

# Appendix A

## Summary and Discussion of Public Comments

### Comment Categories

On November 21, 2019, the BLM issued a scoping letter for this proposed wild horse gather. A total of 556 scoping comment letters were received from individuals, organizations, and agencies through BLM's ePlanning website, emails and physical letters. Of all the comments received, 357 letters were unique, 188 were form letters, and 11 were duplicates. All comment letters were reviewed, and BLM identified 899 individual comments. These comments were grouped into categories. A summary of the number of comments by category is provided in Table A-1:

Table A-1. Summary of Comment Categories for Public Scoping.

Subject	Number of Comments
AML / TNEB	33
Conflicts with Livestock or Energy Development	129
Conflicts with Wildlife	18
Family Bands	22
Financial Costs & Socioeconomics	55
Genetics	17
Habitat Improvements for Wild Horses	7
Health, Safety and Humane Treatment of Wild Horses	25
Helicopter Gathers and Bait Trapping	41
Land Swaps	1
Monitoring Data	7
NEPA Compliance	103
Off Range Corrals and Pastures	22
Past Litigation	18
Population Growth Suppression Strategies	214
Population Surveys, Population Growth Rates & Counting of Foals	113
Private Land Rights	7
Public Viewing of Wild Horses	19
Rangeland Health	16
Slaughter of Wild Horses	30
Wild Horses Outside HMAs	2
<b>Total:</b>	<b>899</b>

On March 31, 2021, the BLM released the EA for a 30-day public review period. Letters were sent to all parties that expressed an interest in BLM's management of these HMAs, and all cooperating agencies. The BLM received a total of 1,754 scoping comment letters from individuals, organizations, and cooperating agencies. Of these, 1,059 letters were unique, 591 were form letters, and 104 were duplicates. All comment letters were reviewed and considered. The BLM identified 126 substantive

comments, that had not been previously addressed in the EA. Based on these comments, the BLM made some minor adjustments to the EA, primarily to clarify the analysis. This appendix was also updated to describe any public comments that had not previously been addressed. A summary of the number of comments by category is provided in Table A-2:

Table A-2. Summary of Comment Categories for Public Review Period.

Subject	Number of Comments
AML / TNEB	454
Conflicts with Livestock or Energy Development	693
Conflicts with Wildlife	44
Family Bands	59
Financial Costs & Socioeconomics	398
Genetics	66
Habitat Improvements for Wild Horses	196
Health, Safety and Humane Treatment of Wild Horses	21
Helicopter Gathers and Bait Trapping	320
Land Swaps	10
Monitoring Data	6
NEPA Compliance	48
Off Range Corrals and Pastures	252
Past Litigation	197
Population Growth Suppression Strategies	603
Population Surveys, Population Growth Rates & Counting of Foals	27
Private Land Rights	172
Public Viewing of Wild Horses	392
Rangeland Health	14
Slaughter of Wild Horses	112
Wild Horses Outside HMAs	111
<b>Total:</b>	<b>4,195</b>

## Summary and Discussion of Public Comments

This section provides a summary and discussion of the public comments in each category described in Tables A-1 and A-2.

### AML / TNEB

Comments under this category were associated with established Appropriate Management Levels (AML) and meeting a Thriving Natural Ecological Balance (TNEB). See the Glossary for definitions of these terms.

#### Summary

Some commenters requested that BLM adjust AML as part of this action. Some commenters believed the AML was too high and should be adjusted downward, while others believed that AML was too low and should be adjusted upward. Commenters asserted a variety of reasons why the AML should be adjusted, including:

- Wild Horses on the Range are in good body condition, and rangelands are not in poor condition; therefore, the range could sustain more wild horses.

- The number of wild horses per acre within each HMA does not indicate that an overpopulation exists.
- AMLs were established many years ago and may no longer be appropriate.
- Overgrazing by wild horses and livestock has reduced the long term carrying capacity of the range. AML should be adjusted because conditions on the ground have changed.
- The way BLM has established AMLs is not transparent and may be arbitrary.
- The inequality between the number of wild horses and the number of livestock on the range should be reevaluated and the AML adjusted to make more room for wild horses.
- AML should be adjusted to what wild horses need to reach a balanced population in nature without the need to gather and remove excess horses.

Other commenters expressed a concern with counting foals toward AML, proposed only gathering enough wild horses to reach the high end of AML, or proposed conducting annual gathers to maintain wild horses at low AML.

#### Discussion

AMLs are established to promote a TNEB. The Wild Horses and Burros Management Handbook (H-4700-1) directs the BLM to establish AML as a range within which wild horses can be managed for the long term. The upper AML limit represents the maximum number of wild horses that can be present on the range while still promoting a TNEB. The lower AML limit is typically set at a number that will allow the herd to grow to the upper limit in a 4-5 year period. Foals are not counted toward AML until January 1<sup>st</sup> on the year following their birth. An appropriate AML range is one in which wild horses can be managed without a decline in body condition or rangeland health. An appropriate AML also promotes other multiple-use activities, such as recreation, healthy wildlife habitat, soil stability, riparian health and livestock grazing. The AMLs for these Herd Management Areas (HMAs) were most recently established by the 1997 Green River Resource Management Plan (RMP) and the 2008 Rawlins RMP.

When BLM determines excess wild horses are present on the range, the BLM conducts a gather to remove the excess wild horses. In doing this the BLM typically removes wild horses to low AML so that the herd can have the maximum amount of time to grow to high AML before another gather is required. This reduces the impacts to the herd as a result of gather operations. The BLM considered an alternative that would remove wild horses to high AML, but eliminated it from detailed analysis (see Section 2.5). See Section 1.1 of this EA for more information on how BLM made an excess determination for these HMAs at this time, and Section 3.2 for an analysis of potential impacts to wild horses associated with gather operations.

While the Wild Horses and Burros Management Handbook (H-4700-1) allows for AML to be adjusted through a site-specific environmental analysis, it states that when a Land Use Plan does not outline a process for adjusting the AML, then the Land Use Plan may need to be amended to adjust AML. An RMP amendment for wild horse management is currently underway for the Great Divide Basin, Salt Wells Creek, Adobe Town and White Mountain HMAs. This RMP amendment is also analyzing possible changes to the AML for each of these HMAs. The RMP Amendment does not analyze any adjustments to the Little Colorado HMA. A Draft EIS for this RMP amendment was released for public comment on

January 31, 2020. For these reasons, a change in AML is not considered as part of this EA (see Section 2.5, Alternatives Considered but Eliminated from Detailed Analysis).

### Conflicts with Livestock or Energy Development

Comments under this category expressed concerns with conflicts between wild horses and livestock grazing or energy development.

#### Summary

Comments under this category generally fell into one of two primary sub-categories. One group of commenters expressed concerns that wild horses were being removed from these HMAs primarily to benefit livestock operations and energy development. Some of the major topics associated with these comments include:

- There are far more livestock on these rangelands than there are wild horses. The number of livestock present within these HMAs should be disclosed in the EA.
- The BLM should consider a livestock reduction alternative that would make more forage available for wild horses.
- A request that BLM disclose how many additional livestock would be placed on the range following the removal of wild horses.
- The number, and grazing pattern of livestock causes more impacts to rangeland health than wild horses do. However, wild horses are typically blamed for these conditions.
- Arguments that livestock shouldn't be permitted to use public lands for grazing.
- Tourism associated with wild horses benefits the local economy more than the livestock industry.
- A belief that the gather is being proposed to make room for more energy development (such as oil and gas drilling).
- A belief that the gather is being proposed solely to benefit the livestock industry.

The other group of commenters expressed concerns that the number of wild horses present on the range were impacting livestock operations in these areas. These commenters expressed a belief that the livestock industry contributed more to the local economy than wild horses do. Some commenters expressed concerns that the wild horse population seems to be growing out of control, causing escalating conflicts with livestock operations, and impacting rangeland health.

Following the public review period for the EA, some commenters expressed concerns that the EA incorrectly lumped the grazing habits of sheep with those of cattle and horses. Some commenters also pointed out that wild horse use is unmanaged and occurs year round, whereas livestock use functions within specified use periods and with limited numbers.

#### Discussion

The BLM is tasked with managing multiple resource values (including wild horses, livestock grazing and energy development) under the Federal Land Policy and Management Act of 1976. As part of BLM's multiple-use sustained yield mandate, BLM strives to manage for balanced use among these various

resource values for current and future generations. BLM uses different strategies to manage each of these resources to meet this multiple-use mandate.

Impacts associated with energy development are primarily managed through required reclamation efforts. There are very few conflicts between wild horses and energy development in this area, as the presence or absence of wild horses does not typically affect a company's ability to construct energy developments, or conduct reclamation efforts. When potential localized conflicts occur, fences are constructed to eliminate the conflict.

Impacts associated with livestock operations are primarily managed through grazing permit terms and conditions, which limit when, where and how livestock utilize the range. Because wild horses utilize the range year-round and do not follow any type of systematic rotational system, the primary way BLM manages impacts associated with wild horse use is by managing the population of the wild horse herd. Because wild horses and livestock compete for some resources (such as water and forage) there is a potential for conflict between these two resources. This potential conflict and the associated impacts related to the proposed action are discussed in Section 3.4. Decisions regarding allocation of AUMs between livestock and wild horses are made through the land use planning process. The BLM considered an alternative that would reduce or eliminate livestock grazing within these HMAs, but eliminated it from detailed analysis (see Section 2.5).

Following the public review period, the BLM added language to clarify the differences in diet and grazing habits between sheep, cattle and horses.

### Conflicts with Wildlife

Comments under this category expressed concerns with conflicts between wild horses and wildlife, or suggested utilizing natural predators to control wild horse populations.

#### Summary

Some commenters expressed concerns that current wild horse populations were causing excessive impacts to native wildlife and their habitat. Greater Sage-grouse priority habitat and big game migration areas were specifically mentioned in some comments. One commenter requested a map showing the overlay of Sage-grouse PHMA with wild horse HMAs. Some commenters asserted that actions in this EA will need to comply with the 2015 Resource Management Plan Amendment for Sage-grouse. One commenter raised specific concerns with potential impacts wild horses may have on mule deer habitat within the Sublette Mule Deer Migration Corridor. Some commenters suggested utilizing natural predators such as mountain lions or wolves to control wild horse populations. The Wyoming Game and Fish Department also provided comments requesting that BLM avoid conducting gathers on Crucial Winter Range from November 15 – April 30, and that BLM coordinate with them on any needed exceptions. They also requested that gathers not occur during opening day of any hunting season.

After the public review period for the EA, one commenter requested that BLM analyze potential impacts to pygmy rabbits as a result of the action alternatives.

#### Discussion

Potential impacts to wildlife species associated with the proposed action are discussed in Sections 3.7, 3.8 and 3.9 of this EA. This includes potential impacts to big game crucial winter range. Potential impacts to Sage-grouse are described and analyzed in Section 3.8 of the EA. An explanation of the reasons potential impacts to mule deer habitat in the Sublette Mule Deer Migration Corridor are not discussed in detail in the EA is provided in Section 1.6 (Issues not Analyzed in Detail). Section 1.6 also describes why a detailed analysis of potential impacts to pygmy rabbits was not provided in this EA. An explanation of the reasons a native predator alternative was not included in the EA is provided in Section 2.5 (Alternatives Considered but not Analyzed in Detail). Potential impacts to recreation experiences during hunting season are described and analyzed in Section 3.11.

## Family Bands

Comments under this category expressed concern with the potential impacts this action would have on wild horse "family bands".

### Summary

Most commenters expressed concerns that various aspects of the proposed alternatives could impact wild horse family bands. Specifically, concerns were raised that the gather and removal process often separates bands of wild horses. One commenter expressed concern that when wild horses are returned to their HMA, no effort is made to ensure family bands are maintained. Others expressed concern that population growth suppression strategies would impact wild horse family bands.

### Discussion

Potential impacts to wild horses are discussed in Sections 3.1, 3.2 and 3.3. Included in these sections is a discussion of impacts associated with the potential separation of mares and their foals.

## Financial Costs and Socioeconomics

Comments under this category were related to the financial and socioeconomic costs associated with the alternatives.

### Summary

Some commenters expressed concerns with the financial costs associated with implementing any gather and removal activities. They expressed concerns that taxpayers would have to pay for an activity that many people oppose. This included the gather, removal and care of wild horses in off range corrals and pastures. Special mention was made of the extensive cost associated with helicopter gathers. Some commenters expressed the view that there was no cost to taxpayers associated with leaving the wild horses on the range. Some concerns were raised regarding the cost to implement population growth suppression strategies on top of the already substantial cost of gathering and removing wild horses from these HMAs. Some of these commenters expressed a desire that taxpayer money be spent protecting wild horses, rather than gathering them and removing them from the range. A number of commenters requested that BLM disclose the financial impact to taxpayers associated with implementing each alternative, including costs associated with the gather, removal and fertility treatments, as well as off range corral and pasture expenses. Other commenters pointed out that wild horses are a tourist attraction that helps bring money to the local economy. Some expressed concerns with government activities that the commenters interpreted to support the ranching industry at the cost of wild horses.

In contrast to these points of view, one commenter expressed support for population growth suppression strategies to help reduce the long term cost to tax payers associated with the wild horse program.

#### Discussion

Many of the comments in this category were related to actions beyond the scope of the proposed action and this NEPA analysis. For example, the costs associated with government subsidies for the livestock industry are legislative and program-wide policy matters that are not the subject of the proposal to remove excess wild horses from these HMAs.

The specific costs associated with various aspects of the BLM's wild horse program (such as off range corral and pasture holding costs, gather costs, etc.) similarly are legislative and program-wide policy matters beyond the scope of the action analyzed in this EA. The legislative process determines how government agencies receive funding, and how that funding is obligated. The BLM makes decisions based on its evaluation of impacts and assessment as to which action will best meet its multiple use mission. For these reasons, program costs are not included in the analysis in this EA. Information on the costs associated with BLM's wild horse program can be found at the following website: <https://www.blm.gov/programs/wild-horse-and-burro/about-the-program/program-data>.

#### Genetics

Comments under this category were associated with concerns regarding the genetic viability of wild horses within these HMAs.

#### Summary

Some commenters expressed concerns that current AMLs may not be genetically viable. Special mention was made of the Little Colorado HMA which has an AML of 69-100. One commenter expressed a belief that some of the populations of wild horses within these HMAs represent independent evolutionary units that merit individual protection. Another commenter pointed out that one dominant stallion can dominate breeding activities within a band, reducing the genetic diversity of the group. As such they suggested that a larger number of wild horses would be needed to maintain adequate genetic diversity. Others pointed out that Wyoming is one of two states that contains the gene pool associated with the "curly" mustang, which is highly sought after for adoption.

Overall, commenters requested that BLM consider how each alternative would affect the genetic diversity of these wild horse herds and their ability to maintain a self-sustaining population. Concerns were raised that removal to low AML could affect genetic viability. Concerns were also raised that the combination of removal to low AML and the use of population growth suppression strategies could have an impact on a herds genetic viability. Because of these concerns, some commenters suggested that reversible fertility control methods, such as immunocontraceptive vaccines, be considered as a better means to reduce population growth while reducing impacts to the genetic diversity of the herd. Commenters also requested that the most recent genetic analysis reports for these HMAs be included as an appendix to the document. In contrast to these positions, one commenter expressed a belief that there is adequate genetic diversity in these herds, and that removal of excess wild horses would not adversely affect the herd.

One commenter requested that BLM analyze an alternative that would remove excess wild horses to high AML to help protect genetic diversity. Another commenter requested the BLM consider an alternative that maintains wild horses above minimum viable population thresholds in each HMA.

#### Discussion

Potential impacts to the genetic diversity of wild horse herds are described and analyzed in Section 3.3 of the EA. The use of intrauterine devices was added to the Proposed Action (see Section 2.2). Like immunocontraceptive vaccines, IUDs are a reversible contraceptive method. The other alternatives proposed in these comments were considered but eliminated from detailed analysis (see Section 2.5 of the EA).

#### Habitat Improvements for Wild Horses

Comments under this category were associated with various forms of habitat improvements for wild horses, such as water developments or fences.

#### Summary

Some commenters requested that the BLM analyze an alternative that considered developing more water sources for wild horse use while removing fences to make it more likely that wild horses would utilize more of their designated HMAs. Some commenters requested that a map be provided that shows water sources and fences within the HMAs.

#### Discussion

The requested alternative was considered but eliminated from detailed analysis (see Section 2.5 of this EA).

#### Health, Safety and Humane Treatment of Wild Horses

Comments under this category were associated with concerns related to the health, safety and humane treatment of wild horses.

#### Summary

Commenters primarily expressed concerns that gather and removal operations would impact the health and safety of the wild horses, and would be inhumane. Some commenters expressed concerns that fertility control procedures could endanger wild horses and would be inhumane. Others expressed a belief that holding wild horses in holding pens was also cruel to animals that are accustomed to free range.

#### Discussion

Potential impacts to wild horses associated with each alternative are provided in Sections 3.1, 3.2 and 3.3 of this EA. In conducting all wild horse gather and removal operations BLM follows a set of standard operating procedures to protect the health and safety of wild horses (see Appendices E and F).

#### Helicopter Gathers and Bait Trapping

Comments under this category were related to the use of helicopter gathers vs. bait trapping.



### Summary

Some commenters expressed opposition to the use of helicopters to gather wild horses. They expressed concerns that this process is dangerous to the animals, and requested that BLM report the possible injuries and deaths that could occur from these types of gathers (using information from previous gathers in these areas). They also expressed concerns that these types of gathers could impact wildlife species and cause harm to vegetation resources. Some proposed that the BLM consider an alternative that involved the use of bait trapping to remove wild horses, in lieu of helicopter gathers. They felt this option would be more cost effective with fewer potential impacts to wild horses. Others asked that BLM consider an alternative that utilized PZP delivered by darts to control wild horse populations, rather than conduct helicopter gathers. One commenter requested that an alternative be considered that used riders on horseback to herd wild horses into trap sites.

In addition to these concerns, a request was made that BLM place all trap sites on public land to allow the public the ability to better view gather operations. A request was also made to equip helicopters with live video feed that could be viewed by the public in real time.

### Discussion

The alternatives proposed in this section have been considered but were eliminated from detailed analysis (see Section 2.5). Potential impacts to wild horses related to the use of helicopter gathers are described and analyzed in Section 3.2 of this EA. A list of standard operating procedures that BLM follows when conducting gather operations is provided in Appendices E and F.

### Land Swaps

Comments under this section were related to the possibility of a land swap within the checkerboard land ownership pattern area.

### Summary

Comments under this category requested that BLM consider an alternative that involved conducting a land swap to eliminate the management conflicts associated with checkerboard lands.

### Discussion

This alternative was considered but eliminated from detailed analysis (see Section 2.5).

### Monitoring Data

Comments under this category were related to the collection and use of vegetation monitoring data within these HMAs.

### Summary

Some commenters expressed concerns that the scoping notice did not provide any monitoring data to help demonstrate that there are excess wild horses within these HMAs. Some requested that BLM provide data to support their alternatives in the EA and to show if the HMAs are currently meeting a TNEB. One commenter expressed concerns that the scoping notice proposed a multi-year plan that would not include year by year monitoring. Another commenter expressed a belief that wild horses are

a BLM Sensitive Species and that the BLM should conduct the level of monitoring for them that is required for a sensitive species.

### Discussion

A discussion of how BLM determined there were excess wild horses is provided in the EA in Section 1.1. This includes a discussion of the factors that lead to an excess determination. The BLM considered implementing a multi-year gather plan, but eliminated this alternative from detailed analysis (see Section 2.5). The wild horse is not listed as a BLM sensitive species; wild horses are managed in accordance with the WFRHBA and BLM's implementing regulations and policies, not the BLM sensitive species policy.

### NEPA Compliance

Comments under this category were associated with actions commenters requested the BLM take in order to comply with the National Environmental Policy Act of 1969 (NEPA).

### Summary

Some commenters requested that the BLM prepare an Environmental Impact Statement (EIS) for this action. Commenters expressed a belief that this action would trigger multiple "significance criteria" that would require the preparation of an EIS. Some expressed a belief that the combination of a multi-year gather plan and proposed fertility treatments would increase the scope of the proposal to a point at which an EIS would be required. Others provided an opinion that many fertility control strategies are scientifically controversial, and that therefore including them in the proposal would require an EIS. One commenter expressed a belief that an EIS was not needed for this project.

Some commenters requested the analysis of other alternatives. Some requested that the BLM analyze an alternative that considers using PZP exclusively to control wild horse populations without conducting a gather and removal. Others requested that BLM consider an alternative that would maintain wild horses at current population levels in these areas while removing livestock grazing within the HMAs. Another commenter requested that BLM consider relocating the wild horses removed from these HMAs to nearby Herd Areas, which are not currently managed for a wild horse population. One commenter asked that BLM consider an alternative that considered the removal of all wild horses from the Great Divide Basin HMA.

Some concerns were raised with BLM implementing a multi-year gather plan. Some commenters expressed concern that they would only be provided a single opportunity to comment during an undisclosed number of years. Others expressed some concerns with how a multi-year gather plan would interact with the RMP amendment for wild horse management that is currently being analyzed in an EIS (BLM 2020). Some expressed a belief that the RMP amendment for wild horses is a connected action, and that both activities should be analyzed together in a single NEPA document. Others suggested that the RMP amendment is a cumulative action that should be considered in the analysis for this proposal. One commenter requested that BLM consider the cumulative impact this action would have on wild horses in combination with past gathers.

Following the public review period for the EA, some commenters provided comments requesting BLM correct perceived errors in various portions of the EA.

### Discussion

One of the purposes of an EA is to analyze potential impacts to determine if any of them are potentially “significant”, as defined by the CEQ regulations. If “significant” impacts are identified then the BLM will prepare an EIS. If none of the identified impacts are “significant” then a Finding of No Significant Impact will be prepared which will discuss why the impacts did not meet the significance criteria.

The separate alternatives proposed under this category were considered but eliminated from detailed analysis (see Section 2.5). The BLM considered implementing a multi-year gather plan, but eliminated this alternative from detailed analysis (see Section 2.5). The ongoing RMP Amendment for wild horse management within the project area is discussed in the cumulative effects analysis (see Sections 3.1, 3.2 and 3.3).

While the RMP Amendment, together with any of the alternatives analyzed in this EA, could lead to cumulative effects, it is not a connected action. “Actions are connected if they automatically trigger other actions that may require an EIS; cannot or will not proceed unless other actions are taken previously or simultaneously; or if the actions are interdependent parts of a larger action and depend upon the larger action for their justification” (BLM 2008). The planning-scale RMP Amendment and the current proposed gather do not meet any of these criteria. They are independent actions, and either could occur in the absence of the other. As such, these actions are being analyzed in separate NEPA documents.

“Controversy”, as it relates to NEPA’s significance criteria, means disagreement about the nature of the effects, not expressions of opposition to the proposed action or preference among the alternatives. There will always be some disagreement about the nature of the effects for land management actions, and the BLM must exercise some judgment in evaluating the degree to which the effects are likely to be highly controversial [40 CFR 1508.27(b)(4)].

Following the public review period, BLM reviewed all comments about perceived errors in the document. The BLM reviewed these perceived errors and corrected any that were verified as errors.

### Off Range Corrals and Pastures

Comments under this category are related to concerns about storing wild horses in off range corrals and pastures.

### Summary

Commenters expressed concerns that wild horses stored in holding facilities would be at increased risk of disease. They also expressed a belief that the experience of being removed from open rangeland and placed in these facilities would be traumatic for these animals. Some expressed concerns that holding pens are already overcrowded and adding more horses to these areas was not appropriate. One commenter requested that BLM disclose the locations where wild horses will go after the gather and removal.

### Discussion

While the program-scale decision to use off range corrals and pastures for wild horses is beyond the scope of this NEPA analysis, the EA includes a discussion of the associated impacts in Section 3.2.2. The BLM has established best management practices (see [PIM 2021-002](#)) to ensure the health and safety of wild horses in off range corrals and pastures. These include isolating sick horses, and utilizing veterinarians to care for sick or injured horses, as well as vaccinating and deworming wild horses kept in off range corrals (see [IM 2015-070](#)).

### Past Litigation

Comments under this category are associated with historic court cases that affect the current management of wild horses within these HMAs.

### Summary

Some of the comments under this category raised concerns about this action and its relation to the 2013 Consent Decree. Some offered support to any alternative that got wild horse numbers down to those agreed upon in the Consent Decree. Others expressed a belief that the alternatives failed to comply with the Consent Decree. A concern was raised about how a multi-year gather plan would interact with the requirements in the Consent Decree to analyze amending wild horse management in the RMP. One commenter expressed a belief that the Consent Decree was not a perpetual document that can be used to remove wild horses to low AML indefinitely, and that it does not provide guidance for all future decisions. Some commenters provided a history of the litigation that has taken place regarding these HMAs and implementation of the Consent Decree, and asked that BLM consider all of these in making a plan for this action. Some litigation history was also provided related to BLM proposals to geld and spay wild horses in other states.

### Discussion

The litigation history related to these HMAs is described in Section 1.1 of the EA. The 2013 Consent Decree and its relationship to the proposed action are discussed in Sections 1.2 and 1.3 of the EA.

### Population Growth Suppression Strategies

Comments under this category expressed concern with the use of population growth suppression strategies, such as spaying, sex ratio skewing and other fertility control strategies.

### Summary

Some commenters expressed general support for the use of population growth suppression strategies while others expressed general disapproval with these methods of controlling wild horse population growth rates. Some commenters mentioned specific methods of population growth suppression in their comments. The comments associated with these various methods are summarized later in this section.

Some commenters expressed concerns that any form of fertility control would alter the wild nature of the wild horses, making them the equivalent of domestic horses. Some commenters asserted that any form of fertility control would violate the Wild Free-Roaming Horses and Burros Act of 1971 (WFRHBA). Some commenters felt that safer forms of fertility control are available and should be considered, such

as the use of intrauterine devices. Others raised concerns that any fertility control action could harm herds that are already below numbers needed for natural genetic viability (such as the Little Colorado herd). One commenter recommended that the BLM attempt to gather close to 100% of the wild horses, then use population growth suppression strategies on all those that would be returned to the HMA. Another commenter asked that the BLM ensure that good quality animals are returned to the HMA to help make future wild horses from these HMAs more easily adoptable when they are gathered and removed.

### *Spay Procedures*

Some commenters expressed support for spaying wild horses to help control population growth. Others expressed concerns with potential dangers associated with spaying a wild horse. Specific concerns were raised with the ovariectomy via colpotomy procedure. Commenters were concerned that ovariectomy via colpotomy had a relatively high frequency of potential complications associated with the surgical procedure. Commenters specifically listed myopathy, neuropathies, wound infection, post-operative pain and hemorrhage as possible complications associated with this procedure. They identified that a number of veterinarians were opposed to the use of this methodology, and asserted a contention that the general public did not support its use on wild horses. They also claimed that the NAS report (NAS 2013) directly recommended against using this methodology.

General concerns expressed in the comments with any method of spaying wild horses included risks of pain, mortality and abortion of pregnant mares. Commenters also expressed concerns that spay procedures conducted in the field with wild horses could be more dangerous because the surgery environment is less clean and controlled than in a veterinary surgical suite, which could lead to a higher infection rate, and reduced recovery success. They were also concerned that standard practices for post-operative care could not successfully be performed on wild horses. Commenters requested that BLM analyze the following potential impacts associated with all spay procedures:

- Impacts on physiology due to reduction in estrus and alteration of hormones
- Risk of infection in conditions that may not be sterile
- Risk of sedation and restraint of wild horses
- Risk of hemorrhage, evisceration, colic and infection due to inability to provide required post-operative care
- Risk of post-operative pain
- Risk to pregnant mares
- Risk to dependent foals when their mare undergoes the procedure
- Premature menopause
- Risk of aggressive stud behavior on mares that are not sexually receptive

### *Gelding*

Some commenters were in favor of gelding while others opposed this practice. Some felt that gelding was not effective because a single stallion could breed with many mares. Others expressed the opinion that gelding is cruel, raised concerns that the procedure can have a relatively high death rate, or suggested that it should not be performed on animals more than 4 years old. Specific concerns were

raised with the use of chemical castration. A concern was also raised that gelded horses do not integrate back into the social structure of the herd.

#### *Porcine Zona Pellucida (PZP)*

Some commenters expressed general concerns with using PZP to treat wild horses. Others expressed a desire that if any birth control method were to be used, it should be PZP. They stated that PZP has been used for decades and is proven to be safe and effective. Concerns were raised about potentially removing wild horses treated with PZP in subsequent gathers, as this doesn't allow enough time to determine if the use of PZP is effective. Some commenters asked that BLM consider an alternative that included the use of PZP without the use of sex ratio skewing. These commenters felt the combination of these two methods was excessive. Some commenters asked that BLM analyze an alternative that included the use of PZP to control the wild horse populations without conducting any gather and removal operations.

#### *GonaCon*

While some commenters generally favored the use of GonaCon, others expressed concern with its use. These individuals expressed a belief that GonaCon has not yet been adequately tested in a scientifically meaningful way, that it could cause stillborn foals and that it may impact wild horse behavior, thereby impacting social interactions within herds.

#### *Sex Ratio Skewing*

Some commenters expressed general support for sex ratio skewing. Others expressed concerns that this activity can cause more aggressive behavior in stallions. They also expressed concerns that this method has not been adequately studied in a scientifically meaningful way, and that it can affect the natural selection process that helps produce strong foals. Some commenters asked that BLM consider an alternative that included the use of PZP without the use of sex ratio skewing. These commenters felt the combination of these two methods was excessive.

#### *Intrauterine Devices (IUDs)*

Some commenters expressed support for using IUDs and asked BLM to include them in the analysis. Others raised concerns with the use of these devices, primarily because these devices have not yet been widely used on wild horses, and the commenters felt that potential impacts may be somewhat unknown. Some expressed concerns that potentially harmful impacts from IUDs may go unnoticed and untreated if they occur once the mares are returned to the HMAs. Others expressed concerns with inserting IUDs into mares already treated with PZP or GonaCon, since this may not have been done before, and potential impacts have not, apparently, been published. Still others raised concerns that few mares would be open, making it unlikely that many IUDs would be able to be inserted.

#### Discussion

The potential impacts associated with any population growth suppression strategies proposed in any of the alternatives are described and analyzed in Section 3.1 of this EA. The Proposed Action includes use of IUDs on mares that are not treated with PZP or GonaCon (see Section 2.2). The other alternatives proposed in these comments were considered but eliminated from detailed analysis (see Section 2.5).

## Population Surveys, Population Growth Rates & Counting of Foals

Comments under this category are related to the results of aerial wild horse population surveys, associated population growth rates and how BLM is counting foals for the proposed action.

### Summary

Multiple commenters disagreed with the results of BLM population surveys and current population estimates. Some expressed a belief that BLM's wild horse population estimates were too high, while others felt they were too low. Many asked that BLM conduct "actual counts" of wild horses, and asked that these counts be conducted by an independent agency using a scientific method. Some expressed a belief that the double-observer method was unreliable and inconsistent, while others expressed support for using this method. Some commenters disagreed with how many wild horses should be categorized as excess, based on the existing population survey. Others argued that BLM's excess determination was inadequate, and needed to be strengthened with additional information. Some expressed a belief that there was adequate acreage within the HMAs to provide adequate habitat for the number of wild horses found in the population survey.

Multiple commenters expressed concern over how the BLM was, or was not, counting foals in relation to AML and the determination of excess wild horses. Some expressed concerns that foals should not count toward AML because their forage needs are different than that of an adult horse. Others expressed concerns that BLM's estimates for foal crops was too low. One commenter expressed a concern that estimating a 20% growth rate for the White Mountain HMA was too high, based on the results of past population surveys in that area. Others argued that a 20% population growth rate estimate is too low. Overall, commenters requested that BLM clearly explain how foals will be counted for this action in the EA.

Following the public review period, one commenter raised concerns with the way BLM was counting foals toward the number of excess wild horses that will be removed under the action alternatives. They argued that because foals did not count toward AML, they could not count toward the excess population.

### Discussion

As is true in almost all surveys of wild ungulates, and because of additional difficulties posed by the size and topography of these HMAs, it is not possible to conduct 100% complete and accurate visual counts of wild horses in these areas. For this reason, the BLM has been utilizing the simultaneous double observer method to conduct wild horse population surveys on these HMAs. This method uses front and back seat observers in aircraft to independently count groups of wild horses. Sighting data are then compared using statistical modeling to estimate rates for all observers. Overall sighting probabilities for each group are computed from the sighting rates, and the inverse of those sighting probabilities are applied to the number of animals seen in each group to generate an overall population estimate for each surveyed area (Griffin et al. 2020). This method of wild horse population survey has been validated in peer reviewed articles, and at this time is considered a reliable method to count wild horses in large HMAs. Representatives from the United States Geological Survey (USGS) have participated in many population surveys conducted recently, and had a role in the validation (Lubow and Ransom 2016) and

statistical analysis of the data. Overall, the estimated population size based on these surveys represents the best available information that BLM can acquire for these herds. A discussion of BLM's determination of excess wild horses is provided in Section 1.1 of the EA, including a discussion on how foals are considered in the excess determination. A discussion of how foals are counted in relation to AML and the number of wild horses to be removed from these HMAs is provided in Section 2.1 under "Management Actions Common to All Action Alternatives".

### Private Land Rights

Comments under this category were related to private land rights associated with wild horse management, as provided for in Section 4 of the WFRHBA.

#### Summary

Comments under this category pointed out that Section 4 of the WFRHBA requires removal of wild horses from private land in response to a landowner's request. Following the public review period, additional comments were provided that identify that wild horses can impact private land, by consuming vegetation, drinking from private water developments, etc...

#### Discussion

Part of the purpose and need of the proposed action is to respond to requests from private landowners for removal of wild horses from their land (see Section 1.2). The ongoing RMP Amendment process is exploring planning-scale measures to address landowner concerns related to wild horse use of private lands in the checkerboard. Potential impacts to private land resources are provided in Sections 3.2 and 3.4 of the EA.

### Public Viewing of Wild Horses

Comments under this category are related to concerns with reduced opportunities to view wild horses within these HMAs.

#### Summary

Multiple commenters pointed out that wild horses provide tourism opportunities that can benefit the local economy. One commenter specifically mentioned the White Mountain Wild Horse Scenic loop and the public viewing and tourism opportunities it provides. Some commenters expressed a personal desire to someday visit these HMAs and see these wild horses. Commenters pointed out that removal of some wild horses from these HMAs would negatively impact their ability to observe, photograph and study these wild horses.

#### Discussion

Potential impacts to public viewing opportunities and tourism are discussed in Section 3.10 of the EA.

### Rangeland Health

Comments under this category are related to potential impacts of wild horses and livestock on rangeland health.

#### Summary



Some commenters raised concerns that the number of wild horses present on these HMAs at this time was negatively impacting rangeland health, which in turn affects wildlife and other resource values. Others argued that impacts to rangeland health came primarily from livestock use. Some argued that wild horses benefit the range by grazing vegetation that other animals won't, and by removing fine fuels that can help start wildfires. One commenter requested that BLM provide the number of wild horses and livestock present on these HMAs, along with the results of the most recent Standards for Healthy Rangelands assessment. Others asked that BLM consider current drought conditions in combination with the current overpopulation of wild horses.

#### Discussion

Potential impacts to soils, vegetation and overall rangeland health are described and analyzed in Sections 3.5 and 3.6 of the EA.

#### Slaughter of Wild Horses

Comments under this category expressed concerns that wild horses may be slaughtered as a result of the proposed action.

#### Summary

Multiple commenters expressed a concern that wild horses removed from these HMAs under the proposed action would eventually be sent to slaughter. One commenter advocated for the humane slaughter of wild horses to help control populations.

#### Discussion

None of the alternatives considered in this EA propose the slaughter of wild horses removed from these HMAs. Under current policy, the BLM does not sell or send wild horses or burros to slaughter. The BLM takes measures to ensure wild horses that are sold or adopted are not sent to slaughter.

#### Wild Horses Outside HMAs

Comments under this category are related to plans for wild horses that are currently located outside the designated HMA boundaries.

#### Summary

Comments under this category asked that BLM disclose the number of wild horses outside HMA, and if they are included in the excess determination.

#### Discussion

See Section 1.1 of the EA for a detailed discussion of the excess determination and how wild horses located outside of these HMAs are counted.

## References

- BLM 2008. BLM National Environmental Policy Act Handbook. H-1790-1.
- BLM 2020. Draft RMP amendment and EIS for wild horse management in the Rock Springs and Rawlins Field Offices, Wyoming. <https://eplanning.blm.gov/eplanning-ui/project/2009946/510>

Griffin, P.C., L.S. Ekernas, K.A. Schoenecker, and B.C. Lubow. 2020. Standard operating procedures for wild horse and burro double-observer aerial surveys: U.S. Geological Survey Techniques and Methods, book 2, chap. A16.

Lubow, B.C., and J.I. Ransom. 2016. Practical bias correction in aerial surveys of large mammals: validation of hybrid double-observer with sightability method against known abundance of feral horse (*Equus caballus*) populations. PLoS-ONE 11(5):e0154902. doi:10.1371/journal.pone.0154902.

NAS 2013. Using science to improve the BLM wild horse and burro program a way forward. National Research Council of the National Academies. The National Academies Press. Washington, D.C.