not a purely hands off management approach.

The costs associated with this alternative include the continued use of PZP, along with extra monitoring and a subsequently larger gather in the future. The costs of gather operations themselves, subsequent feed and care of excess animals, and adoption events would be more expensive in the future when a greater amount of excess wild horses would exist.

4.0 CUMULATIVE IMPACTS

The cumulative impacts of implementing the 2009 PMWHR EA and HMAP and subsequent FONSI and DR, along with the Tiered 2015 Fertility Control EA have been analyzed and are incorporated by reference. Therefore, only the cumulative impacts from a non-helicopter gather are discussed.

Cumulative impacts are impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The cumulative analysis should be focused on those issues and resource values identified during scoping that are of major importance. Accordingly, the issues of major importance that are analyzed are maintaining rangeland health and proper management of wild horses within the established boundaries of the PMWHR.

Past, present, and reasonably foreseeable activities that may contribute to the cumulative impacts of implementing the proposed action or alternatives would include past, present and future wild horse selective removals, fertility control treatments, natural mortality including variable predation, disturbance due to recreation and hunting, and increased or decreased size and quality of rangeland available for wild horse use. BLM would identify these impacts as they occur and mitigate them as needed on a project specific basis to maintain a thriving natural ecological balance and maintain acceptable levels of herd health. The Proposed Action and Alternative A would contribute to the cumulative impacts of future actions by helping to maintain the wild horse population closer to the AML. Monitoring and management actions would establish a process whereby biological and/or genetic issues would be identified and resolved over time. Careful selection of excess wild horses would continue to conserve the genetic health of the herd.

The cumulative impacts of the Proposed Action and Alternative A, including foal production and herd size and future growth is discussed in the 2009 EA and HMAP and incorporated by reference. In addition, the Proposed Action and Alternative A has been evaluated for cumulative impacts to the demographics (size, age structure, sex ratio) of the herd over time using WinEquus. Parameters and output for these population modeling runs are in the 2009 HMAP. Modeling efforts forecast that the cumulative impacts for the Proposed Action and Alternative A would not be expected to reduce herd growth rates below a sustainable level under conditions of average natural mortality. In addition, the average adult herd size would not fall below the existing AML of 120 adult horses, an important consideration in terms of maintaining genetic diversity within the Pryor herd. Additionally, according to Eggert et al.2010 “the higher the Ne/N ratio for the inbreeding effective size may indicate an avoidance of inbreeding.”

Due to the relatively long time between generation (~10 years) and the long reproductive life-span of individual horses, the loss of genetic material from the herd is relatively slow and able to be monitored and mitigated by management. There would be minimal impact to herd genetic diversity by restricting first time births to later in a mare's life and reducing the lifetime contribution of older mares. Given the current levels of genetic diversity in the Pryor horses, the future application of fertility control in combination with small-scale removals to reduce herd size, would not result in damaging cumulative genetic impacts. According to Cothran 2010 "Genetic similiarity results suggest a herd with mixed ancestory that includes Spanish blood." The mix of breeds and historically introduced horses is directly responsible for the high level of genetic variation. Cothran in 2013 reitered the ancenstory from the 2010 report.

5.0 MITIGATION AND SUGGESTED MONITORING

Proven mitigation and monitoring are incorporated into the Proposed Action and Alternative A and also through standard operating procedures (SOP), which have been developed over time. These SOPs (Appendix I) represent the best methods for reducing impacts associated with this type of gathering. Monitoring for invasive and/or noxious plants post gather, and re-seeding gather sites where appropriate.

6.0 CONSULTATION AND COORDINATION

On April 10, 2015, the BLM issued a Scoping Notice "For Capturing and Removal of Wild Horses in the Pryor Mountains." The BLM asked the public to provide input that would assist in the development of a proposed action and alternatives, further identify issues, potential environmental consequences, mitigation opportunities, monitoring or provide information, data, or analysis to be used in development of an EA.

On May 6, 2015 BLM issued a Preliminary Environmental Assessment for a 30 day public comment. The preliminary EA had two action alternatives developed from the public scoping process.

A hearing for the use of motorized equipment (trucks and trailers) for the management of wild horses would be held prior to any gather operations.

6.1 RESPONSE TO COMMENTS

The majority of letters received are from people using a sample letter or talking points provided from internet sites and thus are considered one comment. Individual comments that are similar in nature and received from several parties are summarized and responded to in that manner. Comments regarding National policies, horse slaughter, changing the AML, expansion of the PMWHR, predator protection, allowing population crash, fence removal, livestock grazing, reserve design, ending fertility control are not addressed as they are outside the scope of analysis of this EA. Comments in support of removal are also not individually addressed.

Six parties; the Pryor Mountain Wild Mustang Center, The Cloud Foundation, Alessandro Pitterman, Rachal Reeves, Sarah Griffin, and Abbie Branchflower provided specific information,

recommendations and analysis regarding individual animals, bloodlines, representations, using a tier system, and potential disposition. This information has been incorporated into the Proposed Action and Alternative A. Other comments from these parties that are in addition to the above are addressed individually.

Comment 1: Strongly Encourage BLM to adopt Alternative A, which calls for small, incremental removals as opposed to one large removal. Ask that a time limit of three years be placed on these small removals then assess whether further removals are needed based on the new PZP protocols as well as unpredictable limiting factors (i.e. weather/predation). Remove no more than 6-10 young animals in any one year, so all the horses removed will have the opportunity to find good homes and the fragile genetics of this unique Spanish herd are not placed in jeopardy. Do not eliminate the yearlings from the removal protocol. Yearlings are traditionally the most easily adopted, and adapt more readily to a domestic setting. Spreading the limited removals over mainly the yearling and two-year old quadrants will ensure that no unique animals will be removed and that the horses will be more likely to find homes and successfully adapt to a domestic life. Remove as few three year-old as possible. Many three year-old fillies are settling in to life with their new bands and most three year-old males have become bachelor stallions, honing the skills they will need to one day win a mare. Because of this and their age, three year-olds typically require more time and expertise to gentle and train than most yearlings and two year-olds. Do not remove any young horse that threatens the loss of a genetic line. Do not remove any young horse that threatens the loss of a color. Encore is a low priority based on her sex and color. Mato Ska is the only blaze-faced roan that has ever been born on the Pryor Mountains to our knowledge. Palominos, Blue Roans and Buckskins are rare colors that must be preserved. *The Cloud Foundation, American Wild Horse Preservation Campaign, Numerous commenters including Julianne French.*

Response: Alternative A has been further developed based upon numerous comments including this one. Further identification of removal is being incorporated into the Proposed Action and Alternative A.

Comment 2: BLM Must Provide Current Data on Rangeland Health; BLM has not provided any support for its contention that rangeland health has deteriorated; BLM has not analyzed the observed effects of utilization on rangeland health. *Front Range Equine Rescue*

Response: The BLM provided a summary of annual forage utilization studies since the last gather. Managing for the proper use factor or utilization level as identified in the HMAP which is 45% and incorporated by reference lets the BLM know if objectives are being met or not met that were developed based upon meeting rangeland health. The BLM disagrees that the observed utilization is not tied to rangeland health.

Comment 3: The Preliminary EA must provide support for BLMs determination that 25 wild horses are "excess". Exceeding AML does not automatically trigger a duty to remove wild horses….BLM cannot solely rely on an absolute number of horses as a basis for gathering and removal. *Front Range Equine Rescue*

Response: Discussion regarding objectives being met when the population was closer to AML was included in section 1.2 Management Situation. BLM is relying on monitoring range monitoring and wild horse population/demographics monitoring for a determination of excess and proposed action.

Comment 4: The EA would have to include information on regarding current rangeland monitoring in support of its determination that removal is necessary and that the same problems cannot be addressed by less intrusive means. *Front Range Equine Rescue*

Response: The EA does provide current rangeland monitoring information. The management situation also describes everything that has occurred to address the same problems in a less intrusive manner.

Comment 5: Without information on the current population of wild horses in the PMWHR, the public cannot determine (1) weather any of the 25 horses that BLM seeks to remove are truly excess, and (2) whether it is necessary to remove them. The EA should address why "action is necessary to remove excess animals not based on the last gather in 2012, but rather at this time, based on current population and range conditions and concurrent BLM management actions affecting the herd. *Front Range Equine Rescue*

Response: Section 1.4 The Purpose and Need describe why the action is needed and the purpose for the action.

Comment 6: BLM should not continue to rely on a rangeland assessment that is five years old. BLM has not sufficiently considered assessing rangeland health now…. to determine if conditions warrant permanent removal of 25 wild horses. *Front Range Equine Rescue*

Response: The BLM provided a summary of annual forage utilization studies since the last gather. Managing for the proper use factor or utilization level as identified in the HMAP which is 45% and incorporated by reference lets the BLM know if objectives are being met or not that were developed based upon meeting rangeland health. The BLM disagrees that the observed utilization is not tied to rangeland health. The BLM specifically requested any data, information or analysis which could be incorporated into the document.

Comment 7: The EA Must Include Current Data on Genetic Diversity in the PMWHR…the EA must provide analysis of the impacts of the Proposed Action and the potential damage to herd populations and their genetic variability. *Front Range Equine Rescue*

Response: BLMs reports from Dr. Gus Cothran are referenced and available on BLM website. A link has been provided within the document for the public to understand the current information on genetic data. The Proposed Action and Alternative A have added information regarding genetic representation or "bloodlines" for removal.

Comment 8: The final EA should address how the removal criteria will apply to the current herd in the PMWHR. *Front Range Equine Rescue*

Response: Proposed Action and Alternative have been adjusted based upon numerous comments and information provided.

Comment 9: The EA for the Fertility Control analyzed genetic diversity….the Preliminary EA is not tiered to, and does not even mention any of the NEPA documents prepared for the fertility control program. BLM must conduct a separate analysis for impacts of the proposed action on the genetic diversity and viability of wild horses. BLM cannot take management actions without first evaluation potential genetic effects on the wild horse population**.** *Front Range Equine Rescue*

Response: The Fertility EA was not in effect at the time the proposed gather EA was out for public comment. The 2015 fertility control EA has been incorporated by reference.

Comment 10: The Proposed Action Should be Postponed Pending Implementation of the 2015 Fertility Control Program. *Front Range Equine Rescue*

Response: The Current Management Situation section 1.2 and the Purpose and Need section 1.4 describe why this action needs to occur.

Comment 11: BLM has not made a proper excess determination. *Friends of Animals*

Response: BLM disagrees that excess wild horses are not present on the PMWHR. Both Wild Horse and range monitoring data indicate that too many wild horses are present.

Comment 12: An EIS is required for the proposed action *Friends of Animals*

Response: BLM disagrees that either the proposed action or alternative rise to a level of significance that require an EIS.

Comment 13: BLM should include a reasonable range of alternatives in its analysis. BLM should consider allowing horses to roam freely without conducting gathers or administering fertility control. *Friends of Animals*

Response: BLM agrees that we should consider this alternative. After consideration, BLM determined to add a section of Alternatives Considered but Eliminated from Further Analysis since it did not meet the purpose and need.

Comment 14: BLM should consider the impacts of the proposed action. BLM should consider the cumulative impacts, including the impact of PZP. *Friends of Animals*

Response: The cumulative impacts of the management of the PMWHR utilizing a combination of population management methods which include natural means, fertility control and removals has been analyzed and this EA tiered to that document.

Comment 15: BLM should consider the proposed actions impact on the genetic diversity and health of wild horses. *Friends of Animals*

Response: Both the Proposed Action and Alternative A have been further developed to help the public understand the consideration of removals which a large factor is "bloodlines" or kinship.

Comment 16: BLM should consider the ethical impacts of its actions. *Friends of Animals*

Response: Please refer to section 3.10 Social Values and Economic Considerations.

Comment 17: The average current AML of 105 works out to 362 acres per individual. For this particular habitat with its relatively exuberant forage productivity, this is an underpopulated range, where horses have not filled their ecological niche. *Craig Downer*

Response: The AML is established at 90-120 wild horses excluding the current year's foals. There is neither information nor studies that BLM is aware of that show that the majority of the ecological sites within the PMWHR are highly productive even if never subjected to disturbance. Thank you for your opinion the BLM specifically asked for data, information or analysis to help us develop a proposal and/or alternatives.

Comment 18: Male genetic diversity is not being taken into account. *Craig Downer*

Response: BLM disagrees considering the HMAP specifically manages for a 50/50 sex ratio which was changed from the 70/30 sex ratio that existed before. Also Alternative A has been further developed based upon numerous comments including this one. Further identification of removal is being incorporated into the Proposed Action and Alternative A.

Comment 19: Custer's and Clouds offspring will all be removed. *Craig Downer*

Response: This is highly unlikely. Further identification of removal is being incorporated into the Proposed Action and Alternative A.

Comment 20: Cothran's report warns of incipient inbreeding among the Pryor mountain wild horse population. *Craig Downer*

Response: Thank you for your comment. The report you're referring to is from 2000. The BLM has more current information regarding the genetic monitoring that is available on our website and referenced in this EA.

Comment 21:The Pryor's are being managed at population levels below the agency's own minimum standards for genetic viability as published in the BLM Handbook for Wild Horse and Burro Management (July 2010) *Ms. Gregg*

Response: The PMWHR is being managed in accordance Herd management Area Plan. There is nothing in this EA that is not consistent with that management. The section of the 4700 handbook you are referring to also states "If the recommended minimum wild horse herd size cannot be maintained due to habitat limitations (e.g., insufficient forage, water, cover and/or space) or other resource management considerations (e.g., T&E species), a number of options

may be considered as part of an appropriate site-specific NEPA analysis to mitigate genetic concerns:
• Maximize the number of breeding age wild horses (6-10 years) within the herd.
• Adjust the sex ratio in favor of males to increase the number of harems and effective breeding males.
• Introduce 1-2 young mares every generation (about 10 years), from other herds living in similar environments."
This is precisely the actions the HMAP has taken to address genetic concerns with PMWHR.

Comment 22: As the district court explained in Dahl v Clark, the test as to appropriate wild horse population levels is whether such levels will achieve and maintain a thriving natural ecological balance on public lands. Nowhere in the law or regulations is the BLM required to maintain any specific numbers of animals or to maintain populations in the numbers animals existed at any particular time. *Ms Gregg*

Response: Please see the Proposed Action and Alternative A and section 1.2 Management Situation

Comment 23: Where in the EA is analysis of range improvements, range monitoring, PZP records, updated census, no removal alternative, no action alternative etc… *Ms. Gregg*

Response: Please see section 1.2 Management Situation. Alternative A has been further developed based upon numerous comments including this one. Further identification of removal is being incorporated into the Proposed Action and Alternative A. The affected environment for wild horses has been added to and additional appendices.

Comment 24: The EA did not provide any facts regarding time of year a gather would happen, data on interior fences, oil and gas exploration, water sources, capture methods, public observation, humane treatment of the horses, verification of the number of horses removed, which animals euthanized, public be notified of gather operations, all monitoring data, show wild horse use vs wildlife use, information of pre and post capture information, which mares would be returned to the range after PZP dose, genetic diversity, returned animals to the range, genetic tests from the last 20 years. *Ms. Gregg, Eileen Hennessy*

Response: Please refer to section 1.2 Management Situation, affected environment for each resource and please remember this EA is tiered to the HMAP which has the primary affected environment.

As for gather operations everything is posted on the BLM website and social media just like in past years. PZP isn't being applied as part of the gather operation on the PMWHR.

Comment 25: The EA must consider alternatives that would mitigate any need to remove any wild horses. *Ms Gregg*

Response: Please refer to section 1.2 Management Situation.

Comment 26: The proposed horse removal is inadequate; the proposed action will not reach AML. *Dick Walton and Susan Newell*

Response: The Proposed Action by itself is not designed to meet the AML rather to remove enough wild horses that can be adopted since there is no space available in off range pastures while also monitoring the results of fertility control and death loss.

Comment 27: AML must be achieved before it can be maintained. *Dick Walton and Susan Newel*

Response: The Proposed Action by itself is not designed to meet the AML rather to remove enough wild horses that can be adopted since there is no space available in off range pastures while also monitoring the results of fertility control and death loss which is implementation of the HMAP.

Comment 28: Alternative A: possible advantage, but incomplete. *Dick Walton and Susan Newell*

Response: Alternative A has been further developed based upon numerous comments including this one.

Comment 29: Neither Action Alternative Will Achieve AML: *Dick Walton and Susan Newell*

Response: Alternative A has been further developed based upon numerous comments including this one. Further identification of removal is being incorporated into the Proposed Action and Alternative A.

Comment 30: A Composite of the two Action Alternatives Can Succeed *Dick Walton and Susan Newell*

Response: Alternative A has been further developed based upon numerous comments including this one.

Comment 31: EA needs Projections of Future Horse Populations *Dick Walton and Susan Newell*

Response: Please refer to the management situation section 1.2

Comment 32: When has BLM managed for 120 or fewer horses (i.e. within AML)? *Dick Walton and Susan Newell*

Response: An appendix has been added regarding the population in order for the public to track this. The BLM has been very close to the AML in 2009 and 2012 post gathers.

Comment 33: We are not aware of Russian Knapweed, rather Spotted Knapweed. *Dick Walton and Susan Newell*

Response: Thank you for the information. This has been corrected in the document.

Comment 34: If the proposed action and alternative A do not achieve AML specified by the HMAP and thus inconsistent with it, then what does the following statement from the Draft EA mean. *Dick Walton and Susan Newell*

Response: The HMAP states "The population would be managed using a combination of population control techniques including gathers, fertility control, natural means or a combination of prescriptions." With fertility control occurring and allowing animals to die on the range the proposal is consistent with the HMAP.

Comment 35: The Mustang Center was involved in the decisions to remove a horse or keep them on the range using our thorough knowledge of the herd. The genetics of the herd must be must be carefully considered with any management decision. Examination of our lineage chart shows many lines that are now extinct, often due to removals. The 2012 gather was a fine example of how a careful selection of horses can best ensure the genetic health of the herd. *Pryor Mountain Wild Mustang Center*

Response: Alternative A has been further developed based upon numerous comments. Specific information provided by the Pryor mountain Wild Mustang center has been analyzed and further identification of removal is incorporated into the Proposed Action and Alternative A.

Comment 36: The Mustang Center believes it is essential to move cautiously with removals while the fertility control plan begins to show impact of herd size. *Pryor Mountain Wild Mustang Center*

Response: Thank you for your comment. BLM believes that both the Proposed Action and to a greater extent Alternative A take into account careful consideration of excess wild horses for removal.

Comment 37: Taking this herd to the upper end of AML would drastically impact the genetics of the herd, and we do not see this as a consideration with the preliminary EA. We would like to commend BLM for this conservative approach. *Pryor Mountain Wild Mustang Center*

Response: The HMAP states "The population would be managed using a combination of population control techniques including gathers, fertility control, natural means or a combination of prescriptions." With fertility control occurring and allowing animals to die on the range the proposal is consistent with the HMAP.

Comment 38: Smaller removals over multiple years; this must be thoroughly defined and evaluated on an annual basis using a standard protocol when making decisions about the need for a gather and for the horses selected for removal. The frequency of the gathers should be

determined through a careful analysis of herd demographics. The final gather EA should fully define process and evaluation of the process on an annual basis. Removal may not always be on an annual basis, but the option should be based on current demographics. *Pryor Mountain Wild Mustang Center*

Response: Based upon your comment and information provided additional mitigation and description has been incorporated into Alternative A

Comment 39: The Herd Characteristics Objective defined in the HMAP provides a foundation for the process for determining horses for removal. We believe the consideration of the genetics will best ensure the expression of desired phenotypical markers. We also believe conservation of smaller bloodlines will assist with conservation of the Spanish horse. The mustang center has provided a list of possible horses; carefully selected based upon, number of mare's offspring, health considerations, bloodlines, rare colors, and artificial mixing of bloodlines. *Pryor Mountain Wild Mustang Center*

Response: Thank you for your comment. BLM believes that both the Proposed Action and to a greater extent Alternative A take into account careful consideration of excess wild horses for removal.

Comment 40: There are 30 horses who are 18 years of age and older and will die in the next couple of years, this must be a considered. *Alessandro Pitterman*

Response: The HMAP states "The population would be managed using a combination of population control techniques including gathers, fertility control, natural means or a combination of prescriptions." With fertility control occurring and allowing animals to die on the range the proposal is consistent with the HMAP

Comment 41: A single gather is the best option in my opinion. A possible compromise would be to apply a little bit of both alternatives. This year a gather could take place where 15-20 horses are removed and if necessary a second smaller gather could be done to remove 6-10 or so horses in 2016 or 2017. *Alessandro Pitterman*
Response: Alternative A has been further developed based upon numerous comments. Specific information provided by you has been analyzed and further identification of removal is incorporated into the Proposed Action

Comment 42: A year limit has not been issued as to when the multiple year gather is to stop. This is a big concern because the maximum number of gathers that could take place without causing damage to the bloodlines is 3 year. For this reason it is great importance not to go past 2017. *Alessandro Pitterman*

Response: Alternative A has been further developed based upon numerous comments including this one. Further identification of removal is being incorporated into the Proposed Action and Alternative A.

Comment 43: Concerned with the open ended language of Alternative A, does not have enough specificity or time limit to fully anticipate the level and number of removals that could occur. I

request the BLM not remove more than three consecutive years and 8 horses taken annually. *Rachal Reeves*

Response: Alternative A has been further developed based upon numerous comments including this yours. Specific information provided by you has been analyzed and further identification of removal is being incorporated into the Proposed Action and Alternative A.

Comment 44: I recommend these smaller multiple removals don't exceed 9 horses per year and have a maximum of 25 horses removed in total. These removals should only take place over a series of three years. Should not leave any mare without offspring. Removal considerations should be expressed in a "tier system" similar to as BLM did in 2012. *Sarah Griffin, Abbie Branchflower.*

Response: Alternative A has been further developed based upon numerous comments. Specific information provided by you has been analyzed and further identification of removal is incorporated into the Proposed Action

Comment 45: Focus on mid Sykes for Some removals; consider setting up traps in winter/late spring in the low country to capture horses of interest, request include, all current range data, PZP records, updated census and all yearly death rates since 2009. Also providing the information of colors of horses chart on the Pryor horses. *The Cloud Foundation*

Response: Language has been added to allow for variable trap locations and time of year for capture. Appendices have been added to the EA concerning other information on herd monitoring and PZP treatments. Monitoring Data is summarized and interpreted in the EA already under section 3.3. Currently there are six horses already died or missing that makes the statement factual of between 6-12 deaths per annum. In 2011 14 wild horse died and this is well known.

7.0 REFERENCES

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BLM, BiFO (December 2010, Decision January 2011) Pryor Mountain Wild Horse Range Fertility Control Tiered Environmental Assessment DOI-BLM-MT-010-2011-004-EA

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Appendix I

Standard Operating Procedures for Wild Horse Gathers

The following procedures for gathering and handling wild horses would apply whether a contractor or BLM personnel conduct a gather.

Prior to any gathering operation, the BLM will provide for a pre-capture evaluation of existing conditions in the gather area(s). The evaluation will include animal conditions, prevailing temperatures, drought conditions, soil conditions, road conditions, and a topographic map with wilderness boundaries, the location of fences, other physical barriers, and acceptable trap locations in relation to animal distribution. The evaluation will determine whether the proposed activities will necessitate the presence of a veterinarian during operations.

Trap sites and temporary holding sites will be located to reduce the likelihood of injury and stress to the animals, and to minimize potential damage to the natural resources of the area. These sites would be located on or near existing roads when feasible.

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

1. Bait Trapping. This capture method involves utilizing bait (feed, supplement, mineral, etc.) to lure wild horses into a temporary trap.
2. Water Trapping. This method involves utilizing water sources to trap wild horses as they come to drink.

The following procedures will be followed to ensure the welfare, safety and humane treatment of wild horses in accordance with the provisions of 43 CFR 4700.

A. Capture Methods Used in the Performance of Gather Contract Operations

1. The primary concern is the safe and humane handling of all animals captured. All capture attempts shall incorporate the following:

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

    b. All loading chute sides shall be a minimum of six feet high and shall be fully covered with plywood or metal without holes larger than two by four inches.

    c. All runways shall be a minimum of 30 feet long and a minimum of six feet high for horses and shall be covered with plywood, burlap, plastic snow fence or like material a minimum of one to five feet above ground level for burros and one to six 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 gather crew.

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 one to five feet above ground level, two to six 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.

2. No modification of existing fences will be made without authorization from the agency of jurisdiction.

3. When dust conditions occur within or adjacent to the trap or holding facility, the BLM will wet down the ground with water.

4. Alternate pens within the holding facility to separate mares' small foals, sick and injured animals, strays, or other animals determined to need separate pens from the other animals. Animals shall be sorted according to age, number, size, temperament, sex, and condition when in the holding facility to minimize, to the extent possible, injury due to fighting and trampling. Under normal conditions, the government will require that animals be restrained for the purpose of determining an animal's age or sex, or for other necessary procedures. In areas requiring one or more satellite traps, and where a centralized holding facility is utilized, additional holding pens will be provided to segregate animals transported from remote locations so they may be returned to their traditional ranges. Either segregation or temporary marking and later segregation will be at the discretion of the BLM.

5. A continuous supply of fresh, clean water at a minimum rate of 10 gallons per animal per day. Animals held for 10 hours or more in the traps or holding facilities shall be provided good quality hay at the rate of no less than two pounds of hay per 100 pounds of estimated body weight per day. An animal held at a temporary holding facility through the night is defined as a horse/burro feed day.

6. If there is a contractor, it is the responsibility of the contractor to provide security to prevent loss, injury or death of captured animals until delivery to final destination.

7. Animals shall be transported to their final destination from temporary holding facilities within 24 hours after capture unless prior approval is granted for unusual circumstances. Animals to be released back into the herd management area following gather operations may be held up to 21 days or as directed by the cognizant employee. Animals shall not be held in traps and/or temporary holding facilities on days when there is no work being conducted. Animals shall not be allowed to remain standing on trucks while not in transport for a combined period of greater than three hours in any 24 hour period.

8. Animals that are to be released back into the capture area may need to be transported back to the original trap site.

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

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

    a. Gates shall be either a swinging panel or a regular metal gate that is intended for use with the portable panel system.

    b. All traps will be manned when actively capturing wild horses.

    c. Traps shall be left open in manner that won't inadvertently trap a wild horse or wildlife when not actively trapping.

C. Use of Motorized Equipment

1. All motorized equipment employed in the transportation of captured animals shall be in compliance with appropriate state and federal laws and regulations applicable to the humane transportation of animals.

2. All motorized equipment, including horse and stock trailers shall be in good repair, of adequate rated capacity, and operated so as to ensure that captured animals are transported without undue risk or injury.

3. Only horse or stock trailers with a covered top shall be allowed for transporting animals from trap site(s) to temporary holding facilities and from temporary holding facilities to final destination(s). Sides or stock racks of all trailers used for transporting animals shall be a minimum height of six feet six inches from the floor.

4. The rear door(s) of horse and stock trailers must be capable of opening the full width of the trailer. Panels facing the inside of all trailers must be free of sharp edges or holes that could cause injury to the animals. The material facing the inside of all trailers must be strong enough so that the animals cannot push their hooves through the side.

5. Floors of horse and stock trailers and loading chutes shall be covered and maintained with wood shavings or other non-slip material to prevent the animals from slipping.

6. Animals to be loaded and transported in any trailer 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);
    6 square feet per horse foal (.75 linear foot in an 8 foot wide trailer);

7. The BLM shall consider the condition and size of the animals, weather conditions, distance to be transported, or other factors when planning for the movement of captured animals. The BLM shall provide for any brand and/or inspection services required for the captured animals.

D. Safety and Communications

1. The Agencies involved shall have the means to communicate with all personnel engaged in the capture of wild horses utilizing a VHF/FM transceiver or VHF/FM portable two-way radio. If communications are ineffective, the government will take steps necessary to protect the welfare of the animals.

    a. All accidents occurring during the performance of any task order shall be immediately reported to the field office.

E. Site Clearances

Personnel working at gather sites will be advised of the illegality of collecting artifacts.

Prior to setting up a trap or temporary holding facility, the BLM will conduct all necessary clearances (archaeological, T&E, etc.). The proposed site(s) must be inspected by a government archaeologist. Once archaeological clearance has been obtained, the trap or temporary holding facility may be setup.

Gather sites and temporary holding facilities would not be constructed on wetlands or riparian zones.

F. Animal Characteristics and Behavior

Releases of wild horses would be near available water if the area is new to them. A short-term adjustment period may be required while the wild horses become familiar with the new area.

G. Public Participation

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

H. Responsibility and Lines of Communication

Jared Bybee or delegate has direct responsibility to ensure human and animal safety. Billings Field Manager Jim Sparks will take an active role to ensure that appropriate lines of communication are established between the field, field office, state office, national program office, and BLM holding facility offices. All employees involved in the gathering operations will keep the best interests of the animals at the forefront at all times.

All publicity and public contact and inquiries will be handled through the Billings Field Manager and Montana State Office of Communications. These individuals will be the primary contact and will coordinate with the COR on any inquiries.

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

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

G. Additional requirements for personnel conducting gather operations also include:

1. Electric prods (hotshots) will 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 or burros 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, striking or beating a horse.
8. Loading or unloading of transport vehicles is performed during daylight hours, or supplemental light is 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 exist between the trailer and the side walls of the unloading area, whereby a horse's limbs or head can become stuck or injured.

Appendix II
Population Stats

Year	Wild Horse Numbers (foals excluded)	Number of Horses Gathered/Removed	Treated with Fertility Control
1971	155(post claim)	45	
1972	155		
1973	120(post gather)	35	
1974	130		
1975	140(post gather)	25	
1976	140		
1977	145(post gather)	25	
1978	87		
1979	105		
1980	127	1	
1981	155	6	
1982	144(post gather)	43	
1983	147(post gather)	21	
1984	141(post gather)	13	
1985	139(post gather)	25	
1986	155	0	
1987	147(post gather)	23	
1988	130(post gather)	26	
1989	122(post gather)	21	
1990	133	3	
1991	120(post gather)	16	
1992	115(post gather)	46	
1993	143	1	
1994	118 (post gather)	51	
1995	146	0	
1996	175	0	
1997	147 (post gather)	46	
1998	158	0	
1999	173	1	
2000	188	0	
2001	160 (post gather)	46	6 mares
2002	170	0	14 mares
2003	161	7	14 mares
2004	142	0	4 mares
2005	160	0	12 mares
2006	145 (post gather)	22	17 mares
2007	159	0	27 mares
2008	170	0	0
2009	195	57	40 using PZP-22
2010	134 + 11 off Range (145)	0	12 + 40 using PZP-22
2011	145	0	36 mares
2012	170 (132 post gather)	38 + 7 foals (45 total)	63 mares
2013	145	0	52 mares
2014	159	0	63 mares
2015	170		75 mares (77 potential)

Population numbers were reported based on the fall population post removals of the previous calendar year until 2007 when numbers reported as of March 1 of each year.

Appendix III
PMWHR Wild Horse Herd Demographics June 2015

Area	Name	Number	Sex	Disposition	Color	Markings, other features, whorls	Mane Direction	Age	PZP last dose	Adjuvant
Dryhead	Jesse James	200928	Male	Bachelor	Bay	Star large and offset, snip, LH pastern	Right	6		
	Cecelia	200224	Female	Mare/Dam	Black	Large Star and Snip	Left	13	1/22/2015	Inc
	Mateo	201224	Male	Colt	Dun	small star and snip		3		
Dryhead	Hickock	200711	Male	Band Stallion	Bay	Solid	Right	8		
	Seneca	199926	Female	Mare	Dun	Large star,snip,LH coronet	Right	16	1/15/2015	Inc
	Nova	201315	Female	Filly	Red Dun	Large Star & snip		2	1/29/2015	Inc
	Hightail	198901	Female	Mare	Dun	Star, two tone main, faint freezemark	Right	26	1/7/2015	Inc
	Kitalpha	201013	Female	Mare	Grulla	Star,snip	Right	5	5/20/2015	Inc
Dryhead	Hidalgo	200717	Male	Band Stallion	Dun	Star, Strip, Snip, LF sock, LH coronet, RF pastern, RH sock	Right	8		
	Fresia	200503	Female	Mare	Grulla	small,faint offset star	Right	10	1/27/2015	Inc
	Oak	201407	Male	Colt	Dun			1		
	Montana	201206	Male	Colt	Grulla	Star, snip		3		
Dryhead	Hawk	200702	Male	Bachelor	Black	Large Star, snip	Right	8		
	Mercuria	201204	Female	Filly	Grulla	Star, strip, snip		3	4/23/2015	Inc
	Belle Star	199306	Female	Mare	Bay	Star, LF LH RH pastern dark horse	Right	22	3/17/2015	Inc
Dryhead	Blizzard	200113	Male	Bachelor	Apricot	Blaze, partial left hind sock	Right	14		
	Cascade	199713	Female	Mare	Grulla	Star, two tone mane	Right	18	1/29/2015	Inc
	Bakken	200103	Female	Mare	Grulla	Solid	Right	14	1/29/2015	Inc
	Nina	201317	Female	Filly				2	2/19/2015	Inc
Dryhead	Corona	199725	Male	Band Stallion	Bay	Large star,strip,snip LH coronet, RH pastern	Right	18		
	Waif	199708	Female	Mare	Bay	Solid	Right	18	2/2/2015	Inc
	Orion	201401	Male	colt				1		
Dryhead	Fiero	200510	Male	Band Stallion	Grullo	Blaze, RH Pastern	Right	10		
	Sacajewa	199605	Female	Mare	Grulla	Two tone main and tail	Left	19	1/12/2015	Inc
	Oregon	201403	Female	Filly	Grulla			1		
	Strawberry	199702	Female	Mare	Strawberry-Roan	Star, snip	Right	18	1/13/2015	Inc
Dryhead	Fools Crow	200533	Male	Bachelor	Blue Roan	Star	Split	10		
	Icara	200801	Female	Mare	Bay	Star, LH pastern, RH pastern	Right	7	6/3/2015	Inc
	Oglala	201405	Male	Colt				1		
	Morgana	201201	Female	Filly	Bay	Blaze, LH stocking		3	1/6/2015	Inc
	Jewel	200901	Female	Mare/Dam	Bay	star offset race,snip,RH sock	Right	6	6/3/2015	Inc
	Halo	200704	Female	Mare	Bay	Star	Right	8	4/23/2011	Mod
Dryhead	Jupiter	200923	Male	Bachelor	Grullo	Star,race	Left	6		
	Maia	201203	Female	Mare	Dun	Star		3	2/5/2015	Inc
	Oro	201412	Male	Colt				1		

Dryhead	Joseph	200904	Male	Bachelor	Black	RH sock	Right	6		
	Johan	200910	Male	Bachelor	Dun	Solid	Left	6		
	Johnston	200911	Male	Bachelor	Grullo	Star	Left	6		
	Issaquah	200802	Male	Bachelor	Black	Solid	Right	7		
	Inniq	200831	Male	Bachelor	Black	Star, snip	Right	7		
	Medicine Bow	199931	Male	Bachelor	Sabino	Blaze, LH LF RF RHstocking, crippled	Right	16		
	Durango	199505	Male	Bachelor	Red-Roan	Blaze, LF coronet, LH RH pastern, missing left ear	Right	20		
	Kemmerer	201002	Male	Bachelor	Dun	Star	Right	5		
	Hidatsa	200713	Male	Band Stallion	Grullo	Two tone mane and tail	Right	8		
	Seattle	199731	Male	Bachelor	Black	Solid, blown out left knee	Left	18		
	Jemez	200902	Male	Bachelor	Apricot Dun	Blaze	Right	6		
	Bristol	199705	Male	Band Stallion	Grullo	solid, enflamed right front joint	Left	18		
	Sitting Bull	199609	Male	Band Stallion	Dun	Star	right	19		
	Norte	201302	male	colt	Bay	Large satr with narrow blaze, two hind socks		2		
	Merlin	199703	Male	Bachelor	Grullo	Blaze, LH pastern	Left	18		
BT	Garay	200615	Male	Bachelor	Grullo	Star	Left	9		
	Kohl	201030	Female	Mare	Black	Star	Left	5	3/27/2014	Inc
	Meriwather	201217	Female	Filly	Bay	Star, Strip		3	1/15/2015	Inc
	Jacinta	200922	Female	Mare	Dun	Blaze, LH sock, RH coronet	Right	6	4/25/2013	Inc
BT	Doc	200325	Male	Band Stallion	Bay	Star wavy main	Left	12		
	Jasmine	200906	Female	Mare	Blue Roan	Star, RH pastern	Right	6	3/6/2013	22
	Firestorm	200517	Female	Mare	Red Roan	Star	Left	10	1/27/2015	Inc
	Okomi	201411	Male	Colt				1		
	Galena	200604	Female	Mare	Black	Star	Left	9	5/19/2015	
	Nye	201304	Female	Filly	Grulla	Small snip		2	2/18/2015	Inc
	Heritage	200732	Female	Mare	Red Roan	Star small faint, darker in color	Left	8	5/28/2011	
	Brumby	200128	Female	Mare/Dam	Grulla	Star , two tone mane	Left	14	2/2/2015	Inc
BT	Hernando	200715	Male	Bachelor	Bay	Large Star small snip, LH Pastern	Right	8		
	Phoenix	199104	Female	Mare	Palomino	Star, snip, RF pastern, LH RH Stocking	Right	24	2/3/2015	Inc
	War Bonnet	199311	Female	Mare	Red Roan	Star	Right	22	2/3/2015	Inc
	Maelstrom	201210	Male	Colt	Bay	Star		3		
	Niobrara	201309	Female	Filly	Bay Roan	Star		2	2/3/2015	Inc
BT	Duke	199615	Male	Band Stallion	Bay	Star	Right	19		
	Aurora	200036	Female	Mare	Bay	Star, snip	Right	15	1/15/2015	Inc
	Odakota	201413	Male	Colt				1		
	Helenium	200710	Female	Mare	Dun	star,strip,snip	Right	8	5/19/2015	inc
	Outlaw Lady	201410	Female	Filly				1		

BT	Cappuccino	200216	Male	Band Stallion	Dun	Star	Left	13		
	Gabrielle	200607	Female	Mare/Dam	Dun	Solid	Right	9	6/6/2015	inc
	Naara	201308	Female	Filly	Dun	Snip on left nostril		2	1/27/2015	Inc
	Blanca	199807	Female	Mare	Palomino	Star, Strip,snip LF LH RH stocking RF sock, bloated look	Left	17	1/13/2015	Inc
	Moenkopi	201205	Female	Filly	Dun	Star		3	1/22/2015	Inc
	Aztec	200017	Female	Mare	Grulla	Star	Right	15	1/22/2015	Inc
BT	Baja	199629	Male	Band Stallion	Dun	Star Two Tone Mane, heavy stocky	Left	19		
	Washakie	199421	Female	Mare/Dam	Dun	Star	Right	21	1/7/2015	Inc
	Ojai	201417	Female	Filly				1		
	Nahwa	201316	Male	Colt	Dun	Solid		2		
	Bacardi	200120	Female	Mare	Blue Roan	Solid	Right	14	5/19/2015	Inc
BT	Galaxy	200603	Male	Band Stallion	Black	Small Star, wild mane	Right	9		
	Ireland	199720	Female	Mare	Red-Roan	Star strip	Right	18	2/24/2015	Inc
	Limerick	201105	Female	Mare	Black	Star, strip, LH RH sock	Right	4	2/24/2015	Inc
	Pococeno	199425	Female	Mare	Black	Star	Right	21	4/2/2015	Inc
	Hera	200733	Female	Mare/Dam	Blue-Roan	Star	Right	8	5/19/2015	
BT	Gringo	200621	Male	Band Stallion	Bay	Star	Right	9		
	Beulah	200108	Female	Mare	Red-Roan	Star, left hind coronet, bay base	Right	14	4/13/2015	Inc
	Galadriel	200622	Female	Mare	Bay	Star	Left	9	9/8/2009	Inc
	Oceana	201418	Female	Filly				1		
	Ketchikan	201008	Female	Mare	Dun	Solid	Right	5	5/19/2015	Inc
	Okiotak	201420	Male	Colt				1		
BT	Garcia	200616	Male	Band Stallion	Grullo	Star, snip	Right	9		
	Greta	200601	Female	Mare/Dam	Bay	Star	Right	9	6/10/2015	Mod.
	Orlando	201402	Male	Colt				1		
	Norma Jean	201311	Female	Filly	Bay	Large star		2	2/5/2015	Inc
BT	Knight	201016	Male	Bachelor	Roan	Star	Right	5		
	Nimbus	201305	Female	Filly	Palomino	Wide blaze		2	2/3/2015	Inc
BT	Jasper	200905	Male	Bachelor	Bay	Star,snip LH coronet	Left	6		
	Millicent	201207	Female	Filly	Dun	Star		3	1/13/2015	Inc
BT	Grijala	200618	Male	Band Stallion	Bay	Large Star, big horse, roman nose	Right	9		
	Graciana	200614	Female	Mare	Grulla	Star, two tone mane and tail	Right	9	5/21/2015	Inc
	Naolin	201313	Male	Colt	Dun	Large star, snip, LH Pastern		2		
	Noble	201301	Female	Filly	Chestnut	Blaze		2	4/20/2015	Inc
BT	London	201109	Male	Bachelor	Bay	Star, strip RH pastern	Right	4		
	Inali	200822	Male	Bachelor	Black	Star, RH sock	Right	7		
	Tecumseh	199804	Male	Bachelor	Red Roan	Blaze, LH sock, RH sock	Right	17		
	Santa Fe	199517	Male	Bachelor	Bay	Star,snip, RF Coronet, RH Sock, LH pastern	Right	20		
	Malpais	201214	Male	Colt	Black	Star, RF pastern, LH Stocking		3		
	Jackson	199823	Male	Band Stallion	Dun	Solid	Right	17		

	Moorcraft	201213	Male	Colt	Grullo	Solid		3		
	McKeahnie	201212	Male	Colt	Dun	Solid		3		
	Oklahoma	201416	Male	Colt				1		
Sykes	Morning Star	199618	Male	Band Stallion	Bay	Star, snip	Left	19		
	Felina	199814	Female	Mare	Dun (red)	Blaze, LF LHpasertn, RH sock	Left	17	3/31/2015	Inc
	Gaelic Princess	200623	Female	Mare	Grulla	Star,snip,LHsock	Right	9	9/7/2009	22
	Hataalii	200703	Female	Mare	Dun	LH sock, RH pastern	Right	8	6/2/2015	Inc
	Oracle	201404	Male	Colt				1		
	Hailstorm	200734	Female	Mare	Blue Roan	Star	Right	8	9/8/2009	
Sykes	Hamlet	200714	Male	Bachelor	Black	Star	Left	8		
	Audobon	200003	Female	Mare	Grulla	LH paster, RH coronet	Left	15	3/31/2015	Inc
	Niyaha	201306	Female	Filly	Dun	Solid		2	3/31/2015	Inc
Sykes	Custer	199619	Male	Band Stallion	Red Roan	Star	Right	19		
	Winnemucca	198707	Female	Mare	Grulla	small star	Right	28	4/28/2014	Inc
	Fiasco	200526	Female	Mare	Grulla	Star, two tone mane	Left	10	6/2/2015	Inc
	Nodin	201303	Male	Colt	Grullo	Star		2		
Sykes	Cloud	199513	Male	Band Stallion	Creamello	Blaze, LF RF stocking	Right	20		
	Feldspar	200523	Female	Mare	Grulla	Blaze	Right	10	6/2/2015	Inc
	Ohanzee	201408	Male	Colt				1		
Sykes	Bolder	200122	Male	Band Stallion	Palomino	Star, snip, LF sock, Dark horse	Left	14		
	Sapo	199801	Female	Mare	Grulla	Solid	Right	17	3/31/2015	Inc
	Mesa	201208	Female	Filly	Dun	Star		3	3/31/2015	Inc
	Lobo	201106	Male	Colt	Dun	Star,strip, LH sock, RH sock	Right	4		
	Celt	200207	Female	Mare	Black	Star, snip	Right	13	3/30/2015	Inc.
	Killian	201003	Male	Stallion/in band	palomino	Blaze	Right	5		
	Scarlet	199525	Female	Mare	Blue roan	Solid	Right	20	3/30/2015	Inc
	Bailey	200140	Female	Mare	Black	Solid	Left	14	3/30/2015	Inc
Sykes	Blue Moon	200131	Male	Band Stallion	Blue Roan	Star	Left	14		
	Sequoyah	199717	Female	Mare	Dun	Blaze, LH Sock	Right	18	3/26/2015	Inc
	Halcyon	200706	Female	Mare	Red Roan	star, RH sock	Right	8	5/21/2015	
	Olivia	201414	Female	Filly				1		
	Nirvana	201307	Female	Filly	Grulla	Offset star (left side)		2	4/23/2015	Inc
	Miocene	201209	Male	Colt	Grullo	Star RH pastern		3		
	Amethyst	200010	Female	Mare	Dun	Star, RH pastern	Right	15	3/26/2015	Inc
	Isadora	200816	Female	Mare	Black	Star (large)	Left	7	5/25/2012	
Sykes	Irial	200812	Male	Bachelor	Blue Roan	Star,snip, left pastern	Right	7		
	Blue Sioux	199319	Female	Mare	Blue Roan	Solid	Right	22	1/22/2015	Inc
	La Brava	201104	Female	Mare	Red Roan	Solid	Right	4	1/22/2015	Inc
	Adona	200228	Female	Mare	Blue Roan	Star, LH coronet	Right	15	1/22/2015	Inc
	Fools Gold	200534	Female	Mare	Dun	Star, two tone mane	Right	10	1/22/2015	Inc
	Nickle	201314	Male	Colt	Dun	Solid		2		
	Dove	200315	Female	Mare	Buckskin	Blaze, LH sock, RH sock	Right	12	1/22/2015	Inc

	Manuelita	201224	Female	Filly	Dark	Small star, small snip on left		3	1/22/2015	Inc
Sykes	Mescelaro	199515	Male	Band Stallion	Buckskin Dun (roan)	Solid	Left	20		
	Polaris	199732	Female	Mare	Black	Star	Right	18	2/23/2015	Inc
	Roasarita	199608	Female	Mare	Dun	Star	Right	19	1/7/2015	Inc
	Half Moon	200718	Female	Mare	Bay	star, snip	Left	8	6/2/2015	Inc
	Missoula	201202	Male	Colt	Bay	Blaze, two hind socks		3		
	Broken Bow	199315	Female	Mare	Dun	Solid	Left	22	1/7/2015	Inc
Sykes	Horizon	200707	Male	Band Stallion	Dun	Star,snip,LH pastern	Right	8		
	Juniper	200914	Female	Mare	Buckskin	LH Sock	Left	6	5/9/2013	
	Fiesta	200530	Male	Satellite Stallion	Red Roan	Star,strip,LF sock,LH sock, RF sock, RH sock	Right	10		
	Demure	200313	Female	Mare/Dam	Grulla	LF RF RH pastern, LH coronet	Right	12	3/31/2015	Inc
	Mica	201211	Male	Colt	blue roan	Blaze		3		
Missing Horses/Deceased										
	Lariat	201110	Female	Mare	Bay	Solid	Right	4	5/19/2015	Inc
	Tonopah	198604	Female	Mare	Grulla	Solid mane highlights	Right	29	5/5/2014	Inc
	Topper too	199512	Female	Mare	Dun	Solid	Left	20	1/7/2015	Inc
	Inocentes	200806	Female	Mare	Dun	Star	Right	7	3/20/2012	
	Orielle	201419	Female	Filly				1		
	Coronado	199602	Male	Band Stallion	Red Roan	Blaze, RH sock	Right	19		
	Chino	199307	Male	Band Stallion	Buckskin	Star	Right	22		

***Also some old stallions not confirmed yet may be deceased.**