

# **Environmental Assessment**

Gather Plan to Remove Excess Wild Horses from Herd Areas Previously Designated as Herd Management Areas

The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

DOI-BLM-WY-D040-2024-0101-EA

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### for a

# Gather Plan to Remove Excess Wild Horses from Herd Areas Previously Designated as Herd Management Areas

Bureau of Land Management Rock Springs Field Office & Rawlins Field Office Wyoming

DOI-BLM-WY-D040-2024-0101-EA

May 2025

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### 1.0 INTRODUCTION

This Environmental Assessment (EA) has been prepared to analyze and disclose the environmental consequences of gathering and removing excess wild horses from Herd Areas that were previously designated as the Great Divide Basin, Salt Wells Creek and Adobe Town Herd Management Areas (HMAs). The Bureau of Land Management (BLM) has determined that an excess population of wild horses exists within these Herd Areas (see Section 1.2) and proposes to gather and remove all excess animals from the area. Removing excess wild horses from these Herd Areas is consistent with Sections 3 and 4 of the Wild Free-Roaming Horses and Burros Act of 1971 (WFRHBA), 16 U.S.C. § 1333 & 16 U.S.C. § 1334.

On May 8, 2023, the BLM issued a Record of Decision and Approved Resource Management Plan Amendment (<a href="https://eplanning.blm.gov/eplanning-ui/project/2009946/510">https://eplanning.blm.gov/eplanning-ui/project/2009946/510</a>) that reverted the entirety of the Great Divide Basin and Salt Wells Creek HMAs to Herd Areas, managed for zero wild horses. Additionally, the Record of Decision reverted a portion of the Adobe Town HMA to a Herd Area, to be managed for zero wild horses. The BLM has determined that all wild horses located within the portions of these former HMAs that reverted to Herd Areas are now excess and must be removed from the range in accordance with the WFRHBA.

The BLM also received a written request to remove wild horses from private lands located within the Herd Area boundaries. Section 4 of the WFRHBA, 16 U.S.C. § 1334, and BLM's regulations direct the BLM to remove stray wild horses from private lands as soon as practicable upon receipt of a written request. BLM has confirmed that wild horses are residing on private land within these Herd Areas.

The proposed action would be consistent with BLM's May 8, 2023 Record of Decision and Resource Management Plan amendment and would maintain a "thriving natural ecological balance" (TNEB) and multiple-use relationship within the associated Herd Areas, by removing all excess animals from Herd Areas that are not suited to the long-term management of wild horses.

# 1.1 Background

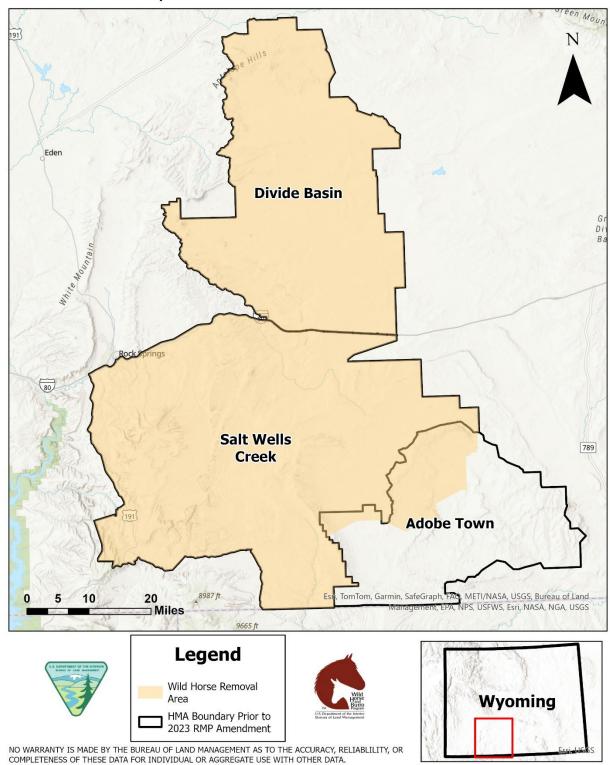
Prior to 2023, the BLM Rock Springs Field Office managed wild horses within HMAs that encompassed an area commonly referred to as "the checkerboard". This included the Great Divide Basin, Salt Wells Creek, Adobe Town and White Mountain HMAs. The creation of these HMAs was possible because, shortly after the passage of the WFRHBA, one of the primary private landowners in the area consented to the presence of wild horses on their private land. However, in 2010 this private landowner revoked their consent citing concerns that BLM had not maintained wild horse populations within the limits previously agreed upon.

In response to this revocation of consent, BLM initiated a Resource Management Plan (RMP) amendment to determine how wild horses should be managed within these HMAs, without the consent of the private landowner in the checkerboard. In the Record of Decision (ROD) for that RMP amendment (BLM 2023) the BLM determined that it would be impossible to manage wild horses on checkerboard lands without consent of the private landowner. Thus, the entirety of the Great Divide Basin and Salt Wells Creek HMAs, as well as a portion of the Adobe Town HMA, would revert to Herd Areas, managed for zero wild

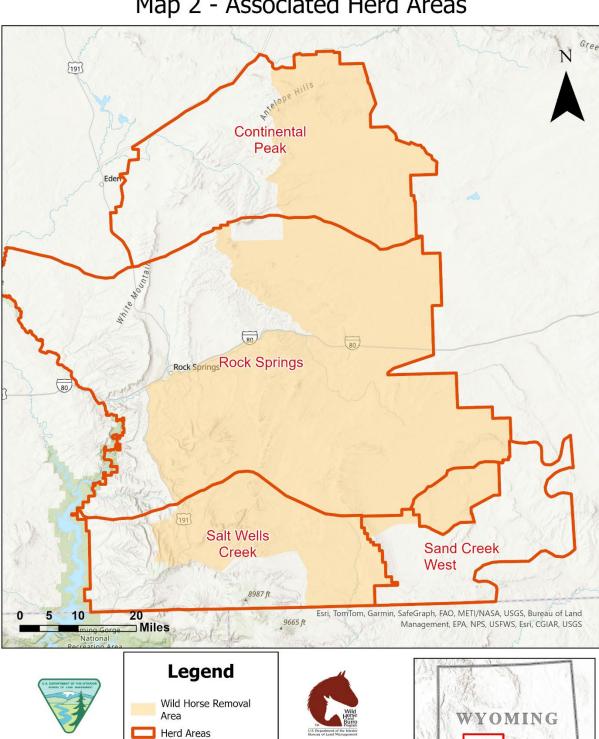
<sup>&</sup>lt;sup>1</sup> The term "checkerboard" refers to a land ownership pattern of alternating sections of federal-owned lands with private or state-owned lands for 20 miles on either side of a land grant railroad (e.g. Union Pacific, Northern Pacific, etc.). On a land status map this alternating ownership is commonly delineated by color coding resulting in a "checkerboard" visual pattern. See "Checkerboard" in the Glossary section of this document.

horses. These Herd Areas, that were formerly designated as HMAs, comprise the project area for this gather operation (see Map 1, Map 2 and Table 1).

A portion of the Adobe Town HMA was retained for the management of a wild horse herd, with an Appropriate Management Level (AML) of 259 – 536. This portion of Adobe Town is managed by the BLM Rawlins Field Office. Concurrent with the proposed wild horse gather on these Herd Areas, the Rawlins Field Office is planning a wild horse gather to low AML on the portion of Adobe Town that is managed as an HMA. More information regarding that proposed wild horse gather may be found on the project website: <a href="https://eplanning.blm.gov/eplanning-ui/project/2037060/510">https://eplanning.blm.gov/eplanning-ui/project/2037060/510</a>.



Map 1 - Wild Horse Removal Area



Map 2 - Associated Herd Areas

NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT AS TO THE ACCURACY, RELIABLILITY, OR

COMPLETENESS OF THESE DATA FOR INDIVIDUAL OR AGGREGATE USE WITH OTHER DATA.

<b>Table</b>	1.	Summary	of the	pro	iect area.

Former HMA	Associated Herd Areas	Public Acres (BML)	Total Acres
Adobe Town	Rock Springs	94,435	118,164
	Salt Wells Creek		
	Sand Creek West		
Great Divide Basin	Rock Springs	561,209	777,922
	Continental Peak		
Salt Wells Creek	Rock Springs	691,695	1,170,714
	Salt Wells Creek		
	Total Acres:	1,347,339	2,066,800

In the fall and winter of 2024-2025, the BLM conducted population surveys on the Herd Areas formerly designated as the Adobe Town, Salt Wells Creek and Great Divide Basin HMAs. Based on these surveys, the BLM estimates that there are at least 2,755 wild horses within these Herd Areas in 2025 (see Table 2). The BLM has determined that all wild horses within the Herd Areas that were previously designated as HMAs are excess and need to be removed to maintain a thriving natural ecological balance, and multiple-use relationship in the area (see Section 1.2).

**Table 2**. Summary of wild horse population surveys.

	Population Survey Results in Former HMA Areas				
Year	Adobe Town	<b>Great Divide Basin</b>	Salt Wells Creek	Total	
2024-2025	736	894	1,125	2,755*	

<sup>\*</sup>Note, these numbers do not account for any foals born after the population surveys were completed.

#### 1.2 Excess Determination

The WFRHBA directs the BLM to consider a variety of factors when determining that there is an overpopulation of wild horses on the range and that action is necessary to remove excess animals. Those factors include 1) a current inventory of the lands, 2) information contained in land use plans, 3) information contained in court ordered environmental impact statements, and 4) additional information currently available. The BLM considers each of these factors in detail below.

#### 1. Current Inventory of the Lands

The project area includes lands that were formerly designated as the Adobe Town, Great Divide Basin and Salt Wells Creek HMAs (see Section 1.1 for details).

The BLM has determined that the project area soils are stable and allow for water infiltration to provide for optimal plant growth and minimal surface runoff. Additionally, upland vegetation is resilient, diverse, and able to recover from natural and human disturbance. Rangelands are capable of sustaining viable native plant and animal species appropriate to their habitat, including threatened species, endangered species, species of special concern, or sensitive species. However, the BLM determined that all three former HMAs contained some impaired riparian systems that were affected by invasive species and unstable bank conditions, which inhibits the functionality of riparian systems. BLM has determined that wild horses are one of the causal factors for the degraded riparian conditions (see Appendix A in BLM 2022), which adversely impacts the BLM's ability to preserve and maintain a thriving natural ecological balance.

The BLM has conducted a wild horse population survey, and found approximately 2,755 wild horses present on public lands that are no longer suitable to the long-term management of a wild horse herd:

#### o Adobe Town

The portion of the project area that was formerly designated as part of the Adobe Town HMA contains a total of 118,168 acres. The wild horse population within this portion of the project area is estimated to be 736.

#### o Great Divide Basin

The former Great Divide Basin HMA contains a total of 777,922 acres. The wild horse population within this portion of the project area is estimated to be 894.

#### o Salt Wells Creek

The former Salt Wells Creek HMA contains a total of 1,170,714 acres. The wild horse population within this portion of the project area is estimated to be 1,125.

#### 2. Information Contained in Land Use Plans

The BLM has considered information contained in the land use plans associated with the project area, specifically the Rock Springs RMP (BLM 2024b) and Rawlins RMP (BLM 2008). In 2023, the BLM issued a Record of Decision amending the RMPs for the Rock Springs and Rawlins field offices regarding wild horse management. In the amendment, BLM determined that the entirety of the Great Divide Basin and Salt Wells Creek HMAs, as well as a portion of the Adobe Town HMA, would revert to Herd Areas, managed for zero wild horses. Therefore, in conformance with the RMP amendment, any population of wild horses within these Herd Areas constitutes an overpopulation. Action is necessary to remove these overpopulated animals to achieve the management for zero wild horses.

#### 3. Information Contained in Court Ordered Environmental Impact Statements

The WFRHBA requires the BLM to consider "information contained in court ordered environmental impact statements as defined in section 1902 of title 43". The specific court ordered environmental impact statements referred to here have been superseded by multiple environmental impact statements for land use planning; most recently, the FEIS for wild horse management (BLM 2022) and the FEIS for the Rock Springs Resource Management Plan Revision (BLM 2024a). The information in these environmental impact statements was reviewed and considered in making this excess determination. See "Information Contained in Land Use Plans" section above for more details.

#### 4. Additional Information Currently Available

The project area contains a large amount of private land, which is interspersed with public land managed by the BLM, an area typically referred to as the Checkerboard (see Glossary). One of the primary private landowners in this area has demanded that all wild horses be removed from their private land in accordance with Section 4 of the WFRHBA. Furthermore, none of the private landowners in the project area have consented to the presence of wild horses on their property. The RMP amendment resolved conflicts between BLM's management of wild horses and private landowners in the checkerboard that have been ongoing since the late 1970's. The private landowner's withdrawal of consent for wild horses to use private land in the checkerboard in 2010

followed over 30 years of conflict regarding the management of the checkerboard portion of these HMAs.

The reversion of these three checkerboard HMAs to Herd Areas, and the subsequent removal of the wild horses in those areas, will also provide an overall environmental benefit to resource values, thereby enhancing the BLM's ability to preserve and maintain a thriving natural ecological balance in the area. By comparison, the continued presence of wild horses would hinder the BLM's ability to preserve and maintain a thriving natural ecological balance and multiple-use relationship in those areas.

Within the checkerboard portions, BLM historically managed wild horses in a way that relies on non-consenting private lands (BLM 2023). No single public parcel in the checkerboard is of sufficient size to maintain a wild horse herd, as horses can travel up to 17 miles a day and the checkerboard parcels are only one square mile in size. To move from one public land parcel to another in the checkerboard, wild horses would, by necessity, cross private land in the process, which would constitute the non-permissive use of that private land. Alternatively, if BLM could somehow force wild horses to remain on individual square mile sections of public land, there would be inadequate forage, water, cover and space in that area to sustain the herd. Accordingly, wild horses in the checkerboard portions constitute excess, as defined at 16 U.S.C. 1332(f), because attempting to maintain wild horses in areas with inadequate forage, water, cover, and space would not promote and maintain a thriving natural ecological balance. The overpopulation of wild horses therefore needs to be removed from the checkerboard portions.

With respect to solid block portions of the former HMAs, BLM must remove these wild horses, for the continued management of wild horses in this area would require infrastructure that would have negative impacts on the natural ecological function of the area, as a whole. Those impacts, in turn, would compromise the BLM's ability to promote and maintain a thriving natural ecological balance in the area. Accordingly, the wild horses located in those areas constitute excess animals that must be removed:

#### o Adobe Town

The RSFO portion of the Adobe Town HMA reverted to HA status and is managed for zero wild horses. The BLM considered the possibility of allowing continuation of wild horse use on the RSFO portion of the HMA outside of the checkerboard, but determined that a combination of topography, land ownership, and available resources made this unfeasible because wild horses would constantly stray onto private land within the checkerboard (BLM 2022). Because of this, the Adobe Town HMA boundary was adjusted to more closely align with existing natural and man-made boundaries to assist in keeping wild horses off private lands in the checkerboard. Splitting the HMA into an area managed for zero wild horses, and a smaller area where wild horses are maintained at an adjusted AML, allowed BLM to maintain the multiple use relationships and a thriving natural ecological balance throughout the Herd Area and the smaller Adobe Town HMA.

#### o Great Divide Basin

The entire Great Divide Basin HMA reverted to HA status and is managed for zero wild horses. Forty eight percent of the former HMA was within the checkerboard pattern of land ownership and BLM had no reasonable possibility of creating an effective barrier between checkerboard and solid-block federal lands (BLM 2022). Although BLM determined that adequate forage, water, cover and space is available on the solid block portion of the former HMA, these herds spend a considerable portion of the year on the checkerboard. The FEIS for the RMP Amendment (BLM 2022) noted that in order to contain wild horses on the solid block lands, BLM would be required to erect a fence or another type of barrier along the border between solid block and checkerboard lands. There are no other fences or natural topography that this fence could intersect on the western side for at least 30 miles. A fence would fully bisect the designated Sublette Mule Deer Migration Corridor and would potentially interfere with big game migration. Because such fencing would adversely affect mule deer (and, in turn, potentially other species and ecological processes), allowing wild horses to remain within the solid block portion of the former Great Divide Basin HMA (which would require containment with fencing) would interfere with a thriving natural ecological balance within this former HMA. Accordingly, while there is adequate forage, water, cover and space available on the solid block portion of the former HMA, it is nevertheless the case that wild horses in those areas constitute excess animals under 16 USC 1332(f) and must be removed.

#### o Salt Wells Creek

The entire Salt Wells Creek HMA reverted to HA status and is managed for zero wild horses. Seventy two percent of this former HMA was within the checkerboard pattern of ownership and BLM had no reasonable possibility of creating an effective barrier, such as a fence, between checkerboard and solid-block federal lands. Although BLM determined that adequate forage, water, cover and space is available on the solid block portion of the former HMA, these herds spend a considerable portion of the year on the checkerboard. The FEIS for the RMP Amendment (BLM 2022) noted that in order to contain wild horses on the solid block lands, BLM would be required to erect a fence or another type of barrier along the border between solid block and checkerboard lands. There are no other fences or natural topography that this northern barrier could intersect on the eastern side for at least 30 miles. Good tie-in points are lacking on the western side as well. Additionally, construction of a fence or another type of barrier on the northern border of the solid block lands would negatively impact Greater Sage-grouse by creating a collision hazard near active leks. Because fencing or another barrier would adversely impact Greater Sage-grouse (and, in turn, potentially other species and ecological processes), allowing wild horses to remain within the solid block portion of the former Salt Wells Creek HMA would interfere with a thriving natural ecological balance within this former HMA. Accordingly, while there is adequate forage, water, cover and space available on the solid block portion of the former HMA, it is nevertheless the case that animals in those areas constitute excess animals under 16 USC 1332(f) and must be removed..

#### **Determination of Excess**

Consistent with the WFRHBA and in consideration of the above factors, the BLM has determined that all wild horses currently present within the project area are excess and must be removed. As discussed above, through the Rock Springs RMP amendment, the BLM considered its obligations under Section 3 and Section 4 of the WRFHBA and determined that elimination of the wild horse HMAs on the affected lands was necessary to ensure their proper protection and management, given the BLM's inability to effectively manage wild horses on the public lands in these Herd Areas after the private landowners' revocation of consent. Because maintaining any wild horses on these former HMAs would not comply with the associated land use plans, BLM finds that the wild horses located in these former HMAs are excess and must be removed.

Moreover, the BLM finds that removal of the wild horses from these Herd Areas (which were formerly designated as HMAs) is necessary to preserve and maintain a thriving natural ecological balance and multiple-use relationship. Although sufficient food and water is available on portions of solid block lands within the former HMAs, the BLM cannot maintain a herd on the solid block alone without adversely impacting the wild horses or other animals, such as mule deer and Greater Sage-grouse, all of which are components of and contribute to a thriving natural ecological balance. If left in the solid block, wild horses would stray, especially during the winter, to the checkerboard lands and end up on property owned by private parties who do not consent to their presence. The only way to avoid that outcome and ensure that wild horses are contained within the solid block lands would be to erect dozens of miles of fencing, which would pose considerable changes to the natural environment by, among other things, interfering with a designated big game migration corridor and creating additional threats to the Greater Sage-grouse. Thus, removal of all wild horses from these Herd Areas is necessary to ensure the thriving natural ecological balance for all range resources does not deteriorate in the future.

### 1.3 Purpose and Need

The purpose of the proposal is: 1) to remove excess wild horses from Herd Areas that have been determined to be unsuitable for the long-term management of wild horses due to the presence of interconnected private lands, and 2) to remove wild horses from private lands within these Herd Areas, as requested by the private landowner.

The need for this action derives from the requirements of the WFRHBA. Section 3(b)(2) of the Act, 16 U.S.C. § 1333(b)(2), as amended, directs the BLM to remove excess wild horses from public lands after considering several factors, including information contained in the associated land use plan. In 2023 BLM amended the 1997 Green River RMP (BLM 1997a), as well as the 2008 Rawlins RMP (BLM 2008), regarding wild horse management. In that plan amendment, BLM determined that wild horses could no longer be managed for the long-term in the entirety of the Great Divide Basin and Salt Wells Creek HMAs, as well as a portion of the Adobe Town HMA. These areas reverted to Herd Areas, managed for zero wild horses. BLM has determined that all wild horses in these Herd Areas are excess and must be removed to maintain a thriving natural ecological balance and multiple-use relationship in that area.

Additionally, Section 4 of the WFRHBA, 16 U.S.C. § 1334, directs the BLM to remove wild horses from private land upon the request of the landowner. Wild horses are present on private lands within these Herd Areas, and the private landowner has requested their removal.

#### Decision to be Made:

Based on the analysis presented in the EA, the authorized officer will select an alternative that meets the purpose and need for the action. The BLM authorized officer will decide how to respond to the presence

of excess wild horses on these Herd Areas, and the private lands contained therein. The authorized officer will decide how to gather and remove excess animals from Herd Areas previously designated as HMAs.

The decision to be made would not include any Land Use Plan decisions, which have already been made. For example, the 2023 RMP Amendment (BLM 2023) reverted some areas that were previously HMAs to Herd Areas, managed for zero wild horses. BLM will not make any decisions about retaining wild horses within these Herd Areas, as those decisions were made in the 2023 RMP Amendment. All impacts associated with that amendment were analyzed in a FEIS (BLM 2022), and those land use plan level impacts (such as managing these Herd Areas for zero wild horses) are beyond the scope of this document. The analysis in this document will focus solely on those actions and alternatives needed to meet the purpose and need for this proposal.

Furthermore, the decision to be made will not include any actions to be taken on the portion of Adobe Town that is still managed as an HMA. Decisions related to managing wild horses within AML inside an HMA represent a separate, independent action with a separate purpose and need from actions related to removing wild horses from Herd Areas that are not managed for a wild horse population. Therefore, these separate activities are not a connected action and are not discussed in this Environmental Assessment.

# 1.4 Relationship to Statutes, Regulations, Land Use Plans, Agreements, and Policies

#### Statutes and Regulations

The Action Alternatives comport with the National Environmental Policy Act (NEPA)<sup>2</sup>, the WFRHBA, the Federal Land Policy and Management Act (FLPMA), applicable regulations in 43 CFR part 4700 and BLM policies.

#### Land Use Plans

The Action Alternatives conform with the 2024 Rock Springs RMP, which incorporated the 2023 amendment to the previous 1997 Green River RMP. They also conform to the 2008 Rawlins RMP, as amended.

The amendment (BLM 2023) to these RMPs states:

• "The Rock Springs Field Office (RSFO) portion of the Adobe Town HMA will revert to HA status and be managed for zero wild horses. In the Rawlins Field Office (RFO) portion of the

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<sup>&</sup>lt;sup>2</sup> Executive Order 14154, Unleashing American Energy (Jan. 20, 2025), and a Presidential Memorandum, Ending Illegal Discrimination and Restoring Merit-Based Opportunity (Jan. 21, 2025), require the Department to strictly adhere to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. The [bureau] verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum. The BLM has also voluntarily considered the Council on Environmental Quality's rescinded regulations implementing NEPA, previously found at 40 C.F.R. Parts 1500 – 1508, as guidance to the extent appropriate and consistent with the requirements of NEPA and Executive Order 14154.

HMA, all checkerboard land and the portion of the HMA north of the existing Corson Springs southern allotment boundary fence . . . will revert to HA status and be managed for zero wild horses. The remaining lands (within the RFO) will be retained as an HMA and managed with an AML of 259 - 536."

- "The entire Great Divide Basin HMA will revert to HA status and be managed for zero wild horses"
- "The entire Salt Wells Creek HMA will revert to HA status and be managed for zero wild horses."

### 1.5 Scoping and Public Involvement

On June 7, 2024, the BLM issued a scoping letter for this proposed wild horse gather. A total of 1,033 scoping comment letters were received from individuals, organizations, and agencies through BLM's ePlanning website. All comment letters were reviewed, and BLM identified the following comment categories: AML / TNEB; conflicts with livestock; conflicts with wildlife; financial costs and socioeconomics; health, safety and humane treatment of wild horses; helicopter gathers and bait trapping; land swaps and other alternatives; NEPA compliance; off range corrals and pastures; population growth suppression strategies; population surveys, population growth rates; private land rights; public viewing of wild horses; rangeland health; RMP amendment; wildland fire; genetics; Herd Management Area Plans. Appendix A provides more detailed information regarding public comments, and BLM's response.

On March 31, 2025, the BLM released the Environmental Assessment (EA) for a 30-day public review period. The BLM received a total of 2,138 comments from the public regarding the EA. BLM reviewed all public comments, and made changes to the EA and Appendix A, as needed, to properly respond to public feedback.

# 1.6 Issues Identified for Analysis

While many issues may arise during scoping, not all issues raised warrant analysis in an EA. Issues will be analyzed if: 1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) the issue is associated with a significant impact, or where analysis is necessary to determine the significance of the impacts. The BLM has reviewed the topics identified through scoping and determined that the following issues require additional analysis (see Section 3).

- How would gather operations affect the health and safety of wild horses?
- How would the concentration of wild horses at trap sites affect vegetation communities?
- How would the concentration of wild horses at trap sites affect soil resources?
- How would gather operations affect permitted livestock grazing activities within the project area?
- How would gather operations impact big game animals in crucial winter range?
- How would gather operations impact Greater sage-grouse and their habitat within Priority Habitat Management Areas (PHMA)?
- How would gather operations affect raptors and migratory birds that are present within these Herd Areas?
- How would noise and traffic associated with the gather operation affect the recreational experience of the public in and around the project area?

## 1.7 Issues not Analyzed in Detail

The following issues were identified through scoping but are not analyzed in detail in this document:

How would the removal of wild horses from these Herd Areas affect the genetic characteristics of these herds?

As described in the Decision to Be Made Section of this EA (Section 1.3) impacts associated with the decision to manage these Herd Areas for zero wild horses were addressed in Section 4.2.1 of the FEIS associated with the RMP Amendment (BLM 2022). Decisions regarding where wild horses will be managed, and in what numbers, is a land use plan level decision, and is beyond the scope of this document. Furthermore, BLM does not have any guidance or regulations on preserving specific genetic traits in a herd.

#### How would the concentration of wild horses at trap sites affect cultural resources?

BLM endeavors to locate trap sites in previously disturbed areas. Prior to using any new trap site, BLM archeologists would evaluate the site to ensure no sensitive cultural resources are present. A site would not be cleared for use if any sensitive cultural resources are present. This will avoid any potential impacts to cultural resources.

### How would the concentration of wild horses at trap sites affect paleontological resources?

BLM endeavors to locate trap sites in previously disturbed areas. Prior to using any new trap site, BLM specialists would evaluate the site to ensure no sensitive paleontological resources are present. A site would not be cleared for use if any sensitive paleontological resources are present. This will avoid any potential impacts to paleontological resources.

#### How would the concentration of wild horses at trap sites affect special status plant species?

BLM endeavors to locate trap sites in previously disturbed areas. Prior to using any new trap site, BLM specialists would evaluate the site to ensure no special status plants are present. A site would not be cleared for use if any special status plant species are present. This will avoid any potential impacts to special status plants.

#### How would the concentration of wild horses at trap sites affect historic trails?

BLM endeavors to locate trap sites in previously disturbed areas. Prior to using any new trap site, BLM archeologists would evaluate the site to ensure there would be no potential to negatively impact historic trails. A site would not be cleared for use if negative impacts to historic trails are expected. This will avoid any potential impacts to historic trails.

# <u>How would the proposed action affect mule deer habitat within the designated Sublette Mule Deer Migration Corridor?</u>

The primary concern with designated big game migration corridors is the ability of animals to move through the area. Gather operations for the removal of wild horses would not impede the movement of mule deer in this area.

How would gather operations impact Greater sage-grouse during critical breeding and nesting periods? By policy, the BLM does not conduct wild horse gathers by helicopter from March 1 through June 30 to avoid the peak foaling period (see BLM Handbook 4700-1 Section 4.4.4). Timing restrictions to protect sage-grouse during critical breeding and nesting periods span March 15 to June 30. The timing restriction on helicopter gathers eliminates any potential impact to Greater sage-grouse during critical breeding and nesting periods.

How would gather operations impact pygmy rabbits in areas where gather activities are occurring? All trap sites would be cleared by a BLM wildlife biologist prior to any gather activities in the area. If the wildlife biologist identifies signs of any sensitive species, including pygmy rabbits, then the trap site would be moved. Other gather activities are unlikely to impact pygmy rabbits, because pygmy rabbits prefer areas with dense, tall sagebrush, which would make it an unlikely area for wild horses to move through during gather operations.

### 2.0 PROPOSED ACTION AND ALTERNATIVES

This section of the EA describes the action alternatives, and alternatives that were considered but eliminated from detailed analysis. Based upon all information available at this time, the BLM has determined that all wild horses within the project area are excess and need to be removed from public lands (see Excess Determination in Section 1.2).

Based on information compiled during scoping, the BLM has developed the following alternatives:

- Alternative I: (No Action) Do not conduct any gather or removal activities.
- Alternative II: (Proposed Action) Remove all excess wild horses from the removal area using a combination of helicopter drive trapping and bait trapping.

The alternatives were developed to meet the BLM purpose and need. All action alternatives would comply with current BLM policy, including <u>PIM 2021-002</u>, which provides direction on protecting the health and well-being of wild horses during gather and removal activities (see Appendix D). It defines standards, training, and monitoring for conducting safe, efficient, and successful gather operations while ensuring humane care and handling of animals gathered.

Implementation of the selected alternative could occur as early as July of 2025. Due to the size of the area, and the number of wild horses that need to be removed, the BLM anticipates that it will take multiple years, and multiple gathers to remove all excess wild horses from the project area. Gather operations will continue to occur in subsequent years until all excess wild horses are removed from the project area.

#### 2.1 Alternative I - No Action Alternative

Under the No Action Alternative, the BLM would not conduct a gather to remove excess wild horses within the project area. Wild horse populations would continue to increase by approximately 20% annually. There would be no removal of wild horses from private lands within the project area.

The No Action Alternative would not comply with:

- The Rock Springs RMP (BLM 2024b)
- The Rawlins RMP (BLM 2008)
- The WFRHBA's directive to immediately remove excess wild horses from the range
- FLPMA's directives to manage public lands on the basis of multiple use and sustained yield, and prevent unnecessary or undue degradation of the public lands

The No Action Alternative is included as a baseline for comparison with the action alternatives, as required under NEPA.

#### 2.2 Alternative II - Gather and Removal

Under this alternative the BLM would gather and remove all wild horses from the project area. The primary gather method will be helicopter drive trapping; however, helicopter assisted roping and bait trapping may also be used. Gather operations are anticipated to start in July 2025 but may start later. Gather operations would continue until all wild horses are removed from the project area, which may span multiple years.

The estimated 2025 wild horse population within the removal area is at least 2,755. However, due to the size of the removal area (see Map 1), and the number of excess wild horses, it is likely that gather operations will involve multiple attempts over multiple years before all excess wild horses are removed from the area. Any wild horses not initially removed from the project area will continue to reproduce, growing the remaining population by approximately 20% annually. Overall, the BLM anticipates that approximately 3,371 wild horses will be removed from these former HMAs once all gather operations are completed and all wild horses are removed from the project area. However, this number could be as low as 2,500 or as high as 5,000.

In conducting gather operations BLM will follow the below guidelines:

- All capture and handling activities would be conducted in accordance with the SOPs described in Appendices C and D.
- Multiple trap sites would be used to capture wild horses within the project area.
- Whenever possible, capture sites would be located in previously disturbed areas.
- An Animal and Plant Health Inspection Service (APHIS) veterinarian would be on-site, as needed, to examine animals and make recommendations to the BLM for care and treatment of wild horses in accordance with PIM 2021-007. If an APHIS veterinarian is not available, the BLM would coordinate with a private practice veterinarian for on-call or referral services as needed. On-site inspection by an APHIS veterinarian is required for any animals to be transported across State borders without testing for Equine Infectious Anemia (EIA) prior to transport.
- Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy. Conditions requiring humane euthanasia occur infrequently and are described in more detail in PIM 2021-007.
- The BLM is committed to the humane treatment and care of wild horses and burros through all phases of its program. The gathering of wild horses will be in accordance with <a href="PIM 2021-002">PIM 2021-002</a> Wild Horse and Burro Comprehensive Animal Welfare Program (see Appendix D).
- Wild horses removed from the range would be shipped to BLM holding facilities in Rock Springs, Wyoming; Wheatland, Wyoming; Cañon City, Colorado and/or any other BLM holding facility, where they would be prepared for adoption or sale to qualified individuals. Wild horses that do not meet adoption age or temperament criteria may be shipped to off-range pastures. All shipping activities would be conducted according to BLM policy to ensure the humane treatment of wild horses.
- The BLM would provide the public and media with safe and transparent visitation at wild horse gather operations in accordance with <a href="May 2013-058"><u>IM 2013-058</u></a>. To protect spectators, workers and the wild horses only authorized personnel would be allowed on site during the removal operations. Designated visitor areas will be established at each trap site to allow spectators to view the gather operation from a safe location.

- Advance planning for observation of gather operations can minimize the potential for
  unanticipated situations to occur and ensure the safety of the animals, staff, and Contractor
  personnel, as well as the public/media. In response to this, an Incident Command System will be
  followed during the gather operations as guided by IM 2013-060.
- Wild horses will be gathered primarily via helicopter drive-trapping. As needed, some animals may be captured using helicopter-assisted roping or bait-trapping.
- Helicopter drive-trapping and helicopter-assisted roping would not be conducted between the dates of March 1 and June 30. The BLM Wild Horse and Burro Handbook, H-4700-1, Section 4.4.4 prohibits the capture of wild horses by helicopter during this period to protect foals during peak foaling.
- After wild horses are captured at a trap site, they would be transported via trailers to a temporary holding facility where they would receive food, water and any needed veterinarian care. Temporary holding facilities and trap sites may be located on either public or private lands in the project area due to the land ownership pattern present in the area (the checkerboard).
- Prior to commencement of gathering operations, the BLM would notify the public with a press release with the location, date, and time associated with the gather operation.
- BLM would inform the Wyoming Game and Fish Department (WGFD) about any gather operations that are likely to occur. WGFD may inform any big game permit holders in the area in advance of the gather activities if deemed necessary.
- All hay fed at trap sites or holding facilities, would be certified as weed free.
- All equipment used for gathering operations shall be cleaned before arrival to minimize the potential spread of noxious and/or invasive weed species.
- To prevent impacts to cultural resources, trap sites and temporary holding facilities would be located in previously disturbed areas whenever possible. Cultural resource inventory and clearance would be required prior to using new trap sites or holding facilities outside existing areas of disturbance.
- To prevent any impacts to sensitive wildlife species or special status plant species, trap sites and temporary holding facilities would be located in areas where no impacts to these resources would be expected. A wildlife biologist would be consulted for clearance of trap sites and holding facilities.

# 2.3 Alternatives Considered but not Analyzed in Detail

All Alternatives Associated with Re-establishing HMAs and AMLs in the Project Area Some public comments requested that BLM consider alternatives that involve re-establishing HMAs/AMLs to provide a location where wild horses could remain on the range. None of these alternatives were analyzed in detail because they would not respond to the purpose and need for this proposal (see Section 1.3), and they would be beyond the scope of this document.

Determining which Herd Areas are suitable for the long-term management of wild horses, and therefore eligible to be designated as an HMA, is a land allocation decision that must be considered through the land use planning process. In 2023 the BLM completed this process by amending the Green River and Rawlins RMPs (BLM 2023). Through that amendment, the BLM reverted these areas from HMAs to Herd Areas managed for zero wild horses. More detailed information is available in the Record of Decision (BLM 2023) and associated FEIS (BLM 2022).

Relocate Wild Horses Removed from this Area to Native American Reservations

Under this alternative, wild horses removed from these Herd Areas would be relocated to Native American Reservations. This alternative was not carried forward for detailed analysis because it is technically infeasible. There is no legal or regulatory mechanism whereby BLM can relocate wild horses to Native American Reservations. Furthermore, no Native American Reservation has expressed an interest in receiving wild horses from the BLM.

#### Exclusive Use of Bait and/or Water Trapping

Under this alternative all wild horses would be removed using only bait and water trapping, without the use of a helicopter. This alternative was dismissed from detailed analysis because it is technically infeasible and would not meet the purpose and need for the proposed action. While bait trap operations can be successful in gathering a small number of animals in a somewhat confined area, it is entirely ineffective at gathering large numbers of wild horses spread over a large area. The proposed action would involve gathering thousands of wild horses spread over millions of acres. Bait trapping is entirely ineffective in these types of circumstances. For this reason, exclusive use of bait and water traps is infeasible, and would not meet the purpose and need of the proposed project.

#### <u>Utilize Fertility Control to Manage Wild Horse Populations</u>

Under this alternative, wild horses in the project area would be gathered, treated with some form of fertility control, and then released back into the Herd Areas. This alternative was not carried forward for detailed analysis because it would not meet the purpose and need of the proposal. The BLM has determined that all wild horses in the project area are excess and need to be removed from public lands to comply with the WFRHBA (see Section 1.2). Treating wild horses with fertility control and then releasing them back into these Herd Areas would not address the presence of excess wild horses in the project area.

#### Control Wild Horse Numbers by Natural Means

This alternative would use natural means, such as natural predation, starvation, and weather, to control the wild horse population. This alternative was eliminated from detailed analysis because it is substantially similar to the No Action alternative and would not meet the purpose and need for the proposal. The BLM has determined that all wild horses within the project area are excess and need to be removed from the range. An alternative that leaves all wild horses on the range would not respond to this need.

#### Remove Younger Wild Horses While Leaving Older Animals on the Range

Under this alterative the BLM would remove all young animals, while leaving older animals on the range. This alternative was not carried forward for detailed analysis because it would not meet the purpose and need for the proposal. The BLM has determined that all wild horses within the project area are excess and need to be removed in accordance with Section 3 of the WFRHBA. Leaving excess animals on the range, regardless of their age, would not address the need to remove all excess animals from these Herd Areas.

#### Conduct Small Removals

Under this alternative the BLM would conduct multiple small removals over a longer period of time. This alternative was not carried forward for detailed analysis because it would not meet the purpose and need of the proposal. Because wild horse populations grow at approximately 20% annually, small removals would be ineffective at removing all wild horses within these Herd Areas. The number removed would not adequately compensate for the population growth rate and would not lead to the total removal of all excess wild horses from these Herd Areas.

#### Remove or Reduce Livestock in the Project Area

Under this alternative the BLM would reduce the number of livestock or eliminate them entirely from the area. This alternative was eliminated from detailed analysis because it would not meet the purpose and need for the proposal and would be inconsistent with the land use plans for the project area. The presence of livestock in the area is not related to the factors that led BLM to make an excess determination (see Section 1.2).

#### Require Private Landowners in the Checkerboard to Fence Wild Horses Off Their Land

Under this alternative, wild horses would not be removed from the range, and private landowners in the checkerboard would be required to install fences to prevent wild horses from entering their property. This alternative was not carried forward for detailed analysis because it would not respond to the purpose and need for the proposed project, and it would be inconsistent with the existing land use plans for this area.

In 2023 the BLM amended the Green River and Rawlins RMPs (BLM 2023) and determined that wild horses could not be managed for the long-term in the project area. In the FEIS for that plan amendment, BLM considered an alternative that would retain wild horses on the public land portion of the checkerboard (BLM 2022). That alternative was eliminated from detailed analysis in the plan amendment because it was not technically feasible. Further, fencing private parcels of checkerboard land would effectively fence off all parcels of public lands as well, and eliminate the possibility that wild horses or other animals could move freely between individual parcels of public lands. It would also result in a labyrinth of hundreds if not thousands of miles of additional fences in derogation of federal laws, including but not limited to the Unlawful Inclosures Act, 43 U.S.C. § 1061 et seq.

Considering the existing RMPs, any alternative that retains wild horses within the project area would not meet the purpose and need for the proposed project and would not be consistent with the management objectives established in the associated land use plans. Furthermore, an alternative that does not remove excess wild horses from the project area would not comply with Section 3 of the WFRHBA, which requires BLM to immediately remove excess animals from the range once an excess determination has been made (16 USC §1333).

#### Remove Fences and Take Other Actions to Improve Habitat for Wild Horses

Under this alternative the BLM would remove fences and take other actions to improve habitat conditions for wild horses. This alternative was not carried forward for detailed analysis because it would not meet the purpose and need for the proposal. The BLM has determined that all wild horses in the project area are excess (see Section 1.2.) and need to be removed from the range. Additionally, the BLM amended the Green River and Rawlins RMPs (BLM 2023) and determined that wild horses could not be managed for the long-term in the project area. Therefore, removing fences or taking other actions to improve habitat conditions for wild horses would not meet the purpose and need to remove excess wild horses from these Herd Areas.

### 3.0 AFFECTED ENVIRONMENT & ENVIRONMENTAL EFFECTS

The area covered by this analysis is within the jurisdiction of the BLM Rock Springs and Rawlins Field Offices, Wyoming. The project area encompasses approximately 2,066,800 acres of public, private and state land, within Fremont, Sublette, and Sweetwater counties in southwest Wyoming, (see Map 1). Topography consists of rolling mesas with defined drainages with some mountains and badlands. Elevation varies from approximately 6,400 feet to 9,431 feet. Summers are hot, and winters can range from mild to bitterly cold. Annual precipitation averages 7 inches at lower elevations up to 12 inches (or more) at the higher elevations. Much of the precipitation from summer thunderstorms runs off in

numerous drainages. Some of this water is captured in reservoirs or pits. Flowing wells, springs, and creeks are the primary sources of water for wild horses, livestock, and wildlife within the project area. The vegetation is comprised primarily of sagebrush steppe and salt desert shrub communities and includes some juniper woodlands.

# 3.1 Issue 1: How would gather operations affect the health and safety of wild horses?

#### 3.1.1 Affected Environment

The project area contains approximately 2,755 wild horses. Wild horses in the area are in good health with good body conditions. There are no known diseases or other health related issues that are affecting the population.

Since 2014, a total of 5,850 wild horses have been removed from the areas formerly designated as the Adobe Town, Salt Wells Creek and Great Divide Basin HMAs, with gathers occurring in 2014, 2017 and 2021 (see Table 3). At the time those areas were designated as HMAs and gather operations were designed to remove wild horses to the low AML level for each of the HMAs. Despite these gathers, wild horses exceeded the established AMLs in at least one of the HMAs in each of the last 10 years.

**Table 3.** Number of wild horses removed from formerly designated HMAs (2014 – 2024).

Former HMA	2014	2015	2016	2017	2018	2019	2020	2021	2022 - 2024
Adobe Town	47	0	0	645	0	0	0	728	0
Salt Wells Creek	688	0	0	922	0	0	0	822	0
Great Divide Basin	526	0	0	401	0	0	0	1,071	0
Totals:	1,261	0	0	1,968	0	0	0	2,621	0

As discussed in Section 1.1 the BLM Rawlins Field Office is currently planning a wild horse gather in the portion of Adobe Town that is managed as an HMA (<a href="https://eplanning.blm.gov/eplanning-ui/project/2037060/510">https://eplanning.blm.gov/eplanning-ui/project/2037060/510</a>). Under that plan, wild horses would be removed to reach the low AML of 259. That gather operation could occur at a similar time as the one described in this Environmental Assessment.

#### 3.1.2 Environmental Effects

#### **Alternative I: No Action**

Under the No Action alternative, no wild horses would be removed from the project area and no wild horses would be subject to the impacts described under the Proposed Action. The wild horse population would continue to grow at approximately 20% per year. By 2030 the population within the area would likely exceed 10,000 wild horses. Projected population increases would be expected to result in the deterioration of habitat conditions, which would lead to decreases in the health of wild horses in the area. Increased competition for forage would lead to decreased body condition. Higher population levels would also lead to higher occurrences of disease and sickness among the population. Overall, this alternative would eliminate the impacts to wild horse health and safety related to gather operations but

would have a long-term negative impact on the health and safety of wild horses related to overpopulations and degradation of habitat.

#### **Alternative II: Proposed Action**

Under this alternative approximately 3,371 wild horses would be removed from the project area through a combination of helicopter drive trapping and bait trapping operations. The impacts associated with these operations and the transportation and off-range care of captured animals are discussed in this section. A review of scientific literature related to the effects of gathers on wild horses is provided in Appendix B.

#### Gather Related Impacts

The BLM has been conducting wild horse gathers since the mid-1970s. During this time, methods and procedures have been identified and refined to minimize stress and effects to wild horses during gather operations. The SOPs in Appendix C would be implemented to ensure a safe and humane gather operation and would minimize potential stress and injury to wild horses.

In wild horse gathers that utilize helicopters and motorized vehicles, gather-related mortality averages approximately 1%, including both acute and chronic causes of mortality (Scasta 2020). Approximately six-tenths of one percent (0.6%) of the captured animals could potentially require humane euthanasia due to pre-existing conditions and in accordance with BLM policy (GAO 2008). These data confirm that the use of helicopters and motorized vehicles has proven to be a safe, humane, effective, and practical means for the gather and removal of excess wild horses (and burros) from the public lands.

As a further measure, it is BLM policy to only use helicopters to assist in the removal of wild horses from July 1 through February 28. The use of helicopters to assist in the capture of wild horses is prohibited during the six weeks before and the six weeks that follow peak foaling. The peak of foaling falls within about a two-week period during mid-April to mid-May for most wild horse herds. Therefore, the use of helicopters to capture wild horses is prohibited during March 1 through June 30, except in emergencies.

Individual effects to wild horses include the handling stress associated with the gathering, capture, sorting, handling, and transportation of the animals. The intensity of these effects varies by individual horse and is indicated by behaviors ranging from nervous agitation to physical distress. When being herded to trap site corrals by the helicopter, wild horses may sustain injuries, bruises, scrapes, or cuts to feet, legs, face, or body from rocks, brush or tree limbs. Rarely will wild horses encounter barbed wire fences and will receive wire cuts. These injuries are very rarely fatal and are treated on-site until a veterinarian can examine the animal and determine if additional treatment is necessary.

When bait trapping is used to trap wild horses, the impacts associated with helicopter use, as described above, would not occur. However, the impacts associated with holding, transportation, sorting and handling would still occur. These are described in the following paragraphs and would occur regardless of whether wild horses are captured via helicopter drive trapping, or bait trapping.

Injuries may occur after a wild horse has been captured and is either within the trap site corral, the temporary holding corral, during transport between facilities, or during sorting and handling. Occasionally, wild horses may sustain a spinal injury or a fractured limb but serious injuries requiring humane euthanasia occur in less than 1% of wild horses captured, on average (Scasta 2020). Similar injuries could be sustained if wild horses were captured through bait and/or water trapping, as the animals

still need to be sorted, aged, transported, and otherwise handled following their capture. These injuries result from kicks and bites, or from collisions with corral panels or gates.

To minimize the potential for injuries from fighting, the animals are transported from the trap site to the temporary (or short-term) holding facility where they are sorted as quickly and safely as possible, then moved into large holding pens where they are provided with hay and water. On many gathers, no wild horses are injured or die. On some gathers, due to the temperament of the horses, they are not as calm, and injuries are more frequent.

In some cases, wild horses may experience individual effects as a result of gather operations. These may include miscarriages in mares, increased social displacement, and conflict in studs. These effects are known to occur intermittently during wild horse gather operations. An example would be the brief 1-2 minute skirmish between older studs, which ends when one stud retreats. Injuries typically involve a bite or kick with bruises which do not break the skin. The frequency of these effects varies with the population and the individual. Observations following capture indicate the rate of miscarriage varies but can occur in about 1% to 5% of the captured mares, particularly if the mares are in very thin body condition or in poor health.

A few foals may be orphaned during a gather. This can occur if the mare rejects the foal, the foal becomes separated from its mother and cannot be matched up following sorting, the mare dies or must be humanely euthanized during the gather, the foal is ill or weak and needs immediate care that requires removal from the mother, or the mother does not produce enough milk to support the foal. On occasion, foals are gathered that were previously orphaned on the range (prior to the gather) because the mother rejected it or died. These foals are usually in poor, unthrifty condition. Every effort is made to provide appropriate care to orphan foals. Veterinarians may be called to administer electrolyte solutions or orphan foals may be fed milk replacer as needed to support their nutritional needs. Orphan foals may be placed in a foster home to receive additional care. Despite these efforts, some orphan foals may die or be humanely euthanized as an act of mercy if the prognosis for survival is very poor.

Through the capture and sorting process, wild horses are examined for health, injury and other defects using the humane care and treatment methods as described in BLM PIM 2021-002 (see Appendix D). Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy. The policy described in PIM 2021-007 is used as a guide to determine if animals meet the criteria and should be euthanized. Animals that are euthanized for non-gather related reasons include those with old injuries (broken or deformed limbs) that cause lameness or prevent the animal from being able to maintain an acceptable body condition (greater than or equal to body condition score of 3); old animals that have serious dental abnormalities or severely worn teeth and are not expected to maintain an acceptable body condition, and wild horses that have serious physical defects such as club feet, severe limb deformities, or sway back. Many of these defects can cause pain to the affected animal. Some of these conditions have a causal genetic component and the animals should not be returned to the range to avoid amplifying the incidence of the problem in the population. All euthanasia activities would be conducted using methods acceptable to the American Veterinary Medical Association (AVMA).

#### Transport, Off-range Corrals, and Adoption (or Sale) Preparation Impacts

Approximately 3,371 excess wild horses would be removed from the project area. Animals would be transported from the capture/temporary holding corrals to the designated BLM off-range corral. From there, they would be made available for adoption or sale to qualified individuals or relocated to off-range pastures.

Wild horses removed from the range are transported to the receiving off-range corral in a straight deck semi-trailer or goose-neck stock trailers. Vehicles are inspected by the BLM Contracting Officer's Representative (COR) or Project Inspector (PI) prior to use to ensure wild horses can be safely transported and that the interior of the vehicle is in a sanitary condition. Wild horses are typically segregated by age and sex and loaded into separate compartments. A small number of mares may be shipped with foals. Transportation of recently captured wild horses is limited to a maximum of 10 hours. During transport, potential effects to individual horses can include stress, as well as slipping, falling, kicking, biting, or being stepped on by another animal. Unless wild horses are in extremely poor condition, it is rare for an animal to be seriously injured or die during transport.

Upon arrival at the off-range corral, recently captured wild horses are off-loaded by compartment and placed in holding pens where they are fed good quality hay and water. Most wild horses begin to eat and drink immediately and adjust rapidly to their new situation. At the off-range corral, a veterinarian examines each load of horses and provides recommendations to the BLM regarding care, treatment, and, if necessary, euthanasia of the recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club feet, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the AVMA (see PIM 2021-007). The BLM has established best management practices to ensure the health and safety of wild horses in off-range facilities. This includes 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 facilities (see IM 2023-028 and IM 2023-041).

Wild horses in very thin condition or animals with treatable injuries are sorted and placed in hospital pens, fed separately and/or treated for their injuries as indicated. Recently captured wild horses, generally mares, in very thin condition may have difficulty transitioning to feed. Some of these animals are in such poor condition that it is unlikely they would have survived if left on the range. Similarly, some mares may lose their pregnancies. Every effort is taken to help the mare make a quiet, low stress transition to captivity and domestic feed to minimize the risk of miscarriage or death.

After recently captured wild horses have transitioned to their new environment, they are prepared for adoption or sale. Preparation involves freeze-marking the animals with a unique identification number, drawing a blood sample to test for equine infectious anemia, vaccination against common diseases, microchipping, castration, and de-worming. During the preparation process, potential effects to wild horses are similar to those that can occur during handling and transportation. Serious injuries and deaths from injuries during the preparation process are rare but can occur.

At off-range corrals, a minimum of 700 square feet is provided per animal. Mortality at off-range corrals averages approximately 5% per year (GAO 2008, page 51), and includes animals euthanized due to a pre-existing condition; animals in extremely poor condition; animals that are injured and would not recover; animals which are unable to transition to feed; and animals which are seriously injured or accidentally die during sorting, handling, or preparation.

#### Adoption or Sale with Limitations, and Off-range Pastures

Adoption applicants are required to have at least a 400-square-foot corral with panels that are at least six feet tall for horses over 18 months of age. Applicants are required to provide adequate shelter, feed, and water. The BLM retains title to the horse for one year and the horse and the facilities are inspected to assure the adopter is complying with BLM requirements. After one year, the adopter may take title to the horse, at which point the horse becomes the property of the adopter. Adoptions are conducted in accordance with 43 CFR 4750.

Potential buyers must fill out an application and be pre-approved before they may buy a wild horse. A sale-eligible wild horse is any animal that is more than 10 years old; or has been offered unsuccessfully for adoption three times. The application also specifies that all buyers are not to re-sell the animal to slaughter buyers or anyone who would sell the animal to a commercial processing plant. Sales of wild horses are conducted in accordance with IM 2019-026.

Between 2007 and 2009, nearly 62% of excess wild horses or burros were adopted and about 8% were sold with limitation to qualified individuals. Animals 5 years of age and older are generally transported to off-range pastures.

Potential effects to wild horses from transport to, adoption, sale or off-range pastures are similar to those previously described. One difference is that when shipping wild horses for adoption, sale or off-range pastures, animals may be transported for a maximum of 24 hours. Immediately prior to transportation, and after every 18-24 hours of transportation, animals are offloaded and provided a minimum of 8 hours on-the-ground rest. During the rest period, each animal is provided access to unlimited amounts of clean water and approximately 25 pounds of good quality hay per horse with adequate bunk space to allow all animals to eat at one time. Most animals are not shipped more than 18 hours before they are rested. The rest period may be waived in situations where the travel time exceeds the 24-hour limit by just a few hours and the stress of offloading and reloading is likely to be greater than the stress involved in the additional period of uninterrupted travel.

Off-range pastures are designed to provide excess wild horses with humane, life-long care in a natural setting off the public rangelands. There, wild horses are maintained in grassland pastures large enough to allow free-roaming behavior and with the forage, water, and shelter necessary to sustain them in good condition. More than 37,000 wild horses, that are in excess of the existing adoption or sale demand (because of age or other factors), are currently located on private land pastures in Iowa, Kansas, Missouri, Montana, Nebraska, Oklahoma, South Dakota, Utah, and Wyoming. Located in mid or tall grass prairie regions of the United States, these off-range pastures are highly productive grasslands as compared to more arid western rangelands. These pastures comprise about 400,000 acres (an average of about 8-10 acres per animal). The majority of these animals are older in age.

Mares and geldings are segregated into separate pastures. Although the animals are placed in off-range pastures, they remain available for adoption or sale to qualified individuals who are interested in adopting or purchasing a larger number of animals. No reproduction occurs in the off-range pastures, but foals born to pregnant mares are gathered and weaned when they reach about 8-10 months of age and are then shipped to off-range corrals where they are made available for adoption. Handling by humans is minimized to the extent possible although regular on-the-ground observation and weekly counts of the wild horses to ascertain their numbers, well-being, and safety are conducted. A very small percentage of the animals may be humanely euthanized if they are in very thin condition and are not expected to improve to a body condition score of 3 or greater due to age or other factors. Natural mortality of wild horses in off-range pastures averages approximately 8% per year, but can be higher or lower depending on the average age of the horses pastured there (GAO 2008, page 52).

#### Euthanasia and Sale without Limitation

While the WFRHBA authorizes humane euthanasia and sale without limitation of healthy horses for which there is no adoption demand, Congress prohibited the use of appropriated funds between 1987 and 2004 and again starting in 2009, through the appropriations language each fiscal year through 2024 for this purpose. Sales of wild horses are conducted in accordance with IM 2019-026.

# 3.2 Issue 2: How would the concentration of wild horses at trap sites affect vegetation communities?

#### 3.2.1 Affected Environment

The predominant vegetation communities present within the project area are sagebrush steppe and salt desert shrub. Overall, these communities are in good health, with proper ecological function, plant biomass and vegetative composition, in accordance with associated ecological site descriptions. However, vegetation communities within approximately 3% of the project area have been altered by a variety of human and natural disturbances, which has altered ecological function, plant biomass and vegetative composition in those areas.

While some invasive species are present within the area (primarily Halogeton (*Halogeton glomeratus*)), they primarily occupy areas that have been previously disturbed as well as some riparian systems. A large-scale effort to reduce invasive plant species and noxious weeds has taken place in this area for decades. As a result of these efforts, it is estimated that invasive species occupy less than 1% of the landscape within the project area.

Drought conditions have varied dramatically in this area over the past 4 years. The analysis area experienced more severe drought conditions in 2021, with conditions improving in 2022-2024. Overall, conditions swung from "extreme drought" to "very moist" on the Palmer Drought Index. More favorable drought conditions in recent years have helped maintain healthy vegetation communities in the area.

Wild horse populations within the project area, which utilize these plant communities for forage, have exceeded population objectives in this area during each of the past 10 years. Livestock also utilize these plant communities for forage. Livestock grazing is managed through grazing permits, which include terms and conditions to reduce potential impacts to plant communities.

#### 3.2.2 Environmental Effects

#### **Alternative I: No Action**

Because there would be no gather activities under this alternative there would be no impacts to vegetation communities related to trap sites or corrals (see Alternative II: Proposed Action in this Section). However, vegetation communities would be impacted by a continued overpopulation of wild horses.

Wild horses can have both positive and negative impacts to vegetation resources. Wild horse fecal matter contributes nutrients to the soils, which can improve plant biomass. They can also help spread seeds, which can benefit vegetative composition when they spread desirable species but would be detrimental when they spread invasive species. However, wild horses have a variety of negative impacts on vegetation communities. Specifically, wild horses reduce ecosystem function, and plant biomass, while also affecting vegetation composition (Eldridge et. al. 2020). These impacts tend to be more pronounced in arid environments and in areas with a higher intensity of wild horse activity (Eldridge et. al. 2020).

Managing wild horses in areas designated for their long-term maintenance, and controlling the number and concentration of wild horses, can minimize these impacts. However, when there is an overpopulation of wild horses, impacts to vegetation communities are expected to increase, especially during times of drought. This would lead to decreases in ecological function, and plant biomass. At the same time, vegetative composition would be altered with fewer desirable species present, and the establishment and spread of more invasive species. If the overpopulation of wild horses continues for an extended period,

these negative impacts to vegetation communities would be difficult to reverse even after excess wild horses are removed from the land.

If no gathers are conducted in future years, populations of wild horses might eventually stabilize at very high numbers at their food-limited ecological carrying capacity. At these levels, vegetation communities would be highly impacted with severe loss of ecological function and plant biomass. Additionally, vegetation composition would be highly altered, with most palatable herbaceous species being lost from these communities.

#### **Alternative II: Proposed Action**

Under this alternative, the impacts associated with an overpopulation of wild horses would be avoided (see Alternative I: No Action in this Section). However, there would be impacts to vegetation communities as a result of gather and removal activities.

During gather operations, wild horses are temporarily concentrated into a relatively small area at the trap site, and the temporary holding corrals. When wild horses are concentrated into a small area, they trample the vegetation which affects the ecological function, plant biomass and vegetative composition of that area.

Trap sites consist of two primary sections, the wings and the corral. The wings are typically established on two sides and funnel wild horses into a corral at the end of the trap site. Because of the size of the area encompassed by the wings (typically 2 or more acres) and the relatively small number of wild horses that occupy this area at any given time, impacts to vegetation communities are minimal and temporary in this area.

The corral portion of the trap site occupies a much smaller area (typically less than ½ acre). Within the corral portion of the trap site, wild horses are more concentrated for longer periods of time. Vegetation in this area will be trampled, and if a trap site is used for multiple days, it is likely that the corral portion of the trap will be primarily void of intact vegetation by the time the operation is complete. Vegetation will regrow within this area, but ecological function, plant biomass and vegetative composition will be altered for multiple years afterwards. It is also possible that invasive species may establish in these sites following the impact to the vegetation community. To minimize impacts the BLM strives to establish trap sites in areas that are already disturbed, such as trap sites used in previous gathers. However, it is sometimes necessary to establish trap sites in previously undisturbed areas.

Impacts to vegetation communities are expected to be greater at temporary holding corrals. These corrals (which are typically less than ½ acre) are used to hold wild horses while they are sorted and inspected, prior to shipping them to off-range corrals. A larger number of wild horses are typically present in this area, for a longer amount of time, compared to the trap site corrals. Furthermore, temporary holding corrals are typically used throughout the duration of a gather, which can last a month or more. In comparison, trap sites are typically only used for a few days until all needed horses have been gathered from a given area. As a result, all vegetation within the temporary holding corrals will be trampled, leaving only bare ground by the end of the gather. The BLM typically only utilizes 1-2 temporary holding corrals during a gather. Vegetation will regrow within this area, but ecological function, plant biomass and vegetative composition will be altered for multiple years afterwards. It is also possible that invasive species may establish in these sites following the impact to the vegetation community. The BLM typically chooses sites that have already been disturbed to minimize impacts to vegetation communities. However, it is sometime necessary to establish trap sites in previously undisturbed areas.

# 3.3 Issue 3: How would the concentration of wild horses at trap sites affect soil resources?

#### 3.3.1 Affected Environment

The two major soil orders found within the project area are Entisols and Aridisols. Entisols are highly undeveloped soils and Aridisols are very dry soils that can be highly alkaline or saline. The nature of these soils can make it very difficult to revegetate areas that have been disturbed in these areas. These soils can be susceptible to wind and water erosion if vegetative cover is removed, or the surface is otherwise disturbed. Approximately 3% of the project area has been affected by natural and human caused disturbances. These disturbances remove vegetative cover, increase bare ground, and make soils more susceptible to erosion. They can also increase soil compaction. Mitigation measures and best management practices commonly implemented on human caused disturbances may reduce the amount of soil erosion and compaction from these activities.

Additionally, wild horse populations have exceeded population objectives within the project area for the past 10 years. An overpopulation of wild horses can cause impacts to soils, including increased erosion and bare ground. Livestock grazing also takes place within the project area. Livestock can also impact soils, which can lead to increased erosion and bare ground. However, grazing permits include terms and conditions which reduce these impacts to soil resources.

#### 3.3.2 Environmental Effects

#### **Alternative I: No Action**

Because there would be no gather activities under this alternative there would be no impacts to soils related to trap sites or corrals (see Section 3.3.2.2). However, soils would be impacted by a continued overpopulation of wild horses.

Wild horses can have both positive and negative impacts to soil resources. Wild horse fecal matter contributes nutrients to the soils. However, wild horses reduce plant biomass and litter cover, which can lead to increased soil erosion (Eldridge et. al. 2020). These impacts tend to be more pronounced in arid environments, and in areas with a higher intensity of wild horse activity (Eldridge et. al. 2020).

Managing wild horses in areas designated for their long-term maintenance, and controlling the number and concentration of wild horses, can minimize these impacts. However, when there is an overpopulation of wild horses, increased soil erosion and compaction is likely to occur, especially during drought years. Soils near water sources would be the most susceptible to these impacts; however, as the wild horse population continues to increase the area of impact near these water sources would be expected to increase. If the overpopulation of wild horses continues for an extended period, these negative impacts to soil resources would be difficult to reverse even after excess wild horses are removed from the land.

If no gathers are conducted in future years, populations of wild horses might eventually stabilize at very high numbers at their food-limited ecological carrying capacity. At these levels, the loss of vegetative cover (see Section 3.2.2) would lead to large amounts of bare ground which would lead to high levels of soil erosion. Furthermore, the concentration of wild horses, especially near water sources, would lead to high levels of soil compaction in the project area.

#### **Alternative II: Proposed Action**

Under this alternative, the impacts associated with an overpopulation of wild horses would be avoided. However, there would be potential impacts to soils as a result of gather activities.

During a gather wild horses are concentrated in a relatively small area at the trap site and temporary holding corrals (see Section 3.2.2). Due to the concentration of wild horses in these areas, soils would be more highly compacted than in the surrounding, undisturbed area. Furthermore, impacts to vegetation communities in these locations would remove vegetative cover, making the soils more susceptible to erosion. Given time, soils will become less compacted and more resilient to erosion as vegetative cover re-establishes on the location.

# 3.4 Issue 4: How would gather operations affect permitted livestock grazing activities within the project area?

#### 3.4.1 Affected Environment

There are 15 livestock grazing allotments that fully or partially overlap the project area. Twenty-one livestock operators hold grazing permits to operate livestock within the project area. These grazing permits specify the number of livestock, and the time of year during which they are authorized to graze. Table 4 provides a summary of permitted Animal Unit Months (AUMs) for these allotments, by former HMA (i.e. the portions of these Herd Areas previously designated as HMAs). An AUM is the amount of forage needed to sustain one cow, five sheep, or one horse for a month. An estimated 108,103 active livestock AUMs are currently permitted within the project area. Many livestock operators currently only utilize a portion of their permitted use. From 2014 through 2024, livestock operators used 33% of their annual permitted use (on average) within these Herd Areas. Annual fluctuations in livestock use are common and are the result of user demands, climatic conditions, and/or an effort to preserve or improve rangeland health.

Most of the allotments are operated under grazing strategies incorporating rest, seasonal rotations, deferment, and prescribed use levels that provide for adequate plant recovery time to enhance rangeland health. The majority of these allotments are considered lower-elevation use areas, and livestock turnout typically occurs from March to May. There are several BLM-administered allotments at higher elevations where grazing does not begin until June. Some livestock operators utilize their grazing allotments during the fall and winter months, when vegetation is dormant. Typically, the season of use for these allotments is four to six months.

**Table 4.** Grazing allotments within former HMAs, their corresponding permitted AUM allocations and the estimated permitted active livestock AUMs located within the former HMAs.

Former HMA	Allotment	% of Allotment Within Former HMA	Permitted Active AUMs on Allotment	Estimated Active AUMs within Former HMA
Adobe Town	Rock Springs	5%	107,991	8,071
(RSFO)	Total:		107,991	8,071
Adobe Town	Corson Springs	97%	1,189	1,189
(Rawlins FO)	Willow Creek	3%	1,680	50
	Total:		2,869	1,239
<b>Great Divide</b>	Bush Rim	55%	3,277	1,808
Basin	Continental Peak	100%	5,769	5,769

Former HMA	Allotment	% of Allotment Within Former HMA	Permitted Active AUMs on Allotment	Estimated Active AUMs within Former HMA
	Red Desert	100%	9,758	9,758
	Rock Springs	17%	107,991	18,650
	Total:		126,795	35,985
	Alkali Creek	100%	2,283	2,283
	Circle Springs	100%	946	946
	Crooked Wash	100%	5,602	5,602
	Horseshoe Wash	35%	3,103	1,089
	Mellor Mountain	99%	6,101	6,009
Salt Wells Creek	Pine Mountain	5%	7,763	418
	Rife	100%	508	508
	Rock Springs	36%	107,991	38,068
	Salt Wells	99%	2,618	2,587
	Vermillion Creek	100%	5,298	5,298
	Total:		142,213	62,808

Approximately 3% of the project area has been impacted by natural and human caused disturbances. These activities have reduced the amount of forage available to livestock. Additionally, wild horse populations within the project area have exceeded population objectives for the past 10 years. Wild horses and livestock compete for similar forage resources.

#### 3.4.2 Environmental Effects

#### **Alternative I: No Action**

Because there would be no gather activities under this alternative there would be no impacts to livestock related to gather operations. However, permitted livestock grazing would be impacted by a continued overpopulation of wild horses. Wild horses and livestock consume similar forage, leading to some competition for resources. The BLM takes measures to minimize the impact of this competition on wild horses and livestock. This is done by managing wild horses within AML and by managing livestock within permitted use levels. This ensures there is adequate forage for both wild horses and livestock.

However, under this alternative, populations of excess wild horses would continue to grow at approximately 20% annually. Over time, this would lead to increased levels of competition for forage resources, which would negatively affect wild horses and livestock within the project area.

#### **Alternative II: Proposed Action**

Under this alternative, livestock would not be impacted by the overpopulation of wild horses described under the No Action alternative. However, they would be impacted by gather related activities.

During gather operations, livestock that are present in the removal area may be temporarily disrupted. During a helicopter gather some livestock may move out of the area where the helicopter is operating. Those that remain in the area may get temporarily grouped up with wild horses that are being herded by the helicopter. This typically only occurs for short periods of time, with livestock separating out from the group and then returning to their regular activities. During bait trap gathers, it is possible that livestock could be present in a trap, with wild horses, when the gate is closed. If this happens, the livestock would

be separated from the wild horses and released back onto the range. This is an unlikely occurrence, as most bait trap operations occur when livestock are not present in the area. Grazing permittees would be notified prior to the gather, enabling them to take precautions and avoid conflict with gather operations.

# 3.5 Issue 5: How would gather operations impact big game animals in crucial winter range?

#### 3.5.1 Affected Environment

Big game populations within the project area include moose, elk, mule deer, white-tailed deer, and pronghorn antelope; approximately 24 percent of the project area is considered crucial winter big game habitat. All the Herd Areas contain designated Crucial Winter Range (CWR) habitat for big game species. Table 5 summarizes the acreage of big game CWR habitat by former HMA. There is significant overlap in CWR for different species within each former HMA.

**Table 5.** Summary of acres of big game CWR habitat by former HMA.

Former HMA	Former HMA Acres	Pronghorn CWR	Elk CWR	Mule-Deer CWR
Adobe Town	118,164	8,952	0	7,467
Salt Wells Creek	1,170,714	123,000	8,800	122,000
Great Divide Basin	777,922	137,500	91,800	254,000
Total:	2,066,800	269,452	100,600	383,467

Approximately 5% of crucial winter range for big game animals in and around the project area has been impacted by human development activities. These activities include road development, mining operations, oil and gas development, power lines, roads, etc. Activities permitted on public land include timing stipulations that reduce potential impacts from these activities on big game populations during crucial winter habitat periods.

#### 3.5.2 Environmental Effects

#### **Alternative I: No Action**

Under the No Action Alternative there would be no impacts associated with gather operations to big game species. However, this alternative would have a negative impact on big game due to continued high use of the native habitat and ever-increasing population size of wild horses through time. This alternative would allow wild horse populations to continue to increase within the Herd Areas. Heavy utilization of vegetation would be expected to occur. Populations of wild horses might eventually stabilize at very high numbers at their food-limited ecological carrying capacity. At these population levels, range conditions may deteriorate, which would affect the native vegetation species as well as seasonal habitats for big game species.

#### **Alternative II: Proposed Action**

Under this alternative, big game species would not be impacted by an overpopulation of wild horses. However, they would be impacted by gather related activities.

Under Alternative II, helicopter drive-trapping and assisted roping operations may be conducted in the analysis area from July 1 through February 28. Helicopter herding represents a high intensity, but transient source of disturbance that would become increasingly concentrated and more frequent near the trap site. Most big game would be on their summer ranges during this timeframe. By July, offspring

would be sufficiently mobile to avoid disturbances, with little risk of separation from adults. It is doubtful that dispersed helicopter herding and the initially intense, but short-term and relatively predictable gather activities would contribute substantially to deterioration in animal fitness at the population level, but big game would tend to avoid or be displaced from areas within 0.5 to 1 mile of helicopter herding activities. It is anticipated that displaced animals would return, more or less, to predisturbance distribution soon after gather operations at an individual site were complete.

Gather related effects would be similar to those discussed above if conducted July through late fall. If operations extend into the winter and late winter months of December through February when adverse weather and forage conditions exert their greatest influence on big game condition (i.e., on severe winter ranges) and when animals are most concentrated (i.e., winter concentration areas), the adverse impacts to big game could be exacerbated. Although disturbances would be short-term, energy expended by animals repeatedly avoiding gather activity or fleeing close helicopter approach, particularly in more open sagebrush terrain and under snowpack conditions, may influence the subsequent condition (e.g., winter fitness, gestation) of those animals affected. An extended gather strategy, depending on the duration and frequency of operations on these ranges, may have adverse consequences on a relatively small portion of the big game population, but would provide a measure of flexibility in scheduling gathers to avoid important big game hunting seasons. Once gather operations are concluded, and all wild horses have been removed from these Herd Areas, the need for future gathers will be very rare, reducing long-term potential impacts to big game species.

#### 3.5.3 Mitigation

The following stipulation would apply to all gather related activities:

• Avoid disruptive activities in big game crucial winter range between November 15 and April 30.

As outlined in Section 2.0, helicopter gather operations would not occur between March 1 and June 30 due to the peak foaling period, which encompasses a portion of the big game CWR timeframe. In addition to this, the portions of the HMAs that are within big game CWR habitat would be subject to the timing restriction dates (November 15 to April 30), particularly for trap and holding pen sites. This limitation would substantially reduce impacts associated with helicopter gather operations.

# 3.6 Issue 6: How would gather operations impact Greater sage-grouse and their habitat within Priority Habitat Management Areas (PHMA)?

#### 3.6.1 Affected Environment

The Greater sage-grouse (*Centrocercus urophasianus*), an iconic western species, inhabits much of the sagebrush-steppe habitat in the project area. The sagebrush-steppe habitat type is abundant across the project area. Sage-grouse habitat consists of large, intact and mostly treeless landscapes with sagebrush, native bunchgrasses, wildflowers and wet meadows. These big areas are called sagebrush-steppe or sagebrush shrublands. The climate is semi-arid, with cold winters and hot summers. The former Salt Wells Creek HMA and the former Great Divide Basin HMA contain significant expanses of sage-grouse Priority Habitat Management Areas (PHMA), as outlined in Table 6. All the areas of each former HMA that are outside of sage-grouse PHMA still contain sage-grouse habitat and are considered General Habitat Management Areas (GHMA). Sagebrush within these PHMAs provide nesting, forage and cover resources for sage-grouse.

**Table 6.** Summary of Sage-grouse PHMA acres by Former HMA.

Former HMA	Former HMA Acres	Sage-grouse PHMA
Adobe Town	118,163	0
Salt Wells Creek	1,172,237	341,200
Great Divide Basin	777,164	254,600
Total:	3,433,431	595,800

Approximately 5% of the PHMA within and near the project area has been impacted by a combination of human and natural disturbances, including wildfires, roads, railways, mining activities, oil and gas development, pipelines, powerlines, etc. These activities can degrade and fragment sage-grouse habitat in PHMA. The overpopulation of wild horses within the project area can also affect sage-grouse and their habitat by removing native bunchgrasses and wildflowers which provide important cover and food sources for sage-grouse.

#### 3.6.2 Environmental Effects

#### **Alternative I: No Action**

Under the No Action Alternative there would be no impacts to sage-grouse associated with gather operations. However, this alternative would have a negative impact on sage-grouse due to continued high use of the native habitat and ever-increasing population of wild horses through time. This alternative would allow wild horse populations to continue to increase within the Herd Areas. Heavy utilization of vegetation would be expected to occur over time. Populations of wild horses might eventually stabilize at very high numbers at their food-limited ecological carrying capacity. At these population levels, range conditions would deteriorate which would affect the native vegetation species as well as the habitat quality for sage-grouse within PHMA.

### **Alternative II: Proposed Action**

While sage-grouse would not be affected by an overpopulation of wild horses under this alternative, they would be impacted by gather related activities. Gather operations would cause temporary trampling of some vegetation and soil compaction, particularly at trap sites and temporary holding corrals (see Section 3.2.2 and Section 3.3.2). The amount of sage-grouse habitat impacted would be limited to less than ½ acre for each trap site, and each temporary holding corral. Additionally, gather activities could temporarily disrupt sage-grouse activity due to vehicle and helicopter traffic during gather operations. On rare occasions, some sage-grouse nests may be trampled by wild horses during gather activities. Because these impacts would be temporary, and limited, and because gather activities would not take place during breeding, nesting and early brood-rearing periods, the Proposed Action is not expected to have a lasting impact to sage-grouse or their habitat.

#### 3.6.3 Mitigation

The following stipulation would apply to all gather related activities:

• Surface disturbing and/or disruptive activities would be prohibited from March 15 – June 30 to protect sage-grouse breeding, nesting, and early brood rearing habitat.

As outlined in Section 2.0, helicopter gather operations would not occur between March 1 and June 30 due to the peak foaling period, which encompasses the sage-grouse breeding, nesting and early brood-rearing periods. This limitation would substantially reduce impacts associated with helicopter gather operations (e.g., noise, human activity, potential for nest trampling/disruption). Similarly, restrictions on

the timing of gather operations would reduce the potential for disrupting courtship/breeding activities and minimize impacts to nesting and early brood-rearing habitat.

# 3.7 Issue 7: How would gather operations affect raptors and migratory birds that are present within these Herd Areas?

#### 3.7.1 Affected Environment

Raptor and migratory bird nesting areas are dispersed throughout the project area. Cliffs and rock outcrops may support the nesting functions of golden eagle, ferruginous hawk, red-tailed hawk, prairie and peregrine falcons, as well as other raptor species. Migratory birds nest in most habitats associated with the project area. There are dozens of known (historic and recent) raptor nests documented throughout the project area. Vegetation conditions and herbaceous ground cover provides important habitat for species that raptors prey upon. Herbaceous cover also provides important cover and habitat for numerous migratory bird species.

Approximately 3% of the project area has been impacted by natural and human caused disturbances. These disturbances can affect habitat for migratory birds and raptors. The overpopulation of wild horses in this area over the past 10 years could also negatively impact habitat for these species.

#### 3.7.2 Environmental Effects

#### **Alternative I: No Action**

Under the No Action Alternative there would be no impacts associated with gather operations to raptor or migratory bird species. However, raptors and migratory birds would be impacted by the continued overpopulation of wild horses.

This alternative would allow wild horse populations to continue to increase within the project area as no wild horses would be removed from these Herd Areas. Heavy utilization of vegetation would be expected to occur as the wild horse populations continues to increase. Wild horses might eventually stabilize at very high numbers at their food-limited ecological carrying capacity. At these population levels, range conditions would deteriorate which would affect nesting and foraging habitat for raptors and migratory birds. Raptor nest habitat would not be directly affected by declining range conditions, but degraded herbaceous ground cover would indirectly affect raptors through reduced abundance and diversity of avian and mammalian prey. Migratory birds would be similarly impacted, as these conditions would lead to degraded habitat conditions with less herbaceous cover present.

#### **Alternative II: Proposed Action**

Helicopter based gather activities may coincide with the later reproductive activities of raptors and migratory birds from early July through mid-August. The relatively infrequent circumstance where active raptor nests would be subjected to brief and close approach by helicopter activity late in the nesting sequence would not be expected to prompt prolonged nest absences or have any substantive influence on chick survival. Gather activities in July and August may infrequently impact late nesting attempts of raptors. There may be potential for inadvertent nest trampling/disruption for ground and low shrub nesting bird species. Because most nesting activity would have been completed by early July, gather operations in a particular area are not expected to impact many nesting birds. This level of impact would have no discernible influence on population-level abundance or reproductive performance, even at the smallest landscape level. There are no identified impacts resulting from this alternative during winter months when migratory birds are not nesting within the project area.

Surveys of suitable raptor, or other migratory bird, nesting habitat would be conducted by BLM specialists on those trap sites proposed for use or development during the breeding period. In the event an

active raptor nest is found in the vicinity of trapping operations, these sites would be afforded a buffer to effectively isolate nesting activity from disruptions generated by wild horse trapping operations.

Once gather operations are concluded, and all wild horses have been removed from these Herd Areas, the need for future gathers will be very rare, reducing long-term potential impacts to raptor and migratory bird species.

#### 3.7.3 Mitigation

The following stipulation would apply to all gather related activities:

• No surface occupancy or disturbing activities within 1-ile radius during raptor season restrictions (generally February 1 to August 15), unless the operator submits a plan that adequately addresses mitigation of impacts following the BLM mitigation policy to raptor nests.

As outlined in Section 2.0, helicopter gather operations would not occur between March 1 and June 30 due to peak foaling, which encompasses a large portion of the raptor and migratory bird nesting period. This limitation would substantially reduce impacts associated with helicopter gather operations (e.g., noise, human activity, potential for nest trampling/disruption). Similarly, restrictions on trap locations outlined in Section 2.0 would reduce the potential for disrupting nesting and foraging activities and minimize impacts to nesting success.

# 3.8 Issue 8: How would noise and traffic associated with the gather operation affect the recreational experience of the public in and around the project area?

#### 3.8.1 Affected Environment.

Members of the public utilize the project area for a variety of outdoor recreational activities. The project area contains a large variety of recreational settings, from developed sites in the front country, to remote back country settings within Wilderness Study Areas. Recreational activities pursued in the project area include, but are not limited to, camping, hiking, backpacking, off-highway vehicle use, rockhounding, horseback riding, mountain biking, wildlife viewing, wild horse viewing, photography and exploration. Due to the size of the project area, the BLM does not have detailed information regarding the number of recreational visitors this area accommodates each year.

Hunting is an especially popular recreational activity within these Herd Areas. The project area provides exceptional big game hunting opportunities for elk, mule-deer and pronghorn. Many of the hunting units in this area feature premier limited entry draws that are highly sought after by both locals and people travelling from out of state to access this recreational opportunity. The primary hunting season for big game in this area runs from August 15th – October 31st each year.

Portions of the project area are less ideal for some recreational activities. These include areas near active mines, areas near oil and gas development and areas where other human caused disturbances reduce the recreational value of the area. There are more of these disturbances present near I-80, and fewer as you move further away from the interstate.

#### 3.8.2 Environmental Effects

#### **Alternative I: No Action**

Under the No Action Alternative, there would be no gather related impacts to recreational experiences in the project area. Some recreational experiences may be impacted due to impacts to vegetation communities (see Section 3.2.2), increased amounts of bare ground (see Section 3.3.2) and reduced wildlife viewing opportunities from impacts to wildlife habitat (see Sections 3.5.2, 3.6.2 and 3.7.2).

#### **Alternative II: Proposed Action**

Under this alternative some recreational experiences may be affected by the noise and traffic associated with a wild horse gather operation. A typical helicopter drive trap gather involves the use of one or two helicopters and a handful of trucks with trailers. Noise and activity from the gather operation could disturb recreationists seeking isolation and solitude in the area. Impacts to recreationists would be most noticeable within 1 mile of the trap site. Since most trap sites are only utilized for a few days, this impact would be temporary and limited to those areas where trapping is actively occurring (noticeable up to approximately an 8-mile radius around a trap site).

Low flying helicopters can disrupt wildlife making it more difficult for hunters to locate and approach an animal. It is possible for gather operations to occur during open hunting seasons, including on opening days. While the BLM can strive to avoid conducting gathers on the opening day of a hunt, it is not always practical to do so (due to limitations associated with the gather operation contracts). Impacts to hunters would be temporary and limited to those areas where trapping is actively occurring (approximately an 8-mile radius around a trap site). These impacts could be reduced by communicating dates and locations of gathers to the public, including those who hold Special Recreation Permits for outfitting hunts, so they can plan their hunts accordingly.

Recreational wild horse viewing would be impacted under this alternative, as no wild horses would remain within the project area after all gather operations are complete (see Section 4.2.11 of the FEIS associated with the 2023 RMP Amendment (BLM 2022) for more details on impacts associated with the loss of wild horse viewing opportunities).

# 4.0 TRIBES, INDIVIDUALS, ORGANIZATIONS, or AGENCIES CONSULTED

Tribes, individuals, organizations, and agencies were included in the scoping process. A letter soliciting scoping comments for the proposed wild horse gather was mailed to 136 recipients on June 7, 2024. The BLM has consulted with Native American Tribes regarding this action, including:

- Eastern Shoshone
- Northern Arapaho
- Ute Indian Tribe of the Uintah and Ouray
- Yankton Sioux
- Sisseton Wahpeton Oyate of the Lake Traverse Reservation
- Oglala Sioux Tribe

- Fort Belknap Reservation
- Blackfeet Nation
- Chippewa Cree Tribe
- Crow Tribe of Indians
- Ft. Peck Assinibione/Sioux
- Northern Cheyenne

Rosebud Sioux

Santee Sioux Nation of Nebraska

• Lower Brule Sioux

• Standing Rock Sioux Tribe

 Shoshone-Bannock Tribes of Fort Hall Reservation • Cheyenne River Sioux

• Comanche Nation of Oklahoma

Crow Creek Sioux

Tribal consultation may continue throughout this process.

See Section 1.5 for more information regarding the results of public scoping.

# 5.0 LIST OF PREPARERS

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### REFERENCES

- Bureau of Land Management (BLM) 1997a. Record of Decision and Green River Resource Management Plan. BLM/WY/PL-97-027+1610. BLM Wyoming State Office, Rock Springs District Office, October 1997.
- BLM. 1997b. Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the State of Wyoming.
- BLM. 2008. Record of Decision and Rawlins Resource Management Plan. BLM/WY/PL-08/007+1610. BLM Wyoming State Office, High Desert District Office, December 2008.
- BLM. 2010. BLM-4700-1 Wild Horses and Burros Management Handbook. Washington, D.C.
- BLM. 2022. Proposed resource management plan amendment and final environmental impact statement for wild horse management for the Rock Springs and Rawlins Field Offices. Bureau of Land Management, Wyoming State Office, Cheyenne, Wyoming. March 2022.
- BLM. 2023. Record of decision and approved resource management plan amendment for wild horse management for the BLM Rock Springs and Rawlins Field Offices. Bureau of Land Management, Wyoming State Office, Cheyenne, Wyoming. May 2023.
- BLM. 2024a. Proposed Resource Management Plan and Final Environmental Impact Statement rock Springs Field Office. DOI-BLM-WY-D040-2011-0001-RMP-EIS. August 2024.
- BLM. 2024b. Record of Decision and Approved Resource Management Plan for the Rock Springs Field Office. DOI-BLM-WY-D040-2011-0001-RMP-EIS. December 2024.
- Eldridge, D.J., J. Ding, S.K. Travers. 2020. Feral horse activity reduces environmental quality in ecosystems globally. Biological Conservation 241 (2020) 108367.
- Government Accountability Office (GAO). 2008. Bureau of Land Management; Effective Long-Term Options Needed to Manage Unadoptable Wild Horses. Report to the Chairman, Committee on Natural Resources, House of Representatives, GAO-09-77.
- Scasta, J. D. 2020. Mortality and operational attributes relative to feral horse and burro capture techniques based on publicly available data from 2010-2019. Journal of Equine Veterinary Science 86 (2020) 102893.

### LIST OF ACRONYMS

AML	Appropriate Management Level
AO	Authorized Officer
AUM	Animal Unit Months
BLM	Bureau of Land Management
ВМР	Best Management Practice
BOR	Bureau of Reclamation
CEQ	Council on Environmental Quality
CIAA	Cumulative Impact Analysis Area
CFR	Code of Federal Regulation
COR	Contracting Officer's Representative
CWR	Crucial Winter Range
DOI	Department of the Interior

EIS	Environmental Impact Statement						
EPA	Environmental Protection Agency						
FLPMA	Federal Land Policy and Management Act of 1976						
GnRH	Gonadotropin Releasing Hormone						
НА	Herd Area						
НМА	Herd Management Area						
IM	Instruction Memorandum						
LUP	Land Use Plan						
NAS	National Academies of Science						
NEPA	National Environmental Policy Act						
PHMA	Priority Habitat Management Area						
PZP	Porcine Zona Pellucida						
RFO	Rawlins Field Office						
RMP	Resource Management Plan						
RSFO	Rock Springs Field Office						
RSGA	Rock Springs Grazing Association						
TNEB	Thriving Natural Ecological Balance						
USDA	United States Department of Agriculture						
USFS	United States Forest Service						
USFWS	United States Fish and Wildlife Service						
USGS	United States Geological Survey						
WFRHBA	Wild Free-Roaming Horses and Burros Act of 1971						
WGFD	Wyoming Game and Fish Department						

### **GLOSSARY**

**Allotment:** An area of land designated and managed for livestock grazing. Allotments generally consist of BLM-administered lands but may include other federally managed, state-owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

**Amendment:** The process for considering or making changes in the terms, conditions, and decisions of approved RMPs or Management Framework Plans using the prescribed provisions for resource management planning appropriate to the proposed action or circumstances. Usually only one or two issues are considered that involve only a portion of the planning area.

**Animal Unit:** Considered to be one mature cow of about 1,000 pounds (450 kg), either dry or with calf up to 6 months of age, or their equivalent, consuming about 26 pounds of forage/day on an oven dry basis.

Animal Unit Month (AUM): The amount of forage necessary for the sustenance of one cow or its equivalent for a period of 1 month (43 CFR 4100.0-5). For the purpose of calculating grazing fees, an animal unit month is defined as a month's use and occupancy of range by one cow, bull, steer, heifer, horse, burro, mule, 5 sheep or 5 goats over the age of 6 months (43 CFR 4130.8-1(c)).

**Appropriate Management Level:** The number of adult horses or burros (expressed as a range with an upper and lower limit) to be managed within an HMA.

**Authorized Officer:** Any employee of the BLM to whom authority has been delegated to perform the duties described.

**Best Management Practices (BMPs):** A suite of techniques that guide or may be applied to management actions to aide in achieving desired outcomes.

**Big Game:** Large species of wildlife that are hunted, such as elk, deer, bighorn sheep, moose, and pronghorn.

**Checkerboard:** This term refers to a land ownership pattern of alternating sections of federal-owned lands with private or state-owned lands for 20 miles on either side of a land grant railroad (e.g. Union Pacific, Northern Pacific, etc.). On land status maps this alternating ownership is either delineated by color coding or alphabetic code resulting in a "checkerboard" visual pattern (see diagram below for a visual explanation of this land ownership pattern).

BLM	Private	BLM		
Private	BLM	Private		
BLM	State	BLM		

**Code of Federal Regulations (CFR):** The official, legal tabulation of regulations directing Federal Government activities.

**Disturbance:** A discrete event, either natural or human induced, that causes a change in the existing condition of an ecological system.

**Endangered Species**: Any plant or animal species that is in danger of extinction throughout all or a significant portion of its range, as defined by the U.S. Fish and Wildlife Service under the authority of the Endangered Species Act of 1973.

**Environmental Assessment (EA):** The term "environmental assessment" means an environmental assessment prepared under section 106(b)(2) of the National Environmental Policy Act of 1969.

**Environmental Impact Statement (EIS):** The term "environmental impact statement" means a detailed written statement that is required by section 102(2)(C) of the National Environmental Policy Act of 1969.

**Erosion:** The wearing away of the land surface by running water, wind, ice, or other geological agents.

Excess Animals: "Excess animals" means wild free-roaming horses or burros

- (1) which have been removed from an area by the Secretary pursuant to application law or,
- (2) which must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area.

**Federal Lands:** As used in this document, lands owned by the United States, without reference to how the lands were acquired or what federal agency administers the lands. The term includes mineral estates or coal estates underlying private surface but excludes lands held by the United States in trust for Indians, Aleuts, or Eskimos. (See also Public Land.)

Federal Land Policy and Management Act of 1976 (FLPMA) as amended: Public Law 94-579. October 21, 1976, often referred to as the BLM's "Organic Act," which provides the majority of the BLM's legislated authority, direction, policy, and basic management guidance.

**Forage:** All browse and herbaceous foods available to grazing animals that may be grazed or harvested for feeding.

**General Habitat Management Areas (GHMA):** Occupied (seasonal or year-round) habitat outside of priority habitat. These areas have been identified by the BLM in coordination with respective state wildlife agencies.

**Habitat:** An environment that meets a specific set of physical, biological, temporal, or spatial characteristics that satisfy the requirements of a plant or animal species or group of species for part or all of their life cycle. In wildlife management, the major components of habitat are food, water, cover and the adequate juxtaposition of the three.

**Herd Area:** The geographic area identified as having been used by a herd of wild horses or burros as its habitat in 1971.

**Herd Management Area (HMA):** May be established in those Herd Areas within which wild horses and burros can be managed for the long term. HMAs are designated through the Land Use Planning process for the maintenance of wild horse and burro herds. In delineating each HMA, the authorized officer shall consider the appropriate management level (AML) for the herd, the habitat requirements of the animals, the relationship with other uses of the public and adjacent private lands, and the constraints contained in 43 CFR 4710.3-1.

**Impacts (or Effects):** Consequences (the scientific and analytical basis for comparison of alternatives) as a result of a proposed action.

**Interdisciplinary Team:** A group of individuals with different training, representing the physical sciences, social sciences, and environmental design arts, assembled to solve a problem or perform a task. The members of the team proceed to a solution with frequent interaction so that each discipline may provide insights on any stage of the problem, and disciplines may combine to provide new

solutions. The number and disciplines of the members preparing the plan vary with circumstances. A member may represent one or more discipline or program interest.

**Land Health Standard:** A description of the physical and biological conditions or degree of function required for healthy, sustainable lands (e.g., land health standards).

Land Use Plan: A set of decisions that establish management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land-use-plan-level decisions developed through the planning process, regardless of the scale at which the decisions were developed.

**Monitoring:** The orderly collection, analysis, and interpretation of resource data to evaluate progress toward meeting management objectives. This process must be conducted over time in order to determine whether or not management objectives are being met. Monitoring also includes observations to evaluate baseline (i.e., pre-activity) conditions, evaluation of whether activities met desired goals and permit requirements (implementation monitoring), and evaluation of how well mitigation measures protected resource conditions (effectiveness monitoring).

Multiple Use: Management of the public lands and their various resource values so that they are used in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and non-renewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output, as provided in the Multiple Use Sustained Yield Act and FLPMA.

National Environmental Policy Act of 1969 (NEPA): The National Environmental Policy Act (NEPA) [42 U.S.C. 4321 et seq.] was signed into law on January 1, 1970. The Act establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment and provides a process for implementing these goals within the federal agencies. The Act also establishes the Council on Environmental Quality (CEQ).

**Noxious Weeds:** A plant species designated by federal or State law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States.

**Off-range Corral** – Also known as short term holding facilities. After wild horses are removed from the range they are brought to off-range corrals. In these corrals wild horses are separated, doctored, and prepared for adoption, or shipping to off-range pastures.

Off-range Pasture – Also known as long term holding facilities. Animals that have not been adopted, or are unlikely to be adopted, are shipped to off-range pastures. These pastures are typically highly productive grasslands that can support a large number of grazing animals. Wild horses brought to off-range pastures will live out the rest of their life in these areas, until they die of natural causes.

**Permittee:** A person or company authorized to use or occupy BLM-administered land.

**Policy:** This is a statement of guiding principles, or procedures, designed and intended to influence planning decisions, operating actions, or other affairs of the BLM. Policies are established interpretations of legislation, executive orders, regulations, or other presidential, secretarial, or management directives.

**Population:** A group of organisms, all the same species, which occupies a particular area. The term is used to refer to the number of individuals of a species within an ecosystem or of any group of like individuals.

**Priority Habitat Management Area (PHMA):** Sage-grouse priority habitats are areas that have the highest conservation value to maintaining or increasing Sage-grouse populations. These areas would include breeding, late brood-rearing, winter concentration areas, and where known, migration or connectivity corridors. Sage-grouse Priority Habitat Management Area includes core plus connectivity habitat.

**Public Lands:** As used in this document, federally owned surface or mineral estate specifically administered by the BLM.

Range Improvement: The term range improvement means any activity, structure or program on or relating to rangelands which is designed to improve production of forage, change vegetative composition, control patterns of use, provide water, stabilize soil and water conditions, and provide habitat for wild horses, livestock and wildlife. The term includes, but is not limited to, structures, treatment projects, and use of mechanical means to accomplish the desired results.

**Resource Damage:** Damage to any natural or cultural resources that results in impacts such as erosion, water pollution, degradation of vegetation, loss of archeological resources, or the spread of weeds.

**Resource Management Plan (RMP):** A land use plan as prescribed by the Federal Land Policy and Management Act that establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, objectives, and actions to be achieved.

**Riparian:** Referring to or relating to areas adjacent to water or influenced by free water associated with streams or rivers on geologic surfaces occupying the lowest position in the watershed. (See also Wetlands.)

**Riparian Area:** A form of wetland transition between permanently saturated wetlands and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels are typical riparian areas (See BLM Manual 1737). Included are ephemeral streams that have vegetation dependent upon free water in the soil. All other ephemeral streams are excluded.

**Riparian Communities:** Communities of vegetation associated with either open water or wetlands. Examples are cottonwood and willow communities, meadows, aspens near water sources, and other trees, grasses, forbs, and shrubs associated with water.

**Runoff:** The total stream discharge of water, including both surface and subsurface flow, usually expressed in acre-feet of water yield.

**Scoping:** The process of identifying the range of issues, management concerns, preliminary alternatives, and other components of an environmental assessment, environmental impact statement or land-use planning document. It involves both internal and public viewpoints.

Sensitive Species: Those species designated by a State Director, usually in cooperation with the State agency responsible for managing the species and state natural heritage programs. They are those species that: (1) could easily become endangered or extinct in a state; (2) are under status review by the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service; (3) are undergoing significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution; (4) are undergoing significant current or predicted downward trends in population or density such that federal listing, proposal, or candidate status may become necessary; (5) typically have small and widely dispersed populations, or (6) inhabit ecological refugia or other specialized or unique habitats.

**Shrub:** A plant that has persistent woody stems and a relatively low growth habit, and that generally produces several basal shoots instead of a single bole.

**Solid-block:** Areas where BLM managed lands are more concentrated in larger blocks of land. This is in contrast to checkerboard lands where land ownership alternates every square mile (see Checkerboard in Glossary). See the diagram below for a visual explanation of this land ownership pattern, as compared with checkerboard.

SOLID-BLOCK											
C	Н	Е	C	K	E	R	В	0	A	R	D

**Special Status Species:** Proposed species, listed species, and candidate species under the Endangered Species Act; state-listed species; and BLM State Director-designated sensitive species (see BLM Manual 6840—Special Status Species Policy).

**Surface Disturbance:** Any disturbance that causes the destruction or alteration of vegetation and the disturbance of the soil surface, and that will cause a lasting impact to the affected area.

- 1. Long-term removal occurs when vegetation is physically removed through activities that replace the vegetation community, such as a road, power line, well pad or active mine. Long-term removal may also result from any activities that cause soil mixing, soil removal, and exposure of the soil to erosive processes.
- 2. Short-term removal occurs when vegetation is removed in small areas, but is restored to desirable vegetation communities within a few years (<5) of disturbance, such as a successfully reclaimed pipeline, or successfully reclaimed drill hole or pit.
- 3. Habitat rendered unusable due to numerous anthropogenic disturbances.

4. Anthropogenic surface disturbances are surface disturbances meeting the above definitions which result from human activities.

**Surface Disturbing Activity:** An action that alters vegetation, surface/near surface soil resources, and/or surface geologic features, beyond natural site conditions and on a scale that affects other Public Land values. Examples of surface disturbing activities may include: operation of heavy equipment to construct well pads, roads, pits and reservoirs; installation of pipelines and power lines; and conducting several types of vegetation treatments (e.g. prescribed fire, etc.). Surface disturbing activities may be either authorized or prohibited (WY-IB-2007-029).

**Threatened Species:** Any plant or animal species defined under the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range; listings are published in the *Federal Register* as determined by the US Fish and Wildlife Service and the Secretary of Interior.

Thriving Natural Ecological Balance (TNEB): Wild horses and burros are managed in a manner that assures significant progress is made toward achieving the Land Health Standards for upland vegetation and riparian plant communities, watershed function, and habitat quality for animal populations, as well as other site-specific or landscape level objectives, including those necessary to protect and manage Threatened, Endangered, and Sensitive Species.

**Watershed:** The area of land, bounded by a divide, that drains water, sediment, and dissolved materials to a common outlet at some point along a stream channel (Dunne and Leopold, 1978), or to a lake, reservoir, or other body of water. Also called drainage basin or catchment.

**Wetlands:** Those areas that are inundated by surface water or groundwater with a frequency sufficient to support, and under normal circumstances do or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mudflats, and natural ponds.

**Wild Horse:** "Wild free-roaming horses and burros" means all unbranded and unclaimed horses and burros on public lands of the United States.