

**Wild Horse Removal Plan
ENVIRONMENTAL ASSESSMENT
Divide Basin Herd Management Area
EA No. WY-040-EA06-107**

July 2006



MISSION STATEMENT

It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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WILD HORSE REMOVAL PLAN
ENVIRONMENTAL ASSESSMENT
for
DIVIDE BASIN HERD MANAGEMENT AREA

EA# WY-040-EA06-107

Prepared by:

**U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ROCK SPRINGS FIELD OFFICE**

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TABLE OF CONTENTS

INTRODUCTION	1
NEED FOR PROPOSED ACTION.....	3
CONFORMANCE WITH LAND USE PLAN	4
RELATIONSHIP TO OTHER STATUTES, REGULATIONS, OR OTHER PLANS.....	4
DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES	6
ALTERNATIVE 1 (PROPOSED ACTION) - GATHER TO LOWER LIMIT OF THE AML RANGE (Lower Limit - 415 Mature Horses in the Divide Basin HMA)	7
ALTERNATIVE 2 - GATHER TO LOWER LIMIT OF THE AML RANGE WITH FERTILITY CONTROL (Lower Limit - 415 Mature Horses in the Divide Basin HMA).....	7
Actions Common to Alternatives 1 and 2.....	8
Age Class and Measures	8
Standard Operating Procedures	9
Capture Methods used in the Performance of a Gather - Contract Operations	9
ALTERNATIVE 3 (NO ACTION) - NO GATHER/REMOVAL	17
ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS.....	17
AFFECTED ENVIRONMENT	18
INTRODUCTION	18
WILD HORSES.....	19
Area Description	19
Gather History and Population Characteristics.....	19
Genetic Diversity and Viability Divide Basin HMA.....	20
CULTURAL, HISTORIC RESOURCES, AND NATIVE AMERICAN CONCERNS..	20
WILDLIFE.....	21
Pronghorn Antelope.....	22
Mule Deer	22
Elk.....	22
Moose.....	22
Raptors	22
Other Species of Interest.....	23
Endangered, Threatened, and Proposed Species	23
LIVESTOCK GRAZING	24
VEGETATION	26
Vegetation General	26
Special Status Plants	26
Invasive Species (Weeds)	27
RECREATION	27
WILDERNESS	28
RIPARIAN AREAS.....	28
PRIVATELY-OWNED AND CONTROLLED LANDS.....	29
ENVIRONMENTAL CONSEQUENCES	29
INTRODUCTION	29
WILD HORSES.....	29

Common Impacts of Alternatives 1 and 2	30
Impacts Specific to Alternative 1.....	32
Impacts Specific to Alternative 2.....	33
Impacts Specific to Alternative 3.....	34
WILDLIFE.....	35
Impacts of Alternatives 1 and 2	35
Big Game (Pronghorn Antelope, Mule Deer, and Elk)	36
Raptors	36
Endangered, Threatened, and Proposed Species	36
Sensitive Wildlife Species	36
Impacts of Alternative 3	36
LIVESTOCK GRAZING	37
Impacts of Alternatives 1 and 2	37
Impacts of Alternative 3	37
VEGETATION	37
Vegetation General	37
Special Status Plants	38
Invasive Species (Weeds)	38
RECREATION	39
Impact of Alternatives 1 and 2.....	39
Impacts of Alternative 3	39
RIPARIAN AREAS.....	39
Impacts of Alternatives 1 and 2	39
Impacts of Alternative 3	40
PRIVATELY-OWNED AND CONTROLLED LANDS.....	40
Impacts of Alternatives 1 and 2	40
Impacts of Alternative 3	41
MITIGATIVE MEASURES.....	41
CONSULTATION AND COORDINATION	41
DISTRIBUTION.....	41
LIST OF PREPARERS.....	42
LITERATURE CITED	43
APPENDIX 1, POPULATION MODELING	45
APPENDIX 2, WILDLIFE MAPS	48

INTRODUCTION

This environmental assessment (EA) has been prepared to analyze the impacts associated with the BLM proposal to remove excess wild horses in the summer or fall of 2006 from the Divide Basin Wild Horse Herd Management Area (HMA) (refer to Map 1 and Table 1) and will also assess whether or not fertility control treatment should be applied to mares released back to the range following the gather. Under this plan, horse numbers would be adjusted to Appropriate Management Level (AML) to prevent deterioration of the range, restore the range to a thriving natural ecological balance, and achieve AML for individual herds while maintaining viable, vigorous, and stable populations.

With passage of the Wild Free Roaming Horse and Burro Act of 1971 (Public Law 92-195), Congress found that: "...wild free roaming horses and burros are living symbols of the historic and pioneer spirit of the West...." In addition, the Secretary of the Interior was ordered to "...manage wild free-roaming horses and burros in a manner that is designed to achieve and maintain a thriving natural ecological balance on the public lands...." From the passage of the Act through the present day, the Bureau of Land Management (BLM) Rock Springs Field Office has endeavored to meet the requirements of the Act. The procedures and policies implemented to accomplish this mandate have been constantly evolving over the years.

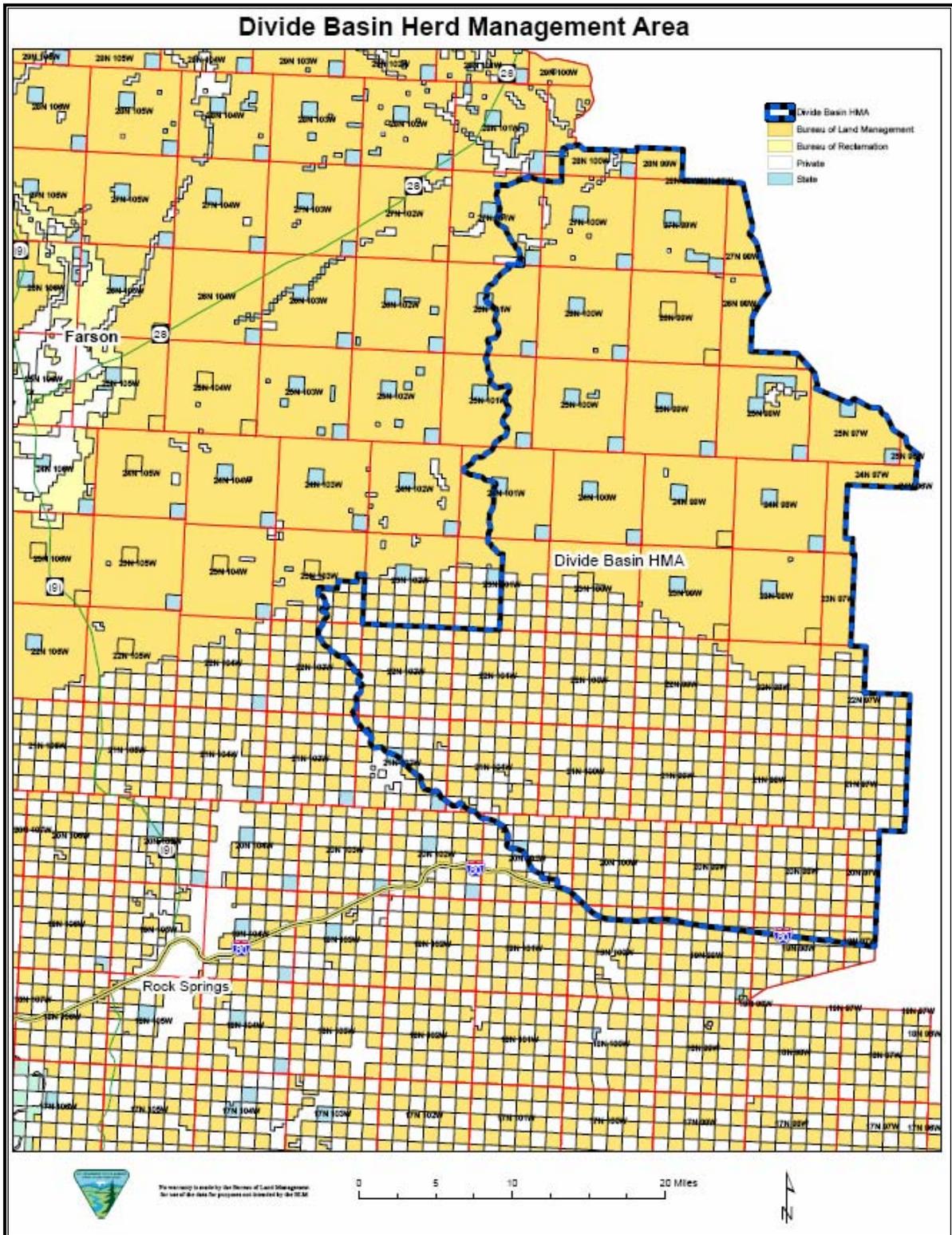
Throughout this period, BLM's experience has grown and knowledge of the effects of current and past management on wild horses and burros has increased. For example, wild horses have been shown to be capable of 18 to 25% increases in numbers annually. This can result in a doubling of the wild horse population every 3 to 4 years. At the same time, nationwide awareness and attention has grown. As these factors have come together, the emphasis of the wild horse program has shifted.

The BLM is proposing to gather wild horses in the Divide Basin HMA and outside of the HMA¹. The Divide Basin HMA is located approximately 40 miles northeast of Rock Springs in the eastern portion of the planning area north of Interstate 80. It encompasses an area from the Rawlins-Rock Springs Field Office boundary west to the Continental Divide. The AML range is 415 to 600 wild horses.

The Divide Basin HMA is within Sweetwater and Fremont counties and is approximately 777,807 acres in size of which 561,835 acres are public (72%), 20,296 acres are State of Wyoming lands (3%), and the remaining 195,676 acres are private (25%). The majority of the private land holdings in the Divide Basin HMA is in a checker board land pattern with every other 1 mile square section (which equals approximately 640 acres per section) alternating between public and private. The checkerboard land status pattern stems back to the land grants given at the turn of the twentieth century to the railroad companies that developed transportation corridors. The Rock Springs Grazing Association is currently in control of a majority of all the

¹ Outside of the HMA includes all lands west of the Divide Basin HMA and east of U.S. Highway 191 and north of Interstate 80 and South of State Highway 28 with the exception of the area known as the Little Sandy Allotment north of State Highway 28. The horses are not uniformly distributed throughout this entire area.

Map 1



private lands in the checkerboard with in the Divide Basin HMA. The Rock Springs Field Office manages the Divide Basin HMA. Table 1 depicts the areas included in this analysis.

Table 1 – Analysis Area

Area	Public Acres	Other Acres	Appropriate Management Level (AML)	Estimated Population (August 2006)
Divide Basin HMA	561,835	215,972	415 - 600	925
Outside of HMA	746,155		0	52
TOTAL	1,307,990		415-600	977

The AML for wild horses within the Divide Basin HMA was established through an agreement with the private land owners at an AML of 415 to 600 adult horses and reaffirmed in the 1997 Green River Resource Management Plan. The Divide Basin HMA is currently estimated at 814 adult wild horses, and a foal crop of 163 foals are anticipated in the spring of 2006 for a total of 977 wild horses.

NEED FOR PROPOSED ACTION

BLM has determined there are excess wild horses present and the Proposed Action is needed in 2006 to restore wild horse herd numbers to levels consistent with the Appropriate Management Level (AML) for the Divide Basin HMA, which would achieve a thriving natural ecological balance.

This determination was made by comparison of census data to the AML of wild horse use for the Divide Basin HMA. It has been determined that current wild horse population is exceeding the range capacity to sustain wild horse use over the long term. The area has experienced five years of drought with one near normal precipitation year in winter and spring of 2004/2005. Removal of excess wild horses is needed to restore and maintain a thriving and natural ecological balance, prevent the range from deterioration, as well as maintain multiple use relationships. Removing excess wild horses to a level below the maximum AML range is needed to allow the population to gradually increase without exceeding the capacity of the Divide Basin HMA over the next several years. The proposed capture and removal is needed at this time to achieve a thriving natural ecological balance between wild horse populations, wildlife, livestock, and vegetation; to improve watershed health; to make “significant progress towards achievement” of Wyoming Rangeland Standards for rangeland health; and to protect the range from the deterioration associated with overpopulation of wild horses as authorized under Section 3(b) (2) of the 1971 Free-Roaming Wild Horse and Burro Act and Section 302(b) of the Federal Land Policy and Management Act of 1976.

This creates the need to establish a framework that will attain and maintain the AML within the Divide Basin HMA and to prevent the establishment of wild horse herds outside of designated HMAs. As wild horse numbers within the HMA rise above AML, competition for critical

habitat requirements increases and leads to instances where the horses move outside the boundaries of the HMAs. Past capture, census, and distribution data collected indicate movement among the horses along the western boundary of the HMA. Wild horses on the western boundary of the Divide Basin HMA tend to move outside of the HMA and reside when horse populations are at their high point.

Management of wild horses is also needed to maintain the health of the public rangelands the horses and other animals depend on and to ensure that BLM activities are in conformance with 43 CFR 4180. It also enables BLM to maintain horse populations at levels that will prevent unwanted damage to state and privately owned lands that occur within and adjacent to the HMAs.

A predictable supply of healthy, adoptable horses is needed to maintain interest in the Adopt-a-Horse-or-Burro Program while it continues to be the primary available means for disposition of excess horses that must be removed from the range.

CONFORMANCE WITH LAND USE PLAN

Gathering and removal of excess wild horses from the Divide Basin HMA is in conformance with the Green River RMP approved on August 8, 1997. The Green River RMP objectives for management of wild horses are to 1) protect, maintain, and control viable, healthy herds of wild horses while retaining their free-roaming nature; 2) provide adequate habitat for free-roaming wild horses through management consistent with principles of multiple use and environmental protection; and 3) provide opportunity for the public to view wild horses.

Wild horse numbers that were agreed to with private land owners and wild horse advocacy groups were addressed in developing the Green River RMP. Wild horse HMAs were established or confirmed through the Green River RMP planning process in compliance with the 1981 District Court Order. Ignoring existing policy, planning decisions, and agreements reached pursuant to the District Court Order are not considered options nor are they within the scope of this EA. This action is in conformance with management objectives found in the land use plan and any proposed change to the AML is beyond the scope of this analysis.

RELATIONSHIP TO OTHER STATUTES, REGULATIONS, OR OTHER PLANS

No other federal, state, or local plans will be affected by managing wild horses and no other permits or authorizing actions are required. The action will be implemented under the authority of Public Law 92-195 (the Wild, Free-Roaming Horse and Burro Act of 1971). The Wild, Free-Roaming Horse and Burro Act (the Act) requires the protection, management, and control of wild free-roaming horses and burros on public lands. Section 3 of the Act allows any excess animal to be sold if the excess animal is more than 10 years of age; or the excess animal has been offered unsuccessfully for adoption at least 3 times. The preparation and transport of wild horses will be conducted in conformance with all applicable state statutes.

The Proposed Action is in conformance with all applicable regulations at 43 Code of Federal Regulations (CFR) 4700 and policies. The following are excerpts from 43 CFR relating to the protection, management, and control of wild horses under the administration of the BLM.

- 43 CFR 4700.0-2 One of the objectives regarding wild horse management is to manage wild horses “as an integral part of the natural system of the public lands under the principle of multiple use....”
- 43 CFR 4700.0-6(a-c) Requires that BLM manage wild horses “...as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat...considered comparably with other resource values...” while at the same time “...maintaining free-roaming behavior.”
- 43 CFR 4710.3-1 “HMAs shall be established (through the land use planning process) for maintenance of wild horse and burro herds.”
- 43 CFR 4710.4 “Management of wild horses and burros shall be undertaken with the objective of limiting the animals’ distribution to herd areas.”
- 43 CFR 4720.1 “Upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately.”
- 43 CFR 4720.2 Removal of strayed or excess animals from private lands.
- 43 CFR 4180 requires that all BLM management actions achieve or maintain healthy rangelands.

All federal actions must be reviewed to determine their probable effect on threatened and endangered plants and animals (the Endangered Species Act).

Federal actions must also be reviewed to determine their probable effect on cultural and historic properties. This process is termed section 106 consultation (Section 106 of the Historic Preservation Act).

A specific Habitat Management Area Plan (HMAP), approved on March 19, 1982, guides the ongoing management of the horses in the Divide Basin HMA. The HMAP contains objectives for both the horses and their habitat along with proposed management actions that will achieve those objectives.

The 1999 Environmental Assessment for Wild Horse Gathering Inside and Outside Wild Horse Herd Management Areas (EA No. WY-040 EA9-041) analyzed gathering in all the HMAs in the Rock Springs Field Office.

The current AML range is in conformance with the August 2003 Wyoming Consent Decree pertaining to the management of wild horses on the public lands of Wyoming. This is an out-of-court settlement agreement between the State of Wyoming and United States Department of the Interior Bureau of Land Management.

Additional guidance has been issued including:

1. Gather Policy and Selective Removal Criteria for Wild Horses (Washington Office Instruction Memorandum 2005-206).
2. Euthanasia Policy (Washington Office Instruction Memorandum 2006-023).

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

This section describes the Proposed Action (Alternative 1) and alternatives including any that were considered but eliminated from detailed analysis. Alternatives analyzed in detail include the following:

- Alternative 1 (Proposed Action) - Gather to Lower Limit of the AML Range (Lower Limit = 415 Mature Horses in the Divide Basin HMA)
- Alternative 2 - Gather to Lower Limit of the AML Range with Fertility Control
- Alternative 3 (No Action) - No Gather/Removal of Horses

Alternatives 1 and 2 were developed based on the need to remove excess wild horses to manage the range in a thriving natural ecological balance and multiple-use relationship and to prevent range deterioration. The removal of wild horses under these alternatives would ensure that the wild horses remaining within the HMA have adequate forage and water to survive and maintain satisfactory physical condition. Removal of excess wild horses would also help to sustain the long-term productivity of the rangeland resources on the public and private lands. Application of fertility control is analyzed under Alternative 2 to determine whether or not its use would be cost effective and result in reducing reproduction rates in mares released back to the range and in reducing gather frequency and decreasing disturbance to herd social structure. Although Alternative 3 (No Action) does not comply with the 1971 Act, as amended, nor meet the purpose and need for this action, it is included as a basis for comparison with the two action alternatives.

ALTERNATIVE 1 (PROPOSED ACTION) - GATHER TO LOWER LIMIT OF THE AML RANGE (Lower Limit - 415 Mature Horses in the Divide Basin HMA)

Under this alternative, BLM would continue a population management strategy for the Divide Basin HMA in which wild horses would be managed in a range from 415-600 adult horses.

This alternative would involve gathering approximately 65% of the estimated population of 977 wild horses. Of the 635 wild horses projected to be gathered, approximately 63 of those gathered may be returned to the Divide Basin HMA to achieve the low range AML. BLM would also assess sex, age and color, herd health (pregnancy/parasite loading/physical condition, etc.) and collect blood samples for genetic analysis. Individual animals would be sorted by age, size, sex, temperament, and/or physical condition. Selected animals would then be returned to the range, while excess wild horses would be sent to Bureau facilities for adoption or long-term holding.

ALTERNATIVE 2 - GATHER TO LOWER LIMIT OF THE AML RANGE WITH FERTILITY CONTROL (Lower Limit - 415 Mature Horses in the Divide Basin HMA)

Alternative 2 would continue a population management strategy for the Divide Basin HMA in which wild horses would be managed in a range from 415-600 mature horses. Part of the alternative would involve gathering approximately 65% of the estimated population of 977 wild horses. Of the 635 wild horses projected to be gathered, approximately 63 of those gathered may be returned to the Divide Basin HMA to achieve the low range AML. Approximately half of the 63 wild horses returned to the Divide Basin HMA would be breeding aged mares. These 32 mares would be administered with fertility control. The Bureau would also assess sex, age and color, herd health (pregnancy/parasite loading/physical condition, etc.). Blood samples would be collected for genetic analysis and individual animals would be sorted by age, size, sex, temperament, and/or physical condition. Selected animals would then be returned to the range. Excess wild horses would be sent to Bureau facilities for adoption or long-term holding.

Administering the fertility control described in Alternative 2 includes immuno-contraceptive research that would be conducted with the results monitored as appropriate. Breeding age mares selected for release back to the range would be treated with Porcine zona pellucidae (PZP) vaccine which would inhibit reproduction of the treated mares for two breeding seasons.

The fertility control protocol that would be followed for Alternative 2 can be reviewed or a copy obtained from the Rock Springs Field Office.

Actions Common to Alternatives 1 and 2

Age Class and Measures

1. An Animal and Plant Inspection Service (APHIS) veterinarian may be on-site, as needed, to examine animals and make recommendations to BLM for care and treatment of wild horses. A veterinarian would be consulted prior to euthanasia in accordance with Washington Office Instruction Memorandum 2006-023.
2. Animals would be removed using a selective removal strategy (Gather Policy and Selective Removal Criteria for Wild Horses, Washington Office IM 2005-206). Selective removal criteria for this gather would include:
 - a. Age Class Five Years and Younger: Wild horses five years of age and younger should be the first priority for removal and placement into the national adoption program.
 - b. Age Class Six Years to Fifteen Years: Wild horses six to fifteen years of age should be removed last and only if management goals and objectives for the herd cannot be achieved through the removal of younger animals.
 - c. Age Class Sixteen years and older: Wild horses aged sixteen years and older should not be removed from the range unless specific exceptions prevent them from being turned back and left on the range.

The national selective removal criteria would be followed to the extent possible. Exceptional animals that represent historic colors, size and/or confirmation may be chosen for release outside of the selective removal priorities. Weak, unhealthy, and unthrifty animals would not be selected for release back onto the HMA.

To enhance the selection process, more animals than required by the Proposed Action or Alternatives would initially be separated for release, and then a final sorting completed to select the exact animals for release, based on traits and ages of all of the animals initially selected for release. Additionally, in the case that a certain number of wild horses evade gather, and have been confirmed by the BLM, Wild Horse and Burro Specialist, the total number of animals released may be reduced by this number.

3. Blood samples may be acquired to determine whether or not BLM management is maintaining acceptable genetic diversity (avoiding inbreeding depression). The blood samples would be collected from horses returned to the HMA, if possible. Other data including sex and age distribution, reproduction, survival, condition class information (using the Henneke rating system), color, size and other information may also be recorded, along with the disposition of that animal (removed or released).

4. A primary focus would be placed on gathering horses that are located on grazing allotments outside of the HMA. All areas outside of the HMA would be considered total removal areas.
5. Gather operations would be conducted in accordance with the Standard BLM Operating Procedures for Wild Horse Removal.

Standard Operating Procedures

Gathers would be conducted by contractors or agency personnel. The same procedures for gathering and handling wild horses and burros apply whether a contractor or BLM personnel are used. The following stipulations and procedures will be followed to ensure the welfare, safety and humane treatment of the wild horses and burros in accordance with the provisions of 43 CFR 4700.

Gathers are normally conducted for one of the following reasons:

- a. Regularly scheduled gathers to obtain or maintain the Appropriate Management Level (AML).
- b. Drought conditions that could cause mortality to wild horses and burros due to the absence of water or forage, and where continued grazing may result in a downward trend to the vegetative communities due to plant mortality and reduced vigor and productiveness.
- c. Fires that remove forage to the extent that there is inadequate forage to sustain the population or to allow recovery of native vegetation.
- d. Utilization levels that reach a point where a continued increase in utilization would cause a downward trend in the plant communities and impede meeting standards for rangeland health.
- e. Monitoring indicates that wild horse and burro use would begin to cause a downward trend in riparian function or not permit the recovery of riparian vegetation determined to be in undesirable condition.

Capture Methods used in the Performance of a Gather - Contract Operations

1. Helicopter - Drive Trapping

Capture attempts may be accomplished by utilizing a helicopter to drive animals into a temporary trap. If this method is selected 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 BLM. Under no circumstances shall animals be tied down for more than one hour.
- b. The contractor shall assure that bands remain together, and that foals shall not be left behind.

- c. A domestic saddle horse(s) may be used as prada (or "Judas") horse to lead the wild horses into the trap site. Individual ground hazers may also be used to assist in the gather.
2. Helicopter - Roping

Capture attempts may be accomplished by utilizing a helicopter to drive animals to ropers. If this method is selected the following applies:

- a. Under no circumstances shall animals be tied down for more than one hour.
- b. The contractor shall assure that bands remain together, and that foals shall not be left behind.

BLM Conducted Gather - Non-Contract Operations

1. Gather operations will be conducted in conformance with the Wild Horse and Burro Aviation Management Handbook (March 2000).
2. Two-way radio communication between the helicopter and the ground crew will be maintained at all times during the operation.

Safety and Communications

1. The Contractor shall have the means to communicate with the BLM 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 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 BLM, violates contract rules, is 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 BLM.
 - b. The Contractor shall obtain the necessary FCC licenses for the radio system.
 - c. All accidents occurring during the performance of any delivery order shall be immediately reported to the BLM.

2. Should the helicopter be employed, 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 and applicable regulations of the State in which the gather is located.
 - b. Fueling operations shall not take place within 1,000 feet of the animals.
 - c. At time of delivery order completion, the contractor shall provide the BLM with a completed copy of the Service Contract Flight Hour Report.

Trapping and Care

1. The primary concern of the contractor is the safe and humane handling of all animals captured. All capture attempts shall incorporate the following:
 - a. All trap and holding facilities locations must be approved by the BLM prior to construction. The Contractor may also be required to change or move trap locations as determined by the BLM. All traps and holding facilities not located on public land must have prior written approval of the landowner.
 - b. A cultural resources investigation by an archaeologist or an archaeological technician would be conducted prior to trap or holding facility construction. If cultural values are found, an alternative site would be selected.
 - c. Prior to facility (temporary traps and holding corrals) construction, the proposed locations would be examined for the presence of noxious weeds. If it is determined that noxious weeds are present, the contractor would be instructed to locate the facilities elsewhere. The contractor and his personnel would also be instructed to avoid camping in or driving through noxious weed infested areas.
2. The rate of movement and distance the animals travel shall not exceed limitations set by the BLM who will consider terrain, physical barriers, weather, condition of the animals, and others factors.
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 with plywood (without holes) or like material.
 - 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 restraining chute to restrain, age, or provide additional care for animals shall be placed in the runway in a manner as instructed by or in concurrence with the BLM.
 - 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, 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. Eight linear feet of this material shall be capable of being removed or let down to provide a viewing window.
 - e. All pens and runways used for the movement and handling of animals shall be connected with hinged self-locking gates.
4. No fence modifications will be made without authorization from the contracting officer's representative or project inspector (COR/PI). The Contractor/BLM shall be responsible for restoration of any fence modification.
 5. When dust conditions occur within or adjacent to the trap or holding facility, the Contractor/BLM 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, and estrays from the other animals. Animals shall be sorted by age, number, size, temperament, sex, and condition when in the holding facility to minimize, to the extent possible, injury due to fighting and trampling. Under normal conditions, the BLM will require that animals be restrained for the purpose of determining an animal's age or other similar practices. In these instances a portable restraining chute will be provided by the BLM. Alternate pens shall be furnished by the Contractor to hold animals if the specific gathering requires the animals be released back into the capture 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 BLM.

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.
8. It is the responsibility of the Contractor/BLM to provide security to prevent loss, injury or death of captured animals until delivery to final destination.
9. The Contractor/BLM shall restrain sick or injured animals if treatment is necessary. A veterinarian may be called to make a diagnosis and final determination. Destruction shall be done by the most humane method available. Authority for humane destruction of wild horses (or burros) is provided by the Wild Free-Roaming Horse and Burro Act of 1971, Section 3(b)(2)(A), 43 CFR 4730.1, and BLM Manual 4730 - Destruction of Wild Horses and Burros and Disposal of Remains, and is in accordance with BLM policy as expressed in Washington Office Instruction Memorandum No. 2006-023.

Any captured horses that are found to have the following conditions may be humanely destroyed:

- a. Displays a hopeless prognosis for life;
 - b. Suffers from a chronic or incurable disease, injury or serious physical defect; (includes severe tooth loss or wear, severe club feet, and other severe acquired or congenital abnormalities);
 - c. Would require continuous treatment for the relief of pain and suffering in a domestic setting;
 - d. Is incapable of maintaining a Henneke body condition score greater than two, in its present environment;
 - e. Has an acute or chronic injury, physical defect, or lameness that would not allow the animal to live and interact with other horses, keep up with its peers or exhibit behaviors which may be considered essential for an acceptable quality of life constantly or for the foreseeable future; or
 - f. Suffers from an acute or chronic infectious disease where State or Federal animal health officials order the humane destruction of the animal as a disease control measure.
10. Animals shall be transported to final destination from temporary holding facilities within 24 hours after capture unless prior approval is granted by the BLM 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 BLM. 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 BLM. 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 BLM. Animals shall not be allowed to remain standing on trucks while not in transport for a combined period of greater than three (3) hours. Animals that are to be released back into the capture area may need to be transported back to the original trap site. This determination will be at the discretion of the BLM.

11. The BLM will issue a Notice of Intent to Impound Unauthorized Livestock prior to all gathers. Branded or privately owned animals whose owners are known will be impounded by BLM, and if not redeemed by payment of trespass and capture fees, will be sold at public auction. If owners are not known, the private animals will be turned over to the State for processing under Wyoming estray laws.

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 BLM 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 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 trap site(s) to temporary holding facilities, and from temporary holding facilities to final destination(s). Sides or stock racks of all trailers used for transporting animals shall be a minimum height of 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 BLM.

5. Floors of tractor-trailers, stock trailers, and the loading chute shall be covered and maintained with wood shavings to prevent the animals from slipping.
6. Animals to be loaded and transported in any vehicle or trailer shall be as directed by the BLM 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:
 - a. 11 sq. ft. per adult horse (1.4 linear ft. in an 8-ft. wide trailer);
 - b. 6 sq. ft. per horse foal (.75 linear ft. in an 8-ft. wide trailer).
7. Prior to any gathering operations, the BLM will provide for a pre-capture evaluation of existing conditions in the gather areas. The evaluation will include animal condition, prevailing temperatures, drought conditions, soil conditions, road conditions, and a topographic map with location of fences, other physical barriers, and acceptable trap locations in relation to animal distribution. The evaluation will determine the level of activity likely to cause undue stress to the animals, and whether such stress would necessitate a veterinarian be present. If it is determined that capture efforts necessitate the services of a veterinarian, one would be obtained before capture would proceed. The Contractor will be informed of all the conditions and will be given directions regarding the capture and handling of animals to ensure their health and welfare is protected.
8. If the BLM determines that dust conditions are such that animals could be endangered during transportation, the Contractor will be instructed to adjust speed.
9. Trap sites will be located to cause as little injury and stress to the animals, and as little damage to the natural resources of the area, as possible. Sites will be located on or near existing roads. Additional trap sites may be required, as determined by the BLM, to relieve stress caused by specific conditions at the time of the gather (e.g., dust, rocky terrain, temperatures, etc.).

Animal Characteristics and Behavior

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

Wildlife Protection

1. Horse gathers will avoid big game crucial winter range from November 15 through April 30.
2. Traps will not be constructed or operated within 1/2 to 1 mile (for Ferruginous hawks and golden eagles) of raptor nests from March 1 through July 15 to avoid causing nest abandonment.
3. For protection of black-footed ferrets and white-tailed prairie dogs, all prairie dog towns will be avoided.
4. Avoid setting up traps on, or within ¼ mile of greater sage-grouse leks from March 1 through April 15.
5. Exceptions may be granted for mitigation measures.

Public Participation

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 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.

Responsibility and Lines of Communication

Rock Springs Field Office

Contracting Officer's Representatives

Rock Springs Field Office

Jay D'Ewart

Project Inspector

Rock Springs Field Office

Jay D'Ewart

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 Rock Springs Assistant Field Manager for Resources will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, State Office, National Program Office, Rock Springs corral office and Canyon City corral 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 Assistant Field Manager for Resources. This individual will be the primary contact and will coordinate the contract 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 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 capture 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.

ALTERNATIVE 3 (NO ACTION) - NO GATHER/REMOVAL

Under Alternative 3, the No Action Alternative, no removal of excess wild horses would take place. The herd would be allowed to increase until it reached levels where predation and environmental factors, coupled with density-dependant adjustments in reproductive rates, stabilized the populations. Considering the limited forage and water available due to the continuing drought conditions in the Divide Basin HMA, it is anticipated that selection of this alternative could result in a rapid decline in the physical condition of the wild horses in the near future from increasing competition for available forage and water. This alternative would not be in conformance with the 1971 Act or the Green River RMP.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS

Using Fertility Control Measures Only to Regulate Wild Horse Populations

Periodic capture operations would be required to administer PZP vaccine to mares, or suitable remote delivery methods would need to be developed. This alternative was eliminated from further analysis since the vaccine has not been formally approved by the U.S. Food and Drug Administration for management-based applications. Even with formal approval, an effective remote delivery methodology (aerial or water based) has not been developed for current formulations. This alternative would not reduce wild horse numbers to a level that current rangeland conditions within the HMA can support and would not meet HMA management objectives.

Closure of HMA to Livestock Grazing

This alternative was not analyzed in detail because its significant features are contained in other alternatives. If livestock grazing was reduced or eliminated to increase AML, the AML would still be determined in a manner which would ensure a thriving natural ecological balance, and the maintenance of those higher horse populations would have effects essentially the same as Alternatives 1 and 2. If livestock grazing was eliminated as a precursor to uncontrolled wild horse population increases rather than in response to them, the effects would be essentially the same as Alternative 3. The Act does not provide for arbitrary reduction in domestic livestock use unless areas are established for the exclusive use of wild horses.

Elimination of All Wild Horses from the HMA

This alternative was not analyzed in detail because the land use planning process has affirmed that the public, in general, wishes to see the Act complied with and wishes to have healthy horses living in healthy habitats within the area.

AFFECTED ENVIRONMENT

INTRODUCTION

The assessment area covered by this analysis is within the jurisdiction of the Rock Springs Field Office, Wyoming BLM. It is bordered on the south by Interstate Highway 80, on the east by the Rock Springs-Rawlins Field Office boundary, on the north by State Highway 28, and on the west by U.S. Highway 191. As shown in Table 1, over 1.3 million acres of public and private lands are included in this analysis. The Divide Basin HMA analysis area occupies 73% of the public lands under the jurisdiction of the Rock Springs Field Office. Map 1 portrays the analysis area. The Divide Basin HMA contains all or portions of four grazing allotments within the Rock Springs Field Office.

Critical elements of the human environment and their potential to be affected by the Proposed Action and Alternatives must be considered. These critical elements are listed in Table 2. The elements that are determined to be not affected will not be analyzed or discussed further in this document.

Table 2 – Critical and Other Elements of the Human Environment

Critical Elements	Status	Analyzed in Detail in this EA
Cultural/Historic	Potentially Affected	Yes
Native American Religious Concerns	Potentially Affected	Yes
Wilderness/Wilderness Study Areas	Potentially Affected	Yes
Wetlands/Riparian Areas	Potentially Affected	Yes
Invasive Species (analyzed with Wildlife & Vegetation)	Potentially Affected	Yes
ACEC	Not Affected	No
Air Quality	Not Affected	No

Critical Elements	Status	Analyzed in Detail in this EA
Farmland, Prime/Unique	Not Present	No
Wastes, Hazardous, Solid	Not Present	No
T&E Species (analyzed with Wildlife & Vegetation)	Potentially Affected	Yes
Water Quality	Not Affected	No
Floodplains	Not Present	No
Environmental Justice	Not Present	No
Wild & Scenic Rivers	Not Present	No
Other Resource Elements		
Wildlife	Potentially Affected	Yes
Wild Horses	Potentially Affected	Yes
Livestock Grazing	Potentially Affected	Yes
Vegetation	Potentially Affected	Yes
Soils	Potentially Affected	NO
Recreation	Potentially Affected	Yes
Private Lands	Potentially Affected	Yes
Socioeconomics	Potentially Affected	No
Fluid or Solid Minerals	Not Affected	No
Visual Resource Management	Not Affected	No

WILD HORSES

Area Description

The Divide Basin HMA is located approximately 40 miles northeast of Rock Springs, within Sweetwater and Fremont Counties, Wyoming. The Divide Basin HMA is approximately 777,807 acres in size. The area outside of the HMA encompasses some 746,155 acres. Elevation ranges from 6,675 feet along Alkali Basin, to 9,431 feet on Continental Peak. Summers are hot, and winters can range from mild to bitterly cold.

Annual precipitation ranges from 7 to 12 inches per year. Overall precipitation from 1999 through 2003 was approximately 65% of normal. In the years 2004 and 2005 precipitation and forage production was closer to normal. About half of the precipitation falls during the growing season from April through June, with the remainder coming in the winter and with high intensity summer thunderstorms. Much of the precipitation from summer thunderstorms runs off in numerous drainages. Some of this water is captured in reservoirs or pits, and is the primary source of water for wild horses, livestock, and wildlife.

Gather History and Population Characteristics

In 2003, a wild horse gather was conducted. A total of 836 horses were gathered and 100 of those horses gathered were released. During the 2003 gather, many of the older and younger horses were removed, returning the herd to a more typical age structure. Table 3 shows the number of wild horses that were gathered and the number removed.

Table 3 – Number of Wild Horses Gathered, Removed, and Remaining

Year	Hma	Number Gathered	Number Removed	Estimated Number Remaining
2003	Divide Basin	570	470	420
2003	Divide Basin/ Outside HMA	266	266	0

Following the 2003 gather, the sex ratio of the herd was estimated to be 47% female and 53% male, due to a slightly larger percentage of female horses which were removed from the HMA.

The current estimated wild horse population, prior to the 2006 foaling period, is estimated to be 814 in the Divide Basin HMA. The horse population following the 2006 foaling period is projected to be approximately 977 in the Divide Basin HMA.

No predation of wild horses has been documented in the HMA and it is considered to have little or no effect on the wild horse population.

Genetic Diversity and Viability Divide Basin HMA

^ Blood samples were collected from horses removed during the 2003 gathers to develop genetic baseline data (e.g. genetic diversity, historical origins of the herd, unique markers). The samples were collected from horses in both the southern part and the northern part of the Divide Basin HMA. The samples were analyzed by Dr. E. Gus Cothran, Department of Veterinary Science, University of Kentucky. His conclusions and recommendations regarding genetic diversity in the Divide Basin southern and northern herds are summarized as follows:

“Overall genetic variability of both the North Divide Basin and South Divide Basin is quite high. This appears to be due largely to a mixed origin to the herds but the relatively large population size for this HMA contributes to the high variability as well. A considerable proportion of the diversity is based upon variants at the frequency, which could be lost from the herds fairly easily, but with the large population size, loss of variation of this type should be slow. Both herds appear to be primarily derived from American saddle and ranch type horses but the South herd also has a significant Spanish component” (Cothran 2004).

“No immediate action is required for either the North Divide Basin or the South Divide Basin herds. Variation is quite high and the overall AML is high enough to maintain the variation for a long period of time, barring a catastrophic reduction in population size.” (Cothran, 2004)

CULTURAL, HISTORIC RESOURCES, AND NATIVE AMERICAN CONCERNS

Site types typically encountered in the Divide Basin HMA include prehistoric open camps, prehistoric lithic scatters, stone circle sites, rock alignments, rock art, historic period trash associated with the ranching industry, historic period trails, the Point of Rocks to South Pass

City Stage road, South Pass ACEC, historic mines, and historic railroad sites. Cultural resource studies to support wild horse capture will follow the Wyoming State Protocol for the BLM National Programmatic Agreement.

For the purposes of consultation under Section 106 of the National Historic Preservation Act of 1966 an undertaking is any activity which is funded in whole or in part by the Federal Government or is under a Federal approval. Under the Wyoming State Protocol Agreement implementing Section 106 consultation for the Bureau of Land Management in Wyoming animal trap and corrals which are used less than three days have been consulted upon programmatically.

Reuse of the same location could not occur without consultation if the total time of use exceeded the three day limit. There is no exemption for case-by-case review of campsites, staging areas, and other locales with the potential to affect cultural resources.

Many of the above kinds of resources within the cumulative analysis study area are of cultural importance to Native American Tribes. Wild horse gathering related traps, corrals, and features will not be placed within or immediately adjacent to any of these sites without first completing consultations with the affected Tribes in accordance with BLM Handbook H-8160-1. Coordination between the wild horse program and the cultural program is key to assuring that known areas of cultural importance are not impacted.

For most traps, there will be will no individual cultural consultations. Such instances can only occur if there will be no permanent features and the amount of use and associated disturbance will be limited to three days or less use as prescribed in Appendix B #21 of the Wyoming State Protocol Agreement. The Wild Horse Coordinator will identify locales planned for utilization prior to use and will coordinate with a Rock Springs cultural resources specialist to determine if there are any known cultural resource issues with a proposed location. If such issues exist an alternate location will be chosen.

For locations where a stay more than three days is anticipated or the activity is something other than a trap or corral, the field office cultural resource specialist will determine the appropriate cultural resource studies to be undertaken. In most cases this would consist of a Class III cultural resource inventory in the area where the horse trap or handling facility will be located. A report would be written on that inventory and a copy sent to the Wyoming State Historic Preservation Officer along with the Bureau's determinations of eligibility of any resources recorded and the effect of the undertaking.

Increased gas development in the area is generating additional data and experience concerning the cultural and historic resources of the area, which may effect future wild horse management actions. The presence of wild, free-roaming horses in the Divide Basin area is, itself, considered by many professionals and publics alike to be an important part of the historical character of the area. Cultural Resources are not anticipated to be impacted, therefore, will not be given further consideration.

WILDLIFE

Over 350 species of wildlife, including: big game, furbearers, waterfowl, shorebirds, songbirds, game birds, amphibians, reptiles and many other species are found within the Divide Basin

HMA. Populations of big game included antelope, mule deer, elk and moose. Much of the HMA contains crucial winter range for these species.

Pronghorn Antelope

The HMA includes portions of the Sublette and Red Desert Herd Units (Appendix 2, Map 1). Currently the Red Desert and Sublette pronghorn herds are at, or slightly below their population objectives. The Red Desert herd is at 15,000 animals and the Sublette herd is at 44,700 animals. Antelope utilize the upland portion of the project area year-round, and approximately 20% of the gather area is identified as crucial winter range for pronghorn antelope.

Antelope live year round and winter in much of the HMA. Crucial winter range within the HMA is shown on map 2. During the winter months they often form loose aggregations and feed primarily on sagebrush. They consume snow for their water needs during winter when open sources of water are not available. Winter weather may be the most limiting factor to pronghorn populations. Severe winters with deep-crusting snow and sub-zero temperatures can limit access to food and greatly increase the animal's caloric needs causing very high mortality. One example of this is the winter of 1971-1972 when the Sublette herd alone was reduced by 74%.

Mule Deer

The HMA encompasses portions of the Steamboat and South Wind River deer herd units (Appendix 2, Map 2). Approximately 15% of the project area is identified a crucial winter range for deer. Mule deer occur throughout most of the HMA with most populations being below the Wyoming Game and Fish herd objectives. Current populations are estimated at 3,100 for the Steamboat herd and 9,600 for the South Wind River herd. They utilize both rangelands and forest, feeding primarily on brush and trees in the winter.

Elk

The HMA lies within the Steamboat herd unit (Appendix 2, Map 3). Elk utilize portions of the HMA year round, and approximately 2% of the project area is identified as crucial winter range for elk. The Steamboat elk herd has been gradually decreasing for several years now and is now believed to be at, or near the population objective level of 1,200 elk.

Moose

Moose occur spring through fall in the northern portion of the HMA area along the rivers, ponds, and some forested mountains. Populations are stable to increasing, estimated at 450 animals for the HMA. Moose and feral horses do not typically use the same habitat and will not be discussed further in this document.

Raptors

There are 17 species of raptors that have the potential of nesting in the HMA and another three species that are occasional visitors (Appendix 2, Map 4). Golden eagles and great horned owls inhabit the area and may start nesting as early as February. Golden eagle nests are most often located on cliffs, canyon walls and pinnacles. However, they will occasionally nest in the tops of snags and open trees. Great horned owls also nest in trees and cliffs. Ferruginous hawks generally arrive in the HMA in mid April to begin their courtship and subsequent nesting.

Ferruginous hawks occasionally build their nests on the ground. However, they are not expected to begin nesting until late April or early May. Burrowing owls nest in the HMA in abandoned prairie dog towns or burrows they excavate themselves. Burrowing owls are expected to begin nesting in the area in May. Other raptors inhabit the area but are not expected to be directly or indirectly impacted by the proposed action. Known raptor nest sites are shown on Map 4 along with Mountain Plover.

Other Species of Interest

Some of the other species that occur in the planning area but not expected to be affected by the proposed action are: bob cat, black bear, mountain lion, ground squirrels, badgers, red fox, rodents, weasels, bats, waterfowl, song birds, fish, invertebrates, amphibians, and reptiles. These species will not be further analyzed.

Endangered, Threatened, and Proposed Species

Table 4 presents listed and proposed for listing species considered in this analysis.

Table 4 - Listed and Proposed Species			
Species	Status	Expected Occurrence	Determination
Black-footed ferret (Mustela nigripes)	Endangered	Potential resident in prairie dog (Cynomys sp.) colonies	May affect/Not likely to adversely affect. Prairie dog towns are avoided due to potential for injury to wild and domestic horses.
Gray Wolf (Canis lupus)	Experimental Population	Migrant	Not likely to jeopardize.
Bald eagle (Haliaeetus leucocephalus)	Threatened	Nesting. Winter resident. Migrant	No affect. No potential nesting or roosting habitat at gathering areas or trap sites.
Colorado and Platte River Depletions affecting downstream resident species	Endangered and Threatened	Downstream residents of the Green or Platte River Systems	No affect. No water depletions planned.

Black-footed Ferret. Potential black-footed ferret habitat exists in the project area. Surveys conducted in relation to other development activities in the Divide Basin HMA have not recorded black-footed ferret. Trap sites and staging areas associated with this project will not be placed in prairie dog towns. Due to these factors, the BLM has made a “may affect not, not likely to adversely affect” determination.

Gray Wolf. The gray wolf is an experimental population that has the potential to occur throughout the project area. The BLM has determined that the proposed action is not likely to jeopardize the continued existence of the species. The Rocky Mountain population of Gray Wolf

is listed as a “Non-essential Experimental Population”. This species will not be given further consideration in this analysis.

Bald Eagle. No bald eagles have been recorded nesting or roosting in the HMA, as perennial water is limited. The BLM has made a “no effect” determination. This species will not be given further consideration in this analysis.

Colorado and Platte River Downstream Species. No water depletions are associated with this gather. The BLM has made a “no effect” determination and these species will not be given further consideration in this analysis.

Sensitive Wildlife Species. A number of animal species potentially present in the project area have been accorded “sensitive species” status (IM WY-2001-040). Sensitive species potentially present in the Divide Basin project area include: some species of raptors (discussed above), Wyoming pocket gopher, pygmy rabbit, swift fox, dwarf shrew, spotted bat, white-tailed prairie dog, greater sage-grouse, sage thrasher, loggerhead shrike, Brewer’s sparrow, sage sparrow, mountain plover, northern leopard frog, and Great Basin spadefoot toad. Of these species the Wyoming pocket gopher, pygmy rabbit, swift fox, dwarf shrew, spotted bat, northern leopard frog, and Great Basin spade foot toad are not expected to be impacted and will not be discussed further.

White-tailed Prairie Dogs. White-tailed prairie dogs inhabit much of the HMA wherever there is suitable soils and flat topography. With their clipping of the vegetation and tilling of the soil they improve and in some cases create habitat for many other species such as black-footed ferrets, mountain plover, swift fox and burrowing owls.

Greater Sage-grouse, Sage Thrasher, Loggerhead Shrike. The greater sage-grouse (Appendix 2, Map 5), sage thrasher, loggerhead shrike, Brewer’s sparrow, and sage sparrow (sagebrush obligates) occur throughout much of the HMA wherever there is sufficient sagebrush habitat. Long-term trends in greater sage-grouse have shown a 70% decrease in populations over the past fifty years. Although trends are not known for the other sagebrush obligates, a similar decline is expected. The summer of 2005 showed good greater sage-grouse chick survival and is expected to have a positive impact on local populations. The greater sage-grouse usually arrive on their traditional strutting grounds, called “leks” in March. However, if weather permits they may arrive as early as mid-February. An open relatively flat area adjacent to sagebrush habitat generally characterizes the leks. Designated “breeding”, “winter concentration area” for greater sage-grouse and known leks with a two-mile buffer zone are shown on Map 5. The map also shows at least 28 leks occurring within the Divide Basin HMA.

Mountain Plover. Mountain plover (Appendix 2, Map 4) have been recorded in the project area, and potential mountain plover breeding/nesting habitat exists throughout the Divide Basin HMA.

LIVESTOCK GRAZING

Domestic livestock are authorized to use the public lands under the authority of the Taylor Grazing Act, as amended. Livestock belonging to specific livestock operators are authorized to

use specific areas of rangeland (grazing allotments) for specified periods of time in specified numbers. Four of the 80 grazing allotments in the Rock Springs Field Office jurisdiction occur within the Divide Basin HMA (see Table 5). In all cases, the grazing allotment and the authorization of livestock use predate passage of the Wild, Free-roaming Horse and Burro Act.

Table 5 – Grazing Allotments

Allotment Name	Public Acres	State Acres	Private Acres	Total Acres
Allotments Within HMA				
Rock Springs ¹	186,073	773	191,770	378,616
Red Desert	243,676	12,839	999	257,514
Continental Peak	83,146	3,920	3,156	90,222
Bush Rim ¹	51,487	2,855	0	54,343
Sub-Total	564,382	20,387	195,925	780,695

Allotments Outside of HMAs

Rock Springs ²				120,100 (approximate)
Bush Rim				44,458
Pacific Creek	185,056	9,170	2,706	196,932
Sands	105,082	4,418	1,608	111,108
Steamboat Mountain	34,091	2,107	1,089	37,287
Fourth of July	9,791	1,000	10,795	21,586
Little Sandy	103,147	6,928	4,609	114,684
Sub-Total	437,167	23,623	20,807	646,155

¹ Only the portion inside the HMA

² The entire Rock Springs Allotment contains a total of 2,061,062 acres in the following ownership: 1,055,477 acres of public land, 20,782 acres of state land, 984,803 acres of private land.

The rangelands in the HMA provide seasonal grazing for livestock (cattle and sheep). Wherever domestic livestock are authorized to use the public lands, range improvements are present. Most of these range improvements are operated and maintained by the livestock operators, and they all affect wild horses. Fencing is primarily used to keep livestock in proper allotments during specified seasons of use. Livestock water is provided by springs, wells, intermittent and ephemeral streams, pipelines, and reservoirs. Sheep use snow in the winter as a water source. Sheep grazing in the HMA is mostly within the winter period. Cattle grazing is about evenly distributed amongst the seasons. The overall decline in the range sheep industry has resulted in a low and variable rate of actual use by sheep operators. Cattle use levels have been fairly constant in recent years. Table 6 depicts the current status of livestock grazing in the HMA. Some sheep operators have expressed interest in converting their idle sheep grazing use into active cattle grazing.

Table 6 - Livestock Preference within the Divide Basin HMA

Grazing	Allotmen	Number	Active	Type Use	Seasons and
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Allotment	t Number	of Operator s	Preference (AUMs)		Dates
Rock Springs	13018	22	108,093	Cattle and Sheep	Yearlong
Red Desert	13012	3	9,758	Cattle and Sheep	5/1 to 12/15
Continental Peak	13011	3	5,786	Cattle and Sheep Trail	5/1 to 10/31
Bush Rim	13013	3	3,214	Cattle and Sheep	5/25 to 9/15

VEGETATION

Vegetation General

There are a variety of vegetation types in the Rock Springs Field Office areas where wild horses can be found, both within and outside of wild horse HMAs. Vegetation types include: sagebrush, sagebrush/grass, saltbush, greasewood, desert shrub, juniper, grass, meadow, broadleaf trees, conifer, mountain shrub, half shrub and perennial forb, and badlands. The predominant vegetation type is sagebrush/grass.

Plant communities are very diverse in this large area, reflecting the diversity in soils, topography, and geology found there. The high-elevation, cold-desert vegetation of the project area is composed predominately of Wyoming big sagebrush/grass and Gardner saltbush vegetation communities. Other plant communities present are: desert shrub, grassland, mountain shrub, juniper woodlands, and a very few aspen woodlands. Needle-and-thread, Indian ricegrass, bluebunch wheatgrass, western wheatgrass, junegrass, mutton bluegrass, and threadleaf sedge are the predominant grasses and grass-like species. Wyoming big sagebrush, black sagebrush, bud sage, salt sage, four-wing salt bush, greasewood, bitterbrush, and true mountain mahogany are important shrub species.

Wild horses generally prefer perennial grass species as forage. Shrubs are more important during the fall and winter. The species of grasses preferred depends on the season of the year. Needle and thread, and Indian ricegrass are most important during the winter and spring and wheatgrasses during the summer and fall.

Special Status Plants

Special status plants are those species that are federally listed as threatened or endangered, proposed for listing, or candidates for listing under the Endangered Species Act (ESA). They also include species designated by each BLM State Director as sensitive and those listed or proposed for listing by a state in a category implying potential endangerment or extinction. BLM is mandated to protect and manage threatened, endangered, candidate, proposed, and sensitive

species and their habitats. The federally listed Ute ladies’-tresses has habitat in the area but surveys throughout the area have not found any populations. It occurs in riparian areas below 7,000 feet. The Wyoming special status plant species that grow or have potential habitat in the project area are listed in Table 7.

Table 7 - Wyoming Special Status Plant Species

Common Name	Scientific Name	Habitat
Ute ladies’-tresses Federally listed threatened.	<i>Spiranthes diluvialis</i>	Moist, subirrigated or seasonally flooded soils in valley bottoms, gravel bars, old oxbows, or floodplains bordering springs, lakes, rivers, or perennial streams at elevations between 1800’ - 6800’
Nelson’s milkvetch	<i>Astragalus nelsonianus</i>	Alkaline clay flats, shale bluffs and gullies, pebbly slopes, and volcanic cinders in sparsely vegetated sagebrush, juniper, & cushion plant communities at 5200’ - 7600’
Large-fruited bladderpod	<i>Lesquerella macrocarpa</i>	Barren, fine textured clay and shale hills 6,800; - 7,700’
Meadow pussytoes	<i>Antennaria arcuata</i>	Sub-irrigated meadows at 4,950’ – 7,900’

Invasive Species (Weeds)

Federal agencies are directed by Executive Order 13112, Invasive Species, to expand and coordinate efforts to prevent the introduction and spread of invasive plant species (noxious weeds) and to minimize the economic, ecological, and human health impacts that invasive species cause. Weed populations are generally found along main dirt roads and two-tracks, in areas of livestock concentration, and in areas of intense recreational use. Motorized vehicles transporting seeds can be a major source of new infestations of weed species. The majority of the area has not been surveyed for noxious weeds. Noxious weed and other invasive species known to occur in the area include: Russian knapweed, hoary cress, houndstongue, Canada thistle, perennial pepperweed, henbane, halogeton, Russian thistle, gumweed, goosefoot, and assorted mustards.

RECREATION

The public enjoys seeing wild horses roaming free in the Rock Springs Field Office area. Some people make special trips to see wild and free-roaming horses. Both residents and nonresidents occasionally make special trips to the RSFO to view wild horses in their natural environment. One outfitter is permitted by BLM to conduct vehicle tours of the HMA and an additional two outfitters conduct horseback rides specifically to see wild horses. Other recreation in the HMA is quite dispersed with the greatest amount occurring during the hunting seasons for the various game animals and birds. Primary recreational activities in the area include: hunting for pronghorn antelope, mule deer, upland game birds, coyotes, and small game; camping, hiking,

rock hounding, photography, wildlife and wild horse viewing, off highway vehicle (OHV) use and sightseeing. No developed recreation sites exist within the HMA.

WILDERNESS

The analysis area contains nine wilderness study areas including:

- Buffalo Hump Wilderness Study Area (10,300 acres)
- Sand Dunes Wilderness Study Area (27,109 acres)
- Oregon Buttes Wilderness Study Area (5,700 acres)
- Whitehorse Creek Wilderness Study Area (4,002 acres)
- Honeycomb Buttes Wilderness Study Area (41,188 acres)
- Alkali Draw Wilderness Study Area (16,990 acres)
- South Pinnacles Wilderness Study Area (10,800 acres)
- Red Lake Wilderness Study Area (9,515 acres)
- East Sand Dunes Wilderness Study Area (12,800 acres)

Until a wilderness study area (WSA) is designated wilderness or released from further consideration by Congress, it is managed under the Interim Management Policy for lands under wilderness review. Wild horses are considered an important attribute of all the aforementioned WSAs. Under the Interim Management Policy, WSAs are managed to preserve their wilderness character (naturalness, solitude, and opportunities for primitive recreation) and suitability for designation as wilderness. Fundamental to this preservation is prohibition of new surface disturbance or permanent structures so that the WSA retains the character of an area untrammelled by man. If designated wilderness, the WSA would be managed in accordance with the Wilderness Act of 1964. No traps are proposed to be placed in the WSAs, hence WSAs are not anticipated to be impacted, therefore, will not be given further consideration.

RIPARIAN AREAS

Riparian areas are extremely important components of the landscape, providing essential habitat requirements to a wide variety of consumptive and non-consumptive uses of the public lands. This includes forage, cover, water, breeding and rearing areas, and numerous essential hydrologic functions. Riparian areas are very important for wild horses, wildlife, and domestic livestock. They generally have deeper, richer loamy soils, higher in organic matter. Natural meadows, wetlands and streamside riparian areas are valuable components for all foraging animals.

Because of the use demands on riparian areas, management considerations have focused on protecting these areas from degradation. Fencing, utilization limits, timing and sequencing of domestic livestock have been effective tools in maintaining and improving the qualities of riparian ecosystems.

Riparian areas are limited in the Divide Basin Herd Management Area (HMA). The rarity of these sources magnifies their critical importance to wildlife and horses. There are approximately 38 miles of perennial and intermittent streams on public lands. They range from a high elevation stream (Sweetwater River) to lower elevation, low gradient, desert streams. Condition ratings of

these riparian areas show that 60% (23 miles) are in proper functioning condition and thus meet the Wyoming Standards for Healthy Rangelands while the remaining 40% (15 miles) do not. There are approximately 150 acres of wetlands within the HMA, primarily created by flowing or artesian wells. All of these are in proper functioning condition. Data sheets for every stream and wetland are in RSFO files.

PRIVATELY-OWNED AND CONTROLLED LANDS

Privately-owned or controlled lands are 28% of the Divide Basin HMA and 26% outside the HMA. In addition to their proportionate contribution to the forage and space requirements for all the animals that utilize the HMAs, a disproportionately high share of the reliable water sources in the HMAs occur on these lands. The Rock Springs Field Office area contains a substantial amount of checkerboard lands (railroad grant lands where private and public land occur in alternating sections for 20 miles on either side of the railroad and crosses southern Wyoming from east to west). Lands north and south of the checkerboard are predominantly solid block, BLM-administered public land. There is no fencing between the checkerboard and solid block public land.

Checkerboard lands create special problems for managing wild horses. A court decision specifically addresses management of these lands. The location of private lands throughout the Rock Springs Field Office area affects wild horse management on public lands, in part, because private lands are not fenced from public lands.

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This section will assess the environmental impacts (either positive or negative) on the components of the human environment either affected or potentially affected by the Proposed Action and Alternatives. Direct impacts are those that result from the actual gather and removal of wild horses in the Divide Basin HMA. Indirect impacts are those impacts that exist once the excess animals are removed. By contrast, cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Resources impacted by the Proposed Action include wild horses, wildlife, livestock grazing, vegetation, recreation, riparian, and private lands. Impacts of each alternative are addressed under the resource value.

WILD HORSES

Table 8 provides a summary of the population modeling results for the 3 alternatives. Population modeling was completed using the wild horse population model, WinEquus (Appendix 1). To project the potential results of each possible management scenario. The results shown in Table 8 represent the median trial for each alternative.

Table 8 – Population Modeling Summary Divide Basin HMA

Modeling Statistic	Alternative 1 Proposed Action	Alternative 2	Alternative 3 No Action
Population in Year One	415	415	977
Median Growth Rate	14.3	9.5	14.2
Average Population	571	567	2,329

Assumptions for analysis: Impact analysis assumes that fertility control will slow wild horse reproduction rates. Previous research on winter application of the two-year drug has shown that mares that are already pregnant will foal normally, but the fertility control treatment will be 94% effective the first year, 82% the second year, and 68% the third year. Population modeling projects that the minimum, average, and maximum population size would be lowest under Alternative 1 and 2. The lowest minimum population size under Alternative 1 and 2 would be within the parameters specified by Dr. Cothran for maintaining a genetically viable herd. The overall population growth rate would be somewhat lower under Alternative 2 than under Alternative 1. Under Alternative 3 (No Action alternative) the wild horse population within the Divide Basin HMA would grow to a level that would quickly exceed the carrying capacity of the range.

Common Impacts of Alternatives 1 and 2

The Act states that all management activities shall be at the minimum feasible level. The minimum feasible level of management would require that removals and other management actions that directly impact the population, such as helicopter census, occur as infrequently as possible (3 to 5 years). To the extent practical, these alternatives would allow maintenance of a self sustaining population, as well as maintaining a thriving natural ecological balance. Reducing the wild horse population in the Divide Basin HMA to 415 mature horses would meet the intent of the Wild Free Roaming Horse and Burro Act. The following positive impacts for wild horses and their habitat would occur:

- A thriving natural ecological balance would be achieved and maintained by reducing the population to the lower limit of the management range.
- Ensure a viable population of wild horses that would survive, and be successful during poor years when elements of the habitat are limiting due to severe winter conditions, drought or other uncontrollable and unforeseeable environmental influences to the herd.
- Annual gathers would not be required which would allow for a greater level of herd stability and band integrity.
- Gathers would only occur when the population approaches or exceeds the upper limit of the management range, anticipated to be every 3 to 4 years.
- The wild horse population would be subjected to the stresses associated with gathering and handling as infrequently as possible.

Selective Removal Criteria

Impacts associated with Alternatives 1 and 2 would consist of selecting wild horses for release that possess the historic characteristics (color pattern, sex ratio) and age structure that are typical of the herd demographics of the Divide Basin HMA. The National Selective Removal Policy (described in Alternatives Analyzed Section) would be followed to the extent possible. Animals selected for release would be the most capable of surviving environmental extremes, thus ensuring a viable population is present in the HMA. Utilizing the selective removal criteria would result in a positive impact for the long term health and stability of the population.

The effect of removal of horses from the population is not expected to have long-term impact on herd population dynamics, age structure or sex ratio, as long as the selection criteria for the removal maintains the social structure and breeding integrity of the herd. The selective removal strategy for the Divide Basin HMA and outside of the HMA would maintain the age structure (of critical breeding age animals), the sex ratio and the historic range of characteristics currently within the herd. This flexible procedure would allow for the correction of any existing discrepancies in herd dynamics, which could predispose a population to increased chances for catastrophic impacts.

Potential negative impacts to the long-term health and stability of the population could occur from exercising poor selection criteria not based on herd demographics and age structure. These negative impacts would include modification of age or sex ratios to favor a particular class of animal. Effects resulting from successive removals causing shifts in sex ratios away from normal ranges are fairly self evident. If the selective removal criteria favor studs over mares, it would be expected to result in decreased band size, increased competition for mares, and an increase in the size and number of bachelor bands. If the selective removal criteria favor mares over studs, it would be expected to result in fewer and smaller bachelor bands, decreased competition for mares, and a likelihood of larger band sizes.

The effects of successive removals on populations causing shifts in herd demographics favoring younger horses (under 15 years) would also have direct consequences on the population. These impacts are not thought of typically as adverse to a population. They include development of a population, which is expected to be more biologically fit, more reproductively viable, and more capable of enduring stresses associated with traumatic natural and artificial events.

Gathering Operations

Impacts of gathering operations include: handling stress associated with the gathering, processing, transportation of animals from gather sites to temporary holding facilities, and from the temporary holding facilities to an adoption preparation facility. The intensity of these impacts varies by individual and is indicated by behaviors ranging from nervous agitation to physical distress. Mortality can occur during a gather however it is infrequent and typically is no more than one-half to one percent of the total animals gathered.

Impacts which may occur after the initial stress of herding and capture include: spontaneous abortion in mares, increased social displacement, and conflict in studs and mares. Spontaneous abortion following capture is rare, depending on the time of year gathered. Traumatic injuries that may occur typically involve biting and/or kicking which results in bruises and minor swelling but normally does not break the skin. These impacts occur intermittently and the frequency of occurrence varies with the individual.

Population wide impacts may occur during or immediately following the implementation of Alternatives 1 or 2. They include the displacement of bands during capture and the associated re-dispersal, temporary separation of members from individual bands of horses, re-establishment of bands following release, and the removal of animals from the population. With the exception of the changes to herd demographics, direct wide population impacts have proven to be temporary in nature with most if not all impacts disappearing within hours to several days of release. No observable effects associated with these impacts would be expected within one month of release except for a heightened shyness toward human contact. Observations of animals following release have shown horses relocate themselves back to their home ranges within 12 to 24 hours of release.

Data Collection

Impacts associated with data collection involve increased stress levels to the animals as they are restrained in the portable squeeze chute. Those animals selected for blood sampling may become very agitated as the samples are drawn. Once the animal is released from the squeeze chute, stress levels decrease rapidly. The collection of data is a positive impact to the long term management of the population. This data would be used to develop population specific objectives that would help to ensure the long term viability of the population. This procedure is within the intent of the Act, as it relates to managing populations at the minimum feasible level.

Impacts Specific to Alternative 1

The impacts specific to Alternative 1 include capturing approximately 65% of the estimated population of 977 wild horses. Approximately 635 wild horses would be captured and approximately 63 mature horses would be returned to the Divide Basin HMA to equal the low range AML of 415 horses. Direct impacts associated with the Proposed Action also include potential changes to herd demographics and stress associated with gathering. The effect on herd demographics will be discussed in the Selective Removal Criteria section, and the stress associated with gathering will be discussed under Gather Operations.

Implementation of Alternative 1 would prevent the population from increasing beyond the upper limit of the management range until the fourth year, 2010. Gathering to the lower limit of the management range (415 mature horses in the Divide Basin HMA) would allow the wild horse population to increase over time to the upper limit of the management range to 600 mature horses in the Divide Basin HMA. When this level is exceeded, another gather would be scheduled. Because the HMA would be gathered again when the upper limit of the management range is exceeded, resource degradation associated with wild horses would be minimized. Under Alternative 1, horses left on the range would have adequate forage, water and space. A thriving natural ecological balance would exist within the HMA and adjacent to it. Reducing the population to 415 mature horses in the Divide Basin HMA would benefit the remaining horses by improving the quality and quantity of forage. This would ensure a vigorous and viable breeding population, reduce stress on vegetative communities and wildlife, and be in compliance with the Wild Free Roaming Horse and Burro Act, and the Green River RMP. Reducing the wild horse population to 415 mature horses would also maintain the wild horse population at a level that Dr. Cothran indicated would preserve the genetic diversity of the Divide Basin wild horses.

Impacts Specific to Alternative 2

The impacts specific to Alternative 2 include capturing approximately 65% of the estimated population of 977 wild horses. Approximately 635 wild horses would be captured and approximately 63 mature horses would be returned to the Divide Basin HMA to equal the low range AML of 415 horses. Direct impacts associated with this alternative include potential changes to herd demographics, and stress associated with gathering. The effect on herd demographics was discussed in the Selective Removal Criteria section, and the stress associated with gathering was discussed under Gather Operations. Of the animals released back to the range, about 32 breeding age mares would be treated with two-year immunocontraceptive (PZP) vaccine. This vaccine has shown effectiveness of 94% in year one, 82% in year two and 68% in year 3.

Each mare released would receive a single-dose of the two-year PZP contraceptive vaccine, as described in Section II. When injected, PZP (antigen) causes the mare's immune system to produce antibodies that bind to her eggs, effectively blocking sperm penetration and fertilization. PZP is relatively inexpensive, meets BLM requirements for safety to mares and the environment, and could be administered in the field. Also, among mares, PZP contraception appears to be completely reversible, and to have no ill effects on ovarian function if the mare is not contracepted for more than 3 consecutive years. PZP would not affect normal development of the fetus, hormone health of the mare or behavioral responses to stallions, should the mare already be pregnant when vaccinated (Kirkpatrick, et al. 1995). Kirkpatrick, et al. (1997) also found that the vaccine has proven to have no apparent effects on pregnancies in progress, the health of offspring, or the behavior of treated mares. Inoculated mares would foal normally in 2007, and the contraceptive would limit foal production in 2008 and 2009. Near normal foaling rates would be expected to resume in 2010.

Mares receiving the vaccine would experience slightly increased stress levels from additional handling while being inoculated and freeze marked. There may be some swelling at the injection site following the administration of the fertility control vaccine, but this would be a temporary,

short term impact. Injection site injury associated with fertility control treatments is extremely rare in treated mares, and may be related to experience of the person administering the vaccine. Injection of the vaccine would be controlled, handled and administered by a trained BLM employee, researcher or veterinarian. Any direct impacts associated with fertility control are expected to be minor in nature and of short duration. The mares would quickly recover once released back to the HMA.

The implementation of fertility control applications appears to be most beneficial in herds with a higher growth rate. Since the last removal in 2003, the Divide Basin herd has increased approximately 18 to 25% per year without fertility control. Population modeling has shown that the benefits of fertility control are apparent over a longer period of time with a lower than normal growth rate. Over the next 10 year period, the number of horses gathered under this alternative would be somewhat less than Alternative 1, and the number of horses removed would be slightly lower.

Other environmental consequences related to reducing the number of horses in the Divide Basin HMA would be nearly identical to Alternative 1.

Impacts Specific to Alternative 3

Under this alternative, horses would not experience the stress associated with gathering, removal or adoption. The current population of wild horses would continue to increase, and exceed the carrying capacity of the range. According to population modeling, the population size would approach 2,329 horses within the next 10 years, which is well above the carrying capacity of the Divide Basin HMA. Though it may require many years for the population to reach catastrophic levels, by exceeding the upper limit of the management range, this alternative poses the greatest risk to the long-term health and viability of the Divide Basin HMA wild horse population, wildlife populations, and the vegetative resource.

The population of wild horses would compete for the available water and forage resources. The areas closest to water would experience severe utilization and degradation of the range resource. Over the course of time, the animals would deteriorate in condition as a result of declining forage availability and the increasing distance traveled between forage and water sources. The mares and foals would be affected most severely. The continued increase in population would eventually lead to catastrophic losses to the herd, which would be a function of the available forage and water and the degradation of the habitat. A point would be reached where the herd reaches the ecological carrying capacity and both the habitat and the wild horse population would be critically unhealthy.

Ecological carrying capacity of a population is a scientific term, which refers to the level at which density-dependant population regulatory mechanisms would take effect within the herd. At this level, the herd would show obvious signs of ill fitness, including poor individual animal condition, low birth rates, and high mortality rates in all age classes due to disease and/or increased vulnerability to predation (Coates-Markle, 2000). In addition, irreparable damage would occur to the habitat through overgrazing, which is not only depended upon by wild horses but by wildlife (which include sensitive species), and permitted livestock. All multiple uses of the area would be impacted. Significant loss of wild horses in the Divide Basin HMA due to

starvation and disease would have obvious consequences to the long-term viability of the herd. Irreparable damage to the resources, which would include primarily vegetative, soil and watershed resources, would have obvious impacts to the future of the Divide Basin HMA and all other uses of the resources, which depend upon them for survival.

This alternative would result in uncontrollable population growth, be in violation of the court order, and would prove to be difficult for BLM to manage public lands.. The BLM realizes that some members of the public may advocate “letting nature take its course”, however allowing horses to die of dehydration and starvation would be inhumane and would clearly indicate that an overpopulation of wild horses existed in the HMA. The Wild Free-Roaming Horse and Burro Act of 1971, as amended, mandates the Bureau to “*prevent the range from deterioration associated with overpopulation,*” and “*remove excess horses in order to preserve and maintain a thriving natural ecological balance and multiple use relationships in that area.*” Additionally, Promulgated Federal Regulations at 43 CFR 4700.0-6 (a) state “*Wild horses shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat.*”

WILDLIFE

Impacts of Alternatives 1 and 2

Impacts to wildlife would include temporary disturbance to animals near trap sites during set-up, gather operations, or in the path of the helicopter when it passes by. These disturbances are temporal in nature and unlikely to pose any serious threat. Indirect impacts would be an animal(s) being disturbed by other animals running in avoidance of the helicopter or gathering personnel.

Wildlife populations in areas where excess wild horses are gathered could be disrupted for a short time during the gathering operations. Once gathering operations cease, these effects would stop. The short-term effects are a result of human presence and the noise of the helicopter causing wildlife to seek cover in areas away from gathering routes. However, large game species should return to the area within a few days. Capture activities would not cause permanent abandonment of these areas. There would be no long-term adverse effect on wildlife.

BLM data and past experience show that removal of excess horses from areas of wild horse concentration improve habitat conditions for wildlife. This effect would be most pronounced around water sources and would benefit both game and non-game wildlife. Maintaining wild horse populations at AML through the removal of excess wild horses enables wildlife populations to utilize the forage that would otherwise be used by the excess wild horses

Long-term (cumulative) impacts to wildlife are expected to be positive by the removal of excess horses from the range. The removal of the excess horses should improve the overall health of the range, thereby benefiting all inhabitants of the range. The wildlife should also benefit from the reduction in competition for water, forage and space. No adverse impacts to general wildlife is anticipated. Cumulative impacts for individual species are only discussed if specific effects are anticipated.

Big Game (Pronghorn Antelope, Mule Deer, and Elk)

Direct impacts to big game would be that of a temporary disturbance to animals near the trap site during construction; gather operations or those animals in the path of the helicopter when it passes by. These disturbances are temporary in nature and unlikely to pose any serious threat. Indirect impacts would be an antelope being disturbed by the horses or other large animals running in avoidance of the helicopter or gather personnel. Cumulative impacts to big game are expected to be positive by the removal of excess horses from the range. The removal of excess horses should improve the overall health of the range, thereby benefiting all inhabitants of the range. The big game should also benefit from the reduction in competition for water and forage (Meeker, J.O. 1982, Stephenson, T.E. 1982). Stephenson (1982), found a 60% dietary overlap between pronghorn antelope and feral horses.

Raptors

Some minor local disturbance to raptors is expected from the gather, but birds are expected to resume their natural activities once the gather is completed.

Endangered, Threatened, and Proposed Species

Black-footed Ferret. Construction of facilities, traps and staging locations will not occur within 50 feet of any active prairie dog town. With the provision of avoiding prairie dog towns there should be no direct or indirect impacts to black-footed ferrets or their prey (prairie dogs) are anticipated.

Sensitive Wildlife Species

White-tailed Prairie Dog. Construction of facilities, traps and staging locations will not occur within 50 feet of any active prairie dog town. With the provision of avoiding prairie dog towns there should be no direct or indirect impacts to prairie dogs are anticipated.

Greater Sage-Grouse, Sage Thrasher, Loggerhead Shrike, and Sage Sparrow. Direct and indirect impacts could happen from horses trampling a nest and/or during the gather and causing nest abandonment. These impacts are expected to be far outweighed by the positive improves to the range as a result of removing the excess horses.

Mountain Plover. Direct and indirect impacts could happen from horses trampling a nest and/or birds during the gather causing nest abandonment.

Impacts of Alternative 3

Unmanaged populations of wild horses would eventually exceed the carrying capacity of the range in HMA and adjacent area for those species having a dietary overlap. Competition for water and forage resources would increase between wildlife and horses and the habitat would be degraded. The effects of this alternative would be very detrimental to all wildlife species and would increase over the long-term. Wildlife would be negatively impacted by a reduction in the quality of their habitat caused by competition for forage, water, space and degradation of the riparian habitats.

However, some species such as the mountain plover could benefit from wild horses overgrazing parts of the range thereby creating more nesting habitat for new males. Also the possibility of nest trampling during the gather would be eliminated.

LIVESTOCK GRAZING

Impacts of Alternatives 1 and 2

An expected improvement in the quality and quantity of forage availability is expected where excess or strayed wild horses are removed under Alternatives 1 and 2. With the implementation of fertility control the wild horse population would not increase as fast as in Alternative #1. This would provide greater opportunity for improved range conditions within the affected areas.

Livestock owners would be notified that wild horse population control operations are planned. The possibility exists that domestic livestock would be spooked by wild horses and/or the helicopter. In this situation, livestock would be subject to short-term stress and possible injury.

Impacts of Alternative 3

Under Alternative 3, wild horse population control methods would not be implemented. This alternative would allow wild horse populations to increase within the Divide Basin HMA and adjacent areas. Livestock would gradually be displaced by wild horses as demand for space, forage, and water increased. Displacement would be slow and indirect. As competition increased, it would become less economically favorable to utilize these areas with domestic livestock. This would have a negative economic impact on livestock producers. Range conditions throughout the area would deteriorate exponentially over the long term and would result in severe degradation of the range.

VEGETATION

Vegetation General

Impacts of Alternatives 1 and 2

The removal of excess wild horses from inside the HMA would avoid potential over-utilization of forage and reduction in vegetative ground cover. The quantity of forage throughout the HMA could be increased. Impacts from wild horses could diminish and be beneficial. Vegetation composition, cover, and vigor could improve or be maintained near water sources where wild horses tend to congregate. An improvement in forage condition could lead to improved livestock distribution, which would prevent over-utilization and reduction in vegetation cover. Vegetative diversity and health should improve in areas where excess wild horses are removed. Adverse, short term effects to vegetation and soils would occur at trap sites when gathers are being conducted. Vegetation would be disturbed by trap construction, and short term trails and soil compaction may develop near and in the trap. Any vegetation removed would be minimal and localized.

Impacts of Alternative 3

Under Alternative 3, wild horse population control methods would not be implemented. Perennial vegetation would continue to experience season-long grazing pressure, which is not conducive to optimum plant health and vigor. Soil erosion and plant health would continue to be compromised around water locations, but elsewhere impacts would be localized and minimal. This alternative would allow wild horse populations to increase within the HMA and nearby areas. As native plant health deteriorated and plants were lost, soil erosion would increase and a long term loss of productivity would occur. There would also be increased impacts to areas outside the HMA as horses move out in search of better forage. Impacts would be cumulative over time and would affect areas beyond the HMA. There would be no impacts from trapping operations because none would occur.

Special Status Plants

Impacts of Alternatives 1 and 2

Ute ladies'-tresses occurs in riparian areas. The gather operations in alternatives 1 and 2 would not be in any area that would contain the necessary habitat for this species and so there would be a No Effect for this species. All existing sites for horse gather operations have been surveyed for special status plant species and have been cleared. If any other sites are proposed they will be surveyed and cleared before operations begin. There should not be any impacts to sensitive species as a result of implementing the Proposed Action since site specific analysis will be completed if surface disturbing activities will occur.

Impacts of Alternative 3

This alternative would allow wild horse populations to increase within the Divide Basin HMA and nearby areas. Under this alternative, no gathering would take place inside or outside of the HMA. Populations of wild horses might eventually stabilize at very high numbers near what is known as their food-limited ecological carrying capacity. At these levels, range conditions would probably deteriorate significantly which would affect the native species and the habitat for special status species.

Invasive Species (Weeds)

Impacts of Alternatives 1 and 2

The over-utilization of range resources and subsequent reduction in vegetative ground cover promotes the establishment and spread of invasive species. The removal of excess wild horses could aid in the curtailment of the introduction and spread of noxious weeds and other invasive species.

Impacts of Alternative 3

Invasive non-native plant species could continue to increase and invade new areas following increased soil disturbance and reduced native plant vigor and abundance. This would lead to both a shift in plant composition towards weedy species and a loss of productivity from loss of native species and the erosion of soils. There would also be increased impacts to areas outside the HMAs as horses move out in search of better forage. Impacts would be cumulative over time and would affect areas beyond the HMA.

RECREATION

Impact of Alternatives 1 and 2

Recreation values are quite subjective. Those who wish to see wild horses might appreciate the increased viewing opportunities associated with increased herd sizes, so long as the condition of the horses remained good. Those who prefer other recreational activities that are degraded by an increase in the horse population might prefer to see smaller horse herds. Some might prefer to see no horses at all, particularly if they perceived that horses were using habitat that would otherwise be able to support greater numbers of native wildlife. Any change in the relative balance among species in the habitat is going to affect the quality of the recreational opportunities found in the HMA. The analysis is based on the assumption that the public wants the balance of recreational opportunities available in the HMA to remain essentially unchanged from what it has been in recent years.

Impacts of Alternative 3

Where horse numbers increased, certain kinds of opportunities associated with the horse population would increase, although the condition of the horses could decline over time, rendering them less desirable for viewing. The quality of recreational opportunities associated with the quality of the habitat, such as viewing or hunting wildlife, would probably decline as the wild horse population increased beyond the carrying capacity of the habitat.

The quality of all recreational opportunities would decline, in the long-term. Some opportunities associated with the presence of wild horses might increase in the short term, but they would probably decline in the long-term due to the increasing occurrence of obviously malnourished horses. Recreationists would likely encounter carcasses and their scavengers more frequently when the population of horses is in decline due to insufficient feed and/or water. Thus, although the increased population of wild horses might make them easier for the recreationists to find, the experience might not be as desirable due to the poor condition of the horses.

Other recreation opportunities could be detrimentally effected over the long-term due to the habitat degradation caused by wild horse overpopulation. Game species might be pressured out of the area in search of essential resources. Viewers might not need to go to the HMA to view wild herds because the wild horses would be forced to expand their territories outside the current HMA boundaries in order to find the feed and water they need to survive. Once they establish themselves beyond the HMA boundaries, they would upset the balance among other species in the new habitat as they used resources required for the other species. Opportunities for viewing and hunting other wildlife could be severely reduced in the long run, both within the HMA and beyond it.

RIPARIAN AREAS

Impacts of Alternatives 1 and 2

Overabundant grazing and browsing animals can detrimentally affect the condition of riparian areas due to overuse of riparian plants and physical damage caused by loitering. Specific

impacts on riparian areas from animal use may include declining water quality from increased sedimentation, declining plant vigor, and decreased stream channel stability.

Animal use can indirectly affect riparian condition through the removal of upland forage. When upland rangeland is adversely affected through the degradation of plant communities, nearby riparian areas are subjected to additional stress associated with increased run-off and sedimentation. If sufficient upland forage is removed, domestic and other grazing animals may then be forced to concentrate more in riparian areas to meet their foraging requirements. Increased utilization in riparian areas may induce plant species changes that increase the riparian grass component. This could increase the tendency for horses to select riparian areas for food. While horses do not typically loiter in riparian areas, choosing instead to visit them to drink and then quickly returning to upland areas, increases in their population levels would likely change this habit as it has been observed that domestic horses soon learn to tolerate the increased insect levels and unstable footing when confined to riparian areas.

At sufficiently elevated use levels, increased wild horse populations could adversely affect infiltration rates from cumulative impacts on soil compaction and reduced vegetative cover on both riparian and upland sites. Compacted soil restricts water infiltration, thus increasing runoff and soil loss. Similarly, vegetative cover serves to reduce runoff water velocities and thus promotes infiltration and reduces erosion. Increased sedimentation in streams and riparian areas is the likely result of both of these occurrences. Assessing the contribution of wild horses on total riparian impacts can be done by assuming constant grazing pressure from other species (equivalent to assuming no change in livestock grazing management and steady wildlife populations) and then estimating the probable change in riparian condition due to changes in wild horse stocking.

Impacts of Alternative 3

This is the no action or “natural” alternative and would result in population increases and decreases in response to favorable and unfavorable environmental and predator-prey relationships. Often these population swings can be dramatic and result in large population gains followed by catastrophic die-off. Habitat effects of this type of management would be the decline of riparian habitat when populations were maximum, followed by habitat recovery when horse populations declined. In the end, the extent that habitat could recover when populations were low would contribute to the determination of the extent and timing of population recovery. Effects of this alternative are highly variable, and likely to have the most unpredictable outcomes.

PRIVATELY-OWNED AND CONTROLLED LANDS

Impacts of Alternatives 1 and 2

The effects of any particular alternative course of wild horse management upon privately-owned and controlled lands would fall into two categories. The first, environmental affects, would not be significantly different depending on the ownership or control of the land. A particular riparian area, for instance, would be affected in the same manner by a given level of wild horse use irrespective of its ownership or form of control. The second category would be a particular

combination of legal and attendant socioeconomic aspects that would tend to be quite subjective and personal and might be called value. This category would comprise a range of factors associated with a property owner's rights to the enjoyment of whatever might comprise the value of that property. An important principle of our legal system provides for, under carefully prescribed conditions, that private property (or values associated with a particular piece of property) may be "taken" for public use, provided that the private owner is properly compensated and due process is employed. The Act did not authorize the taking of any privately-owned or controlled lands for use by wild horses. Thus, if a particular course of action (alternative) would result in the value of privately-owned or controlled property being adversely affected, the alternative would be legally unavailable as a course of action, in other words, the taking would not be authorized under current authorities.

Impacts of Alternative 3

All populations would expand without control. Horses would expand their range. Eventually all available forage would be consumed by horses, and takings would occur within the HMA and in adjacent areas.

MITIGATIVE MEASURES

Each alternative incorporates mitigation measures and standard operating procedures that have been developed through experience or policy. No additional measures have been identified.

CONSULTATION AND COORDINATION

The BLM is responsible for obtaining public input on Proposed Actions within the wild horse program. Public input has been solicited for previous gathers over the last few years.

In addition, a formal statewide hearing regarding the use of helicopters for the gather of wild horses in Wyoming is held each year. The public is provided an opportunity to discuss concerns and questions with BLM staff.

Environmental analyses have been prepared which analyze the effects of individual population management actions on specific populations of wild horses. Interested publics were contacted and asked to identify issues of concern for inclusion in the analyses. Some of those concerns identified were beyond the scope of the analysis of the particular actions at the time they were proposed.

Comments concerning the alternatives analyzed herein will be solicited from the public until August 15, 2006. Comments received during that period will be considered in arriving at a decision whether or not to implement any of the alternatives analyzed.

DISTRIBUTION

Information regarding this environmental assessment and any future Finding of No Significant Impacts and Decisions regarding the Divide Basin HMA will be distributed to all of the interested publics that have requested to be informed of any actions with wild horses. The list of interested publics for wild horses is maintained within the Rock Springs Field Office. These

documents will also be available on the internet at:
www.wy.blm.gov/nepa/rsfodocs/divide_basin.

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APPENDIX 1

POPULATION MODELING

Population modeling was completed for the proposed action and the alternatives for the Divide Basin HMA. One hundred trials were run, simulating population growth and herd demographics to determine the projected herd structure for the next ten years. The computer program used simulates the population dynamics of wild horses. It was written by Dr. Stephen H. Jenkins, Department of Biology, University of Nevada, Reno, under a contract from the National Wild Horse and Burro Program of the Bureau of Land Management and is designed for use in comparing various management strategies for wild horses.

Interpretation of the Model

The estimated population of 977 wild horses is for the Divide Basin HMA. Year one is the baseline starting point for the model, and reflects wild horse numbers immediately after a gather action, or the lack of action in the case of the No Action Alternative 3. In this population modeling, year one would be 2006. Year two would be exactly one year in time from the original action, and so forth for years three, four, five through year ten. Consequently, at year ten in the model, exactly ten years in time would have passed. In this model, year ten is 2016. This is reflected in the Population Size Modeling Table by “Population sizes in 10 years” and in the Growth Rate Modeling Table by “Average growth rate in 10 years.” Growth rate is averaged over ten years in time, while the population is predicted out the same ten years to the end point of year ten. The Full Modeling Summaries contain tables and graphs directly from the modeling program.

Population Modeling Criteria

The following summarizes the population modeling criteria that are common for Alternative 1 (Proposed Action) and Alternative 2:

- Starting Year: 2006
- Initial gather year: 2006
- Gather interval: regular interval of four years
- Sex ratio at birth: 50% female-50% male
- Percent of the population that can be gathered: 65%
- Minimum age for long term holding facility horses: no restrictions
- Foals are not included in the AML
- Simulations were run for four years with 100 trials each
- Fertility control is estimated to be 94% effective in year 1 and 82% effective in year 2 and 68% effective in year three.
-

The No Action (Alternative 3) starts at the current population of 977 and does not account for any gathers over a ten-year period in the population model.

Population Modeling Comparison for the Alternatives

This table compares the projected population growth for the proposed action and the alternative at the end of the ten-year simulation. The population averages are across all trials.

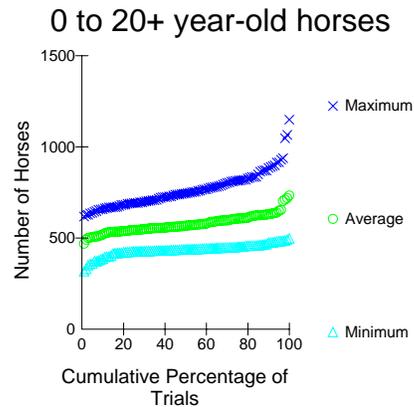
Modeling Statistic	Alternative 1, Proposed Action	Alternative 2	Alternative 3, No Action
Population in Year One	415	415	977
Median Growth Rate	14.3	9.5	14.2
Average Population	571	567	2,329

FULL MODELING SUMMARIES

Alternative 1: Gather without Fertility Control

	Population Sizes in 10 Years*		
	Minimum	Average	Maximum
Lowest Trial	276	341	494
10th Percentile	408	528	634
25th Percentile	428	550	671
Median Trial	451	571	716
75th Percentile	470	613	791
90th Percentile	502	658	866
Highest Trial	568	730	1023

* 0 to 20+ year-old horses



Average Growth Rate in 10 Years

Lowest Trial	5.0
10th Percentile	10.2
25th Percentile	12.0
Median Trial	14.3
75th Percentile	16.5
90th Percentile	17.6
Highest Trial	22.7

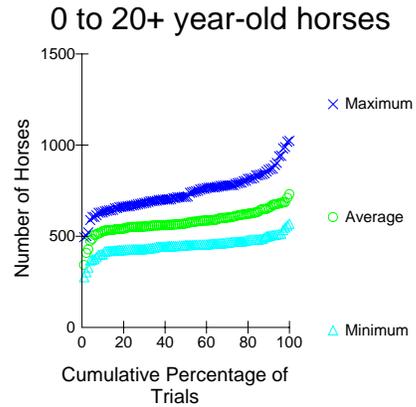
Alternative 2: Gather With Fertility Control

	Population Sizes in 10 Years*		
	Minimum	Average	Maximum
Lowest Trial	317	468	617
10th Percentile	390	521	660
25th Percentile	426	544	691
Median Trial	438	567	745
75th Percentile	451	606	814
90th Percentile	474	631	886
Highest Trial	497	732	1149

* 0 to 20+ year-old horses

Average Growth Rate in 10 Years

Lowest Trial	-1.8
10th Percentile	5.9
25th Percentile	7.6
Median Trial	9.5
75th Percentile	11.8
90th Percentile	13.0
Highest Trial	16.1



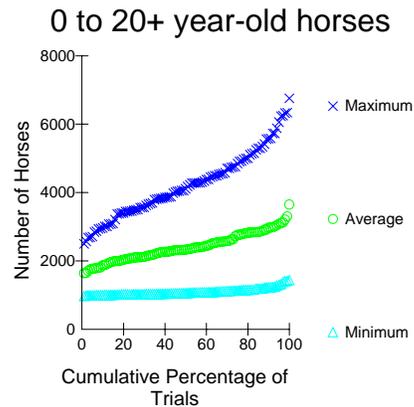
Alternative 3: No Action Alternative: Delay Management

	Population Sizes in 10 Years*		
	Minimum	Average	Maximum
Lowest Trial	968	1632	2494
10th Percentile	998	1874	2985
25th Percentile	1022	2095	3486
Median Trial	1059	2329	4142
75th Percentile	1132	2760	4875
90th Percentile	1228	2967	5576
Highest Trial	1435	3647	6750

* 0 to 20+ year-old horses

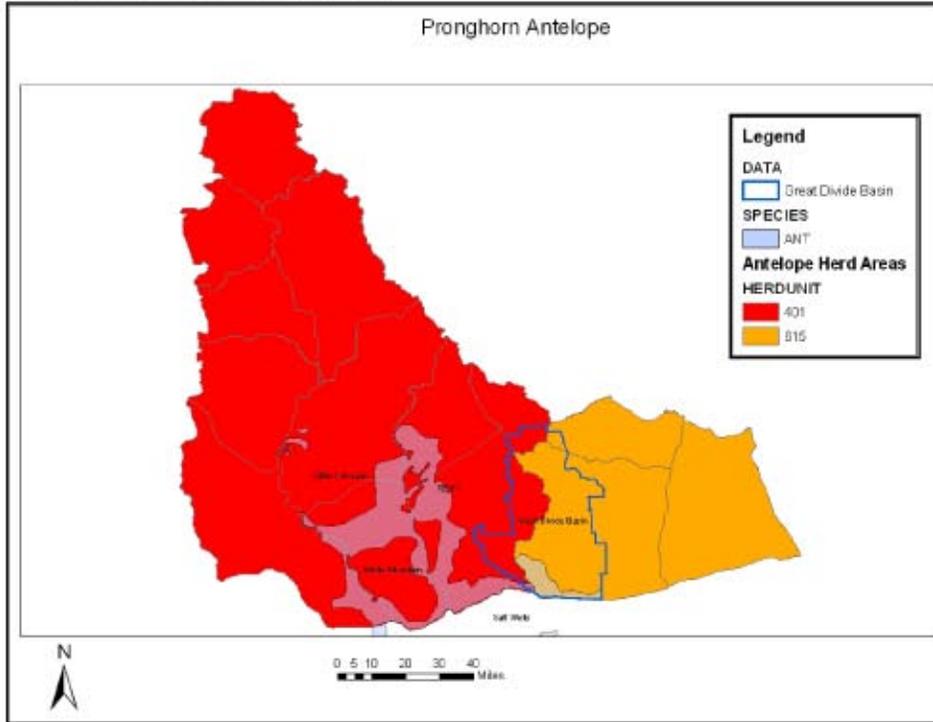
Average Growth Rate in 10 Years

Lowest Trial	7.8
10th Percentile	10.8
25th Percentile	12.5
Median Trial	14.2
75th Percentile	16.0
90th Percentile	17.4
Highest Trial	20.5

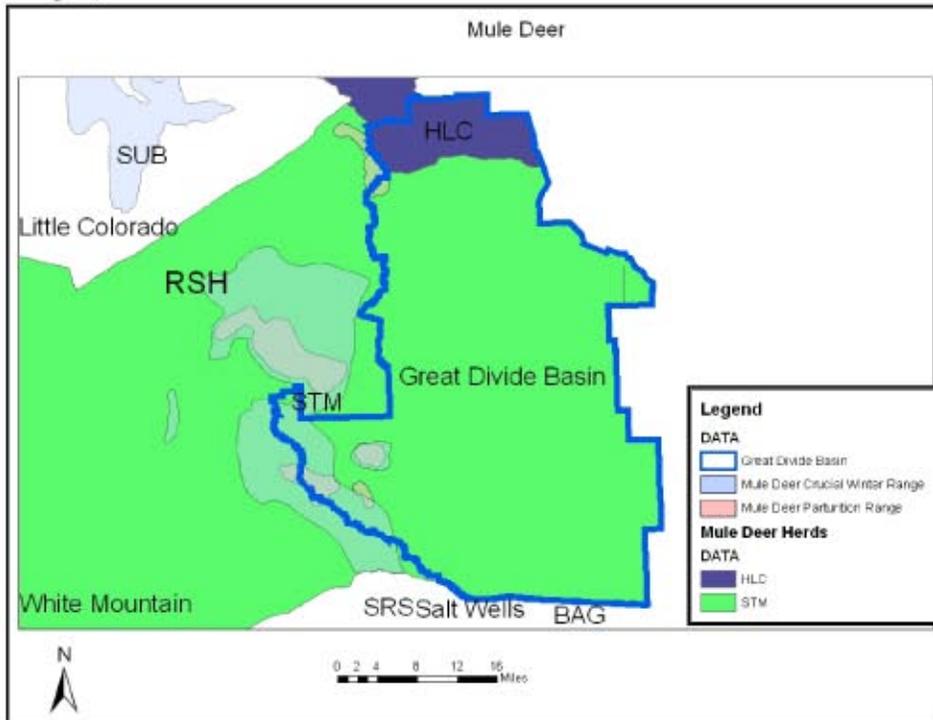


APPENDIX 2 WILDLIFE MAPS

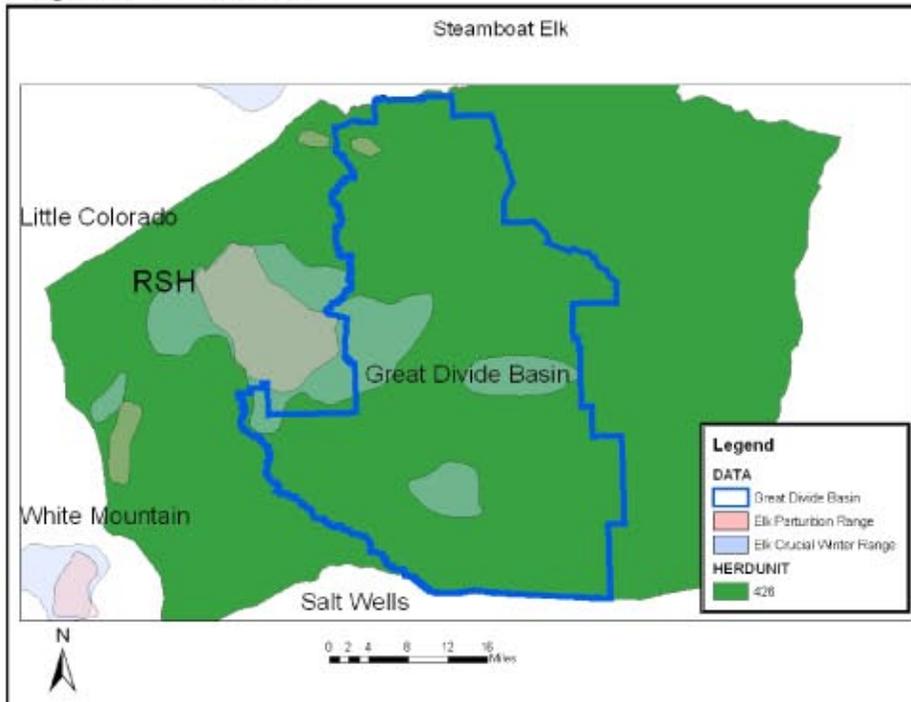
Map 1, Pronghorn Antelope



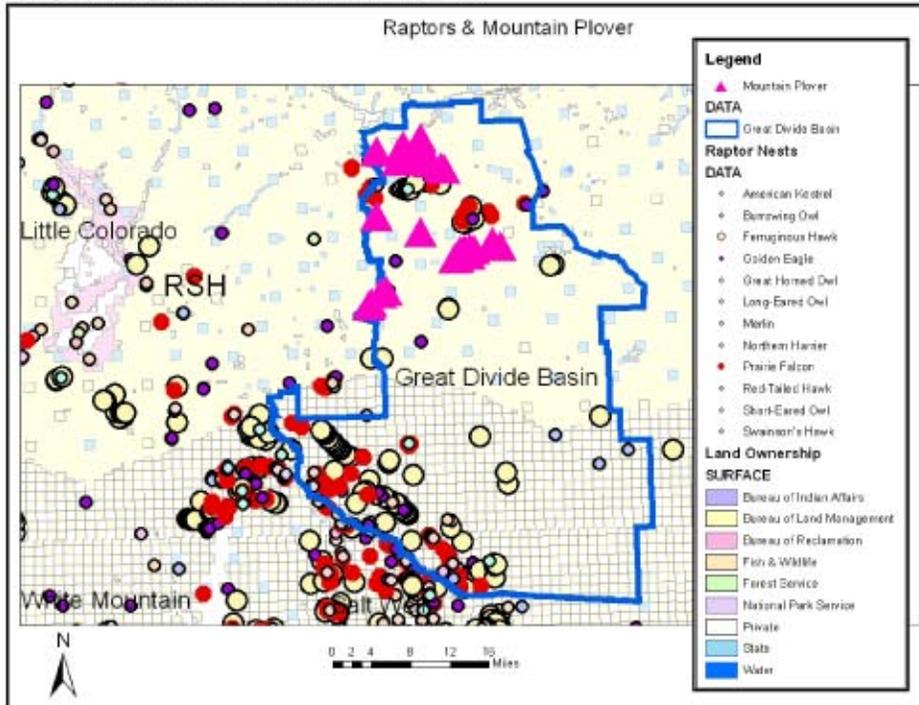
Map 2, Mule Deer



Map 3, Steamboat Elk



Map 4, Raptors & Mountain Plover



Map 5, Greater Sage-Grouse

