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

Preliminary Environmental Assessment
DOI-BLM-NV-L060-2020-010-EA
June 24, 2020

Moriah Herd Area Wild Horse Gather

White Pine County, NV.

U.S. Department of the Interior
Bureau of Land Management
Ely District Office
Bristlecone Field Office
Phone: (775) 289-1800
Fax: (775) 289-1910

BLM

CHAPTER 1 INTRODUCTION

This Environmental Assessment (EA) has been prepared to disclose and analyze the environmental effects of the Proposed Action, which consists of gathering and removing excess wild horses from within and outside Moriah Herd Area (HA). The wild horse gather plan would allow for an initial gather and follow-up maintenance gathers to be conducted over the next 10 years from the date of the initial gather operation.

This EA assist the Bureau of Land Management (BLM) Bristlecone Field Office (FO) in project planning, ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any significant effects could result from the analyzed actions. Following the requirements of NEPA (40 CFR 1508.9 (a)), this EA describes the potential impacts of a No Action Alternative and the Proposed Action for the Moriah HA. If the BLM determines that the Proposed Action for the Moriah HA is not expected to have significant impacts a Finding of No Significant Impact (FONSI) will be issued and a Decision Record (DR) will be prepared. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of "Finding of No Significant Impact" (FONSI).

This document is tiered or conforms to the following documents:
- Ely Proposed RMP (2007) (Resource Management Plan) and Final Environmental Impact Statement (*FEIS-RMP/EIS 2008*),
- Ely District Record of Decision and Approved Resource Management Plan (2008) *(Ely RMP*), as amended.

1.1 Background

Since the passage of the Wild Free-Roaming Horses and Burros Act (WFRHBA) of 1971, BLM has refined its understanding of how to manage wild horse population levels. By law, BLM is required to control any overpopulation, by removing excess animals, once a determination has been made that excess animals are present, and removal is necessary. Program goals have always been to establish and maintain a "thriving natural ecological balance," which requires identifying the Appropriate Management Level (AML) for individual herds within the HMA boundaries. In the past two decades, goals have also explicitly included conducting gathers and applying contraceptive treatment to achieve and maintain wild horse population within the established AML, so as to manage for healthy wild horse population and healthy rangelands.

The Moriah HA is located 48 miles northeast of Ely, within White Pine County, Nevada. The HA is 55,300 acres in size. The eastern boundary of the HA is the Nevada/Utah state line (Figure 1). Under the 2008 Ely District Record of Decision (ROD) and Approved Resource Management Plan (RMP, no wild horses are to be managed within the Moriah HA based on

Under the 2008 Ely District Record of Decision (ROD) and Approved Resource Management Plan (RMP) management action WH-5 states: "Remove wild horses and drop herd management area status for those areas that do not provide sufficient habitat resources to sustain healthy populations as listed in Table 13." The Moriah herd area was dropped from Herd Management Area (HMA) status and returned to HA status (manage for "0" wild horses) under this land-use plan management action. The decision to remove wild horses and to manage for 0 wild horses within the Moriah HA reflects the evaluation using multi-tiered analysis from the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007) RMP/EIS table 3.8-2 and page 4.8-2. The RMP/EIS (November 2007) evaluated each herd management area for five essential habitat components and herd characteristics: forage, water, cover, space, and reproductive viability. If one or more of these components were missing or there was no potential for a stable shared genetic pool, the herd management area was considered unsuitable for wild horses. The Moriah HMA failed to meet one or more of the five required habitat components resulting in the decision to drop its HMA status.

Table 1 Moriah Herd Area

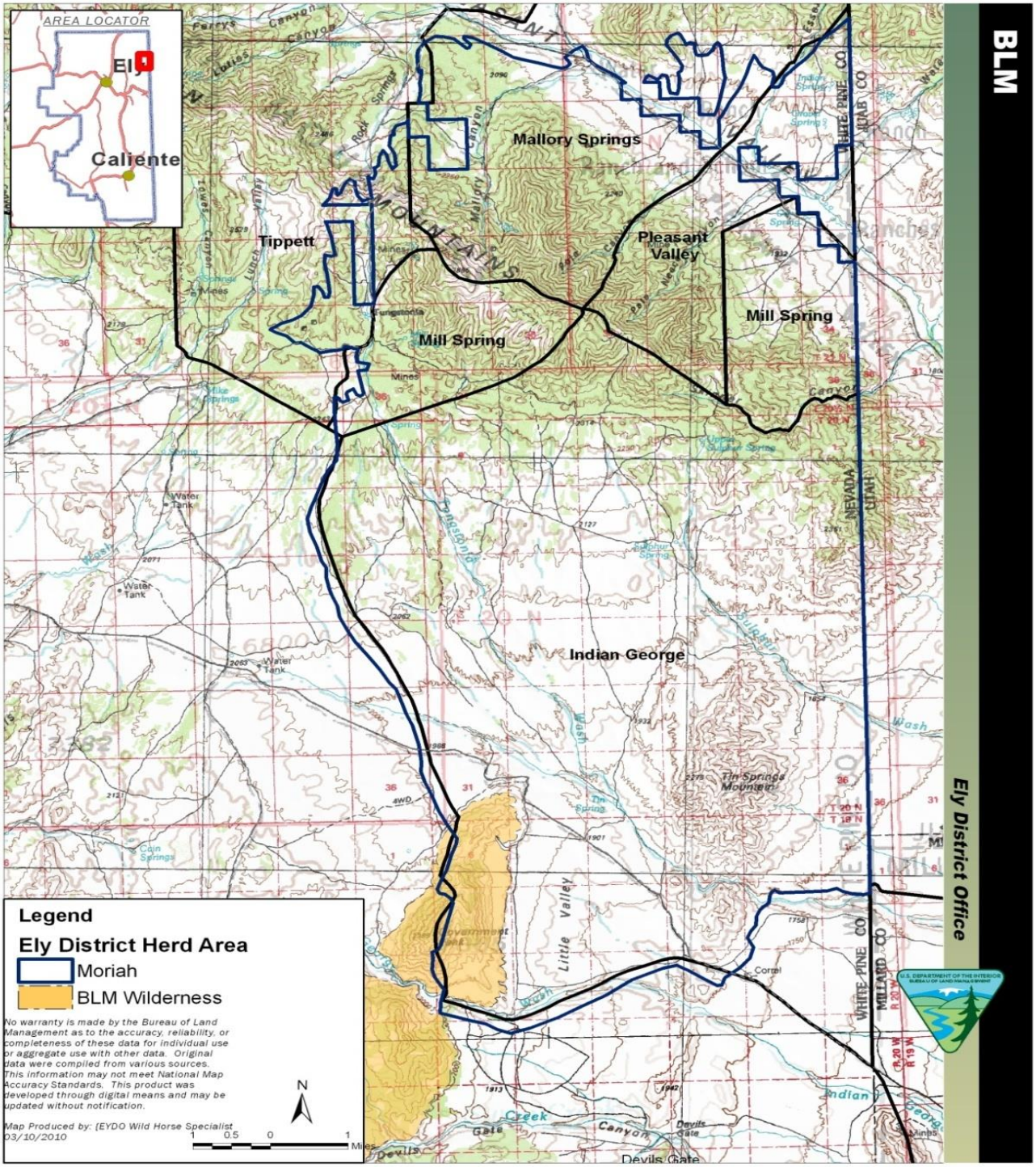
Herd Area Number	Herd Area Name	Estimated Total Acres	Population Estimate	Removal
413	Moriah	53,300	714	714

The Moriah HA has been gathered periodically since the 1971 Wild Free-Roaming Horses and Burros Act was passed. This area was last gathered in August 2010 where 53 horses were removed under the Final Environmental Assessment DOI-BLM-NV-L020-2010-0032-EA.

The Moriah HA population inventory was conducted in February of 2017. The inventory was conducted using the Double Simultaneous Count method, in which observers in an aircraft independently observe and record groups of wild horses. Sighting rates for the observers is then computed from the information collected and population estimated generated. The 2020 population estimate is 714 excess wild horses including the projected 2020 foal crop. Approximately half of these 714 excess horses regularly move or reside outside the HA in search of forage, water and space.

As is true for any estimates of wildlife abundance or herd size, there is always some level of uncertainty about the exact numbers of wild horses or wild burros in any HA/HMA or non-HMA area. The estimates shown here reflect the most likely number of wild horses, based on the best information available to the BLM and may not account for every animal within the HA. BLM strives to conduct aerial surveys in each HMA once every two to three years. These surveys result in estimates that statistically account for animals that are not detected by any observer on the flights. In years without surveys, herd size estimates rely on addition information, including known number of animals removed and estimated annual population growth rates of 20%.

Figure 1 Moriah Herd Area.



*Black line represents grazing allotment boundary.
* Blue line represents Moriah HA boundary.

In the 2012 National Academy of Science's (NAS) report "Using Science to Improve BLM Wild Horse and Burro Program", the committee's judgment was that the reported annual population statistics are probably underestimates of the actual number of equids on the range inasmuch as most of the individual HMA population estimates are based on the assumption that all animals are detected and counted in population surveys. A large body of scientific literature on techniques of inventorying horses and other large mammals clearly refutes that assumption and suggests that the proportion of animals missed on surveys range from 10 to 50 percent. An earlier National Research Council committee and the Government Accountability Office also concluded that reported statistics were underestimates.

Monitoring data collected for the HA during the years 2012 through 2019 indicates that forage utilization at key grazing areas by wild horses is heavy severe in established key grazing areas. Insufficient water, space, and cover within dominant ecological sites does not support healthy wild horses, and this situation has led to excess utilization and trampling that directly impacts range conditions and prevents vegetative recovery of key sites. Due to the overpopulation and lack of habitat components within the HA boundary wild horses routinely move and reside outside the HA in search of forage and water resources. These outside areas have been negatively impacted by the heavy to severe utilization which is attributed to wild horses.

Vegetation and population monitoring data indicate that the Moriah HA contains insufficient year-round wild horse habitat and the area should not be managed for wild horses. The excess wild horses present within and outside of the Moriah HA are therefore proposed for removal in order to prevent further deterioration of the range and to achieve and maintain a thriving natural ecological balance and multiple use relationship.

1.2 Purpose and Need for the Proposed Action

The purpose of the Proposed Action is to remove all excess wild horses from areas not designated for their long-term maintenance and to achieve and maintain a thriving natural ecological balance and multiple use relationship on the public lands consistent with the provisions of Section 1333 (a) of the Wild Free-Roaming Horses and Burros Act of 1971, Section 302(b) of the Federal Land Policy and Management Act of 1976 and is in conformance with the decision in the 2008 Ely RMP to return these areas to HA status. Implementation of the Proposed Action is needed to improve watershed health and to make "significant progress towards achievement" of Northeastern Great Basin Resource Advisory Council (RAC) Standards for rangeland Health.).

1.3 Conformance with BLM Land Use Plan(s)

- The Proposed Action is in conformance with the following goal, objective, and management action in the 2008 Ely District ROD and Approved RMP (August 2008), as amended:
- United States Department of the Interior Greater Sage-Grouse Approved Resource Management Plan Amendment (2015).

- ***Goal:*** "Maintain and manage healthy, self-sustaining wild horse herds inside herd management areas within appropriate management levels to ensure a thriving natural ecological balance while preserving a multiple-use relationship with other uses and resources."
- ***Objective:*** "To maintain wild horse herds at appropriate management levels within herd management areas where sufficient habitat resources exist to sustain healthy populations at those levels."
- ***Action WH-5:*** "Remove wild horses and drop herd management area status for those areas that do not provide sufficient habitat resources to sustain healthy populations as listed in Table 13."

1.4 Relationship to Statutes, Regulations, or other Plans

The Proposed Action is consistent with the following Federal, State, and local plans to the maximum extent possible.

- State Protocol Agreement between the Bureau of Land Management, Nevada and the Nevada Historic Preservation Office (1999).
- Northeastern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (February 12, 1997).
- Endangered Species Act-1973
- Wilderness Act-1964
- Migratory Bird Treaty Act (1918 as amended) and Executive Order 13186 (1/11/01)
- National Environmental Policy Act of 1969 (as amended)
- Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 1701 et seq.)
- Public Rangelands Improvement Act (PRIA) of 1978
- National Historic Preseravation Act of 1966 (as amended)
- United States Department of the Interior Manual (910 DM 1.3).

The Proposed Action is consistent with all applicable regulations at 43 CFR (Code of Federal Regulations) 4700 and policies, as well as the 1971 WFRHBA. More specifically, this action is designed to remove excess wild horses consistent with the following regulations:

- 43 CFR § 4710.1: "*Management activities affecting wild horses and burros, including the establishment of herd management areas, shall be in accordance with approve land use plans prepared pursuant to part 1600 of this title."*
- 43 CFR § 4710.3-1: "*Herd management areas shall be established for the maintenance of wild horse and burro herds. In delineating each herd management area, the authorized officer shall consider the appropriate management level for the herd, the habitat requirements of the animals, the relationships with other uses of the public and adjacent private lands, and the constraints contained in 4710.4."*
- 43 CFR § 4720.1: *"Upon examination of current information and a determination*

that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately…"

- 43 CFR § 4710.4: *"Management of wild horses and burros shall be undertaken with the objective of limiting the animals' distribution to herd areas."* The Interior Board of Land Appeals (IBLA) has interpreted this to mean that the animals' distribution should be limited to established HMAs (refer to 118 IBLA 24).

CHAPTER 2 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

2.1 Introduction

The previous chapter presented the purpose and need of the proposed project. In order to meet the purpose and need of the proposed project, the BLM has developed a range of action alternatives. These alternatives, as well as a no action alternative, are presented below. The potential environmental impacts or consequences resulting from the implementation of each alternative are then analyzed in Chapter 3 for each of the identified issues.

2.2 Alternative A - Proposed Action

The Proposed Action would be to capture 100% of the current population of wild horses (estimated at around 714 excess wild horses as of 2020), including any horses outside the HA boundaries and return periodically over the next 10 years. All of the animals gathered would be removed and transported to BLM holding facilities where they would be prepared for adoption and/or sale to qualified individuals or maintained in off-range holding facilities. Due to the rugged terrain, access, and historic gather efficiencies for the area it is estimated that 75-85% or 535-606 excess wild horses of the population may be gathered during an initial gather and follow-up gathers may be necessary over the next 10 years to achieve management objectives.

All capture and handling activities (including capture site selections) would be conducted in accordance with the Standard Operating Procedures (SOPs) described in Appendix I. Multiple capture sites (traps) may be used to capture wild horses from the HA. Whenever possible, capture sites would be in previously disturbed areas. Capture techniques would be the helicopter-drive trapping method and/or helicopter assisted roping from horseback, or bait and water trap methods.

- Gather operations may involve areas beyond the Moriah HA boundaries due to horses moving and residing outside HA boundaries.
- Gather operations would be conducted in accordance with the Comprehensive Animal Welfare Program (CAWP) for Wild Horses and Burro Gathers, which includes provisions of the Comprehensive Animal Welfare Program (BLM Instructional Memorandum 2015-151). A combination of gather methods may be used to complete the management actions and would depend on the needs of the specific actions to select which method would be used. This EA and decision include addressing management needs in regards to public safety, emergency situations and private land issues.
- Trap sites and temporary holding facilities would be located in previously used sites or other disturbed areas whenever possible. Undisturbed areas identified as potential trap sites or holding facilities would be inventoried for cultural

resources. If cultural resources are encountered, these locations would not be used unless they could be modified to avoid impacts to cultural resources.

- Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Washington Office Instruction Memorandum 2015-070).
- A BLM contract Veterinarian, Animal and Plant Health Inspection Service (APHIS) Veterinarian or other licensed Veterinarian would be on call or on site as the gather is started and then as needed for the duration of the helicopter gather to examine animals and make recommendations to the BLM for the care and treatment of wild horses, and ensure humane treatment. Additionally, animals transported to a BLM wild horse facility are inspected by facility staff and the BLM contract Veterinarian, to observe health and ensure the animals have been cared for humanely.
- Noxious weed monitoring at gather sites and temporary holding corrals would be conducted following the gather by BLM.
- Monitoring of rangeland forage condition and utilization, water availability, aerial population surveys and animal health would continue until management goals are achieved.
- A comprehensive post-gather aerial population inventory would occur within 12 to 18 months following the completion of the gather operation.

Helicopter

If the local conditions, such as topography, distribution, numbers of animals, as well as access to areas within the gather area require a helicopter drive-trap operation, the BLM would use a contractor or in-house gather team to perform the gather activities in cooperation with BLM and other appropriate staff. The contractor would be required to conduct all helicopter operations in a safe manner and in compliance with Federal Aviation Administration (FAA) regulations 14 CFR § 91.119 and BLM IM No. 2010-164.

Helicopter drive trapping involves use of a helicopter to herd wild horses into a temporary trap. The CAWP outlines measures that would be implemented to ensure that the gather is conducted in a safe and humane manner, and to minimize potential impacts or injury to the wild horses. Traps would be set in an area with high probability of access by horses using the topography, if possible, to assist with capturing excess wild horses residing within the area. Traps consist of a large catch pen with several connected holding corrals, jute-covered wings and a loading chute. The jute-covered wings are made of material, not wire, to avoid injury to the horses. The wings form an alley way used to guide the horses into the trap. Trap locations are changed during the gather to reduce the distance that the animals must travel. A helicopter is used to locate and herd wild horses to the trap location. The pilot uses a pressure and release system while guiding them to the trap site, allowing them to travel at their own pace. As the herd approaches the trap the pilot applies pressure and a prada horse is released guiding the wild horses into the trap. Once horses are gathered they are removed from the trap and transported to a temporary holding facility where they are sorted.

If helicopter drive-trapping operations are needed to capture the targeted animals, BLM would assure that an Animal and Plant Health Inspection Service (APHIS) veterinarian or contracted licensed veterinarian is on-site during the gather to examine animals and make recommendations to BLM for care and treatment of wild horses. BLM staff would be present on the gather at all times to observe animal condition, ensure humane treatment of wild horses, and ensure contract requirements are met.

Bait/Water Trapping

Bait and/or water trapping may be used if circumstances allow or require it or this best fits the management action to be taken. Bait and/or water trapping generally require a longer window of time for success than helicopter drive trapping. Although the trap would be set in a high probability area for capturing excess wild horses residing within the area, and at the most effective time periods, time is required for the horses to acclimate to the trap and/or decide to access the water/bait.

Trapping involves setting up portable panels around an existing water source or in an active wild horse area, or around a pre-set water or bait source. The portable panels would be set up to allow wild horses to go freely in and out of the corral until they have adjusted to it. When the wild horses fully adapt to the corral, it is fitted with a gate system. The acclimation of the horses creates a low stress trapping method. During this acclimation period the horses would experience some stress due to the panels being setup and perceived access restriction to the water/bait source.

When actively trapping wild horses, the trap would be staffed or checked on a daily basis by either BLM personnel or authorized contractor staff. Horses would be either removed immediately or fed and watered for up to several days prior to transport to a holding facility. Existing roads would be used to access the trap sites.

Gathering excess horses using bait/water trapping could occur at any time of the year and traps would remain in place until the target number of animals are removed. Generally, bait/water trapping is most effective when a specific resource is limited, such as water during the summer months. For example, in some areas, a group of wild horses may congregate at a given watering site during the summer because few perennial water resources are available nearby. Under those circumstances, water trapping could be a useful means of reducing the number of horses at a given location, which can also relieve the resource pressure caused by too many horses. As the proposed bait and/or water trapping in this area is a low stress approach to gathering wild horses, such trapping can continue into the foaling season without harming the mares or foals.

Gather Related Temporary Holding Facilities (Corrals)

Wild horses that are gathered would be transported from the gather sites to a temporary holding corral in goose-neck trailers. At the temporary holding corral, wild horses would be sorted into different pens based on sex. The horses would be aged and provided good quality hay and water. Mares and their un-weaned foals would be kept in pens together. At the temporary holding facility, a veterinarian, when present, would provide

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

Transport, Off-range Corrals, and Adoption Preparation
All gathered wild horses would be removed and transported to BLM holding facilities where they would be inspected by facility staff and if needed a contract veterinarian to observe health and ensure the animals are being humanely cared for.

Wild horses removed from the range would be transported to the receiving off-range corrals (ORC, formerly short-term holding facility) in a goose-neck stock trailer or straight-deck semi-tractor trailers. Trucks and trailers used to haul the wild horses would be inspected prior to use to ensure wild horses can be safely transported. Wild horses would be segregated by age and sex when possible and loaded into separate compartments. Mares and their un-weaned foals may be shipped together. Transportation of recently captured wild horses is limited to a maximum of 12 hours.

Upon arrival, recently captured wild horses are off-loaded by compartment and placed in holding pens where they are provided good quality hay and water. Most wild horses begin to eat and drink immediately and adjust rapidly to their new situation. At the off-range corral, a veterinarian provides recommendations to the BLM regarding care, treatment, and if necessary, euthanasia of the recently captured wild horses. Wild horses in very thin condition or animals with injuries are sorted and placed in hospital pens, fed separately and/or treated for their injuries.

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

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

Sale with Limitations
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 at least three times. The application also specifies that buyers cannot sell the horse to slaughter buyers or anyone who would sell the

animals to a commercial processing plant. Sales of wild horses are conducted in accordance with the 1971 WFRHBA and congressional limitations.

Off-Range Pastures
When shipping wild horses for adoption, sale, or Off-Range Pastures (ORPs) the animals may be transported for up to a maximum of 24 hours. Immediately prior to transportation, and after every 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 two pounds of good quality hay per 100 pounds of body weight with adequate space to allow all animals to eat at one time.

Mares and sterilized stallions (geldings) are segregated into separate pastures, except at one facility where geldings and mares coexist. Although the animals are placed in ORP, they remain available for adoption or sale to qualified individuals; and foals born to pregnant mares in ORP are gathered and weaned when they reach about 8-12 months of age and are also made available for adoption. The ORP contracts specify the care that wild horses must receive to ensure they remain healthy and well-cared for. Handling by humans is minimized to the extent possible although regular on-the-ground observation by the ORP contractor and periodic counts of the wild horses to ascertain their well-being and safety are conducted by BLM personnel and/or veterinarians.

Euthanasia or Sale without Limitations
Under the WFRHBA, healthy excess wild horses can be euthanized or sold without limitation if there is no adoption demand for the animals. However, while euthanasia and sale without limitation are allowed under the statute, these activities have not been permitted under current Congressional appropriations for over a decade and are consequently inconsistent with BLM policy. If Congress were to lift the current appropriations restrictions, then it is possible that excess horses removed from the Moriah HA over the next 10 years could potentially be euthanized or sold without limitation consistent with the provisions of the WFRHBA.

Any old, sick or lame horses unable to maintain an acceptable body condition (greater than or equal to a Henneke BCS of 3) or with serious physical defects would be humanely euthanized either before gather activities begin or during the gather operations. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Washington Office Instruction Memorandum (WO IM) 2015-070 or most current edition). Conditions requiring humane euthanasia occur infrequently and are described in more detail in Washington Office Instruction Memorandum 2009-041.

Public Viewing Opportunities
Opportunities for public observation of the gather activities on public lands would be provided, when and where feasible, and would be consistent with WO IM No. 2013-058 and the Visitation Protocol and Ground Rules for Helicopter WH&B Gathers. This protocol is intended to establish observation locations that reduce safety risks to the public during helicopter gathers (see Appendix II). Due to the nature of bait and water

trapping operations, public viewing opportunities may only be provided at holding corrals.

Wildlife Stipulations

- If gather operations were to be conducted during the migratory bird breeding season (March 1 – July 31) a nest clearance survey would be conducted by BLM Biologist at trap, corral, and staging areas.
- Trap sites and corrals would not be located in active pygmy rabbit habitat or other sensitive habitat.
- Greater sage-grouse Required Design Features that are identified in Appendix IV would be applied in Greater sage-grouse habitat.
- Corrals would not be constructed within 1 mile of an active or pending lek.
- Prior to gathers, BLM will coordinate with Nevada Department of Wildlife (NDOW) in regard to location of staging areas to address Greater sage-grouse concerns. The following timing restrictions will be adhered to the best of BLM's abilities while not impeding gather operations.
    - Helicopter and water trapping gathers would not occur during the lek timing restriction of March 1 - May 15 to protect breeding Greater sage-grouse.
    - Helicopter gathers would not occur during the nesting timing restriction of April 1 – June 30 within 4 miles of an active or pending lek.
    - Water trapping operations would not occur during nesting timing restriction April 1 – June 30 within 1 mile of active or pending lek.
    - Water trapping operations would not occur at springs and seeps during brood rearing timing restriction (May 1 – September 15) if determined by the BLM wildlife biologist the locations are considered Greater sage-grouse brood habitat.

2.3 Alternative B - No Action:

Under the No Action Alternative, a 10 year gather plan to remove all excess wild horses in the Moriah HA would not take place. There would be no active management to control the size of the wild horse population at this time. The current population of about 714 wild horses would continue to increase at a rate of 20% annually and would be allowed to regulate their numbers naturally through predation, disease, and forage, water and space availability. Horses would continue to move outside the HA in increasing numbers in search of habitat components. Over time, excess wild horses would continue to impact range condition to the point that horse herd health is placed at risk. Individual horses would be at risk of death by starvation and lack of water. Existing management, including monitoring, would continue.

The No Action Alternative is not in conformance with The Ely District ROD and Approved RMP (August 2008) management action WH-5.
The No Action Alternative would not comply with the 1971 WFRHBA or with applicable regulations and Bureau policy, nor would it comply with the Northeastern

Great Basin Area RAC Standards and Guidelines for Rangeland Health and Healthy Wild Horse and Burro Populations. However, it is included as a baseline for comparison with the Proposed Action, as required under the 1969 National Environmental Policy Act (NEPA).

2.4 Alternatives Considered, but Eliminated from Further Analysis

Use of Bait and/or Water Trapping Only

An alternative considered but eliminated from detailed analysis was use of bait and/or water trapping as the sole gather method. The use of bait and water trapping, though effective in specific areas and circumstances, would not be timely, cost-effective or practical as the sole gather method for Moriah HA However, water or bait trapping may be used as a supplementary approach to achieve the desired goals of Alternative A if gather efficiencies are too low using a helicopter, excess horses are concentrated in a specific geographic area amenable to bait or water trapping, or a helicopter gather cannot be timely scheduled. The use of only bait and/or water trapping was dismissed from detailed analysis as it was determined this method would not fully meet the purpose and need for action as there is a lack of adequate road access or ability for cross country motorized travel to reach areas where excess horses are located. This would make it technically infeasible to construct traps and safely transport capture wild horses from these areas. This alternative was dismissed from detailed study as a primary or sole gather method for the following reasons:

1. The Moriah HA has numerous springs and seedings outside the HA where horses move for resources that are inaccessible effectively use this gather method as the primary or sole method;
2. There is limited road access for vehicles to reach potential trapping locations in order to get equipment in/out as well as safely transport gathered wild horses.
3. The large numbers of horses proposed to be gathered and the dispersed area over which they are located makes water or bait trapping as a sole means impossible within a reasonable time frame.

Field Darting PZP Treatment to Reduce Population

Field Darting PZP treatment to reduce population would not meet the purpose and need to remove all the horses from the Moriah HA BLM would administer PZP in the one year liquid dose inoculations by field darting the mares. This method is currently approved for use and is being utilized by BLM in other HMAs. This alternative was dismissed from detailed study for the following reasons:

1. It would be impossible to dart 100% of the mares located in the HA;
2. Even if all mares could be darted annually, field Darting would only very gradually decrease the population through attrition and would be unlikely to zero out the population even after several decades.
3. A good portion of the HA is inaccessible with no roads or access to some of the water sources and areas where horses reside to be able to successfully dart them.

For these reasons, this alternative was determined to not be an effective or feasible method for gathering and removing excess wild horses from the Moriah HA

Control of Wild Horse Numbers by Natural Means
This alternative would use natural means, such as natural predation and weather, to control the wild horse population. This alternative was eliminated from further consideration because it would be contrary to the WFRHBA which requires the BLM to protect the range from deterioration associated with an overpopulation of wild horses. The alternative of using natural controls to achieve a desirable AML has not been shown to be feasible in the past so is unlikely to achieve complete removal of wild horses from the Moriah HA Wild horse populations in the Moriah HA are not substantially regulated by predators, as evidenced by the 15-25% annual increase in the wild horse populations. In addition, wild horses are a long-lived species with documented foal survival rates exceeding 95% and are not a self-regulating species. This alternative would allow for a steady increase in the wild horse populations which would continue to exceed the carrying capacity of the range and would cause increasing and potentially irreversible damage to the rangelands until severe range degradation or natural conditions that occur periodically – such as blizzards or extreme drought – cause a catastrophic mortality of wild horses in the HA.

Raising the Appropriate Management Levels for Wild Horses
An in-depth analysis was conducted through the 2007 EIS/2008 approved Ely District RMP finding that these HAs are not suited for long-term management of wild horses due to inadequate habitat to sustain and manage for healthy wild horses. There is no new information or data that would support increasing the AML for the HA, and doing so would be contrary to the land-use plan.

Remove or Reduce Livestock within the Moriah Herd Areas
This alternative would involve no removal of wild horses and would instead address the excess wild horse numbers through the removal of livestock or reductions in livestock grazing allocations within the Moriah HA This alternative was not brought forward for analysis because it would be inconsistent with the current land use plans. This gather document and subsequent Decision Record is not the appropriate mechanism for adjusting the authorized livestock use within the allotments associated with the Moriah HA in order to reallocate forage to wild horses.

The proposal to reduce livestock would not meet the purpose and need for action identified in Chapter 1.1 Purpose and Need for Action: “to remove all excess wild horses from areas not designated for their long-term maintenance and to achieve and maintain a thriving natural ecological balance and multiple use relationship on the public lands consistent with the provisions of Section 1333 (a) of the Wild Free-Roaming Horses and Burros Act of 1971, Section 302(b) of the Federal Land Policy and Management Act of 1976 or with the decision in the 2008 Ely RMP to return these areas to HA status. Implementation of the Proposed Action is needed to improve watershed health and to make “significant progress towards achievement” of Mojave/Southern Great Basin Resource Advisory Council (RAC) Standards for rangeland Health.”

This alternative would also be inconsistent with the WFRHBA, which directs the Secretary to immediately remove excess wild horses when a determination is made that there is an overpopulation and that removal is necessary. Livestock grazing can only be reduced or eliminated if BLM follows regulations at 43 CFR § 4100 and must be consistent with multiple use allocations set forth in the land-use plan. Such changes to livestock grazing cannot be made through a wild horse gather decision, and are only possible if BLM first revises the land-use plans to re-allocate livestock forage to wild horses and to eliminate or reduce livestock grazing.

Furthermore, re-allocation of livestock AUMs to increase the wild horse AMLs would not achieve a thriving natural ecological balance due to differences in how wild horses and livestock graze. Unlike livestock which can be confined to specific pastures, limited periods of use, and specific seasons-of-use so as to minimize impacts to vegetation during the critical growing season or to riparian zones during the summer months, wild horses are present year-round and their impacts to rangeland resources cannot be controlled through establishment of a grazing system, such as for livestock. Thus, impacts from wild horses can only be addressed by limiting their numbers to a level that does not adversely impact rangeland resources and other multiple uses.

While the BLM is authorized to remove livestock from HA "if necessary to provide habitat for wild horses or burros, to implement herd management actions, or to protect wild horses or burros from disease, harassment or injury" (43 CFR§ 4710.5), this authority is usually applied in cases of emergency and not for general management of wild horses since it cannot be applied in a manner that would be inconsistent with the existing land-use plans. (43 CFR § 4710.1)

For the reasons stated above, this alternative was dropped from detailed analysis. For modifications in long-term multiple use management, changes in forage allocations between livestock and wild horses would have to be re-evaluated and implemented through the appropriate public decision-making processes to determine whether a thriving natural ecological balance can be achieved at a higher AML and in order to modify the current multiple use relationship established in the land-use plans.

Make Individualized Excess Wild Horse Determinations Prior to Removal
An alternative whereby BLM would make on-the-ground and individualized excess wild horse determinations prior to removal of wild horses from any HA has been advocated by some members of the public. Under the view set forth in some comments during public commenting for wild horse gathers nationwide, a tiered or phased removal of wild horses from the range is mandated by the WFRHBA.1 Specifically, this alternative would involve a tiered gather approach, whereby BLM would first identify and remove old, sick or lame animals in order to euthanize those animals on the range prior to gather. Second, BLM would identify and remove wild horses for which adoption demand exists, e.g., younger wild horses or wild horses with unusual and interesting markings. Under the WFRHBA(1333(b)(2)(iv)(C)), BLM would then destroy any additional excess wild horses for which adoption demand does not exist in the most humane and cost effective manner possible, although euthanasia has been limited by Congressional appropriations.

A phased removal process could potentially be viable in situations where the project area is contained, the area is readily accessible and wild horses are clearly visible, and where the number of wild horses to be removed is so small that a targeted approach to removal can be implemented. However, under the conditions present within the gather area and the significant number of excess wild horses both inside and outside of the Moriah HA, this proposed alternative is impractical, if not impossible, as well as less humane for a variety of reasons.

First, BLM does euthanize old, sick or lame animals on the range when such animals have been identified. This occurs on an on-going basis and is not limited to wild horse gathers. During a gather, if old, sick or lame animals are found and it is clear that an animal's condition requires the animal to be put down, that animal is separated from the rest of the group that is being herded so that it can be euthanized on the range. However, wild horses that meet the criteria for humane destruction because they are old, sick or lame usually cannot be identified as such until they have been gathered and examined up close, e.g., so as to determine whether the wild horses have lost all their teeth or are club footed. Old, sick and lame wild horses meeting the criteria for humane euthanasia are also only a small fraction of the total number of wild horses to be gathered, comprising on average about 0.5% of gathered wild horses. Thus, in a gather of over 1,000 wild horses, potentially about five of the gathered wild horses might meet the criteria for humane destruction over an area of over three quarters of a million acres.

Due to the size of the gather area, access limitations associated with topographic and terrain features and the challenges of approaching wild horses close enough to make an individualized determination of whether a wild horse is old, sick or lame, it would be virtually impossible to conduct a phased culling of such wild horses on the range without actually gathering and examining the wild horses. Similarly, rounding up and removing 1 The view that the WFRHBA requires a phased removal process has been litigated and rejected by Federal courts. See In Defense of Animals v. Salazar, 675 F. Supp. 2d 89, 97-98 (D.D.C. 2009); In Defense of Animals v. United States DOI, 909 F. Supp. 2d 1178, 1190-1191 (E.D. Cal. 2012), aff'd 751 F.3d 1054, 1064-1065 (9th Cir. 2014). wild horses for which an adoption demand exists, before gathering any other excess wild horses, would be both impractical and much more disruptive and traumatic for the animals. Recent gathers have had success in adopting out approximately 30% of excess wild horses removed from the range on an annual basis. The size of the gather area, terrain challenges, difficulties of approaching the wild horses close enough to determine age and whether they have characteristics (such as color or markings) that make them more adoptable, the impracticalities inherent in attempting to separate the small number of adoptable wild horses from the rest of the herd, and the impacts to the wild horses from the closer contact necessary, makes such phased removal a much less desirable method for gathering excess wild horses. This approach would create a significantly higher level of disruption for the wild horses on the range and would also make it much more difficult to gather the remaining excess wild horses.

Furthermore, making a determination of excess as to a specific wild horse under this alternative, and then successfully gathering that individual wild horse would be impractical to implement (if not impossible) due to the size of the gather area, terrain challenges and difficulties approaching the wild horses close enough to make an individualized determination. This tiered approach would also be extremely disruptive to the wild horses due to repeated culling and gather activities over a short period of time. Gathering excess wild horses under this alternative would greatly increase the potential stress placed on the animals due to repeated attempts to capture specific animals and not others in the band. This in turn would increase the potential for injury, separation of mare/foal pairs, and possible mortality.

This alternative would be impractical to implement (if not impossible), would be cost prohibitive, and would be unlikely to result in the successful removal of excess wild horses or application of population controls to released wild horses. This approach would also be less humane and more disruptive and traumatic for the wild horses. This alternative was therefore eliminated from any further consideration.

Use of Alternative Capture Techniques Instead of Helicopter Capture

An alternative using capture methods other than helicopters to gather excess wild horses has been suggested by some members of the public. As no specific alternative methods were suggested, the BLM identified chemical immobilization, net gunning, and wrangler/horseback drive trapping as potential methods for gathering wild horses. Net gunning techniques normally used to capture big game animals also rely on helicopters. Chemical immobilization is a very specialized technique and strictly regulated. Currently the BLM does not have sufficient expertise to implement either of these methods and it would be impractical to use given the size of the project area, access limitations, and difficulties in approachability of the wild horses.

Use of wrangler on horseback drive-trapping to remove excess wild horses can be fairly effective on a small scale. However, given the number of excess wild horses to be removed, the large geographic size of the Moriah HA gather area, access limitations, and difficulties in approaching the wild horses this technique would be ineffective and impractical. Horseback drive-trapping is also very labor intensive and can be very dangerous to the domestic horses and the wranglers used to herd the wild horses. Domestic horses can easily be injured while covering rough terrain and the wrangler could be injured if he/she falls off. For these reasons, this alternative was eliminated from further consideration.

CHAPTER 3 AFFECTED ENVIRONMENT/ENVIRONMENTAL EFFECTS

3.1 General Setting

The Moriah HA ranges in elevation from approximately 5400 feet above sea level (asl) to approximately 9500 feet asl. The annual precipitation varies from 5 inches in the valley bottoms to 19 inches in the higher elevations. The area lies about 50 air miles northeast of Ely, Nevada and is entirely within White Pine County. The HA is 55,300 acres and is dominated by sagebrush, and pinyon-juniper with topography ranging from wide open valley bottoms to surrounding gently sloping hills to steep escarpments. Wild horses routinely move outside the HA for winter habitat.

Identification of Issues:

Table 2 summarizes which of the critical elements of the human environment and other resources of concern within the project area are present, not present or not affected by the proposed action.

Internal scoping was conducted by an interdisciplinary (ID) team on April 20, 2020, that analyzed the potential resource concerns of this project. Potential impacts to the following resources/concerns were evaluated in accordance with criteria listed in the H-1790-1 NEPA Handbook (2008) page 41, to determine if detailed analysis was required. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general, and to the Ely District BLM in particular.

Table 2. Review of Statutory Authorities and Resources Considered

Resource/Concern	Issue(s) Analyzed? (Y/N)	Rationale for Dismissal from Detailed Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	Y	Analysis in EA
Areas of Critical Environmental Concern (ACEC	N	Not present in the designated HA boundaries.
Cultural Resources	N	A Class III intensive cultural resource inventory was or will be conducted on all possible ground disturbing portions of this project. All known cultural resource sites eligible for the National Register of Historic Places will be avoided. If any cultural resource sites are discovered during the implementation of this project, all work will cease within 100 yards of the site and the BLM Archaeologist will be contacted immediately.

		All known vertebrates, rare invertebrates and plant paleontological resource will be avoided. If any are discovered during the implementation of this project, all work in the vicinity will cease and the BLM Archaeologist/Paleontologist will be contacted immediately.
Forest Health	N	Project has a negligible impact directly, indirectly and cumulatively to forest health. Detailed analysis not required.
Migratory Birds	Y	Analysis in EA
Rangeland Standards and Guidelines	N	Beneficial impacts to rangeland standards and health are consistent with the need and objectives for the Proposed Action. Detailed analysis is not necessary.
Native American Religious and other Concerns	N	No potential traditional religious or cultural sites of importance are identified in the project area according to the Ely District RMP Ethnographic report (2003).
Wastes, Hazardous or Solid	N	No hazardous or solid wastes exist on the permit renewal area, nor would any be introduced.
Water Quality, Drinking/Ground	Y	Analysis in EA
Environmental Justice	N	The Proposed Action would not have disproportionately high or adverse effects on low income or minority populations. Health and environmental statues would not be compromised.
Floodplains	N	No floodplains have been identified by HUD or FEMA. Floodplains as defined in Executive Order 11988 may exist in the area, but would not be affected by the Proposed Action.
Farmlands, Prime and Unique	Y	Analysis in EA
Livestock Grazing	Y	Analysis in EA
Wetlands/Riparian Zones	Y	Analysis in EA
Noxious and Invasive Non-native Species	Y	Analysis in EA
Wilderness/WSA	Y	Analysis in EA
Lands with Wilderness Characteristics	N	Gather area overlaps small portion (66ac) of LWC unit NV-040-078. There will be no permanent negative impacts to LWC from gather.

Human Health and Safety	N	Risks have been assessed to mitigate any safety hazards in the form of safety plans and risk management worksheets.
Wild and Scenic Rivers	N	Not Present
Special Status Plant and Animal Species	Y	Analysis in EA
Fish and Wildlife	Y	Analysis in EA
Wild Horses	Y	Analysis in EA
Water Rights	N	Water rights would not be affected by Proposed Action. The proposed action is expected to have no effect to existing water rights in the project area.
Vegetative Resources	Y	Analysis in EA
Soils/Watershed	Y	Analysis in EA
Visual Resource Management	N	No long-term effects expected as a result of Proposed Action.
Transportation/Access	N	Temporary access to some minor roads may be affected during gather.
Socioeconomics	N	The Proposed Action will would not disproportionately impact social or economic values.
Paleontological Resources	N	Paleontological sites would be avoided when setting up traps.
Mineral Resources	N	No effects likely due to the Proposed Action.
FWS Listed or proposed for listing Threatened or Endangered Species or critical habitat.	N	No threatened or endangered species are present within the project area

3.2 Affected Environment

3.2.1 Wild Horses

3.2.1.1 Affected Environment

In 2008, BLM issued the Ely District ROD and Approved Resource Management Plan (RMP). The Ely District ROD/Approved RMP management action WH-5 states: "Remove wild horses and drop herd management area status for those areas that do not provide sufficient habitat resources to sustain healthy populations as listed in Table 13." As a result of the RMP, the Moriah HMA was returned to HA status with the directive to manage the HA for "0" wild horses. This management decision for the Moriah HA reflects the recent evaluation and determination of the non-suitability of this area for wild

horses using multi-tiered analysis from the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007) table 3.8-2 and page 4.8-2. The EIS (November 2007) evaluated the herd management area for five essential habitat components and herd characteristics: forage, water, cover, space, and reproductive viability. If one or more of these components were missing or there was no potential for a stable shared genetic pool, the herd management area was considered unsuitable. The Moriah HMA failed to meet one or more of the five required habitat conditions.

At the present time, an estimated 714 excess wild horses (including the projected 2020 foal crop) are present within the Moriah HA. Documented heavy and severe utilization of key forage species by wild horses at key areas, together with trampling/trailing, bare ground, and limited water sources is contributing to rangeland damage and preventing attainment of rangeland health standards.

Insufficient herbaceous forage is present within the dominant ecological sites to support healthy wild horses and has led to heavy and excessive utilization and trampling in key areas, which adversely impacts range health and prevents recovery of the native vegetative communities at the key sites. Monitoring also indicates wild horses are routinely moving and residing outside the HA boundaries in their search for food and water.

3.2.1.2 Environmental Effects

Impacts of Alternative A -- Proposed Action

Under the Proposed Action, and considering the terrain and anticipated gather efficiency, more than one gather would likely be needed to remove all excess wild horses within the HA and effectively return it to HA status. However, reducing population size would ensure that wild horses are not at risk due to insufficient habitat (lack of forage and water).

Impacts to the rangeland as a result of the current population of wild horses would be reduced; with the removal of all excess wild horses as forage conditions (quality and quantity) improve, thereby allowing progress towards achieving RAC standards (also see Rangeland Standards and Guidelines above (1.6 Identification of Issues)). Monitoring data currently shows key forage areas are being heavily impacted due to horse use. Removal of excess wild horses will also eliminate the declines in wild horse condition due to the lack of resources on the range to sustain health for any horses remaining after the initial gather operations.

Helicopter/ Bait and water trap impacts to wild horses

Indirect impacts can occur to horses after the initial stress event and could include increased social displacement or increased conflict between studs. These impacts are known to occur intermittently during wild horse gather operations. Traumatic injuries could occur and typically involve biting and /or kicking bruises. Horses may potentially strike or kick gates, panels or the working chute while in corrals or trap which may cause injuries. Lowered competition for forage and water resources would reduce stress and

fighting for limited resources (water and forage) and promote healthier animals. Indirect individual impacts are those impacts which occur to individual wild horses after the initial stress event, and may include spontaneous abortions in mares. These impacts, like direct individual impacts, are known to occur intermittently during wild horse gather operations. An example of an indirect individual impact would be the brief skirmish which occurs among studs following sorting and release into the stud pen, which lasts less than a few minutes and ends when one stud retreats. Traumatic injuries usually do not result from these conflicts. These injuries typically involve a bite and/or kicking with bruises which don't break the skin. Like direct individual impacts, the frequency of occurrence of these impacts among a population varies with the individual animal.

Spontaneous abortion events among pregnant mares following capture is also rare, though poor body condition at time of gather can increase the incidence of spontaneous abortions. Given the two different capture methods proposed, spontaneous abortion is not considered to be an issue for either of the two proposed gather methods, since helicopter/drive trap method would not be utilized during peak foaling season (March 1 thru June 30), unless an emergency exists, and the water/bait trapping method is anticipated to be low stress.

Foals are often gathered that were orphaned on the range (prior to the gather) because the mother rejected it or died. These foals are usually in poor, unthrifty condition. Orphans encountered during gathers are cared for promptly and rarely die or have to be euthanized. It is unlikely that orphan foals would be encountered since majority of the foals would be old enough to travel with the group of wild horses. Also depending on the time of year the current foal crop would be six to nine months of age and may have already been weaned by their mothers.

Gathering wild horses during the summer months can potentially cause heat stress. Gathering wild horses during the fall/winter months reduces risk of heat stress, although this can occur during any gather, especially in older or weaker animals. Adherence to the SOPs and techniques used by the gather contractor or BLM staff would help minimize the risks of heat stress. Heat stress does not occur often, but if it does, death can result. Most temperature related issues during a gather can be mitigated by adjusting daily gather times to avoid the extreme hot or cold periods of the day. The BLM and the contractor would be pro-active in controlling dust in and around the holding facility and the gather corrals to limit the horses' exposure to dust.

The BLM has been gathering excess wild horses from public lands since 1975, and has been using helicopters for such gathers since the late 1970's. Refer to Appendix I for information on the methods that are utilized to reduce injury or stress to wild horses and burros during gathers.

Since 2006, BLM Nevada has gathered over 40,000 excess animals. Of these, gather related mortality has averaged less than 0.5%, which is very low when handling wild animals. Another 0.6% of the animals captured were humanely euthanized due to pre-existing conditions and in accordance with BLM policy. This data affirms that the use of

helicopters and motorized vehicles are a safe, humane, effective and practical means for gathering and removing excess wild horses and burros from the range. BLM policy prohibits gathering wild horses with a helicopter (unless under emergency conditions) during the period of March 1 to June 30 which includes and covers the six weeks that precede and follow the peak of foaling period (mid-April to mid-May).

Through the capture and sorting process, wild horses are examined for health, injury and other defects. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy. BLM Euthanasia Policy IM 2015-070 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 hip, leg) that have caused the animal to suffer from pain or which prevent them from being able to travel or maintain body condition: old animals that have lived a successful life on the range, but now have few teeth remaining, are in poor body condition, or are weak from old age; and wild horses that have congenital (genetic) or serious physical defects such as club foot, or sway back and should not be returned to the range.

Temporary Holding Facilities During Gathers

Wild horses gathered would be transported from the trap sites to a temporary holding corral within the HA in goose-neck trailers. At the temporary holding corral wild horses will be sorted into different pens based on sex. The horses will be aged and fed good quality hay and water. Mares and their un-weaned foals will be kept in pens together.

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

Transport, Short Term Holding, and Adoption Preparation

Wild horses removed from the range would be transported to the receiving short-term holding facility in a goose-neck stock trailer or straight-deck semi-tractor trailers. Trucks and trailers used to haul the wild horses will be inspected prior to use to ensure wild horses can be safely transported. Wild horses will be segregated by age and sex when possible and loaded into separate compartments. Mares and their un-weaned foals may be shipped together. Transportation of recently captured wild horses is limited to a maximum of 8 hours. During transport, potential impacts 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 die during transport.

Upon arrival, 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 short-term holding facility, a veterinarian provides recommendations to the BLM regarding care,

treatment, and if necessary, euthanasia of the recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the AVMA. Wild horses in very thin condition or animals with injuries are sorted and placed in hospital pens, fed separately and/or treated for their injuries. Recently captured wild horses, generally mares, in very thin condition may have difficulty transitioning to feed. A small percentage of animals can die during this transition; however, some of these animals are in such poor condition that it is unlikely they would have survived if left on the range.

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, vaccination against common diseases, castration, and de-worming. During the preparation process, potential impacts to wild horses are similar to those that can occur during transport. Injury or mortality during the preparation process is low but can occur.

At short-term corral facilities, a minimum of 700 square feet is provided per animal. Mortality at short-term holding facilities averages approximately 5% (GAO-09-77, 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 die accidentally during sorting, handling, or preparation.

Adoption

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

Sale with Limitation

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 at least 3 times. The application also specifies that all buyers are not to sell to slaughter buyers or anyone who would sell the animals to a commercial processing plant. Sales of wild horses are conducted in accordance with the 1971 WFRHBA and congressional limitations.

Off-Range Pastures

During the past 6 years, the BLM has removed over 31,000 excess wild horses or burros from the Western States. Most animals not immediately adopted or sold have been transported to Off-Range pastures in the Midwest given current Congressional prohibitions on selling excess animals without limitations, or on euthanizing healthy animals for which no adoption or sale demand exists as required by the WFRHBA.

Potential impacts to wild horses from transport to adoption, sale or Off-range Pastures (ORP) are similar to those previously described. One difference is that when shipping wild horses for adoption, sale or ORP, animals may be transported for a maximum of 24 hours. Immediately prior to transportation, and after every 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 2 pounds of good quality hay per 100 pounds of body weight with adequate bunk space to allow all animals to eat at one time. The rest period may be waived in situations where the anticipated travel time exceeds the 24-hour limit but the stress of offloading and reloading is likely to be greater to the animals than the stress involved in the additional period of uninterrupted travel.

Off-range pastures are designed to provide excess wild horses with humane, and in some cases 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 (i.e., the horses are not kept in corrals) and with the forage, water, and shelter necessary to sustain them in good condition. About 33,429 wild horses that are in excess of the current adoption or sale demand (because of age or other factors such as economic recession), are currently located on private land pastures in Oklahoma, Kansas, South Dakota Iowa, Missouri, Montana, and Utah. Establishment of an ORP is subject to a separate NEPA and decision-making process. Located in mid or tall grass prairie regions of the United States, these ORPs are highly productive grasslands compared to the more arid western rangelands. These pastures comprise about 256,000 acres (an average of about 10-11 acres per animal). Of the animals currently located in ORP, less than one percent is age 0-4 years, 49 percent are age 5-10 years, and about 51 percent are age 11+ years.

Mares and sterilized stallions (geldings) are segregated into separate pastures except at one facility where geldings and mares coexist. Although the animals are placed in ORP, they remain available for adoption or sale to qualified individuals; and foals born to pregnant mares in ORP are gathered and weaned when they reach about 8-12 months of age and are also made available for adoption. The ORP contracts specify the care that wild horses must receive to ensure they remain healthy and well-cared for. Handling by humans is minimized to the extent possible, although regular on-the-ground observation by the ORP contractor and periodic counts of the wild horses to ascertain their well-being and safety are conducted by BLM personnel and/or veterinarians. A very small percentage of the animals may be humanely euthanized if they are in very poor condition due to age or other factors. Natural mortality of wild horses in ORP averages approximately 8% per year, but can be higher or lower depending on the average age of the horses pastured there (GAO-09-77, Page 52). Wild horses residing on ORP facilities live longer, on the average, than wild horses residing on public rangelands,

Euthanasia and Sale Without Limitation

Under the WFRHBA, healthy excess wild horses can be euthanized or sold without limitation if there is no adoption demand for the animals. However, while euthanasia and sale without limitation are allowed under the statute, these activities have not been

permitted under current Congressional appropriations for over a decade and are consequently inconsistent with BLM policy. If Congress should remove this prohibition, then excess horses removed from the HA could potentially be sold without limitations or humanely euthanized, as required by statute, if no adoption or sale demand exists for some of the removed excess horses.

Wild Horse Remaining Following Gather

The wild horses that are not captured may be temporarily disturbed and move into another area during the gather operations. With the exception of changes to herd demographics, direct population wide impacts have proven, over the last 20 years, to be temporary in nature with most if not all impacts disappearing within hours to several days.

The remaining wild horses not captured would maintain their social structure and herd demographics (age and sex ratios). No observable effects to the remaining population associated with the gather impacts would be expected except a heightened shyness toward human contact.

Indirect individual impacts are those impacts which occur to individual wild horses after the initial stress event, and may include spontaneous abortions in mares, and increased social displacement and conflict in studs. These impacts, like direct individual impacts, are known to occur intermittently during wild horse gather operations. An example of an indirect individual impact would be the brief skirmish which occurs among older studs following sorting and release into the stud pen, which lasts less than two minutes and ends when one stud retreats. Traumatic injuries usually do not result from these conflicts. These injuries typically involve a bite and/or kicking with bruises which don't break the skin. Like direct individual impacts, the frequency of occurrence of these impacts among a population varies with the individual animal.

Spontaneous abortion events among pregnant mares following capture is also rare, though poor body condition can increase the incidence of such spontaneous abortions. Given the timing of this gather, spontaneous abortion is not considered to be an issue for the proposed gather.

A few foals may be orphaned during gathers. This may occur due to:

a) The mare rejects the foal. This occurs most often with young mothers or very young foals,
b) The foal and mother become separated during sorting, and cannot be matched,
c) The mare dies or must be humanely euthanized during the gather,
d) The foal is ill, weak, or needs immediate special care that requires removal from the mother,
e) The mother does not produce enough milk to support the foal.

Most foals that would be gathered would be over four months of age and some would be already weaned from their mothers. In private industry, domestic horses are normally weaned between four and six months of age.

Gathering the wild horses during the fall reduces risk of heat stress, although this can occur during any gather, regardless of season, especially in older or weaker animals. Adherence to the SOPs as well and techniques used by the gather contractor help minimize the risks of heat stress. Heat stress does not occur often, but if it does, death can result.

During summer gathers, roads and corrals may become dusty, depending upon the soils and specific conditions at the gather area. The BLM ensures that contractors mitigate any potential impacts from dust by slowing speeds on dusty roads and watering down corrals and alleyways. Despite precautions, it is possible for some animals to develop complications from dust inhalation and contract dust pneumonia. This is rare, and usually affects animals that are already weak or otherwise debilitated due to older age or poor body condition. Summer gathers pose increased risk of heat stress so Contractors use techniques that minimize heat stress, such as conducting gather activities in the early morning, when temperatures are coolest, and stopping well before the hottest period of the day. The helicopter pilot also brings in the horses at an easy pace. If there are extreme heat conditions, gather activities are suspended during that time. Water consumption is monitored, and horses or burros are often lightly sprayed with water as the corrals are being sprayed to reduce dust. The wild horses and burros appear to enjoy the cool spray during summer gathers. Individual animals are also monitored and veterinary or supportive care administered as needed. Electrolytes can be administered to the drinking water during gathers that involve animals in weakened conditions or during summer gathers. Additionally, BLM Wild Horse and Burro staff maintains supplies of electrolyte paste if needed to directly administer to an affected animal. As a result of adherence to SOPs and care taken during summer gathers, potential risks to wild horses associated with summer gathers can be minimized or eliminated.

During winter gathers, wild horses and burros are often located in lower elevations, in less steep terrain due to snow cover in the higher elevations. Subsequently, the animals are closer to the potential gather corrals, and need to maneuver less difficult terrain in many cases. However, snow cover can increase fatigue and stress during winter gathers, therefore the helicopter pilot allows horses to travel slowly at their own pace. The Contractor may plow trails in the snow leading to the gather corrals to make it easier for animals to travel to the gather site and to ensure the wild horses can be safely gathered.

Through the capture and sorting process, wild horses are examined for health, injury and other defects. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy. Animal Health Maintenance Evaluation and Response WO IM-2015-070 is used as a guide to determine if animals meet the criteria and should be euthanized (refer to SOPs Appendix I). Animals that are euthanized for non-gather related reasons include those with old injuries (broken hip, leg) that have caused the animal to suffer from pain or which prevent them from being able to travel or maintain body condition; old animals that have lived a successful life on the range, but now have few teeth remaining, are in poor body condition, or are weak from old age; and wild

horses that have congenital (genetic) or serious physical defects such as club foot, or sway back and should not be returned to the range.

Impacts of Alternative B -- No Action Alternative
Under the No Action Alternative, wild horses would not be removed from the Moriah HA at this time. Individual horses, as well as the herd, would not be subject to any individual direct or indirect impacts that may result during a gather operation as described in the Proposed Action. However, the current population of 714 wild horses would continue to increase at rates of approximately 20% annually and their numbers would be regulated only through natural means such as predation, disease, and limited forage, water and space availability. Existing management, including monitoring, would continue.

The BLM would be out of conformance with the Ely District ROD and Approved RMP (August 2008) at management action WH-5.

The No Action Alternative would not comply with 1971 WFRHBA or with applicable regulations and Bureau policy, nor would it comply with the Northeastern Great Basin Area RAC Standards and Guidelines for Rangeland Health and Healthy Wild Horse and Burro Populations. However, it is included as a baseline for comparison with Proposed Action, as required under the 1969 National Environmental Policy Act (NEPA).

Predation and disease do not substantially regulate wild horse population levels. As a result, wild horse numbers would be expected to continue to increase, which in turn would continue to exceed the carrying capacity of the range. Over time, excess wild horse numbers would continue to impact range condition to the point that horse herd health is placed at risk. Individual horses would be at risk of death by starvation and lack of water. Competition among wild horses for the available forage and water would increase, affecting mares and foals most severely. Social stress would increase. Fighting among stud horses would increase as they protect their position at scarce water sources. As populations continue to increase beyond the capacity of the habitat, more bands of horses would be expected to leave the boundaries of the HA seeking forage and water. This would lead to negative impacts to range conditions and other range users (i.e. native wildlife) outside the HA boundaries, in addition to within the HA boundaries.

3.2.2 Wilderness

3.2.2.1 Affected Environment

The Moriah HA contains portions of the Government Peak Wilderness Area (see map 1). The Government Peak Wilderness lies off the northern end of the Snake Range in eastern Nevada. Vegetation includes mostly desert brush and grass at the lower elevations to a scattering of pinyon and juniper stands on the slopes of the Government Peak and surrounding hills. Bare rock cliffs jut skyward on the eastern side of the area. Paintbrush is the most common wildflower, along with the blooms of cactus. The wilderness area receives occasional wild horse use during certain times of the year.

3.2.2.2 Environmental Effects

Impacts of Alternative A - Proposed Action

Impacts to opportunities for solitude could occur during gather operations due to the possible noise of the helicopter and increased vehicle traffic around the wilderness. Those impacts would be temporary and would cease when the gather was completed. No surface impacts within wilderness are anticipated to occur during the gather since all trap sites and holding facilities would be placed outside wilderness. Wilderness values of naturalness after the gather would be enhanced by a reduction in wild horse numbers as a result of an improved ecological condition of the plant communities and other natural resources.

Impacts of Alternative B - No Action Alternative

No impacts to wilderness due to gather operations would occur. Impacts to wilderness values of naturalness could be threatened through the continued increase in the population of wild horses. Although the area currently has very little wild horse use, degradation of vegetative and soil resources by wild horses would be expected if higher numbers of wild horses are present in the Moriah HA. To some, the sight of heavy horse trails, trampled vegetation and areas of high erosion detract from the wilderness experience.

3.2.3 Riparian/Wetland Areas and Surface Water Quality

3.2.3.1 Affected Environment

Small riparian areas and their associated plant species occur throughout the HA near seeps and springs. Riparian areas are currently experiencing trampling damage from wild horses. Monitoring data collected in the HA highlights that utilization by wild horses is heavy (61-80%) and severe (81-100%) in some established key areas. Trampling damage by wild horses is also evident at most key areas, including upland and riparian sites. The area outside the HA to the east is lower elevation sagebrush vegetation, with several small riparian areas. This area is also being impacted through increased grazing utilization by wild horses. Utilization and trampling in key areas is currently impacting range conditions and preventing recovery of key sites.

3.2.3.2 Environmental Effects

Impacts of Alternative A – Proposed Action

Riparian areas would improve with the removal of the wild horse population, which would lead to healthier, more vigorous vegetative communities. Hoof action on the soil around unimproved springs and stream banks would be lessened, which would lead to increased stream bank stability. Improved vegetation around riparian areas would dissipate stream energy associated with high flows, and filter sediment that would result in some associated improvements in water quality. The proposed action would make progress towards achieving and maintaining proper functioning condition at riparian areas.

Impacts of Alternative B – No Action Alternative
Wild horse populations would continue to grow. Increased wild horse use throughout the Moriah HA and outside the HA boundary would adversely impact riparian resources and their associated surface waters. As native plant health deteriorates and plants are lost, soil erosion would increase. This alternative would not make progress towards achieving and maintaining a thriving natural ecological balance and proper functioning condition at riparian areas.

3.2.4 Soil Resource/Watershed

3.2.4.1 Affected Environment
Soils within the HA are typical of the Great Basin, and vary with elevation. Soils range in depth and type and are typically coarse textured (gravelly loams and sandy loams). Impacts to soil based on the removal of wild horses from this herd area were analyzed on pages 4.4-3-12 and pages 4.19-5-14 of the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). The proposed action would impact soil temporarily with trampling and disturbance occurring at trap sites and holding facilities. The effects would be minimal, and would not directly, indirectly, or cumulatively approach a level of significance as the project would be implemented by staying on existing roads, and relatively small areas would be used for gathering and holding operations.

3.2.4.2 Environmental Impacts
Impacts of Alternative A – Proposed Action
Horses may be concentrated for a limited period of time in the trap sites. Potential for soil compaction would occur but would be minimal and temporary. As such, the Proposed Action is not expected to adversely impact soil or hydrologic function. Long term impacts are likely to be an improvement in soil resources within the area due to less soil compaction from trailing and reduced erosion as utilization of forage species decreases.

Impacts of Alternative B – No Action Alternative
Potential effects on soil resources would increase as wild horse populations continue to grow. Heavy trailing and trampling around water sources would occur, causing soil compaction, Soil compaction around springs may impede water movement and decrease water infiltration which may affect the flow of water.

3.2.5 Vegetation Resource

3.2.5.1 Affected Environment
Vegetation within the Moriah HA varies with elevation, soil type, and precipitation amount and timing. Salt desert scrub communities dominate the lower elevations, and at mid-elevation sagebrush-bunchgrass communities dominate. Pinon and juniper dominate with increased elevation, and at the highest elevations, mountain mahogany and mountain sagebrush dominate, with small pockets of aspen and fir trees.

The impacts to vegetation based on the removal of wild horses from the Moriah HA and outside the HA boundary were analyzed on pages 4.5-7-27 of the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). The proposed action would impact vegetation temporarily with trampling and disturbance of vegetation occurring at trap sites. The effects would be minimal, and would not directly, indirectly, and cumulatively approach a level of significance.

Monitoring data has been collected for the HA since 2009 in 2019. Utilization by wild horses at key sites in 2019 showed 18% severe use (81-100%), 36% heavy use (61-80%), 36% moderate use (41-60%) and 10% slight use (1-20%). Trampling damage by wild horses is evident at most locations. Insufficient herbaceous forage within the dominant ecological sites does not support healthy wild horses, and has led to excess utilization and trampling which is currently impacting range conditions and preventing recovery of key sites.

3.2.5.2 Environmental Effects

Impacts of Alternative A -- Proposed Action

Lower wild horse numbers would result in decreased grazing pressure on vegetation resources, including those found in riparian areas. These areas would be expected to improve in the absence of year-round utilization by wild horses, which would lead to healthier, more vigorous plant communities. Over the long-term, improving range conditions would be expected to result in increased vegetation density, reproduction and productivity and an increase in the amount of vegetation available for use as forage or habitat; this could take numerous years (20+ years in some areas) in the Great Basin environment. Impacts of hoof action on the soil around springs would also be reduced, which should lead to increased bank stability and improved riparian habitat conditions. There would also be a reduction in hoof action on upland habitats and reduced competition among individual wild horses for available water sources.

Some ephemeral (and mostly temporary) impacts to vegetation could result with implementation of the Proposed Action. Included would be disturbance of native vegetation immediately in and around temporary trap sites or holding facilities. Direct impacts could result from vehicle traffic or the hoof action of penned horses, and could be locally severe in the immediate vicinity of the trap sites or holding facilities. Generally, these activity sites would be small (less than one half acre) in size and would utilize previously disturbed areas. Since most trap sites or holding facilities would be re-used during future wild horse gather operations, any impacts would be expected to be localized and isolated in nature. In addition, most trap sites or holding facilities are selected to enable easy access by transportation vehicles and logistical support equipment and would generally be adjacent to or on roads, pullouts, water haul sites, or other flat spots that have been previously disturbed. By adhering to the Standard Operating Procedures (SOPs see appendix I), adverse impacts to soils as a result of capture operations would be minimized.

Impacts of Alternative B -- No Action Alternative

Under the No Action Alternative, a wild horse removal would not occur at this time. As a result, the potential for localized trampling or vegetation/soil disturbance associated with the trap sites and temporary holding facilities needed to conduct a gather operation would not occur. However, wild horses would continue to heavily utilize vegetative resources, which would result in further decreases in vegetation cover and in increased soil erosion throughout the HA as well as areas outside the HA boundary where wild horses are currently found.

Over the long-term, increased use by wild horses on the shallow soils typical of this region would be expected to reduce plant vigor and abundance. Decreased soil and vegetation health has the potential to subject the range to invasion by non-native plant species or noxious weeds. A shift in plant composition to undesirable species would result in less vegetation available for use as forage (by all herbivores), loss of topsoil through increased erosion, and decreased vegetative productivity. These impacts would also be seen outside the HA, and could affect even larger geographic areas as wild horses forage further from the HA as wild horse numbers continue to increase.

3.2.6 Wildlife, including Migratory Birds

3.2.6.1 Affected Environment

The Moriah HA provides habitat for many species of wildlife, including large mammals like mule deer, pronghorn antelope, and Rocky Mountain elk. The lower two-thirds and south of the Kern Mountains of the HA is year-round pronghorn antelope habitat. Most of the mule deer habitat is in the northern portion of the HA, with a majority consisting of winter habitat. Both crucial summer mule deer and elk habitat occurs on the northwest portion of the HA within the Kern Mountains.

Predominant habitat types within the HA which are likely to support migratory birds include aspen, mountain riparian, mountain shrub, sagebrush, pinyon/juniper, salt desert scrub, and cliffs/talus habitat types. There are small inclusions of coniferous forests and mountain mahogany habitat types included in the upper elevations of the Kern Mountains.

The migratory bird nesting season is March 1 – July 31 (includes raptors). No surface disturbing activity (staging, trapping, or corrals) can be conducted during this time period without a nesting bird survey.

3.2.6.2 Environmental Effects

Impacts of Alternative A -- Proposed Action

Wildlife would be temporarily disturbed or displaced during gather operations. Large mammals and some birds may run or fly (flush from the nest) during helicopter operations, but animals should return to normal activities post disturbance. Helicopter operations may cause increased stress to wildlife, particularly to large game. Small mammals, birds, and reptiles would be displaced at staging areas and slower moving

animals may be adherently killed. Overall, there would be no impact to animal populations as a result of gather operations.

The use of previously disturbed areas would reduce impacts to migratory birds. Any new staging, corral, and trap sites with vegetation would be surveyed for nesting birds, if gather operations were to occur during the migratory bird breeding season. Removing wild horses would result in decreased competition between wild horses and wildlife for available forage and water resources as soon as the gather is completed. Over the long-term, both riparian and upland habitat conditions (forage quantity and quality) for wildlife would improve.

Impacts of Alternative B -- No Action Alternative
Under the No Action (no removal) alternative, wildlife would not be temporarily displaced or disturbed. However, as wild horse numbers continued to grow, competition between wild horses and wildlife for limited water and forage resources would increase. As competition increases, some wildlife species may not be able to compete successfully, potentially leading to increased stress and possible dislocation or death of native wildlife species over the long-term.

3.2.7. Special Status Plant and Animal Species

3.2.7.1. Affected Environment

The BLM 6840 Manual (2008) describes special status species as: 1) species listed or proposed for listing under the Endangered Species Act (ESA), and 2) species requiring special management consideration to promote their conservation and reduce the likelihood and need for future listing under the ESA, which are designated as Bureau sensitive by the State Director(s). All Federal candidate species, proposed species, and delisted species in the 5 years following delisting will be conserved as Bureau sensitive species. Data pertaining to special status species occurrence in Nevada are maintained by the BLM, U.S. Fish and Wildlife Service (FWS), Nevada Department of Wildlife (NDOW), and Nevada Natural Heritage Program (NNHP).

Appendix IV. identifies numerous BLM special status species that may potentially occur within the Moriah HA, including several bat, reptile, raptor and other bird species. According to both the 2015 and 2019 Greater sage-grouse Land Use Plan Amendments (LUPA), portions of the Moriah HA contains Other Habitat (OHMA) and General Habitat Management Areas (GHMA; Appendix IV. A majority of the habitat is within Pleasant Valley in the northeast and the central portion of the HA. There is nesting, early and late brood-rearing, and winter sage-grouse habitat within the Moriah HA. There are no known active or pending sage-grouse leks within the HA, however there are 4 leks within 4 miles to the west of the HA. Lek data for Utah that borders the eastern edge of the HA was not obtained.

Pygmy rabbits inhabit predominately sagebrush habitat with soils suitable for burrowing. Golden eagles are a year-round resident to Nevada and typically nest on cliff faces. Ferruginous hawks are year-round residents frequently nesting in juniper stringers.

The Intermountain wavewing, a special status plant species, has been documented at the northern end of the HA. This species typically inhabits bare basaltic rocks and barren clays between elevations of 5,594 and 6,998 feet in pinyon-juniper and sagebrush communities.

3.2.7.2. Environmental Effects

Impacts of Alternative A – Proposed Action

Individual raptors and birds may be disturbed during gather operations when helicopter operations occur; however birds should return to normal activities. Staging, corral and trapping locations would be surveyed for nests if operations take place during the breeding season, minimizing impacts to species. Because gather sites and holding corrals would not be located where sensitive animal and plant species are known to occur, there would be no impact from the placement of facilities.

Important habitat used for Greater sage-grouse strutting grounds and pygmy rabbit habitat would not be used for trap sites. Additionally, Greater sage-grouse timing restrictions as identified in the Proposed Action would be applied to the greatest extent possible to minimize impacts to breeding, nesting and brood-rearing birds. Water bait trapping sites that occurred on natural water sources during the late brood-rearing season would be reviewed for use by Greater sage-grouse prior to use as a trapping location to minimize impacts to birds. BLM would coordinate with NDOW if the gather could not meet any of these stipulations. Greater sage-grouse may be disturbed during the winter if gather operations were to occur during that timeframe.

Under the Proposed Action, habitat conditions would improve for all special status species with the removal of horses.

Impacts of Alterative B – No Action

Under the No Action (no removal) alternative, special status species would not be temporarily displaced or disturbed. However, as wild horse numbers continued to grow, competition for limited resources would continue. Nesting, security and foraging habitat would continue to be compromised by wild horses.

3.2.8. Non-native Invasive Species Including Noxious Weeds

3.2.8.1 Affected Environment

The BLM defines a weed as a non-native plant that disrupts or has the potential to disrupt or alter the natural ecosystem function, composition and diversity of the site it occupies. A weed's presence deteriorates the health of the site, makes efficient use of natural resources difficult, and may interfere with management objectives for that site. Weeds are invasive species that require a concerted effort (manpower and resources) to remove from

their current location, if they can be removed at all. "Noxious" weeds refer to those plant species which have been legally designated as unwanted or undesirable. This includes national, state and county or local designations.

Four occurrences of salt cedar (*Tamarix spp.)* are documented within in the Moriah HA. Salt cedar is also found along roads and drainages leading to the project area. The Moriah HA was last inventoried for noxious weeds in 2016. The following non-native invasive weeds may occur in or around the project area:

Bromus tectorum	Cheatgrass	*Marrubium vulgare*	Horehound
Ceratocephala testiculata	Bur buttercup	*Salsola kali*	Russian thistle
Convolvulus arvensis	Field bindweed	*Sysimbrium altissimum*	Tumble mustard
Halogeton glomeratus	Halogeton	*Verbascum thapsus*	Common mullein

3.2.8.2 Environmental Effects

Impacts of Alternative A -- Proposed Action

Salt cedar is not usually spread by hoofed animals but can be spread by birds, so no increases would be expected. Some of the non-native weeds, such as cheatgrass and bur buttercup can be spread by animals. Given the concentrated use around capture sites and the use of non-certified forage the project activities could result in new infestations, specifically at the capture sites and holding pens. The potential to spread weeds would be limited primarily to trap and holding areas, making follow-up monitoring and treatment, if necessary, more manageable and effective. (See Appendix III Weed Risk Assessment).

Impacts of Alternative B -- No Action Alternative

Under the No Action Alternative, a wild horse removal would not occur at this time. As a result, the potential for localized trampling and vegetation/soil disturbance associated with the trap sites and temporary holding facilities needed to conduct a gather operation would not occur. However, as wild horse populations continue to grow, continued heavy to excessive utilization would result in further decreases in vegetation cover, reducing native plant vigor and abundance and increasing the potential for invasion by noxious and invasive weeds.

3.2.9. Livestock grazing

3.2.9.1 Affected Environment

The Moriah HA includes portions of five livestock grazing allotments (see Figure 1). Permitted livestock grazing use in the HA includes both cattle and sheep. Some livestock grazing occurs during all seasons. Rangeland health assessments and renewal of term permits have been completed for two of the five allotments (Table 5). Permitted livestock grazing use has generally been reduced in recent years in a majority of the allotments (Table 4). Through the issuance of renewed term grazing permits, BLM has analyzed livestock stocking levels, established deferred seasons of grazing, rotated grazing areas, and established water hauling areas that result in more effective distribution of livestock grazing. Since the last gather, licensed livestock use, or actual use, has generally been

less than permitted use for each of the grazing allotments, in part due to persistent drought (Table 4).

Table 4. Moriah Herd Area

Allotment	Season of Use	Permitted Use as Animal Unit Months (AUMs)	Average Actual AUM Use	Percent of Permit Use	Percent of allotment within HA
Indian George	10/16 to 4/15	2,860	1466	51	95 %
Mallory Spring*	Cattle: 6/1 to 7/15 Cattle: 11/1 to 12/15 Sheep: 9/1 to 5/31	940	461	24	57%
Mill Spring	Cattle: 6/1 to 7/15	341	88	74	97%
Pleasant Valley*	Cattle 4/15 to 9/30	405	389	95	86%
Tippett	Cattle: 3/1 to 2/28 Sheep: 4/16 to 12/15	12,800	3959	26	.8%

*Mallory Spring and Pleasant Valley Allotments have less than 10 years of use.

Table 5. Rangeland Health Conditions

	Rangeland Health Standards	Evaluation in Progress	Evaluation Completion Year
Mallory Spring	**Standard 1: Soils:** Achieving the Standard		2007
	Standard 2:Ecosystem Components: Achieving the Standard		
	Standard 3: Habitat and Biota: not Achieving the Standard		
Mill Spring	**Standard 1: Soils:** Achieving the Standard		2009
	Standard 2: Ecosystem Components: Achieving the Standard		
	Standard 3: Habitat and Biota: Not Achieving the Standard		
Pleasant Valley	**Standard 1: Soils**:n/a	X	
	Standard 2: Ecosystem Components: n/a		
	Standard 3: Habitat and Biota n/a		
Indian George	**Standard 1: Soils:** n/a	X	
	Standard 2: Ecosystem Components:n/a		
	Standard 3: Habitat and Biota: n/a		
Tippett	**Standard 1: Soils:** n/a	X	
	Standard 2: Ecosystem Components: n/a		
	Standard 3: Habitat and Biota: n/a		

3.2.9.2 Environmental Effects

Impacts of Alternative A -- Proposed Action
Livestock located near gather activities would be disturbed by the helicopter and the increased vehicle traffic during the gather operation. This displacement would be temporary; and the livestock would move back into the area once gather operations moved. Past experience has shown that gather operations have little impact on grazing cattle. No increases in permitted livestock use would occur as a result of the Proposed Action.

Impacts of Alternative B -- No Action Alternative
Livestock would not be displaced or disturbed due to gather operations under the No Action Alternative. However, forage quality and quantity and ecological conditions would continue to deteriorate on the range due to the year-round impacts of wild horses on vegetative resources. This impact would spread even further as wild horses expand their range in search of forage and living space.

3.2.10. Farmlands/Prime and Unique

3.2.9.1 Affected Environment

There are soils that have been designated by the Natural Resource Conservation Service as meeting the requirements to be considered prime farmlands.

3.2.9.2 Environmental Effects

Impacts of Alternative A – Proposed Action
Localized trampling of these soils may occur at the trap sites. The proposed action will not contribute either directly or indirectly to loss of these potential farmlands. The effects would be minimal and would not directly or indirectly approach any level of significance.

Impacts of Alternative B – No Action Alternative
No impacts to prime and unique farmlands would occur.

3.2.10 Air Quality

3.2.10.1 Affected Environment

The affected area is not within an area of non-attainment or areas where total suspended particulates or other criteria pollutants exceed Nevada air quality standards.

3.2.10.2 Environmental Effects

Impacts of Alternative A – Proposed Action
Some dust would be created by the helicopter and horses when the animals are brought to the trap sites. Any particulate suspension in the area would be temporary.

Impacts of Alternative B – No Action Alternative

No changes in air quality would occur

3.2.11. Water Quality/Drinking/Ground

3.2.11.1 Affected Environment

Water development projects are present in the area. A water development may be used as a trap location in order to facilitate gather efficiencies.

3.2.11.2 Environmental Impacts

Impacts of Alternative A – Proposed Action

No effects to water quality are expected. Temporary disturbance in these areas may occur at some trap sites. Actions would not affect surface or ground water quality.

Impacts of Alternative B – No Action Alternative

No impacts to water quality would occur.

CHAPTER 4 CUMULATIVE IMPACTS

4.1 Introduction

The National Environmental Policy Act (NEPA) regulations define cumulative impacts as impacts on the environment that result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such actions (40 CFR § 1508.7). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

According to the 1994 BLM *Guidelines for Assessing and Documenting Cumulative Impacts*, the cumulative analysis should be focused on those issues and resource values identified during scoping that are of major importance. Accordingly, the issues of major importance that are analyzed are maintaining rangeland health and achieving and maintaining appropriate management level.

4.2 Past Present and Reasonably Foreseeable Future Actions

4.2.1 Past Actions

Following the passage of the 1971 WFRHBA, BLM delineated the Moriah Herd Area (HA) of which 53,300 acres was BLM. Through land use planning (the 1983 Schell Management Framework Plan (MFP)), the entire HA (100%) was designated as a herd management area suitable for long-term management of wild horses. The 1983 Schell MFP also established the interim AML for the HMA as 1-29 wild horses.
the long-term management of the Moriah HMA was reviewed and recommended to be dropped from HMA status in the 2003 Environmental Assessment NV-04-03-036 due to a finding that one or more components of the habitat needs for a healthy wild horse population are lacking, and a determination that management for healthy populations within the HMA is therefore not possible. The recommendation to drop the HMA status for this area was carried forward through the Ely *Proposed Resource Management Plan/Final Environmental Impact Statement* (RMP/EIS, 2007) released in November 2007 and was adopted by the Ely District Record of Decision (ROD) and Approved Resource Management Plan (RMP) in August 2008. The RMP was amended by the Nevada and Northeastern California Greater Sage-grouse Approved Resource Management Plan (2015). The EISs analyzed impacts of the Land Use Plan's management direction for grazing and wild horses, as updated through Bureau policies, Rangeland Program direction, and Wild Horse Program direction.

The Moriah HA has been gathered periodically since the 1971 Wild Free-Roaming Horses and Burros Act was passed. This area was last gathered in August 2010 after the 2008 decision was made to manage this area for zero wild horses. The 2010 gather resulted in the removal of 53 excess wild horses. This gather was conducted under the

Decision Record and Final Environmental Assessment DOI-BLM-NV-L020-2010-0032-EA.

Blue Mass/ Kern Mountain habitat restoration project was completed in 2018. This project involved mechanical and chemical treatments to reduce fuels and improve watershed health.

4.2.2 Present Actions

Today the Moriah HA (which is to be managed for zero wild horses) has an estimated population of 714 excess wild horses including the projected 2020 foal crop. Resource damage is occurring both within and outside the HA due to the presence of these wild horses.

Current BLM policy is to implement the Ely District ROD and Approved RMP (August 2008) as directed by management action WH-5, which states: "Remove wild horses and drop herd management area status for those areas that do not provide sufficient habitat resources to sustain healthy populations as listed in Table 13." The Moriah HA was dropped from HMA status with this management action thereby requiring that all wild horses be removed from the former Moriah HMA.

Congressional appropriations over the past decade and most recently for the 2020 budget year prohibits the destruction of healthy animals that are removed or deemed to be excess. BLM policy is consistent with these appropriations provisions such that only sick, lame, or dangerous animals can be euthanized. Nor does BLM sell excess animals for slaughter; rather BLM makes every effort to place excess animals with private citizens who can provide the animals with a good home.

Public interest in the welfare and management of wild horses continues to be very high. There are many different values pertaining to wild horse management from the public's perceptions. Some view wild horses as nuisances, while others strongly advocate management of wild horses as living symbols of the pioneer spirit.

An assessment for conformance with Rangeland Health Standards is currently ongoing for the Moriah HA associated livestock grazing allotments. Portions of the HA have been monitored intensely over the past several years due to problems with drought, vegetation condition and combined use by wild horses and domestic livestock. Upon completion of these evaluations, additional adjustments in livestock season of use, livestock numbers, and grazing systems may be made through the allotment evaluation process.

The Proposed Action analyzed in this environmental assessment would result in reducing the current wild horse population size to zero. By removing wild horses, competition between wild horses and other users (i.e. native wildlife and domestic livestock) for limited forage and water resources would decrease. Direct improvement in soils and riparian-wetland condition would be expected in the short term, which should benefit wildlife, improve ecological conditions, and result in fewer multiple-use conflicts within

and adjacent to the Moriah HA. Over the long-term, improving the range would further benefit all users and the resources they depend on for forage and water.

Under the No Action (no removal) alternative, the current overpopulation of wild horses would not be reduced because a gather would not occur at this time. Competition between wild horses, native wildlife, and domestic livestock for limited forage and water would increase, and riparian-wetland conditions would continue to deteriorate. Over the longer-term, the health of wild horses and native wildlife and ecological conditions would be expected to decrease as rangeland productivity further declines.

4.2.3 Reasonably Foreseeable Future Actions

In the future, the BLM would manage wild horses within HMAs that have suitable habitat for a population range, while maintaining genetic diversity, age structure, and sex ratios. Current policy is to express all future wild horse AMLs as a range, to allow for regular population growth, as well as better management of populations rather than individual HMAs. The Ely BLM District completed the *Ely Proposed Resource Management Plan/Final Environmental Impact Statement* (RMP/EIS, 2007) released in November 2007 which analyzed AMLs expressed as a range and addressed wild horse management on a programmatic basis. Future wild horse management would focus on an integrated ecosystem approach with the basic unit of analysis being the watershed. The BLM would continue to conduct monitoring to assess progress toward meeting rangeland health standards. Wild horses would continue to be a component of the public lands, managed within a multiple use concept on approximately 3.7 million acres managed as consolidated herd management areas by the Ely District.

As the BLM achieves AML on a Bureau wide basis, gathers for the remaining HMAs should become more predictable due to facility space. This should increase stability of gather schedules. Fertility control should also become more readily available as a management tool, with treatments that last between gather cycles, reducing the need to remove as many wild horses, and possibly extending the time between gathers.

Future actions have noxious and invasive weed prevention stipulations and required weed treatment requirements associated with each project. This in combination with the active BLM Ely District Weed Management Program will minimize the spread of weeds throughout the watershed. Livestock grazing would likely continue in the area.

4.3 Cumulative Impact Analysis

Cumulative beneficial ecological effects from the Proposed Action are expected and would include continue improvement of vegetation and riparian-wetland conditions. This would positively impact native wildlife and domestic livestock as forage quantity and quality is improved over the current level.

Establishment of non-native, invasive species could occur under the Proposed Action and other interrelated projects. However, the spread of noxious weeds would be minimized

through the stipulations listed in the Weed Risk Assessment (Appendix III) incorporated into the Proposed Action along with follow up treatment and monitoring at capture sites, as needed.

Direct cumulative impacts of the No Action alternative coupled with impacts from past, present and reasonably foreseeable future actions would prevent or impede BLM's ability to improve watershed health. The No Action Alternative, in conjunction with many of the past, present and reasonably foreseeable future actions would result in non-attainment of RMP.

The combination of the past, present, and reasonably foreseeable future actions, along with implementation of the Proposed Action, should result in healthier rangelands and fewer multiple-use conflicts within and adjacent to the Moriah HA.

4.2.1 Wild Horses

4.2.1.1 Cumulative Impacts

Impacts of Alternative A -- Proposed Action

A gather would ultimately benefit wild horses and rangeland resources. During gather operations, wild horses would be provided adequate feed and water at temporary and short-term holding. Removal of excess wild horses would ensure that individual animals do not perish due to starvation, dehydration, or other health concerns related to insufficient feed and water and extreme dust conditions.

The cumulative effects associated with the capture and removal of excess wild horses include gather-related mortality of less than 1% of the captured animals, about 5% per year associated with transportation, short term holding, adoption or sale with limitations and about 8% per year associated with long-term holding. These rates are comparable to natural mortality on the range ranging from about 5-8% per year for foals (animals under age 1), about 5% per year for horses ages 1-15, and 5-100% for animals age 16 and older (Stephen Jenkins, 1996, Garrott and Taylor, 1990). In situations where forage and/or water are limited, mortality rates in the wild increase, with the greatest impact to young foals, nursing mares and older horses. Animals can experience lameness associated with trailing to/from water and forage, foals may be orphaned (left behind) if they cannot keep up with their mare, or animals may become too weak to travel. After suffering, often for an extended period, the animals may die. Before these conditions arise, the BLM generally removes the excess animals to prevent their suffering from dehydration or starvation. While humane euthanasia and sale without limitation of healthy horses for which there is no adoption demand is authorized under the WFRHBA, Congress prohibited the use of appropriated funds between 1987 and 2004 and again in 2010 to present for this purpose. If Congress were to lift the current appropriations restrictions, then it is possible that excess horses removed from the Moriah HA over the next 10 years could potentially be euthanized or sold without limitation consistent with the provisions of the WFRHBA.

Impacts of Alternative B – No Action Alternative
Under the No Action Alternative, the wild horse population within the Moriah HA would continue to expand outside the HA in search for food and water for survival, thus impacting larger areas of public lands. Heavy to Severe utilization of the available forage would continue to be expected and the water available for use would become increasingly limited. Ecological plant communities would continue to be damaged. As wild horse populations continue to increase within and outside the HA rangeland degradation would intensify on public lands.

Emergency removals could be expected in order to prevent individual animals from suffering or death as a result of insufficient forage and water. During emergency conditions, competition for the available forage and water increases. This competition generally impacts the oldest and youngest horses as well as lactating mares first. These groups would experience substantial weight loss and diminished health, which could lead to their prolonged suffering and eventual death.

Cumulative impacts of the no action alternative would result in foregoing the opportunity to improve rangeland health in balance with the available forage and water and other multiple uses. Attainment of site-specific vegetation management objectives and Standards for Rangeland Health would continue to not be achieved.

4.2.2 Wilderness

4.2.2.1 Cumulative Impacts

Impacts to Wilderness from past actions such as road development/improvement, grazing, range improvements, recreation and OHV use have been accounted for within the designation of the wilderness its boundary and management plan. Impacts from present and future actions are similar and should be limited to outside of the Wilderness boundary. Horse gather operations have occurred in the past and will likely continue into the reasonably foreseeable future. Impacts of these operations usually have temporary negative impacts to solitude during operations but have long term beneficial effects to naturalness.

Impacts of Alternative A - Proposed Action
The cumulative impacts from the Proposed Action, in addition to past, present and reasonably foreseeable future actions would have temporary negative impacts to solitude during operations but would have beneficial impacts to naturalness.

Impacts of Alternative B - No Action Alternative
The cumulative impacts from the No Action Alternative, in addition to past, present and reasonably foreseeable future actions would have no temporary negative impacts to solitude during operations but would have negative impacts to naturalness.

4.2.3 Riparian/Wetland Areas and Surface Water Quality

4.2.3.1 Cumulative Impacts

Impacts of Alternative A - Proposed Action
Impacts to riparian/wetland areas and surface water quality within the Moriah Herd Area have resulted from past and present actions such as grazing, road construction and maintenance, agriculture, off-highway vehicle (OHV) use and recreation, mining and processing activities, aggregate operations, public land management activities, and wildland fire.

Impacts to riparian/wetland areas and surface water quality from Reasonably Foreseeable Future Actions (RFFAs) would be similar to those described above for past and present actions, as these activities are expected to continue into the future. RFFAs in the area that include planned habitat restoration projects, invasive plant species treatments and future horse gathers may have short-term impacts related to equipment operation as these projects are executed.

Direct cumulative impacts to riparian/wetland areas and surface water quality would be marginal because part of the Proposed Action is to avoid riparian/wetland areas during the present and future horse gathers. However, the long-term incremental impact to these resources from the proposed action would be positive as the number of horses are decreased with this gather and over time with subsequent gathers. This would result in improved surface water quality and reestablishment of riparian areas exhibiting increased stability and vigor.

Impacts of Alternative B – No Action Alternative
Under the No Action Alternative, no incremental gather-associated impacts would occur to riparian/wetland areas and surface water quality, thus declining conditions would continue as horse populations increase.

4.2.4 Soil Resource/Watershed

4.2.4.1 Cumulative Impacts

Impacts of Alternative A – Proposed Action
Impacts to soil resources/watersheds within the Moriah Herd Area have resulted from past and present actions such as grazing, road construction and maintenance, OHV use and recreation, mining and processing activities, aggregate operations, public land management activities, and wildland fire.

Impacts to soil resources/watersheds from RFFAs would be similar to those described above for past and present actions, as these activities are expected to continue into the future. RFFAs in the area that include planned habitat restoration projects, invasive plant species treatments and future horse gathers may have short-term impacts related to equipment operation as these projects are executed.

Direct cumulative impacts from the Proposed Action would include the short-term incremental impact of disturbance and compaction from hoof action around horse corrals. However, the long-term incremental impact to soil resources/watersheds would be positive as the number of horses are decreased with this gather and over time with subsequent gathers. This would result in restored soil structure, increased stability, and improved biological function of soils resulting in increased water-holding capacity, reduced erosion and enhanced vegetation community support.

Impacts of Alternative B – No Action Alternative
Under the No Action Alternative, no incremental gather-associated impacts would occur to Soil Resources/Watersheds, thus the declining conditions from compaction, erosion, and consequent poor vegetation support would continue as horse populations increase.

4.2.5 Vegetation Resource

4.2.5.2 Cumulative Impacts

Impacts of Alternative A -- Proposed Action
Impacts to vegetation within the Moriah Herd Area have resulted from past and present actions such as livestock grazing, road construction, maintenance and use, recreation, and wildlife and wild horses use. Cumulative impacts would be diffuse or localized. The cumulative impacts from the Proposed Action of diffuse impacts, in addition to past, present and reasonably foreseeable future actions would be beneficial for vegetation communities and ecosystems. Localized impacts in the short-term would be associated with trapping and gather operations at small, localized areas around trap sites. These impacts would include trampling and destruction of vegetation. In the long-term, diffuse impacts would be beneficial to the vegetation resources in the uplands and around riparian areas with fewer or no impacts from horses. Horses graze the Moriah HA year-round which is inappropriate grazing to maintain ecological sustainability and meet grazing objectives. With horses removed from the HA, grazing of vegetation resources would be controlled by livestock grazing systems and seasonal grazing. Wildlife would continue to graze the area seasonally. Forage and water resources would have opportunities for recovery and regeneration with less use by horses. Loss of inappropriate grazing pressure on the ecological sites within the HA, would eliminate the possibility of these site crossing ecological thresholds into undesirable stable states. Native plants would continue to dominate and rangeland health would improve.

Impacts of Alternative B -- No Action Alternative
The cumulative impacts from the No Action Alternative, in addition to past, present and reasonably foreseeable future actions would result in continual degradation of vegetation and riparian resources. Horses would continue to be above AML and compete for resources with livestock and wildlife. Continued inappropriate grazing by horses would continue to degrade vegetation and forage resources. With unchecked population growth and no planned gathers, rangeland resources would become degraded at an accelerated rate both within the HA and outside the area.

4.2.6 Wildlife, Special Status Species, including Migratory Birds

4.2.6.1 Cumulative Impacts

Impacts of Alternative A -- Proposed Action

Impacts to wildlife habitat within the Moriah Herd Area have resulted from past and present actions such as livestock grazing, road construction and maintenance, agriculture, OHV use and recreation, and wild horses. The cumulative impacts from the Proposed Action, in addition to past, present and reasonably foreseeable future actions would be beneficial for all wildlife and their habitat. With a reduction of horse numbers, habitat within the HA and surrounding area would have the opportunity to improve. Impacts to vegetation at riparian areas would be reduced, allowing them to slowly recover with time. Breeding, forage, nesting, and security habitat for all species would improve over time.

Impacts of Alternative B -- No Action Alternative

The cumulative impacts from the No Action Alternative, in addition to past, present and reasonably foreseeable future actions would result in continual degradation of habitat for all wildlife. Horses would continue to be above AML and compete for resources with other wildlife and livestock. Breeding, foraging, nesting and security habitat for all species would continue to degrade.

4.2.8. Non-native Invasive Species Including Noxious Weeds

4.2.8.1 Cumulative Impacts

Impacts of Alternative A -- Proposed Action

Cumulative Impacts from the Proposed Action could increase the existing populations of invasive species such as cheatgrass, kochia, and Russian thistle. New weed species could be introduced by equipment, vehicles, and foot traffic carried from other sites. Areas of disturbance from the past gather sites may already have established cheatgrass, kochia, and Russian thistle, by using the same sites for holding pens this will reduce the soil disturb of a new area and will make yearly monitoring and treatments, if necessary, easier to control. Best Management Practices should be adhered to.

Impacts of Alternative B -- No Action Alternative

Under the No Action Alternative, the Cumulative Impacts will be reduced but still exists. If no horses are gathered and no reduction in AML is achieved there will likely be over grazing, increased soil disturbance around watering sites, and a reduction in overall rangeland health. This stresses the native plants and noxious and invasive species will take advantage of the weakened state and invade these areas. Many noxious and invasive species are very good competitors and can easily out compete desirable species for resources one being available water.

4.2.9. Livestock grazing

4.2.9.1 Cumulative Impacts

Impacts of Alternative A -- Proposed Action

Impacts to livestock grazing within the Moriah Herd Area have resulted from past and present actions such as recreation, road construction, maintenance and use, wildlife and wild horses use. Cumulative impacts would be diffuse and localized. The cumulative impacts from the Proposed Action of diffuse impacts, in addition to past, present and reasonably foreseeable future actions would be beneficial for rangeland resources and ecosystems. Horses compete with livestock and wildlife for forage and water resources in the entire HA, so gathering horses would reduce competition and resource degradation. Localized negative impacts in the short-term would be associated with trapping and gather operations. These impacts would include trampling and destruction of forage for livestock, and temporary disturbance to livestock grazing in the area. Livestock may be frightened and leave areas due to helicopter, traffic and human interactions; however, once gather operations ceased, animals would return to those areas. In the long-term, localized cumulative impacts to water sources would benefit with reduced grazing pressure and degradation of riparian areas. Heavy grazing at water sources would be eliminated. Less water would be used allowing springs and riparian areas to recover and improve. In the long-term, diffuse impacts would be beneficial to the rangeland resources. Horses graze the Moriah HA year-round which is inappropriate grazing to maintain ecological sustainability and meet grazing objectives. With horses removed from the HA, livestock grazing would be controlled by grazing systems and seasonal grazing. Livestock operations within and around the HA would continue to operate and grazing allotments would be part of whole-ranch economic viability. Removal of inappropriate grazing pressure by horses would eliminate the possibility of ecological sites crossing ecological thresholds into undesirable stable states. Undesirable stable states would increase bare ground, increase weed populations, and reduce ecosystem function so that livestock grazing would be jeopardized. Native plants would continue to dominate and rangeland health would improve.

Impacts of Alternative B -- No Action Alternative

The cumulative impacts from the No Action Alternative, in addition to past, present and reasonably foreseeable future actions would result in continual degradation of forage and riparian resources. Horses would continue to be above AML and compete for resources with livestock and wildlife. Continued inappropriate grazing by horses would continue to degrade vegetation and forage resources. With unchecked population growth and no planned gathers, rangeland resources would become degraded at an accelerated rate both within the HA and outside the area. Ranches with which BLM grazing allotments provide controlled, seasonal use would see reduced economic viability with reduced ecosystem health and less forage and water availability. Continued grazing by horses with growing populations would reduce ecosystem and ranching economic sustainability.

4.2.10. Farmlands/Prime and Unique

4.2.10.1 Cumulative Impacts

Impacts of Alternative A – Proposed Action
Past and present actions affecting the soils meeting the Prime and Unique Farmland criteria in the Moriah Herd Area include agricultural practices, OHV vehicle use, grazing, public land management activities, mining and exploration activities, and wildland fire.

Impacts to this farmland from RFFAs would be similar to that described above for past and present actions, including disturbance impacts associated with equipment operation during planned habitat restoration projects, invasive plant species treatments, and future horse gathers in the Herd Area.

The cumulative impact to this farmland from the incremental impact of the proposed action when added to the past actions, present actions, and RFFAs may add short-term effects such as localized compaction and soil destabilization. However, the long-term incremental impact to these farmlands from the proposed action will be positive as the number of horses are decreased with this gather and over time with subsequent gathers.

Impacts of Alternative B – No Action Alternative
Under the No Action Alternative, no incremental gather-associated impacts would occur to Prime and Unique Farmlands, thus declining conditions would continue as horse populations increase.

4.2.11 Air Quality

4.2.11.1 Cumulative Impact

Impacts of Alternative A – Proposed Action
Impacts to air quality from past and present actions in the Moriah Herd Area have included dust and combustion emissions from agriculture, road construction and maintenance, OHV use and recreation, exploration, mining and processing activities, aggregate operations, public land management activities, and wildland fire. Impacts to air resources from past and present actions in the area are considered to be moderate lasting only as long as the activities persist.

Impacts to air quality from RFFAs could result from the generation of dust and combustion emissions from equipment operation associated with planned habitat restoration projects, invasive plant species treatments, and future horse gathers in the Herd Area.

The cumulative impact on air quality from the incremental impact of the proposed action when added to the past actions, present actions, and RFFAs would be fugitive, point source, and mobile combustion emissions, which would remain low.

Impacts of Alternative B – No Action Alternative
Under the No Action Alternative, no incremental gather-associated impacts would occur to air quality, thus air quality would continue as is expressed under current management.

4.3.11. Water Quality/Drinking/Ground

4.3.11.1 Cumulative Impacts

Impacts of Alternative A – Proposed Action
Impacts to water quality within the Moriah Herd Area have resulted from past and present actions such as grazing, irrigation, road construction and maintenance, OHV use and recreation, mining and processing activities, aggregate operations, public land management activities, and wildland fire.

Impacts to water quality from RFFAs would be similar to those described above for past and present actions, as these activities are expected to continue into the future. RFFAs in the area that include planned habitat restoration projects, invasive plant species treatments and future horse gathers may have short-term impacts related to equipment operation as these projects are executed, but because the goal of these activities is to improve environmental quality these impacts would be minimal.

Direct cumulative impacts from the Proposed Action in terms of an incremental impact to water quality would be minimal as the design of the project requires avoidance of water sources. However, the long-term incremental impact to water quality would be positive as pressure on water sources would be reduced from reduced horse numbers, resulting in a return of water quality and quantity from restored balance of the hydrologic cycle in the Herd Area.

Impacts of Alternative B – No Action Alternative
Under the No Action Alternative, no incremental gather-associated impacts would occur to water quality, thus the declining conditions from increased water resource stress would continue as horse populations increase.

CHAPTER 5 CONSULTATION AND COORDINATION

5.1 Introduction

The issue identification section of Chapter 1 provides the rationale for issues that were considered but not analyzed further, and identifies those issues analyzed in detail in Chapter 3. The issues were identified through the public and agency involvement process described in sections 5.2 and 5.3 below.

5.2 Persons, Groups and Agencies Consulted

- **Nevada Department of Wildlife**
  - Moira Kolada

- **Tribal Consultation**
  - Tribal Coordination Letters were sent May 12, 2020.

5.3 Summary of Public Participation

Public hearings are held annually on a state-wide basis regarding the use of motorized vehicles, including helicopters and fixed-wing aircraft, in the management of wild horses (or burros). During these meetings, the public is given the opportunity to present new information and to voice any concerns regarding the use of the motorized vehicles. The Southern Nevada District Office held the state-wide meeting on June 24, 2019; eight letters were received and one public participant attended. Specific concerns included: (1) whether Most were not in support of the use of helicopters and the gathering of excess wild horses. Their comments were entered into the record for this hearing. Standard Operating Procedures were reviewed in response to these concerns and no changes to the SOPs were indicated based on this review.

The use of helicopters and motorized vehicles has proven to be a safe, effective and practical means for the gather and removal of excess wild horses and burros from the range. Since July 2004, Nevada has captured 26,000 animals with a total mortality of 1.3% (of which .5% was gather related) which is very low when handling wild animals. BLM also avoids gathering wild horses prior to or during the peak foaling season and as a result does not conduct helicopter removals of wild horses from March 1 through June 30.

The Ely District BLM has coordinated with NDOW on this gather during the yearly coordination meeting. Additionally, as required by the GRSG Land Use Plan Amendment (2015), NDOW has reviewed the Greater sage-grouse form, RDF's and has granted seasonal waivers for the Moriah Horse Gather. BLM will continue to coordinate with NDOW in regard to staging, trapping, and corral locations to minimize impacts to wildlife.

5.4 List of Preparers

5.4.1 BLM:

Name	Title	Responsible for the Following Section(s) of this Document
Ben Noyes	**Wild Horse Specialist**	**Project Lead/ Wild Horse**
Nancy Herms	**Wildlife Biologist**	**Wildlife, Migratory Birds, Special Status Species**
Maria Ryan	**Natural Resource Specialist**	**Non-native Invasive Species Including Noxious Weeds**
Concetta Brown	**NEPA Coordinator**	**NEPA Compliance, Review**
John Miller	**Wilderness Planner**	**Wilderness**
Andy Gault	**Hydrologist**	**Soil, Water, Wetlands and Riparian/Flood Plans**
Maria Ryan	**Rangeland Management Specialist**	**Livestock Grazing**
Robert Nash	**Archaeologist**	**Cultural Resources**
Liz Seymour	**Native American Coordinator**	**Native American Religious Concerns**

CHAPTER 6 REFERENCES

Coates-Markle, L. 2000. Summary Recommendations, BLM Wild Horse and Burro Population Viability Forum April 1999, Ft. Collins, CO. Resource Notes 35:4pp.

Ganskopp, D.C. 1983. Habitat use and Spatial Interactions of Cattle, Wild Horses, Mule Deer, and California Bighorn Sheep in the Owyhee Breaks of Southeast Oregon. PhD Dissertation, Oregon State University.

Ganskopp, D.C. and M. Vavra. 1986. Habitat Use by Feral Horses in the Northern Sagebrush Steppe. Journal of Range Management 39(3):207-211.

Ganskopp, D.C. and M. Vavra. 1987. Slope Use by cattle, feral horses, deer, and bighorn sheep. Northwest Science, 61(2):74-80

Great Basin Bird Observatory. 2003. Nevada Bird Count. A habitat-based monitoring program for breeding birds of Nevada. Instruction package and protocol for point count surveys.

Interior Board of Land Appeals 88-591, 88-638, 88-648, 88-679 at 127.

109 Interior Board of Land Appeals 119 API 1989.

118 Interior Board of Land Appeals 75.

McInnis, M.A. 1984. Ecological Relationships among Feral Horses, Cattle, and Pronghorn in Southeastern Oregon. PhD Dissertation. Oregon State University.

McInnis, M.A. and M. Vavra. 1987 Dietary relationships among feral horses, cattle, and Prognhorn in southeastern Oregon. Journal of Range Mgt 40(1):60-66.

Neel, L.A. (Editor). 1999. Nevada Partners in Flight Bird Conservation Plan. Nevada Department of Wildlife. March 2007. www.ndow.org

NOAA. www.cpc.ncep.noaa.gov

Smith, M.A. 1986a. Impacts of Feral Horses Grazing on Rangelands: An Overview. Equine Veterinary Science, 6(5):236-238.

Smith, M.A. 1986b. Potential Competitive Interactions Between Feral Horses and Other Grazing Animals. Equine Veterinary Science, 6(5):238-239.

Smith, M.A and J.w. Waggoner, Jr., et al. 1982. Vegetation Utilization, Diets, and Estimated Dietary Quality of Horses and Cattle Grazing in the Red Desert of West central Wyoming. BLM Contract No. AA851-CTO-31.

Society for Range Management, 1989. A glossary of Terms Used in Range Management (Third ed.). Society for Range Management, Denver, Colo.

Vavra, M. and F. Sneva. 1978. Seasonal Diets of five ungulates grazing the cold desert biome. Proceedings of the First International Rangeland Congress. Society for Range Mgt. Denver, CO.

USDOI, BLM. 2008. National Environmental Policy Act. Handbook-1790-1.

USDOI. 2007. Ely Proposed Resource Management Plan/ Final Environmental ImpactStatement. U.S. Department of the Interior, Bureau of Land Management. BLM/EL/PL-07/09+1793. DOI No. FES07-40. November 2007

USDOI. 2008. Ely District Record of Decision and Approved Resource Management Plan. U.S. Department of the Interior, Bureau of Land Management. BLM/NV/EL/PL-GI08/25+1793.

USDOI, Bureau of Land Management. 1994. Guidelines for assessing and documenting cumulative impacts. WO-IB-94-310.

State of Nevada Department of Conservation and Natural Resources Nevada Natural Heritage Program. Accessed in 2007. http://heritage.nv.gov

Appendix I
Gather Operations Standard Operating Procedures

Gathers would be conducted by utilizing contractors from the Wild Horse Gathers-Western States Contract, or BLM personnel. The following procedures for gathering and handling wild horses would apply whether a contractor or BLM personnel conduct a gather. For helicopter gathers conducted by BLM personnel, gather operations will be conducted in conformance with the *Wild Horse Aviation Management Handbook* (January 2009).

Prior to any gathering operation, the BLM will provide for a pre-gather evaluation of existing conditions in the gather area(s). The evaluation will include animal conditions, prevailing temperatures, drought conditions, soil conditions, road conditions, and a topographic map with wilderness boundaries, the location of fences, other physical barriers, and acceptable trap locations in relation to animal distribution. The evaluation will determine whether the proposed activities will necessitate the presence of a veterinarian during operations. If it is determined that a large number of animals may need to be euthanized or gather operations could be facilitated by a veterinarian, these services would be arranged before the gather would proceed. The contractor will be apprised of all conditions and will be given instructions regarding the gather and handling of animals to ensure their health and welfare is protected.
Trap sites and temporary holding sites will be located to reduce the likelihood of injury and stress to the animals, and to minimize potential damage to the natural resources of the area. These sites would be located on or near existing roads whenever possible.
The primary gather methods used in the performance of gather operations include:

1. Helicopter Drive Trapping. This gather method involves utilizing a helicopter to herd wild horses into a temporary trap.
2. Helicopter Assisted Roping. This gather method involves utilizing a helicopter to herd wild horses or burros to ropers.
3. Bait Trapping. This gather method involves utilizing bait (e.g., water or feed) to lure wild horses into a temporary trap.

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

A. Gather Methods used in the Performance of Gather Contract Operations

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

All trap and holding facilities locations must be approved by the Contracting Officer's Representative (COR) and/or the Project Inspector (PI) prior to construction. The Contractor may also be required to change or move trap locations as determined by the COR/PI. All traps and holding facilities not located on public land must have prior written approval of the landowner.

2. The rate of movement and distance the animals travel shall not exceed limitations set by the COR who will consider terrain, physical barriers, access limitations, weather, extreme temperature (high and low), condition of the animals, urgency of the operation (animals facing drought, starvation, fire rehabilitation, etc.) and other factors. In consultation with the contractor the distance the animals travel will account for the different factors listed above and concerns with each HMA.

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

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

   b. All loading chute sides shall be a minimum of 6 feet high and shall be fully covered, plywood, metal without holes larger than 2"x4".

   c. All runways shall be a minimum of 30 feet long and a minimum of 6 feet high for horses, and 5 feet high for burros, and shall be covered with plywood, burlap, plastic snow fence or like material a minimum of 1 foot to 5 feet above ground level for burros and 1 foot to 6 feet for horses. The location of the government furnished portable fly chute to restrain, age, or provide additional care for the animals shall be placed in the runway in a manner as instructed by or in concurrence with the COR/PI.

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

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

4. No modification of existing fences will be made without authorization from the COR/PI. The Contractor shall be responsible for restoration of any fence modification which he has made.

5. When dust conditions occur within or adjacent to the trap or holding facility, the Contractor shall be required to wet down the ground with water.

6. Alternate pens, within the holding facility shall be furnished by the Contractor to separate

mares or jennies with small foals, sick and injured animals, estrays or other animals the COR determines need to be housed in a separate pen from the other animals. Animals shall be sorted as to age, number, size, temperament, sex, and condition when in the holding facility so as to minimize, to the extent possible, injury due to fighting and trampling. Under normal conditions, the government will require that animals be restrained for the purpose of determining an animal's age, sex, or other necessary procedures. In these instances, a portable restraining chute may be necessary and will be provided by the government. Alternate pens shall be furnished by the Contractor to hold animals if the specific gathering requires that animals be released back into the gather area(s). In areas requiring one or more satellite traps, and where a centralized holding facility is utilized, the contractor may be required to provide additional holding pens to segregate animals transported from remote locations so they may be returned to their traditional ranges. Either segregation or temporary marking and later segregation will be at the discretion of the COR.

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

    a. An animal that is held at a temporary holding facility through the night is defined as a horse/burro feed day. An animal that is held for only a portion of a day and is shipped or released does not constitute a feed day.

8. It is the responsibility of the Contractor to provide security to prevent loss, injury or death of gathered animals until delivery to final destination.

9. The Contractor shall restrain sick or injured animals if treatment is necessary. The COR/PI will determine if animals must be euthanized and provide for the destruction of such animals. The Contractor may be required to humanely euthanize animals in the field and to dispose of the carcasses as directed by the COR/PI.

10. Animals shall be transported to their final destination from temporary holding facilities as quickly as possible after gather unless prior approval is granted by the COR for unusual circumstances. Animals to be released back into the HMA following gather operations may be held up to 21 days or as directed by the COR. Animals shall not be held in traps and/or temporary holding facilities on days when there is no work being conducted except as specified by the COR. The Contractor shall schedule shipments of animals to arrive at final destination between 7:00 a.m. and 4:00 p.m. No shipments shall be scheduled to arrive at final destination on Sunday and Federal holidays, unless prior approval has been obtained by the COR. Animals shall not be allowed to remain standing on trucks while not in transport for a combined period of greater than three (3) hours in any 24 hour period. Animals that are to be released back into the gather area may need to be transported back to the original trap site. This determination will be at the discretion of the COR/PI or Field Office horse specialist.

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

1. Gather attempts may be accomplished by utilizing bait (feed, water, mineral licks) to lure animals into a temporary trap. If this gather method is selected, the following applies:

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

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

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

2. Gather attempts may be accomplished by utilizing a helicopter to drive animals into a temporary trap. If the contractor selects this method the following applies:

    a. A minimum of two saddle-horses shall be immediately available at the trap site to accomplish roping if necessary. Roping shall be done as determined by the COR/PI. Under no circumstances shall animals be tied down for more than one half hour.

    b. The contractor shall assure that foals shall not be left behind, and orphaned.

3. Gather attempts may be accomplished by utilizing a helicopter to drive animals to ropers. If the contractor, with the approval of the COR/PI, selects this method the following applies:

    a. Under no circumstances shall animals be tied down for more than one hour.

    b. The contractor shall assure that foals shall not be left behind, or orphaned.

    c. The rate of movement and distance the animals travel shall not exceed limitations set by the COR/PI who will consider terrain, physical barriers, weather, condition of the animals and other factors.

C. Use of Motorized Equipment

1. All motorized equipment employed in the transportation of gathered animals shall be in compliance with appropriate State and Federal laws and regulations applicable to the humane transportation of animals. The Contractor shall provide the COR/PI, if requested, with a current safety inspection (less than one year old) for all motorized equipment and tractor-trailers used to transport animals to final destination.

2. All motorized equipment, tractor-trailers, and stock trailers shall be in good repair, of adequate rated capacity, and operated so as to ensure that gathered animals are

transported without undue risk or injury.

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

4. All tractor-trailers used to transport animals to final destination(s) shall be equipped with at least one (1) door at the rear end of the trailer which is capable of sliding either horizontally or vertically. The rear door(s) of tractor-trailers and stock trailers must be capable of opening the full width of the trailer. Panels facing the inside of all trailers must be free of sharp edges or holes that could cause injury to the animals. The material facing the inside of all trailers must be strong enough so that the animals cannot push their hooves through the side. Final approval of tractor-trailers and stock trailers used to transport animals shall be held by the COR/PI.

5. Floors of tractor-trailers, stock trailers and loading chutes shall be covered and maintained with wood shavings to prevent the animals from slipping as much as possible during transport.

6. Animals to be loaded and transported in any trailer shall be as directed by the COR/PI and may include limitations on numbers according to age, size, sex, temperament and animal condition. The following minimum square feet per animal shall be allowed in all trailers:

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

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

8. If the COR/PI determines that dust conditions are such that the animals could be endangered during transportation, the Contractor will be instructed to adjust speed.

D. Safety and Communications

1. The Contractor shall have the means to communicate with the COR/PI and all contractor personnel engaged in the gather of wild horses utilizing a VHF/FM Transceiver or VHF/FM portable Two-Way radio. If communications are ineffective the government will take steps necessary to protect the welfare of the animals.

    a. The proper operation, service and maintenance of all contractor furnished property is the responsibility of the Contractor. The BLM reserves the right to remove from service any contractor personnel or contractor furnished equipment which, in the opinion of the contracting officer or COR/PI violate contract rules, are unsafe or otherwise unsatisfactory. In this event, the Contractor will be notified in writing to furnish replacement personnel or equipment within 48 hours of notification. All such replacements must be approved in advance of operation by the Contracting Officer or his/her representative.

    b. The Contractor shall obtain the necessary FCC licenses for the radio system

    c. All accidents occurring during the performance of any task order shall be immediately reported to the COR/PI.

2. Should the contractor choose to utilize a helicopter the following will apply:

    a. The Contractor must operate in compliance with Federal Aviation Regulations, Part 91. Pilots provided by the Contractor shall comply with the Contractor's Federal Aviation Certificates, applicable regulations of the State in which the gather is located.

    b. Fueling operations shall not take place within 1,000 feet of animals.

G. Site Clearances

No personnel working at gather sites may excavate, remove, damage, or otherwise alter or deface or attempt to excavate, remove, damage or otherwise alter or deface any archaeological resource located on public lands or Indian lands.
Prior to setting up a trap or temporary holding facility, BLM will conduct all necessary clearances (archaeological, T&E, etc). All proposed site(s) must be inspected by a government archaeologist. Once archaeological clearance has been obtained, the trap or temporary holding facility may be set up. Said clearance shall be arranged for by the COR, PI, or other BLM employees.
Gather sites and temporary holding facilities would not be constructed on wetlands or riparian zones.

H. Animal Characteristics and Behavior

Releases of wild horses would be near available water when possible. If the area is new to them, a short-term adjustment period may be required while the wild horses become familiar with the new area.

I. Public Participation

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

J. Responsibility and Lines of Communication

Contracting Officer's Representative/Project Inspector

Wild Horse and Burro Specialist, Ely District
Wild Horse and Burro Specialist, Ely District
NV WH&B Program Lead

The Contracting Officer's Representatives (CORs) and the project inspectors (PIs) have the direct responsibility to ensure the Contractor's compliance with the contract stipulations. The Wells and Bristlecone Field Managers will take an active role to ensure the appropriate lines of communication are established between the field, Field Offices, State Office, National Program Office, and BLM Holding Facility offices. All employees involved in the gathering operations will keep the best interests of the animals at the forefront at all times.

All publicity, formal public contact and inquiries will be handled through the Field Manager and/or the Supervisory Natural Resource Specialist and Field Office Public Affairs. These individuals will be the primary contact and will coordinate with the COR/PI on any inquiries.

The COR will coordinate with the contractor and the BLM Corrals to ensure animals are being transported from the gather site in a safe and humane manner and are arriving in good condition.

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

Should the Contractor show negligence and/or not perform according to contract stipulations, he will be issued written instructions, stop work orders, or defaulted.

Water and Bait Trapping Standard Operating Procedures

Gathers would be conducted by utilizing contractors from the Wild Horse and Burro Gathers-Western States Con- tract, or BLM personnel. The following procedures for gathering and handling wild horses and burros would apply whether a contractor or BLM personnel conduct a gather.

Prior to any gathering operation, the BLM will provide for a pre-capture evaluation of existing conditions in the gather area(s). The evaluation will include animal conditions,

prevailing temperatures, drought conditions, soil conditions, road conditions, and preparation of a topographic map with wilderness boundaries, the location of fences, other physical barriers, and acceptable gather site locations in relation to animal distribution. The evaluation will determine whether the proposed activities will necessitate the presence of a veterinarian during operations. If it is determined that capture operations necessitate the services of a veterinarian, one would be obtained before the capture would proceed. The contractor will be apprised of all conditions and will be given instructions regarding the capture and handling of animals to ensure their health and welfare is protected.

Gather sites and temporary holding sites will be located to reduce the likelihood of undue injury and stress to the animals, and to minimize potential damage to the natural and cultural resources of the area. Temporary holding sites would be located on or near existing roads.

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

1. Bait Trapping. This capture method involves utilizing bait (water or feed) to lure wild horses and burros into a temporary gather site.

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

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

The primary concern of the contractor is the safety of all personnel involved and humane handling of all wild horses and burros captured:

a) Some trap sites will require a staging area (Temporary Holding) as determined by the COR/PI.
b) All trap and staging areas locations must be approved by the Contracting Officer's Representative (COR) and/or the Project Inspector (PI) prior to construction. The Contractor may also be required to change or move trap locations as determined by the COR/PI. All traps and staging facilities not located on public land must have prior written approval of the landowner.
c) The capture attempts may be accomplished by utilizing bait (feed, mineral supplement or water) or sexual attractants (mares in heat) to lure wild horses and burros into a temporary trap.

All capture attempts shall incorporate the following:

a) All feed bait ingredients, and the formula in that bait will be given to the COR/PI one full week prior to using in the trap.
b) When using water as the bait, other water sources shall not be cut off in the bait area. If the government deter- mines that cutting off other water sources is the best action to take under this contract, elimination of other water sources shall not last longer than 48 continuous hours.
c) All traps, wings, and staging facilities shall be constructed, maintained and operated to handle the wild horses and burros in a safe and humane manner and be in accordance with the following:
d) Darting of wild horses and wild burros will not be allowed.

e) Traps and staging facilities shall be constructed of portable panels or equal material, the top of which shall not be less than 72 inches high for horses and 60 inches for burros, and the bottom rail of which shall not be more than 12 inches from ground level. All traps and staging facilities shall be flowing design without corners. All material used will be flush at the top and bottom, no protrusions, sharp areas.
f) No barbed wire material shall be used in the construction of any traps.
g) All loading alleys shall be a minimum of 6 feet high for horses and 5 feet high for burros and shall be fully covered on the sides with, tarps, plywood, etc.
h) All crowding pens including the gates leading to the alleyways shall be covered with a material which serves as a visual barrier,(plywood, burlap, plastic snow fence, tarps etc.) and shall be covered a minimum of 1 foot to 5 feet above ground level for burros and 2 feet to 6 feet for horses. Perimeter panels on the staging corrals shall be covered to a minimum height of 5 feet for burros and 6 feet for horses.
i) Self-latching gates will be used on all pens and alleyways for the movement and handling of wild horses and burros.
j) No modification of existing fences will be made without authorization from the COR/PI. The Contractor shall be responsible for restoration of any fence modification which he has made.
k) Wild horses and burros trapped at trap sites may need to be sorted into small sorting pens determined by age or sex in order to safely transport them to a BLM preparation facility or a staging area.
l) Sick and injured wild horses and burros, and strays will be separated as needed. Segregation will be at the discretion of the COR.
m) Wild horses and burros will not be held in the trap for more than 24 hours.
n) A staging area will be required away from the trap site for any wild horses and burros that are being held for more than 24 hours.
o) The contractor shall assure that wet mares and their foal shall not be separated.
p) Finger gates may be constructed of materials such as, juniper poles, pipe, etc., only with the prior approval and direction of the COR. Finger gates shall not be constructed of materials such as "T" posts, sharpened willows, etc. that may be injurious to wild horses and burros.
q) All trigger and/or trip gate devices must be approved by the COR prior to capture of wild horses and burros.
r) Traps shall be checked a minimum of once every 24 hours when traps are “set” to capture wild horses and burros.
s) Contractor will report any injuries that resulted from trapping operations as well as pre-existing injuries to the COR and BLM preparation facility.
t) The COR/PI may assist with the handling of wild horses and burros.
u) At the discretion of the COR/PI the Contractor may be required to delay shipment of horses until the COR/PI inspects the wild horses and burros at the trap site prior to transporting them to the BLM preparation facility.

C. Temporary Holding and Animal Care

The temporary holding facility area will only be used when approved by the COR

a) Sorting pens shall be of sufficient size to minimize (minimal 100 square feet per adult horse and or burro with only having a maximum of 25 wild horses or burros being held at any other time), to the extent possible, injury due to fighting and trampling as well as to allow wild horses and burros to move easily and have adequate access to water and feed.
b) All pens will be capable of expansion on request of the COR. Alternate pens, within the staging facility shall be furnished by the Contractor to separate mares or Jennies with small foals, sick and injured wild horses and burros, and estrays from the other wild horses and burros.
c) The Contractor shall provide wild horses and burros held in the staging area with a supply of fresh clean water at a minimum rate of 10 gallons per animal per day.
d) Wild horses and burros approved to be held by the COR will be provided good quality hay at the rate of not less than two pounds of hay per 100 pounds of estimated body weight per day. If the task order notes that weed free hay is to be used for this bait trap gather the contractor will provide certified weed free hay in the amounts stated above. The contractor will have to have documentation that the hay is certified weed free.
e) It is the responsibility of the Contractor to provide security to prevent loss, injury or death of captured wild horses and burros until delivery to final destination. Animals lost from traps shall not be included in payment schedule.
f) It is the responsibility of the Contractor to provide for the safety of the wild horses and burros and personnel working at the trap locations and staging area.
g) The Contractor shall restrain sick or injured wild horses and burros if treatment is necessary in consultation with the COR and/or veterinarian. The contractor in consultation with the COR will determine if injured wild horses and burros must be destroyed and provide for destruction of such wild horses and burros in accordance with the BLM Euthanasia policy. (Section J) The Contractor will have the ability to humanely euthanize wild horses and burros in the field and to dispose of the carcasses in accordance with state and local laws.
h) Separate water troughs shall be provided for each pen where wild horses and burros are being held. Water troughs shall be constructed of such material (e.g., rubber, plastic, fiberglass, galvanized metal with rolled edges, and rubber over metal) so as to avoid injury to the wild horses and burros.
i) The use of solid covered panels or visual barriers in the alley ways keeps the animals from kicking thru the panels.
j) All gates and panels are covered with snow fence for the safety of wild horses and burros.
k) Wild horses and burros will be fed twice a day per a schedule determined by the COR/PI and will have water in every pen.

D. Transportation and Animal Care

a) Wild horses and burros shall be transported to BLM preparation facilities

within 24 hours after capture unless prior approval is granted by the COR/PI for unusual circumstances.

b) The Contractor shall schedule shipments of wild horses and burros to arrive at BLM preparation facilities between 7:00 a.m. and 4:00 p.m. unless prior approval has been obtained by the COR. No shipments shall be scheduled to arrive at BLM preparation facilities on Sunday and Federal holidays; unless prior approval has been obtained by the COR.

c) Wild horses and burros shall not be allowed to remain standing on gooseneck or semi-trailers while not in transport for a combined period of greater than three (3) hours.

d) Total drive time from the trap site or staging area to the BLM preparation facilities will not exceed 8 hours.

e) All motorized equipment employed in the transportation of captured wild horses and burros shall be in compliance with appropriate State and Federal laws and regulations applicable to the humane transportation of wild horses and burros.

f) All equipment used to transport wild horses and burros will be inspected and accepted by the COR/PI prior to use to avoid any injury to wild horses and burros and shall be in good mechanical condition, of adequate rated capacity, and operated so as to ensure that captured wild horses and burros are transported without undue risk.

g) No open stock trailers shall be allowed for transporting wild horses and burros from trap site(s) or staging area to the BLM preparation facilities.

h) Sides or stock racks of all trailers used for transporting wild horses and burros shall be a minimum height of 6 feet 6 inches from the floor. A minimum of one partition is required in each stock trailer.

i) The rear door(s) of the stock trailers must be capable of opening the full width of the trailer. All partitions and panels the inside of all trailers must be free of sharp edges or holes that could cause injury to the wild horses and burros. The material facing the inside of all trailers must be strong enough so that the wild horses and burros cannot push their hooves through the side.

j) All surfaces of the stock trailers shall be cleaned and a disinfectant used to eliminate the possibility of disease transmittal from domesticated horses to wild horses and burros (WH&B's) prior to the WH&B's under this contract being transported.

k) Floors of stock trailers and loading chutes shall be covered and maintained with anti-slip materials (mats, wood shavings, sand etc.) to prevent wild horses and burros from slipping.

l) Wild horses and burros to be loaded and transported in any size trailer shall be as directed by the COR and may include limitations on numbers according to age, sex, size, temperament and animal condition. The following minimum square feet per animal shall be allowed in all trailers

12.6 square feet per adult horse (1.8 linear foot in a 7 foot wide trailer)
8.0 square feet per adult burro (1.15 linear foot in a 7 foot wide trailer)
6.0 square feet per horse foal (0.85 linear foot in a 7 foot wide trailer)
4.0 square feet per burro foal (0.57 linear feet in a 7 foot wide trailer)

m) The COR shall consider the condition and size of the wild horses and burros, weather conditions, distance to be transported, or other factors when planning for the movement of captured wild horses and burros. The COR shall provide for any brand and/or inspection services required for the captured wild horses and burros. If wild horses and burros are to be transported over state lines the COR will be responsible work with the receiving state veterinarian to get permission to transport the wild horses and burros without a health certificate or Coggins test. If the receiving state does not allow wild horses or burros in their state without a current health certificate or Coggins test the COR/PI will obtain them through a local veterinarian prior to shipment.
n) An electric prod, paddle or wild rag may be humanely used to work wild horses and burros during sorting and loading operations.
o) Flagging will be used strategically so not to desensitize the animal(s).
p) When transporting wild horses and burros, drivers shall check for downed animals.
q) The contractor will separate the animals in trailer compartments so animals do not pile up in the rear of the trailer during transport from trap site to staging area/BLM preparation facility. Separation of animals helps prevent animals from falling down and being trampled.
r) All sorting, loading or unloading wild horses and burros will be performed during daylight hours unless supplemental light is provided in the area to facilitate visibility.
s) Provide a visual barrier on panels in the area where the loading is accomplished at the trap site and at the staging area to eliminate holes, gaps, or openings where horses can be injured.
t) The contractor may dig holes at the end of the loading alley so that trailer floor is at ground level to ease the loading horses or burros at the trap site
u) Hot shots should not be used routinely or excessively on wild horses or burros. Use of hot shots should be limited to instances of trying to protect or preserve human or animal safety (such as with animals that are down and reluctant to get up on trailers and in chutes) or as a near final resort for animals that refuse to move or load. Hot shots should only be used as follows:
v) Hotshots should never be applied to 3 areas: the head (defined as everything above the throat- latch), anus and genitals (this includes the vulva, penis, and scrotum as well as the anogenital area which includes the anal recess, underside of the tail and the perineum which is the area between the anus and the vulva)
w) Only unmodified, commercially available hotshots that use DC battery power may be used, batteries should be maintained fresh at all times to avoid the overuse of apparently ineffective devices
x) A hot shot should only be used after 3 other stimuli have failed to successfully encourage forward movement (other options include use of body position and movement, use of voice or whistle, use of a wild rag to flag an animal, use of a shaker paddle as a visual and auditory stimulus, tapping animal with flag or shaker paddle, use of plastic tarp or bag, and returning animal to the point of origin and starting over.
y) A hot shot should be used to shock an animal not more than 3 times on any single

occasion

z) A hot shot should only be used when a path of escape or movement away from the stimulus is available (animals should not be encouraged to "push-up" with or without a hotshot – this too of- ten leads to trampling).

E. Safety and Communication

The BLM/FS reserves the right to remove from service immediately any contractor personnel or contractor furnished equipment which, in the opinion of the contracting officer or COR violate contract rules, are unsafe or other- wise unsatisfactory. In this event, the Contractor will be notified in writing to furnish replacement personnel or equipment within 48 hours of notification. All such replacements must be approved in advance of operation by the Contracting Officer or his/her representative

a) The Contractor shall have the means to communicate with the COR/PI and all contractor personnel engaged in the capture of wild horses and burros utilizing a cell/satellite phone at all times during the trapping operations.
b) Contractor will contact the COR/PI prior to loading horses to be delivered to BLM preparation facility.
c) Contractor will contact BLM facility manager to schedule delivery and relay information of wild horses and burros trapped (number of wild horses and burros trapped, sex, approximate age, number of pairs, etc.)
d) Contractor will photo document all horses trapped in a digital image format and digital photos will be delivered to the COR.
e) Contractor will be required to provide State or National Rifle Association certification or equivalent (conceal carry, hunter safety, etc.) for firearm safety.
f) All accidents involving wild horses and burros or people that occur during the performance of any task order shall be immediately reported to the COR/PI.
g) All domestic stock used for or around the bait trap or staging area will have current Coggins documentation and a health certificate. Trailers will be cleaned and have a disinfectant applied after any domestic horses have been hauled in it and before any WH&B's are loaded. This will help prevent transmission of disease into our populations at a BLM Preparation Facility

F. Use of Motorized Equipment

1. All motorized equipment employed in the transportation of captured animals shall be in compliance with appropriate State and Federal laws and regulations applicable to the humane transportation of animals. The Contractor shall provide the COR/PI with a current safety inspection (less than one year old) for all motorized equipment and tractor-trailers used to transport animals to final destination.
2. All motorized equipment, tractor-trailers, and stock trailers shall be in good repair, of adequate rated capacity, and operated so as to ensure that captured animals are transported without undue risk or injury.
3. Only tractor-trailers or stock trailers with a covered top shall be allowed for transporting animals from gather site(s) to temporary holding facilities and from

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

4. All tractor-trailers used to transport animals to final destination(s) shall be equipped with at least one (1) door at the rear end of the trailer which is capable of sliding either horizontally or vertically. The rear door(s) of tractor- trailers and stock trailers must be capable of opening the full width of the trailer. Panels facing the inside of all trailers must be free of sharp edges or holes that could cause injury to the animals. The material facing the inside of all trailers must be strong enough so that the animals cannot push their hooves through the side. Final approval of tractor-trailers and stock trailers used to transport animals shall be held by the COR/PI.
5. Floors of tractor-trailers, stock trailers and loading chutes shall be covered and maintained with wood shavings to prevent the animals from slipping.
6. Animals to be loaded and transported in any trailer shall be as directed by the COR/PI and may include limitations on numbers according to age, size, sex, temperament and animal condition. The following minimum square feet per animal shall be allowed in all trailers:

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

7. The COR/PI shall consider the condition and size of the animals, weather conditions, distance to be transported, or other factors when planning for the movement of captured animals. The COR/PI shall provide for any brand and/or inspection services required for the captured animals.
8. If the COR/PI determines that dust conditions are such that the animals could be endangered during transportation, the Contractor will be instructed to adjust speed.

G. Safety and Communications

1. The Contractor shall have the means to communicate with the COR/PI and all contractor personnel engaged in the capture of wild horses and burros utilizing a VHF/FM Transceiver or VHF/FM portable Two-Way radio. If communications are ineffective the government will take steps necessary to protect the welfare of the animals.

a. The proper operation, service and maintenance of all contractor furnished property are the responsibility of the Contractor. The BLM reserves the right to remove from service any contractor personnel or contractor furnished equipment which, in the opinion of the contracting officer or COR/PI violate contract rules, are unsafe or otherwise unsatisfactory. In this event, the Contractor will be notified in writing to furnish replacement personnel or equipment within 48 hours of notification. All such replacements must be approved in advance of operation by the Contracting Officer or his/her representative.
b. The Contractor shall obtain the necessary FCC licenses for the radio system
c. All accidents occurring during the performance of any task order shall be immediately reported to the COR/PI.

H. Public and Media

Due to heightened public interest in wild horse and burro gathers, the BLM/Contractor may expect an increasing number of requests from the public and media to view the operation.

a) Due to this type of operation (luring wild horses and burros to bait) spectators and viewers will be prohibited as it will have impacts on the ability to capture wild horses and burros. Only essential personnel (COR/PI, veterinarian, contractor, contractor employees, etc.) will be allowed at the trap site during operations.
b) Public viewing of the wild horses and burros trapped may be provided at the staging area and/or the BLM preparation facility by appointment.
c) The Contractor agrees that there shall be no release of information to the news media regarding the removal or remedial activities conducted under this contract.
d) All information will be released to the news media by the assigned government public affairs officer.
e) If the public or media interfere in any way with the trapping operation, such that the health and wellbeing of the crew, horses and burros is threatened, the trapping operation will be suspended until the situation is resolved.

I. COR/PI Responsibilities

a) In emergency situations, the COR/PI will implement procedures to protect animals as rehab is initiated, i.e. rationed feeding and watering at trap and or staging area.
b) The COR/PI will authorize the contractor to euthanize any wild horse or burros as an act of mercy.
c) The COR/PI will ensure wild horses or burros with pre-existing conditions are euthanized in the field according to BLM policy.
d) Prior to setting up a trap or staging area on public land, the BLM and/or Forest Service will con- duct all necessary clearances (archaeological, T&E, etc.). All

proposed sites must be inspected by a government archaeologist or equivalent. Once archaeological clearance has been obtained, the trap or staging area may be set up. Said clearances shall be arranged for by the COR/PI.

e) The COR/PI will provide the contractor with all pertinent information on the areas and wild horses and burros to be trapped.
f) The COR/PI will be responsible to establish the frequency of communicating with the contractor.
g) The COR/PI shall inspect trap operation prior to Contractor initiating trapping.
h) The Contractor shall make all efforts to allow the COR/PI to observe a minimum of at least 25% of the trapping activity.
i) The COR/PI is responsible to arrange for a brand inspector and/or veterinarian to inspect all wild horses and burros prior to transporting to a BLM preparation facility when legally required.
j) The COR/PI will be responsible for the establishing a holding area for administering PZP, gelding of stallions, holding animals in poor condition until they are ready of shipment, holding for EIA testing, etc.
k) The COR/PI will ensure the trailers are cleaned and disinfected before WH&B's are transported. This will help prevent transmission of disease into our populations at a BLM Preparation Facility.

J. Responsibility and Lines of Communication

The Wild Horse Specialist (COTR) or delegate has direct responsibility to ensure human and animal safety. The Wells or Bristlecone Field Managers will take an active role to ensure that appropriate lines of communication are established between the field, field office, state office, national program office, and BLM holding facility offices.

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

All publicity and public contact and inquiries will be handled through the Elko and Ely District Offices and Nevada State Office of Communications. These individuals will be the primary contact and will coordinate with the COR on any inquiries.

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

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

K. Resource Protection

Gather sites and holding facilities would be located in previously disturbed areas whenever possible to minimize potential damage to the natural and cultural resources.

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

Prior to implementation of gather operations, gather sites and temporary holding facilities would be evaluated to determine their potential for containing cultural resources. All

gather facilities (including gather sites, gather run- ways, blinds, holding facilities, camp locations, parking areas, staging areas, etc.) that would be located partially or totally in new locations (i.e. not at previously used gather locations) or in previously undisturbed areas would be inventoried by a BLM archaeologist or district archaeological technician before initiation of the gather. A buffer of at least 50 meters would be maintained between gather facilities and any identified cultural resources.

Gather sites and holding facilities would not be placed in known areas of Native American concern.

The contractor would not disturb, alter, injure or destroy any scientifically important paleontological remains; any historical or archaeological site, structure, building, grave, object or artifact; or any location having Native American traditional or spiritual significance within the project area or surrounding lands. The contractor would be responsible for ensuring that its employees, subcontractors or any others associated with the project do not collect artifacts and fossils, or damage or vandalize archaeological, historical or paleontological sites or the artifacts within them.

Should damage to cultural or paleontological resources occur during the period of gather due to the unauthorized, inadvertent or negligent actions of the contractor or any other project personnel, the contractor would be responsible for costs of rehabilitation or mitigation. Individuals involved in illegal activities may be subject to penalties under the Archaeological Resources Protection Act (16 U.S.C 470ii), the Federal Land Management Policy Act (43 U.S.C 1701), the Native American Graves and Repatriation Act (16 U.S.C. 1170) and other applicable

Appendix II

Visitation Protocol and Ground Rules for Helicopter WH&B Gathers within Nevada

BLM recognizes and respects the right of interested members of the public and the press to observe the wild horse and burro gathers. At the same time, BLM must ensure the health and safety of the public, BLM's employees and contractors, and America's wild horses. Accordingly, BLM developed these rules to maximize the opportunity for reasonable public access to the gather while ensuring that BLM's health and safety responsibilities are fulfilled. Failure to maintain safe distances from operations at the gather and temporary holding sites could result in members of the public inadvertently getting in the path of the wild horses or gather personnel, thereby placing themselves and others at risk, or causing stress and potential injury to the wild horses and burros.

The BLM and the contractor's helicopter pilot must comply with 14 CFR Part 91 of the Federal Aviation Regulations, which determines the minimum safe altitudes and distance people must be from the aircraft. To be in compliance with these regulations, the viewing location at the gather site and holding corrals must be approximately 500 feet from the operating location of the helicopter at all times. The viewing locations may vary depending on topography, terrain and other factors.

General Daily Protocol

- A Wild Horse Gather Info Phone Line would be set up prior to the gather so the public can call for daily updates on gather information and statistics. Visitors are strongly encouraged to check the phone line the evening before they plan to attend the gather to confirm the gather and their tour of it is indeed taking place the next day as scheduled (weather, mechanical issues or other things may affect this) and to confirm the meeting location.

- Visitors must direct their questions/comments to either their designated BLM representative or the BLM spokesperson on site, and not engage other BLM/contractor staff and disrupt their gather duties/responsibilities - professional and respectful behavior is expected of all. BLM may make the BLM staff available during down times for a Q&A session on guided public-observation days. However, the contractor and its staff will not be available to answer questions or interact with visitors.

- Observers must provide their own 4-wheel drive high clearance vehicle, appropriate shoes, winter clothing, food and water. Observers are prohibited from riding in government and contractor vehicles and equipment.

- Gather operations may be suspended if bad weather conditions create unsafe flying conditions.

- BLM will establish one or more observation areas, in the immediate area of the gather and holding sites, to which individuals will be directed. These areas will be placed so as to maximize the opportunity for public observation while providing for a safe and effective horse gather. The utilization of such observation areas is necessary due to the use and presence of heavy equipment and aircraft in the gather operation and the critical need to allow BLM personnel and contractors to fully focus on attending to the needs of the wild horses and burros while maintaining a safe environment for all involved. In addition, observation areas will be sited so as to protect the wild horses and burros from being spooked, startled or impacted in a manner that results in increased stress.

- BLM will delineate observation areas with yellow caution tape (or a similar type of tape or ribbon).

- Visitors will be assigned to a specific BLM representative and must stay with that person at all times.

- Visitors are NOT permitted to walk around the gather site or temporary holding facility unaccompanied by a BLM representative.

- Observers are prohibited from climbing/trespassing onto or in the trucks, equipment or corrals, which is the private property of the contractor.

- When BLM is using a helicopter or other heavy equipment in close proximity to a designated observation area, members of the public may be asked to stay by their vehicle for some time before being directed to an observation area once the use of the helicopter or the heavy machinery is complete.

- When given the signal that the helicopter is close to the gather site bringing horses in, visitors must sit down in areas specified by BLM representatives and must not move or talk as the horses are guided into the corral.

- Individuals attempting to move outside a designated observation area will be requested to move back to the designated area or to leave the site. Failure to do so may result in citation or arrest. It is important to stay within the designated observation area to safely observe the wild horse gather.

- Observers will be polite, professional and respectful to BLM managers and staff and the contractor/employees. Visitors who do not cooperate and follow the rules will be escorted off the gather site by BLM law enforcement personnel, and will be prohibited from participating in any subsequent observation days.

- BLM reserves the right to alter these rules based on changes in circumstances that may pose a risk to health, public safety or the safety of wild horses (such as weather, lightening, wildfire, etc.).

Public Outreach and Education Day-Specific Protocol

- A public outreach and education day provides a more structured mechanism for interested members of the public to see the wild horse gather activities at a given site. On this day, BLM attempts to allow the public to get an overall sense of the gather process and has available staff who can answer questions that the public may have. The public rendezvous at a designated place and are escorted by BLM representatives to and from the gather site.

APPENDIX III

RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

Moriah HA Gather

White Pine County, Nevada

The BLM Bristlecone Field Office proposes to capture 100% of the current population of wild horses (estimated at around 714 excess wild horses as of 2020), including any horses outside the HA boundaries and return periodically over the next 10 years. All of the animals gathered would be removed and transported to BLM holding facilities where they would be prepared for adoption and/or sale to qualified individuals or maintained in off-range holding facilities absent removal of the Congressional appropriations prohibition on implementation of the WFRHBA's mandate to euthanize healthy excess animals for which there is no adoption or sale demand. Due to the rugged terrain, access, and historic gather efficiencies for the area it is estimated that 75-85% or 535-606 excess wild horses of the population may be gathered during an initial gather and follow-up gathers may be necessary over the next 10 years to achieve management objectives for management of "0" wild horses within the Moriah Herd Area.

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. Currently, the following weed species are found within the Moriah HA:

Tamarix spp.	Salt cedar

The following noxious and non-native, invasive species are found along roads and drainages leading to the project area:

Tamarix spp.	Salt cedar

The Moriah HA was last inventoried for noxious weeds in 2016. The following non-native invasive weeds probably occur in or around the project area:

Bromus tectorum	Cheatgrass	*Marrubium vulgare*	Horehound
Ceratocephala testiculata	Bur buttercup	*Salsola kali*	Russian thistle
Convolvulus arvensis	Field bindweed	*Sysimbrium altissimum*	Tumble mustard

Halogeton glomeratus Halogeton *Verbascum thapsus* Common mullein

Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as Moderate (5) at the present time. Given the concentrated use around capture sites and the use of non-certified forage the project activities could result in new infestations, specifically at the capture sites and holding pens. However, no animals will be released back on to public lands thus preventing weeds from spreading through animal movements.

Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.

Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (8-10)	Obvious adverse effects within the project area and probable expansion of noxious/invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

This project rates as Moderate (7) at the present time. The Moriah HA is relatively free from noxious weed infestations. If new weed infestations spread to the area there would be adverse effects to the surrounding native vegetation. Any increase in cheatgrass could alter the fire regime in the area. The potential to spread weeds would be limited primarily to identified areas making follow up monitoring and treatment, if necessary, more manageable.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing

	infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

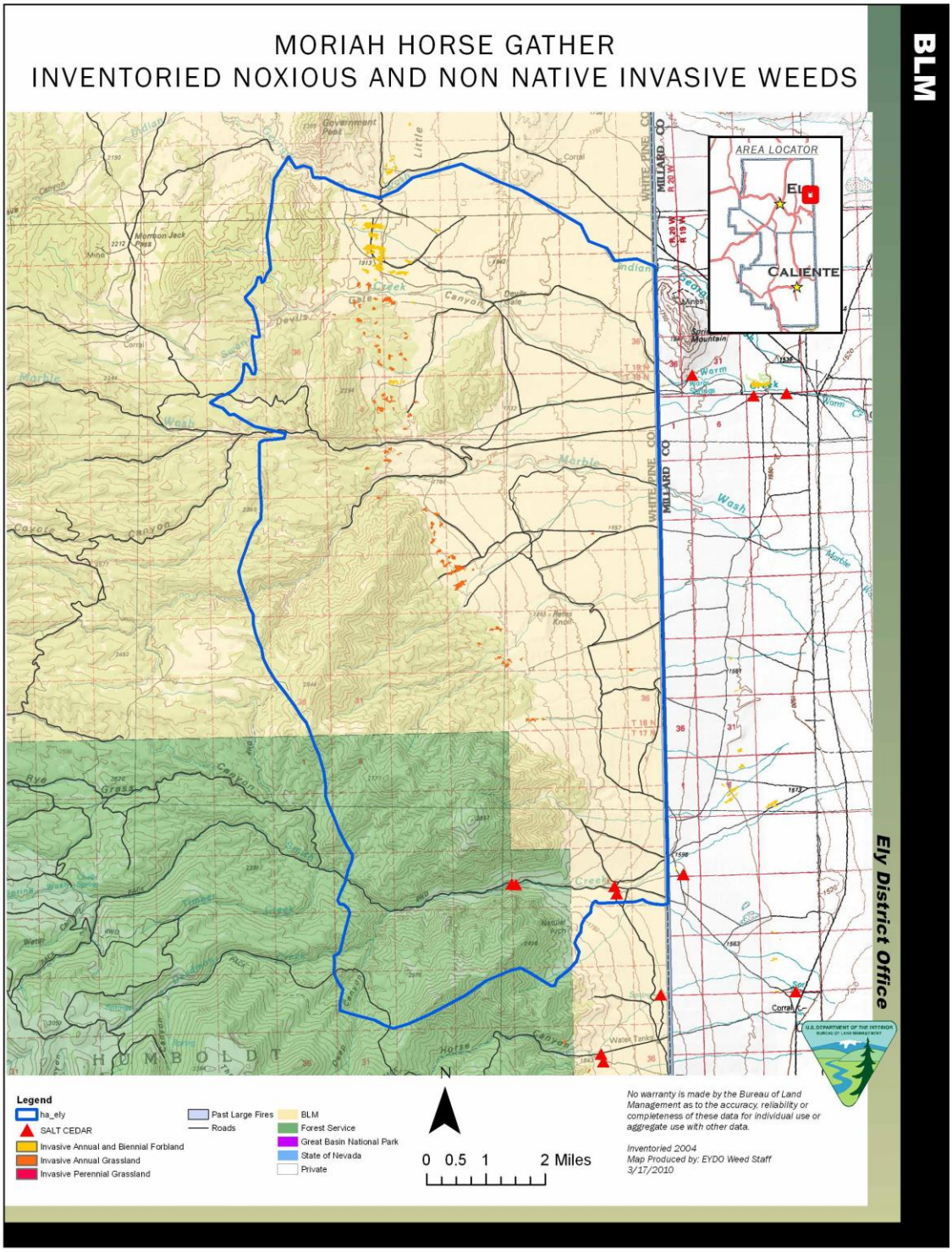
For this project, the Risk Rating is Moderate (35). This indicates that the project can proceed as planned as long as the following measures are followed:

- Gather capture sites will be chosen in previously disturbed areas which are free from noxious weed infestations, to the greatest extent possible.
- Where appropriate, vehicles and heavy equipment used for the completion, maintenance, inspection, or monitoring of ground disturbing activities; or for authorized off-road driving will be free of soil and debris capable of transporting weed propagules. Vehicles and equipment will be cleaned with power or high pressure equipment prior to entering or leaving the work site or project area. Cleaning efforts will concentrate on tracks, feet and tires, and on the undercarriage. Special emphasis will be applied to axels, frames, cross members, motor mounts, on and underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out and refuse will be disposed of in waste receptacles. Cleaning sites will be recorded using global positioning systems or other mutually acceptable equipment and provided to the Ely District Office Weed Coordinator or designated contact person.
- Prior to entry of vehicles and equipment to a planned disturbance area, a weed scientist or qualified biologist will identify and flag areas of concern. The flagging will alert personnel or participants to avoid areas of concern.
- Keep removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.)
- Monitoring of the capture sites and holding pens on public lands will be conducted for at least three years and will include weed detection. Any newly established populations of noxious/invasive weeds discovered will be communicated to the Ely District Noxious and Invasive Weeds Coordinator for treatment.

The Ely District normally requires that all hay, straw, and hay/straw products use in project be free of plant species listed on the Nevada noxious weed list. However, this gather is being implemented through the National Wild Horse & Burro Gather Contract and there are no stipulations in this national contract that require the contractor to provide certified weed-free forage.

When feeding animals on public lands the contractor should be encouraged to acquire locally produced hay from the valleys nearest to the Moriah HA. Although it may not be required to feed weed free hay, by using locally produced hay it would prevent the introduction of weeds from other areas.

Reviewed by:	Sheryl Post	May 13, 2020
	Sheryl Post Natural Resource Specialist	Date


MORIAH HORSE GATHER
INVENTORIED NOXIOUS AND NON NATIVE INVASIVE WEEDS
BLM
AREA LOCATOR
ELY
CALIENTE
Ely District Office
HUMBOLDT
MILLARD CO
WHITE PINE CO
Legend
ha_ely
SALT CEDAR
Invasive Annual and Biennial Forbland
Invasive Annual Grassland
Invasive Perennial Grassland
Past Large Fires
Roads
BLM
Forest Service
Great Basin National Park
State of Nevada
Private
N
0 0.5 1 2 Miles
No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data.
Inventoried 2004
Map Produced by: EYDO Weed Staff
3/17/2010

APPENDIX IV

Table 3. BLM Special Status Species that may occur within the HA (2017)

Common Name	Scientific Name
Birds	
Bald Eagle	*Haliaeetus leucocephalus*
Black Rosy-finch	*Leucosticte atrata*
Brewer's Sparrow	*Spizella breweri*
Ferruginous Hawk	*Buteo regalis*
Flammulated Owl	*Otus flammeolus*
Golden Eagle	*Aquila chrysaetos*
Gray-crowned Rosy Finch	*Leucosticte tephrocotis*
Gray Vireo	*Vireo vicinior*
Great Basin Willow Flycatcher	*Empidonax traillii adastus*
Greater Sage-grouse	*Centrocercus urophasianus*
Juniper Titmouse	*Baeolophus griseus*
Lewis's Woodpecker	*Melanerpes lewis*
Loggerhead Shrike	*Lanius ludovicianus*
Long-billed Curlew	*Numenius americanus*
Long-eared Owl	*Asio otus*
Northern Goshawk	*Accipiter gentilis*
Peregrine Falcon	*Falco peregrinus*
Pinyon Jay	*Gymnorhinus cyanocephalus*
Prairie Falcon	*Falco mexicanus*
Sage Thrasher	*Oreoscoptes montanus*
Short-eared Owl	*Asio flammeus*
Swainson's Hawk	*Buteo swainsoni*
Vesper Sparrow	*Pooecetes graminueus*
Western Burrowing Owl	*Athene cunicularia hypugaea*
Yellow-breasted Chat	*Icteria virens*
Mammals	
Big Brown Bat	*Eptesicus fuscus*
California Myotis	*Myotis californicus*
Fringed Myotis	*Myotis thysanodes*
Hoary Bat	*Lasiurus cinereus*
Little Brown Myotis	*Myotis lucifugus*
Long-eared Myotis	*Myotis evotis*
Long-legged Myotis	*Myotis volans*
Pallid Bat	*Antrozous pallidus*
Pygmy Rabbit	*Brachylagus idahoensis*
Silver-Haired Bat	*Lasionycteris noctivagans*
Spotted Bat	*Euderma maculatum*
Townsend's Big-eared Bat	*Corynorhinus townsendii*

Western Small-footed Bat	*Myotis ciliolabrum*
Reptiles	
Desert Horned Lizard	*Phrynosoma platyrhinos*
Greater Short-horned Lizard	*Phyrnosoma hernandesi*
Sonoran Mountain Kingsnake	*Lampropeltis pyromelana*
Plants	
Intermountain Wavewing	*Cymopterus basalticus*

GRSG Proposed Activities Form IM 2016-038, Attachment 3: Required Design Features (RDF) identified in the Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (SGPA) Appendix C

Project Name: Moriah Herd Area Horse Gather **NEPA #:**

General RDFs		Applied	If RDF not applied, select reason:
RDF Gen 1:	Locate new roads outside of GRSG habitat to the extent practical.	☐ Yes ☑ No	☑ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.
			Rationale if RDF is not applied: No roads proposed.
RDF Gen 2:	Avoid constructing roads within riparian areas and ephemeral drainages. Construct lowwater crossings at right angles to ephemeral drainages and stream crossings (note that such construction may require permitting under Sections 401 and 404 of the Clean Water Act).	☐ Yes ☑ No	☑ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.
			Rationale if RDF is not applied: No roads proposed.
RDF Gen 3:	Limit construction of new roads where roads are already in existence and could be used or upgraded to meet the needs of the project or operation. Design roads to an appropriate standard, no higher than necessary, to accommodate intended purpose and level of use.	☐ Yes ☑ No	☑ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.
			Rationale if RDF is not applied: No roads proposed
RDF Gen 4:	Coordinate road construction and use with ROW holders to minimize disturbance to the extent possible.	☐ Yes ☑ No	☑ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.
			Rationale if RDF is not applied: No new roads proposed.
RDF Gen 5:	During project construction and operation, establish and post speed limits in GRSG habitat to reduce vehicle/wildlife collisions or design roads to be driven at slower speeds.	☑ Yes ☐ No	☐ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.
			Rationale if RDF is not applied: BLM and contractors will drive slower in GRSG habitat.

RDF Gen 6:	Newly constructed project roads that access valid existing rights would not be managed as public access roads. Proponents will restrict access by employing traffic control devices such as signage, gates, and fencing.	☐ Yes ☑ No	☑	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied: No new roads proposed.		
RDF Gen 7:	Require dust abatement practices when authorizing use on roads.	☐ Yes ☑ No	☐	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☑	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # Gen 5
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied: Driving at reduced speeds in GRSG habitat.		
NO RDF 8 Identified				
RDF Gen 9:	Upon project completion, reclaim roads developed for project access on public lands unless, based on site-specific analysis, the route provides specific benefits for public access and does not contribute to resource conflicts.	☐ Yes ☑ No	☑	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied: No reclamation required.		
RDF Gen 10:	Design or site permanent structures that create movement (e.g., pump jack/ windmill) to minimize impacts on GRSG habitat.	☐ Yes ☑ No	☑	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied: No permanent structures		
RDF Gen 11:	Equip temporary and permanent aboveground facilities with structures or devices that discourage nesting and perching of raptors, corvids, and other predators.	☐ Yes ☑ No	☑	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied: No facilities		

RDF Gen 12:	Control the spread and effects of nonnative, invasive plant species (e.g., by washing vehicles and equipment, minimize unnecessary surface disturbance; Evangelista et al. 2011). All projects would be required to have a noxious weed management plan in place prior to construction and operations.	☑ Yes ☐ No	☐ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.	Rationale if RDF is not applied: Weed risk assessment prepared.
RDF Gen 13:	Implement project site-cleaning practices to preclude the accumulation of debris, solid waste, putrescible wastes, and other potential anthropogenic subsidies for predators of GRSG.	☑ Yes ☐ No	☐ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.	Rationale if RDF is not applied:
RDF Gen 14:	Locate project related temporary housing sites outside of GRSG habitat.	☐ Yes ☑ No	☑ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.	Rationale if RDF is not applied: No temporary housing
RDF Gen 15:	When interim reclamation is required, irrigate site to establish seedlings more quickly if the site requires it.	☐ Yes ☑ No	☑ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.	Rationale if RDF is not applied: No reclamation
RDF Gen 16:	Utilize mulching techniques to expedite reclamation and to protect soils if the site requires it.	☐ Yes ☑ No	☑ A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. ☐ An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____ ☐ A specific RDF will provide no additional protection to GRSG or its habitat.	Rationale if RDF is not applied: No reclamation

RDF Gen 17:	Restore disturbed areas at final reclamation to the pre-disturbance landforms and desired plant community.	☐ Yes ☑ No	☑	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied: No reclamation		
RDF Gen 18:	When authorizing ground-disturbing activities, require the use of vegetation and soil reclamation standards suitable for the site type prior to construction.	☐ Yes ☑ No	☑	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied: Gathers used previously disturbed areas.		
RDF Gen 19:	Instruct all construction employees to avoid harassment and disturbance of wildlife, especially during the GRSG breeding (e.g., courtship and nesting) season. In addition, pets shall not be permitted on site during construction (BLM 2005b).	☑ Yes ☐ No	☐	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied:		
RDF Gen 20:	To reduce predator perching in GRSG habitat, limit the construction of vertical facilities and fences to the minimum number and amount needed and install anti-perch devices where applicable.	☐ Yes ☑ No	☑	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied: No facilities or fences constructed.		
RDF Gen 21:	Outfit all reservoirs, pits, tanks, troughs or similar features with appropriate type and number of wildlife escape ramps (BLM 1990; Taylor and Tuttle 2007).	☑ Yes ☐ No	☐	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied:		

RDF Gen 22:	Load and unload all equipment on existing roads to minimize disturbance to vegetation and soil.	☑ Yes ☐ No	☐	A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
			☐	An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. Alternative RDF # _____
			☐	A specific RDF will provide no additional protection to GRSG or its habitat.
		Rationale if RDF is not applied:		

Greater Sage-grouse Habitat Management Areas (2015). Lek data provided by NDOW.