

**United States Department of the Interior
Bureau of Land Management**

**Environmental Assessment
DOI-BLM-CO-N05-2015-0023**

**West Douglas Herd Area
Wild Horse Gather**

**July 2015
Final Environmental Assessment**

U.S. Department of the Interior
Bureau of Land Management
Northwest District
White River Field Office
220 East Market St
Meeker, CO 81641



BLM

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1. INTRODUCTION

1.1. Identifying Information

Project Title: West Douglas Herd Area Wild Horse Gather Plan

Legal Description: 6th Principal Meridian, Rio Blanco County, Colorado

Township 1 North, Range 101 West, Section 31
Township 1 North, Range 102 West, Sections 34 – 36
Township 1 South, Range 101 West, Sections 6, 7, 18 – 20, 28, 29, 33
Township 1 South, Range 102 West, Sections 1 – 4, 8 – 36
Township 1 South, Range 103 West, Sections 9 – 36
Township 1 South, Range 104 West, Sections 12 – 15, 22 – 27, 34 - 36
Township 2 South, Range 101 West, Sections 4 – 9, 16 – 21, 28 - 33
Township 2 South, Range 102 West, Sections All
Township 2 South, Range 103 West, Sections All
Township 2 South, Range 104 West, Sections 1 – 3, 10 -15, 22 – 27, 34 – 36
Township 3 South, Range 101 West, Sections 5 – 7, 18, 19
Township 3 South, Range 102 West, Sections All
Township 3 South, Range 103 West, Sections All
Township 3 South, Range 104 West, Sections 1 – 3, 10 -15, 22 – 27, 34 - 36
Township 4 South, Range 102 West, Sections 1 - 30
Township 4 South, Range 103 West, Sections 1 - 30
Township 4 South, Range 104 West, Sections 1 – 3, 10 -15, 22 – 27, 34 - 36

Applicant: Department of the Interior, Bureau of Land Management, White River Field Office

NEPA Document Number: DOI-BLM-CO-N05-2015-0023-EA

1.2. Background

The analysis area (gather area) is larger than the West Douglas Herd Area (WDHA) because it includes areas/lands to the south and west of the WDHA where wild horses have relocated outside of the WDHA. The analysis area is located entirely within Rio Blanco County, approximately 70 miles west and south of Meeker, Colorado and approximately 50 miles north of Grand Junction, Colorado. The predominant land uses within the analysis area are livestock and wild horse grazing, as well as recreation and energy development that began around the 1940s with minimal recent development occurring. The analysis area comprises approximately 229,276 acres (206,265 acres of public and 23,011 acres of private) which is approximately 13 percent of all of the lands within the White River Field Office (WRFO) boundary. The WDHA itself comprises about 123,387 acres of public and 4,754 acres of private lands. The map for the analysis area (including the WDHA) is located in Appendix A, Map 1.

The most recent inventory of the WDHA, conducted in February 2012, found that there are approximately 154 excess wild horses within the WDHA. With an estimated foal crop of 20 percent and less the 20 wild horses that were gathered in the summer of 2013 due to lack of water, the population could reach 291 wild horses by 2015. Further, the February 2012 inventory accounted for 36 excess wild horses adjacent to the WDHA. With an estimated foal crop of 20 percent, the population of wild horses outside of the WDHA is expected to reach 74 wild horses by 2015.

The history of wild horses in the WDHA has been summarized in *Wild Horse Management History and Current Conditions within the West Douglas Herd Area, January 2015* (see Appendix C, also available online at: http://www.blm.gov/co/st/en/fo/wrfo/wrfo_wild_horse_and.html). The *Wild Horse Management History and Current Conditions within the West Douglas Herd Area, January 2015* document has outlined how the wild horses that reside in the WDHA or areas adjacent to the WDHA are impacting the landscape and the ability to maintain a thriving, natural ecological balance and multiple-use relationship in the area.

After a careful review of the WDHA history document and the current land use plan, the WRFO Field Manager concluded that all wild horses within or adjacent to the WDHA meet the statutory definition of excess animals, as determined in “West Douglas Herd Area Review of Current Situation” Information Memorandum dated January 2015. Based on that review, the WRFO Field Manager has concluded that an overpopulation exists and that the gather and removal is necessary to remove excess animals in accordance with the authority provided in 16 USC § 1333 (b) (2), that upon those findings, the Bureau of Land Management (BLM) shall immediately remove excess animals from the range and is requesting such action take place under the “West Douglas Herd Area Review of Current Situation” Information Memorandum dated January 2015. Gather and removal operations shall be conducted until excess animals have been removed in order to restore a thriving natural ecological balance and protect the range from deterioration associated with an overpopulation of wild horses.

The BLM has determined that all of the wild horses that reside within the WDHA and adjacent lands are excess animals that require removal in order to comply with existing Land Use Planning decisions set forth in the White River Resource Management Plan (Record of Decision, July 1997), and reaffirmed in the West Douglas Herd Area Amendment to the White River Resource Management Plan (Record of Decision October 10, 2007).

This Environmental Assessment (EA) specifically considers the methods to be used to gather excess wild horses that reside in or adjacent to the WDHA. The BLM is preparing this EA to disclose and analyze the environmental consequences of the methods used to gather excess wild horses in the WDHA in compliance with the National Environmental Policy Act (NEPA).

1.3. Purpose and Need for Action

This EA is a site-specific analysis of potential impacts that could result with the implementation of the Proposed Action or alternatives to the Proposed Action.

Based on existing inventories inside and outside the WDHA, the BLM has identified a need to take action to protect the other resources, including wildlife habitat, livestock and wildlife grazing, soil, water and vegetation resources. Therefore, the purpose for this action is to remove excess wild horses that reside in or adjacent to the WDHA in accordance with The Wild Free-Roaming Horses and Burros Act of 1971 and land use planning decisions.¹ In accordance with 16 USC § 1332 (f) "excess animals" means wild free-roaming horses or burros which have been removed from an area pursuant to applicable law or which must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area and to manage wild horses within designated management areas.

The need for this action is that after the review of *Wild Horse Management History and Current Conditions within the West Douglas Herd Area (January 2015)*, inventories, the White River Resource Management Plan (RMP) and all applicable Resource Management Plan Amendments, any existing court ordered EISs, and other information in accordance with The Wild Free-Roaming Horses and Burros Act of 1971, as amended, the BLM has determined that excess wild horses exist on the public lands within and adjacent to WDHA requiring that they be gathered and removed.

1.4. Decision to be Made

Upon completion of this EA, the Authorized Officer (AO) will make a determination as to whether any "significant" impacts could result from the implementation of these actions. "Significance" is defined by NEPA and is found in regulation 40 CFR 1508.27. An EA provides evidence necessary to determine whether a significant impact exists. If the BLM determines that the proposal would result in a "significant" impact, then the BLM would prepare an Environmental Impact Statement (EIS) for the project. If the AO determines that this project does not have "significant" impacts following the analysis, then the BLM would prepare and sign a "Finding of No Significant Impact" and Decision Record which implements the agency's selected alternative.

Based on the analysis contained in this EA, the BLM will decide whether to approve or deny the Proposed Action to begin to gather and remove excess wild horses from within and adjacent to the WDHA, and if so, under what terms and conditions. Under the NEPA, the BLM must determine if there are any significant environmental impacts associated with the Proposed Action.

The objective of the action is to remove excess wild horses from within and adjacent to the WDHA so that a thriving ecological balance is maintained. The AO will select the alternative that best allows the BLM to meet this objective.

¹ 16 U.S.C. §1333(b)(2)

The Field Manager is the AO, and will decide one of the following:

- To approve specific types of gather methods and design features to gather and remove excess wild horses that reside within or adjacent to the WDHA;
- To approve specific types of gather methods and design features to gather excess wild horses that reside within or adjacent to the WDHA but to remove excess wild horses in a phased approach based on age and sex;
- To analyze the effects of gather and removal operations in an EIS; or
- To deny wild horse gather and removal operations within or adjacent to the WDHA.

1.5. Conformance with the Land Use Plan

The Proposed Action is subject to and in conformance with the following plan (43 CFR 1610.5-3(a), BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (WRRMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-26, *Wild Horse Management*, “The North Piceance and West Douglas Herd Areas will be managed in the short-term (0-10 years) to provide forage for a herd of 0 – 50 wild horses in each herd area. The long term objective (+10 years) will be to remove all wild horses from these areas.”

Name of Plan: West Douglas Herd Area Amendment (WDHAA) to the White River Resource Management Plan, Environmental Assessment CO-WRFO-05-083-EA

Date Approved: October 10, 2007

In 2005, the BLM revisited its planning decisions to remove all wild horses in the herd area. The State Director found that BLM could not maintain a thriving natural ecological balance and multiple-use relationship outside of the designated Piceance-East Douglas Herd Management Area. That portion of the State Director’s decision reads as follows:

After extensive analysis and public input, the BLM concluded that a self-sustaining population of healthy wild horses could not be maintained within the West Douglas Herd Area in balance with their habitat and other uses, within the bounds of where wild horses existed in 1971, and with the minimum level of management needed to achieve land use plan objectives.

The State Director then found that wild horses within the White River Field Office's management area could be better managed within the designated Piceance-East Douglas Herd Management Area:

Intensive management would be required to maintain genetic viability of the herd, provide adequate horse habitat and suitable conditions for other competing uses, keep the horses within the boundaries of the management area, and to carry-out horse gathers in the localized rough terrain. For these reasons, BLM concluded that wild horses could be better managed within the adjacent Piceance-East Douglas Herd Management Area.

1.6. Relationship to Laws, Regulations, and Other Plans

The Wild Free-Roaming Horses and Burros Act of 1971, 16 U.S.C. 1333(a) provides:

Section 3(a)

The Secretary shall 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.

To achieve a thriving natural ecological balance (TNEB) on the public lands, wild horses and burros (WH&B) should be managed in a manner that assures significant progress is made toward achieving the Land Health Standards for upland vegetation and riparian plant communities, watershed function, and habitat quality for animal populations, as well as other site-specific or landscape-level objectives, including those necessary to protect and manage threatened, endangered, and sensitive species. WH&B herd health is promoted by achieving and maintaining a TNEB.

However, Bureau of Land Management wild horse and burro program goals have expanded beyond simply establishing and maintaining a TNEB (i.e. establishing AML for individual herds), to include achieving/maintaining population size within the established AML as well as managing for healthy, self-sustaining wild horse population. The focus of wild horse management has also expanded to place emphasis on achieving rangeland health as measured through the Standards for Rangeland Health.

Section 3(b)(2)

Where the Secretary determines on the basis of (i) the current inventory of lands within his jurisdiction; (ii) information contained in any land use planning completed pursuant to section 202 of the Federal Land Policy and Management Act of 1976; (iii) information contained in court ordered environmental impact statements as defined in section 2[3] of

the Public Range Lands Improvement Act of 1978; and (iv) such additional information as becomes available to him from time to time, including that information developed in the research study mandated by this section, or in the absence of the information contained in (i-iv) above on the basis of all information currently available to him, that an overpopulation exists on a given area of the public lands and that action is necessary to remove excess animals, he shall immediately remove excess animals from the range so as to achieve appropriate management levels.

The Federal Land Policy and Management Act of 1976 (FLPMA) requires that an action under consideration be in conformance with the applicable BLM land use plan, and be consistent with other federal, state, and local laws and policies to the maximum extent possible.

Title 43 Code of Regulations

Title 43 of the Code of Federal Regulations (CFR) provides:

PART 4700 – PROTECTION, MANAGEMENT, AND CONTROL OF WILD FREE-ROAMING HORSES AND BURROS

Subpart 4710 – Management Considerations

Sec. 4710.1: Land use planning.

Management activities affecting wild horses and burros, including the establishment of herd management areas, shall be in accordance with approved land use plans prepared pursuant to part 1600 of this title.

Sec. 4710.4: Constraints on management.

Management of wild horses and burros shall be undertaken with the objective of limiting the animals' distribution to herd areas. Management shall be at the minimum level necessary to attain the objectives identified in approved land use plans and herd management area plans.

Subpart 4720 - Removal

Sec. 4720.1: Removal of excess animals from public lands.

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 in the following order.

(a) Old, sick, or lame animals shall be destroyed in accordance with subpart 4730 of this title;

- (b) Additional excess animals for which an adoption demand by qualified individuals exists shall be humanely captured and made available for private maintenance in accordance with subpart 4750 of this title; and
- (c) Remaining excess animals for which no adoption demand by qualified individuals exists shall be destroyed in accordance with subpart 4730 of this title.

Sec. 4720.2: Removal of strayed or excess animals from private lands.

Sec. 4720.2-1: Removal of strayed animals from private lands.

Upon written request from the private landowner to any representative of the Bureau of Land Management, the authorized officer shall remove stray wild horses and burros from private lands as soon as practicable. The private landowner may also submit the written request to a Federal marshal, who shall notify the authorized officer. The request shall indicate the numbers of wild horses or burros, the date(s) the animals were on the land, legal description of the private land, and any special conditions that should be considered in the gathering plan.

Sec. 4720.2-2: Removal of excess animals from private lands.

If the authorized officer determines that proper management requires the removal of wild horses and burros from areas that include private lands, the authorized officer shall obtain the written consent of the private owner before entering such lands. Flying aircraft over lands does not constitute entry.

BLM Standards for Public Land Health in Colorado

In January 1997, the Colorado BLM approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. The BLM applies standards on a landscape scale and related to the potential of the landscape.

Readers can access this information at
http://www.blm.gov/co/st/en/BLM_Resources/racs/nwrac.html

1.7. Relationship between the Piceance-East Douglas Herd Management Area and West Douglas Herd Area Gathers

The BLM's National Wild Horse and Burro Program has determined there is space available in short-term and/or long-term holding facilities for excess wild horses which may be removed

from Colorado in Fiscal Year 2015. All wild horse gathers are subject to funding approval and further based on availability of short-term and/or long-term holding facilities. Within the WRFO, the priority would be to remove excess wild horses from within and adjacent to the West Douglas Herd Area (WDHA). However, if it becomes difficult to gather excess wild horses from the area due to weather conditions, resource conditions, wild horse behavior, etc., the WRFO would gather excess wild horses from within and adjacent to the Piceance-East Douglas Herd Management Area (PEDHMA). Gather of any wild horses within the PEDHMA is contingent upon whether or not (and if so, how many) excess wild horses are gathered and removed from the WDHA. Due to differences between the PEDHMA and the WDHA, the WRFO is conducting separate NEPA reviews for the two proposed gathers, DOI-BLM-CO-N05-2015-0024-DNA and DOI-BLM-CO-N05-2015-0023-EA, respectively. The proposed gather in PEDHMA is for a specified number of excess wild horses and would be proposed to be conducted during September 2015 using helicopter drive trapping or helicopter assisted roping. The PEDHMA is the only area identified in the WRFO for management of wild horses. In contrast, the WDHA is not identified in the RMP for management of wild horses and the proposed gather would be conducted over a period of several years using a variety of gather techniques including helicopter drive trapping, helicopter assisted roping, and bait and water trapping. To make sure that the WRFO's gather plans for excess wild horses are clearly understood by the public, both of the NEPA reviews will be made available for public scoping and review at the same time.

2. PUBLIC INVOLVEMENT

2.1. Scoping

Per the BLM NEPA Handbook, "scoping is the process by which the BLM solicits internal and external input on issues, impacts, and alternatives" and is considered a form of public involvement in the NEPA process (Section 6.3). Scoping is both an internal and external process. While external scoping for EAs is not required (40 CFR 1501.7; 43 CFR 46.305(a)), CEQ regulations direct agencies to encourage and facilitate public involvement in the NEPA process to the fullest extent possible (40 CFR 1500.2(d), 40 CFR 1506.6), and DOI regulations (43 CFR 46.305(a)) and the BLM's NEPA Handbook gives the Authorized Officer the discretion to conduct external scoping for EAs. In this case, external scoping was conducted because the proposed gather and removal of excess wild horses within the West Douglas Herd Area is known to be a contentious issue with widespread public interest.

Internal scoping was initiated when the project was presented to the White River Field Office (WRFO) interdisciplinary team on December 16, 2014. External scoping was conducted from January 30, 2015 until February 14, 2015. This project was posted on the BLM's on-line NEPA register (ePlanning) and the public was informed via a news release. Informational letters regarding scoping for the Preliminary EA were sent to interested parties on January 30, 2015.

As of March 9, 2015 WRFO had received comments from 19 individuals or organizations and 9,096 form letters. The majority of these comments were related to the proposed gather operation in the WDHA, although a few of the comments were directed towards both the WDHA and the

PEDHMA. Substantive comments are those that question the accuracy of the information in the EA, the assumptions used for the analysis, present new information relevant to the analysis, or present reasonable alternatives other than those analyzed in the EA (BLM NEPA Handbook, Section 6.9.2.1). Scoping comments are summarized in Appendix F and where appropriate incorporated into the document.

2.2. Public Comment

On April 6, 2015 the WRFO made the preliminary NEPA documents available for public review and comment, with a comment due date of May 5, 2015. The public was notified by a press release and the WRFO also sent letters to over 100 individuals and groups announcing the availability of the documents.

The BLM received a total of 54 public comments in the form of individual letters, faxes, calls, emails, and 10,279 form letter emails. The majority of the comments focused on the WDHA, although there were some comments that were applicable to both the WDHA and PEDHMA, and some comments that were specific to only the PEDHMA. In response to comments received, the BLM made minor changes in the final EA. The WRFO considered whether new comments were received that were not previously addressed within the scope of the analysis of the 2011 EA throughout preparation of the DNA. Public comments are addressed under Appendix G.

3. PROPOSED ACTION AND ALTERNATIVES

This chapter describes the Proposed Action and alternatives, including any that were considered but eliminated from detailed analysis. The BLM has developed four alternatives which will be considered in detail:

- Alternative A – Proposed Action - Use all approved gather methods
- Alternative B – Exclusive use of bait and/or water trapping
- Alternative C - Use all approved gather methods but remove wild horses in a phased approach based on age and sex
- Alternative D – No Action Alternative.

For a detailed description of the gather methods described in the alternatives, refer to Appendix D - Standard Operating Procedures (WO- IM-2013-059). The gather and removal of excess wild horses would be completed by a BLM Wild Horse and Burro (WH&B) National Program Contractor and/or BLM personnel.

Note: All Washington Office Instruction Memorandums (WO IMs) can be found online (http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction.html).

3.1. Alternative A (Proposed Action): Use All Approved Gather Methods

Under Alternative A (Proposed Action), the BLM would use all approved gather methods (either individually or in various combinations) to remove excess wild horses from areas within and adjacent to the WDHA. Gather operations would continue as needed on an annual bases, as funding allows, or until excess wild horses are gathered and removed from areas within and adjacent to the WDHA.

For Fiscal Year 2015, gather operations, if approved, would be tentatively scheduled for September 14 – 25, 2015 (approximately 11 days) with an anticipated gather and removal of 167 wild horses utilizing helicopter drive-trapping and helicopter assisted roping. Several factors such as animal health, weather conditions, or other considerations could result in adjustments in the schedule. The use of helicopters in subsequent fiscal years would likely be scheduled for a similar duration between July 1 and February 28.

The gather and removal of excess wild horses would be completed by a BLM Wild Horse and Burro (WH&B) National Program Contractor and/or BLM personnel. The types of approved gather methods include:

1. Helicopter drive-trapping: involves using a helicopter to spot and then herd wild horses towards a pre-constructed trap. Traps would be pre-constructed utilizing portable, round-pipe steel panels with funnel-shaped wings made up of jute fabric affixed to T-posts that have been temporarily tamped into the ground to create a visual barrier so that as the wild horses are hazed by the helicopter towards the trap through the “wings” or funnel so that the wild horses ultimately end up in the trap where people on-the-ground shut a gate behind them in order to catch them in the trap. In general, most traps would be estimated to be 1 – 5 acres in size. Trap locations would be situated in areas where previously used trap sites were located or other disturbed areas whenever possible. Trap locations are chosen for safety of maneuvering the wild horses into the trap, as well as, to gather the wild horses located in a given area. Helicopter drive-trapping would not be conducted between the dates of March 1 and June 30 which are considered to be the peak foaling period (Washington Office (WO) Instruction Memorandum (IM) 2010-183). The BLM Wild Horse and Burro Handbook, H-4700-1, Section 4.4.4 prohibits the capture of wild horses by helicopter during peak foaling periods.
2. Helicopter assisted roping: includes herding by helicopter towards ropers who rope the wild horse(s). Once roped, another rider rides alongside the roped wild horse and roper, helping to haze, or herd, the roped wild horse either towards the trap or towards a stock trailer. Once at the trap the rope is flipped away from the roped wild horse’s neck and it joins the rest of the trapped wild horses. No helicopter assisted roping would be conducted between the dates of March 1 and June 30 due to the BLM’s policy which prohibits the capture of wild horses by helicopter during peak foaling periods. Several factors such as animal condition, herd health,

weather conditions, or other considerations could result in adjustments in the schedule. Helicopter gathers in subsequent years would likely be scheduled for a similar duration between July 1 and February 28.

3. Water trapping: utilizes a trap constructed of portable, round-pipe steel panels. Funnel-shaped traps are built allowing wild horses to get deep into the trap so that the gate release mechanism has time to close. Water traps are located at a specific water source. Water trapping may be conducted at any time of year.
4. Bait trapping: utilizes a trap constructed of portable, round-pipe steel panels. Funnel-shaped traps are built which allow wild horses to get deep into the trap so that the gate release mechanism has time to close. Bait traps would be located in areas frequented by wild horses so that the horses make use of the provided forage (quality, weed free hay). Bait trapping may be conducted at any time of year.

3.2. Alternative B: Exclusive Use of Bait and/or Water Trapping

Exclusive use of bait and/or water trapping utilizes a trap constructed of portable, round-pipe steel panels. Funnel-shaped traps would be built, allowing wild horses to get deep into the trap so that the gate release mechanism has time to get the gate closed. Water traps would be located at a specific water source. Bait traps would be located in areas frequented by wild horses so that the wild horses would make use of the forage that is provided as bait. Water and/or bait trapping may be conducted at any time during the year. The exact locations of such bait and/or water trapping have not been determined at this time but these locations would be selected based on current wild horse use of an area and/or a given water source.

3.3. Alternative C: Use All Approved Gather Methods but Remove Wild Horses in a Phased Approach Based on Age and Sex

Alternative C is similar to Alternative A except all stallions over three years of age would be returned to the WDHA until the point when the sex ratio of gathered wild horses is 80 percent stallions and 20 percent dry mares, and/or mare/foal pairs, and stallions younger than three years of age. The BLM would then begin removing stallions over three years of age along with any of the dry mares, and/or mare foal pairs, and stallions younger than three years of age. Until the time that the 80/20 percent is reached, all mares, foals, and stallions three years old or younger would be gathered and removed from the WDHA. No stallions would be gelded that are returned to the WDHA. No mares or mare/foal pairs would be returned to the WDHA so there would be no need for the treatment of mares with porcine zona pellucida (PZP).

For the gather operation that could be conducted in 2015, approximately 167 excess wild horses would be removed. It is currently estimated that approximately 183 of the total estimated wild

horses that are located in the WDHA or adjacent to the WDHA area would be dry mares or mares with a foals at their side. Further, it is estimated that approximately another 36 wild horses would be stallions three years of age or younger. If this gather is carried out, and is successful, 167 dry mares, mare/foal pairs and/or stallions three years of age or younger would be removed from the WDHA or adjacent areas. Even if the proposed gather operation is fully successful this would leave approximately 208 wild horses within or adjacent to the WDHA to be gathered and removed in the future not including a population increase. With the removal of more mares from the herd it is expected that the reproductive rate would be reduced to less than the 20 percent that currently takes place.

Because the BLM has limited ability to place wild horses within holding facilities because most facilities are at or near capacity, the purpose of a phased approach to removing excess wild horses based on age and sex is to slow the reproductive rate of the remaining population of excess wild horses within or adjacent to the WDHA and to capitalize on BLM's ability to adopt the younger horses versus placement in short-term or long-term holding facilities.

3.4. Design Features for Alternatives Involving Helicopters (Alternatives A and C)

1. Avoid, if possible, helicopter gather operations from late-August through November for high public use areas during big game hunting seasons.
2. Colorado Parks and Wildlife (CPW) staff would be contacted to coordinate gather operations in an effort to develop mutually compatible strategies that may reduce the intensity and localize the expanse of helicopter-related disturbances during big game hunting seasons.
3. 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.
4. Aviation fueling operations would be conducted a minimum of 1,000 feet from wild horses in traps or temporary holding facilities.
5. All refueling would occur on existing roads or a site approved by the BLM as a helicopter staging area. All approved staging areas would be a minimum of 200 feet from any riparian area or stream channel. The operator would utilize absorbent pads while refueling to limit the potential of fuel spills. In the event of a spill of lubricant, hydraulic fluids, fuels, or other hydrocarbons, the spill would be reported to the BLM's Contracting Officer Representative (COR) or Project Inspector (PI) so that BLM can immediately conduct evaluations of any necessary clean-up actions, as well as perform such actions to ensure compliance with applicable laws, rules, and regulations.

6. If possible, avoid helicopter gather operations from December through February to reduce/eliminate impacts to big game during the critical winter period.
7. If possible, avoid helicopter gather operations from July 1 through August 15 to reduce/eliminate impacts to nesting raptors and migratory birds.

3.5. Design Features Common to All Gather Alternatives (Alternatives A, B, and C)

1. Gather operations would be recurring as funding and space in short-term and/or long-term holding allow until excess wild horses are gathered and removed from areas within and adjacent to the WDHA.
2. The BLM would provide the public/media with safe and transparent visitation at wild horse gather operation in accordance with WO-IM-2013-058. The BLM would conduct gather operations while ensuring the humane treatment of wild horses in accordance with WO-IM 2013-059. A schedule would be prepared and posted on the WRFO's website (<http://www.blm.gov/co/st/en/fo/wrfo.html>) that would outline specific viewing opportunities and other relevant information. The BLM would provide concise, accurate and timely information about gather operations with communication and reporting during the course of an ongoing wild horse gather in accordance with WO-IM 2013-061.
3. The WRFO would utilize the Incident Command System (ICS) to enable safe, efficient, and successful wild horse gather operations in accordance with WO-IM-2013-060.
4. The BLM would not construct trap locations or temporary holding facilities within 200 meters of known occupied habitat for listed plant species. If trap sites are anticipated in potential or suitable habitat that have not been previously disturbed, 24 hours of notification would be required and a pre-survey for special status plant species would be conducted prior to mobilization of vehicles and equipment by a BLM plant specialist. If BLM Sensitive plant species or federally listed plant species are located, another site would be selected at a distance greater at least 200 meters from the edge of the population or occurrence and pre-surveyed similarly, as necessary.
5. A veterinarian from the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) would be at the gather to examine animals and make recommendations to the BLM for care and treatment of the gathered wild horses. Decisions to humanely euthanize animals in field situations would be made in conformance with BLMs 4730 Manual and WO-IM-2015-070.
6. Contractors and/or BLM would utilize trailers to transport gathered wild horses to a temporary holding facility where they would receive appropriate food and water. Holding facilities and gather sites have historically been located on both public and private lands

due to road access and availability of water and may be located on such lands again during proposed gather operations.

7. Removed wild horses would most likely be transported to the Canon City, Colorado BLM holding facility where they would be prepared (freeze-marked, vaccinated, and dewormed) for adoption, sale (with limitations), or long-term holding unless unforeseen circumstances warranted that the wild horses be transported to a different approved BLM holding facility (i.e. at Rock Springs, Wyoming).
8. There is no proposal to hold a wild horse adoption at the temporary holding facility upon completion of a gather because of current market conditions. However, if determined that an adoption is warranted, the BLM may hold an adoption offering approximately 10 wild horses with a date to be decided upon and advertised.
9. Any discovery of hazardous or potentially hazardous materials would be reported to the BLM hazardous materials coordinator and Law Enforcement for investigation.
10. Any hay fed at trap sites or holding facilities, on public lands, would be certified as weed free. Any noxious weeds that establish as a result of the proposed action would be controlled by the BLM. All of the trap locations would be monitored for up to three years for weed species infestation following gather operations. If discovered, the BLM would treat these locations following procedures outlined in DOI-BLM-CO-110-2010-0005-EA (http://www.blm.gov/co/st/en/BLM_Information/nepa/wrfo/FY_2010.html). It is estimated that the total acreage affected would be less than 50 acres.
11. Trap locations and holding areas would be sited to avoid cultural resources. In areas with acceptable levels of inventory no additional field work should be necessary except to ensure that sites in the near vicinity can be adequately avoided by drive lines, wing fences and traps. In areas where inadequate inventory data exists an inventory would be conducted to ensure that any resources present are avoided.
12. Known and reported fossil localities would be avoided when locating trap sites and associated wing fences and holding facilities. Sites without adequate inventory data would need to be examined for the presence of fossils during trap site selection activities. Trap facilities would be modified to avoid impacting identified fossil resources.
13. All of the trap locations would be monitored for up to three years for vegetation recovery. If problems with vegetation establishment are discovered, BLM would treat these locations based on the aid in vegetation recovery that may be necessary, i.e. broadcast seeding, at the trap locations. It is estimated that approximately 50 acres would be affected for what would be considered the life of the gather and removal efforts.

14. The BLM is responsible for informing all persons who are associated with the project that they would be subject to prosecution for knowingly disturbing archaeological sites or for collecting artifacts.
15. If any archaeological materials are discovered as a result of operations under this authorization, activity in the vicinity of the discovery would cease, and the WRFO Archaeologist would be notified immediately. Work may not resume at that location until approved by the AO. The BLM would make every effort to protect the site from further impacts including looting, erosion, or other human or natural damage until BLM determines a treatment approach, and the treatment is completed. Unless previously determined in treatment plans or agreements, the BLM would evaluate the cultural resources and, in consultation with the State Historic Preservation Office (SHPO), select the appropriate mitigation option within 48 hours of the discovery. The BLM would implement the mitigation in a timely manner. The process would be fully documented in reports, site forms, maps, drawings, and photographs. The BLM would forward documentation to the SHPO for review and concurrence.
16. Pursuant to 43 CFR 10.4(g), the BLM would immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.
17. The BLM would be responsible for informing all persons who are associated with gather operations that they would be subject to prosecution for disturbing or collecting vertebrate or other scientifically-important fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.
18. For Minerals and ROWs: Prior to commencement of gathering operations, the BLM would notify existing right-of-way holders, range permittees, operators, and lessees of any location, date, and time associated with the gather that may affect their permitted activities.
19. No traps or holding facilities would be located within Oil Spring Mountain Wilderness Study Area.
20. If gather operations are conducted during any of the CPW GMU 21 big game seasons, Special Recreation Permit holders authorized to operate in the analysis area for commercial big game guiding and outfitting would be notified of the gather activities and locations in advance.
21. No traps or holding facilities would be located at or impede the use of the developed recreation sites in Canyon Pintado National Historic District and along the Dragon Road (RBC Road 23).

22. Surveys of suitable raptor nesting habitat would be conducted by WRFO staff at those trap sites proposed for use or development from April 15 to August 15. In the event an active raptor nest is found in the vicinity of trapping operations, these sites would be afforded a buffer adequate to effectively isolate nesting activity from disruptions generated by wild horse trapping operations as required in the 1997 WRRRA ROD.
23. Those sites proposed for water trapping would be surveyed by WRFO wildlife staff prior to use to determine if sites are occupied by aquatic amphibian species. If trapping efforts are found to impact individuals or habitat, the trap site would be relocated.
24. Traps and temporary holding facilities locations would avoid all known paleontological localities. In addition, all trap and temporary holding facilities would be surveyed for exposed outcrops of fossils, suspected fossil localities, and exposed outcrops of stone.
25. Traps and temporary holding facilities location would be located in previously used trap sites or on an area of existing disturbance, such as road or a wash. The possibility of finding intact cultural resources in these areas is minimal to non-existent. If an existing disturbed area cannot be located for traps and temporary holding facilities, a cultural resource inventory would take place prior to the gather. If cultural resources are located during this inventory, the trap site or temporary holding facility would be moved to another location, which does not contain cultural resources.
26. All equipment used for gather operations shall be cleaned before it comes to WRFO and when it leaves WRFO to minimize the potential spread of noxious and/or invasive weed species.
27. Equipment shall be cleaned when moving between locations within the analysis area if noxious weeds are encountered and if there is any potential for weed seeds to be carried between locations.
28. Monitoring would be completed every year for three years following gather operations to ensure no new weed establishment has occurred at any of the trap locations. If new weeds are found, appropriate treatment by BLM will be done to eradicate or minimize spread.
29. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the AO.
30. Any trap sites located on greater than 35 percent slope would be evaluated in the field by WRFO hydrology staff prior to identify any necessary Best Management Practices (BMPs) in order to ensure that use of the site would still allow for meeting Public Land Health Standard 1 (e.g., minimizing overland surface erosion and subsequent rilling and/or gullyng).

3.6. Alternative D: No Action Alternative

Under Alternative D, excess wild horses would not be gathered or removed from areas within and adjacent to the WDHA.

3.7. Alternatives Considered but Eliminated from Detailed Analysis

3.7.1. *Alternative Gather and Removal Methods*

- A. Other alternative capture techniques:** The BLM has identified net gunning, chemical immobilization, and wrangler/horseback drive trapping as other capture techniques for gathering wild horses.

Generally, net gunning techniques normally used to capture animals also rely on helicopters. The BLM has not approved this technique for the use in gathering of wild horses.

Chemical immobilization is a very specialized technique and strictly regulated. Currently, the BLM does not have sufficient expertise to implement this method and it would be impractical to use given the size and with the varied topographic and rough terrain features of the WDHA, access limitations and the approachability of the wild horses.

Use of wrangler on horseback drive-trapping as the only gather method to remove excess wild horses can be fairly effective on a small scale or for the gathering of individual wild horses but due to the number of excess wild horses to be gathered, the large geographic size of the WDHA, rough terrain, and approachability of the wild horses in this area, this technique would be ineffective and impractical to meet the purpose and need. Horseback drive-trapping is also very labor intensive and can be harmful to the domestic horses and wranglers during the gather operations.

For the reasons listed above, these alternative gather methods were eliminated from further consideration.

- B. Capture excess wild horses using all available approved gather methods then geld all stallions over the age of 3 and return them to the WDHA:** This alternative is similar to Alternative C except all stallions over 3 years of age would be gelded and then returned to the WDHA and a non-reproducing herd would remain. As gather operations are conducted over time, all mares, foals, and stallions 2 years old or younger would be gathered and removed from the WDHA. All stallions aged 3 and older would be gelded that are returned to the WDHA to reduce the number of stallions available to breed any remaining wild horse mares that are located within the WDHA or adjacent areas. Gather operations would be recurring until a non-reproducing herd is established within the WDHA. A conservative estimate of reaching a non-reproducing herd is approximately 10 years with an additional

25 years until all wild horses have lived out their natural lives in or adjacent to the WDHA with the result that no wild horses are located within or adjacent to the WDHA. There is additional risk and/or complications which could result in death from the gelding process of the stallions. The gelding of the stallions also eliminates the hormonally driven behavior of the stallions. For these reasons and because this alternative does not meet plan conformance for no wild horses to be located within the WDHA this alternative was eliminated from further consideration.

- C. Remove or reduce livestock within the WDHA and adjacent lands:** This action would not be in conformance with the existing land use plan and is contrary to the BLM's multiple-use mission as outlined in the 1976 Federal Land Policy and Management Act (FLPMA), and would be inconsistent with the WFRHBA, which provides that upon finding that an overpopulation exists and that action is necessary to remove animals, the Secretary shall immediately remove excess wild horses. Additionally, this would only be effective for the very short term because the wild horse population would continue to increase at a recruitment rate of approximately 20 percent annually. Eventually the WDHA and adjacent lands would no longer be capable of supporting the excess wild horse population due to limited resources and limited space.

4. ISSUES

The CEQ Regulations state that NEPA documents “must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail” (40 CFR 1500.1(b)). While many issues may arise during scoping, not all of the issues raised warrant analysis in an environmental assessment (EA). Issues will be analyzed if: 1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) if the issue is associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of the impacts. The following sections list the resources considered and the determination as to whether they require additional analysis.

4.1. Issues Analyzed

The following issues were identified during internal scoping as potential issues of concern for the Proposed Action. These issues will be addressed in this EA.

- **Aquatic Wildlife:** Impacts associated with helicopter gather and roping operations as well as bait and water trapping have the potential to impact aquatic communities.
- **Vegetation:** Impacts associated with gather methods for the capture and removal of excess wild horses have the potential to impact native vegetation communities.

- **Invasive, Non-Native Species:** Impacts associated with gather methods for the capture and removal of excess wild horses have the potential to impact the area with the introduction of or increase in invasive, non-native species.
- **Migratory Birds:** Impacts associated with helicopter gather and roping operations as well as bait and water trapping have the potential to impact migratory bird species and habitats that support their reproductive functions.
- **Terrestrial Wildlife:** Impacts associated with helicopter gather and roping operations as well as bait and water trapping have the potential to impact terrestrial wildlife species and habitats that provide forage and cover resources during critical timeframes (breeding, winter, etc.).
- **Special Status Animal Species:** Impacts associated with helicopter gather and roping operations as well as bait and water trapping have the potential to impact special status animal species and habitats that provide forage and cover resources during critical timeframes.
- **Cultural Resources:** Direct impacts to cultural resources will be reduced by placing traps and temporary holding facilities in previously used trap sites or on an area of existing disturbance when possible. If an existing disturbed area cannot be located for traps and temporary holding facilities, a cultural resource inventory will take place prior to the gather. However, the Proposed Action can still directly and indirectly adversely affect cultural resources.
- **Paleontological Resources:** The Proposed Action can negatively affect exposed fossils, suspected fossil localities, and exposed outcrops of stone.
- **Lands with Wilderness Characteristics:** There are ten lands with wilderness characteristics units that have been identified as having wilderness characteristics within the proposed analysis area. There is potential for the proposed activities associated with the various alternatives to impact wilderness characteristics in these ten units.
- **Wilderness Study Area:** Oil Spring Mountain Wilderness Study Area (WSA) is located within the proposed analysis area. There is potential for some of the proposed activities in various alternatives to not meet the non-impairment standard for managing WSAs.
- **Livestock Grazing:** Impacts associated with gather methods for the capture and removal of excess wild horses have the potential to impact livestock grazing management.
- **Wild Horses:** Impacts associated with gathering and removal of excess wild horses will have an impact on wild horses.
- **Recreation:** There is potential for the activities proposed in the various alternatives to impact the desired experiences of big game hunters and other recreationalists during gather operations.

4.2. Issues Considered but not Analyzed

- **Air Quality**: The analysis area is located in rural northwest Colorado in the White River Basin. Industrial facilities in the White River Basin include coal mines, soda ash mines, natural gas processing plants, and power plants. Due to these industrial uses, increased population and oil and gas development in this region, emissions of air pollutants in the White River Basin due to exhaust emissions and dust (particulate matter) occur. Overall air quality conditions in the White River Basin are generally good due to effective atmospheric dispersion conditions and limited transport of air pollutants from outside the area. The WRFO resource area has been classified as either attainment or unclassified for all air pollutants, and most of the area has been designated for the prevention of significant deterioration (PSD) class II for Dinosaur National Monument. Regional air quality parameters including dust are being measured on a continuous basis at monitoring sites located at Meeker, Rangely, Dinosaur, and near the Flat Tops Wilderness Area. Under the No Action Alternative, excess wild horses would not be gathered or removed from areas within and adjacent to the WDHA and long-term direct impacts to Air Quality from grazing and trailing would be higher than the Proposed Action since wild horse herd numbers would continue to rise and air quality benefits from reducing wild horse herd levels would not be realized.
- **Wetlands and Riparian Zones**: Wetland and riparian zones are unlikely to be impacted by helicopter drive trapping operations. If water sources which support wetland or riparian zones are chosen for water trapping operations, these operations are not likely to increase the amount of use these areas receive under natural conditions. As the trap sites are continuously monitored while actively in use there would not be an opportunity for increased or prolonged congregation within these areas from the present situation during gather operations.
- **Geology and Minerals**: Gathering and removing wild horses would have little to no impacts on the geologic and mineral resources. The Design Feature requiring the notification of the affected mineral operators would allow the operators to schedule maintenance and production operations to prevent conflict of activities in analysis area.
- **Native American Religious Concerns**: No Native American religious concerns are known in the area, and none have been noted by tribal authorities. Should recommended inventories or future consultations with Tribal authorities reveal the existence of such sensitive properties, appropriate mitigation and/or protection measures may be undertaken.
- **Fire Management**: The Proposed Action will not affect the Northwest Colorado Fire Program Area Fire Management Plan.
- **Social and Economic Conditions**: There would not be any substantial changes to local social or economic conditions.

- **Environmental Justice:** According to the most recent Census Bureau statistics (2010) and guidelines provided in WO-IM-2002-164, there are no minority or low income populations within the WRFO.
- **Prime and Unique Farmlands:** There are no prime and unique farmlands within the analysis area.
- **Soil Resources:** Soils with landslide potential and/or located on slopes greater than 35 percent within the analysis area have been mapped and broken down by USGS 24,000 scale maps (refer to Appendix A – Soils Analysis Map) to provide a reference during the proposed gather operations. Any trap sites located on these slopes would be evaluated in the field to identify any necessary BMPs to ensure that use of the site would meet Public Land Health Standard 1 (e.g., minimizing overland surface erosion and subsequent rilling and/or gullyng).
- **Surface and Ground Water Quality:** The gathering and removal of wild horses utilizing water traps and temporary holding facilities would not result in impacts to surface or groundwater quality. If water traps are located near surface and/or groundwater expressions (springs), resource impacts would be temporary and are not expected to exceed current impacts from wild horse usage.
- **Floodplains, Hydrology, and Water Rights:** Based on USACE 2007 data, several delineated floodplains exist within the analysis area (refer to Appendix A – Water Resources Map). The gathering and removal of wild horses utilizing water traps and temporary holding facilities would not impact delineated floodplains or stream channel hydrology beyond current impacts from wild horse usage. Water rights: Given the temporary nature of the Proposed Action and Alternatives, no long-term impacts to designated beneficial uses of water rights located within the analysis area are foreseen.
- **Realty Authorizations:** Gathering and removing wild horses would have little to no impacts on Realty Authorizations. The Design Feature requiring the notification of the affected holders would allow the operators to schedule maintenance and production operations to prevent conflict of activities in analysis areas.
- **Visual Resources:** Due to the temporary nature of all proposed activities associated with any and all alternatives, there would be no long term impacts or changes to the existing character of the landscape as a result of implementing any of the alternatives.
- **Access and Transportation:** There should be no changes to public access or the BLM travel and transportation system as a result of implementing any of the proposed alternatives. It is unlikely that any existing routes will change in character or that new vehicle routes would be created as a result of implementing any of the proposed alternatives. Access to and from the trap sites and/or holding facilities by BLM employees, contractors, the public, and others associated with the proposed activities is

likely to result in an inconsequential and temporary increase in traffic volume on routes used for this project.

- **Wild and Scenic Rivers:** There are no Wild and Scenic Rivers within the WRFO.
- **Scenic Byways:** The proposed analysis area is located adjacent to approximately 22 miles of the 512 mile long state-designated Dinosaur Diamond Scenic and Historic Byway along State Highway 139. This byway is designated for the dinosaur, fossil, and archeological resources located along the route. The activities associated with the gathering of wild horses in the various alternatives are not expected to change or interfere with the visitor experience and setting for which this byway is intended to provide.
- **Areas of Critical Environmental Concern (ACEC):** No trapping operations would take place in the ACECs, so there would be no impacts from gather operations to any ACEC.
- **Special Status Plant Species:** There is no known Threatened, Endangered or Candidate plant species known to exist in the analysis area. Limited inventories have been conducted for these and other special status plant species within the analysis area. Several BLM sensitive plant species endemic to the Green River geologic formations would be anticipated to occur on shale barren habitats in the area. One BLM Sensitive plant species, the Duchesne milkvetch (*Astragalus duchesnensis*) is known from a historic State of Colorado field record in Township 2 South, Range 103 West, Section 14. This parcel is privately owned but the portion of the parcel containing the Duchesne milkvetch is unfenced from the surrounding BLM parcels. This plant was found on Soil Units #64 (Piceance fine sandy loam) and is approximately ½ mile southeast of the Big Park Road off of Rio Blanco County Road #23.
- **Forestry and Woodland Products:** There would be no impacts to forestry and woodland products as a result of the proposed action or any of the alternatives.
- **Hazardous or Solid Wastes:** There are no anticipated impacts that would result from materials that would be used, stored, transported, or disposed of in association with the proposed action or any of the alternatives. Use, storage, transportation, and disposal of small amounts of chemical and solid waste potentially used would be in accordance with the BLMs policy and guidelines, and other federal, state, and local laws.

5. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

5.1. General Setting & Access to the Analysis Area

The WDHA begins approximately 5 miles south of Rangely in northwestern Colorado and approximately 50 miles north of Grand Junction, Colorado. The WDHA encompasses approximately 123,387 acres of federal land managed by the WRFO and approximately 4,754 acres of private land. The entire WDHA and analysis area is located within Rio Blanco County, Colorado (Appendix A, Map 1).

Generally, the area is characterized as a canyon/plateau geographic type. The terrain has numerous washes and draws that can run long and deep, and arroyos, as well as, small canyons. There is considerable amount of surface rock and rock outcrops resulting in wild horses having difficulty traveling long distances and having to take circuitous routes. Elevations range from 6,300 feet near Rangely, Colorado to 8,000 feet on Oil Spring Mountain. Precipitation ranges from 11 inches at the lower elevations and 18 inches at the higher elevations. Vegetation is highly varied as a result of topography and precipitation. At the lower elevations are greasewood bottoms, the mid-elevations are pinyon/juniper woodlands and sagebrush parks, and the upper elevations are made up of mountain shrub and Douglas-fir communities. There are a few natural waters (springs, seeps, creeks) with the majority of the water provided by stock ponds which are scattered throughout the area. Several treated areas in the WDHA provide some open space and forage. The WDHA boundary is not completely fenced and has some internal fences, as well as, fences in the adjoining allotments and along highway right-of-ways. All fences would be considered when gathering wild horses.

Various county roads are available to access the area including but not limited to the following: Rio Blanco County Road (RBC) 23 (Big Park aka Dragon Trail), RBC 100 (Compressor Station West), RBC 105 (Horse Draw), RBC107 (Angelo Ridge), RBC 109 (Missouri Creek), RBC 111 (Texas Creek), RBC 113 (Upper Horse Draw), RBC 114 (Rabbit Mountain), and RBC 116 (Little Horse Draw). Additional access is available off of several numbered or unnumbered BLM roads, as well as other private or energy related roads. A majority of the roads may pose potential travel issues after a moderate rain event. Colorado State Highway 139 defines the eastern WDHA boundary and is fenced not allowing migration of wild horses outside of the WDHA to the east.

5.2. Assumptions for Analysis

Assumed Timeframes Necessary to Gather Excess Wild Horses

The BLM anticipates that gathering all of the excess wild horses in any one year period, regardless of the gather methods used, may not be attainable due to terrain, pinyon-juniper cover, potential for storm conditions affecting ability to travel in the area, budget, available holding capacity for wild horses, and the historic gather success rates in the area.

The BLM anticipates that because of the history of difficult gather operations for this area and the failure of meeting all previous project objectives that more than one trap location would be required no matter the gather method and that the number of days at any given trap location

could vary widely. For Alternatives A, B and C, the BLM anticipates that trap sites used for helicopter drive trapping are typically active for 1 to 3 days during a gather operation, where bait/water trap sites may be active for extended periods in order to capture the same number of wild horses as the helicopter drive trap method.

Variables such as weather delays, availability of short-term and long-term holding spaces, difficulties in gathering the excess wild horses including horse behavior, availability of gather contractors, and budget could adjust the time period needed to complete gather operations.

Trap Locations

Due to the need to be able to access gathered wild horses with trucks and trailers, it is assumed that the majority of trap locations (whether using helicopters, water, or bait) would be located near existing disturbances and/or roads.

Acreage

It is estimated that the total acreage affected would be less than 50 acres and includes previously disturbed locations per gather operation.

Impacts Due to Changes in the Wild Horse Population and/or Distribution: The analysis in this EA focuses on the impacts associated with proposed gather operations (e.g., use of helicopters, bait or water traps, temporary corrals, etc.). It is anticipated that under each of the alternatives there would be a change in the wild horse population size and/or distribution within the area. Any potential impacts associated with such a change in distribution and use of the area or change in population size (either increase or decrease) were analyzed in previous NEPA analyses for the WDHA. The 2005 West Douglas Herd Area Amendment to the White River Resource Management Plan and its associated environmental assessment (CO-WRFO-05-083-EA) to which this EA is tiered, discusses impacts to resources associated with changes in wild horse populations and/or distribution. That analysis is incorporated by reference in its entirety. This EA is also tiered to the White River Resource Area Proposed RMP and Final Environmental Impact Statement (FEIS) (1996) which also disclosed potential impacts associated with removing wild horses from the WDHA. The conditions and environmental effects described in the FEIS and the WDHA Amendment are still valid. Exceptions include the number of wild horses has increased, the livestock operator has voluntarily deferred grazing within portions of the WDHA, an approximate 1,000 acre wild land fire (Wild Rose Fire) in 2013, and drought conditions have varied over the years. However, these conditions do not substantially alter the effects described in the FEIS and WDHA Amendment. That analysis can be found in Chapter 4 of the FEIS in sections labeled as impacts from proposed wild horse management (on various resources, including wild horses) and is incorporated by reference. Those documents can be found at: http://www.blm.gov/co/st/en/fo/wrfo/wrfo_wild_horse_and.html (Amendment) and http://www.blm.gov/co/st/en/BLM_Programs/land_use_planning/rmp/archived/white_river.html (Proposed RMP and FEIS).

For Fiscal Year 2015, the National Program Office estimates that they would only be able to

provide space in short and/or long-term holding facilities for up to 167 wild horses from the WRFO. If we assumed a similar number of wild horses could be accommodated each fiscal year in holding facilities, then it would take approximately 3 years to gather and remove excess wild horses from areas within and adjacent to the WDHA in Alternatives A or B (see Table 1) with a 100 percent success rate for each gather operation.

Table 1. For Alternatives A & B the Minimum Number of Years Required in order to Gather Excess Wild Horses from Areas within and Adjacent to the WDHA: All Gather Methods or Bait Trapping.

Year	Estimated Wild Horse Population at the Start of the Year	Wild Horses Removed via Gathers	Horses Not Removed via Gathers	Annual Recruitment	Remaining Wild Horses
2015	365	167	198	40	238
2016	238	167	71	14	85
2017	85	85	0	0	0

If we assumed a similar number of wild horses could be accommodated each fiscal year in holding facilities, then it would take approximately 3 years to gather and remove excess wild horses from areas within and adjacent to the WHDA in Alternative C (see Table 2) with a 100 percent success rate for each gather operation. Recruitment rate for 2015 would be calculated at 10 percent and 5 percent in 2016 because of the removal of more mares than stallions in the initial gather operation in 2015 and potentially again in 2016.

Table 2. For Alternative C the Minimum Number of Years Required to Gather Excess Wild Horses from Areas within and Adjacent to the WDHA. Remove mares and young stallions.

Year	Estimated Wild Horse Population at the Start of the Year	Wild Horses Removed via Gathers	Horses Not Removed via Gathers	Annual Recruitment	Remaining Wild Horses
2015	365	167	198	20	218
2016	218	167	51	2	53
2017	53	53	0	0	0

Further for Alternative C, BLM believes this alternative should be considered an ineffective alternative due to the fact that approximately 50 wild horse stallions over the age of 3 would be gathered and released back into the WDHA until such time that they would be gathered and removed after meeting the percentage of mares and mare/foal pairs and younger stallions is met. Stallions that are caught and released would be knowledgeable in the ways of being gathered which in turn would increase their abilities to avoid being gathered in future operations. If gather operations are less than 100 percent successful there is potential that wild horse stallions could remain in the WDHA for approximately the next 30 years, because they are a long lived species, if unable to be gathered and removed.

5.3. Cumulative Impacts

5.3.1. *Cumulative Impacts Analysis Areas*

The geographic extent of cumulative impacts varies by the type of resource and impact. The timeframes, or temporal boundaries, for those impacts may also vary by resource. Different spatial and temporal cumulative impact analysis areas (CIAAs) have been developed and are listed with their total acreage in Table 3.

Table 3. Cumulative Impact Analysis Areas by Resource

Resource	CIAA	Total CIAA Acreage	Temporal Boundary
Wild Horses	WDHA and adjacent areas subject to gather operations.	229,276 acres (206,265 acres of public and 23,011 acres of private).	Impacts to wild horses from this action would be irreversible and irretrievable if all wild horses are gathered and removed.
Cultural & Paleontology	WDHA and adjacent areas subject to gather operations.	229,276 acres (206,265 acres of public and 23,011 acres of private land).	Impacts to the regional cultural & paleontological databases from this action would be irreversible and irretrievable and result in an ongoing cumulative loss of data.
Air Quality, Soil Resources, Surface and Groundwater Quality, Flood Plains, Water Rights, Hydrology, Recreation, Wilderness Study Areas, and Lands with Wilderness Characteristics	WDHA and adjacent areas subject to gather operations.	229,276 acres (206,265 acres of public land and 23,011 acres of private land).	During wild horse gather operations and through implementation and establishment of final succession post-reclamation vegetation.
Aquatic Wildlife, Migratory Birds, Terrestrial Wildlife, Special Status Animal Species	WDHA and adjacent areas subject to gather operations.	229,276 acres (206,265 acres of public and 23,011 acres of private land).	During horse gather activities and through implementation and establishment of final succession post-reclamation vegetation.

5.3.2. *Past, Present, and Reasonably Foreseeable Future Actions*

Cumulative effects are defined in the CEQ regulations (40 CFR 1508.7) as “...the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”

As of March 2014, the Colorado Oil and Gas Conservation Commission database indicated there were a total of 568 producing wells, 24 shut-in wells, and 2 wells where drilling has taken place but are not yet in production in the identified area of the proposed gather and removal operation. Most energy development was conducted decades ago but still requires regular maintenance activities of those facilities utilizing the area.

Other past, present, and reasonably foreseeable actions in the analysis area include: grazing by livestock, wild horses and wildlife; and construction and/or maintenance associated with range improvement projects; energy development and/or maintenance of energy related facilities, vegetation treatments; and both wildfires managed for resource benefit and prescribed burns. Generally, recreation use is characterized by dispersed camping, off road vehicle use, wild horse and wildlife viewing, as well as big game hunting activities.

5.4. Wild Horses

5.4.1. *Affected Environment*

In February 2012, the BLM conducted a direct count inventory by helicopter with 2 observers and the pilot of the wild horses within and adjacent to the WDHA which indicated an estimated population of 154 within and 36 outside the WDHA. These wild horses are difficult to count due to the dense coniferous (pinyon/juniper) canopy cover located across the analysis. In 2012 a helicopter inventory was conducted and revealed a population count that was expected for the area based on previous inventories and other data for the area. Refer to the aerial inventory report dated February 16 - 17, 2012 at: http://www.blm.gov/co/st/en/fo/wrfo/wrfo_wild_horses.html.

The current estimated population of the wild horses within or adjacent to the WDHA is generated from the 2012 inventory and includes annual foaling recruitment rates of 20 percent plus the 2015 expected foals (Table 4). The current estimated population at the time of the proposed gather for the analysis area will be approximately 360 wild horses.

Table 4. Estimated Wild Horse Populations

Year	WDHA Estimated Population	Outside WDHA Estimated Population	20% Recruitment WDHA/Outside	Estimated Population WDHA/Outside	Forage Utilization by AUMs WDHA/Outside
2012*	154	36	31/7	185/43	2,220/516
2013	165	43	33/9	198/52	2,376/624
2014	198	52	40/10	238/62	2,856/744
2015	238	62	48/12	286/74	3,432/888

1 Aerial inventory by helicopter done in 2012.

*20 wild horses gathered and removed at water trap (emergency gather August 2012).

Wild horse gathers/removals have been conducted nine times over the past 34 years in the area: 1981, 1984, 1985, 1989, 1996, 1998, 2001, 2006 and 2012. The last time that wild horses were gathered and removed in this area was in 2012 under an emergency situation due to the lack of sufficient water resources. Of the proposed 50 wild horses to be gathered and removed only 20 wild horses were gathered and removed from the east side of the Texas Mountain area (DOI-BLM-CO-110-2012-0140-EA). Several attempts at gathering and removing of all of the wild horses in the area have been attempted but were unsuccessful for a variety of reasons. Not all gathers have been targeted for the gather and removal of all the wild horses in this area. For example, the 2001 gather and removal project concentrated on the removal of 53 wild horses that had relocated outside of the WDHA. Further, the proposed 2006 project (CO-110-2006-166-EA) was for the gather and removal of 89 wild horses which was identified as only a partial gather and removal of the wild horses in this area.

Wild horse distribution is lopsided in that heavier utilization is made of the Texas Mountain area and the nearby connected habitats which may be due to a combination of the lack of reliable water resource in adjacent areas, past gather operations and the removal of wild horses in specific areas, decreased forage competition with livestock due to the recent (last 10 year) voluntary non-use by the livestock operator which includes the associated human presence for livestock management (i.e., herding livestock), the preferred habitat of grass species with some forb and browse species, and finally the potential for cooler day time temperatures during the hotter summer months in and around the Texas Mountain area. Competition with other ungulates (including deer and elk) is over forage, water, space and cover necessary for healthy survival by all that utilize the area. In 2013, approximately 1,000 acres of land was burned by a wild fire on the southwest side of Texas Mountain; wild horses that utilized this area would be expected to shift their use to a different location(s) until the burned area is able to be utilized again, however, this use would continue to be adjacent to Texas Mountain.

Based on past and current inventories of wild horses it is apparent that occupation and use by wild horses has extended beyond the WDHA boundary and in some cases onto private lands. When this occurs it makes it difficult for land owners to manage their domestic horses, because when a wild horse gains access to private lands they may injure and/or breed with the domestic horse(s), attempt to incorporate the domestics into a herd, as well as making use of the forage and water resources on those private lands.

Genetic Diversity and Viability

Blood samples were collected from the wild horses removed from the WDHA during the 2001 and 2006 gathers for genetic baseline data (e.g., genetic diversity, historical origins of the herd, unique markers) with written reports received in 2002 and 2010. The samples were analyzed by Dr. E. Gus Cothran, previously with Department of Veterinary Science, University of Kentucky, Lexington, KY however now with Equine Genetics Laboratory, Texas A&M University. (Note these reports are available online at:

http://www.blm.gov/co/st/en/fo/wrfo/wrfo_wild_horse_and.html

Smaller herds (<200 horses) which experience some degree of isolation tend to lose genetic information through genetic drift. The loss of genetic material has a negative impact on the genetic composition of a herd. According to the Cothran's data, at this time, there is evidence to indicate that the WDHA suffers from low genetic fitness. The pattern of variation suggests low effective population size and some inbreeding. Since the herd is unable to mix with other herd areas or herd management areas there is no exchange of genetic materials.

Monitoring of the genetic diversity of the West Douglas wild horses that were gathered from the West Douglas Herd Area in 2001 and 2006 indicates that the WHDA are primarily derived from North American riding horse breeds.

5.4.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

All wild horses would experience varying levels of stress during herding, gather, handling and holding when gathered. Wild horses herded using helicopter drive trapping and helicopter assisted roping are herded cross country. Those wild horses gathered during water and bait trapping are not herded cross country. Stress levels, and the potential for injury, would be highest immediately following gather when wild horses are moved through the chutes during sorting and when they are being loaded into trailers. Confinement of wild horses at the temporary holding facility may increase the likelihood of injury, and stress/confinement related illness.

Trap locations could be placed at a given location for 1 day up to several weeks; however, helicopter trap locations are usually in place for 1 day up to several days and are commonly located on previously disturbed areas. Bait and water trap locations could be utilized intermittently or continuously. For example, an intermittent trap would be utilized for 2 consecutive days and then left in place until needed again either several days later or several weeks later. When traps are left in place and not being utilized to capture wild horses it would be open enough for wild horses, livestock and other wildlife to enter and exit at will while a continuous trap would be utilized daily after constructed until it was deemed no longer necessary at a given location.

Well placed and well-constructed traps and temporary holding facilities, safety-conscious corral construction, additional pens (if necessary) for any wild horses that need kept separate from other wild horses, as well as well-maintained equipment would decrease stress and the potential for injury and illness of those wild horses that have been gathered. The Standard Operating Procedures (Appendix B) would be implemented and are expected to further reduce the potential for stress, injury and/or illness of the wild horses gathered.

Experienced BLM personnel (reference April 2001, Western Horseman article regarding "Handling Mustangs" at BLM facilities) would be onsite during all phases of the operation. The BLM plans to have an Animal and Plant Health Inspection Service (APHIS) on-site throughout the gather operations. To minimize the level of activity, address health and safety of observers,

and reduce stress to wild horses, the BLM would ask that observers remain some distance from the wild horses during all phases of the gather and holding of wild horses within temporary facilities.

The BLM also avoids gathering wild horses by helicopter during the 6 weeks prior to and following the peak foaling season. The peak of foaling occurs between mid-April to mid-May. Therefore, the BLM prohibits the use helicopters to assist in the removal of wild horses from March 1 through June 30 unless an emergency situation exists.

If BLM is successful in implementing the Proposed Action (if approved) excess wild horses associated with the WDHA and those located adjacent to the WDHA would be gathered and removed, would not occupy private lands, would not relocate outside the WDHA, and would not be available for viewing by the public in the WDHA.

During gather operations wild horses may become separated from other members of their band(s), and some may ultimately escape being gathered, requiring subsequent gather efforts. If subsequent annual gathers, between the dates of July 1 and February 28, are needed wild horses potentially become more and more difficult to gather as the herd and the band sizes decrease and with habituation to gather methods (helicopter and/or water and bait trapping). It is expected that after the initial gather in 2015, the remaining wild horses would form smaller bands and in some cases become solitary wild horses. Wild horses that evade being gathered, during the initial gather, would experience herding stress as described above each time they are herded until they are gathered. Wild horses are herd animals so it is expected that as wild horses are gathered and removed that those wild horses that remain would eventually reform into new bands that may all be bachelors or may be bands that include mares and stallions, however, there are times when there could be a single wild horse with no band.

Over the past 35 years, various impacts to wild horses as a result of gather activities have been observed. Under the action alternatives, impacts to wild horses would be both direct and indirect, occurring to both individual horses and the population as a whole. The BLM has been conducting wild horse gathers since the mid-1970s. During this time, methods and procedures have been identified and refined to minimize stress and impacts to wild horses during gather implementation. The SOPs in Appendix B would be implemented to ensure a safe and humane gather occurs and would minimize potential stress and injury to wild horses.

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

Other injuries may occur after a wild horse has been captured and is either within the trap site corral, the temporary holding corral, during transport between facilities, or during sorting and handling. Occasionally, wild horses may sustain a spinal injury or a fractured limb but based on prior gather statistics, serious injuries requiring humane euthanasia occur in less than 1 horse per every 100 captured. Similar injuries could be sustained if wild horses were captured through bait and/or water trapping, as the animals still need to be sorted, aged, transported, and otherwise handled following their capture. These injuries result from kicks and bites, or from collisions with corral panels or gates.

To minimize the potential for injuries, the wild horses are transported from the trap site to the temporary (or short-term) holding facility where they are sorted as quickly and safely as possible, then moved into larger holding pens where they are provided with hay and water. On some gathers, due to the temperament of the wild horses that are not as calm, injuries may be more frequent. Indirect individual impacts are those which occur to individual wild horses after the initial event. These may include miscarriages in mares, increased social displacement, and conflict between stallions. These impacts, like direct individual impacts, are known to occur intermittently during wild horse gather operations. An example of an indirect individual impact would be the brief 1-2 minute skirmish between older stallions which ends when one stud retreats. Injuries typically involve a bite or kick with bruises which do not break the skin. Like direct individual impacts, the frequency of these impacts varies with the population and the individual. It is unknown the number of miscarriages possible by wild horses that are gathered and removed, or those wild horses that evade being gathered, however, BLM believes the rate to occur in about 1 to 5 percent of the captured mares, particularly if the mares are in very thin body condition or in poor health. A few foals may be orphaned during a gather. This can occur if the mare rejects the foal, the foal becomes separated from its mother and cannot be matched up following sorting, the mare dies or must be humanely euthanized during the gather, the foal is ill or weak and needs immediate care that requires removal from the mother, or the mother does not produce enough milk to support the foal. On occasion, foals are gathered that were previously orphaned on the range (prior to the gather) because the mother rejected it or died. These foals are usually in poor condition. Every effort is made to provide appropriate care to orphan foals. Veterinarians may administer electrolyte solutions or orphan foals may be fed milk replacer as needed to support their nutritional needs. Orphan foals may be placed in a foster home in order to receive additional care. Despite these efforts, some orphan foals may die or be humanely euthanized as an act of mercy if the prognosis for survival is poor.

Referenced from the National Wild Horse and Burro webpage: History and Facts, Myths and Facts that was updated March 17, 2015 (#8): In Fiscal Year 2014, out of 1,860 wild horses and burros gathered, a total of 18 animals, or approximately one percent (0.97 percent), died or were euthanized during gather operations; of those 18, nine animals, or about one-half of one percent (0.48 percent) of the gathered animals, died or were euthanized because of acute injuries. Acute injury deaths include all animals that died or were euthanized because of acute injuries, such as spinal cord or head injuries, fractured limbs, or other severe injuries that occurred during gathers. Total deaths include all animals that died or were euthanized for any reason during gathers,

including acute or sudden injuries or illnesses, as well as chronic or pre-existing conditions that required euthanasia (such as limb deformities, lameness, and poor body condition).

Two reports issued in the fall of 2010 (one by four independent, credentialed equine professionals and one by the Interior Department's Office of Inspector General), plus another report released in 2011 by the American Association of Equine (Veterinary) Practitioners, found that the BLM's gathers of wild horses are conducted in a humane manner.

In some areas, gathering wild horses during the winter may avoid the stress that could be associated with a summer gather. By fall and winter, foals are of good body size and sufficient age to be easily weaned. Winter gathers are often preferred when terrain and higher elevations make it difficult to gather wild horses during the summer months. Under winter conditions, wild horses are often located in lower elevations due to snow cover at higher elevations. This typically makes the wild horses closer to the potential trap sites and reduces the potential for fatigue and stress. While deep snow can tire wild horses as they are moved to the trap, the helicopter pilots allow the wild horses to travel slowly at their own pace. Trails in the snow are often followed to make it easier for wild horses to travel to the trap site. On occasion, trails can be plowed in the snow to facilitate the safe and humane movement of wild horses to a trap. In some areas, a winter gather may result in less stress as the cold and snow does not affect wild horses to the degree that heat and dust might during a summer gather. Wild horses may be able to travel farther and over terrain that is more difficult during the winter, even if snow does not cover the ground. Water requirements are lower during the winter months, making distress from heat exhaustion rare.

By comparison, during summer gathers, wild horses may travel long distances between water and forage and become easily dehydrated. Depending on the year, the potential for reliable water resources to have a reduced flow during the summer months is possible so there is potential that for those wild horses that start out with a reduced intake of water which puts them at a heightened risk of dehydration due to lack of base body fluids. Through the capture and sorting process, wild horses are examined for overall general health as well as new or old injuries.

Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy. BLM Euthanasia Policy Washington Office Instruction Memorandum-2009-041 is used as a guide to determine if animals meet the criteria and should be euthanized. Animals that are euthanized for non-gather related reasons include those with old injuries such as broken or deformed limbs that cause lameness or prevent the animal from being able to maintain an acceptable body condition (equal to or greater than BCS 3); old animals that have serious dental abnormalities or severely worn teeth and are not expected to maintain an acceptable body condition, and wild horses that have serious physical defects such as club feet, severe limb deformities, or sway back.

As the excess wild horses are gathered and removed from the WDHA they would be transported to the Canon City holding facility or if circumstances warrant another BLM approved holding facility (i.e., Rock Springs, WY).

Transport, Short Term Holding, Long-term Pastures, and Adoption (or Sale) Preparation – Excess wild horses would be removed and transported from the capture/temporary holding corrals to the designated BLM short-term holding corral facility(s). From there, they would be made available for adoption or sale to qualified individuals or to long-term pastures (LTPs). Wild horses selected for removal from the range would be transported to the receiving short-term holding facility in approved stock trailers. Vehicles would be inspected by the BLM COR or PI prior to use to ensure wild horses could be safely transported and that the interior of the vehicle is in a sanitary condition. Wild horses would be segregated by age and sex and loaded into separate compartments. A small number of mares may be shipped with foals. Transportation of recently captured wild horses would be limited to a maximum of 8 hours. During transport, potential impacts to individual wild horses could include stress, as well as slipping, falling, kicking, biting, or being stepped on by another animal. Unless wild horses are in extremely poor condition, it is rare for an animal to be seriously injured or die during transport.

Upon arrival at the short term holding facility, recently captured wild horses would be off-loaded by compartment and placed in holding pens where they would be fed good quality hay and water. Most wild horses begin to eat and drink immediately and adjust rapidly to their new situation. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club feet, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the American Veterinary Medical Association (AVMA).

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

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

At short-term corral facilities, a minimum of 400 square feet would be provided per animal. Mortality at short-term holding facilities averages approximately 5 percent per year (GAO 2008), and includes animals euthanized due to a pre-existing condition; animals in extremely poor condition; animals that are injured and would not recover; animals which are unable to transition to feed; and animals which are seriously injured or accidentally die during sorting, handling, or preparation.

Adoption or Sale with Limitations, and Long Term Pastures - Adoption applicants are required to have at least a 400 square foot corral with panels that are at least six feet tall for wild horses over 18 months of age. Applicants are required to provide adequate shelter, feed, and water. The BLM retains title to the wild horse for one year and most of the wild horses and the facilities are inspected to assure the adopter is complying with the BLM's requirements. After one year, the adopter may apply for title to the wild horse after an inspection from a humane official, veterinarian, or other individual approved by the authorized officer, at which point the wild horse becomes the property of the adopter. Adoptions are conducted in accordance with 43 CFR 5750. Potential buyers must fill out an application and be pre-approved before they may buy a wild horse.

A sale-eligible wild horse is any animal that is more than 10 years old; or has been offered unsuccessfully for adoption three times. The application also specifies that all buyers are not to resell the animal to slaughter buyers or anyone who would sell the animal to a commercial processing plant. Sales of wild horses would be conducted in accordance with Bureau policy.

Between 2007 and 2009, nearly 62 percent of the excess wild horses or burros removed were adopted and about 8 percent were sold with limitation (to good homes) to qualified individuals. Most wild horses 5 years of age and older would be transported to LTPs. Each LTP is subject to a separate environmental analysis and decision making process. Animals in LTPs remain available for adoption or sale to individuals interested in acquiring a larger number of animals and can provide the animals with a good home. The BLM has maintained LTPs in the Midwest for over 20 years.

Potential impacts to wild horses from transport to adoption, sale and/or LTP are similar to those previously described. One difference is that when shipping wild horses for adoption, sale or LTP, animals may be transported for a maximum of 24 hours. Immediately prior to transportation, and after every 18-24 hours of transportation, animals would be offloaded and provided a minimum of 8 hours on-the-ground rest. During the rest period, each animal would be provided access to unlimited amounts of clean water and good quality hay with adequate space to allow all animals to eat at one time. Most animals would not be shipped more than 18 hours before they are rested.

LTPs are designed to provide excess wild horses with humane, life-long care in a natural setting off the public rangelands. There wild horses are maintained in grassland pastures large enough to allow free-roaming behavior and with the forage, water, and shelter necessary to sustain them in good condition. About 31,000 wild horses (according to Off-Range Pasture Solicitation FAQs, Updated March 16, 2015), that are in excess of the existing adoption or sale demand (because of age or other factors), are currently located on private land pastures in Iowa, Kansas, Oklahoma, and South Dakota. Located in mid or tall grass prairie regions of the United States, these LTP are highly productive grasslands as compared to more arid western rangelands. These pastures comprise about 256,000 acres (an average of about 8-10 acres per animal). Mares and castrated stallions (geldings) are segregated into separate pastures except one facility where geldings and mares coexist. No reproduction occurs in the long-term grassland pastures, but foals born to

mares that are pregnant when they were removed from the range are gathered and weaned when they reach about 8-10 months of age and are then shipped to short-term facilities where they are made available for adoption. Handling by humans is minimized to the extent possible although regular on-the-ground observation and weekly counts of the wild horses to ascertain their numbers, well-being, and safety are conducted. A very small percentage of the animals may be humanely euthanized if they are in very thin condition and are not expected to improve to a Body Condition Score (BCS) of 3 or greater (base on the Henneke Scoring System) due to age or other factors, see IM 2009-041. Natural mortality of wild horses in LTP averages approximately 8 percent per year, but can be higher or lower depending on the average age of the wild horses pastured there (GAO-09-77, Page 52). The savings to the American taxpayer which results from contracting for LTP averages about \$4.45 per wild horse per day as compared with maintaining the animals in short-term holding facilities.

Euthanasia and Sale without Limitation - While humane euthanasia and sale without limitation of healthy wild horses for which there is no adoption demand is authorized under the WFRHBA, Congress prohibited the use of appropriated funds between 1987 and 2004 and again in 2010 for this purpose. On December 16, 2014 the Consolidated and Further Continuing Appropriations Act, 2015 was approved, this act provides: *“Appropriations herein made shall not be available for the destruction of healthy, unadopted, wild horses and burros in the care of the Bureau or its contractors or for sale of wild horses or burros that results in their destruction for processing into commercial products.”* Pp 671-

Cumulative Impacts

Under this alternative, wild horses would experience the associated stresses and possible deaths during gather operations for as long as gather operation are being conducted until all of the wild horses are gathered and removed. Further, for those wild horses not gathered at this time, the remaining wild horses would experience the possibility of drought conditions and wild land fires, competition associated with livestock and wildlife for forage/water/cover and space, temporary disruptions from energy development related activities (facilities maintenance) and recreational use.

The BLM/WRFO would continue to manage a healthy wild horse herd in the Piceance-East Douglas Herd Management Area.

5.4.3. Environmental Consequences – Alternative B (Bait/Water Trapping Only)

Direct and Indirect Impacts:

Impacts resulting from this alternative are similar to those of the Proposed Action, except that gather operations may occur during all months of the year but without helicopter assistance. Due to the presence of mountainous terrain, vegetative cover and the potential for summer thunder/rain and winter snow storm conditions, gather efficiency may be less than optimal.

Gather operations conducted during the winter can also be stressful to wild horses due to snow depths, potentially slick conditions, and cold temperatures, however, because they are not being herded into bait or water traps they would not experience issues with cross country travel including temporary respiratory problems associated with breathing cold air.

Cumulative Impacts

Under this alternative, the cumulative impacts would be similar to Alternative A.

5.4.4. *Environmental Consequences – Alternative C (Phased Approach)*

Direct and Indirect Impacts

Impacts resulting from this alternative would be similar to those of the Proposed Action, except that there would continue to be more wild horse stallions than herd stallions and fewer wild horse mares. The number of herd stallions would be reduced and potentially change frequently due to fighting between stallions over the remaining mares available in the area. Unattached wild horse stallions would either be found as a single wild horse or would group together for protection in small "bachelor bands". For wild horse mares that are not gathered/removed it would be expected that several stressful events could occur over time until they are gathered and removed:

- 1) It would be rare that a mare is not be picked up by another band however it could happen and for that short term time the mare may be in danger of being a target by predators.
- 2) If a mare is picked up into a new band there is potential that for her 2016 foal to be destroyed by a new herd stallion.
- 3) For mares that are not pregnant and when they are cycling there is potential for several stallions to aggressively fight over their opportunity to breed said mare which could include her in those altercations due to the number of stallions available to breed the mare and the reduced numbers of mares in the area.
- 4) Further, if the mare is cycling there is potential for the mare to endure several mountings by multiple stallions until she is impregnated. Once impregnated and the mare's cycling no longer takes place, or during the time of year when mares are not cycling the occurrences of aggressive fighting and multiple mountings by stallions should be rare until the mare either delivers a foal or is no longer pregnant.
- And 5) Each foal that is born may potentially be destroyed by a new herd stallion due to the number of stallions that would be aggressively fighting over the remaining number of wild horse mares available to generate bands of wild horses in the area. The possibility of the listed events recurring year after year is high until no wild horse mares remain in the area.

The BLM/WRFO would expect that future gather and removal attempts of these individuals and/or bands would possibly be too difficult due wild horses becoming weary or trap shy because of the knowledge gained from being previously gathered and released.

Cumulative Impacts

Under this alternative, the cumulative impacts would be similar to Alternative A except that it would be possible that not all of the wild horse stallions would be gathered and removed so the

area could possibly be with wild horses for approximately 30 years until all of the remaining wild horses stallions die from old age.

5.4.5. *Environmental Consequences – Alternative D (No Action)*

Direct and Indirect Impacts

Under this alternative, wild horses would not experience the stresses associated impacts with gathering, removal and/or adoption (Alternatives A, B and C). The current population of wild horses would continue to increase at an annual rate of approximately 20 percent. With such a growth rate the population of wild horses would expect to be double by 2019. Wild horses would continue to compete for forage, water, cover and space with the wildlife and livestock in the area. The locations closest to water would experience the heaviest utilization and occurrences when wild horses may keep other wildlife and livestock from access to water sources especially during times of limited water sources. Wild horses would be expected to travel greater distances from water sources to available forage.

Cumulative Impacts

Wild horses and past and present land uses, such as livestock grazing and foraging by deer, elk, and would be expected to continue to occur in the future. If wild horses were not able to relocate beyond the WDHA boundary, the BLM would expect the wild horse population to reach levels that would catastrophically impact the vegetative resources ultimately impacting the health of individual wild horses and death losses would be expected. Wild horses would continue to seek the resources they need to survive which would place them beyond the WDHA boundary.

5.5. Vegetation

5.5.1. *Affected Environment*

The native plant communities can be described by major plant associations that are characterized by one or two dominant plant species or an association of several dominant plant species. Distribution of these associations is influenced primarily by precipitation and elevation and, to a lesser extent, by aspect and soil type. Table 5 shows the vegetation communities by ecological sites and acres associated with each site within the WDHA, and in areas outside the WDHA but within the analysis area.

Table 5. Vegetation Communities by Ecological Site and Acreage

Ecological Site/Woodland Type	Plant Community Appearance	Predominant Plant Species in Plant Community	Inside WDHA (ac)	Outside WDHA (ac)
Alkaline Slopes	Sagebrush/grass	Greasewood, Big Sagebrush, western wheatgrass, sand dropseed	2221	2142
Badlands	Barren	Low Desert Shrubs and grasses	506	3068

Ecological Site/Woodland Type	Plant Community Appearance	Predominant Plant Species in Plant Community	Inside WDHA (ac)	Outside WDHA (ac)
Brushy Loam	Deciduous Shrub / Grass Shrubland	Serviceberry, oakbrush, snowberry, mountain brome, slender wheatgrass, western wheatgrass, Letterman and Columbia needle grasses	742	6168
Clay Salt Desert	Salt Desert Shrubland	Gardner saltbush, shadscale, mat saltbush, galleta, Salina wildrye, squirreltail, Indian rice grass	68	0
Clayey Foothills	Grass / Open Shrub Shrubland	Western wheatgrass, mutton grass, Indian rice grass, squirreltail, June grass, Wyoming big sagebrush, black sagebrush	20	40
Clayey Slopes	Grassland	Salina wildrye, mutton grass, western wheatgrass, June grass, squirreltail, shadscale	40371	1448
Deep Clay Loam	Grass / Open Shrub Shrubland	Western wheatgrass, slender wheatgrass, mutton grass, squirreltail, June grass, Letterman and Columbia needle grasses, mountain big sagebrush	0	1619
Deep Loam	Grassland	Bluebunch wheatgrass, mottongrass, needle-and-thread, western wheatgrass, slender wheatgrass, big sagebrush, serviceberry, snowberry.	756	21
Dry Exposure	Grassland	Beardless bluebunch wheatgrass, needle-and-thread, June grass, Indian rice grass, fringed sage, buckwheats	149	0
Foothills Swale	Grass Shrubland	Basin wildrye, western wheatgrass, Indian ricegrass, big sagebrush, rubber rabbitbrush	3117	1911
Loamy Slopes	Mix Shrub / Grass Shrubland	Mountain mahogany, bitterbrush, serviceberry, mountain big sagebrush, beardless bluebunch wheatgrass, western wheatgrass, June grass, Indian rice grass	352	1951
Mountain Loam	Grass / Open Shrub Shrubland	Mountain brome, slender wheatgrass, western wheatgrass, Letterman and Columbia needle grasses, mountain big sagebrush, bitterbrush, low rabbitbrush, snowberry, serviceberry	1196	3273
Pinyon/Juniper	Pinyon/Juniper Woodland	Pinyon pine, Utah juniper, mountain mahogany, bitterbrush, serviceberry, Wyoming big sagebrush, beardless bluebunch wheatgrass, western wheatgrass, June grass, Indian rice grass, mutton grass	43932	38901

Ecological Site/Woodland Type	Plant Community Appearance	Predominant Plant Species in Plant Community	Inside WDHA (ac)	Outside WDHA (ac)
Aspen Woodlands	Quaking Aspen Forest	Aspen, blue wildrye, mountain brome, idaho fescue, parry oatgrass, Columbia needlegrass, Lettermans needlegrass, nodding brome, snowberry, chokecherry, serviceberry, silver sagebrush	0	521
Rock Outcrop	Barren	Very scattered shrubs and grasses	16247	7259
Rolling Loam	Sagebrush/grass Shrubland	Wyoming big sagebrush, winterfat, low rabbitbrush, horsebrush, bitterbrush, western wheat grass, Indian rice grass, squirreltail, June grass, Nevada and Sandberg bluegrass	4604	2207
Salt Desert Breaks	Salt Desert Shrubland	Galleta, salina wildrye, squirreltail, Indian rice grass, needle-and-thread, shadscale, winterfat	53	0
Spruce-Fir woodland	Spruce / Fir Forest	Douglas fir, serviceberry, chokecherry, snowberry, elk sedge, mountain brome	0	7131
Stony Foothills	Grass / Open Shrub Shrubland	Beardless bluebunch wheatgrass, western wheatgrass, needle-and-thread, June grass, Indian rice grass, fringed sage, Wyoming big sagebrush, black sage, serviceberry, pinyon and juniper	7822	4528
Torrifluvents	Nearly Barren	Sparse Desert Shrubs and annual grasses	1164	437
Total Acres			123320	82624

Within the WDHA plant communities are classified by “range sites” or “non-range sites”. A range site is a distinctive kind of rangeland that differs from other kinds of rangeland in its ability to produce a characteristic natural plant community. A range site is the product of all the environmental factors responsible for its development. It is capable of supporting a native plant community typified by an association of species that differs from that of other range sites in the kind or proportion of species or in total production (National Range Handbook, 1976). Non-range sites are composed of forests, woodlands and non-grazeable sites including badlands and rock outcrops. Non-range sites are generally not considered as range forage producing sites.

Range sites were classified by the present communities’ similarities to the climax communities (Table 6).

Table 6. Percent of present communities’ similarities to the climax communities

RANGE CONDITION CLASS	PERCENTAGE OF PRESENT PLANT COMMUNITY THAT IS CLIMAX FOR THE RANGE SITE. (BASED ON WEIGHT)
Potential Natural Community (PNC)	76-100

Late Seral	51-75
Mid Seral	26-50
Early Seral	0-25

Tables 7-10 list the range sites and the range condition classification within the WDHA only; the range condition classification data is not currently available for areas outside the WDHA but within the analysis area.

Table 7. Potential Natural Community Condition Class

ECOLOGICAL SITE	ACRES
Alkaline Slopes	97
Dry Exposure	149
Total	246

Table 8. Late Seral Condition Class

ECOLOGICAL SITE	ACRES
Alkaline Slopes	87
Brushy Loam	440
Clayey Foothills	20
Clayey Slopes	38,050
Deep Loam	729
Loamy Slopes	246
Rolling Loam	173
Total	39,745

Table 9. Mid-Seral Condition Class

ECOLOGICAL SITE	ACRES
Alkaline Slopes	250
Brushy Loam	302
Clayey Salt Desert	68
Clayey Slopes	2,354
Deep Loam	27
Foothills Swale	972
Loamy Slopes	106
Rolling Loam	3,367
Salt Desert Breaks	53
Total	7,499

Table 10. Early Seral

ECOLOGICAL SITE	ACRES
Alkaline Slopes	1,787
Foothills Swale	2,145
Rolling Loam	1,064
Total	4,996

Table 11 lists the non-range sites for the WDHA. Non-range sites are composed of forests, woodlands and non-grazeable sites including badlands and rock outcrops. The BLM does not consider non-range sites as range forage producing sites due to these characteristics.

Table 11. Non-Range Sites

NON-RANGE SITES	SUCCESSIONAL STAGE	ACRES
Torrifluvents	Not Classified	1,164
Pinyon/Juniper Woodlands	Late Seral	40,716
Douglas-fir-Spruce/Fir Forests	PNC	1,196
Pinyon/Juniper Chainings & Fires	Early	3,250
Badlands	Not Classified	506
Rock Outcrop	Not Classified	16,180
Stony Foothills (Pinyon/Juniper)	Late Seral	7,822
Total		70,834

The BLM identifies approximately 52,486 acres (43 percent) as rangeland sites and 70,834 acres (57 percent) as non-rangeland sites within the WDHA. Of the rangeland sites 246 acres (0.5 percent) are considered Potential Natural Community; 39,745 acres (76 percent) are considered late-seral; 7,499 acres (14 percent) are considered as mid-seral; and 4,996 acres (9.5 percent) are considered early-seral.

5.5.2. *Environmental Consequences – Alternative A (All Gather Methods)*

Direct and Indirect Impacts

During gather operations, vegetation would be disturbed at the location of trap sites and holding facilities due to congregation and trampling by wild horses and the increased vehicle and foot traffic. The amount of vegetation that would be disturbed or affected is dependent on the number of wild horses gathered at a specific site and the duration those wild horses remain at the trap site/holding facility. Vegetation disturbance would be short term and limited to locations of temporary gather and holding facilities. It would be expected that plant communities would recover from disturbance within three years. Under this alternative, trap sites may be re-used annually until excess wild horses are captured and removed, resulting in less opportunity for recovery between gather operations. Previous gather operations have typically utilized areas of existing disturbance for trap location such as roads, or well pads allowing for fewer disturbances of native vegetation communities. It would be expected that as the number of excess wild horses is reduced, the quantity of trap sites needed would be reduced. It would be expected that the health and vigor of rangeland vegetation communities within the WDHA would improve as the population of excess wild horses is reduced, this would not be discussed in detail since impacts due to changes in the wild horse population and distribution are outside the scope of this EA.

Cumulative Impacts

The CIAA for vegetation is the WDHA, and adjacent lands within the Douglas Creek and Evacuation Creek watersheds. Activities impacting vegetation include oil and gas exploration,

recreation, livestock and wild horse grazing. It is not expected that there will be a large increase of oil and gas activity within this area however; there is abundant existing infrastructure associated with oil and gas exploration including well pads, pipelines, roads, and compressor stations. As these disturbed lands are reclaimed, it would be expected to improve the health of vegetation communities. Livestock grazing results in removal of forage, however the number of animals, season of use, duration, and species of grazing animal can be controlled to avoid long term degradation of vegetation. In the event of drought or wildfire, livestock could be removed from the range to prevent damage. Impacts from Alternative A are considered short term, and vegetation would be able to recover quickly.

5.5.3. *Environmental Consequences – Alternative B (Bait/Water Trapping)*

Direct and Indirect Impacts

Impacts to the vegetation communities under Alternative B would be similar to those described for Alternative A. If trap sites are not located within areas of pre-disturbance, vegetation would be affected by trampling and congregation of wild horses at the trap site horses and the increased vehicle and foot traffic. The primary difference would be the duration the trap sites are left constructed and active. Under this alternative, the time period to gather and remove excess wild horses would likely be increased, although gather operations would likely be prolonged, this is not expected to increase the impacts on vegetation communities associated with gather activities.

Cumulative Impacts

Cumulative impacts are the same as those described under Alternative A.

5.5.4. *Environmental Consequences – Alternative C (Phased Approach)*

Direct and Indirect Impacts

Impacts to vegetation communities associated with gather efforts would be similar to those described above under Alternative A. Alternative C would not be expected to result in substantial differences in direct or indirect impacts to vegetation, however by using a phased approach, there is a strong likelihood that stallions that have been previously trapped would become weary or trap shy, making them more difficult to capture in future gather attempts. This may require an increased number of trap sites or prolonged use at trap site locations in order to capture trap weary animals, which may lead to increased impacts to vegetation as a result of gather operations.

Cumulative Impacts

Cumulative impacts are the same as those described under Alternative A.

5.5.5. *Environmental Consequences – Alternative D (No Action)*

Direct and Indirect Impacts

Under Alternative C wild horses would not be gathered and removed from the WDHA or adjacent areas. There would be no impacts associated with gather operations.

Cumulative Impacts

As addressed in Alternative A, oil and gas exploration, recreation, livestock and wild horse grazing are the primary activities which have or are currently influencing vegetation communities in the analysis area. Failure to gather wild horses would result in increased utilization of vegetation as the wild horse population increases, this increase combined with wildlife and livestock use would exceed the amount of available forage resulting in continual overuse. The constant overuse of rangeland vegetation would decrease the ability of plants to complete their growth cycle, recover from grazing while decreasing regeneration. As a result, desirable native plants would eventually be replaced by less desirable, often non-native plants, most commonly the invasive annual cheatgrass. Once the desired native rangeland vegetation community has been lost it generally cannot recover without human intervention, which is often time consuming, and expensive. The loss of valuable rangeland forage would force wild horses to expand their range to areas outside of the WDHA, likely resulting in an increase to the geographic scope of impacts associated with heightened season long use to native vegetation communities including those located outside of the WDHA as wild horse use increases.

5.6. Livestock Grazing

5.6.1. *Affected Environment*

The BLM organizes the descriptions for grazing management into one allotment and one pasture of a separate allotment within this analysis area: Twin Buttes and Bull Draw. The Twin Buttes Allotment contains a total of 158,520 acres of which 113,790 acres are within the WDHA. The Bull Draw pasture contains 9,530 acres and is entirely within the WDHA.

Bull Draw Pasture: The Bull Draw pasture is part of the East Douglas Creek Allotment. This pasture contains 9,530 acres of public land. The permitted use for the Bull Draw Allotment is 268 Animal Unit Months (AUMs). The grazing schedule for the Bull Draw Allotment is 60 cattle during the period November 16 to March 31.

Twin Buttes Allotment: The Twin Buttes Allotment contains 158,520 acres of public land. Two grazing permittees operate in-common on this allotment: James Steele and the Twin Buttes Ranch Company. James Steele runs 59 cattle during the period of November 1 to May 30. The Twin Buttes Ranch Co. runs 1,157 cattle and is reliant on the public lands throughout the year. The Twin Buttes Ranch Co. manages livestock under an Allotment Management Plan completed in 1984, with a major revision completed in 1999. Twin Buttes Ranch Co. is a cow/calf operation that also maintains a registered Hereford herd. Table 12 provides a breakdown of the AUMs by pasture within this allotment as well as actual use by livestock for the 2006-2014 grazing years.

The northern portion of the allotment is within the WDHA, this area is lower in elevation with a milder climate and precipitation averaging about 10-12 inches/year and used during the winter and spring. The middle portion, centered around Texas Mountain, has a wide variance in elevation and vegetation associations and used during the fall, winter, and spring. The southern portion of the allotment has the highest elevations (8,000 feet) with precipitation ranging from 15-20 inches/year and used during the summer and fall (Table 13).

Table 12. Twin Buttes Allotment Permitted Use by Pasture (Both Operators)

Year	Pasture	Winter/Spring Pasture	West Creek Pasture*	Park Canyon Pasture	Bull Draw Pasture	Total
	Authorized Use (AUMs)	8,932	1,289	98	268	10,587
2006	Actual Use (AUMs)	2,085	907	0	268	3,376
	Percent of Authorized Used	23%	70%	0%	100%	32%
2007	Actual Use (AUMs)	1,722	1,121	45	205	3,165
	Percent of Authorized Used	19%	87%	46%	76%	30%
2008	Actual Use (AUMs)	4,406	1,083	82	221	5,792
	Percent of Authorized Used	49%	84%	84%	82%	55%
2009	Actual Use (AUMs)	6,499	1,068	42	272	7,881
	Percent of Authorized Used	73%	83%	43%	101%	74%
2010	Actual Use (AUMs)	5,533	1,159	29	26	6,747
	Percent of Authorized Used	62%	90%	30%	10%	64%
2011	Actual Use (AUMs)	5,731	1,050	70	22	6,873
	Percent of Authorized Used	64%	81%	71%	8%	65%
2012	Actual Use (AUMs)	3,654	957	0	135	4,746
	Percent of Authorized Used	41%	74%	0%	50%	45%
2013	Actual Use (AUMs)	3,584	963	73	77	4,697
	Percent of Authorized Used	40%	75%	74%	29%	44%
2014	Actual Use (AUMs)	5,257	861	60	161	6,339
	Percent of Authorized Used	59%	67%	61%	60%	60%

* Part of pasture not within WDHA

The Twin Buttes allotment has another pasture called West Douglas/Redrocks which is outside of the WDHA and not included in Table 12, authorized use for this pasture is 4,569 AUMs

The grazing program for the Twin Buttes Allotment is described in the Allotment Management Plan (AMP) completed in 1999. This AMP was developed through a collaborative process as provided for in Section 8 of the Public Range Improvement Act of 1978².

The following description is directly from the Twin Buttes AMP (EA# CO-017-99-93-EA):

“Four units within the grazing management area have been identified within the lower winter and spring ranges. These units are Lower Cottonwood, Lower Big Horse, Lower Douglas Creek and Lower Texas Creek. Livestock would be spread across the whole of the winter range from approximately November 1 to March 31. This will allow for livestock to use the rims and south slopes through the winter periods. On the Cottonwood Grazing Management (Unit #1), over a four year period, livestock would be cleared out by April 1, May 1, May 7, and May 31. On the remaining area of Cottonwood pasture, livestock would be progressively moved off the pasture ending May 31. On the Lower Horse Draw Grazing Management (Unit #2), over a four year period livestock would be cleared out by May 31, April 1, May 1, and May 15 (bottom areas cleared by May 7). On the Lower Douglas Grazing Management (Unit #3), over a four year period livestock would be cleared by May 15, May 31, April 1, and May 1. On the remaining Water Canyon pasture livestock would be progressively moved off the pasture ending May 31. On the W1/2 Texas Creek Grazing Management (Unit #4), over a four year period livestock would be cleared by May 1, May 15, May 31 and April 1. On the remaining area of W1/2 Texas Creek pasture livestock would be progressively moved off the pasture ending May 31.”

“The summer use period is June 5 to November 1 using the Red Rock, West Douglas and West Cr. Pastures (outside this planning area). Livestock are split, with half of the herd using the Red Rock and West Douglas pastures, and the remainder using the West Creek pasture. Cattle are rotated around each grazing area for two years and then the rotation would be reversed.”

Table 13 shows the grazing schedule for this grazing program.

Table 13. Twin Buttes Grazing Schedules

PASTURE	Sub Unit	Spring/Summer Rotation Year	GRAZING USE PERIOD	
			SPRING/SUMMER	WINTER (EVERY YEAR)
Cottonwood	Grazing Management Area (GMA)	1	March 1 to April 1	November 1 to February 28
		2	March 1 to May 1	
		3	March 1 to May 7	
		4	March 1 to May 31	

² Section 8 of the Public Rangelands Improvement Act of 1978 (P.L. 95-514; Stat. 1803) “provide for, among other things, careful and considered consultation, cooperation, and coordination between the Forest Service, Bureau of Land Management, federal grazing permittees and lessees, and any state having lands within areas to be included in allotment management plans;...”

PASTURE	Sub Unit	Spring/Summer Rotation Year	GRAZING USE PERIOD	
			SPRING/SUMMER	WINTER (EVERY YEAR)
	Remaining Pasture	All	March 1 to May 31	
Lower Horse Draw	All	1	March 1 to May 31	November 1 to February 28
		2	March 1 to April 1	
		3	March 1 to May 1	
	Bottoms	4	March 1 to May 7	
	Uplands	4	March 1 to May 15	
Water Canyon	Lower Douglas GMA	1	March 1 to May 15	November 1 to February 28
		2	March 1 to May 31	
		3	March 1 to April 1	
		4	March 1 to May 1	
	Remaining Pasture	All	March 1 to May 31	
West 1/2 Texas Creek	West 1/2 Texas Creek GMA	1	March 1 to May 1	November 1 to February 28
		2	March 1 to May 15	
		3	March 1 to May 31	
		4	March 1 to April 1	
	Remaining Pasture	All	March 1 to May 31	
E1/2 Texas Creek	All	All	May 20 to June 12	November 1 to February 28
Park Canyon Pasture	All	N/A	No Use	November 15 to January 30
			Summer/Fall	
West Creek	All		June 5 to November 1	
West Douglas Creek & Red Rock	All		June 5 to November 1	

Livestock grazing is currently being deferred throughout approximately 12,000 acres within the East and West 1/2 Texas Creek pastures and part of the West Creek Pasture in an area centered around Texas Mountain (See Appendix C for description of Texas Mountain Conservation Deferment Area). Livestock grazing has been deferred within this area of the grazing allotment since 2005 in an effort to avoid overutilization and degradation of the forage community (Table 12). Through a Memorandum of Understanding (MOU) with the livestock grazing permittee, this area will continue to be deferred from livestock grazing until rangeland conditions improve to a level necessary to ensure rangeland health can be sustained.

Existing Water Developments: Within the WDHA there are 69 stock ponds, 3 wells and 4 developed springs. The stock ponds range in age and usability and the majority are functional. None of the wells are functional.

5.6.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

Under the Proposed Action, wild horse gather operations would likely have few direct impacts to livestock grazing. Livestock located near gather activities would be temporarily disturbed or displaced by helicopter activity and the increased vehicle traffic during gather operations. There would be no potential for gather operations to disturb livestock within the Texas Mountain Conservation Deferment area as livestock grazing is currently deferred within this area through a Memorandum of Understanding (MOU) with Twin Buttes Ranch. Typically livestock would move back into the area once gather operations cease. Bait and water traps are continuously monitored while they are active, therefore there would be little chance that livestock would become inadvertently trapped. Placement of bait and water traps would not likely disrupt grazing management practices. If water traps are placed in an area which livestock rely for water, they would be constructed in a manner that would not exclude livestock or wildlife use.

Cumulative Impacts

The CIAA for rangeland management includes the Twin Buttes Grazing Allotment and the Bull Draw Pasture of the East Douglas Creek Allotment. Reasonably foreseeable activities in this area include livestock grazing, oil and gas development, wildlife and recreation.

Continued livestock grazing within these grazing allotments removes vegetation associated with AUMs which are allocated for livestock consumption. Wildlife grazing within these grazing allotments removes vegetation associated with AUMs, which are allocated for wildlife consumption.

The BLM currently does not anticipate an increase in oil and gas activity within this area; however, existing infrastructure associated with these activities (i.e., well pads, pipelines and compressor stations) has resulted in long term removal of vegetation. Current reclamation associated with this activity has provided positive benefits to rangeland management, as these wells begin to lose production value and are successfully reclaimed, increasing the amount of valuable forage.

Recreation activities (i.e., hunting, hiking, OHV use) may result in removal and impact to vegetation associated with AUMs, which are allocated to livestock and wildlife for consumption. In addition, activities may displace livestock and redistribute animals within the allotment resulting in unanticipated distribution.

Generally impacts associated with the Proposed Action are considered short term, and would not have long term effects to rangeland management.

Alternatives A and B result in the removal of excess wild horses from both grazing allotments. This would therefore allow for the full implementation of the 1997 White River ROD/RMP and The Twin Buttes AMP (AMP), EA CO-017-99-93-EA, signed May 18, 1999, if rangeland

conditions allow. Livestock distribution would improve allowing for lower utilization and deferment improving vegetation communities.

5.6.3. *Environmental Consequences – Alternative B (Bait/Water Trapping)*

Direct and Indirect Impacts

Impacts to livestock grazing management for this alternative would be similar to those described for Alternative A. There would be no potential for displacement of livestock due to helicopter activity under this alternative.

Cumulative Impacts

Cumulative impacts would be the same as those described under Alternative A.

5.6.4. *Environmental Consequences – Alternative C (Phased Approach)*

Direct and Indirect Impacts

Impacts to livestock grazing management associated with gather efforts would be similar to those described above under Alternative A. Alternative C would not be expected to result in substantial differences in direct or indirect impacts to vegetation, however by using a phased approach, there is a strong likelihood that stallions that have been previously trapped would become weary or trap shy, making them more difficult to capture in future gather attempts and extending gather operations over an indeterminate number of years. Although impacts associated with gather operations would be prolonged, they would not be expected to influence livestock grazing any differently.

Cumulative Impacts

Cumulative impacts would be the same as those described under Alternative A.

5.6.5. *Environmental Consequences – Alternative D (No Action)*

Direct and Indirect Impacts

Under Alternative D wild horses would not be gathered and removed from the lands within and adjacent to the WDHA. There would be no short term impacts to rangeland resources associated with gather operations.

Cumulative Impacts

As addressed in Alternative A, oil and gas exploration, recreation, livestock, wild horse, and wildlife grazing are the primary activities which have or are currently influencing vegetation communities in the analysis area. Failure to gather wild horses would likely result in impacts to the rangeland resources within the analysis area including irreversible loss of native perennial vegetation resulting in a conversion to unhealthy, low producing rangelands unable to support livestock, wildlife, or wild horse grazing. Once rangelands have crossed this threshold they are

then no longer comprised of healthy perennial vegetation communities capable of supporting the current AMP. This would require revision to the current AMP or implementation of human manipulations to restore degraded rangelands which are often time consuming and expensive to complete.

In the event of drought, fire, or other natural phenomenon which could drastically reduce the amount of available forage within the analysis area, the BLM would coordinate with livestock operators to reduce or remove livestock use to prevent irreversible degradation to rangeland resources. However, these proactive conservation efforts alone may not fully achieve deferment levels necessary to prevent longstanding resource damage if the excess wild horse population is not also reduced.

5.7. Terrestrial Wildlife

5.7.1. *Affected Environment*

The analysis area supports year-round big game use. The higher elevation aspen/spruce-fir woodlands that make up the extreme southern portion of the analysis area and the ridges encompassing Texas and Oil Spring Mountains are classified by Colorado Parks and Wildlife (CPW) as mule deer summer range. These ranges typically receive use from May through September. The remainder is classified as winter range, with the northern half further delineated into severe winter range/winter concentration areas. Severe winter range is considered a specialized component of winter range that supports virtually all of a herd's population in the most extreme conditions (heavy snowfall, extreme cold temperatures, etc.). These winter ranges are generally occupied from October through April.

Raptor nesting activities are dispersed throughout the analysis area. Mature components of pinyon-juniper woodlands, as well as aspen and spruce-fir woodlands may provide suitable nest substrate for woodland raptors including accipiters, buteos, and stick nesting owl species. These woodlands may also provide substrate for cavity nesters such as flammulated, pygmy and saw-whet owls. Cliffs and rock outcrops in the area may support the nesting functions of golden eagle, red-tailed hawk, prairie and peregrine falcons. Nesting records for potentially affected hawks, eagles, and owls indicate that nest attempts (initiated as early as March) are largely (85 percent) complete and young fledged by early August.

The analysis area encompasses a peninsula of higher elevation habitats extending north from the Douglas-Baxter Pass divide that support year-long dusky grouse occupation. Grouse winter habitat and year-round distribution centers on mixed spruce and fir forest on Texas and Oil Spring Mountains and like habitats throughout the southern extent of the analysis area. Habitats that support nesting, brood-rearing, and general summer and fall distribution are confined to mixed shrub and higher elevation (above 7,200 feet) sagebrush habitats. After the first snows (~by mid-October), dusky grouse distribution is strongly associated with mature arboreal cover in spruce, fir, and pine, and diets consist primarily of conifer needles.

Small mammal populations are poorly documented; however, the 20 or so species that are likely to occur in this area are widely distributed throughout the Great Basin or Rocky Mountain regions. Even though several species have relatively specialized habitat affiliation (i.e., shrubland with well-developed understories), all species display broad ecological tolerance. No narrowly distributed or highly specialized species or subspecific populations are known to occur in the analysis area.

5.7.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

Big Game

Helicopter drive-trapping and assisted roping: Extensive and potentially disruptive helicopter operations would be conducted in the analysis area during mid- to late-September 2015. Helicopter herding represents a high-intensity, but transient source of disturbance that would become increasingly concentrated and more frequent near the trap-site. Most big game would be on their summer ranges during this timeframe. By July, offspring are sufficiently mobile to avoid disturbances, with little risk of separation from adults. It is doubtful that dispersed helicopter herding and the initially intense, but short-term and relatively predictable gathering/holding activities would contribute significantly to deterioration in animal fitness at the population level, but big game would tend to avoid or be displaced from areas within 0.5 to 1 mile of this activity. It is anticipated that displaced animals would return, more or less, to pre-disturbance distribution soon after gather operations at an individual site were complete.

Gather-related effects would be similar to those discussed above if conducted July through February, except those operations may extend into the winter and late winter months of December through February when adverse weather and forage conditions exert their greatest influence on big game condition (i.e., on severe winter ranges) and when animals are most concentrated (i.e., winter concentration areas). Although disturbances would be short term, energy expended by animals repeatedly avoiding gather activity or fleeing close helicopter approach, particularly in more open sagebrush terrain and under snowpack conditions, may influence the subsequent condition (e.g., winter fitness, gestation) of those animals affected. An extended gather strategy, depending on the duration and frequency of operations on these ranges, would probably have adverse consequences on a relatively small portion of the big game population, but would provide a measure of flexibility in scheduling gathers to avoid important big game hunting seasons.

Water and bait trapping: Water or bait trapping would not be expected to have a substantial influence on big game populations or habitat. These operations involve the ground-based capture of individual animals. Although these capture techniques may be used during big game occupation, these operations represent very localized and short-term points of potential disturbance that would have no substantive adverse influence on animal distribution or energetics.

Nongame Species

Helicopter drive-trapping and assisted roping: As proposed, operations associated with the 2015 gather would be confined to timeframes outside of the raptor nesting season (late-September) and would therefore have no potential to directly influence the outcome of nesting activities. The timing, intensity and duration of gather activities would not be expected to have any substantial adverse consequences on local bird populations. Helicopter-based gather activities may coincide with the later reproductive activities of non-game wildlife from early July through mid-August in subsequent years. In the case of passerine birds and small mammals, this intense, but localized activity would be expected to disrupt reproductive activity and suppress recruitment at levels discountable at the local population level (see Migratory Bird section). The relatively infrequent circumstance where active cliff or woodland raptor nests would be subjected to brief and close approach by helicopter activity late in the nesting sequence would not be expected to prompt prolonged nest absences or have any substantive influence on chick survival. Preparation and gathering work in July and August may infrequently involve late nesting attempts of raptors, including golden eagle and BLM-sensitive accipitrine hawks. Surveys of suitable raptor nesting habitat will be conducted by WRFO staff on those trap sites proposed for use or development from April 15 to August 15. In the event an active raptor nest is found in the vicinity of trapping operations, these sites will be afforded a buffer adequate to effectively isolate nesting activity from disruptions generated by wild horse trapping operations.

Dusky (blue) grouse: Gather activities would be temporally or spatially asynchronous with and would have no effective influence on the reproductive or wintering functions of dusky grouse.

Water and bait trapping: Neither bait nor water trapping are expected to have a substantial influence on raptors or habitats that support their reproductive functions. If trapping efforts occur during the nesting season (May – July), there may be potential for temporary displacement/disruption, however due to the nature of the sites (e.g., typically located in degraded or disturbed areas or in areas easily accessible by vehicle, etc.), it is unlikely that these locations would provide suitable substrate for nesting raptors. Trap sites will be localized and small in extent, and set-up duration as well as length of time animals would be in the trap is generally short-term. Depending on trapping success, these sites may remain in use for a longer period of time (several weeks). Coordination with wildlife staff would be necessary to ensure bait/water trap locations would have minimal impacts to woodland raptors. Surveys will be conducted by WRFO staff for bait/water trap sites proposed for use or development from April 15 to August 15 and, depending on survey results, trap sites may be relocated if necessary. Trapping efforts conducted outside the nesting season would not be expected to have any conceivable influence on raptor nesting activities.

Cumulative Impacts

In addition to wild horse use, energy development (particularly in the northern portion of the analysis area) and livestock grazing are the primary activities impacting big game and nongame species and habitats in the analysis area. All of these activities result in the reduction, modification or complete removal of forage and cover resources for local wildlife. Alternative A would not be expected to have any adverse consequences on local big game and nongame

wildlife populations nor would it be expected to detract from habitat quality. Any impacts to vegetation would be localized and short term.

5.7.3. *Environmental Consequences – Alternative B (Bait/Water Trapping)*

Direct and Indirect Impacts

Impacts to terrestrial wildlife species and habitats that provide forage and cover resources associated with bait and water trapping would be identical to those discussed above under Alternative A.

Cumulative Impacts

Cumulative impacts to terrestrial wildlife species and habitats that provide forage and cover resources would be similar to those described above under Alternative A.

5.7.4. *Environmental Consequences – Alternative C (Phased Approach)*

Direct and Indirect Impacts

Impacts to big game and nongame species and habitats that provide forage and cover resources associated with gather efforts would be similar to those described above under Alternative A. Alternative C would not be expected to result in substantial differences in direct or indirect impacts to terrestrial wildlife species, however by using a phased approach, there is a strong likelihood that stallions that have been previously trapped would become weary or trap shy, making them more difficult to capture in future gather attempts and extending gather operations over an indeterminate number of years. Although impacts associated with gather operations would be prolonged, they would not be expected influence local wildlife populations any differently should they be extended.

Cumulative Impacts

Cumulative impacts associated with the Alternative C would be similar to those described above under Alternative A. As discussed above under Direct and Indirect Impacts, using a phased approach has the potential to prolong gather efforts and subsequently extend season-long wild horse grazing pressure over many years within the analysis area. Depending on remaining horse numbers and number of years for gathering efforts to be successful, improvements in the utility of forage and cover resources for local big game and nongame wildlife species (i.e., well developed herbaceous ground cover, improvements in composition, density and height of herbaceous ground cover, etc.) resulting from reduced season-long grazing by wild horses would take longer to realize, particularly in high use areas.

5.7.5. *Environmental Consequences – Alternative D (No Action)*

Direct and Indirect Impacts

Under the No Action Alternative there would be no direct or indirect impacts associated with gather operations (helicopter drive trapping and assisted roping, bait or water trapping) to big game and nongame species or habitats that provide forage and cover resources.

Cumulative Impacts

As addressed in Alternative A, grazing (both livestock and wild horse) and energy development are the primary activities that have or are currently influencing rangeland conditions that provide forage and cover resources for big game and nongame wildlife species in the analysis area. Although there would be no direct or indirect impacts associated gather operations, failure to gather horses would result in continued season-long grazing use, exacerbating detrimental effects on wildlife resources, particularly in preferred use areas. Shifts in ground cover composition resulting from inappropriate levels of growing season use by wild horses compounded with authorized livestock use would reduce the suitability and utility of affected shrub-steppe habitat in the longer term and may be irreversible barring extraordinary management intervention. Progressive deterioration of native ground cover communities, particularly in sage-steppe habitats, would contribute to the cumulative range-wide deterioration and modification/loss of sagebrush habitats from oil and gas developments and the proliferation of invasive annual grasses.

Raptor nest habitat would not be directly affected by declining range conditions attributable to unregulated wild horse populations, however, these species would remain vulnerable to the indirect effects of declining range health, namely reduced abundance and diversity of avian and mammalian prey stemming from degraded herbaceous ground cover.

5.8. Special Status Animal Species

5.8.1. *Affected Environment*

There are no threatened or endangered animal species that are known to inhabit or derive important use from the analysis area.

The endangered pikeminnow occupies the lower White River below Taylor Draw dam. The White River and its 100-year floodplain below Rio Blanco Lake have been designated as critical habitat for the fish. The analysis area is located in the Douglas, Cottonwood, and Evacuation Creek watersheds, all of which drain to the White River below Taylor Draw dam. The Douglas Creek watershed, which is the nearest system, is separated from the White River by roughly six miles of intermittent channel.

On 5 March 2010, the U.S. Fish and Wildlife Service (FWS) concluded that the greater sage-grouse warranted listing as an endangered species under the Endangered Species Act, but that listing was precluded by the need to complete listing actions of higher priority. Range-wide, this

species is considered a candidate for listing--a designation that affords management attention equivalent to that of species considered sensitive by the BLM. There are approximately 10,323 acres of mapped preliminary general habitat (PGH) for greater sage-grouse that occur as a narrow band immediately along the east side of County Road 23 within the analysis area. Based on recent CPW mapping efforts, sage-grouse habitat has been classified into two types: 1) preliminary priority habitat (PPH) and 2) PGH. PPH is defined by BLM as those areas having the highest conservation value to maintaining sustainable greater sage-grouse populations. These areas would include breeding, late brood-rearing, and winter concentration areas. There is no PPH that occurs within the analysis area. PGH is defined by BLM as greater sage-grouse occupied range outside of PPH. Isolated areas with low activity are typically considered to be general habitat. Small numbers of sage grouse have been sporadically encountered by local CPW staff in larger Wyoming big sagebrush parks on the north and northwest portions of the analysis area, but there appears to be no consistent use or occupation of these habitats. These areas are not associated with any known strutting grounds (nearest active lek is over 10 miles away) and the habitat offers few attributes that would be expected to serve summer/nesting functions. As such, the analysis area is widely considered to be unoccupied by greater sage-grouse.

A number of animals that may inhabit the analysis area are classified as sensitive species by the BLM. These species are thought to be especially susceptible to population-level influences. It is the policy of the BLM to identify these species on a state-specific basis and ensure that BLM actions do not contribute to their becoming candidate for listing under the ESA. Sensitive species that are known to occur or have a reasonable probability of occurring in the analysis area include: northern goshawk (integral with raptor discussion in Terrestrial Wildlife section), Brewer's sparrow (integral with the Migratory Bird section), Townsend's big-eared and big free-tailed bats, fringed myotis, northern leopard frog, and Great Basin spadefoot.

Brewer's sparrow: Brewer's sparrows are common and widely distributed in virtually all big sagebrush and mixed brush communities throughout the planning area. These birds are typically one of the most common members of these avian communities and breeding densities probably range between 10-40 pairs per 100 acres. Typical of most migratory passerines in this area, nesting activities normally take place between mid-May and mid-July. This species is addressed integral with the Migratory Bird section.

Gray vireo: The gray vireo is associated with the WRFO's Utah juniper-black sagebrush ranges principally below 6,000 feet in elevation. In higher elevation woodlands with more extensive canopies, and with the appearance of pinyon pine and the plumbeous vireo, gray vireo distribution appears to abruptly cease. Point-count surveys conducted by BLM from 1996-2009 in the core of occupied habitat indicate average breeding populations of about 16 pairs per section. The northern boundary of the analysis area lies on the southern periphery of occupied gray vireo habitat such that the analysis area encompasses less than 10 percent of potential habitat within the Resource Area. Although there is a history of wild horses occupying these lower elevation ranges, there has been no substantive use of these gray vireo habitats by wild horses since a BLM gather 20-25 years ago. There appears to be no tendency for wild horses to use these ranges at sustained WDHA populations under 150 wild horses.

Northern goshawk: The upper elevation aspen and Douglas fir woodlands in the southern portion of the analysis area likely support the nesting functions of northern goshawk. Goshawks typically nest in contiguous stands of mature aspen and coniferous woodlands, although they have been documented nesting in lower elevation (~6,500 feet) pinyon and juniper within the Resource Area. Goshawks establish breeding territories as early as March and begin nesting by the end of April. Nestlings are normally fledged and independent of the nest stand by mid-August. An influx of migrant goshawk appears to elevate densities in this Resource Area during the winter months. This species is addressed integral with woodland raptors in the Terrestrial Wildlife section.

Townsend's big-eared bat, big free-tailed bat, and fringed myotis: Although the distribution of these bats is poorly understood, recent acoustical surveys in the Piceance Basin and along the lower White River have documented the localized presence of Townsend's big-eared and big free-tailed bat along larger perennial waterways. These bats typically use caves, mines, bridges, and unoccupied buildings for night, nursery, and hibernation roosts, but in western Colorado, single or small groups of bats use rock crevices and tree cavities. Although rock outcrops and mature conifers suitable as temporary daytime roosts for small numbers of bats are widely available in the analysis area, and relatively extensive riparian communities are available along the White River and in the main stem and larger tributaries of Douglas Creek, there are no underground mines or known caves, and unoccupied buildings are extremely limited in the analysis area. Birthing and rearing of young for these bats occurs in May and June, and young are flighted by the end of July. The big free-tailed bat is not known to breed in Colorado.

Northern leopard frog and Great Basin spadefoot: Leopard frogs are sporadically distributed along Douglas Creek. Spadefoot toads are known recently from western Rio Blanco County and neighboring Uintah County, Utah and appear to be associated with ephemeral stock ponds in valley and basin terrain. Although probably rare and sporadically distributed, it remains possible that toads occupy shrublands and woodlands in close association with stock ponds and perennial streams distributed throughout the analysis area. This species is addressed integral with the Aquatic Species section.

5.8.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

Habitats occupied by Colorado pike-minnow are geographically separated from the analysis area. Because there is no reasonable likelihood that project-related influences would extend beyond the analysis area this gather operation would have no reasonable chance of affecting this species.

Greater sage-grouse and bald eagle are sparingly distributed at low density and no important use functions are attributable to the analysis area. Impacts could include the temporary displacement of birds during gather operations. Any exposure of these species to project-related disturbances would be brief and infrequent.

Helicopter drive-trapping and assisted roping: Impacts to northern leopard frog, Great Basin spadefoot, Brewer's sparrow, northern goshawk and sensitive bat species, would be similar to those described in the Aquatic Species, Migratory Bird and Terrestrial Wildlife sections.

Although no northern goshawk nest sites have been identified in the analysis area, it is likely that several nests occur. Based on preferred nest site placement (interior of heavy canopied stands) and nest density, there would be a very low probability of helicopter encounters, much less prolonged or frequent disturbances that would jeopardize nest success late in the nesting season (July-August). Requirements to survey areas potentially influenced by trapping and holding activities will reduce the risk of nest involvement in these instances to negligible levels.

Brewer's sparrow and gray vireo are species that are believed to be widely distributed in suitable habitat across the analysis area. Reproduction in each of these species would normally be complete by early to mid-July. Brief and infrequent helicopter flyovers would not be expected to fail nest attempts late in the nesting sequence. The proportion of habitat and number of animals influenced by those facets of the gather that involve longer duration impacts (e.g., helicopter staging, holding and trap sites) would be discountable at the landscape and population levels (see for example, Migratory Birds section).

It is unlikely that the analysis area offers habitat suitable for hibernation or rearing of young for the three species of bat (big free-tailed bat not known to reproduce in Colorado). Perhaps widely distributed singly or in small groups during the summer months, roosting bats may be subject to short term gather-related activity at discrete trapping and holding sites, and briefly and infrequently during dispersed helicopter flyovers during July and August. Besides the potential for displacement of individuals from temporary diurnal roosts near holding/trapping sites and helicopter staging areas (about 50 acres maximum), gather operations would have no potential to interfere with any important roost functions (e.g., hibernacula, nurseries).

Water and bait trapping: Impacts to northern leopard frog, Great Basin spadefoot, Brewer's sparrow, northern goshawk, and sensitive bat species would be similar to those described in the Aquatic Species, Migratory Birds, and Terrestrial Wildlife sections.

Cumulative Impacts

Cumulative impacts to special status species would be similar to those discussed in the Aquatic Species, Migratory Birds, and Terrestrial Wildlife sections.

5.8.3. *Environmental Consequences – Alternative B (Bait/Water Trapping)*

Direct and Indirect Impacts

Impacts to special status animal species associated with bait and water trapping would be similar to those described under Proposed Action for Aquatic Species, Migratory Birds, and Terrestrial Wildlife sections.

Cumulative Impacts

Cumulative impacts to special status animal species would be similar to those discussed in the Aquatic Species, Migratory Birds, and Terrestrial Wildlife sections.

5.8.4. *Environmental Consequences – Alternative C (Phased Approach)*

Direct and Indirect Impacts

Impacts to special status animal species would be similar to those discussed in the Aquatic Species, Migratory Birds, and Terrestrial Wildlife sections.

Cumulative Impacts

Cumulative impacts to special status animal species would be similar to those discussed in the Aquatic Species, Migratory Birds, and Terrestrial Wildlife sections.

5.8.5. *Environmental Consequences – Alternative D (No Action)*

Direct and Indirect Impacts

Impacts to special status animal species would be similar to those discussed in the Aquatic Species, Migratory Birds, and Terrestrial Wildlife species sections.

Cumulative Impacts

Cumulative impacts to special status animal species would be similar to those discussed in the Aquatic Species, Migratory Birds, and Terrestrial Wildlife sections.

5.9. Migratory Birds

5.9.1. *Affected Environment*

The southern extent of the analysis area is rugged and higher in elevation than much of the northern extent. These steeper hillsides are broadly encompassed by pinyon-juniper woodlands throughout the mid-elevations. Upper elevation woodlands are largely comprised of Douglas fir, aspen and Engelmann spruce. The northern portion of the analysis area is largely comprised of low to mid-elevation sagebrush parks with a matrix of pinyon and juniper dominated ridges. A wide variety of migratory birds fulfill nesting requirements in these woodland and shrubland communities during the breeding season (typically May through July). Species associated with these shrubland and woodland communities are typical and widely represented in the Resource Area and the region. Several bird species have been identified as Birds of Conservation Concern (BOC) by the FWS including Brewer's sparrow, sagebrush sparrow, sage thrasher (sagebrush associates), pinyon jay, juniper titmouse, Gray vireo, and Cassin's finch (pinyon-juniper associates). These birds are typically well distributed in extensive suitable habitats.

Portions of perennial or intermittent streams inside the analysis area boundary sporadically support a simple contingent of riparian-affiliated migratory birds (e.g., rough-winged swallow,

song sparrow). Larger systems (i.e., main stem Douglas Creek) are represented by better developed willow and sedge-dominated riparian vegetation that supports richer avian communities that include such members as yellow warbler, blue grosbeak, yellow-breasted chat, and willow flycatcher.

5.9.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

Helicopter drive-trapping and assisted roping: Primary gather and trapping operations involve the use of aircraft and considerable ground activity, but these activities are typically widely dispersed and short in duration (i.e., helicopter surveillance and herding). As proposed, gather operations associated with this alternative would be confined to timeframes outside the nesting season of all migratory birds (late-September) and would therefore have no potential to directly influence the outcome of migratory bird nesting activities. The timing, intensity and duration of gather activities would not be expected to have any substantial adverse consequences on local bird populations.

Helicopter gathers in subsequent years may influence nesting activities, particularly if gather operations were to take place during July (latter portion of the breeding season). There may be potential for inadvertent nest trampling and mortality of nestlings. This would be expected to have the most pronounced influence on ground and low shrub nesting species. Assuming most nesting activity would have been completed by early July, and that half the nesting attempts in these situations would fail, no more than a half-dozen total attempts would be disrupted and less than half of those would be associated with species having higher conservation status (e.g., Brewer's sparrow). This level of impact would have no discernible influence on population-level abundance or reproductive performance, even at the smallest landscape level. There are no identified impacts resulting from this alternative during winter months when migratory birds are not present within the analysis area.

Bait and water trapping: Neither bait nor water trapping are expected to have a substantial influence on migratory birds or habitats that support their reproductive functions. Impacts associated with trapping are typically concentrated but localized. If trapping efforts occur during the nesting season (May – July), there may be potential for temporary displacement/disruption due to high levels of disturbance, particularly if nest sites are in close proximity to concentrated activity. However, due to the nature of the sites (e.g., typically located in degraded or disturbed areas or in areas easily accessible by vehicle, etc.), it is unlikely that these locations would involve any more than one or two pair of birds. Trap sites would be localized and small in extent, and set-up duration, as well as length of time animals would be in the trap is generally short-term. Trapping efforts conducted outside the nesting season would not be expected to have any conceivable influence on migratory birds or associated habitats.

Gather efforts are scheduled to occur annually for three years (2015 – 2017), and depending on gather success and other factors, may potentially continue for several more years. Although

impacts associated with gather operations would be prolonged, they would not be expected to influence migratory bird populations or habitat any differently should they be extended.

Cumulative Impacts

In addition to wild horse use, energy development (particularly in the northern portion of the analysis area) and livestock grazing are the primary activities impacting migratory birds and migratory bird habitat in the analysis area. All of these activities result in the reduction, modification or complete removal of forage and cover resources for migratory birds. Alternative A would not be expected to have any adverse consequences on local migratory bird populations nor would it be expected to detract from habitat quality. Any impacts to vegetation would be localized and short term.

5.9.3. *Environmental Consequences – Alternative B (Bait/Water Trapping)*

Direct and Indirect Impacts

Impacts to migratory birds and habitats that provide foraging and nesting resources would be identical to those described above under Alternative A.

Cumulative Impacts

Cumulative impacts to migratory birds and habitats that provide foraging and nesting resources would be similar to those described above under Alternative A.

5.9.4. *Environmental Consequences – Alternative C (Phased Approach)*

Direct and Indirect Impacts

Impacts to migratory birds and habitats that provide foraging and nesting resources associated with gather efforts would be similar to those described above under Alternative A. Alternative C would not be expected to result in substantial differences in direct or indirect impacts to migratory birds, however by using a phased approach, there is a strong likelihood that stallions that have been previously trapped will become weary or trap shy, making them more difficult to capture in future gather attempts. Although impacts associated with gather operations would be prolonged, they would not be expected influence migratory birds populations any differently should they be extended.

Cumulative Impacts

Cumulative impacts associated with the Alternative C would be similar to those described above under Alternative A. As discussed above under Direct and Indirect Impacts, using a phased approach has the potential to prolong gather efforts and subsequently extend season-long wild horse grazing pressure over many years within the analysis area. Depending on remaining horse numbers and number of years for gathering efforts to be successful, improvements in forage and cover resources for migratory birds (i.e., improvements in the ground cover composition, density

and height of herbaceous ground cover) resulting from reduced season-long grazing would take longer to realize.

5.9.5. ***Environmental Consequences – Alternative D (No Action)***

Direct and Indirect Impacts

Under the No Action Alternative there would be no direct or indirect impacts associated with gather operations (helicopter drive trapping and assisted roping, bait or water trapping) to migratory bird nesting activities or habitats that support their breeding functions.

Cumulative Impacts

As addressed in Alternative A, livestock grazing, energy development and wild horse use are the primary activities have or are currently influencing rangeland conditions that support migratory bird nesting functions in the analysis area. Failure to gather wild horses would allow for continued reductions or modifications in upland rangeland conditions associated with season-long grazing use. This would prolong and exacerbate detrimental effects on wildlife resources, particularly in preferred use areas. Strong reductions in the density and height of herbaceous ground cover from collective ungulate grazing would be expected to depress nest success and or breeding densities, particularly to ground nesting and near-ground nesting species. Shifts in ground cover composition resulting from inappropriate levels of growing season use by wild horses compounded by authorized livestock use would reduce the suitability and utility of affected shrub-steppe habitat in the longer term and may be irreversible barring extraordinary management intervention.

5.10. Aquatic Wildlife

5.10.1. *Affected Environment*

There are several perennial and intermittent streams located within the analysis area, however only main stem Douglas Creek and West Douglas Creek which skirt the eastern boundary are known to support populations of higher order aquatic species. Both systems persist in supporting discontinuous populations of speckled dace; a native, non-sensitive fish species as well as isolated populations of northern leopard frog, a BLM sensitive species. Beaver have intermittently colonized Douglas Creek, as well as a small portion of West Douglas Creek near Sand Draw. These beaver ponds and their lengthy backwaters support small, but well distributed breeding populations of mallard, green-winged teal, and spotted sandpiper. Those portions of mainstream Douglas that are influenced by the WDHA are considered to be properly functioning and have sustained a long term improving trend in aquatic habitat conditions. Reaches of West Douglas are classified as either non-functional or functional at risk due to lack of obligate riparian vegetation, entrenched channel and presence of invasive species.

Perennial and ephemeral ponds and reservoirs located throughout the analysis area may provide habitat for tiger salamander and chorus frog, as well as BLM sensitive northern leopard frog and Great Basin spadefoot (see also Affected Environment in Special Status Animal Species section).

5.10.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

Helicopter drive-trapping and assisted roping: As conditioned by the design features, helicopter drive trapping and roping would have little if any discernable direct influence on aquatic wildlife communities. Safeguards integral with the Proposed Action are intended to reduce the risk of water contamination from helicopter fueling or inadvertent fuel spills. Drive trapping and roping operations, including helicopter staging areas and drive trap/holding areas would be sited to preclude direct or indirect riparian or aquatic habitat involvement.

Bait trapping: Bait trapping would not be expected to have a substantial influence on aquatic communities. Bait stations would be sited to avoid any direct involvement with the floodplain or riparian/aquatic habitat.

Water trapping: As mitigated, there would be very little potential for water trapping efforts to influence aquatic communities. Proposed sites would be surveyed by BLM wildlife staff prior to use. If it is determined that trapping efforts would negatively influence aquatic communities, an alternate location would be used.

Cumulative Impacts

In addition to wild horse use, energy development (particularly in the northern portion of the analysis area) and livestock grazing are the primary activities influencing aquatic communities in the analysis area. These activities have the potential to result in alteration or reductions in riparian vegetation and upland rangeland conditions, which may influence riparian communities (reservoirs) and downstream channel conditions. Alternative A would not be expected to have any adverse consequences on aquatic wildlife populations nor would it be expected to detract from habitat quality. Any impacts to riparian vegetation associated with water trapping efforts would be localized and short term (see Riparian in Section 4.2 above).

5.10.3. ***Environmental Consequences – Alternative B (Bait/Water Trapping)***

Direct and Indirect Impacts

Impacts to aquatic communities associated with water and bait trapping would be identical to those described above under Alternative A.

Cumulative Impacts

Cumulative impacts associated with bait and water trapping would be similar to those described above under the Proposed Action.

5.10.4. ***Environmental Consequences – Alternative C (Phased Approach)***

Direct and Indirect Impacts

Alternative C would not be expected to result in substantial differences in direct or indirect impacts to aquatic communities, however by using a phased approach, there is a strong likelihood that stallions that have been previously trapped would become weary or trap shy, making them more difficult to capture in future gather attempts. Although this would prolong gather efforts, it is unlikely that direct impacts to aquatic communities associated with water trapping would be notably different if mitigation measures outlined in the Design Features are applied.

Cumulative Impacts

Cumulative impacts associated with the Alternative C would be similar to those described above under Alternative A. As discussed above under Direct and Indirect Impacts, using a phased approach would potentially prolong gather efforts and subsequently extend season-long wild horse grazing pressure over many years within the analysis area. Depending on remaining horse numbers and length of time for gathering efforts, benefits to aquatic communities resulting from reductions in season-long wild horse grazing pressure would take longer to realize.

5.10.5. ***Environmental Consequences – Alternative D (No Action)***

Direct and Indirect Impacts

There would be no direct or indirect impacts to aquatic communities under the No Action Alternative.

Cumulative Impacts

As addressed in Alternative A, livestock grazing, energy development and wild horse use are the primary activities that have the greatest potential to influence aquatic communities in the analysis area. Although there appears to be little direct influence from wild horse and livestock use on channel or riparian vegetation associated with the Douglas and West Douglas Creek channels within the analysis area, continued reductions or modifications in upland rangeland conditions associated with season-long wild horse grazing use may lead to increased sediment loads to these systems, which may aggravate downstream sediment delivery to the White River. Over time, heavy sediment deposition in these tributary channel systems would be expected to degrade the suitability of aquatic habitat available for fish, amphibians, beaver, waterfowl, and aquatic invertebrates. Similarly, continued season-long use of perennial and ephemeral ponds by wild horses would be expected to result in degradation of these sites (reduced water quality, reduction in riparian vegetation as a form of cover, etc.).

5.11. Invasive, Non-Native Species

5.11.1. ***Affected Environment***

The state of Colorado has noxious weed species classified into three categories: List A, List B, and List C. List A species are targeted for eradication in Colorado. List B are those plant species which management plans have been developed to limit the spread of these species. List C are those plant species which management plans have been developed to aid in management for the jurisdictions that choose to manage them. There are no List A noxious weeds known to exist in or adjacent to the WDHA. However, there are several List B species known to occur, but none are known that occur in a large area but more specifically scattered throughout. Known List B species located in or adjacent to the WDHA are as follows: Hoary cress (whitetop), houndstongue, Russian knapweed, spotted knapweed, musk thistle, Canada thistle, bull thistle, Russian olive, salt cedar, and halogeton. The List C species, cheatgrass, is scattered throughout the analysis area along with common mullein and possibly other early seral annual invasive species.

5.11.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

Disturbance of vegetation associated with trap locations, vehicle and human traffic would provide the opportunity for invasive, non-native species to establish in the analysis area. Use of equipment could carry weed seeds and propagate from other areas onto the analysis area. Disturbance to vegetation is expected to be minimal (see Vegetation Section) so opportunity for non-native or weeds to establish and proliferate on any area associated with the project is minimal.

Cumulative Impacts

Past and present land uses including: wild horse and livestock grazing; energy development; and dispersed recreation have all contributed to establishment and proliferation of invasive, non-native species in the analysis area. The proposed project is not anticipated to add additional cumulative impacts to the current situation with the design features provided.

5.11.3. ***Environmental Consequences – Alternative B (Bait/Water Trapping)***

Direct and Indirect Impacts

Impacts from Alternative B would be the same as those analyzed in Alternative A.

Cumulative Impacts

Cumulative impacts for Alternative B are expected to be the same as those analyzed in Alternative A.

5.11.4. ***Environmental Consequences – Alternative C (Phased Approach)***

Direct and Indirect Impacts

Impacts from Alternative C would be the same as those analyzed in Alternative A.

Cumulative Impacts

Cumulative impacts for Alternative C are expected to be the same as those analyzed in Alternative A.

5.11.5. ***Environmental Consequences – Alternative D (No Action)***

Direct and Indirect Impacts

The No Action Alternative would result in no additional soil or vegetation disturbance and result in no change from the current situation in regards to invasive, non-native species from gather operations.

Cumulative Impacts

As addressed in Alternative A, wild horse and livestock grazing, energy development and dispersed recreation are the primary activities influencing rangeland conditions that could impact the kinds and size of the areas of invasive, non-native species in the analysis area. Failure to gather wild horses would allow for continued modification in upland rangeland conditions associated with year-long grazing use by wild horses that would have the potential to increase both the kinds and size of an area of invasive, non-native species to become established in the analysis area.

5.12. Cultural Resources

5.12.1. *Affected Environment*

The analysis area is known to contain a wide variety of prehistoric and historic resources. Prehistoric sites include but are not necessarily limited to rock art, masonry structures, open lithic scatters, open campsites, and wickiup villages. Such sites seem to be particularly concentrated on the ridges overlooking the various tributaries to the West Douglas, Texas, Missouri, and Evacuation Creeks. Recent inventory data suggests that site densities tend to be very high throughout these areas. Historic resources are primarily related to early ranching and livestock grazing efforts and are concentrated along the moister drainage bottoms. Sites include, but are not limited to: old homesteads, line shacks, corrals, pasture fences, and railroad grades.

Sites are vulnerable to a number of impacts because of wild horse activity. In areas where wild horses concentrate or trail sites are at risk from trampling which can crush and break artifacts or churn up the soil destroying the site context – the spatial relationship between artifacts and cultural features. Further, as wild horses rub or scratch on standing features, such as structural walls, wickiup poles or other vertical manmade items these items can be knocked down. Loosing these elements hastens the collapse of architectural features such as wickiups or homestead

cabins. In area of concentration, if the vegetation cover is reduced significantly by trampling or grazing the loosened and unprotected soil is more susceptible to wind and water erosion, which can also destroy overall site contexts by eliminating the vertical spacing that, might indicate change through time. Trampling can also cause horizontal movement of artifacts, especially during muddy conditions when items encapsulated in mud adhere to wild horse hooves as they move about.

5.12.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

While traps and temporary holding facilities location would be surveyed for cultural resources prior, direct impact to cultural resources could still occur since herding horses via helicopter is not a precise process and wild horses might trail through sites as they are herded. If the wild horses are moving at a trot or cantor the force of hoof strikes would be higher than if wild horses are just walking and could cause deeper and more extensive disturbance of site contexts along with crushing or breaking of artifacts. Bait or water trapping would also avoid all known sites and the traps sites themselves would not cause any impacts to known sites. However, as wild horses become habituated to the trap locations prior to being captured they could concentrate in adjacent areas for thermal cover and could select areas where sites are present. The selection of site areas for concentration could result in severe trampling impacts to those sites until the wild horses are captured and removed. These impacts would be permanent and irreversible and cause a loss of scientific data regarding the human use and adaptation to the area over time.

Cumulative Impacts

Gathering operations would avoid sites to the extent possible in an effort to reduce impacts. Overall impacts to cultural resources would be lower as wild horse numbers are reduced. However, there would continue to be impacts to cultural resources due to the presence of wild horses in the area and the impacts described above such as increased wind and water erosion, trampling and so on. As long as there are wild horses in the analysis area, there would continue to be wild horse related impacts that are cumulative to other past and present land-use.

5.12.3. ***Environmental Consequences – Alternative B (Bait/Water Trapping)***

Direct and Indirect Impacts

Direct impacts to cultural resources would be reduced by not driving wild horses via helicopter or using helicopter assisted roping because it reduces the possibility for wild horses trailing through archaeological sites as they are herded. Bait and water trapping would also avoid all known sites and the traps sites themselves would not cause any direct impacts to known sites. However, indirect impacts could occur as wild horses become habituated to the trap locations prior to being captured they could concentrate in adjacent areas for thermal cover possibly selecting areas where sites are present. The selection of site areas for concentration could result in severe trampling impacts to those sites until the wild horses are captured and removed. The

loss of site contextual data is permanent and irreversible and causes a loss of scientific data regarding the human use and adaptation to the area over time.

Cumulative Impacts

Gathering operations would avoid sites to the extent possible in an effort to reduce impacts. Overall impacts to cultural resources would be lower as wild horse numbers are reduced. However, there would continue to be impacts to cultural resources due to the presence of wild horses in the area and the impacts described above such as increased wind and water erosion, trampling and so on. As long as there are wild horses in the WDHA, there would continue to be wild horse related impacts that are cumulative to other past and present land-use.

5.12.4. *Environmental Consequences – Alternative C (Phased Approach)*

Direct and Indirect Impacts

Direct and indirect impacts would be similar to those discussed in Alternative A.

Cumulative Impacts

Gathering operations would avoid sites to the extent possible in an effort to reduce impacts. Overall impacts to cultural resources would be lower as wild horse numbers are reduced. However, there would continue to be impacts to cultural resources due to the presence of wild horses in the area and the impacts described above such as increased wind and water erosion, trampling and so on. As long as there are wild horses in the WDHA, there would continue to be wild horse related impacts that are cumulative to other past and present land-use.

5.12.5. *Environmental Consequences – Alternative D (No Action)*

Direct and Indirect Impacts

Not gathering wild horses from the analysis area would result in the continued increase in wild horse numbers and the increase of related impacts. Areas of band concentration would undergo increased trampling of resources, standing archaeological and historical features would see increases in rubbing and congregating. Increased grazing pressure and reduction in vegetation cover along with soil loosened by trampling would result in increased soil erosion, which would significantly increase the loss of surface features such as hearths, tool stone concentrations or other similar cultural features. The loss of site contextual data would be permanent and irreversible and would cause a loss of scientific data regarding the human use and adaptation to the area over time.

Cumulative Impacts

Wild horses and past and present land uses, such as livestock grazing and foraging by deer, elk, and are expected to continue to occur in the future. The impacts described above, such as increased wind and water erosion, trampling, and so on would continue and intensify as the wild horse population increases.

5.13. Paleontological Resources

5.13.1. *Affected Environment*

The analysis area contains horizontal planes and near vertical outcrops of the geological formations Iles, Uinta, Wasatch, Green River Williams Fork, and Mesaverde Group, which are known to produce scientifically valuable fossils, resulting in Potential Fossil Yield Classifications (PFYCs) 4 and 5 (Tweto 1979, Armstrong and Wolny 1989). The area is known to produce fossils from Paleocene and Eocene mammals, fish, reptiles, birds, invertebrates, and various floras. Inventory data indicate that wild horse trampling can negatively affect exposed fossils. These impacts are manifest by badly fragmented or crushed fossils found on the surface of the more horizontal and gently sloping areas of the formation. In areas where wild horses concentrate and rub on vertical exposures there is the potential to break larger specimens or remove smaller fossil completely from the stone matrix, causing a permanent and irreversible loss of scientific data.

5.13.2. *Environmental Consequences – Alternative A (All Gather Methods)*

Direct and Indirect Impacts

Fossils could be directly impacted by gather operations if trap sites and associated wing fences or holding facilities are located in known and reported fossil localities. Careful placement of trap sites and holding facilities would limit the damage to exposed fossils and fossil localities. Herding wild horses via helicopter is not a precise undertaking and wild horses may trail across exposed outcrops of fossil bearing stone as they travel to trap sites or roping areas. There is the potential to damage or destroy some fossil resources as the wild horses trail across the formation, particularly if the rock surface is weathered and soft and the wild horses travel through at a rate of speed greater than a walk. Bait and water trapping pose a limited threat of impacts to fossil resources as traps will be sited to avoid all known or suspected fossil localities and exposed outcrops of stone. A potential indirect impact from bait and water trapping could occur if wild horses concentrate in areas of rock exposure as they become habituated to the trap before capture. Soft and weathered rock exposures could be further eroded by trampling causing loss of smaller fossils to erosion or crushing and breaking of fossils by trampling. Loss of fossil specimens due to crushing or erosion is an irreversible, permanent loss of scientific data.

Cumulative Impacts

The continuing presence of wild horses would continue to result in adverse impacts to fossil resources. Impacts to fossil resources from the continuing presence of wild horses in the analysis area combined with past and present land use would result in some continuing, irreversible and cumulative loss of scientific paleontological data.

5.13.3. ***Environmental Consequences – Alternative B (Bait/Water Trapping)***

Direct and Indirect Impacts

Bait and water trapping pose a limited threat of impacts to fossil resources as traps would be placed to avoid all known or suspected fossil localities and exposed outcrops of stone. A potential indirect impact from bait and water trapping could occur if wild horses concentrate in areas of rock exposure as they become habituated to the trap before capture. Soft and weathered rock exposures could be further eroded by trampling causing loss of smaller fossils to erosion or crushing and breaking of fossils by trampling. Loss of fossil specimens due to crushing or erosion is an irreversible, permanent loss of scientific data.

Cumulative Impacts

The continuing presence of wild horses would continue to result in adverse impacts to fossil resources. Impacts to fossil resources from the continuing presence of wild horses in the analysis area combined with past and present land use would result in some continuing, irreversible and cumulative loss of scientific paleontological data.

5.13.4. ***Environmental Consequences – Alternative C (Phased Approach)***

Direct and Indirect Impacts

Direct and indirect impacts would be similar to those discussed in Alternative A.

Cumulative Impacts

The continuing presence of wild horses would continue to result in adverse impacts to fossil resources. Impacts to fossil resources from the continuing presence of wild horses in the analysis area combined with past and present land use would result in some continuing, irreversible and cumulative loss of scientific paleontological data.

5.13.5. ***Environmental Consequences – Alternative D (No Action)***

Direct and Indirect Impacts

Under the No Action Alternative wild horse numbers would continue to increase. With the increase in wild horse numbers there would be a corresponding increase in wild horse concentrating and/or trailing in some areas or rubbing on exposed vertical exposures in other areas. Should those concentration or trailing areas happen to coincide with exposures of fossiliferous stone or rock outcrops there is an increased potential for damage to fossil resources from trampling of or rubbing on the exposed rock. The more wild horses there are the greater potential for trailing and concentrating on exposed horizontal surfaces or rubbing on vertical surfaces and the greater the potential impact to fossil resources. Loss of fossil resources under this alternative would potentially be the most severe of the alternatives. The loss of fossil resources and scientific data that accompanies them is permanent and irretrievable.

Cumulative Impacts

The continuing presence of wild horses would continue to result in adverse impacts to fossil resources. Impacts to fossil resources from the continuing presence of wild horses in the analysis area combined with past and present land use would result in some continuing, irreversible and cumulative loss of scientific paleontological data.

5.14. Lands with Wilderness Characteristics

5.14.1. *Affected Environment*

The BLM - WRFO has completed an assessment of BLM managed lands with wilderness characteristics outside of existing WSAs. The BLM Manual 6310 - Conducting Wilderness Characteristics Inventory on BLM Lands, provides the guidance from which the WRFO performed the wilderness characteristic inventory process. In order for an area to qualify as lands with wilderness characteristics, it must possess sufficient size, naturalness, and outstanding opportunities for either solitude or primitive and unconfined recreation. In addition, it may also possess supplemental values. There are six units identified as containing wilderness characteristics located within the proposed analysis area. These units include: unit 2-Whiskey Creek (5,200 acres), unit 4-Texas Mountain (15,600 acres), unit 7-Bluejay Creek (9,900 acres), unit 28-Evacuation Creek (6,700 acres), unit 31-Gilsonite Hills (11,900 acres), and unit 35-Oil Spring Mountain WSA adjacent (8,200 acres) (see Map 3). The WRFO has not yet made management decisions on any lands with wilderness characteristics units specifically in regards to wild horses, but has made management decisions for these areas for oil and gas development in the recently released Proposed Resource Management Plan Amendment and Final EIS for Oil and Gas Development. According to BLM Manual 6320-Considering wilderness characteristics in the land use planning process may result in several outcomes, including, but not limited to: (1) emphasizing other multiple uses as a priority over protecting wilderness characteristics; (2) emphasizing other multiple uses while applying management restrictions (conditions of use, mitigation measures) to reduce impacts to wilderness characteristics; (3) the protection of wilderness characteristics as a priority over other multiple uses. In the Proposed Resource Management Plan Amendment and Final EIS for Oil and Gas Development all of the above units, except unit 2-Whiskey Creek, would be managed to emphasize other multiple uses as a priority over protecting wilderness characteristics (Tier 3) and unit 2-Whiskey Creek would be managed to protect wilderness characteristics as a priority over other multiple uses (Tier 1).

5.14.2. *Environmental Consequences – Alternative A (All Gather Methods)*

Direct and Indirect Impacts

The use of helicopters to gather wild horses may result in short term, temporary impacts to those seeking the outstanding opportunities for either solitude or primitive and unconfined recreation found within each identified wilderness characteristics unit. This impact would only be realized if this recreational opportunity is the experience sought by those recreating in these units in the same area and at the same time as helicopter flights. Based on the planned timing of these

proposed activities, it is likely that big game hunters would be hunting in these areas during this time. Big game hunting is considered a primitive, unconfined recreational opportunity and some hunters may also be there to experience the solitude or naturalness of the setting. In order to reduce these impacts to big game hunters CPW staff would be contacted to coordinate gather operations in an effort to develop mutually compatible strategies that may reduce the intensity and localize the expanse of helicopter related disturbances during big game hunting seasons. Also, if possible helicopter gather operations would be avoided from late-August through November for high public use areas during big game hunting seasons.

The use of water and/or bait traps as gather methods combined with holding facilities may result in up to a total 50 acres of trampled ground. These concentrated areas of use may initially not appear natural immediately after use. According to BLM Manual 6310, apparent naturalness refers to whether or not an area looks natural to the average visitor who is not familiar with the biological composition of natural ecosystems versus human-affected ecosystems. However, these areas are expected to naturally reclaim and would be monitored for any noxious weeds for up to three years. This would therefore be a short term, temporary impact to the naturalness of these small localized areas, but would result in no long term impacts to the wilderness characteristics found within these units.

Cumulative Impacts

Combined with other past, existing, and foreseeable activities in this area, this alternative is likely to not have any long term impacts in these lands with wilderness characteristics units.

5.14.3. *Environmental Consequences – Alternative B (Bait/Water Trapping)*

Direct and Indirect Impacts

The use of water and/or bait traps as gather methods combined with holding facilities may result in up to a total 50 acres of trampled ground. These concentrated areas of use may initially not appear natural after use. According to BLM Manual 6310, apparent naturalness refers to whether or not an area looks natural to the average visitor who is not familiar with the biological composition of natural ecosystems versus human-affected ecosystems. However, these areas are expected to naturally reclaim and would be monitored for any noxious weeds for up to three years. This would therefore be a short term, temporary impact to the naturalness of these units, but would result in no long term impacts to the wilderness characteristics found within these units.

Cumulative Impacts

Combined with other past, existing, and foreseeable activities in this area, this alternative is likely to not have any long term impacts in these lands with wilderness characteristics units.

5.14.4. ***Environmental Consequences – Alternative C (Phased Approach)***

Direct and Indirect Impacts

This alternative would have essentially the same direct short term, temporary effects as Alternative A on lands with wilderness characteristics units in the analysis area.

Cumulative Impacts

Combined with other past, existing, and foreseeable activities in this area, this alternative is likely to not have any long term impacts in these lands with wilderness characteristics units.

5.14.5. ***Environmental Consequences – Alternative D (No Action)***

Direct and Indirect Impacts

This alternative would result in no short term temporary impacts such as those described under Alternative A.

Cumulative Impacts

Combined with other past, existing, and foreseeable activities in this area, this alternative is likely to not have any long term impacts in these lands with wilderness characteristics units.

5.15. Recreation

5.15.1. *Affected Environment*

The analysis area is located in the southwest portion of the WRFO and the primary recreational activity in this area is big game hunting. The approximately 230,000 acre analysis area consists of half of Colorado Parks and Wildlife's (CPW) Game Management Unit (GMU) 21 which is approximately 560,000 acres, the vast majority of which is BLM public lands. The CPW big game seasons (archery, muzzleloader, and 1st-4th rifle seasons) for GMU 21 run from late August through mid-November of each year. GMU 21 is managed by CPW as a trophy mule deer hunting area with 383 mule deer hunting licenses issued in 2013 according to CPW big game hunting statistics. GMU 21 also provides excellent elk and bear hunting opportunities with 2,347 elk hunting licenses issued in 2013 and 600 bear hunting licenses issued in 2014 according to CPW big game hunting statistics. There are currently five Special Recreation Permits for commercial big game guiding and outfitting with authorized operating areas within all or parts of the analysis area. Elk and deer hunters have complained to both BLM WRFO staff and CPW staff that wild horses have negatively impacted their desired hunting experience and opportunity. This has typically occurred in localized areas, such as water sources, when these areas are occupied by wild horses and the hunted big game was thought to have been displaced from these areas by wild horses. GMU 21 also had a 2014 CPW mountain lion harvest quota of 15, which is one of the highest GMU mountain lion harvest quotas in the state. The mountain lion hunting season generally runs from mid-November through April each year. There are currently fourteen Special Recreation Permits for commercial mountain lion guiding and outfitting permitted to

operate throughout the entire WRFO, several of these outfitters guide mountain lion clients in GMU 21 each year.

There are three of eight developed recreation sites in Canyon Pintado National Historic District (CPNHD) located within the analysis area along the west side of State Highway 139. These sites, White Birds, Kokopelli, and Waving Hands, are all developed with signed and surfaced parking areas, short hiking trails, and interpretive panels for viewing and learning about the unique rock art at each site. According to BLM traffic counter data the Waving Hands site received 1,928 visits from April through November in 2014. There are also four developed recreation sites located along the Dragon Road (Rio Blanco County Road 23) in the analysis area. These four sites: Shield Site, Crook's Brand, Fremont Ridge, and Carrot Men all have signed and developed unsurfaced parking areas with short trails to interpretive panels that interpret unique rock art or other cultural sites. These sites receive less use than the CPNHD sites and are not as readily accessible as those located along the State Highway 139.

Other recreational activities that occur within the analysis area at lower and more dispersed levels include recreational Off-Highway Vehicle (OHV) riding, hiking, mountain biking, wild horse viewing, and rock climbing. Oil Spring Mountain Wilderness Study Area (WSA) (18,245 acres) is located within the analysis area. This WSA provides outstanding primitive recreational opportunities such as hiking, backpacking, horseback riding, and big game hunting. There are currently no developed facilities that support these activities in the analysis area.

5.15.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

Helicopter drive-trapping or helicopter assisted roping to gather wild horses may impact big game hunter's desired recreation experience and hunting success if low-flying helicopter operations occur at the same time and place as those hunting. During the planned preliminary gather dates of September 14 - 25, 2015 and based on CPW hunting seasons and statistics this could potentially impact up to approximately 84 either archery or muzzleloader trophy mule deer hunters. This could also impact the desired experience and success of up to 690 either archery or muzzleloader elk hunters. It is unlikely that this many hunters would be impacted during planned gather operations in this alternative because the analysis area overlaps with only half of GMU 21, the planned gather dates overlap with seven days of the nine day muzzleloader season and twelve days of the thirty day archery season. However, if gather operations do occur during this planned time, it is likely that some mule deer and elk hunters desired experience and hunting success would be affected by the helicopter gather operations. There may be up to a combined 1,956 deer and elk hunters in GMU 21 during the various rifle seasons which are from October 10 through November 15, 2015. Therefore, design features and the timing of the proposed gather operations are intended to impact fewer individual hunters than other times during the August through November big game hunting seasons. If helicopter-based gather operations are conducted during the big game hunting seasons, CPW staff would be contacted to coordinate gather operations in an effort to develop mutually compatible strategies that may reduce the intensity and localize the expanse of helicopter-related disturbances during big game hunting

seasons. In an effort to reduce the potential for helicopter flights to be where commercial big game outfitters are planning to guide clients, the five Special Recreation Permit holders for commercial big game guiding and outfitting would be notified of the gather activities and locations as soon as BLM knows. A long term positive effect to big game hunters may be realized in localized areas where desired big game hunting opportunities and experiences may be improved. This may occur at water sources or concentration areas that were formerly occupied by wild horses where now big game will no longer be displaced from these areas. Therefore desired big game hunting experiences and opportunities may be improved in these areas over the long term as a result of this alternative.

The gather may result in visitors not being able to view as many wild horses in this area as before the gather. However, this opportunity would still be available and most appropriate on nearby public lands in the Piceance-East Douglas Herd Management Area. Also, every gather day is considered a public observation day according to WO-IM-2013-058 (Wild Horse and Burro Gathers: Public and Media Management). This provides the public an opportunity to view the gather operations. This alternative is not expected to have any impacts to the developed recreation sites located within the analysis area because no traps or holding facilities would be located within or impede the use of these sites. This alternative could result in short-term temporary impacts to those seeking a primitive recreational experience in Oil Spring Mountain WSA if helicopter flights are in close proximity to those recreating in this area. However, all alternatives are designed to meet the WSA non-impairment standard in BLM Manual 6330-Management of Wilderness Study Areas. This is discussed in more detail in the WSA section of this document. This alternative is not expected to have any other substantial or long term impacts to any other recreational activities, opportunities, or experiences in the analysis area.

Cumulative Impacts

Combined with former, existing, and potential future oil and gas development and production, livestock grazing, wild horse gathers, recreational activities, rights-of-ways, and other public land use activities there are no known cumulative effects identified for recreational experiences, settings, or opportunities as a result of gathering of wild horses.

5.15.3. *Environmental Consequences – Alternative B (Bait/Water Trapping)*

Direct and Indirect Impacts

This alternative would result in impacting fewer big game hunters than Alternative A because a helicopter would not be used to gather wild horses. However there may be a small number of hunters impacted at water trap sites that are planned to be used as part of their hunting strategy.

Other recreation related impacts would be the same as described under Alternative A.

Cumulative Impacts

Combined with former, existing, and potential future oil and gas development and production, livestock grazing, wild horse gathers, recreational activities, rights-of-ways, and other public

land use activities there are no known cumulative effects identified for recreational experiences, settings, or opportunities as a result of gathering of wild horses.

5.15.4. *Environmental Consequences – Alternative C (Phased Approach)*

Direct and Indirect Impacts

The direct impacts to recreational opportunities, settings, and experiences would be the same as Alternative A.

Cumulative Impacts

Combined with former, existing, and potential future oil and gas development and production, livestock grazing, wild horse gathers, recreational activities, rights-of-ways, and other public land use activities there are no known cumulative effects identified for recreational experiences, settings, or opportunities as a result of gathering of wild horses.

5.15.5. *Environmental Consequences – Alternative D (No Action)*

Direct and Indirect Impacts

By not gathering any wild horses, there would be no direct impacts to big game hunters or any other recreationalists in 2015. Indirectly by not removing wild horses, hunters may continue to have diminished hunting experiences and opportunities in localized areas where wild horses are reported to be displacing big game. Recreationalists would likely continue to see wild horses in this area. Some recreationalists may perceive this as a positive experience and opportunity while others may see this as providing a more negative experience.

Cumulative Impacts

Combined with former, existing, and potential future oil and gas development and production, livestock grazing, wild horse gathers, recreational activities, rights-of-ways, and other public land use activities there are no known cumulative effects identified for recreational experiences, settings, or opportunities as a result of gathering of wild horses.

5.16. Wilderness Study Area

5.16.1. *Affected Environment*

Oil Spring Mountain Wilderness Study Area (WSA) is located within the analysis area. This WSA was established through the Federal Land Policy and Management Act of 1976, which directed the BLM to inventory and study roadless areas for wilderness characteristics on public lands. Until Congress makes a final determination on a WSA, the BLM manages these areas to not impair their suitability for designation as wilderness. WSAs are managed in accordance with BLM Manual 6330 – Management of Wilderness Study Areas. This manual states that the BLM will review all proposals for uses and/or facilities within WSAs to ascertain whether the proposal would impair the suitability of the WSA for preservation as wilderness. All uses and/or facilities

must meet the non-impairment standard which means that it must be both temporary and not create surface disturbance.

Portions of BLM Manual 6330 that are specifically relevant to this project include: “Wild horses and burros are managed to remain in balance with the productive capacity of the habitat; this includes managing herds so as not to impair wilderness characteristics. Wild horse and burro populations must be managed at appropriate management levels so as to not exceed the productive capacity of the habitat (as determined by available science and monitoring activities), to ensure a thriving natural ecological balance, and to prevent impairment of wilderness characteristics, watershed function, and ecological processes. The BLM should limit population growth or remove excess animals as necessary to prevent the impairment of the WSA. Traps for the removal of excess wild horses or burros must be located outside of WSAs whenever possible. Helicopters and fixed wing aircraft may be used for aerial surveys and for the gathering of wild horses and burros.”

This 18,245 acre WSA is dominated by the flat-topped Oil Spring Mountain, its associated ridges, and numerous side drainages. This remote area has elevations that range from 6,000 feet to 8,600 feet and is an undeveloped island surrounded by scattered oil and gas wells, roads, with aspen and Douglas fir stands in the higher elevations.

5.16.2. ***Environmental Consequences – Alternative A (All Gather Methods)***

Direct and Indirect Impacts

The use of helicopters in a WSA does meet the non-impairment standard in that this use is both temporary and does not create ground disturbance. This use is also specifically identified as appropriate in WSAs in BLM Manual 6330. However, based on the primary recreational use of this area and the planned timing of this proposal, low-flying helicopter activities are likely to impact the desired recreation experience of some big game hunters. The use of helicopters to gather wild horses may result in short term, temporary impacts to those seeking the outstanding opportunities for either solitude or primitive and unconfined recreation found within this WSA. This impact would only be realized if this recreational opportunity is the experience sought by those recreating in the same area and at the same as the helicopter flights. Based on the planned timing of these proposed activities, it is likely that some big game hunters will be hunting in this area during this time. Big game hunting is considered a primitive, unconfined recreational opportunity and some hunters may also be there to experience the solitude or naturalness of the setting. In order to reduce these impacts to big game hunters CPW staff would be contacted to coordinate gather operations in an effort to develop mutually compatible strategies that may reduce the intensity and localize the expanse of helicopter-related disturbances during big game hunting seasons. Also, if possible helicopter gather operations would be avoided from late-August through November for high public use areas during big game hunting seasons.

A design feature has been incorporated into this proposal that states no traps or holding facilities would be located within Oil Spring Mountain WSA. Therefore there would be no impacts from traps or holding facilities to the WSA.

Cumulative Impacts

Combined with other past, existing, and foreseeable activities in this area, this alternative should result in no cumulative impacts to Oil Spring Mountain WSA.

5.16.3. *Environmental Consequences – Alternative B (Bait/Water Trapping)*

Direct and Indirect Impacts

A design feature has been incorporated into this proposal that states no traps or holding facilities would be located within Oil Spring Mountain WSA. Therefore there would be no impacts from traps or holding facilities to the WSA.

Cumulative Impacts

Combined with other past, existing, and foreseeable activities in this area, this alternative should result in no cumulative impacts to Oil Spring Mountain WSA.

5.16.4. *Environmental Consequences – Alternative C (Phased Approach)*

Direct and Indirect Impacts

This alternative would have the same direct, short term impacts as Alternative A.

Cumulative Impacts

Combined with other past, existing, and foreseeable activities in this area, this alternative should result in no cumulative impacts to Oil Spring Mountain WSA.

5.16.5. *Environmental Consequences – Alternative D (No Action)*

Direct and Indirect Impacts

This alternative would result in no short term temporary impacts such as those described under Alternative A.

Cumulative Impacts

Combined with other past, existing, and foreseeable activities in this area, this alternative should result in no cumulative impacts to Oil Spring Mountain WSA as a result of gather operations. However, long term indirect impacts under this alternative may result in the BLM not limiting wild horse population growth in such a manner as to prevent impairment of existing wilderness characteristics found within Black Mountain WSA. This manual directs the BLM's management of WSA's "... to ensure a thriving natural ecological balance, and to prevent impairment of wilderness characteristics, watershed function, and ecological processes." If this impairment were to occur, the indirect impacts under this alternative would not meet direction in BLM Manual 6330 as referenced in the above Affected Environment (5.16.1).

5.17. Colorado Standards for Public Land Health

In January 1997, the Colorado BLM approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, special status species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. If there is the potential to impact these resources, the BLM will note whether or not the analysis area currently meets the standards and whether or not implementation of the Proposed Action would impair the standards.

5.17.1. *Standard 1 – Upland Soils*

The locations of traps and/or holding facilities are planned for pre-disturbed sites with initial reclamation and BMPs in place. As such, upland soils in and around the traps and/or holding facilities should not be negatively impacted by Alternatives A, B, or C.

5.17.2. *Standard 2 – Riparian Systems*

Wetland and riparian zones are unlikely to be impacted by helicopter drive trapping operations. If water sources which support wetland or riparian zones are chosen for water trapping operations, these operations are not likely to increase the amount of use these areas receive under natural conditions. As the trap sites are continuously monitored while actively in use there would not be an opportunity for increased or prolonged congregation within these areas from the present situation during gather operations.

5.17.3. *Standard 3 – Plant and Animal Communities*

Alternatives A, B, and C are not expected to have an influence on plants and animal communities and, as such, the project should have no influence on the status of applicable Land Health Standards. Cumulative impacts from Alternative D could have long-term impacts to plant and animal communities due to increased forage use; however specific impacts from this situation will not be analyzed further because they are outside the scope of this EA.

5.17.4. *Standard 4 – Special Status Species*

Alternatives A, B, and C are not expected to influence populations or habitats of plants associated with the Endangered Species Act or BLM sensitive species and, as such, the project should have no influence on the status of applicable Land Health Standards. Cumulative impacts from Alternative D could have long-term impacts to plant populations due to increased forage use, however specific impacts from this situation will not be analyzed further because they are outside the scope of this EA.

5.17.5. *Standard 5 – Water Quality*

The locations of traps and/or holding facilities are planned for pre-disturbed sites with initial reclamation and BMPs in place. As such, ephemeral and perennial water quality in and around the traps and/or holding facilities should not be negatively impacted by the Proposed Action.

6. SUPPORTING INFORMATION

6.1. Interdisciplinary Review

Table 14. List of Preparers

Name	Title	Area of Responsibility	Date Signed
Keith Sauter	Hydrologist	Surface and Ground Water Quality; Floodplains, Hydrology, and Water Rights; Soils Resources, Prime and Unique Farmlands	2/22/2015
Lisa Belmonte	Wildlife Biologist	Special Status Animal Species, Migratory Birds, and Aquatic and Terrestrial Wildlife	3/3/2015
Tyrell Turner	Rangeland Management Specialist	Vegetation, Livestock Grazing, Wetlands and Riparian Zones	3/9/2015
Matthew Dupire	Ecologist	Special Status Plant Species, Forestry and Woodland Products, Areas of Critical Environmental Concern	3/9/2015
Brian Yaquinto	Archaeologist	Cultural Resources, Paleontological Resources, Native American Religious Concerns	2/19/2015
Aaron Grimes	Outdoor Recreation Planner	Visual Resources, Lands with Wilderness Characteristics, Recreation, Access and Transportation, Wilderness, Scenic Byways	2/27/2015
Paul Daggett	Mining Engineer	Air Quality; Geology and Minerals	2/23/2015
Kyle Frary	Fire Management Specialist	Fire Management	3/9/2015
Stacey Burke	Realty Specialist	Realty Authorizations	2/23/2015
James R. Roberts	Supervisory Natural Resource Specialist	Hazardous or Solid Wastes	3/9/2015
Melissa J. Kindall	Range Technician	Invasive/Non-Native Species, Wild Horse Management/Project Lead	3/3/2015
Heather Sauls	Planning & Environmental Coordinator	Social and Economic Conditions, NEPA Compliance	3/15/2015

6.2. Tribes, Individuals, Organizations, or Agencies Consulted

Letters describing the proposed action and to address any tribal concerns were sent to the Eastern Shoshone Tribes (Wind River Reservation), Northern Ute Indian Tribe (Uintah & Ouray Reservation), Southern Ute Indian Tribe, Ute Mountain Ute Tribe, Pueblo of Jemez, and The Hopi Tribe on February 3, 2015.

6.3. References

Armstrong, Harley and David Wolny. 1989. *Paleontological Resources of Northwest Colorado: A Regional Analysis*. Museum of Western Colorado, Grand Junction, Colorado.

Bureau of Land Management (BLM) Manual 6310 - Conducting Wilderness Characteristics Inventory on BLM Lands. C. (2) (b) pg. 6-7 Rel. 6-129. March 15, 2012

BLM Manual 6320 - Considering wilderness characteristics in the BLM land use planning process. A. pg. 3 Rel. 6-130. March 15, 2012.

BLM Manual 6330 - Management of Wilderness Study Areas. C. 1-10. D (10) 1-36. Rel. 6-134. July 13, 2012.

BLM, White River Field Office (Tyrell Turner). "The Wild Horse Management History and Current Conditions within the West Douglas Herd Area". January 2015

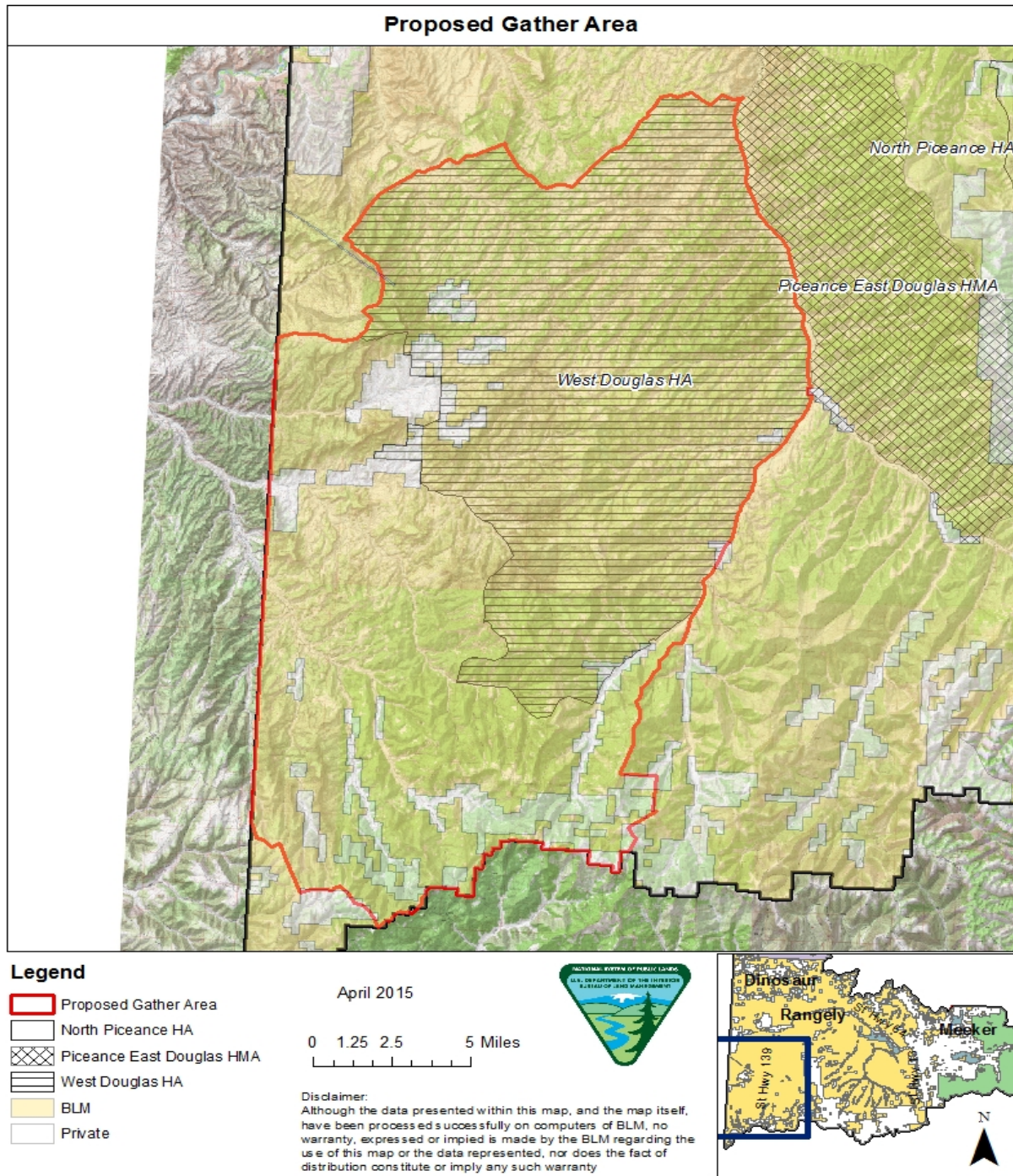
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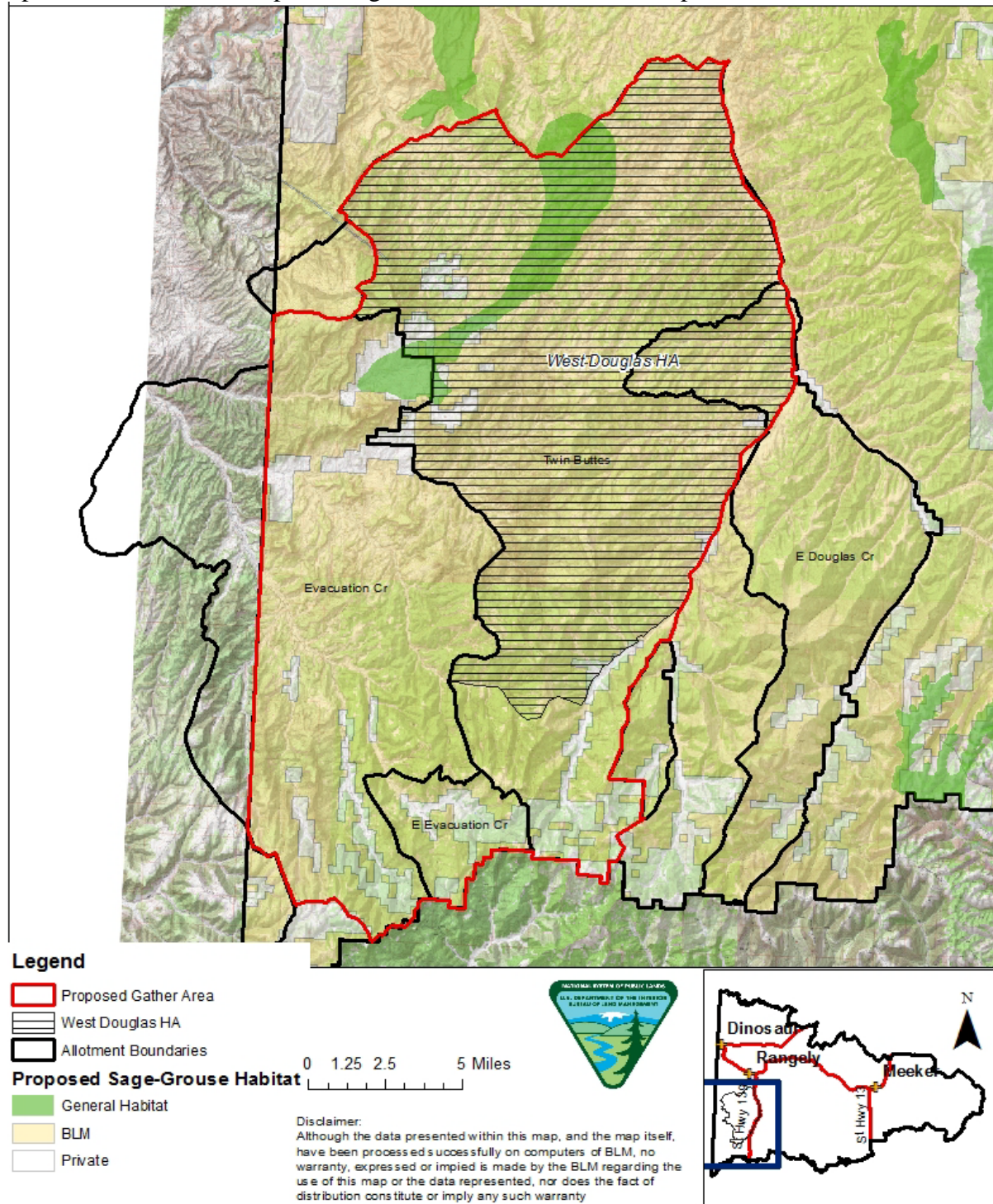
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Appendix A. Maps

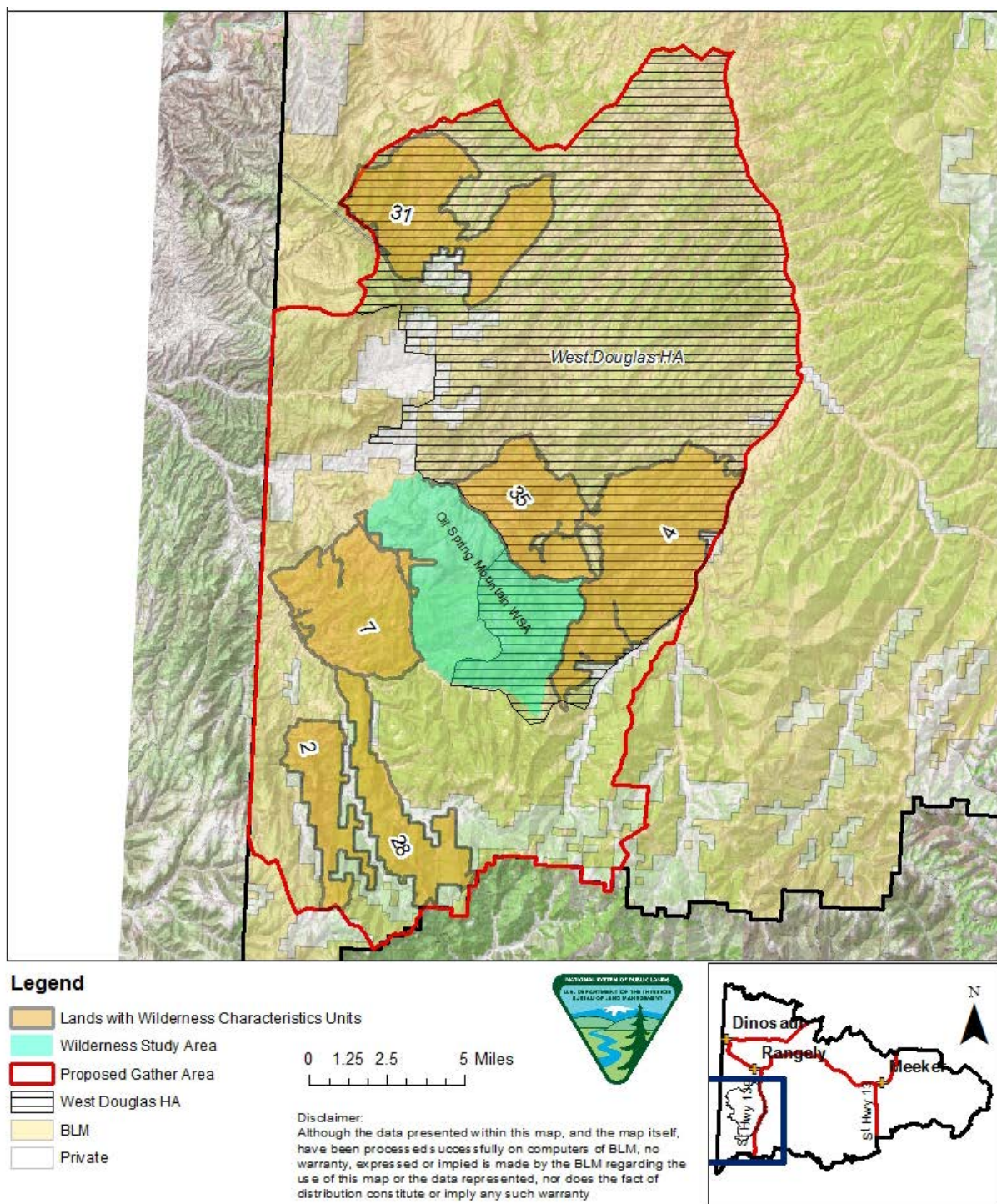
Map 1. Gather Area



Map 2. Allotments and Proposed Sage-Grouse Habitat within Proposed Gather Area



Map 3. Lands With Wilderness Characteristics Units and Wilderness Study Areas within Proposed Gather Area



APPENDIX B. STANDARD OPERATING PROCEDURES

BLM Standard Operating Procedures for Wild Horse Gathers

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

Prior to any gathering operation, the BLM will provide for a pre-capture evaluation of existing conditions in the gather area(s). The evaluation will include animal conditions, prevailing temperatures, drought conditions, soil conditions, road conditions, and a topographic map with wilderness boundaries, the location of fences, other physical barriers, and acceptable trap locations in relation to animal distribution. The evaluation will determine whether the proposed activities will necessitate the presence of a veterinarian during operations. If it is determined that a large number of animals may need to be euthanized or capture operations could be facilitated by a veterinarian, these services would be arranged before the capture would proceed. The contractor will be apprised of all conditions and will be given instructions regarding the capture and handling of animals to ensure their health and welfare is protected.

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

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

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

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

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

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

All trap and holding facilities locations must be approved by the Contracting Officer's Representative (COR) and/or the Project Inspector (PI) prior to construction. The Contractor

may also be required to change or move trap locations as determined by the COR/PI. All traps and holding facilities not located on public land must have prior written approval of the landowner.

2. The rate of movement and distance the animals travel shall not exceed limitations set by the COR/PI who will consider terrain, physical barriers, weather, condition of the animals and other factors. Under normal circumstances this travel should not exceed 10 miles and may be much less dependent on existing conditions (i.e. ground conditions, animal health, and extreme temperature [high and low]).

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

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

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

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

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

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

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

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

6. Alternate pens, within the holding facility shall be furnished by the Contractor to separate mares or jennies with small foals, sick and injured animals, estrays or other animals the COR determines need to be housed in a separate pen from the other animals. Animals shall be sorted as to age, number, size, temperament, sex, and condition when in the holding facility so as to minimize, to the extent possible, injury due to fighting and trampling. Under normal conditions, the government will require that animals be restrained for the purpose of determining an animal's age, sex, or other necessary procedures. In these instances, a portable restraining chute may be necessary and will be provided by the government. Alternate pens shall be furnished by the Contractor to hold animals if the specific gathering requires that animals be released back into the 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 COR.

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

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

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

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

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

to be released back into the capture area may need to be transported back to the original trap site. This determination will be at the discretion of the COR/PI or Field Office horse specialist.

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

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

- a. Finger gates shall not be constructed of materials such as "T" posts, sharpened willows, etc., that may be injurious to animals.
- b. All trigger and/or trip gate devices must be approved by the COR/PI prior to capture of animals.
- c. Traps shall be checked a minimum of once every 10 hours.

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

- a. A minimum of two saddle-horses shall be immediately available at the trap site to accomplish roping if necessary. Roping shall be done as determined by the COR/PI. Under no circumstances shall animals be tied down for more than one half hour.
- b. The contractor shall assure that foals shall not be left behind, and orphaned.

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

- a. Under no circumstances shall animals be tied down for more than one hour.
- b. The contractor shall assure that foals shall not be left behind, or orphaned.
- c. The rate of movement and distance the animals travel shall not exceed limitations set by the COR/PI who will consider terrain, physical barriers, weather, condition of the animals and other factors.

C. Use of Motorized Equipment

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

transportation of animals. The Contractor shall provide the COR/PI, if requested, with a current safety inspection (less than one year old) for all motorized equipment and tractor-trailers used to transport animals to final destination.

2. All motorized equipment, tractor-trailers, and stock trailers shall be in good repair, of adequate rated capacity, and operated so as to ensure that 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 at least two (2) partition gates providing at least three (3) compartments within the trailer to separate animals. Tractor-trailers less than 40 feet shall have at least one partition gate providing at least two (2) compartments within the trailer to separate the animals. Compartments in all tractor-trailers shall be of equal size plus or minus 10 percent. Each partition shall be a minimum of 6 feet high and shall have a minimum 5 foot wide swinging gate. The use of double deck tractor-trailers is unacceptable and shall not be allowed.

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

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

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

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

7. The COR/PI shall consider the condition and size of the animals, weather conditions, distance to be transported, or other factors when planning for the movement of captured

animals. The COR/PI shall provide for any brand and/or inspection services required for the captured animals.

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

D. Safety and Communications

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

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

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

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

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

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

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

E. Site Clearances

No personnel working at gather sites may excavate, remove, damage, or otherwise alter or deface or attempt to excavate, remove, damage or otherwise alter or deface any archaeological resource located on public lands or Indian lands.

Prior to setting up a trap or temporary holding facility, BLM will conduct all necessary clearances (archaeological, T&E, etc. as necessary). All proposed site(s) must be inspected by a

government archaeologist. Once archaeological clearance has been obtained, the trap or temporary holding facility may be set up. Said clearance shall be arranged for by the COR, PI, or other BLM employees.

F. Public Participation

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

H. Responsibility and Lines of Communication

Contracting Officer's Representative/Project Inspector

Jerome Fox, Northwest Colorado District, Wild Horse Specialist

Contracting Officer's Representative/Project Inspector

Tyrell Turner, White River Field Office, Rangeland Management Specialist

Project Inspector

Melissa Kindall, White River Field Office, Range Technician

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 Field Manager, Kent Walter and/or Assistant Field Manager, Ester McCullough will take an active role to ensure the appropriate lines of communication are established between the field, White River Field Office, Northwest Colorado District Office, Colorado State Office, National Program Office, and BLM Holding Facility offices at Canon City. 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 Renewable Resources and Northwest Colorado District Office Public Affairs. These individuals will be the primary contact and will coordinate with the COR/PI on any inquiries.

The COR/PIs will coordinate with the contractor and 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.

APPENDIX C. WILD HORSE MANAGEMENT HISTORY AND CURRENT CONDITIONS WITHIN THE WEST DOUGLAS HERD AREA

Wild Horse Management History and Current Conditions within the West Douglas Herd Area

Bureau of Land Management, White River Field Office



Prepared by Tyrell Turner, Rangeland Management Specialist
January 2015 (Updated April 2015)

Documentation of Changes From the Original January 2015 Version

Section	Revision	Date
4.1 (Table 3)	Corrected shading in table which incorrectly identified aerial inventories occurring in 2011 and 2013; the inventories actually occurred during 2010 and 2012.	4/3/2015

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1.0 Introduction

The Bureau of Land Management (BLM) is responsible for the protection, management and control of wild free-roaming horses and burros (WH&B). Under the Wild Free-Roaming Horses and Burros Act (WFRHBA), WH&B are considered an integral part of the national system of public lands in the areas they were found in 1971. The BLM's goal is to manage healthy WH&B populations on healthy rangelands. To achieve this goal, the BLM also prescribes management to assure WH&B populations are in balance with other uses of the public lands and that a thriving natural ecological balance (TNEB) is achieved and maintained.

The purpose of this document is to review management actions prescribed by the White River Field Office through the land use planning process to maintain TNEB as well as analyze the current conditions within the West Douglas Herd Area (WDHA) to determine whether TNEB is being maintained or whether excess wild horses are present within the WDHA.

2.0 Federal Law and BLM Policy for Management of Wild Horses

It is the policy of the BLM, in accordance with the Wild Free-Roaming Horses and Burros Act (Public law 92-195, as amended), its implementing regulations at 43 CFR Part 4700, and other laws governing the administration of public land to protect and manage wild horses and burros on public lands in areas where they were found in 1971 at passage of the WFRHBA. The policy described below is an abbreviated summary of the BLM's current management policy for wild horses. For a full description of the BLM's policy for management of wild horses and burros, refer to BLM Manual 4700 (pages 5-6).

- A. Protect wild horses and burros from unauthorized capture, branding, harassment or death.
- B. Consider wild horses and burros in the areas where they were found in 1971 (Herd Areas or HAs) as an integral part of the national system of public lands. Maintain a permanent record of the HAs that existed in 1971.
- C. Consider wild horses and burros comparably with other resource values for each HA in the formulation of land use plans (LUPs). Herd Management Areas shall be established in those HAs within which wild horses and burros can be managed for the long term. An HMA may be considered for designation as a wild horse or burro range to be managed principally, but not necessarily exclusively, for wild horses and burros when significant public value is present.
- D. Manage wild horses and burros in a manner designed to achieve and maintain a TNEB and multiple-use relationships on the public lands. Management activities should be carried out at the minimum feasible level necessary to attain the objectives identified in approved LUPs and Herd Management Area Plans (HMAPs) and should also ensure the animals' free-roaming behavior is maintained.

2.1 Federal Laws Related to Management of Wild Horses

During the 1950s, documented abuses of wild horses led concerned individuals and national humane organizations to push for federal protections of wild horses. Subsequently, Congress passed the Wild Horse Annie Act in 1959 prohibiting the use of aircraft or motor vehicles to capture or kill wild horses or burros on public lands and polluting watering holes on public lands to trap, kill, wound, or maim wild horses or burros. Despite the 1959 act, wild horse exploitation continued. To protect wild horses and burros, Congress passed additional legislation in 1971 titled the Wild Free Roaming Horses and Burros Act of 1971 to require the protection and management of wild free-roaming horses and burros on public lands. The 1971 act was amended by the Federal Land Policy and Management Act of 1976 and the Public Rangelands Improvement Act of 1978.

2.1.1 Wild Horse Annie Act of 1959 (Public Law 86-234)

Establishes criminal penalties for using an aircraft or motor vehicle to hunt wild horses or burros on public lands for capturing or killing and for polluting watering holes on public lands to trap, kill, wound, or maim wild horse or burros.

2.1.2 Wild Free-Roaming Horses and Burros Act of 1971 Public Law 92-195)

Directs the Secretaries of the Interior and Agriculture to protect and manage wild horses and burros as components of the public lands to achieve and maintain a thriving natural ecological balance. Once information becomes available to the Secretary that an overpopulation of WH&B exists on a given area of the public lands, the Secretary “may order old, sick, or lame animals to be destroyed in the most humane manner possible, and he may cause additional excess wild free-roaming horses and burros to be captured and removed for private maintenance under humane conditions and care.” (P.L 92-195 Sec. 3 (b)). The act also establishes criminal penalties for a number of offenses involving wild horses and burros.

2.1.3 Federal Land Policy and Management Act of 1976 (Public Law 94-579)

Directs the Secretary of the Interior to prepare and maintain an inventory of public lands and their resources and other values and with public involvement, to develop, maintain, and revise land use plans (LUP), which provide for the use of public lands. The Federal Land Policy and Management Act (FLPMA) also directs the Secretary to manage the public lands under principles of multiple use and sustained yield. This act also authorizes the Secretaries of the Interior and Agriculture to contract for the use of helicopters and for using motor vehicles to transport captured animals after a public hearing and in accordance with humane procedures.

2.1.4 Public Rangelands Improvement Act of 1978 (Public Law 95-514)

Directs the Secretaries of the Interior and Agriculture to maintain a current inventory of wild horses and burros on given areas of public lands to determine whether and where overpopulation exists and whether to remove excess animals, the appropriate management levels, and whether appropriate management levels could be achieved by removal or destruction of excess animals or through other options. Section 3 of the WFRHBA was amended to direct the Secretary that upon finding that an overpopulation exists and that action is necessary to remove excess wild horses and burros, “he shall immediately remove excess animal from the range” (P.L. 92-195 as

amended Sec. 3 (b) (2)) to restore a thriving natural ecological balance. Authorizes the Secretaries, upon application, to grant title to excess wild horses and burros which an individual provided humane conditions, treatment, and care for a period of 1 year. This act also provides that a wild horse or burro is no longer a wild horse and burro for purposes of the 1971 act once title has passed to an individual or in a number of other circumstances. The Public Rangelands Improvement Act (PRIA) also states that no wild horse and burro or its remains may be sold or transferred for consideration for processing into a commercial product.

2.2 BLM Policy Related to Management of Wild Horses

The BLM interprets laws through promulgation of regulations and provides guidance through policy contained in manuals, handbooks, and instruction memoranda. Regulations implementing laws relating to the protection, management, and control of wild horses and burros under the administration of the BLM are 43 C.F.R. 4700, subpart 4710 directs management considerations for implementation of those laws. Manuals contain the BLM policy and program direction. It provides policy, procedures, and instructions to manage programs. Handbooks are the source of detailed instructions for performing specialized procedures to carry out policy and direction described in the Manual Section. Handbooks provide specific detailed instructions, techniques, procedures, practices, and processes. Handbooks do not contain broad objectives, policies, assignment of responsibilities, or delegations needed primarily by line officials and principal staff officials to administer programs. Handbooks are considered part of the Manual and have the same force of authority as the Manual Section. Instruction Memoranda are temporary directives that supplement the Bureau Manual Sections; however, there are no current IMs relevant to making determinations of excess wild horse or burros.

2.2.1 BLM Manual 4700 and BLM Handbook 4700-1

The current versions of the BLM manual 4700 and BLM Handbook H-4700-1 released July 7, 2010 provide guidance for all aspects of wild horse and burro protection and management as well as define terms commonly used when describing wild horse and burro protection and management activities.

Two important terms describing wild horse habitat are Herd Area (HA) and Herd Management Area (HMA). Herd Area is defined in 43 CFR 4700.0-5 (d) and further explained in H4700-1 as the “Geographic areas of the public lands identified as habitat used by WH&B at the time the WFRHBA was enacted (12/15/1971).” Direction for establishment of an HMA is provided in 43 CFR 4710.3-1, Herd Management Area is defined in H4700-1 as “May be established in those HAs within which WH&B can be managed for the long term. HMAs are designated through the LUP process for the maintenance of WH&B herds. In delineating each HMA, the authorized officer shall consider the appropriate management level (AML) for the herd, habitat requirements of the animals, the relationships with other uses of the public and adjacent private lands, and the constraints contained in 43 CFR 4710.4.” (H-4700-1 pg 57)

Guidance contained in the BLM Handbook 4700-1 states: “Where appropriate, the LUP may include decisions not to manage WH&B in all or a part of an HA.” An example given in the handbook is “where essential habitat components (forage, water, cover and space) are unavailable or insufficient to sustain healthy WH&B and healthy rangelands over the long term.” (H-4700-1 2.1.4)

Where LUPs include decisions to designate HMAs within all or a portion of a HA, wild horses must be managed to achieve and maintain a thriving natural ecological balance (TNEB) and multiple use relationships on the public lands. TNEB means “WH&B are managed in a manner that assures significant progress is made toward achieving the Land Health Standards for upland vegetation and riparian plant communities, watershed function, and habitat quality for animal populations...” Before issuing a decision to gather and remove animals, the authorized officer will analyze multiple factors to determine whether excess animals are present and removal is necessary to restore or maintain the range in a TNEB.

The Act defines excess animals as: “wild free-roaming horses or burros (1) which have been removed from an area by the Secretary pursuant to applicable law or, (2) which must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple –use relationship in that area.” The term excess animals is further defined in BLM Manual Section 4720.1 as: “those animals which must be removed from an area to preserve and maintain a thriving natural ecological balance (TNEB) and multiple-use relationship in that area. This definition includes wild horses or burros located outside the HMA in areas not designated for their long-term maintenance.”

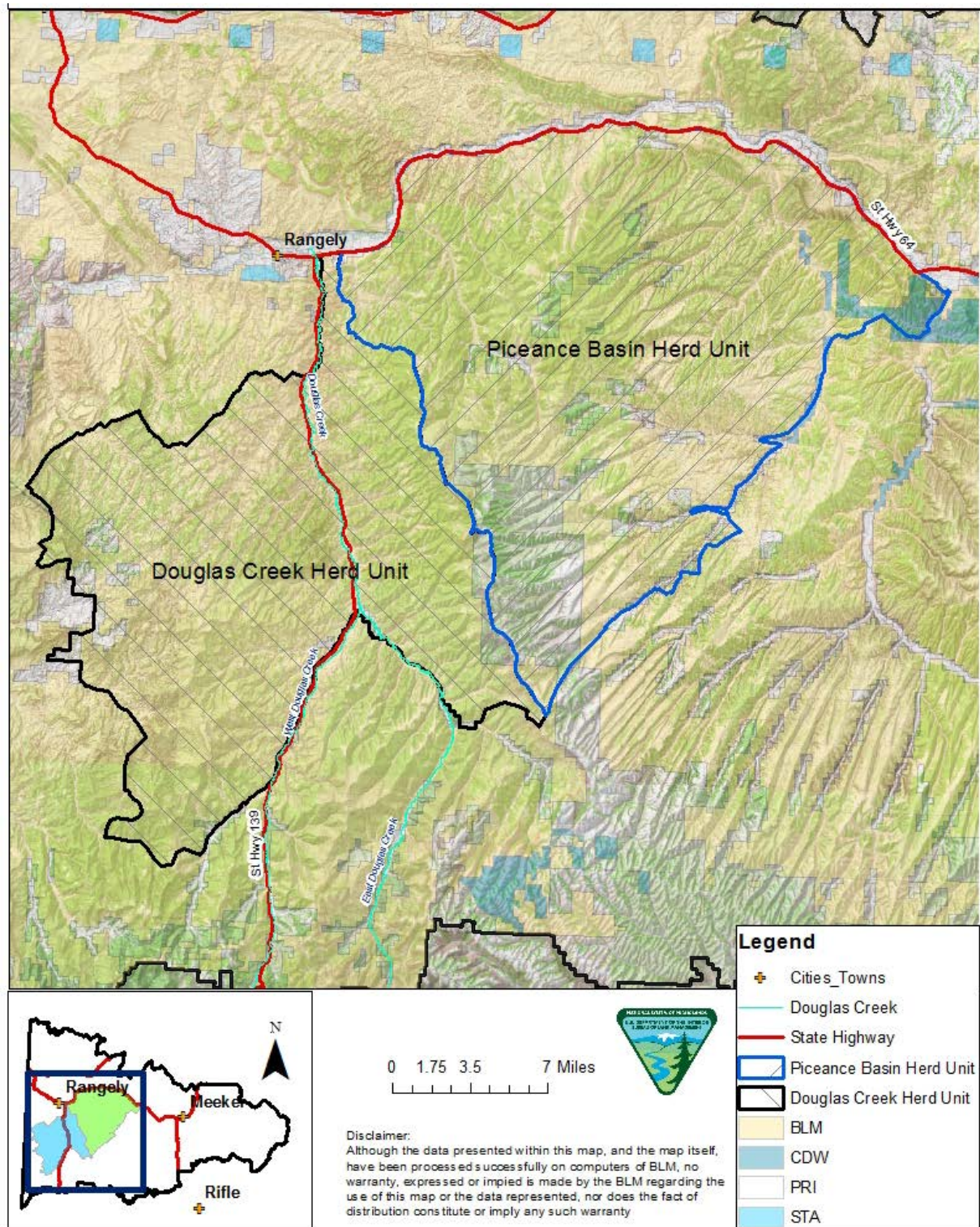
3.0 WRFO Land Use Planning Decisions for Wild Horses

This summary presents an overview of the analysis and subsequent land use planning decisions that the BLM White River Field Office (WRFO) have made regarding the West Douglas Herd Area (WDHA). Since the passage of the Wild Free Roaming Horses and Burros Act (The Act) of 1971, this area has been analyzed multiple times for the feasibility of designating this area as a Herd Management Area for long term maintenance of wild horses. The WDHA has not been designated as an area for long term maintenance of wild horses.

Since passage of The Act, the WRFO has completed six land use planning documents which direct management of the multiple uses including wild horses within the resource area. The first plan called the White River Management Framework Plan was completed in 1975, during preparation of this plan two herd units were identified as the habitat used by wild horses in the resource area in 1971. The WRFO identified two herd units the Piceance Basin Herd Unit and the Douglas Creek Herd Unit, which shared a common boundary along the Cathedral Bluffs (Map 1).

Through analysis and decisions of the various land use planning documents, the requirement to manage wild horses within areas they were found in 1971 (43CFR 4710.4) and evolution of naming conventions for the areas where wild horses were found at passage of The Act (See Section 3.6), the WRFO has designated one HMA for long term maintenance of wild horses and given titles to two HAs for those areas within the original herd units which have not been designated for long term maintenance of wild horses. The Piceance-East Douglas HMA includes the portion of the Douglas Creek Herd Unit east of Douglas Creek and the southern and eastern portion of the Piceance Basin Herd Unit. The North Piceance HA (NPHA) includes the portion of the Piceance Basin Herd Unit not designated for long-term maintenance of wild horses, and the West Douglas HA includes the portion of the Douglas Creek Herd Unit not designated for long term maintenance of wild horses (Map 6).

Map 1. Herd Units within the White River Resource Area

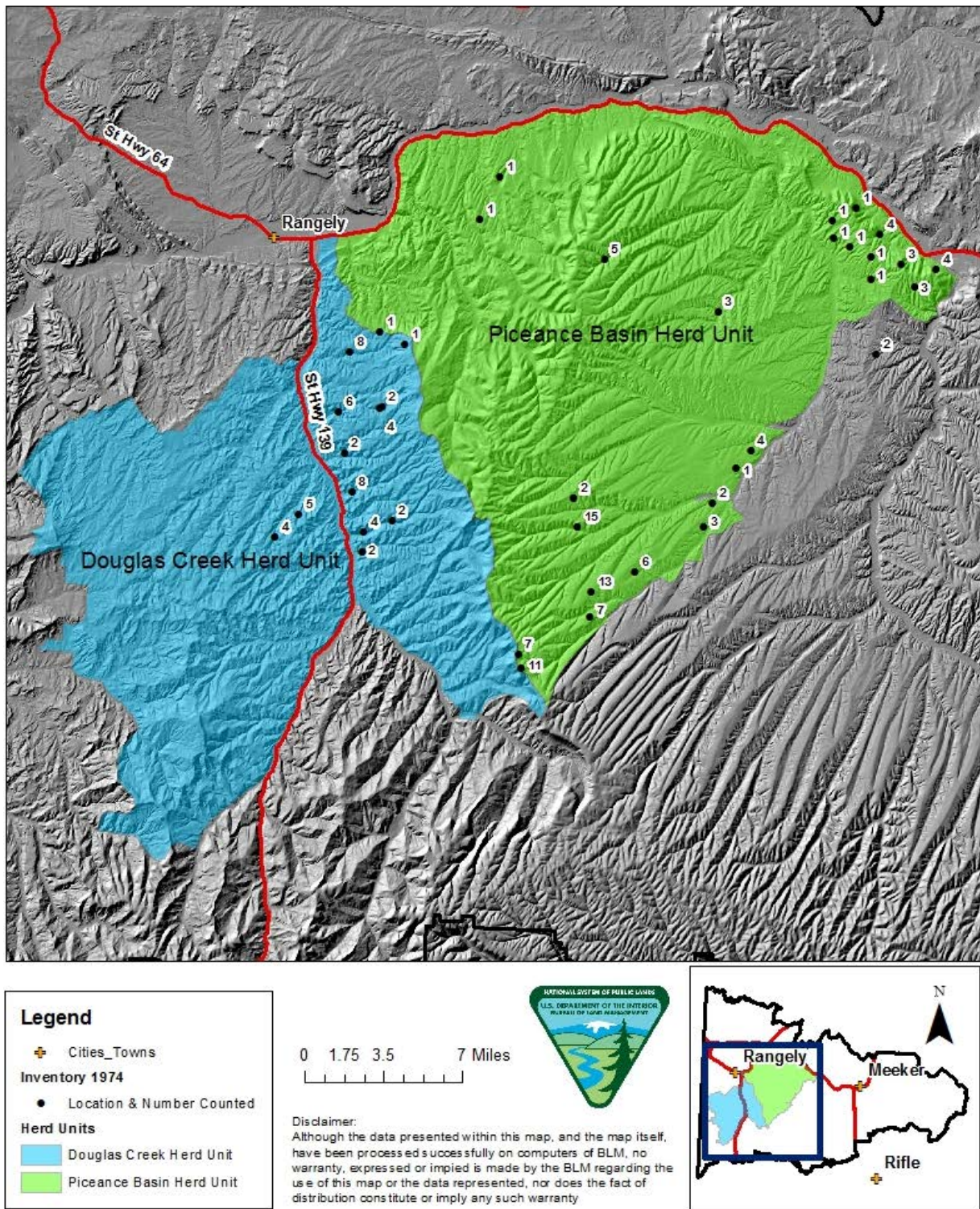


3.1 Identification of the Douglas Creek and Piceance Basin Herd Units (1974)

The White River Resource Area (WRRRA) completed its first land use plan in 1975. In the Wild Free Roaming Horses and Burros Act (The Act) of 1971 each area that horses and burros were found in 1971 received the designation as Herd Units. Each HU was to be analyzed for the components of habitat required for the long term suitability for self-sustaining wild horse herds; the components analyzed are: water, feed, cover, and space. Within the WRRRA two areas were analyzed: Douglas Creek Herd Unit and Piceance Basin Herd Unit. One Herd Management Area was designated from a portion of both herd units that met all requirements for self-sustaining herds. The portions of each unit that remained in HA status were renamed West Douglas HA and North Piceance HA.

The BLM WRFO completed its first inventory of wild horses within the WRRRA from February 26 – March 6, 1974, and a second inventory was completed August 12-16, 1974. Information regarding the number and distribution of wild horses collected during these inventories was used to identify the habitat used by wild horses at passage of The Act and establish the two herd units. The Piceance Basin Herd Unit included 247,615 acres of public, private and state lands. The Douglas Creek Herd Unit included 188,142 acres of public and private lands, although no wild horses were observed in the southern and western portion of this herd unit during the aerial inventory, the boundary was delineated based on barriers existing in 1971 that would restrict wild horse movement throughout this area. The two herd units shared a common boundary along the Cathedral Bluffs, which was also the boundary of the planning units. Map 2 shows the location and number of wild horses counted during the original 1974 inventory as well as the two herd units identified through this effort.

Map 2. Original Wild Horse Inventory and Wild Horse Herd Units within the White River Resource Area, 1974



3.2 1975 Management Framework Plan

The first land use plan completed in 1975 was developed in two phases which began in early 1974. This plan established objectives and constraints for each resource and support activity throughout the WRRRA. The first phase was called the Unit Resource Analysis (URA) which included internal and external scoping on the values, resources, and uses present on the public land, as well as, opportunities for developing and/or protecting these values and uses. The URA was completed for three planning units within the WRRRA which were Rangely, Piceance Basin, and Meeker.

Following the completion of the URA portion of the land use plan, management alternatives were developed in the Management Framework Plan (MFP). The first step of the MFP was a single resource or use approach to developing management alternatives which maximized and/or optimized that resource regardless of conflicts with other resources or uses. The single resource objectives developed for wild horses in 1975 were:

- WH-A- Establishment of a wild horse range consisting of parts of the Piceance Basin Herd Unit and parts of the Douglas Creek Herd Unit, consisting of 107,000 acres and capable of supporting 430 wild horses.
- WH-B- Establish a wild horse range of 462,812 acres which would include all of the Douglas Creek herd unit (Rangely Planning Unit) and all of the Piceance Basin herd unit.
- WH-C- Manage wild horses on all wild horse ranges in combination with livestock and other uses. (WRMFP, Vol. II, Wild Horses, 1975)

The next step in the process was to identify conflicts with other resources or uses in a Multiple-Use Analysis and develop a multiple use recommendation (or alternative). These multiple-use recommendations were presented to external publics and internally within the BLM before multiple use decisions were made. Multiple-Use Decisions were completed by the Craig District Manager following public review and comment. The Colorado State Director approved the Multiple Use Decisions on June 30, 1975. Table 1 includes multiple use recommendations and rationale directly from the 1975 MFP.

Table 1. Summary of 1975 Multiple Use Decisions

Multiple Use Recommendation	Rationale
That at the present time, the wild horses east of Douglas Creek be left where they presently are located	This is their natural habitat, and the degree of disturbance by other activities needs further study
Update forage surveys in the wild horse area east of Douglas Creek	These studies are needed to determine the carrying capacity for wild horses and livestock
After completion of the forage surveys, and determination is made on the maximum and minimum number of horse to maintain, forage will be allocated for these horses and for livestock	The Wild Horse and Burro Act states that forage will be allocated for wild horses, and by law and BLM policy, forage will be allocated for livestock

Multiple Use Recommendation	Rationale
That the horses west of Douglas Creek be removed from the entire resource area	The increase in oil and gas activities in this area warrants removal of the horses. Without forage surveys completed east of Douglas Creek to determine the carrying capacity, the area should not be burdened. Gas development activity is causing horses to disperse into areas where they did not exist prior to 1971. The Wild Horse and Burro Act states that horse range or habitat will not expand beyond the area occupied when the law was passed.
Construct a fence along the East Douglas Creek and Main Douglas Creek road	This fence would keep the horses off the highway and out of the active oil and gas field
Do not construct any new fences in the wild horse area east of Douglas Creek until studies and a joint management plan for wild horses, livestock and wildlife has been completed and approved and the need for these fences identified	Sufficient livestock boundary fences exist and additional fences would hinder wild horse management. Fence construction should be based upon need
Do not construct any new roads in area 4759 except as needed for mineral exploration and development	Additional roads would reduce the naturalness of this area and the wild horse habitat
Allow oil and gas exploration and development, oil shale development and saline minerals development with sufficient stipulations to protect the wild horse habitat	This would help meet the energy needs of the nation and aid in becoming energy self-sufficient by 1980. It is not presently known the degree of impact that the minerals program has on wild horses in this area.
That studies be initiated to determine the impacts of the existing fences on wild horses	These studies are needed to formulate an effective management plan that would improve the habitat for both livestock and wild horses
Initiate studies to determine feasibility of consolidating grazing allotments, relocation of fences and removal of some of the existing fences	These studies are needed to aid in determining impacts and to formulate an effective management plan for the area
That after forage surveys and studies are completed, a management plan for the horses and wildlife and cattle be completed. Livestock and horse numbers will be determined from the studies and management plan.	The management plan for wild horses should be correlated with movement of livestock. The management plan is needed to properly manage the horses and to comply with the Wild Horse and Burro Act.
That vegetative manipulation and other land treatment practices be allowed on areas not within the intensive mineral activity areas and not in conflict with other identified resource values	This would ass forage for horses which has been lost to mineral activities
Do not acquire private lands for wild horse management	The Wild Horse and Burro act provides for management on private lands. The cost of these lands would outweigh the benefits received
No vegetative manipulation will be allowed between Douglas Creek and Cathedral Bluffs, known as the Philadelphia Creek Area	This area should remain in its present state at the present time. Vegetative manipulation should not be initiated until a forage survey has been completed to determine if additional forage is needed in this locale
As energy development intensifies in Piceance Basin and forage is reduced, all present herbivore animals should be reduced proportionately	At the present time, the horses are compatible with the minerals activities, and to move them is not warranted. The public expressed the desire that livestock use be reduced proportionate to reduction in horse use, if any reduction is imposed
Continue studies to determine migration, feeding habits, sex, age ratio, and production	These studies are needed to effectively manage the horses and to formulate a management plan
Continue surveillance for unlawful human acts	This is BLM policy and is necessary to protect the horses as per the Wild Horse and Burro Act

Multiple Use Recommendation	Rationale
Prior to formulation and execution of a management plan, all gates in the vicinity of where horses exist will be left open at the end of the livestock grazing season	This would allow for more wild horse movement during the winter months and is necessary for better habitat management by reducing concentration of use
That all ORV use not be allowed anywhere during the winter and spring months and vehicles be restricted to the existing roads and trails all year, with the exception to allow that ORV use necessary for oil and gas and mineral exploration and development	This would avoid disturbance of wild horses during critical winter and spring months when forage conditions of horses are very important. It would allow for oil and gas and mineral exploration and development to help meet the self-sufficiency needs of the nation. Expected ORV use will increase dramatically as industrial development occurs
That no use by livestock, wildlife, or horses be discontinued or reduced to increase forage available for wild horses until forage surveys are conducted, forage allocated for horses and the need for an adjustment in grazing use is identified	The need for adjustment in grazing use has not been identified for the present horse numbers. Forage data is insufficient at the present time to determine any grazing use adjustments that may be needed
That big game hunting be considered on hunting unit basis, and to reject the specified hunting recommendation WH-B.5	Proper harvest of wildlife must be by hunting units already established. The Division of Wildlife controls the type of hunting allowed
Construct only those corrals and traps as defined in the management plan or need is identified	These traps and corrals will be required for management of the horse herd. Also, see analysis and recommendation for RC-1
Reject recommendation WH-B.15 to construct a permanent field camp in the wild horse range	This camp is not needed to manage wild horses. Protection of these facilities in remote areas would be very difficult. It would distract from the naturalness of the area
Do not acquire private lands for wild horse management only. Initiate land acquisition studies in the vicinity of the C-a oil shale prototype lease tract for mineral development and wild horse use. This study should be done in conjunction with the wild horse management plan	These lands are located in a highly mineralized area. Industry has indicated the desire to acquire some of these lands for mineral development (see M-7 analysis). Increasing minerals activities could negate the horse use and land acquisition, but wild horses could use these lands until such activities occur. These studies are needed to determine the need for federal ownership of these lands
Disallow any land treatment practices or minerals surface occupancy on the ecologically unique area	To protect pinyon-juniper and ponderosa pine relic areas. (Refer to F-3.8, F-3.9, and R-14.6)
Management and removal of excess wild horses included in the management plan will be consistent with the present regulations and recommendations of the National Wild Horse Advisory Board. Recommendations will be obtained from wild horse groups for removal and disposal. Recommend that the removal will be every second year by experienced and qualified people by means of water traps and corrals	This will comply with the law. It will provide for control, orderly management, and sustained long term use
Establish an observation area only after the management plan has been completed and the need identified	The need for and location of an observation area cannot be determined until studies and management plan have been completed

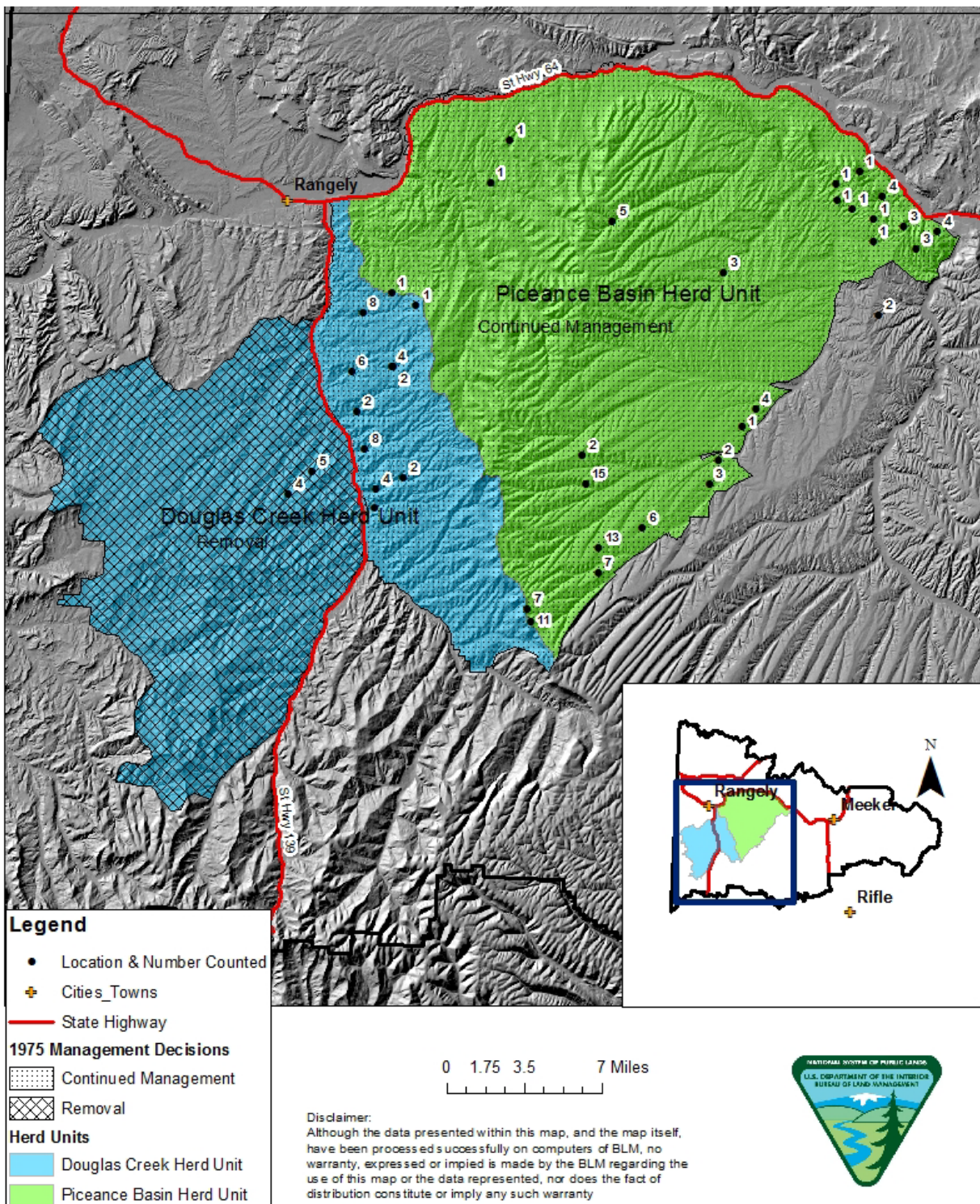
Along with the decisions and reasons of the MFP, the Unit Resource Analysis (Current Situation) also provided background information for the decisions.

- URA- Step III Page WH-4 -Identified one "herd unit" in the Rangely area, this was the Douglas Herd Unit containing 187,970 acres.
- URA- Step III Page WH-4 -Identified that there was likely interchange between the Piceance Herd Unit and the east side of Douglas Creek.
- URA- Step III Page WH-10 -Identified conflicts between wild horses and oil and gas development. "Currently, the greatest activity concerning oil and gas production in the Craig District is taking place within the Rangely Planning Unit."
- URA- Step III Page WH-13 -Identified Utilization/distribution problems resulting from energy development and human population increases projected for the future. "There are three actions that one can expect: The horses will migrate into other areas of the range that are not as accessible to the human population. The areas they will migrate into will probably be less desirable than the areas presently occupied. These areas would have less forage and could eventually be overused. The second action that may take place is that horses will migrate into areas already used by horses. This would result in overuse of the range and possibly increased conflict between horses. The third action is that the horses will remain within the disturbed area. This would result in horse behavior that would resemble the behavior of black bears in Yellowstone National Park."

The final decision in this MFP regarding wild horse management was a collection of the three objectives recommended in step 1 of the MFP. The decision was made to "manage wild horses with wildlife and livestock. The wild horses will be managed on their present range with the exception of that portion of the horse range lying west of Douglas Creek." (WRMFP, Vol. II, Wild Horses, 1975). The decision was also made to update 244,000 acres of forage survey to determine carrying capacity for numbers of wild horses, livestock and wildlife that can be supported in this area.

Map 3 shows the Herd Units identified during the URA stage of the planning process, as well as the areas selected for continued management of wild horses, forage analysis update, and the area west of Douglas Creek selected for removal of all wild horses. The stippled area within the Piceance Basin Herd Unit and the portion of the Douglas Creek Herd Unit east of Douglas creek is the area chosen to continue to manage wild horses and update forage surveys, the cross hatched area within the portion of the Douglas Creek Herd Unit west of Douglas Creek is the area that was chosen for removal of wild horses.

Map 3. Areas Identified for Continued Management or Removal per the 1975 MFP



3.3 1980 Management Framework Plan Decisions

In 1978 through 1980, another planning effort was undertaken to update the 1975 MFP. This update was driven by the court ordered environmental impact statements for the livestock grazing program. This update included a forage allocation for livestock, wild horses, and big game wildlife.

As in the 1975 MFP, the BLM conducted internal and external scoping meetings in development of the Unit Resource Analysis (present situation and opportunities for enhancement). Again, the URA identified two wild horse herd units, the Douglas Creek Herd Unit and the Piceance Basin Herd Unit.

In the 1980 MFP, two objectives (alternatives) were advanced by the wild horse specialist to enhance or optimize opportunities for management of a viable wild horse population (WRMFP, Wild Horse, 1980):

- Objective WH-1: Maintain 462,812 acres of wild horse habitat, capable of supporting a minimum of 200 wild horses and a maximum of 450 wild horses, within the 1971 wild horse range boundaries which include the Piceance Basin wild horse Herd Unit and the Douglas Creek Herd Unit.
- Objective WH-2: Maintain 107,000 acres of wild horse habitat capable of supporting 100 to 250 wild horses. This area will consist of Tommy's Draw, Philadelphia Creek, and Hogan Draw allotments in the Rangely Planning Unit (east of Douglas Creek) and part of the Boxelder and Square S allotments in the Piceance Basin Planning Unit.

In the next step, a multiple use conflict analysis was conducted for each Objective and a Multiple-Use Recommendation advanced by the Area Manager in February, 1979. Multiple-Use Decisions were completed by the Craig District Manager following public review and comment. The Colorado State Director approved the Multiple Use Decisions April 1981. Table 2 includes multiple use recommendations and rationale directly from the 1980 MFP.

Table 2 Summary of 1980 Multiple Use Decisions

Multiple Use Recommendation	Rationale
All horses west of Douglas Creek be removed.	The increase in oil and gas activities in this area warrants removal of the horses. Gas development activity is causing horses to disperse into areas where they did not exist prior to 1971. The Wild Horse and Burro Act states that horse range or habitat will not expand beyond the area occupied when the law was passed
Reduce the horse herd to 30 head in the Cathedral Bluff Allotment (Hogan Draw, Philadelphia Draw and Tommy's Draw Area) and maintain that level	This area is their natural habitat; however, the herd has increased substantially since passage of the Act in 1971. Reducing the herd to approximately 30 head will bring it down to approximately what it was in 1971. There is presently substantial conflict between horse and livestock
Reduce the horse numbers in the C pasture of the Square S Allotment to 25 head and maintain at that level	Same as #2

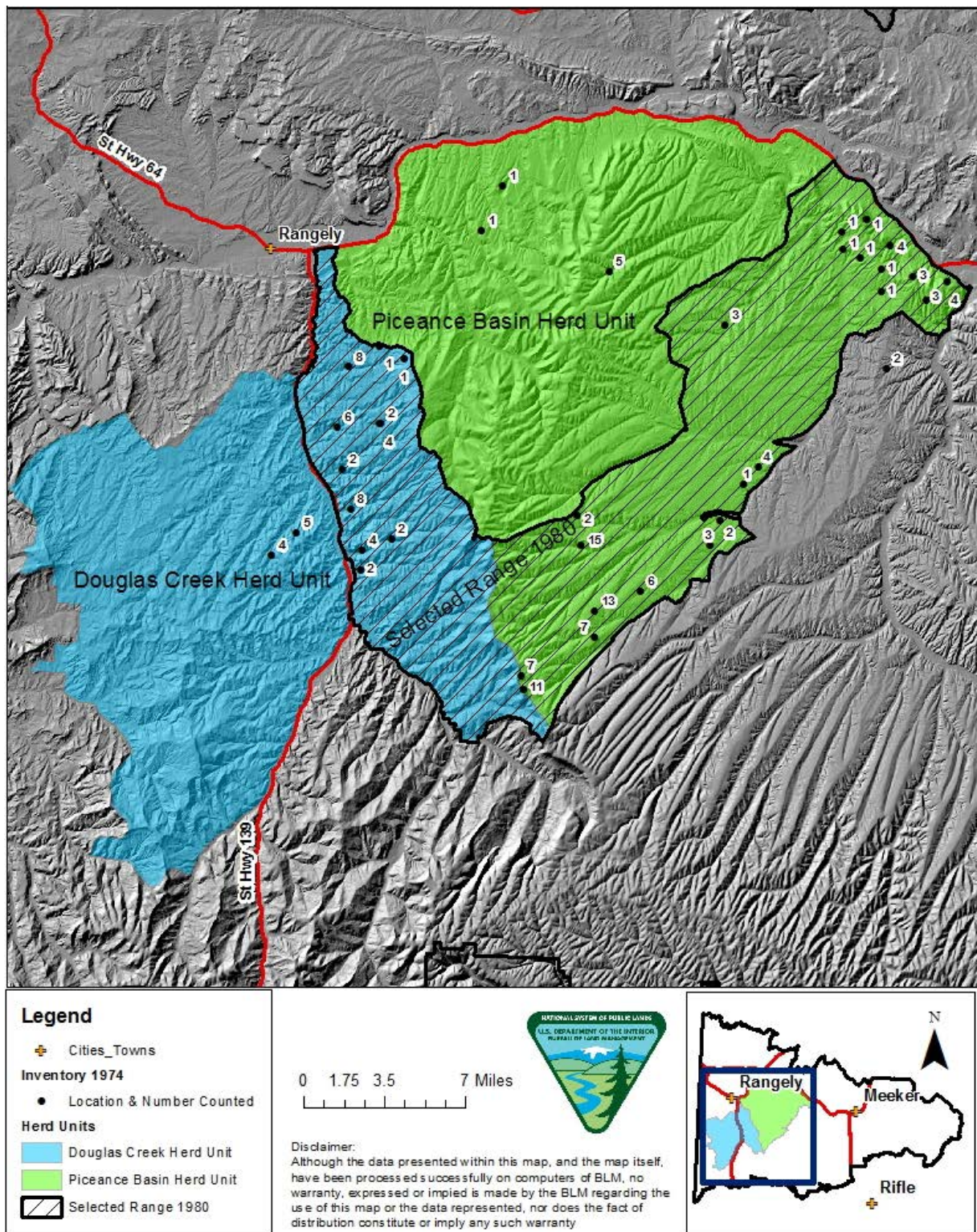
Reduce the horse numbers in the Box Elder pasture of Yellow Cr. Allotment to 25 head and in the Barcus Pinto Gulch area to 15 and maintain at that level	Same as #2
Remove all horses from the rest of the Square S Allotment as well as from the following allotments: Yellow Creek, Spring Creek, Greasewood, Hammond Draw, Upper Fletcher, Lower Fletcher, Boise Creek, Little Spring Creek, and Rocky Ridge	Wild horses in these areas are in direct competition with wildlife and livestock. Also refer to #1
Construct a fence along the East Douglas Creek and Main Douglas Creek road (approximately 12 miles)	This fence would keep the horses off the highway and out of the active oil and gas field
Construct approximately 3-1/2 miles of boundary fence on the Big Ridge between Spring Creek and Cathedral Bluffs Allotments	This will prevent drift from Cathedral Bluffs into Spring Creek Allotment
Complete the boundary fence around Yellow Creek Allotment	Prevent horses from drifting into the adjoining allotments which are being recommended for complete removal
Accept Step II Multiple Use Recommendation RM-14 on fencing in the Cathedral Bluffs and Spring Creek Allotments	This will insure free movement of horses
Reserve 1400 AUMs of forage for between 95 and 120 head of wild horses	This is the amount of forage necessary to sustain approximately 120 head of horses which will be the maximum number allowed in the horse range
Complete a management Plan for wild horses by the end of FY81	Management plan is needed to properly manage the horses and comply with the Wild Horse and Burro Act
Vegetative manipulation will be conducted in accordance with Step II multiple use recommendation RM-1	Same as RM-1.14
Update forage surveys in the Cathedral Bluffs and Yellow Creek Allotments in FY81	These surveys are needed to determine carrying capacities for wild horse, wildlife and livestock
Accept Step II multiple use recommendation RM-1.4 on water developments	Same as RM-1.4
Do not acquire private land for wild horse management	The wild horse and burro act provides for management on private lands. The cost of these lands would outweigh the benefits received
Construct a small holding corral centrally located so it can be utilized for both the Douglas Creek and Piceance areas	Horses must be held for several days for brand inspections and claiming procedures
That all ORV use not be allowed anywhere during the winter and spring months and vehicles be restricted to the existing roads and trails all year, with the exception to allow that ORV use necessary for oil and gas and mineral exploration and development	This would avoid disturbance of wild horses during critical winter and spring months when forage conditions of horses are very important. It would allow for oil and gas and mineral exploration and development to help meet the self-sufficiency needs of the nation. Expected ORV use will increase dramatically as industry development occurs
Accept Step II multiple use recommendation F-1.2, F-2.2, and RM-1.14	Same as F-1.2, F-2.2 and RM1.14
Establish an observation area only after the management plan has been completed and the need identified	The need for and location of an observation area cannot be determined until studies and management plan have been completed
Construct 3 water traps in the south ½ of the Rangely Planning Unit, west of State Highway #139	This area has a limited supply of water which will make water trapping an effective means of removing wild horses from this area

Construct a minimum of 2 water traps in Cathedral Bluffs	Same as above
Set up cooperative agreement with the Colorado Division of Wildlife	Cooperative agreements are necessary for management of wild horses on state owned land and is also necessary for compliance with the wild horse law 92-915
Accept Step II multiple use recommendation RM-1.7 on interior fences	Same as RM-1.7
Accept Step II multiple use recommendation RM-1.2 on restricting livestock use during spring grazing season	Same as RM-1.2
No limitation on wildlife use be implemented until forage surveys are conducted and the need for restriction are identified	The need for Adjustment in grazing use has not been identified for the present horse numbers. Forage data is insufficient at the present time to determine any grazing use adjustments that may needed
Where determined necessary by the area manager, gates will be left open or fence segments let down during periods of non-use by livestock, to allow horse movement	So as not to restrict horse movement between and within allotments

The final decision in this MFP regarding wild horse management was to reserve 2,101 AUMs of forage for between 95 to 140 wild horses within the 161,300 acre (148,153 acres public land) selected range. Wild horses would be removed from areas outside the selected range including those wild horses west of Douglas Creek. At this time the portions of the herd units outside of the selected range were known only as adjacent areas and did not have HA titles as there was no regulation or policy at this time which provided the description of Herd Areas.

Map 4 shows the selected range for wild horse management within the White River Resource Area following completion of the MFP update in 1980. This map also includes the original wild horse inventory completed in 1974. The selected range was chosen “because it has the most concentrated wild horse population (their preferred habitat), has reliable sources of water during late summer, and has a balance between summer and winter range.” This area would support a high quality herd representative of the situation in effect at the passage of The Act.

Map 4. Selected Wild Horse Range and Original Wild Horse Inventory (1980)



3.4 1981 White River Resource Area Grazing Management EIS.

The recommendations of the 1980 MFP were again presented to the BLM's internal and external publics along with the scoping process for the court ordered grazing EIS. The Multiple-Use Recommendations from the MFP became the proposed action for the 1981 Grazing EIS.

In addition to the proposed action, the Grazing EIS evaluated five other alternatives, some of which were developed from opportunities or objectives identified in the URA/MFP. As relates to wild horses, the grazing EIS evaluated the following alternatives in detail:

- Alternative A (Proposed Action)
 - Manage 90 to 140 horses on 148,153 acres public land (161,300 total acres) which includes parts of both herd units.
 - Allocate 2,101 AUMs of forage for wild horse use within the area described.
 - Remove all horses west of Douglas Creek and from all other allotments in the Piceance Basin not designated for management of wild horses.
- Alternative B (No Action)
 - Manage present herd of 625 horses on 443,979 acres public land recognized as the area occupied by wild horses in 1971.
 - Allocate 9,364 AUMs of forage for horse use within the area described.
- Alternative C (Eliminate all Livestock Grazing)
 - Manage 500 to 750 head of wild horses on 443,979 acres public land.
 - Allocate 9,364 AUMs of forage for horse use within the area described.
- Alternative D (Optimize Livestock Grazing)
 - Manage 52 wild horses on 148,153 acres public land (161,300 total acres).
 - Allocate 797 AUMs of forage for horse use within the area described.
 - Remove all horses west of Douglas Creek and from all other allotments in the Piceance Basin not designated for management of wild horses.
- Alternative E (Emphasis on Other Resource Uses)
 - Manage 280 to 450 head of wild horses on 148,153 acres public land (161,300 total acres).
 - Allocate 4,200 AUMs of forage for horse use within the area described.
 - Remove all horses west of Douglas Creek and from all other allotments in the Piceance Basin not designated for management of wild horses.
- Alternative F (Optimize Wild Horses)
 - Manage 700 to 1,125 head of wild horses on 443,979 acres public land.
 - Allocate 16,865 AUMs of forage for horse use within the area described.

During public review of the Draft Grazing EIS, responses indicated concern regarding proposals for managing wild horses. Major areas of concern included: 1) the need for reducing the size of the wild horse range; 2) the proposed population levels; and 3) the possibility of the proposals violating the mandates of the Act.

These issues were addressed in the Final Grazing EIS and again emphasized the principal considerations used in reducing the size of the wild horse range including:

- The designated range (161,300 acres) is considered their preferred habitat and has been allocated for continued wild horse use;
- The amount of habitat already lost from oil and gas development and associated human disturbance and the projected new disturbance west of Douglas Creek;
- The amount of critical deer winter range, the number of existing fences restricting horse movement, the lack of dependable watering areas and the lack of sufficient summer forage in the non-designated ranges in the Piceance Basin.

In April 1981 the State Director approved both the Rangeland Program Summary (the Record of Decision for the Grazing EIS) and the Multiple-Use Decisions for the WRRRA MFP. The decisions for wild horse management were:

1. Allocate 2,101 AUMs of forage for 95 to 140 wild horses to be managed on an area of 148,153 acres of public land (161,300 total acres); and
2. Remove horses from 295,826 acres which includes all horses west of Douglas Creek and all horses from those allotments in the Piceance Basin which are not part of the designated management area.

The rationale noted in the Rangeland Program Summary: "The proposed wild horse use area was chosen because it has the most concentrated wild horse population (their preferred habitat), has reliable sources of water during summer, and has a balance between summer and winter range." and, "Decisions for wild horse management are aimed at maintaining a viable wild horse population within the best habitat of their present range, while simultaneously satisfying the needs for various other resource considerations." (Rangeland Program Summary White River Resource Area, page 7). The decisions for wild horse management made through this EIS were the same as those made in the 1980 MFP; the selected range and forage allocations did not change.

3.5 1981 WRRRA Herd Management Area Plan

The herd management area plan (HMAP) was an activity plan developed to implement the land use decisions made in the 1980 MFP and 1981 EIS. This plan reiterated the land use decisions of managing a viable wild horse population within a Herd Management Area consisting of 148,153 acres of public land (161,300 total acres).

The HMAP developed specific objectives, following public input, for managing a viable wild horse herd. Objectives with detailed planned actions to achieve each objective developed in the HMAP include:

- A. Maintain wild horse herds at a level consistent with the carrying capacity for the area while providing adequate forage for livestock and wildlife.
- B. Improve the range condition in the herd management area within 15 years.

- C. Maintain levels of utilization on key forage by limiting the maximum allowable utilization to 40 percent on ranges used on a continuous yearlong basis, and 50 percent on ranges used on a continual seasonal basis.
- D. Maintain the free roaming behavior of wild horses.
- E. Maintain a healthy, viable breeding population of wild horses.
- F. Provide for the protection of wild horses from harassment and unauthorized capture.

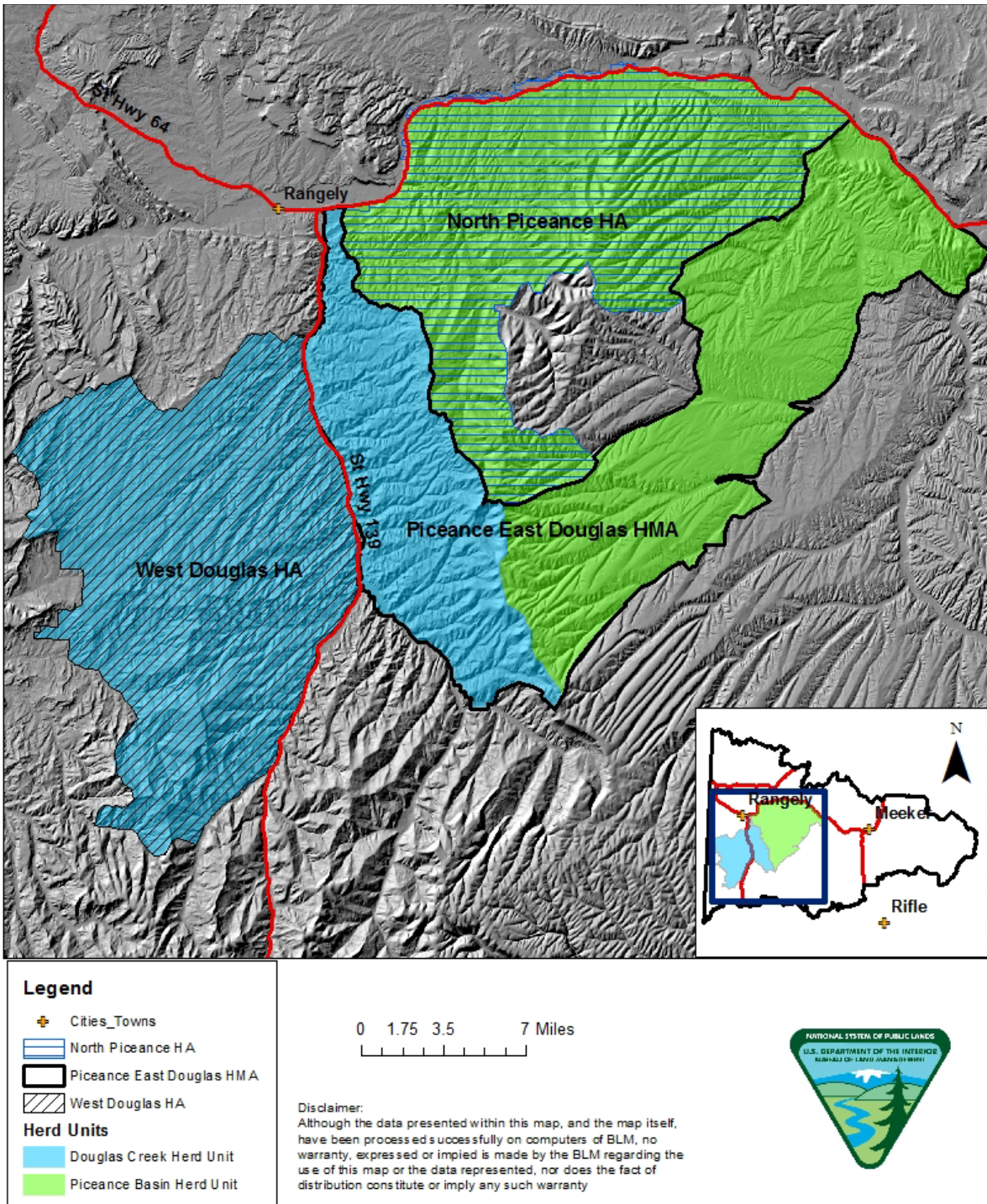
The objectives developed in the HMAP were designed to protect, manage, and control wild horses on a long term continuing basis within the herd management area established through the land use planning process. This plan was specific to the selected range for wild horse management as all wild horses outside of the selected range were to be removed in accordance with the land use plan.

3.6 1983-1986 Evolution of Herd Area Identification

Within early planning documents, the areas occupied by wild horses were known as the horse range, which was separated into two herd units within the separate planning areas. Following completion of the 1980 MFP update and the 1981 herd management area plan, the “selected range” became known as the White River Herd Management Area. Areas outside of the herd management area but within the herd units were commonly referred to by geographic reference, or the grazing allotment name (i.e., Texas Mountain or Twin Buttes). National BLM Wild Horse and Burro Program guidance in 1983 identifies Herd Areas as areas that “Collectively represent the maximum distribution of horses in a planning area.” The term Herd Area therefore evolved as a way to differentiate between the areas within the herd units that were selected for management of wild horses, which was the Herd Management Area, and areas within the herd units not selected for management became known as Herd Areas.

In 1986, wild horse and burro regulations (43CFR part 4700) were revised, the definition of Herd Areas changed to “the geographic area identified as having been used by a herd as its habitat in 1971”. The first known White River reference to the term Herd Area was August 1986 in the 6th report to Congress. At this time, the portions of the Piceance Basin and Douglas Creek Herd Units selected for management were known as the Piceance-East Douglas Herd Management Area (PEDHMA), the portion of the Douglas Creek Herd Unit not chosen for long term management becomes known as the West Douglas Herd Area, and the portion of the Piceance Basin Herd Unit not chosen for management becomes known as the North Piceance Herd Area (NPHA). Although now given three distinct names, these areas collectively include the original herd units identified in the 1974 MFP. Map 5. Wild Horse Habitat Naming Following 1986 Revision of Wild Horse and Burro Program Regulations shows the location of the herd areas, the herd management area, and the name of each area as well as the original herd areas identified in 1974. The area between the NPHA and the PEDHMA originally identified as part of the Piceance Basin Herd Unit was not included in either the NPHA or PEDHMA as this area was completely fenced and no wild horses were observed in that region during the original inventory in 1974.

Map 5. Wild Horse Habitat Naming Following 1986 Revision of Wild Horse and Burro Program Regulations



3.7 1985 WRRR Piceance Basin RMP

In 1985 the BLM WRFO developed another land use plan specific to the Piceance Basin with appropriate scoping and public review, this plan was driven by mineral resources in the Piceance Basin. In this plan, the 1981 Grazing EIS decisions concerning wild horse management in the Piceance Basin planning unit were incorporated and carried forward in the 1985 RMP. In addition, some of the objectives covering the Piceance Basin developed in the Herd Management Area Plan for managing a viable herd in a free roaming habitat were incorporated into the RMP as land use decisions. This plan did not change any decisions made in the 1980 MFP, 1981 Grazing EIS, or the HMAP, no alternatives to wild horse management decisions from earlier planning documents were considered.

3.8 1997 WRRR Resource Management Plan

The next land use plan decision is the Record of Decision for the White River Resource Area, Resource Management Plan which was approved by the State Director on July 1, 1997.

The Draft Resource Management Plan evaluated four alternatives for wild horse management developed through the public scoping process.

- Alternative A.
 - A total of 2,100 AUMs of forage would be provided to support 60-140 wild horses.
 - The boundary of the Piceance-East Douglas Herd Area, containing 161,300 acres would be unchanged.
 - Wild Horses would be removed from the North Piceance (107,590 acres) and the West Douglas (190,870 acres) Herd Areas.
 - The HMA would be open to motorized vehicles with no restrictions.
- Alternative B.
 - A total of 1,050 AUMs of forage would be provided to support 60-70 wild horses.
 - The Piceance-East Douglas HMA would be adjusted to exclude the upper part of the Boxelder Allotment (6,080 acres) and Pasture C of the Square S Allotment (12,460 acres), which were patented in 1987.
 - The adjusted Piceance-East Douglas HMA, totaling 146,200 acres, would be managed to provide 900 to 1,050 AUMs of forage for 60 to 70 horses.
 - Wild horses would be removed from the excluded portion of the Boxelder Allotment and Pasture C of the Square S Allotment in the Piceance-East Douglas HMA. Wild horses would also be removed from the North Piceance HA and the West Douglas HA.
 - Motorized vehicles would be allowed only on existing roads and trails.
- Alternative C.
 - A total of 4,800 AUMs would be provided to support 320 wild horses. The Piceance-East Douglas HMA would be managed to provide 2,100 AUMs of forage for 90-140 horses.
 - The North Piceance HA would be designated as the North Piceance HMA. The North Piceance HMA would be managed to provide 600-900 AUMs of forage for 40-60 wild horses.

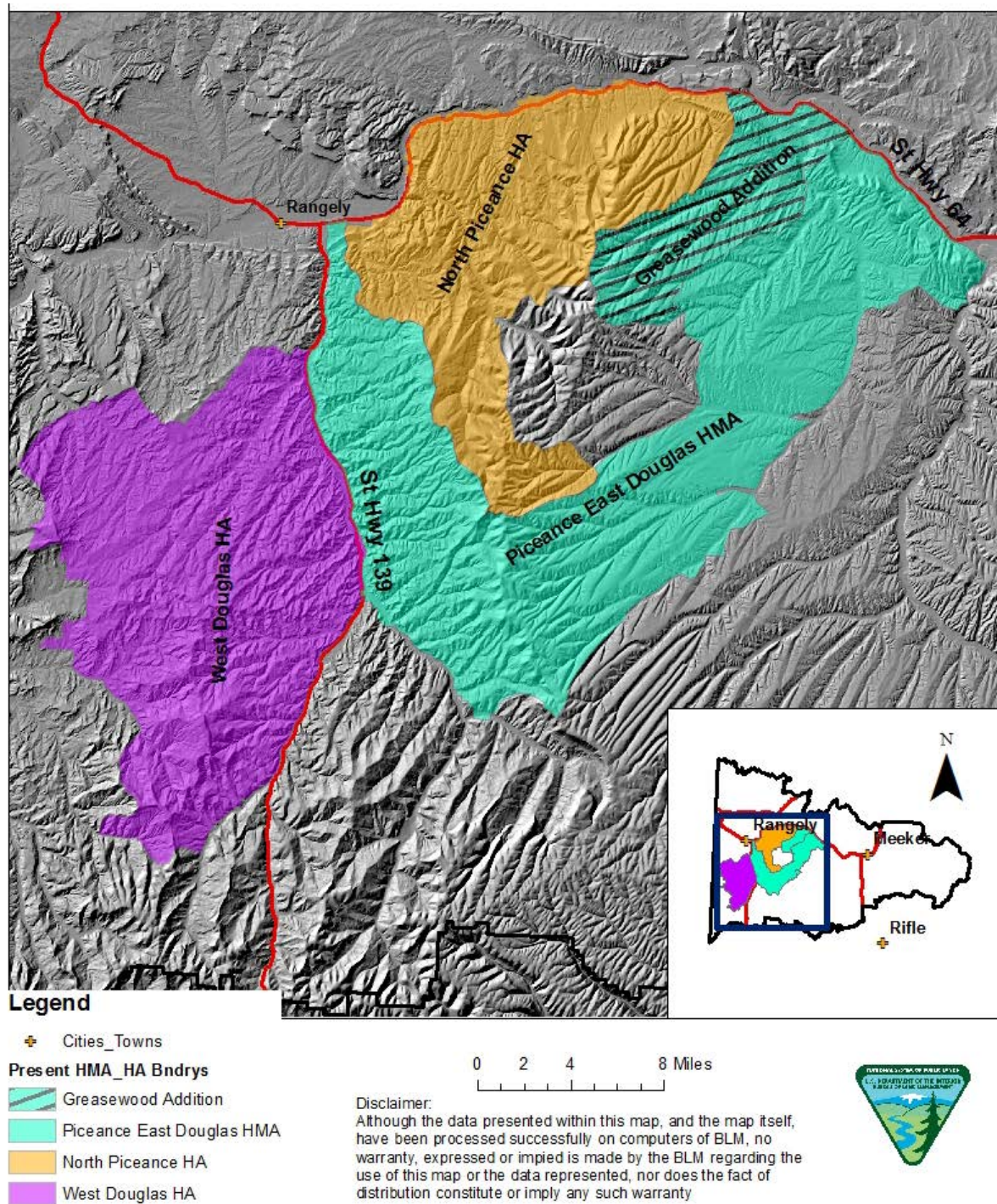
- A portion of the West Douglas HA would be designated as the Texas Creek HMA; 1,050 AUMs of forage would be allocated for 60-70 wild horses Texas Creek HMA and the remainder of the existing West Douglas HA would also serve as a permanent relocation area for older, predominantly male, unadoptable horses which are gathered from within the White River Resource Area.
 - The Texas Creek HMA (41,370 acres) and the remainder of the West Douglas HA (149,500 acres) would also support a population of younger age-class animals. These horses might be used for introduction into the North Piceance and Piceance-East Douglas HMA for increased genetic diversity in those herds.
 - The remainder of the West Douglas HA (149,500 acres) would be allocated 750 AUMs of forage to support a population of 0 to 50 horses.
 - Motorized vehicles would be allowed only on existing roads and trails.
- Alternative D.
 - A total of 2,100 AUMs would be provided to support 95-140 horses.
 - The boundary of the Piceance-East Douglas HMA would be expanded to include the Greasewood Allotment (28,830 acres) portion of the North Piceance HA. The expanded Piceance-East Douglas HMA, totaling 190,130 acres, would be managed to provide 1,430 to 2,100 AUMs of forage for 95-140 horses.
 - The remainder of the North Piceance HA (78,760 acres) and the West Douglas HA (190,870 acres) would be managed in the short term (0-10 years) to provide 750 AUMs of forage for population of 0 to 50 horses in each area (a total of 1,500 AUMs). The long-term objective would be to remove all wild horses in both areas.
 - A cooperative management agreement for the Boxelder Allotment and Square S Pasture C would be pursued with Shell Minerals, holder of 13,900 acres.
 - Motorized vehicles would be allowed on designated roads and trails.

The decision for horse management (WRROD/RMP pg2-26) was to implement Alternative D:

- "Manage for a wild horse herd of 95-140 animals on 190,130 acres within the Piceance-East Douglas Herd Management Area (HMA) so that a thriving ecological balance is maintained for plant and animal species on that range."
- "The North Piceance and West Douglas Herd Areas will be managed in the short-term (0-10) years) to provide forage for a herd of 0 to 50 horses in each herd area. The long term objective (+10 years) will be to remove all wild horses from these areas.
- "The boundary of the Piceance-East Douglas HMA will be expanded to include the Greasewood allotment (presently a part of the North Piceance Herd Area).
- "Monitoring studies will be conducted and the long term appropriate management level (AML) for the Herd Management Area will be adjusted based on the results of this monitoring."

The AML for the PEDHMA was increased in 2002 from 95-140 to 135-235 wild horses, a 58% increase of median population from 117 to 185. Map 6 shows the present day Piceance-East Douglas Herd Management Area including the 28,830 acre Greasewood Addition to the HMA, the map also shows the current herd area boundaries.

Map 6. Current Piceance-East Douglas HMA, North Piceance HA, and West Douglas HA Boundaries



3.9 2002 White River Field Office Begins Resource Management Plan Amendment

On June 25, 2002 a Notice of Intent (NOI) to prepare an Environmental Assessment and resource management plan amendment is published in the Federal Register. This NOI stated “The Bureau of Land Management (BLM), White River Field Office proposes to prepare an EA and consider an amendment to the White River RMP regarding management of wild horses in the West Douglas Herd Area. The purpose of this planning process is to identify the most appropriate strategy for management of wild horses in the West Douglas Herd Area of the White River Resource Area, while protecting resource values, providing for multiple uses, and improving the health of public lands. The planning process will allow the BLM, with integrated public involvement, to develop and conduct detailed analysis of a full range of alternatives specifically focused on wild horses and other resources within this herd area.” The BLM had determined that such detail and focus may not have been sufficiently addressed and documented in the 1997 RMP, which has a resource area-wide scope.

In July 2004, the WRFO completed a draft resource management plan amendment. Through internal scoping, comments received during three public scoping meetings, and comment letters received, the BLM identified issues and concerns. The BLM WRFO then developed eight alternatives to achieve the purpose and need as well as address issues and concerns that were identified. A summary of each alternative is included below (each alternative is described in detail in CO-WRFO-03-050-EA pages 7-11):

- **Alternative A (Continue Current Situation)**
 - As described in the current RMP decisions, the wild horse population would be limited to a range between 0 and 50 animals. The BLM would remove all wild horses from the West Douglas Herd Area and from areas where horses have relocated outside the Herd Area by 2007.
 - Under this alternative there would be no long term forage allocation to wild horses.
- **Alternative B (Remove all Wild Horses)**
 - The BLM would remove all wild horses from the West Douglas Herd Area as soon as possible. This alternative included an accelerated removal timeline as well as adjustments in forage allocation.
 - Under this alternative total forage allocation would be reduced approximately 20 percent within the herd area.
- **Alternative C (Small Herd in Unfenced Preferred Habitat)**
 - Wild horses would be managed within the Texas Mountain preferred habitat with an initial appropriate management level (AML) range between 29 and 60 head.
 - Periodic introduction of wild horses into the herd from other HMAs would be used to increase herd genetic variability. The herd would primarily be managed within their preferred habitat surrounding Texas Mountain.
 - A yearly average of 648 AUMs would be allocated to wild horses.
 - To achieve this alternative, and maintain the basic requirements which make the Texas Mountain area the preferred wild horse habitat, there would be stipulations

imposed on new oil and gas leases to protect key wild horse habitats and functions (CSU-9, CSU-10, TL-12, TL-13, and LN-1).

- Alternative D (Mid-Sized Herd in Unfenced Herd Area)
 - The wild horse AML would range between 100 and 207 animals, an average of 2,232 AUMs would be allocated to wild horses.
 - No new fences would be built. Under this alternative there is a high probability that wild horses would continue to move outside of the herd area, especially to the unfenced southwest. It would not be practical for BLM to attempt to continuously remove horses from outside the herd area and from private lands; therefore this alternative was eliminated from further consideration.
- Alternative E (Mid-Sized Herd with WSA Excluded)
 - The initial wild horse AML would range between 100 and 207 horses.
 - Periodic introduction of wild horses into the herd from other HMAs would be used as a means to increase herd genetic variability.
 - Wild horses would not be managed within the Oil Spring Mountain Wilderness Study Area (WSA). Wild horses would be fenced out of the WSA with 9.4 miles of fence. The BLM would also encourage horse movement into the northern part of the herd area by establishing a corridor approach.
 - The BLM would allocate an average of 2,232 AUMs to wild horses.
 - There would be additional stipulations on new oil and gas leases to maintain preferred horse habitat (CSU-9, CSU-10, CSU-11, TL-12, TL-13, and LN-1).
- Alternative F (Mid-Sized Herd in Texas Mountain Preferred Habitat with Fences)
 - The initial AML would range between 100 and 207 horses.
 - Periodic introduction of wild horses into the herd from other HMAs would be used as a means to increase herd genetic variability.
 - In this alternative, wild horses would be managed only in the southern portion of the herd area. The BLM would build and maintain a fence along the southern boundary of the herd area, through the WSA (18.2 miles). The BLM would also establish a northern boundary by building and maintaining another fence (14 miles).
 - The BLM would allocate an average of 2,232 AUMs to wild horses. Only trailing and incidental livestock use would be allowed in this horse habitat area. There would be additional stipulations to new oil and gas leases within the horse habitat area (CSU-9, CSU-10, TL-12, TL-13, and LN-1).
- Alternative G (Maximum Sized Herd in Fenced Herd Area)
 - The initial AML for wild horses would range between 310 and 643 animals.
 - Introduction of wild horses into the herd from other HMAs would be used initially as a means to increase herd genetic variability. The entire boundary of the herd area would be fenced.
 - An average of 6,914 AUMs would be allocated to wild horses. No forage would be allocated to livestock.
 - The BLM would build and maintain 32.5 miles of new fence to completely enclose the herd area. This would include 18.2 miles on Oil Springs Mountain, through the WSA. The BLM would also be responsible for maintaining approximately 61 miles of existing boundary fence, and all water sources within

the herd area. The BLM would identify preferred horse habitat. To maintain this habitat, stipulations would be placed on new oil and gas leases (CSU-9, CSU-10, and LN-1).

- **Alternative H (Maximum Sized Herd in Unfenced Herd Area)**
 - The wild horse AML would be between 300 and 622 horses. An average of 6,914 AUMs would be allocated to wild horses.
 - There would be no new fences. The BLM would maintain existing fences and waters within and along the boundary of the herd area. The BLM would not use fertility control, or introduce horses for increased genetic variability. There would be no new stipulations on oil and gas leases. The AML for this alternative would definitely exacerbate the problem with migration of wild horses to the southwest, out of the herd area and onto private land. It would be impractical and fiscally impossible for the BLM to continuously gather the large number of horses that would move outside the herd area under this alternative. Therefore, this alternative was eliminated from further consideration.

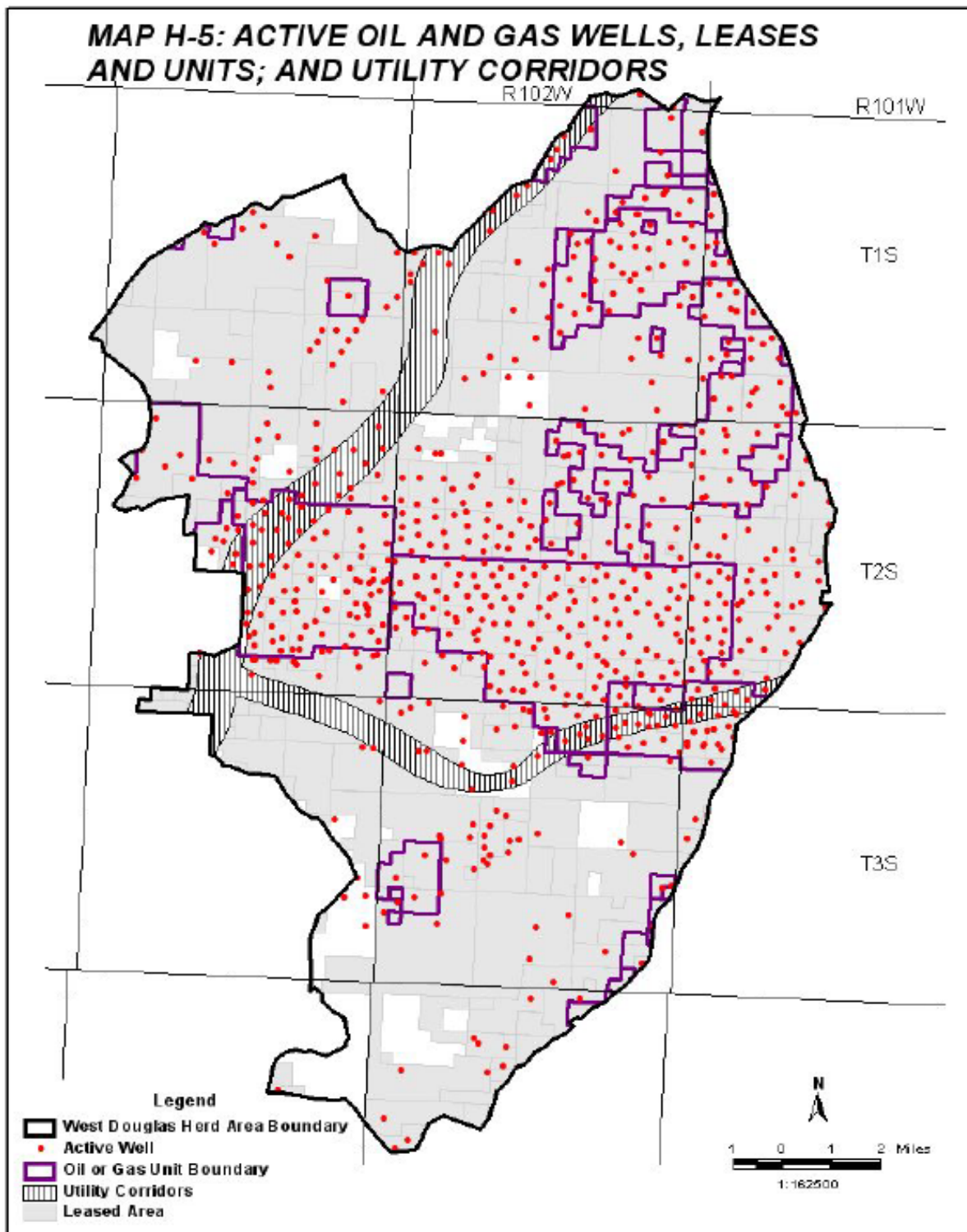
The WRFO also identified oil and gas lease stipulations briefly described below that would be necessary to implement the various alternatives, with the exception of Lease Notice 1 already in the White River ROD/RMP, these surface stipulations were new and would be added to the White River ROD/RMP (for detailed description of these stipulations refer to CO-WRFO-03-050-EA, Appendix B):

- **Controlled Surface Use 9 (CSU-9): Key Wild Horse Habitat.** Only short-term development activity will be allowed
- **Controlled Surface Use 10 (CSU-10): Preferred Wild Horse Habitat.** Density of development will be limited, well pads will be limited to four sites per section, road density would be limited to 1.5 miles of road per section
- **Controlled Surface Use 11 (CSU-11): Wild Horse Migration Corridor.** Density of development activity will be limited, well pads will be limited to two sites per section, road density will be limited 3 miles of road per section.
- **Timing limitation 12 (TL-12): Wild Horse Summer Range.** Activities which displace horses from important summer range may only occur between September 1 and May 30.
- **Timing Limitation 13 (TL-13): Wild Horse Winter Range.** Activities which displace horses from important winter range may only occur between May 1 and November 15
- **Lease Notice 1 (LN-1): Wild Horse Habitat.** Notice that the lease parcel is within a herd management area, intensive development may be delayed for a 60 day period between March 1 and June 15, the lessee may also be required to perform special conservation measures within this area.

Following completion of detailed impact analysis for each of the six alternatives that were carried forward, the recommended decision was to amend the White River RMP as described in Alternative B of Environmental Assessment CO-WRFO-03-050-EA. Rationale for choosing Alternative B was: The Wild and Free Roaming Horse and Burro Act requires a “thriving natural

ecological balance” be maintained on all wild horse ranges. All of the alternatives for retention of horses rely on “Oil and Gas lease stipulations” to maintain key habitat for horses. Currently 93 percent of the area is leased and there is no opportunity to place new stipulations on these leases, until they expire. Of the 7 percent that are not leased, 4 percent are within the currently preferred horse habitat (Texas Mountain). These currently un-leased parcels, if leased with the proposed stipulations, would not protect enough of the key wild horse habitat to maintain a balance of seasonal ranges. Application of well specific mitigation will not maintain habitat or protect horses during critical periods such as foaling. Without lease stipulations the BLM cannot protect the habitat needed for wild horses, requisite to the requirement of maintaining a “thriving natural ecological balance.” This area will retain “Herd Area” status, and future Land Use Plans will monitor the changes in oil and gas development and make a determination of suitability for wild horses. Until such time as this oil and gas field is depleted/abandoned retention of horses is not reasonable. Map 7 shows the areas that had been leased within the herd area, active wells in the herd area, and designated utility corridor as shown in an appendix ;l to CO-WRFO-03-050-EA.

Map 7. Active Oil and Gas Wells, Leases and Units, and Utility Corridors as Analyzed in CO-WRFO-03-050-EA



3.10 2005 West Douglas Herd Area Amendment

Following completion of the previous draft amendment and the public and internal comments received on the draft, the BLM continued the RMP amendment process by developing two new alternatives based on comments received regarding the proposed decision for CO-WRFO-03-050-EA and preparing another Environmental Assessment to determine whether it is feasible to manage wild horses in the West Douglas Herd Area, while protecting resource values, providing for multiple uses, and improving the health of public lands.

The previous draft amendment (2004) examined eight alternatives. Six alternatives addressed managing a varying range of wild horses were analyzed in detail. Alternative C, of the previous draft amendment, proposed managing a herd of between 29-60 wild horses within their preferred habitat surrounding Texas Mountain. This alternative proposed oil and gas lease stipulations on human development in an effort to protect key and preferred wild horse habitat. Human development in the 2005 EA is defined as “any impacts to the public lands related to human use. These uses can include oil and gas development, livestock management, and recreational use”. As 93 percent of the herd area is currently leased, new lease stipulations could not be added to provide protection to horse habitat (43 CFR 3101.1-3 & 3101.1-4). Public and internal BLM comments questioned whether this alternative could be modified to allow a herd of horses to be managed without stipulations, using the entire herd area.

Considering the planning criteria, issues, and concerns, the BLM developed two alternatives (Alternatives A and B). Alternative A carries out the White River ROD/RMP for removal of horses by 2007. Alternative B addresses the above comments and proposes the creation of a Herd Management Area, to manage a herd of 29-60 wild horses. Both alternatives as written in CO-WRFO-05-083-EA are:

- **Alternative A (Implement Existing RMP Direction):**
As described in the 1997 RMP decisions, the wild horse population would be limited to a range between 0 and 50 wild horses. The BLM would remove all wild horses from the Herd Area and from areas where horses have relocated outside the Herd Area by 2007. Activity plans would be prepared for all wild horse removals. The 1997 RMP further specifies allocation of up to 750 AUMs of forage until removal of wild horses is completed. There would be no need for long-term forage allocation for wild horses. The current permitted use for livestock within the herd area is approximately 9,080 animal unit months (AUMs). All other resources would be managed in accordance with the existing situation (current Land Use Plan).
- **Alternative B (Wild Horse Herd within the entire Herd Area)**
Wild horses would be managed within the entire West Douglas Herd Area encompassing 123,387 acres. The entire Herd Area would be designated a Herd Management Area (HMA). The herd would be managed with an initial Appropriate Management Level (AML) range between 29 and 60 wild horses. When the population increases to 60 or more adult horses BLM will reduce the herd to the lower AML range of 29 horses. Wild horses would be allocated 750 AUMs of forage. Herd genetics would be strengthened with the periodic, scheduled introduction of wild horse mares from other HMAs. Mares introduced into the herd would be selected from locations with similar climate, topography

and habitat to encourage successful integration into the herd. DNA analysis would be conducted during scheduled gathers, or as needed to monitor genetics until such time as the herd exhibits long-term, desirable genetic viability. Recognizing the herd's low genetic variability and relatively small herd size, immunocontraception would not be applied to the West Douglas herd. There would be no new stipulations for human development.

Through this process, consideration of nine alternatives covering a wide range of management options within the West Douglas Herd Area including various herd sizes of zero, 29-60 wild horses, 100-207 wild horses, and 310-643 wild horses was conducted. Following completion of detailed analysis which included public involvement throughout, the proposed decision recommended for approval was to implement Alternative A, of EA CO-WRFO-05-083-EA. This alternative calls for implementing the current Record of Decision for the 1997 White River Resource Management Plan/Environmental Impact Statement (EIS) for the total removal of wild horses from the West Douglas Herd Area by 2007.

The proposed decision was protested by five parties, following resolution of the protests by the Assistant Director for Renewable Resources and Planning, the proposed decision was approved by the Colorado State Director in October 2007. The Decision Record for CO-WRFO-05-083-EA states "After extensive analysis and public input, the BLM concluded that a self-sustaining population of healthy wild horses could not be maintained within the West Douglas Herd Area in balance with their habitat and other uses, within the bounds of where wild horses existed in 1971, and with the minimum level of management needed to achieve land use plan objectives." To date this decision has not been implemented. The only gather since 2007 was in 2012 when 20 wild horses were captured and removed as an emergency action due to a lack of adequate water.

4.0 Population and Distribution of Wild Horses in West Douglas HA

During the first aerial inventory of wild horses in 1974, 9 wild horses were documented within the West Douglas Herd Area, the current population estimate based on an aerial inventory conducted in 2012 is approximately 300 wild horses.

Boundary fencing has isolated the population of wild horses within the herd area from the population located within the herd management area. Gather and removal operations to remove all wild horses west of Douglas Creek in conformance with land use plan decisions have been conducted however, these operations were not successful in fully implementing decisions to remove all horses west of Douglas Creek. Due to isolation and periodic reductions of the population, genetic variation of the wild horses in the WDHA is very low.

Since 1974 distribution of wild horses within the WDHA has shifted to the southern portion of the herd area. The change of distribution has led to concentrated use within approximately 40 percent of the herd area and minimal or no use in the remainder of the herd area.

4.1 Population Estimates

Since passage of the Wild Free Roaming Horses and Burros act in 1971 (The Act), the population of wild horses west of Douglas Creek in the area presently known as the West Douglas Herd Area (WDHA) has been aerially inventoried 14 times. The first inventory of wild

horses was completed February 26th through March 6th, 1974. During this inventory, 152 wild horses were counted in two herd units within the White River Resource area; 103 were located in the Piceance Basin Herd Unit and 49 were located within the Douglas Creek Herd Unit. Of the 49 wild horses observed in the Douglas Creek Herd Unit, 9 were located west of Douglas Creek in the present herd area.

Since passage of The Act, nine gather and removal operations have occurred within the West Douglas Herd Area. The first gather operation occurred September 2nd through September 11th, 1981; during this action, 74 wild horses were gathered and removed from the range west of Douglas Creek.

Table 3 illustrates the population of wild horses west of Douglas Creek since the first inventory in 1974. Shaded boxes in the table identify the years which an aerial inventory was conducted, population estimates not obtained by actual count are based on a 20 percent annual growth calculation. There were two inventories done in 1974 however only the first inventory completed during the winter is shown in this table. Before 1983, there were no barriers restricting intermixing of the wild horses within the Douglas Creek Unit, there are two numbers for the inventories conducted between 1974 and 1983, the first is the number of wild horses observed west of Douglas Creek, and the second number in parenthesis is the total estimated population within the herd unit. Fencing along State Highway 139 completed in 1983 isolated the wild horses west of Douglas Creek from the population within the herd management area east of Douglas creek.

Wild horse inventories were conducted using a helicopter with the exception of the 2010 inventory which was done with a fixed wing aircraft. Inventory flights included multiple observers to locate and document wild horses during the flight. The 1992 and 1994 flights were conducted in August and June respectively; all other inventories were completed in late winter prior to peak foaling season. Table 3 includes the percent of the expected population that was inventoried the expected population is based on a 20 percent annual growth rate and any wild horses removed between inventories. When reviewing the percent of the expected population inventoried following completion of fencing along SH 139, a 20 percent annual recruitment rate seems to be an accurate figure to estimate the wild horse population. Inventories between 1985 and 2005 ranged from 31 percent above to 27 percent below the expected population with 4 inventories resulting in a population below expected and 3 inventories resulting in a population above expected. The low percentage of the expected population of wild horses observed during the 2010 inventory is likely due to the difficulty in locating wild horses in the WDHA from a fixed wing aircraft due to the high elevation and speeds required to safely fly the area which also likely skewed the expected population in 2012.

Table 3. Population of Wild Horses West of Douglas Creek Since the First Inventory in 1974

Year	Pre Foal ¹ Population	Post Foal ² Population	Number ³ Horses Removed	Census ⁴ Expected @ 20 percent	Percent ⁵ of Expected	Year	Pre Foal Population	Post Foal Population	Number Horses Removed	Census Expected @ 20 percent	Percent of Expected
1974	9 (49)	11 (59)				1995	122	147			
1975	30	36				1996	147	176	61		
1976	40	48				1997	95	114		115	83
1977	53 (107)	64 (128)				1998	114	137	72		
1978	68	82				1999	65	78			
1979	85	102				2000	78	93			
1980	106	127				2001	93	112	53		
1981	97 (133)	116 (160)	74	127	76	2002	77	92		59	131
1982	63 (133)	76 (160)		42	150	2003	92	111			
1983	76	91				2004	111	133			
1984	91	109	45			2005	97	116		133	73
1985	59	71	45	64	92	2006	116	140	37		
1986	32	38				2007	103	123			
1987	38	46				2008	123	148			
1988	46	55				2009	148	177			
1989	55	66	23			2010	86	103		177	49
1990	43	52				2011	103	124			
1991	61	73		52	117	2012	190	228	20	124	153
1992	67	80		73	92	2013	208	250			
1993	80	96				2014	250	300			
1994	102	122		96	106	2015	300	360			
Total Horses Removed:									430		

¹ Population of adult wild horses inventoried or population estimate based on 20 percent annual increase and number of wild horses gathered and removed during the previous year if any.

² Population of wild horses including that years foals.

³ Number of wild horses gathered and removed.

⁴ Number of wild horses expected to be observed during inventory based on 20 percent annual increase.

⁵ Percent of the expected population that was observed during inventory.

Tan shaded boxes show population based on aerial inventory

Blue shaded boxes show the lowest population of wild horses within the WDHA following completion of fencing along State Highway 139.

4.2 Genetic Variation within the West Douglas Herd

During July and August 1985, 45 wild horses were gathered and removed from the area west of Douglas Creek, leaving an estimated population of 32 wild horses. It is believed the estimated current population of 300 wild horses are descendants of the 32 wild horses remaining following the 1985 gather operation. Genetic analysis of the West Douglas wild horse population in 2002 indicated that genetic variation within the herd was extremely low ($Ho^1 = 0.269$). “This is the lowest variation seen in any of the Colorado herds and among the lowest observed in any horse population. He^2 also is low but is somewhat higher than Ho indicating some inbreeding. There is a high degree of allelic diversity however as indicated above, much of the diversity is due to variants present only at very low frequency. The overall pattern of variability suggest a large population that has been reduced in size and has experienced a loss of genetic variation due to both genetic drift and inbreeding.” (Cothran, 2002)

4.3 Distribution of Wild Horses within the West Douglas HA

Map 8 shows the location and number of wild horses observed during the first wild horse inventory conducted in 1974. As shown on this map, the majority of wild horses observed within the Douglas Creek Herd Unit were located east of Douglas Creek. At the time of this inventory, State Highway (SH) 139 along Douglas Creek was not fenced, allowing the wild horses to freely travel and interact east or west of Douglas Creek.

As the population of wild horses within the resource area increased, wild horses west of Douglas Creek began to move south and west as well as outside of the herd unit. Map 9 shows the location and number of wild horses observed during an inventory conducted February 1982. At this time, fencing along SH 139 was not complete; therefore wild horses could freely move east or west of Douglas creek within the herd unit. During this inventory, of the 47 percent of the population located in the portion of the herd unit west of Douglas Creek, 33 (52 percent) were observed in the southern portion, 25 (40 percent) were observed in the northern portion, and 5 (8 percent) were observed outside the boundary of the herd unit.

The southern portion of the WDHA includes the area south of the ridge on the north side of Little Horse Draw and the ridgeline at the head of the North Fork of Texas Creek as shown on Map 8-13. This is not a physical boundary but a topographical feature at the northern edge of the wild horses preferred habitat.

Even though the population had been reduced through removal operations, wild horses continued to move south. Map 10 shows the location and number of wild horses observed during the 1985 inventory; 34 (58 percent) of the wild horses were observed in the southern portion of this area, 7 (12 percent) were observed outside the herd unit boundary, and 18 (30 percent) were located in the northern portion. The population of wild horses observed during this inventory were now isolated from the population within the HMA due to completion of fencing along SH 139 in 1983.

¹ Observed heterozygosity, the actual number of loci heterozygous per individual based on chemical loci.

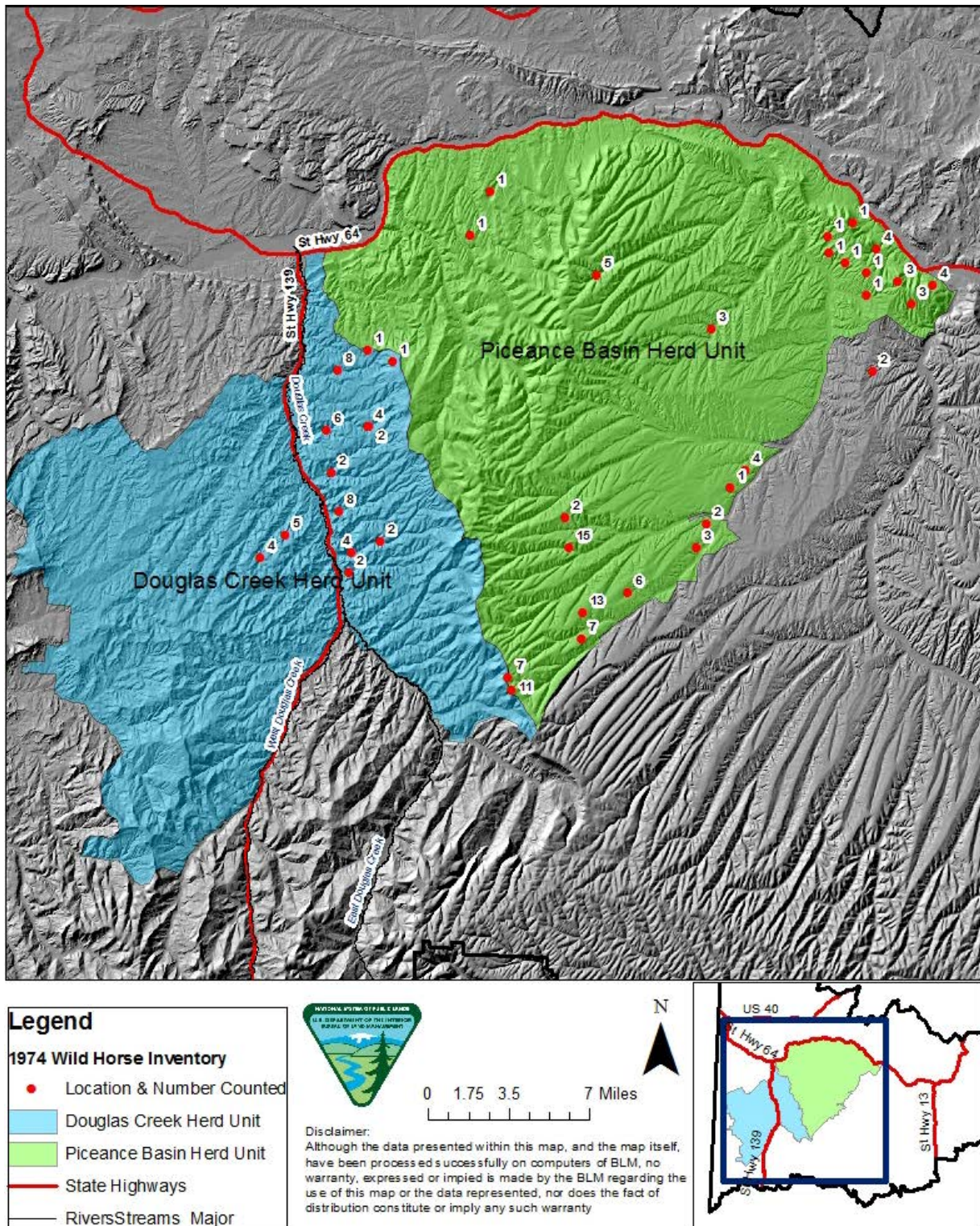
² Expected heterozygosity, the predicted number of heterozygous loci based on gene frequencies calculated for biochemical loci and all marker systems.

Over the next 10 years, two gather operations were conducted in 1985 and 1989; through these two operations a total of 68 wild horses were gathered and removed. Wild horses continued to concentrate in the southern portion of the herd area and in 1994, 80 of the wild horses observed (78 percent) were located in the southern portion of the herd area, 10 horses (10 percent) were located outside the herd area boundary, and 12 horses (12 percent) were located in the northern portion as shown Map 11.

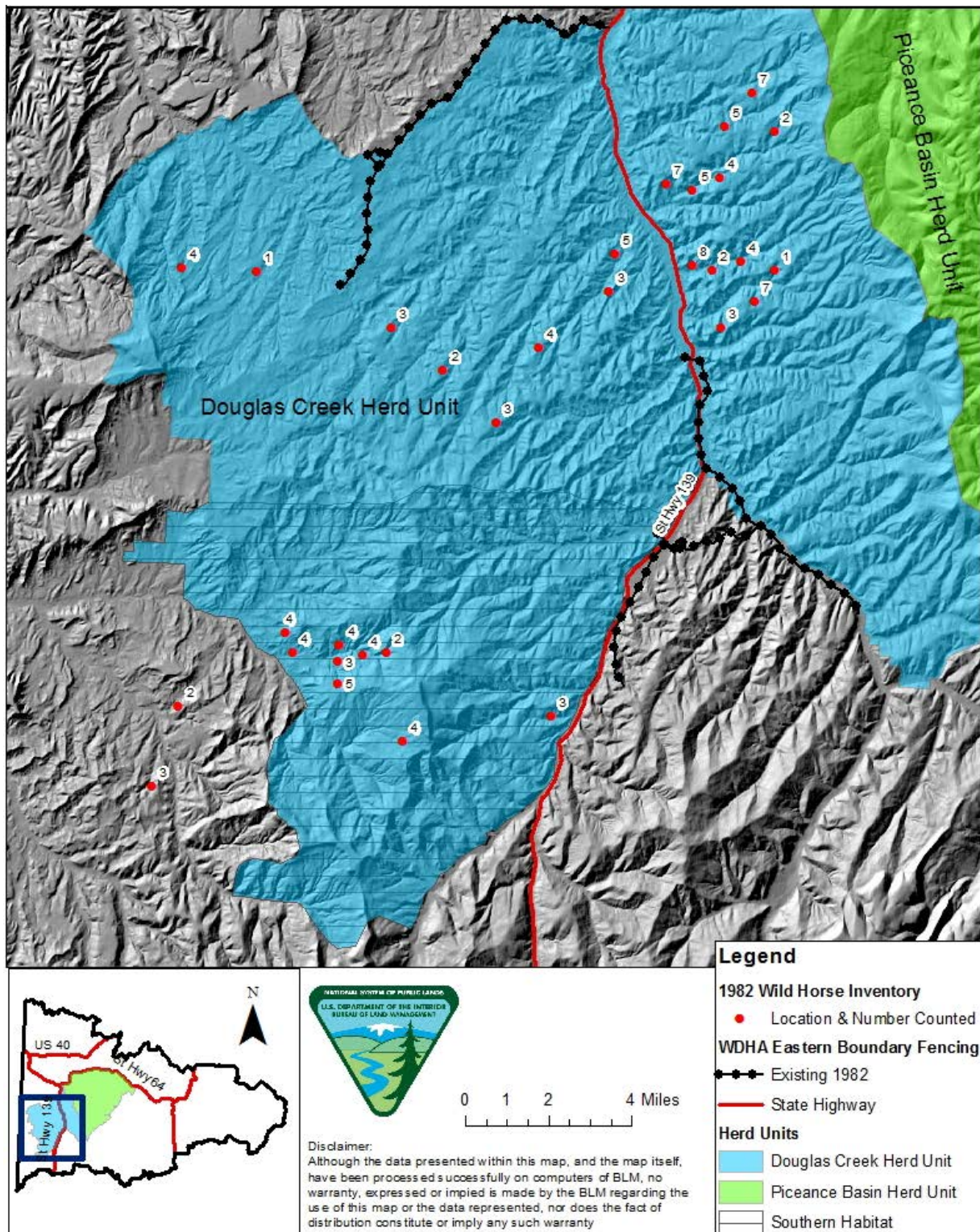
Map 12 shows the number and location of wild horses observed during 2005 inventory, 84 of the wild horses (87 percent) were observed in southern portion of the herd area, 6 horses (6 percent) were located outside the herd area boundary, and 7 horses (7 percent) were located in the northern portion.

Map 13 is the most recent aerial population inventory of the WDHA completed February 16 and 17, 2012. During this inventory 190 wild horses were observed West of Douglas Creek; 122 horses (64 percent) were observed in the southern portion of the herd area, 36 horses (19 percent) were located outside of the herd area boundary, and 32 horses (17 percent) were located in the northern portion. During the inventory the number of yearling wild horses within each band was recorded; 153 were adult horses and 37 were yearlings (approximately 24 percent of the population). This inventory was conducted before the 2012 foaling season; after including a 20 percent increase to account for foals the estimated population would be 228 wild horses (190 adults and 38 foals). An emergency gather was conducted July 2012 resulting in 20 wild horses gathered and removed leaving an approximate population of 208 wild horses in fall 2012. Based on a 20 percent annual increase, the estimated population in January 2015 within and adjacent to the WDHA is approximately 300 adult wild horses. The population of wild horses observed during this inventory is the largest population that has been observed within and adjacent to the WDHA, including the highest number of wild horses located outside of the herd area boundary to the south and west since passage of The Act.

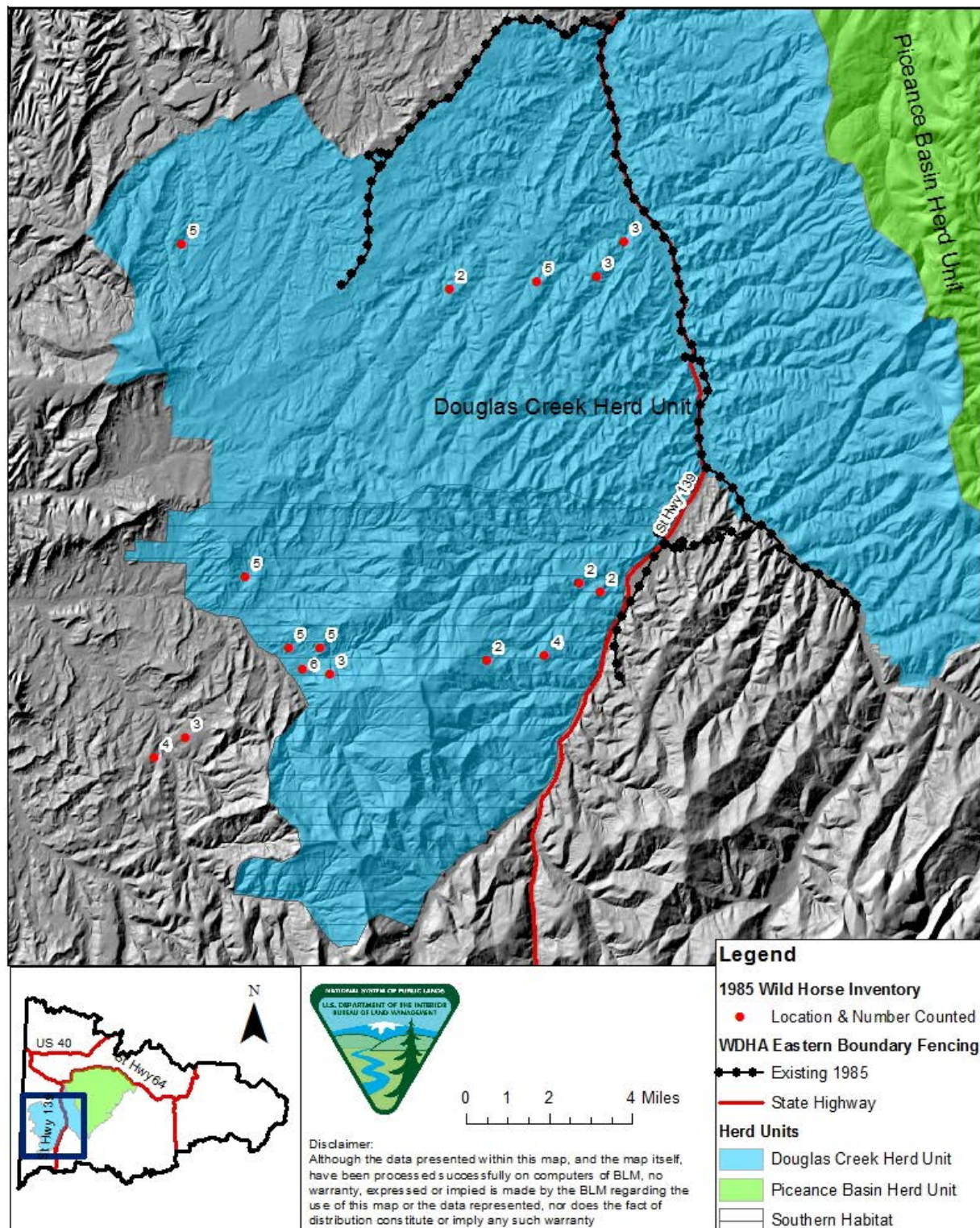
Map 8. Original 1974 Wild Horse Inventory



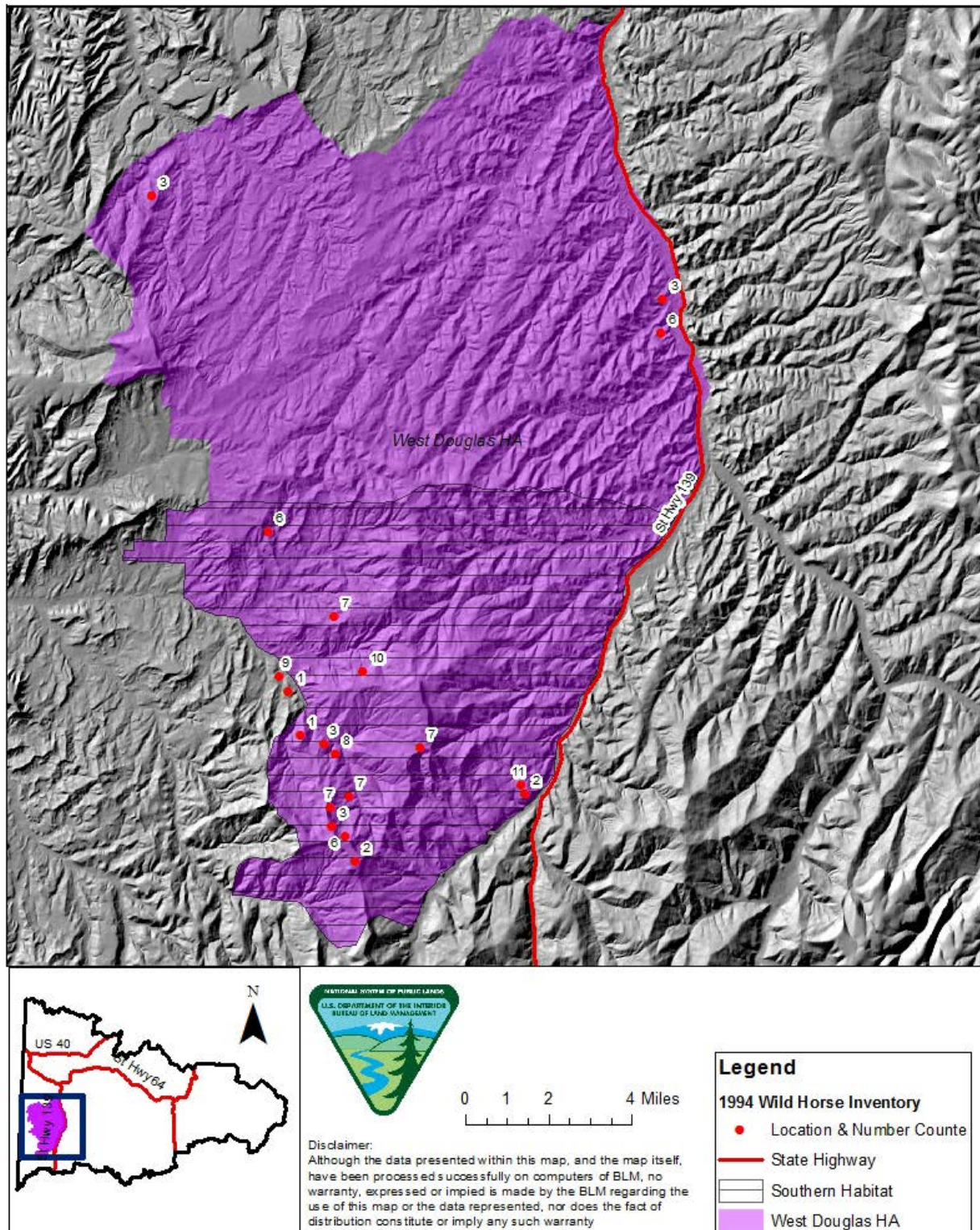
Map 9. 1982 Aerial Inventory of the Douglas Creek Unit



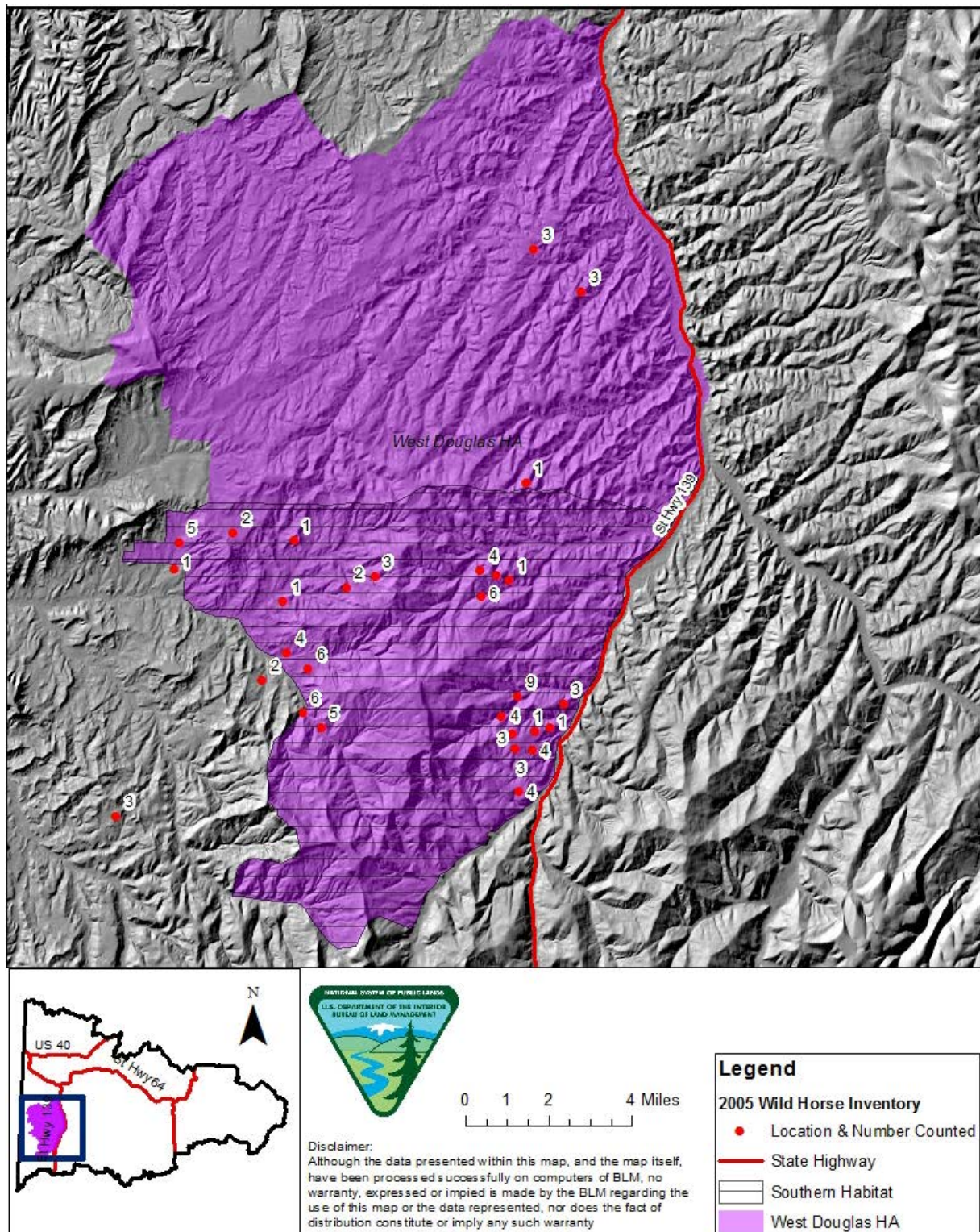
Map 10. 1985 Aerial Inventory Area West of Douglas Creek in the Douglas Creek Herd Unit



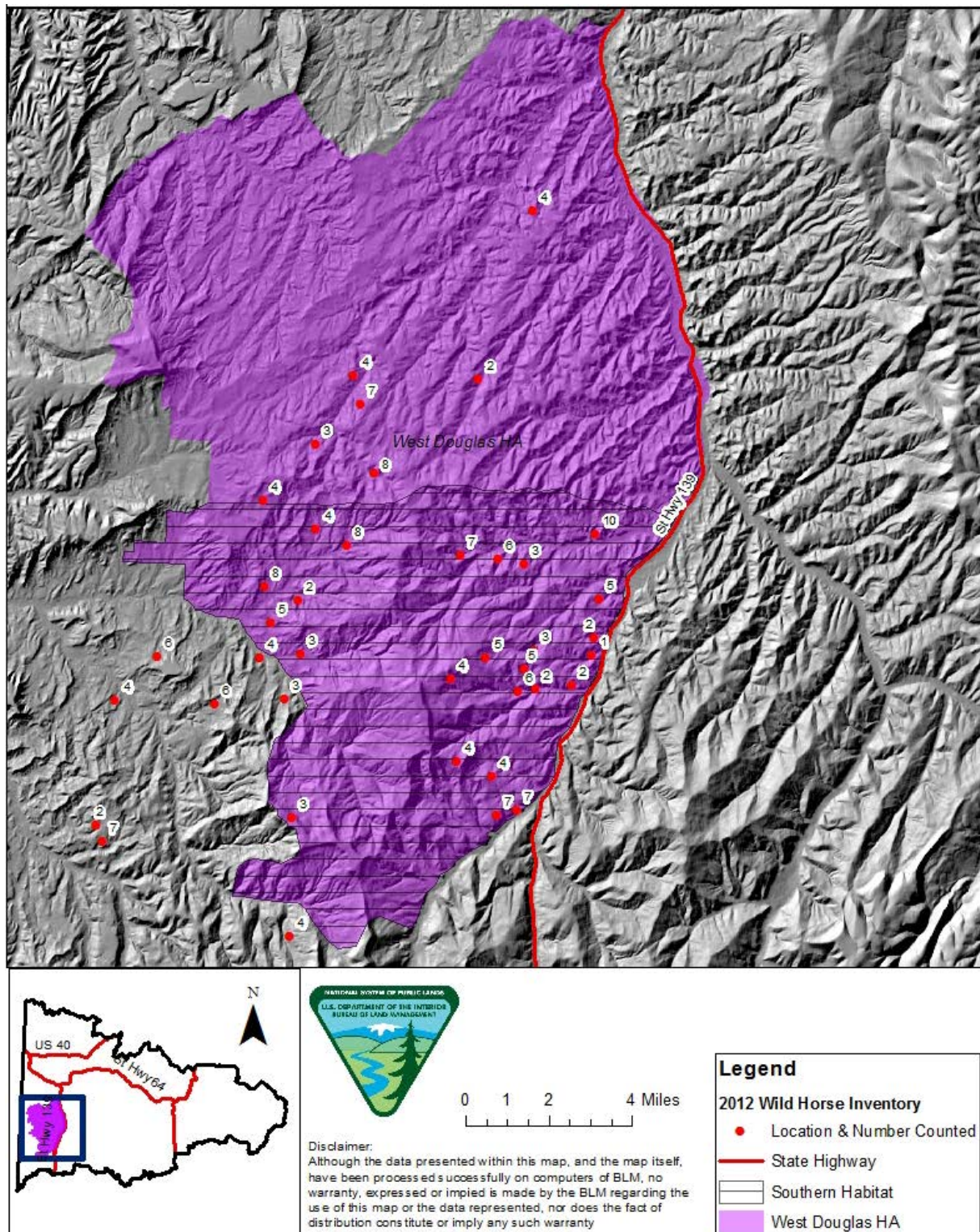
Map 11. 1994 Aerial Inventory of the West Douglas Herd Area



Map 12. 2005 Aerial Inventory of the West Douglas Herd Area



Map 13. 2012 Aerial Inventory of the West Douglas Herd Area



4.4 Factors Influencing Wild Horse Distribution

As shown in Maps 8-13, since 1974, the concentration of wild horses has shifted to the southern portion of the herd area and to the west outside of the herd area. During the 2012 inventory, 19 percent of the population was observed outside of the herd area, 64 percent of the population was observed concentrated in the southern 40 percent of the herd area, and 17 percent were observed in the remaining 60 percent of the herd area. The southern portion of the herd area contains the summer range and preferred habitat of the wild horses therefore the majority of the wild horse use within the herd area is concentrated in this area. As the population has increased more wild horses have moved outside of the herd area boundary in search of forage and space. Although wild horses have moved into the northern portion of the herd area, since the 2005 inventory a higher percentage of the population has moved outside of the herd area boundary than have moved into the northern portion of the herd area as there is very little summer range in the northern portion.

In early planning documents, the BLM concluded that this area was not suitable for long term management of a viable wild horse herd, it was predicted that wild horses would begin to move to the south, and the population would be concentrated in the southern portion of the herd unit west of Douglas Creek, as well as horses would move outside of the herd unit to areas that they were not located in 1971 at the passage of The Act. As disclosed in early planning documents, the area west of Douglas Creek was the site of intense oil and gas exploration and development prior to and following passage of The Act. By December 15, 1971, leases for oil and gas development which currently remain effective encompassed 64 percent of the present WDHA. There are currently 882 wells in the present herd area boundary, of these 706 (80 percent) are located within areas leased prior to passage of The Act and 480 of these wells remain active. Map 14 shows effective leases issued prior to passage of The Act, effective leases issued after passage of The Act (1972-2012), and the location and status of wells within the WDHA. Table 4 includes a breakdown of the number and acres of effective leases issued within the WDHA before passage of The Act, and the periods between development of planning documents.

Table 4 Currently Effective Leases Issued Within WDHA 1940-2012

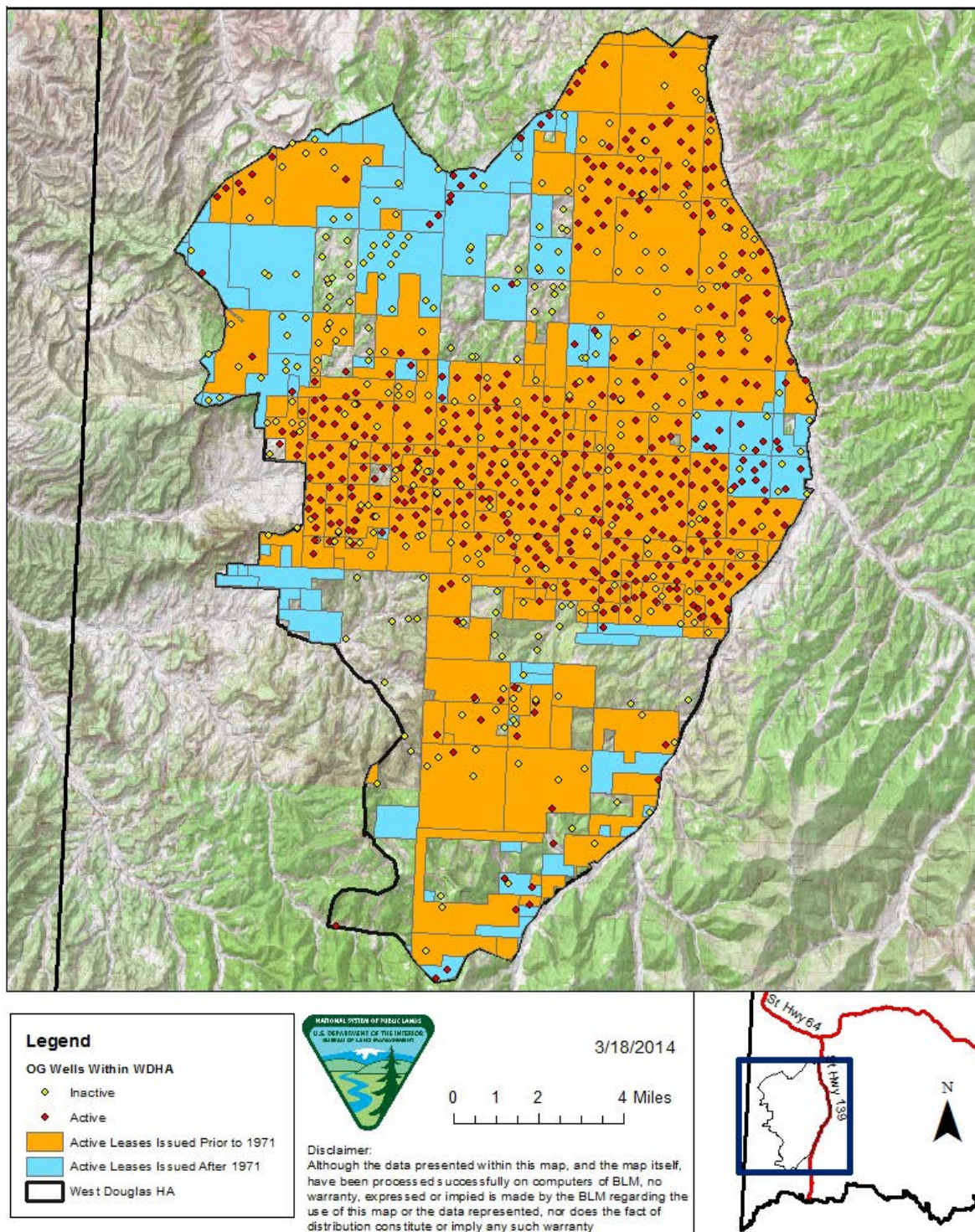
Year	Number of Leases	Percent of Total	Acres	Percent of Total
1940-1971	143	72%	82,004	77%
1972-1974	23	12%	6,826	6%
1976-1980	15	8%	5,047	5%
1985-1994	9	5%	4,951	5%
1998-2004	5	3%	1,749	2%
2006-2012	3	2%	5,379	5%
Total	198	100%	105,956	100%

Although the presence of extensive oil and gas development within this portion of the herd unit likely influenced wild horses to begin to concentrate to the south, and avoid the areas of development, the principal factor influencing the preferred habitat of wild horses within the WDHA is the location of summer range. This is the area that is used as habitat by grazing animals during the summer months, the herd area is composed primarily of winter range, or transitional range used during the spring and fall. This herd area contains little summer range

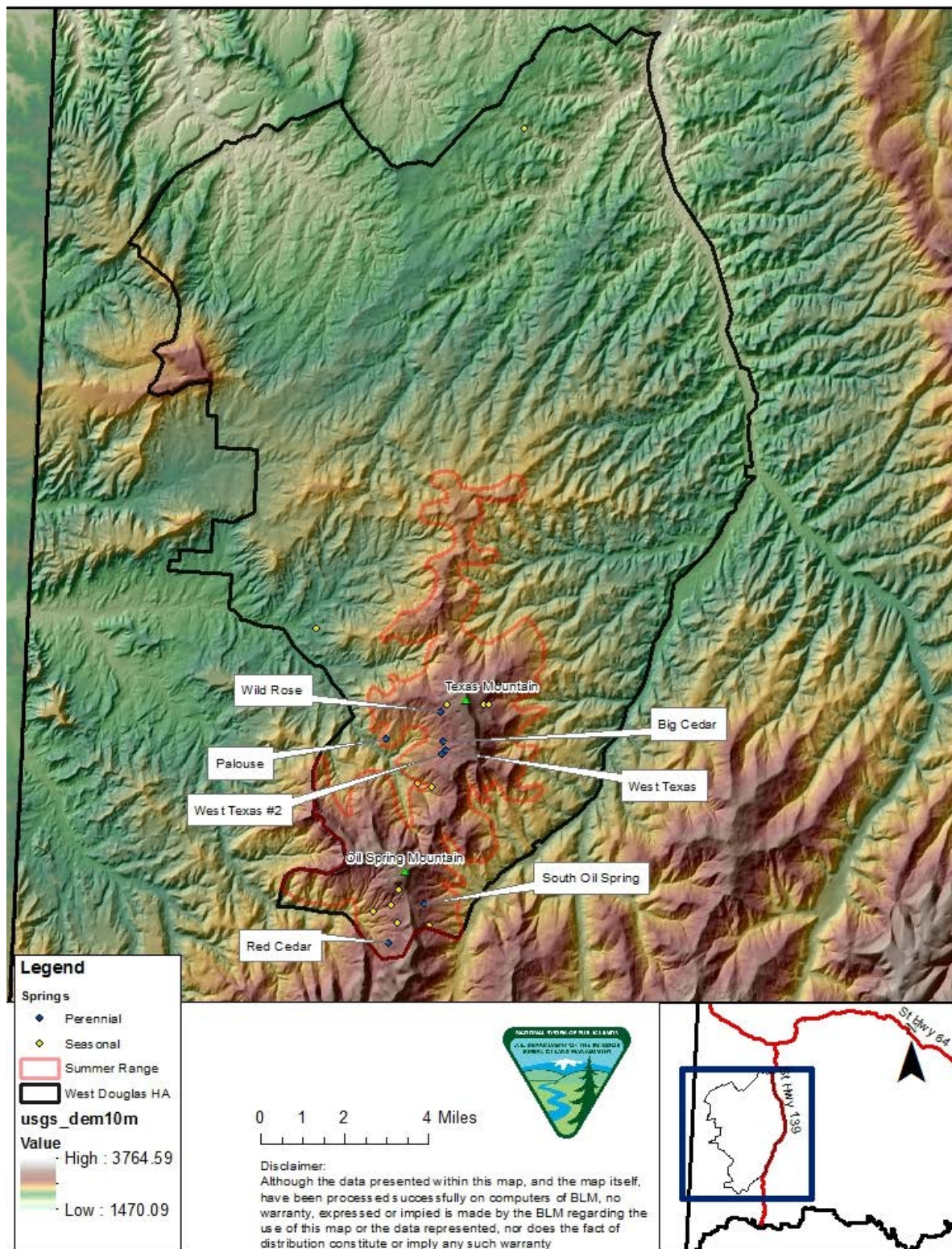
with adequate water sources capable of supporting a viable wild horse herd. Approximately 14 percent of the herd area is considered a seasonal use area that may be utilized by grazing animals in the summer months; the remainder of the herd area consists primarily of winter range or mid elevation transitional range. Map 15 shows satellite relief imagery overlaid with a 10 meter digital elevation model, showing the higher elevation summer range in the southern portion of the herd area as well as perennial springs within the herd area. Map 16 highlights the summer range, with the winter and transitional habitat within the herd area shaded.

During the development of the various planning documents for the WRFO, it was known that much of the summer range had been leased for oil and gas development prior to passage of The Act. Effective leases within the herd area issued prior to passage of The Act include approximately 12,051 acres within the summer range which is approximately 66 percent of the summer range.

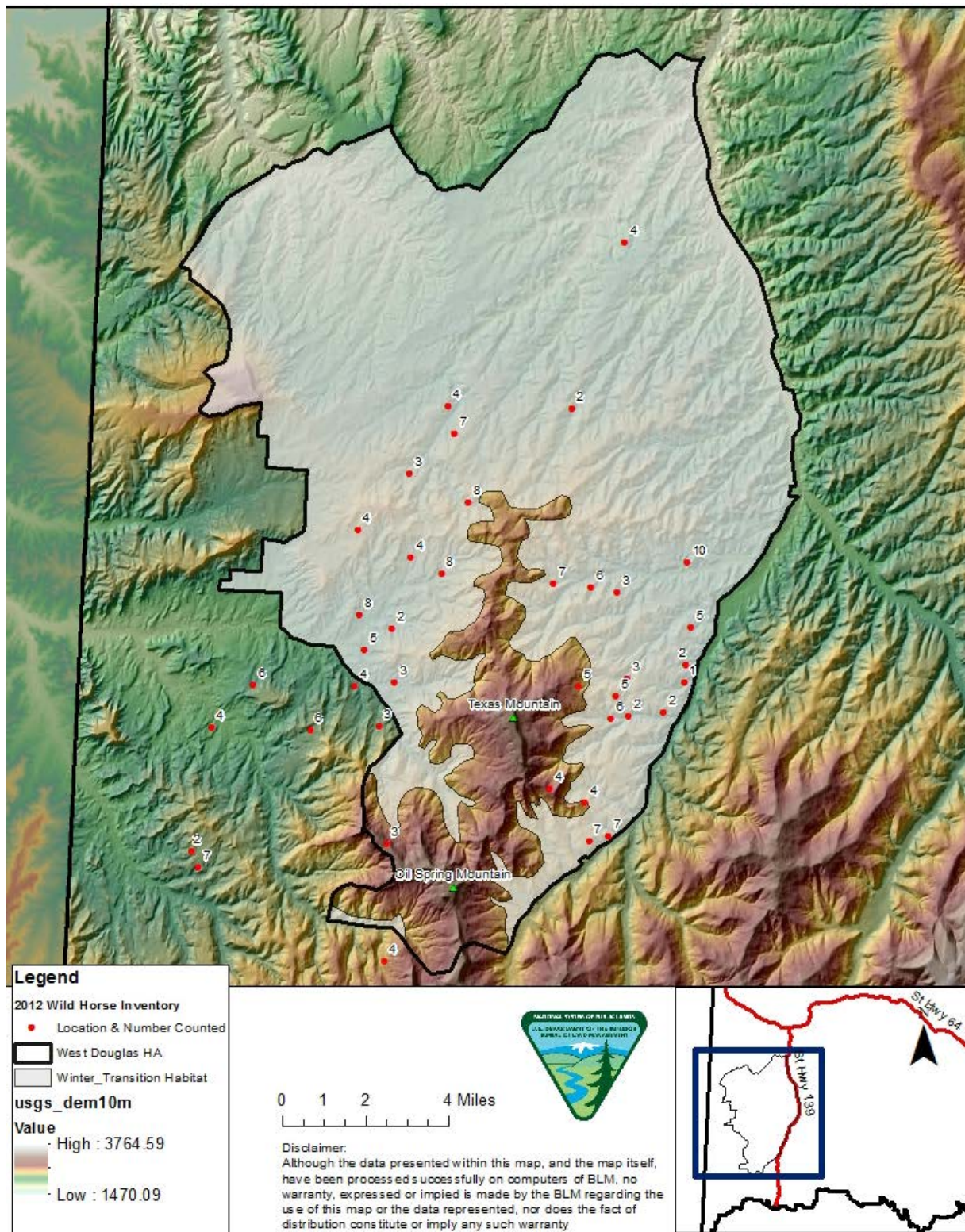
Map 14. Oil and Gas Wells and Leases Effective Prior to 1971 within the West Douglas Herd Area



Map 15. West Douglas Herd Area with Digital Elevation Model and Spring Locations



Map 16. West Douglas Herd Area with Digital Elevation Model and Shaded Winter Range



4.5 Wild Horses Located in Areas Not Designated for Their Long-Term Maintenance

The current estimated population of approximately 300 wild horses west of Douglas Creek are located either within the WDHA which has not been designated for long term maintenance of wild horses or outside of the area they were found in 1971. Due to limited summer range and forage conditions within the WDHA, it is expected that further increases in population will result in additional wild horses moving outside of the HA boundary in search of habitat, which is outside the area they were found in 1971.

5.0 *Range Conditions within the West Douglas Herd Area*

In order to determine whether excess wild horses are present and must be removed in order to maintain a Thriving Natural Ecological Balance (TNEB), the Authorized Officer must consider the condition of multiple components of the animal's habitat. The BLM Handbook H-4700-1 defines TNEB as "WH&B are managed in a manner that assures significant progress is made toward achieving the Land Health Standards³ for upland vegetation, riparian plant communities, watershed function, and habitat quality for animal populations, as well as other site-specific or landscape-level objectives, including those necessary to protect and manage Threatened, Endangered, and Sensitive Species" (H-4700-1 pg59). The BLM Manual 4700 defines excess animals as "those animals which must be removed from an area to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area. This definition includes wild horses or burros located outside the HMA in areas not designated for their long-term maintenance" (BLM Manual Section 4720 pg3).

The BLM Manual Section 4720.11 provides guidance on elements to consider in making a determination that excess wild horses and burros are present and require removal. "The authorized officer shall analyze current information for the following elements: grazing utilization and distribution; trend in range ecological condition; actual use; climate (weather) data; current population inventory; wild horses and burros located outside the HMA, or in herd areas (HAs) not designated for their long-term maintenance; and other factors such as the results of land health assessments which demonstrate removal is needed to restore or maintain the range." The following analysis of information and data collected within the West Douglas Herd Area (WDHA) provides necessary information to determine whether current management of wild horses is allowing rangelands to meet or make significant progress toward meeting land health standards, or whether current management does not allow conditions necessary to sustain public land health.

5.1 Grazing Utilization and Distribution:

Heavy utilization of forage species leaves desirable vegetation communities susceptible to impairment; repeated overutilization increases the risk of damaging the vegetation community as plants are unable to replace photosynthetic material necessary for the plants survival. Two indicators of rangeland health directly correlated to utilization include 1) photosynthetic activity is evident throughout the growing season and 2) appropriate plant litter accumulates and is

³ Colorado Standards for Public Land Health
http://www.blm.gov/co/st/en/BLM_Programs/grazing/rm_stds_guidelines.html

evenly distributed across the landscape. These two indicators are directly related to the amount of plant which is physically removed by grazing. At unacceptable utilization levels throughout the growing season, rangeland plants will have little opportunity for regrowth to produce photosynthetic material in order to maintain photosynthetic activity and complete their annual growth cycle, which will also reduce plant vigor. In general, utilization of 30 percent-50 percent of plant material is considered the acceptable level of defoliation necessary to allow plant maintenance and recovery. Plant litter accumulation serves important ecological functions including decreasing runoff and increasing infiltration. At repeated unacceptable use levels, plant parts are grazed before they can break off and accumulate as litter. Without litter accumulating on the soil surface, water is not slowed down in plant interspaces and runoff increases. Heavy to severe utilization has been observed in the WDHA, this level of utilization is unsuitable to meeting land health standards. Areas which are receiving high utilization levels occur primarily in the southern portion of the HA.

Photos 1 thru 4 were taken within the WDHA in T3S R102W Sec 21 in the Texas Mountain area on June 14th 2012. The photos show severe utilization of grass species in this area due to the presence of wild horses. The wild horse population is concentrated within approximately 40 percent of the HA within the limited summer range centered around Texas Mountain. Livestock grazing has been deferred within this area of the grazing allotment since 2005 in an effort to avoid overutilization and degradation of the forage community (Maps 17 and 18). The portion of the grazing allotment that has been deferred includes approximately 12,000 acres (65 percent) of the summer range habitat within the HA. Through a Memorandum of Understanding (MOU) with the livestock grazing permittee, this area will continue to be deferred from livestock grazing until rangeland conditions improve to a level necessary to ensure rangeland health can be sustained.

Despite deferring this area from livestock grazing, overutilization has occurred. Overutilization of a plant reduces the amount of photosynthetic material necessary to sustain the plant. Continued overutilization particularly during the growing season (April 1st to June 30th) essentially “starves” the plant by interrupting the ability to complete photosynthesis. This process reduces the overall vigor and reproductive capability of the plant, if overutilization occurs on a continuous basis, plant mortality occurs. As the density, composition, and frequency of desirable species within a vegetation community are reduced through overutilization, undesirable species begin to colonize the site. Undesirable species are generally less palatable, less productive, and unable to provide adequate forage to meet nutritional requirements of animals within the area. Following loss of desirable species from a vegetation community, conditions necessary to sustain healthy rangeland cannot be met without intervention.

Photo 1



Overutilization of grass species, excessive bare ground vulnerable to erosion, minimal litter accumulation, inadequate residual leaf material of grass species.

Photo 2



Severe utilization of grass species, trampling of forb species, excessive bare ground, uprooted plants (circled), little litter accumulation, inadequate residual leaf material of grass species.

Photo 3



Severe utilization of grass species leaving inadequate leaf material necessary to complete photosynthesis, initiate regrowth, and restore nutrient reserves within the roots.

Photo 4



Overutilization of grass species, excessive bare ground vulnerable to erosion, minimal litter accumulation litter present primarily originating from shrub species, inadequate residual leaf material of grass species.

5.2 Actual Use

Table 5 contains the actual livestock grazing use in animal unit months (AUMs) made within the WDHA by grazing year (3/1-2/28). There are three livestock operators authorized to graze within allotments or pastures located within the boundary of the WDHA. The four pastures which lie inside the WDHA boundary are the Winter/Spring and Park Canyon pastures and a portion of the West Creek pasture of the Twin Buttes allotment and the Bull Draw pasture of the East Douglas Creek allotment. As shown in Tables 5 and 6 livestock use within the Winter/Spring pasture, which covers the majority of the HA (86%), has been well below the authorized use of 8,932 AUMs. All long-term trend sites within the HA are located within the Winter/Spring pasture.

Table 5. Actual Livestock Grazing Use within the West Douglas Herd Area

Year	Pasture	Winter/Spring Pasture	West Creek Pasture	Park Canyon Pasture	Bull Draw Pasture	Total
	Authorized Use (AUMs)	8,932	1,289	98	268	10,587
2006	Actual Use (AUMs)	2,085	907	0	268	3,376
	Percent of Authorized Used	23%	70%	0%	100%	32%
2007	Actual Use (AUMs)	1,722	1,121	45	205	3,165
	Percent of Authorized Used	19%	87%	46%	76%	30%
2008	Actual Use (AUMs)	4,406	1,083	82	221	5,792
	Percent of Authorized Used	49%	84%	84%	82%	55%
2009	Actual Use (AUMs)	6,499	1,068	42	272	7,881
	Percent of Authorized Used	73%	83%	43%	101%	74%
2010	Actual Use (AUMs)	5,533	1,159	29	26	6,747
	Percent of Authorized Used	62%	90%	30%	10%	64%
2011	Actual Use (AUMs)	5,731	1,050	70	22	6,873
	Percent of Authorized Used	64%	81%	71%	8%	65%
2012	Actual Use (AUMs)	3,654	957	0	135	4,746
	Percent of Authorized Used	41%	74%	0%	50%	45%
2013	Actual Use (AUMs)	3,584	963	73	77	4697
	Percent of Authorized Used	40%	75%	74%	29%	44%

Table 6 includes the amount of forage allocated to livestock within the WDHA that was unused by livestock, this table does not include the West Creek pasture as only a portion of the pasture lies within the WDHA, because actual use is reported for the entire pasture, the amount of unused forage in the portion of the pasture within the HA cannot be determined. The range of unused AUMs below the permitted level ranges from 2,489 in 2009 to 7,326 during the 2007 grazing year. The level of reduced use by the grazing permittees has been beneficial and necessary to prevent widespread degradation to the rangeland resources within the WDHA as the wild horse population within the WDHA has continued to grow since the most recent gather and removal operations in 2006 and 2012. During the 2006 operation, the BLM planned to gather and remove 89 wild horses, however only 37 wild horses and 1 escaped domestic horse were removed, 20 wild horses were removed July 2012 during an emergency gather operation.

Table 6. Forage Allocated to Livestock within the WDHA that was Unused by Livestock (3/1/2006-2/28/2013)

Pasture	Authorized Use (AUMs)	Unused AUMs							
		2006	2007	2008	2009	2010	2011	2012	2013
Winter/Spring	8,932	6,847	7,210	4,526	2,433	3,399	3,201	5,278	5,348
Park Canyon	98	98	53	16	56	69	28	98	25
Bull Draw	268	0	63	47	0	242	246	133	191
Total	9,298	6,945	7,326	4,589	2,489	3,710	3,475	5,509	5,564

Actual grazing use by livestock for the 1987 through 2013 grazing years within the Winter/Spring pasture of the Twin Buttes allotment is shown in Figure 1. The Winter/Spring pasture includes 86% of the HA, grazing use within this pasture is authorized 11/1 to 6/12 annually. As shown in Figure 1, livestock use has fluctuated greatly during the 27 years shown with an overall decline in use from 1987. The grazing permittees authorized to graze within this pasture have made voluntary reductions particularly in response to drought and elevated wild horse use, the reductions have been made in an effort to sustain rangeland health. Figure 2 shows the amount of forage utilized by wild horses within the HA from 1987 to 2013 based on the estimated population, wild horse use has also fluctuated primarily as a result of gather and removal operations, with an overall increase in wild horse use from 1987. Although livestock use decreased 40% from 6,033 AUMs in 1987 to 3,654 in 2012, wild horse use has increased 500% from 456 AUMs in 1987 to 2280 AUMs in 2012. As discussed in the analysis of trend data, all trend sites read in 1987 and again in 2012 have shown a decrease in desirable species.

Figure 1. Livestock Actual Use in the Winter/Spring Pasture from 1987-2013

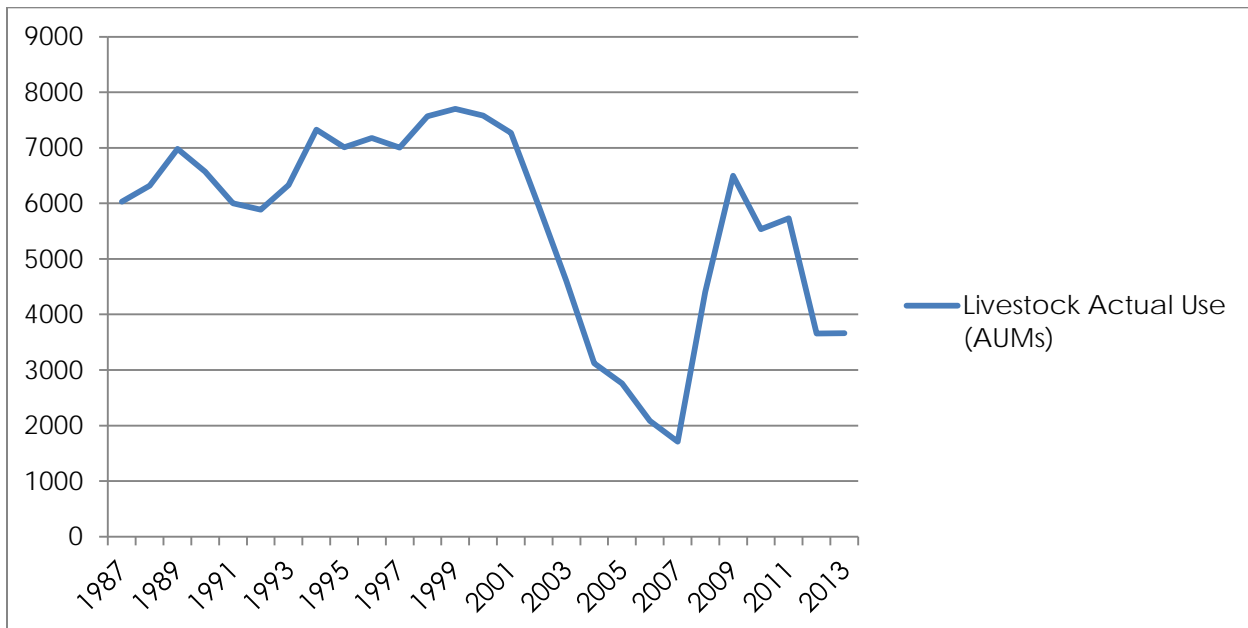
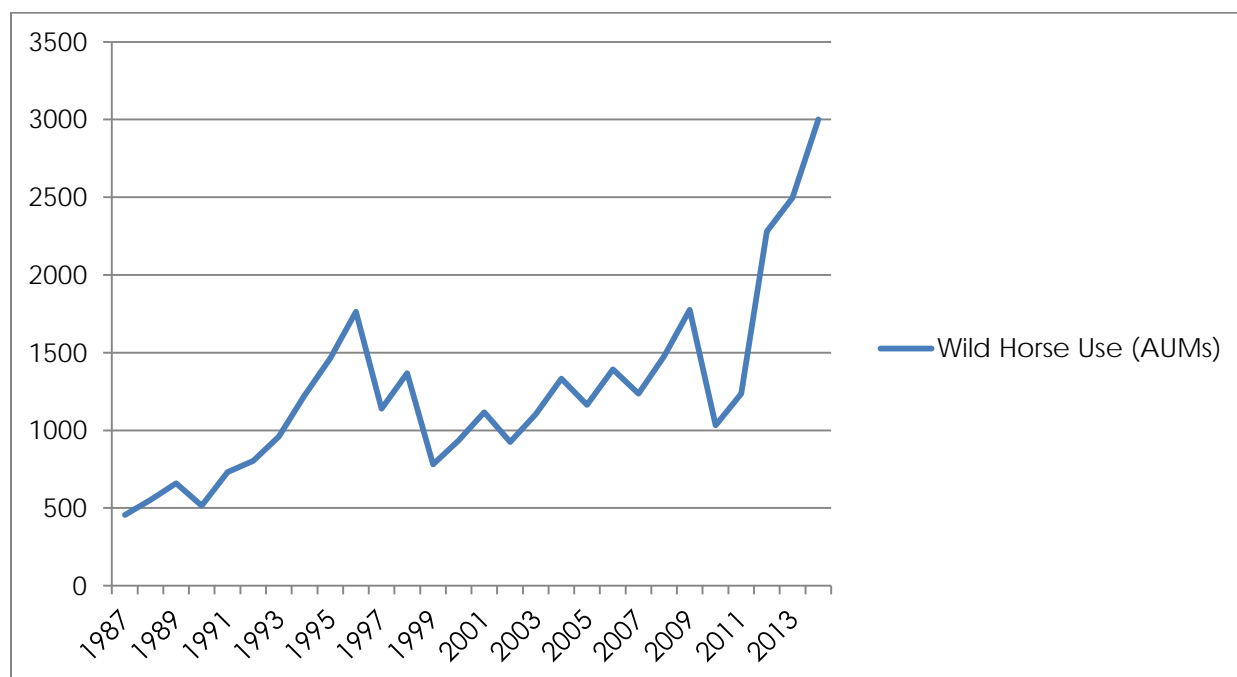


Figure 2. West Douglas Herd Area Wild Horse Use Based on Estimated Population



Although the actual amount of available forage for each year shown may be less due to environmental factors such as drought, the forage allocation unused by livestock would likely be enough to support the wild horse population within the WDHA. However, this available forage is for the entire WDHA, population inventories and on the ground observation of wild horse distribution have shown that wild horse use is concentrated within their preferred habitat centered around the limited summer range in the southern portion of the WDHA and their use does not occur uniformly across the entire WDHA. Trend data shows that despite livestock grazing use below that authorized, particularly within the Winter/Spring pasture, concentrated use has led to overutilization and impairment of the rangeland resources in some areas of the HA. Comparison of actual use and trend data reconfirms that summer range habitat is not present in sufficient amounts to sustain a healthy wild horse population on healthy rangelands within the WDHA over the long term. The H-4700-1 Handbook recommends 150-200 animals as the minimum amount needed to maintain a genetically viable herd; this would require 1,800 to 2,400 AUMs. The data shows that if forage were allocated to wild horses within the HA to maintain a genetically viable herd, this herd could not be managed to maintain TNEB and sustain healthy rangelands.

5.3 Climate (Weather) Data

Precipitation was well below average in 2012. The U.S. Drought Monitor produces weekly maps showing drought conditions across the United States over the past year, these maps have shown Rio Blanco County experiencing some level of drought conditions beginning with moderate drought early in 2012 and escalating to extreme drought by May 2012. Precipitation across the county improved in 2013 with many months receiving at or above average precipitation resulting in improved drought conditions beginning late January 2013 as classification moved from

extreme to severe through September 2013. Conditions improved further from severe to moderate until early November 2013 when the classification improved to abnormally dry. Between January 2012 and December 2013, Rio Blanco County experienced three months of abnormally dry conditions, four months of moderate drought, nine months of severe drought, and eight months of extreme drought conditions. The U.S. drought monitor shows that conditions improved from abnormally dry to normal during the week of May 13, 2014. Table 7 includes precipitation data collected at the Dragon Road Remote Access Weather Station (RAWS) located within the WDHA (Map 17). This RAWS site has been in operation since July of 1998, the average yearly precipitation for the period of record is 9.71 inches. Precipitation levels during 2012 were well below average and no precipitation was received in this area during May and June during the critical growing season for vegetation. The drought conditions coupled with the heightened population of wild horses in the area has made many rangeland sites across the HA vulnerable to degradation which without reducing grazing pressure will likely result in a transition to less productive vegetation communities which do not meet land health standards. As shown in the actual use data above, livestock grazing has been reduced or deferred throughout the WDHA in an effort to avoid damage to drought stressed rangelands. Precipitation recorded in 2002-2003 was also well below average, however the population of wild horses during this period was less than half of the population observed in 2012.

Table 7. Dragon Road RAWS Precipitation Data (inches)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
2000	0.5	1.12	0.81	0.5	0.59	1.4	0.49	0.76	1.5	1.06	0.1	0.06	8.89
2001	0.11	0.72	0.8	1.16	1.06	0.11	0.6	2.66	1.1	1.18	0.8	0.21	10.51
2002	0.24	0.12	0.92	0.39	0.02	0.25	0.99	0.92	1.85	1.1	0.4	0.15	7.35
2003	0.29	0.62	0.9	0.45	1.07	0.44	0.07	0.26	0.53	0	1.49	0.83	6.95
2004	0.18	0.7	1.55	1.7	0.22	0.46	0.24	0.44	1.57	1.16	0.81	0.34	9.37
2005	0.85	0.45	1.31	0.88	1.57	3.31	1.15	0.74	0.67	1.2	0.43	0.08	12.64
2006	0.43	0.08	0.6	0.41	0.18	0.13	0.66	2.13	1.43	3.88	0.31	0.12	10.36
2007	0.03	0.43	0.74	0.31	0.88	0.21	0.79	2.1	2.14	0.77	0	1.26	9.66
2008	0.05	0.15	0.44	1.42	1.31	0.82	0.77	1.55	1.8	0.82	0.71	0.03	9.87
2009	0.39	0.05	0.29	1.65	1.4	1.53	0.5	0.7	1.95	0.51	0.31	0.06	9.34
2010	0.25	0.25	0.97	1.45	0.64	1.12	0.31	1	0.36	1.55	1.1	1.36	10.36
2011	0.4	0.27	0.72	1.52	1.72	0.88	2.24	1.09	1.13	1.36	0.65	0	11.98
2012	0.03	0.8	0.1	1.03	0	0	1.75	1.88	1.52	0.25	0.43	0.05	7.84
2013	0.96	0.26	0.33	1.27	0.56	0.07	1.41	0.46	3.6	2.09	0.4	0.19	11.6
Avg 2000-2013	0.34	0.43	0.75	1.01	0.80	0.77	0.86	1.19	1.51	1.21	0.57	0.34	9.77

Drought stressed vegetation is especially vulnerable to mortality when overuse occurs. Although conditions improved in 2013, much of the vegetation particularly within the preferred habitat of the herd area has likely not received adequate relief from grazing pressure to complete growth cycles, replenish root reserves, and improve in vigor. Although much of the native rangeland species within the arid west are resilient to fluctuations in climate patterns, elevated disturbance from herbivory during drought periods increases the likelihood that desirable species will be lost.

5.4 Trend in Range Ecological Condition

The following tables include long term trend data collected August 2 – September 18, 2012 within the WDHA compared to historical data. This data was collected using the Daubenmire Canopy Coverage Transect method. The Daubenmire method estimates frequency and canopy cover (including litter) of key vegetation species along a transect representative of a key area within a landscape. This data is used to determine whether desirable healthy plant communities are being maintained or if vegetation communities are transitioning to less desirable states incapable of meeting land health standards. The percent canopy cover is a measure of how much each particular species contributes to the total canopy cover. Percent frequency is a measure of how often a species is observed within a plot along a transect, 20 plots per 100 feet of transect are recorded. Frequency does not measure the amount of each species within each plot rather if and how often a species is observed.

Rangelands can transition between varying states occupied by various plant communities⁴, the desired plant community of a site generally yields higher forage production, provides structure and function to protect soil resources, provides habitat for large and small animals, and is capable of supporting and maintaining land health standards. Factors such as overutilization, no grazing, and fire can influence transitions⁵. As a result of heavy continuous use, vegetation communities begin to be dominated by less productive grazing tolerant species⁶. Although rangelands can transition back to the desired community, this often involves human intervention and may take decades to fully recover if action is not taken early in the transition process to avoid loss of desirable species and soil resources⁶.

The desired plant community (DPC) for many sites within the HA is a mixed grass/Wyoming big sagebrush community, this community is dominated by cool season bunch grasses such as needle and thread, with a subdominant component of the cool season rhizomatous grass, western wheatgrass, and the dominate shrub species Wyoming Big Sagebrush. This community is desirable for grazing animals as it provides higher forage production and consists of plants with high nutritional value; this community is also capable of meeting and sustaining rangeland health. The less desirable community lacks cool season bunchgrass species, dominate grass species in this community include the grazing tolerant species such as sandberg bluegrass or prairie junegrass which provide less forage production and lower nutritional value than needle and thread. Undesirable vegetation communities include a rabbitbrush/rhizomatous wheatgrass or cheatgrass dominated site as these communities provide little forage value and are generally incapable of sustaining rangeland health.

⁴ Laycock, W.A. 1991. Stable states and thresholds of range condition on North American rangelands: A viewpoint. *Journal of Range Management* 44(5):427-433

⁵ Briske, D.D., S.D. Fuhlendorf, and F.E. Smeins. 2005. State and Transition Models, Thresholds, and Rangeland Health: A Synthesis of Ecological Concepts and Perspectives. *Rangeland Ecology & Management* 58(1):1-10

⁶ Bestelmeyer, B.T., J.R. Brown, K.M. Havstad, R. Alexander, G. Chavez, and J.E. Herrick. 2003. Development and use of state and transition models for rangelands. *Journal of Range Management* 56(2):114-126

The vegetation community which occupies a given area depends on multiple factors, including climate within an area (refer to Section 5.3 for climate data), soil properties and slope, presence or absence of disturbance, and the level of disturbance. Individual plants compete for space, soil nutrients, water, and sunlight within an area. In order for vegetation to produce adequate food needed to complete its lifecycle and maintain reproduction, plants must have access to adequate sunlight, carbon dioxide, and nutrients including water in order to complete photosynthesis, to maintain growth and vigor. Because a diverse composition of vegetation species is needed in order to maintain healthy rangelands, and achieve rangeland health standards, there will always be competition between different vegetation species as well as intraspecific competition between individual plants within a site. In order for a species as well as individual plants to sustain within a population they must be able to adequately compete for necessary resources.

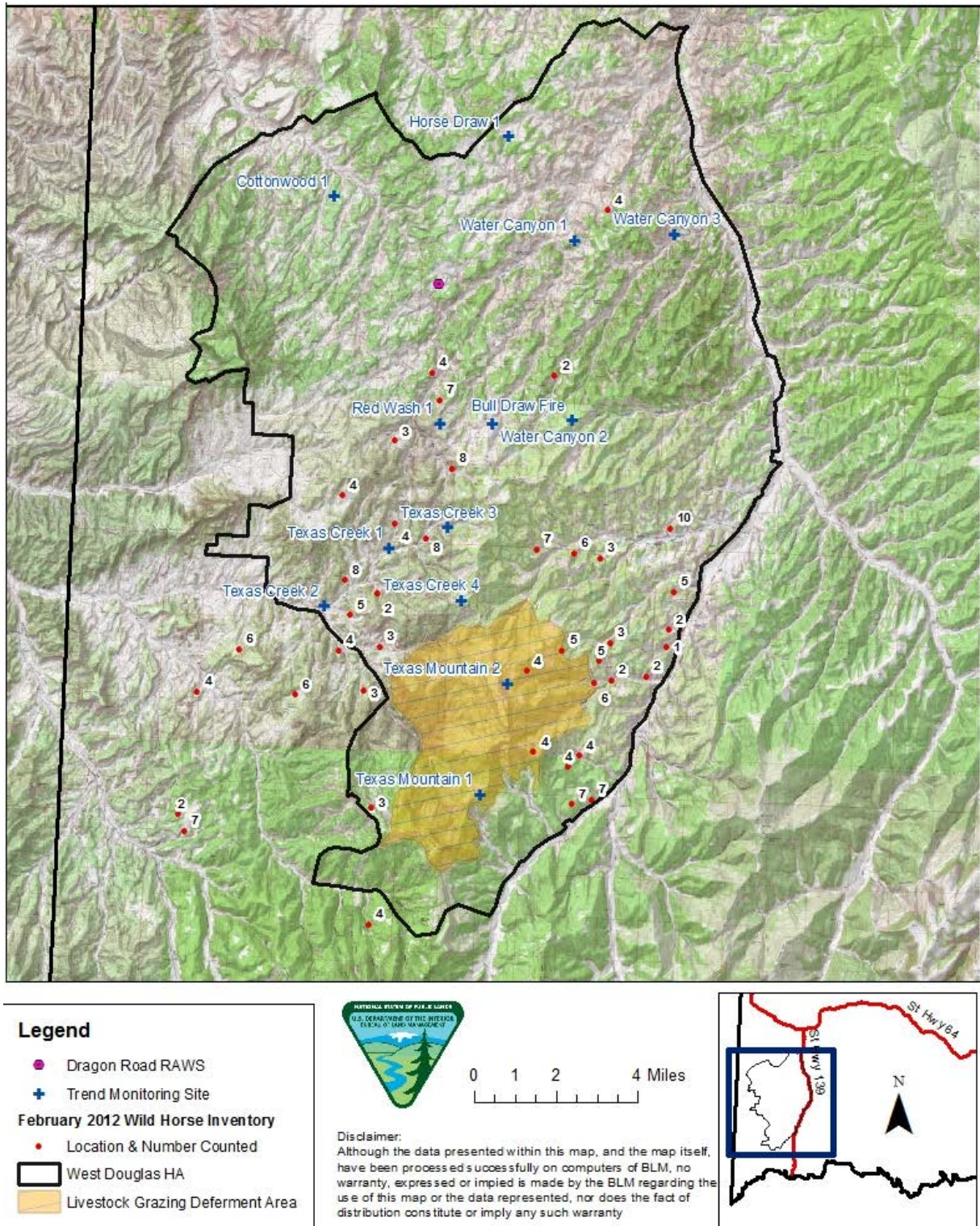
One factor which can influence a species ability to compete is disturbance. Following disturbances within a site or across a landscape, a species' ability to compete may be increased or decreased depending on the disturbance. Following a fire for example, grass species can initially gain an advantage due to the increased space and nutrients not used by shrubs, while shrubs may be at a disadvantage due to the reduction of mature plants which provide seed or the opposite would be true where shrubs have an advantage under the presence of grazing and absence of fire⁶. Herbivory is another disturbance which can greatly affect vegetation's ability to complete its life cycle. Season long grazing can reduce competitiveness of grass species, especially the most palatable species. Following repeated removal of photosynthetic material by herbivory, individual grass plants lose their ability to complete their growth cycle including reproduction especially during the spring growing season when plants are using food stored in the roots for growth. If they are unable to produce more food because the leaves are repeatedly removed by herbivory, the plant will likely die⁷. Following this disturbance, other species such as shrubs, and less palatable grasses gain an advantage because they are not as susceptible to the disturbance, and can complete their life cycle without the added pressure of outside influences⁶. Under continuous season long grazing, the palatable grass species susceptible to grazing begin to be replaced by less palatable species which are also likely less valuable forage to grazing animals including wild horses, livestock, and wildlife⁸. As the desirable plant community is replaced, rangelands become less capable of sustaining conditions necessary to achieve land health standards.

Long term trend transects established within the WDHA represent various key habitat or ecological sites within the HA which provide indications of the overall trend and condition of vegetation communities throughout the HA. Map 17 shows the location of these trend sites, the location and number of wild horses counted during the February 2012 wild horse inventory, and the area deferred from livestock grazing since 2005.

⁷ Burkhardt, J.W., and K. Sanders. 2012. Management of Growing-Season Grazing in the Sagebrush Steppe: A Science Review of Management Tools Appropriate for Managing Early-Growing Season Grazing. *Rangelands* 34(5):30-35

⁸ Milton, S.J., W.R.J. Dean, M.A. du Plessis, and W.R. Siegfried. 1994. A Conceptual Model of Arid Rangeland Degradation. *BioScience* 44(2):70-76

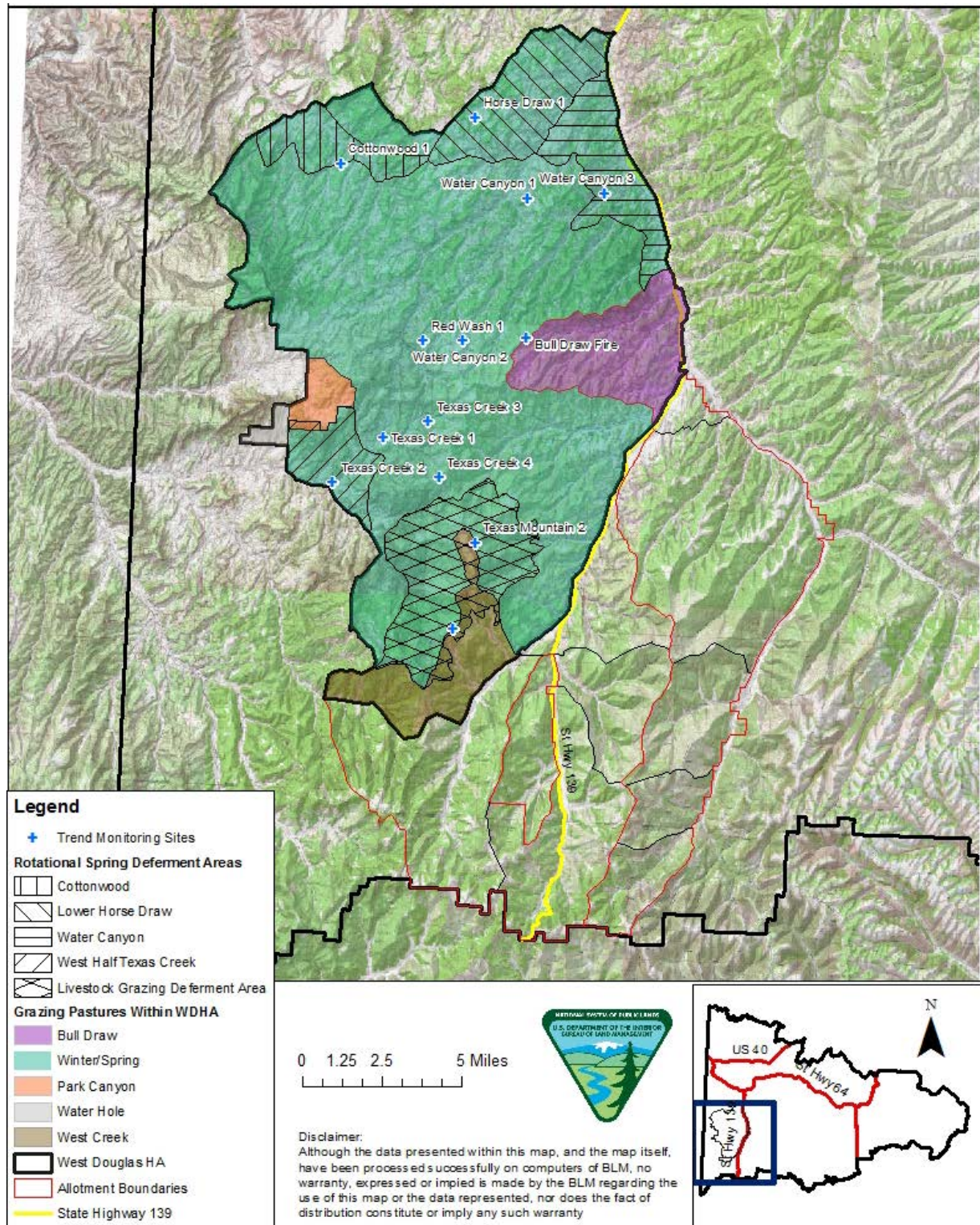
Map 17. Monitoring Sites and Livestock Grazing Deferment Area



Monitoring studies conducted in conjunction with the 1999 Allotment Management Plan (AMP) revision for the Twin Buttes Allotment indicated concerns with land health standards. A livestock grazing schedule and grazing management areas which receive rotational grazing deferment during the spring growing season were developed and incorporated into the AMP to address land health concerns. Map 18 shows pastures of the Twin Buttes Allotment within the WDHA, grazing management areas, the area deferred from livestock grazing, and the location of long term monitoring sites within the WDHA. The AMP describes minimum periods or levels of rest an area should receive during an average year to maintain land health, other factors such as drought, fire, or increased competition for forage from other grazing animals may increase the level of livestock grazing rest necessary to maintain healthy rangelands. Under the current AMP, the grazing management areas receive complete deferment of spring growing season use two out of four years and partial growing season deferment one out of four years. The goal of this rotational grazing system was to allow opportunity for regrowth and reproduction of forage species needed for improvement in cover and composition. The rotational deferment system has been fully implemented for permitted livestock.

The duration and intensity of livestock use is controlled by regular herding of livestock throughout the allotment particularly during the critical growing season, or by adjusting stocking rates in response to varying ecological conditions. The ability to implement controlled management of domestic livestock allows land managers to develop grazing systems which outline seasonal use or deferment on an annual basis to provide vegetation periods of rest from grazing to sustain or improve rangeland health. In order to maintain wild free roaming behavior, wild horses are not herded to different areas within the HA on an annual basis as is done with livestock resulting in continuous season long wild horse use. The inability to manage wild horse grazing in the same manner as domestic livestock by controlling the timing, duration, and intensity of use is contradictory to the grazing management system developed in the AMP and has reduced or eliminated the benefits of rotational grazing management. Continuous concentrated grazing throughout the growing season increases the likelihood of exceeding the maximum point of defoliation which continues to maintain or improve rangeland health. If continued without action to reduce utilization to proper levels necessary to sustain rangeland health repeated overutilization of forage results in deteriorated rangelands.

Map 18. Grazing Pastures and Rotational Spring Deferment Areas Within West Douglas Herd Area



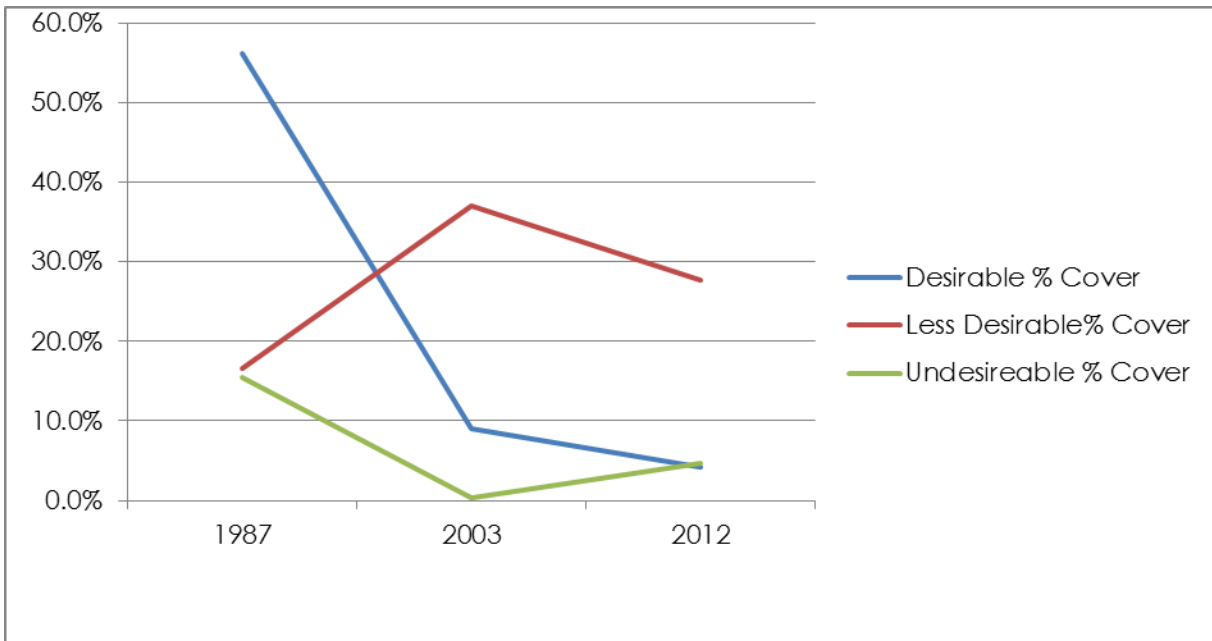
5.4.1 Horse Draw Trend Plot

The Horse Draw trend plot (Table 8) is located in the Northern portion of the HA within the Lower Horse Draw Grazing Management Area (GMA). Needle and thread grass, an important bunchgrass species, shows a large decrease from 1987 (from 43.9 percent to 3.8 percent) while Wyoming big sagebrush and green rabbitbrush have increased, this is indicative of a downward trend. Although needle and thread shows an increase in both canopy cover and frequency since 2003, this species has likely remained static since 2003. The apparent increase in canopy cover is due to the loss of western wheatgrass and Colorado wildrye and the decrease of other desirable species which contribute to the overall vegetation community and canopy cover within the site. The data collected in 2012 is an indicator of the vulnerability of this site to loss of desirable species, which provide greater forage value and soil cover as well as contribute to the maintenance of land health standards.

Table 8. Horse Draw Trend Plot (06346-1) Data from 1987, 2003, and 2012

YEAR	1987		2003		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Colorado Wildrye	10.0	6.1	20.0	2.4	0.0	0.0
Needle and Thread	90.0	43.9	25.0	3.0	62.5	3.8
Western Wheatgrass	0.0	0.0	35.0	2.8	0.0	0.0
Winterfat	35.0	6.3	10.0	0.9	2.5	0.4
Desirable Species Percent Cover		56.3		9.0		4.1
Sandberg Bluegrass	40.0	5.3	80.0	8.8	57.5	3.0
Big Sagebrush	15.0	7.5	45.0	28.4	70.0	24.8
Shadscale	10.0	3.9	0.0	0.0	0.0	0.0
Less Desirable Species Percent Cover		16.6		37.1		27.8
Cheatgrass	50.0	15.5	15.0	0.4	50.0	2.5
Pricklypear	0.0	0.0	0.0	0.0	2.5	0.9
Green Rabbitbrush	0.0	0.0	0.0	0.0	27.5	1.3
Undesirable Species Percent Cover		15.5		0.4		4.8

Figure 3. Change in Desirable Cover at the Horse Draw Site from 1987-2012



5.4.2 Cottonwood 1 Trend Plot

The Cottonwood 1 trend plot (Table 9) is located in a key area in the northern portion of the HA in the Cottonwood Creek area. This area is within the WDHA however during population inventories wild horses have not historically been documented in this area since 1994. This trend plot is located within the Cottonwood GMA identified for rotational spring grazing deferment in the 1999 Twin Buttes AMP. The increase in frequency and nearly static canopy cover of needle and thread from 2003, suggests that the grazing program outlined in the AMP as well as the absence of wild horses is allowing the condition of this area to improve, by allowing defoliated plants opportunity to regrow and complete growth cycles resulting in higher vigor and reproductive capability. Although figure 4 shows a nearly 5% decline in desirable species since 2003, the increase in frequency of needle and thread is favorable for progression toward a vegetation community comparable to that observed in 1987. Photos 5-7 show the vegetation changes between 1987 and 2012, and the increase of needle and thread from 2003 to 2012.

Table 9. Cottonwood 1 Trend Plot (06346-2) Data from 1987, 2003, and 2012

YEAR	1987		2003		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Needle & Thread	55.00	19.75	60.00	14.00	67.50	16.56
Indian Ricegrass	15.00	3.38	0.00	0.00	0.00	0.00
Colorado Wildrye	10.00	3.88	0.00	0.00	0.00	0.00
Sand Dropseed	0.00	0.00	40.00	4.00	0.00	0.00
Western Wheatgrass	70.00	28.38	50.00	5.50	30.00	2.88
Winterfat	20.00	5.38	15.00	1.00	5.00	0.13
Desirable Species Percent Cover		60.75		24.50		19.56
Sandberg Bluegrass	5.00	0.13	5.00	0.13	0.00	0.00
Big Sagebrush	10.00	2.00	10.00	2.00	25.00	7.19
Less Desirable Species Percent Cover		2.13		2.13		7.19
Cheatgrass	40.00	9.88	20.00	5.88	37.50	1.88
Green Rabbitbrush	0.00	0.00	0.00	0.00	5.00	0.13
Undesirable Species Percent Cover		9.88		5.88		2.00

Figure 4. Change in Desirable Cover at the Cottonwood 1 Site from 1987-2012

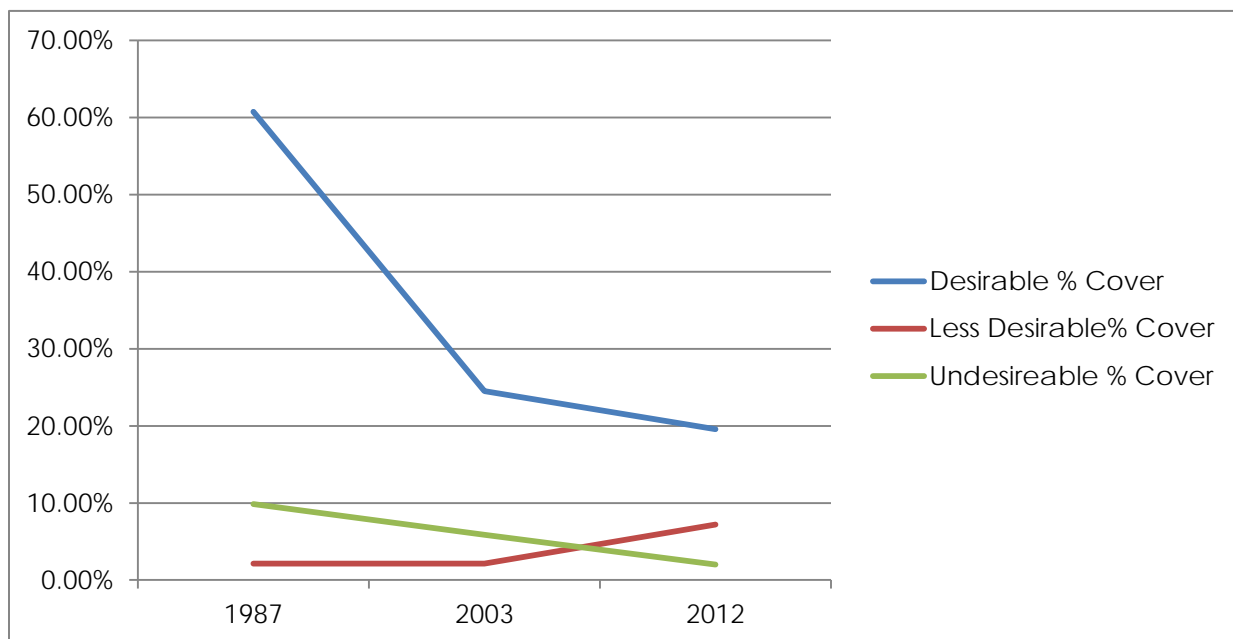


Photo 5



Cottonwood 1 Trend Plot Site. Photo taken 8/6/1987.

Photo 6



Cottonwood 1 Trend Plot Site. Photo taken 8/18/2003.

Photo 7



Cottonwood 1 Trend Plot Site. Photo taken 8/21/2012.

5.4.3 Texas Creek 1 Trend Plot

The Texas Creek 1 trend plot site (Table 10) is located within the North Fork of Texas Creek Drainage. During population inventories multiple bands of wild horses are consistently observed in this area. The large decrease in western wheatgrass and absence of perennial bunchgrass species show a downward trend at this site. The area has likely crossed an ecological threshold that cannot be reversed without intensive human intervention such as seeding and reduction or exclusion of grazing to allow desirable species to reestablish. Long term trend data and photographs indicate this area is not meeting land health standards. Photos 8-11 show the transition from a productive vegetation community to a degraded site with little vegetation and abundant bare ground between 1987 and 2012.

Table 10. Texas Creek 1 Trend Plot (06346-6) Data from 1995, 1999, and 2012

YEAR	1995		1999		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Western Wheatgrass	95.00	24.00	100.00	60.13	92.50	5.44
Winterfat	40.00	3.50	35.00	2.13	32.50	2.38
Desirable Species Percent Cover		27.50		62.25		7.81
Sandberg Bluegrass	50.00	3.13	30.00	1.38	15.00	0.38
Less Desirable Species Percent Cover		3.13		1.38		0.38
Green Rabbitbrush	0.00	0.00	0.00	0.00	7.50	0.19
Greasewood	5.00	4.88	5.00	3.13	5.00	1.31
Undesirable Species Percent Cover		4.88		3.13		1.50

Figure 5. Change in Desirable Cover at the Texas Creek 1 Site from 1995-2012

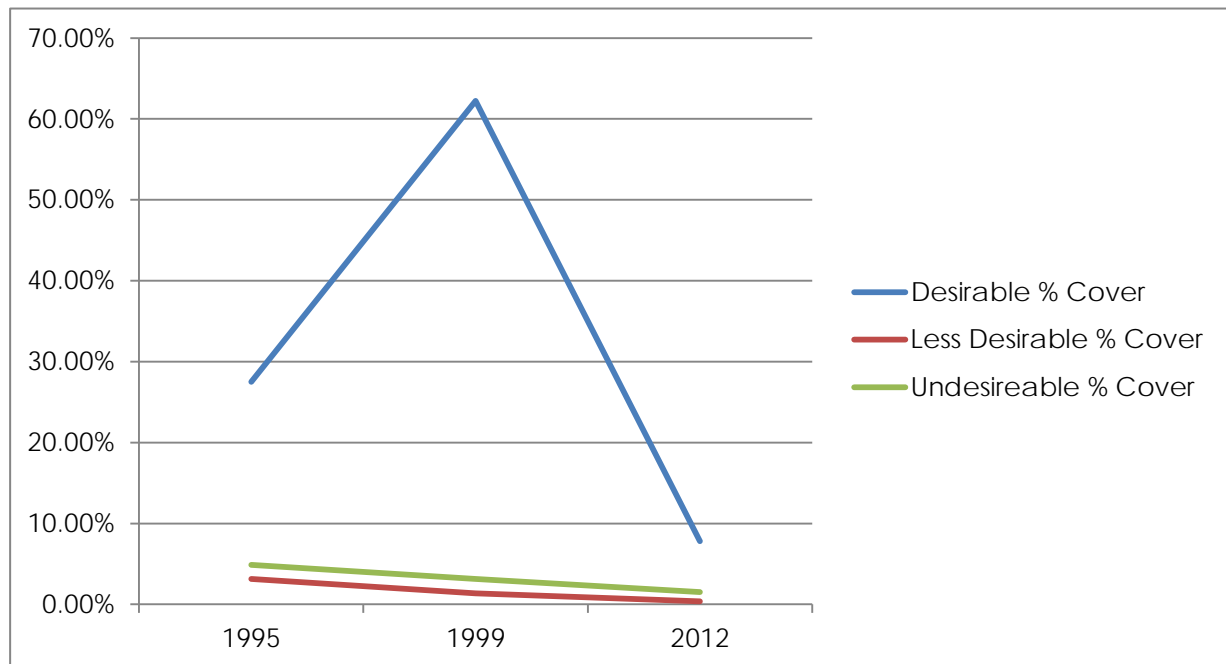


Photo 8



Texas Creek 1 Trend Plot Site. Photo taken 8/10/1987.

Photo 9



Texas Creek 1 Trend Plot Site. Photo taken 9/28/1995.

Photo 10



Texas Creek 1 Trend Plot Site. Photo taken 8/27/1999.

Photo 11



Texas Creek 1 Trend Plot Site. Photo taken 8/16/2012.

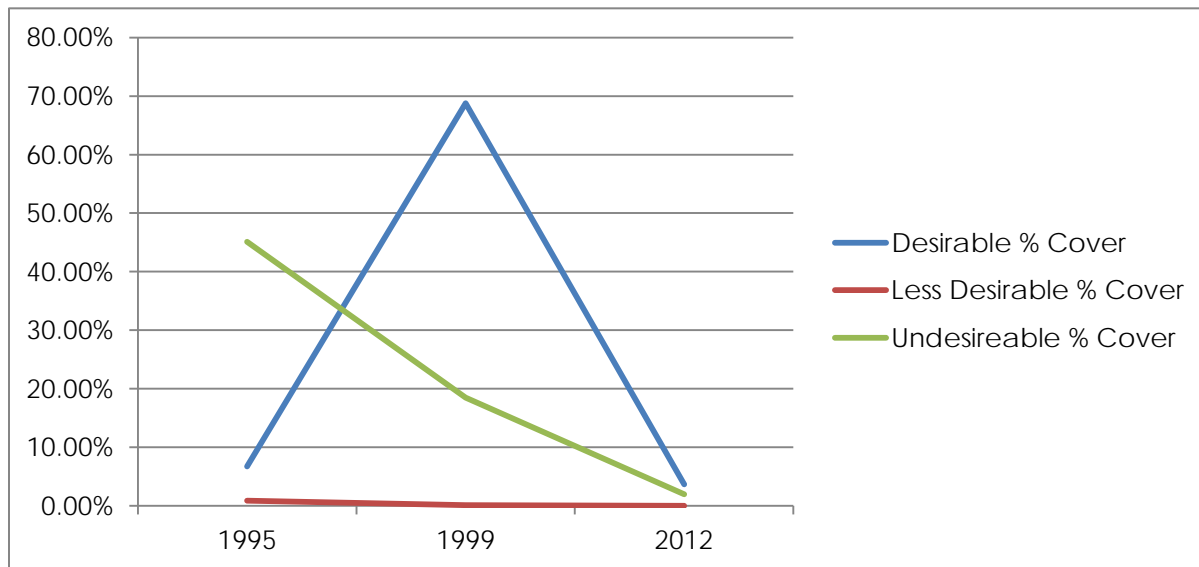
5.4.4 Texas Creek 2 Trend Plot

The Texas Creek 2 trend plot transect (Table 11) is located at the confluence of the north and south forks of Texas Creek near the HA boundary. During the 2012 population inventory 5 bands totaling 22 wild horses were documented within 1.75 miles of this site. The original transect has been disturbed by pipeline construction, a new transect was established in the opposite direction of the previous transect due to the disturbance. The Texas Creek 2 trend site is located within the West Half Texas Creek GMA identified in the 1999 Twin Buttes AMP to receive rotational spring deferment of livestock grazing. However, with the inability to manage wild horses in this area the range continues to show a downward trend due to the continual growing season use by wild horses. The loss of galleta and western wheatgrass is a downward trend however the sharp decrease of cheatgrass is an improvement in condition. Although it is an undesirable species, cheatgrass is palatable for a short period in the spring; the decline in cheatgrass is likely due to elevated utilization of this species due to the loss of other desirable species from this site.

Table 11. Texas Creek 2 Trend Plot (06346-7) Data from 1995, 1999, and 2012

YEAR	1995		1999		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Western Wheatgrass	50.00	5.00	35.00	15.13	0.00	0.00
Galleta	20.00	1.75	0.00	0.00	0.00	0.00
Sand Dropseed	0.00	0.00	80.00	45.88	0.00	0.00
Blue Grama	0.00	0.00	45.00	7.75	47.50	3.69
Desirable Species Percent Cover		6.75		68.75		3.69
Sandberg Bluegrass	10.00	0.88	5.00	0.13	0.00	0.00
Less Desirable Species Percent Cover		0.88		0.13		0.00
Cheatgrass	95.00	45.13	70.00	18.50	15.00	0.38
Greasewood	0.00	0.00	0.00	0.00	5.0	1.6
Undesirable Species Percent Cover		45.13		18.50		2.00

Figure 6. Change in Desirable Cover at the Texas Creek 2 Site from 1995-2012



5.4.5 Texas Creek 3 Trend Plot

The Texas Creek 3 trend site (Table 12) is located near the head of the North Fork of Texas Creek. The decline in western wheatgrass and sand dropseed suggest a downward trend. Photographs taken in 1999 compared to photographs from 2012 show that canopy cover of perennial grass species, particularly the warm season sand dropseed, has decreased sharply; this site has been degraded. Comparison of Photos 12-15 shows a large increase in the amount of bareground vulnerable to erosion. Vegetation trend data and photographs indicate that this area is not meeting land health standards. During the 2012 population inventory, 4 bands totaling 27 wild horses were documented within 2.25 miles of this site.

Table 12. Texas Creek 3 Trent Plot (06346-8) Data from 1987, 1995, and 2012

YEAR	1987		1995		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Western Wheatgrass	100.00	68.75	100.00	45.88	75.00	4.38
Sand Dropseed	40.00	6.38	60.00	6.38	60.00	4.63
Desirable Species Percent Cover		75.13		52.25		9.00
Sandberg Bluegrass	0.00	0.00	0.00	0.00	2.50	0.06
Big sagebrush	0.00	0.00	0.00	0.00	2.50	0.38
Less Desirable Species Percent Cover		0.00		0.00		0.44
Bare Ground	100.00	18.63	100.00	49.88	100.00	64.19
Litter	100.00	59.50	100.00	29.75	100.00	25.69

Figure 7. Change in Desirable Cover at the Texas Creek 3 Site from 1987-2012

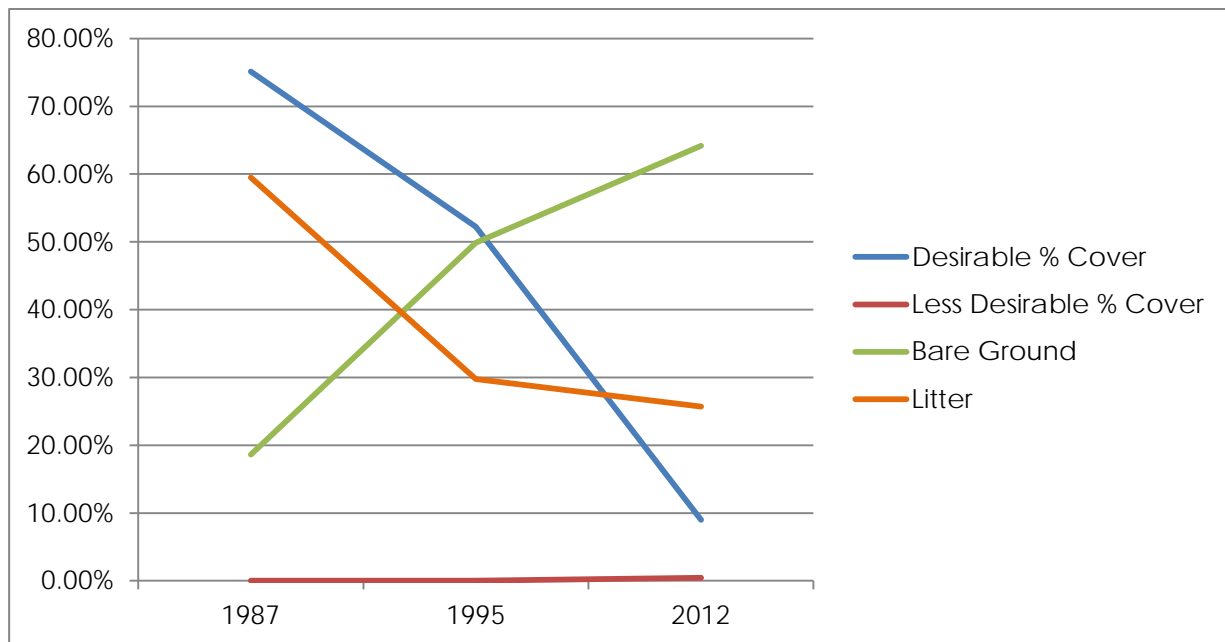


Photo 12



Texas Creek 3 Trend Plot Site. Photo taken 8/10/1987.

Photo 13



Texas Creek 3 Trend Plot Site. Photo taken 9/28/1995.

Photo 14



Texas Creek 3 Trend Plot Site. Photo taken 8/27/1999.

Photo 15



Texas Creek 3 Trend Plot Site. Photo taken 8/16/2012.

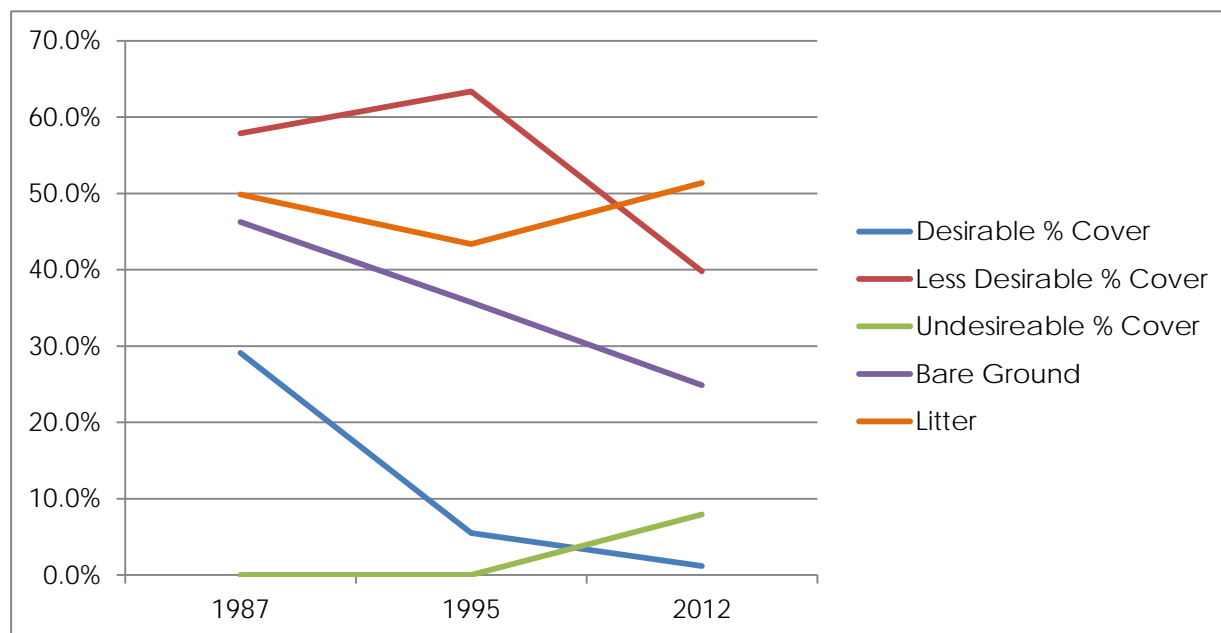
5.4.6 Texas Creek 4 Trend Plot

The Texas Creek 4 site (Table 13) is located approximately 2 miles north west of Texas Mountain off of BLM Road 1064. The monitoring results show this site has transitioned to a vegetation community dominated by less desirable prairie junegrass a drought and grazing tolerant species adapted to the ecological site covered by this transect and Wyoming big sagebrush. The decrease in canopy cover of winterfat and absence of bunchgrass species indicate forage production within this site has declined.

Table 13. Texas Creek 4 Trend Plot (06346-9) Data from 1987, 1995, and 2012

YEAR	1987		1995		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Indian Ricegrass	5.00	0.13	0.00	0.00	0.00	0.00
Western wheatgrass	85.00	20.50	10.00	0.25	7.50	0.50
Winterfat	30.00	8.50	20.00	5.25	15.0	0.7
Desirable Species Percent Cover		29.1		5.5		1.2
Sandberg bluegrass	15.0	1.0	5.0	0.8	2.5	0.1
Prairie junegrass	50.0	16.3	70.0	23.8	92.5	11.9
Big sagebrush	65.0	40.6	85.0	38.9	77.5	27.9
Less Desirable Species Percent Cover		57.9		63.4		39.8
Broom snakeweed	0.00	0.00	0.00	0.00	72.5	7.9
Undesirable Species Percent Cover		0.00		0.00		7.94
Bare Ground	95.0	46.3	100.0	35.8	100.0	24.9
Litter	95.0	49.9	100.0	43.4	100.0	51.4

Figure 8. Change in Desirable Cover at the Texas Creek 4 Site from 1987-2012



5.4.7 Red Wash 1 Trend Plot

The Red Wash 1 trend site (Table 14) is located on a bench between the head of Water Canyon and Red Wash; wild horses have historically been inventoried in this area during population surveys. The loss of Indian ricegrass and needle and thread (two important bunchgrass forage species) suggests a downward trend from mixed grass/sagebrush site to a site dominated primarily by western wheatgrass and grazing tolerant species such as sandberg bluegrass and prairie junegrass. The loss of the large bunchgrass species from the site results in a decline of available forage. Currently this site is likely meeting land health standards however, under continued or increased use levels, the condition of this area is expected to continue to decline over time. Photos 16-18 show the decrease in cover of desirable species from 1987-2012.

Table 14. Red Wash 1 Trend Plot (06346-13) Data from 1987, 2003, and 2012

YEAR	1987		2003		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Needle & thread	5.00	0.75	5.00	0.13	0.00	0.00
Indian ricegrass	10.00	1.50	0.00	0.00	0.00	0.00
Western wheatgrass	35.00	13.38	70.00	11.25	80.00	6.00
Winterfat	40.00	14.13	30.00	7.25	0.00	0.00
Desirable Species Percent Cover		29.75		18.63		6.00
Prairie junegrass	40.00	7.63	25.00	4.25	0.00	0.00
Sandberg bluegrass	60.00	9.25	80.00	12.75	65.00	5.69
Big sagebrush	75.00	50.00	50.00	39.13	70.00	22.8
Fourwing saltbush	0.00	0.00	0.00	0.00	12.5	0.6
Less Desirable Species Percent Cover		66.88		56.13		29.13
Cheatgrass	45.00	14.25	40.00	10.50	25.00	0.63
Broom snakeweed	0.00	0.00	0.00	0.00	7.5	0.5
Undesirable Species Percent Cover		14.25		10.50		1.13

Figure 9. Change in Desirable Cover at the Red Wash 1 Site from 1987-2012

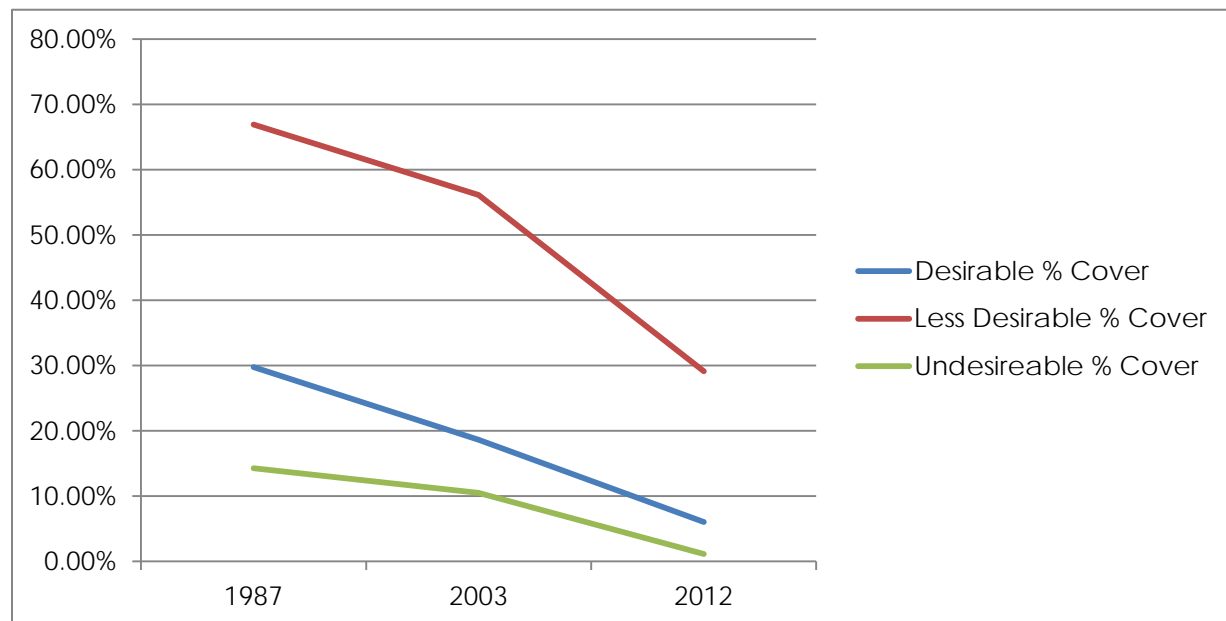


Photo 16



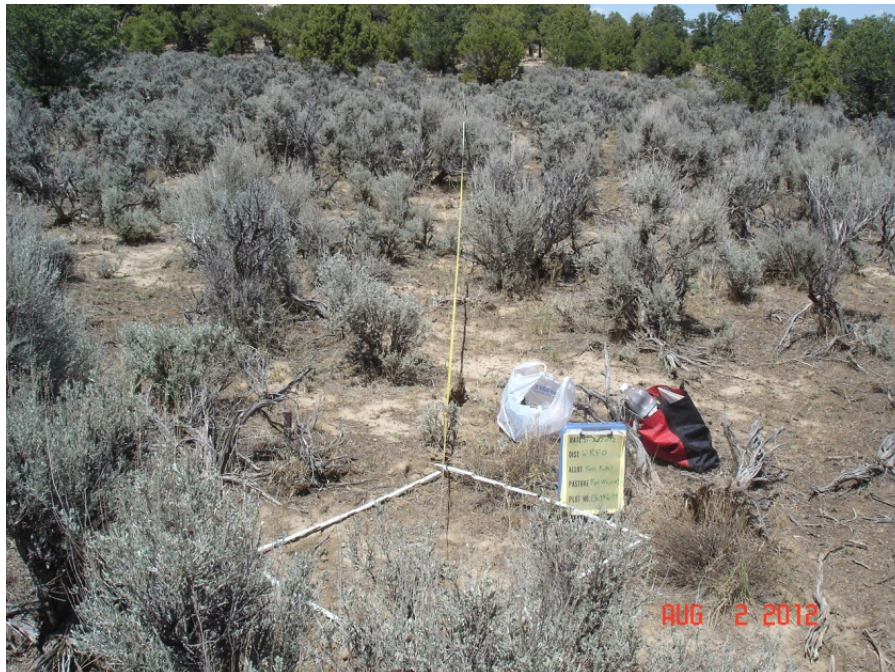
Red Wash 1 Trend Plot Site. Photo taken 8/6/1987.

Photo 17



Red Wash 1 Trend Plot Site. Photo taken 8/18/2003.

Photo 18



Red Wash 1 Trend Plot Site. Photo taken 8/2/2012.

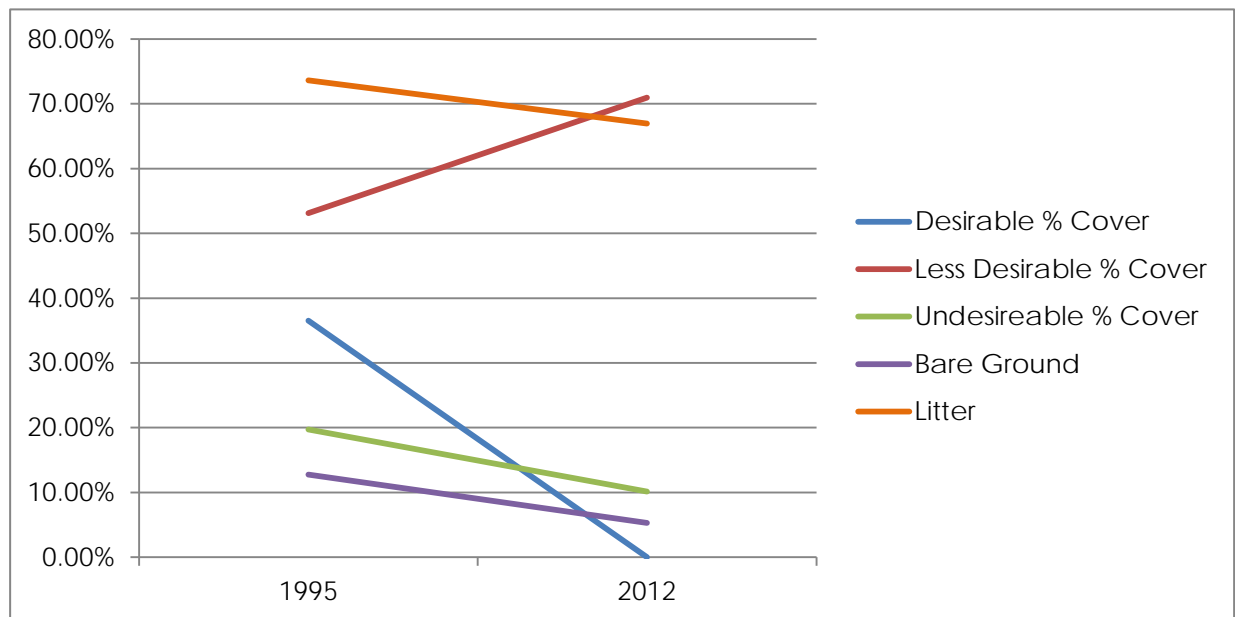
5.4.8 Texas Mountain 1 Trend Plot

The Texas Mountain 1 site (Table 15) is located south of Texas Mountain along BLM Road 1063. This area is historically used by wild horses during the summer and fall months. This site only had one year of comparable Daubenmire data that was collected in 1995. The loss of western wheatgrass and the increase of the grazing tolerant prairie junegrass shows a downward trend for this site. During collection of data in 2012 it was noted that this area had received heavy wild horse use; forage utilization was estimated to be 75 percent. Complete livestock grazing deferment in this area has occurred since 2005. This site is located within the limited summer range of the WDHA and is indicative that deferment of livestock grazing alone has not been sufficient to avoid a decline in rangeland health to the point that land health standards are not being met.

Table 15. Texas Mountain 1 Trend Plot (06346-14) Data from 1995 and 2012

YEAR	1995		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Western wheatgrass	65.00	29.50	0.00	0.00
Elk Sedge	15.00	7.00	0.00	0.00
Desirable Species Percent Cover		36.50		0.00
Big sagebrush	60.00	25.75	80.0	27.1
Serviceberry	50.00	27.38	20.0	4.1
Prairie junegrass	0.00	0.00	100.00	32.13
Snowberry	0.00	0.00	42.5	7.6
Less Desirable Species Percent Cover		53.13		70.94
Rubber Rabbitbrush	55.00	19.75	85.0	10.1
Undesirable Species Percent Cover		19.75		10.13
Bare Ground	100.00	12.75	100.00	5.32
Litter	100.00	73.63	100.00	66.92

Figure 10. Change in Desirable Cover at the Texas Mountain 1 Site from 1995-2012.



5.4.9 Texas Mountain 2 Trend Plot

The Texas Mountain 2 site (Table 16) is located on a bench at the base of the east side of Texas Mountain. Wild horses have historically concentrated in this area during late spring, summer, and fall and are frequently observed in the area. This site has undergone a downward trend, with the exception of sandberg bluegrass which is a species that is highly tolerant to heavy grazing. The loss or decline of grass species is a consequence of continuous overutilization that occurs in this area, the forage utilization Photos 1-4 were taken approximately 300 yards southeast of this site. Livestock grazing has been deferred from this area since 2005 in an effort to prevent degradation. Photos 19-22 show a transition from a mixed grass/sagebrush community to a shrub dominated community with little grass understory.

Table 16. Texas Mountain 2 Trend Plot (06346-15) Data from 1987, 1995, and 2012

YEAR	1987		1995		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Needle & thread	5.00	0.75	0.00	0.00	0.00	0.00
Western wheatgrass	75.00	19.75	100.00	26.38	2.50	0.06
Elk sedge	40.00	8.75	40.00	12.88	0.00	0.00
Desirable Species Percent Cover		29.25		39.25		0.06
Prairie junegrass	65.00	26.75	5.00	0.13	0.00	0.00
Sandberg bluegrass	0.00	0.00	25.00	2.50	65.00	6.00
Big sagebrush	60.00	25.25	60.00	25.25	47.5	13.7
Rubber rabbitbrush	10.00	3.75	5.00	0.75	0.00	0.00
Serviceberry	40.00	22.25	40.00	26.50	57.5	17.5
Less Desirable Species Percent Cover		78.00		55.13		37.19
Broom snakeweed	0.00	0.00	0.00	0.00	10.0	0.3
Pinyon	0.00	0.00	5.00	4.25	7.5	4.1
Juniper	0.00	0.00	0.00	0.00	2.5	0.1
Undesirable Species Percent Cover		0.00		4.25		4.38
Bare Ground	100.00	14.50	100.00	25.75	97.50	20.75
Litter	100.00	74.00	100.00	59.50	100.00	60.75

Figure 11. Change in Desirable Cover at the Texas Mountain 2 Site from 1987-2012

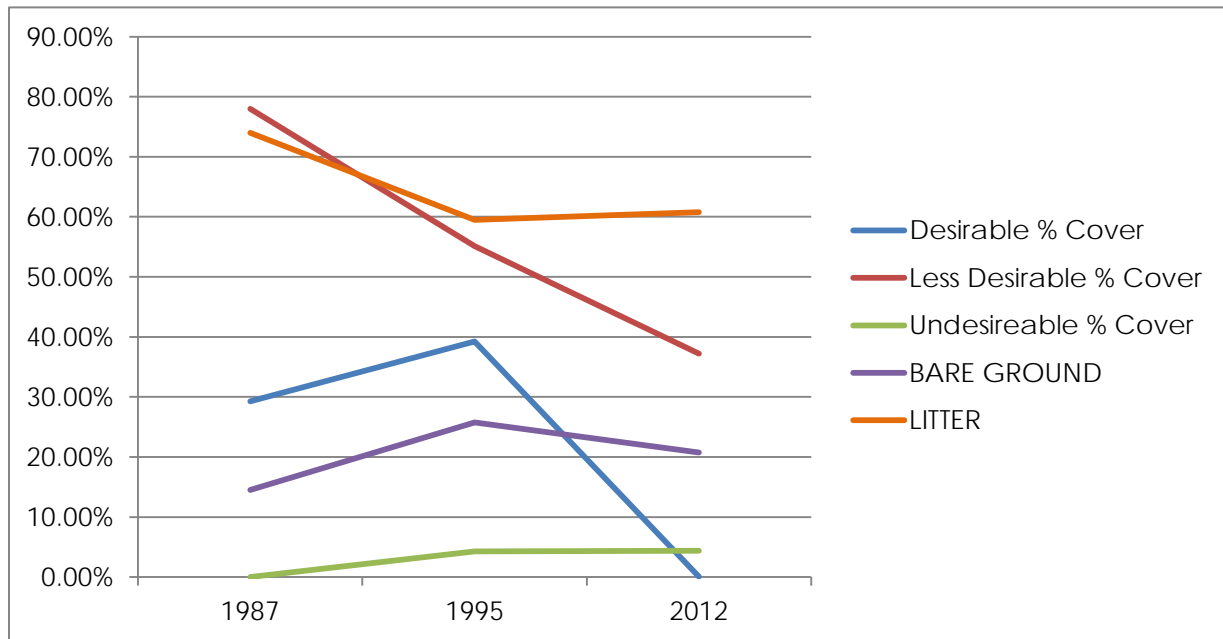


Photo 19



Texas Mountain 2 Trend Plot Site. Photo taken 8/5/1987.

Photo 20



Texas Mountain 2 Trend Plot Site. Photo taken 10/17/1995.

Photo 21



Texas Mountain 2 Trend Plot Site. Photo taken 8/30/1999.

Photo 22



Texas Mountain 2 Trend Plot Site. Photo taken 9/13/2012.

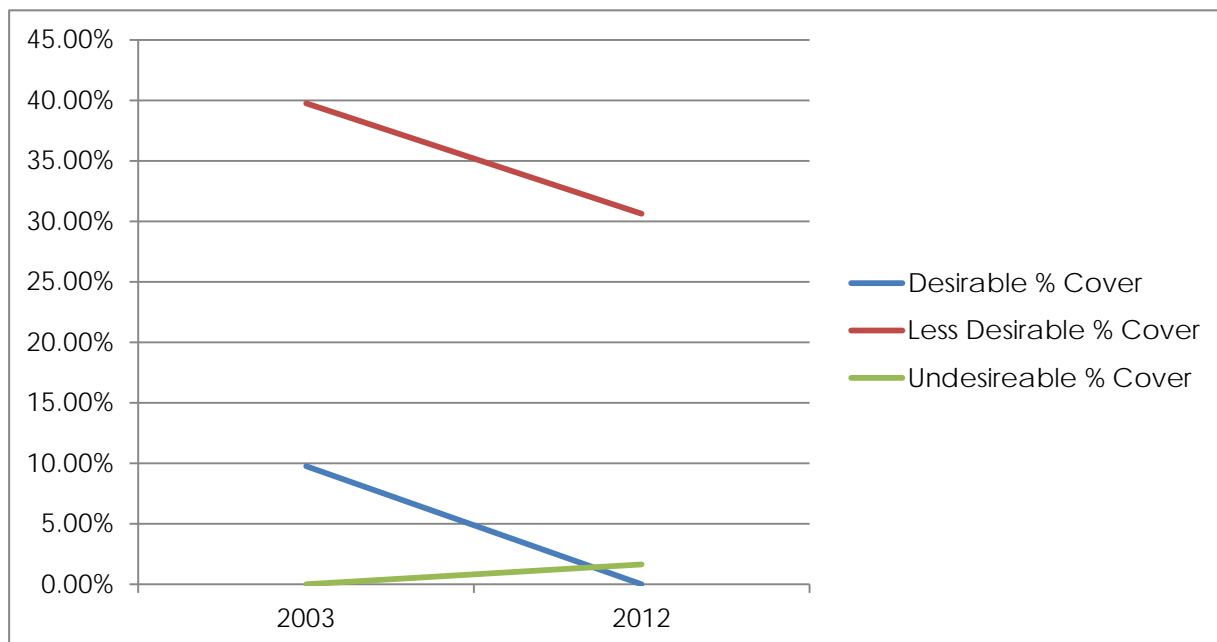
5.4.10 Water Canyon 1 Trend Plot

The Water Canyon 1 site (Table 17) is located on a bench near the confluence of Big Horse Draw and Water Canyon. Wild horses have historically been inventoried in this area during population surveys. This site has undergone a downward trend with the loss of western wheatgrass, needle and thread, and Colorado wild rye. As shown in the data, the increase in canopy cover composed of sandberg bluegrass suggests this site has transitioned to more grazing tolerant vegetation community which provides less forage and reduced ground cover than the desired vegetation community.

Table 17. Water Canyon 1 Trend Plot (06346-23) Data from 2003 and 2012

YEAR	2003		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Needle & thread	45.00	6.00	0.00	0.00
Colorado wildrye	30.00	2.63	0.00	0.00
Western wheatgrass	20.00	1.13	0.00	0.00
Desirable Species Percent Cover		9.75		0.00
Sandberg bluegrass	55.00	3.88	75.00	6.19
Big sagebrush	75.00	30.88	77.5	24.4
Shadscale	10.00	5.00	0.00	0.00
Less Desirable Species Percent Cover		39.75		30.63
Cheatgrass	0.00	0.00	12.50	0.31
Broom snakeweed	0.00	0.00	27.5	1.3
Undesirable Species Percent Cover		0.00		1.63

Figure 12. Change in Desirable Cover at the Water Canyon 1 Site from 2003 to 2012



5.4.11 Water Canyon 2 Trend Plot

The Water Canyon 2 site (Table 18) is located at the head of Water Canyon and during the last population inventory, wild horses were documented in this area. This site has experienced a downward trend in condition with the loss of Indian ricegrass, needle and thread grass, and western wheatgrass. This site has also transitioned to a community dominated by sandberg bluegrass and prairie junegrass, two grazing tolerant species. Photos 23-25 show the loss of bunchgrass species from the site.

Table 18. Water Canyon 2 Trend Plot (06346-17) Data from 1987, 2003, and 2012

YEAR	1987		2003		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Needle & thread	25.00	6.00	55.00	8.50	0.00	0.00
Indian ricegrass	5.00	0.75	5.00	0.13	0.00	0.00
Western wheatgrass	40.00	10.00	30.00	3.13	0.00	0.00
Desirable Species Percent Cover		16.75		11.75		0.00
Sandberg bluegrass	50.00	3.75	45.00	2.38	45.00	3.31
Prairie junegrass	65.00	24.88	40.00	4.00	72.50	3.38
Big sagebrush	85.00	36.00	45.00	16.63	87.5	22.0
Fourwing saltbush	0.00	0.00	0.00	0.00	2.5	0.1
Less Desirable Species Percent Cover		64.63		23.00		28.75
Cheatgrass	5.00	0.75	5.00	0.75	5.00	0.13
Broom snakeweed	0.00	0.00	25.00	9.50	32.5	1.8
Prickly Pear	0.00	0.00	10.00	0.88	5.0	0.1
Pinyon	0.00	0.00	0.00	0.00	5.0	1.9
Undesirable Species Percent Cover		0.75		11.13		3.94

Figure 13. Change in Desirable Cover at the Water Canyon 2 Site from 1987-2012

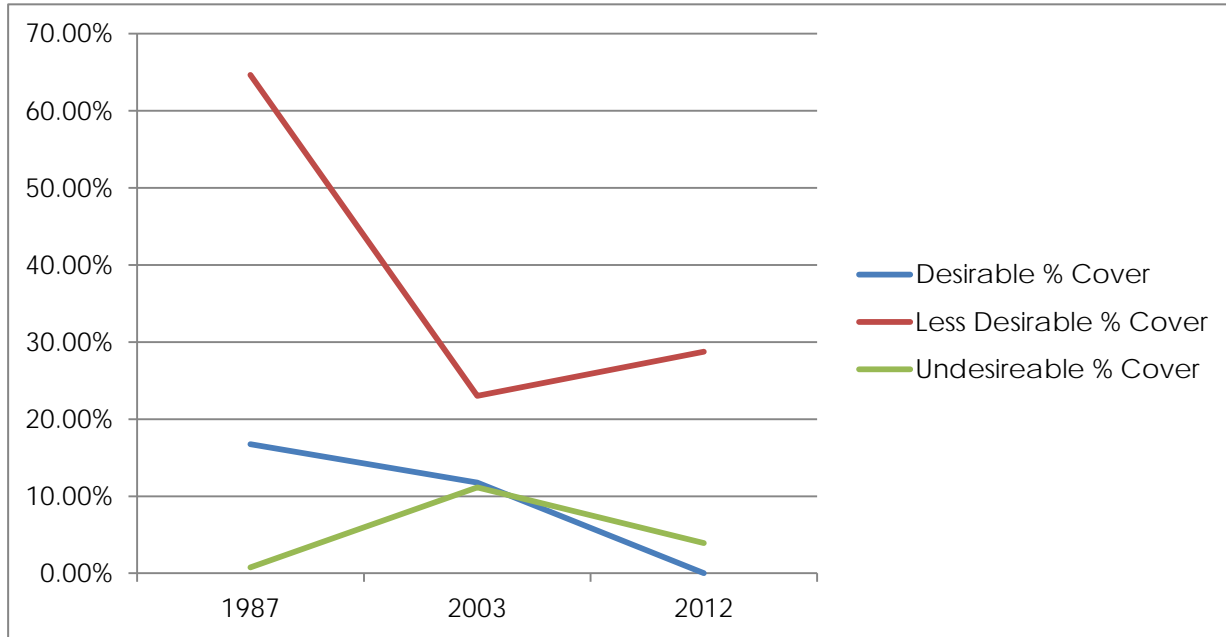


Photo 23



Water Canyon 2 Trend Plot Site. Photo taken 8/6/1987.

Photo 24



Water Canyon 2 Trend Plot Site. Photo taken 8/19/2003.

Photo 25



Water Canyon 2 Trend Plot Site. Photo taken 8/2/2012. (Note: this photo was taken from a different angle than the other photos of the Water Canyon 2 site.)

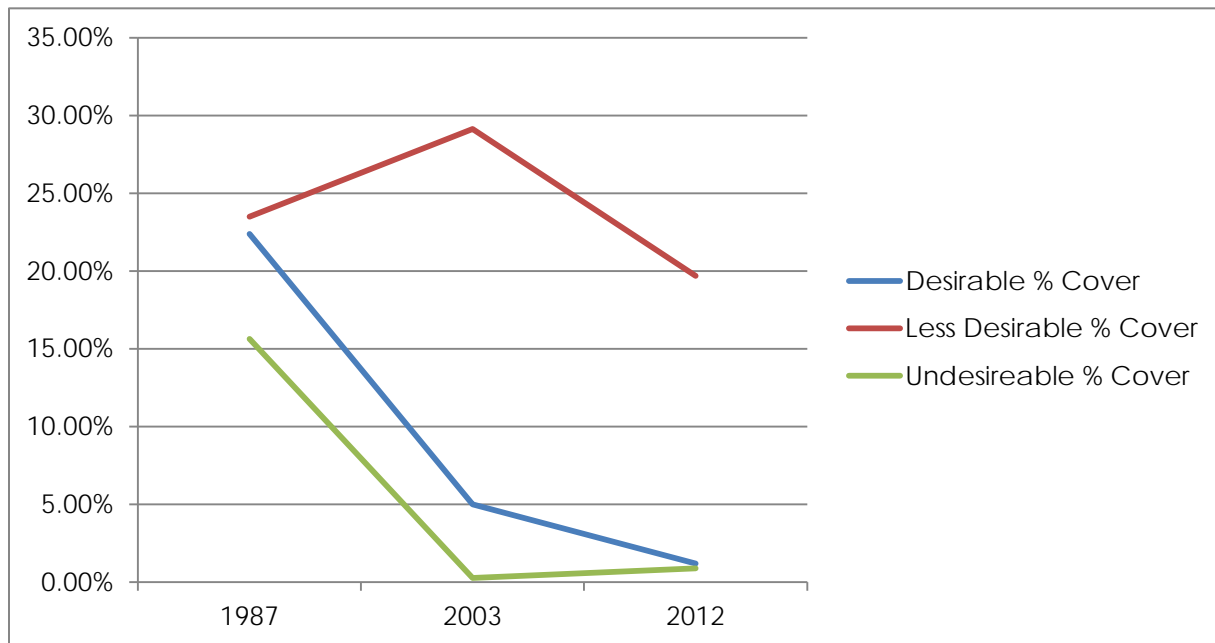
5.4.12 Water Canyon 3 Trend Plot

The Water Canyon 3 site (Table 19) is located in West Fourmile Draw approximately one mile west of Douglas Creek. Like other sites this area shows a downward trend in condition due to the loss of important bunchgrass species, the increase of grazing tolerant forage species, and the increase of Wyoming big sagebrush. The decline in robust bunchgrass species indicates a reduction in available forage within this site.

Table 19. Water Canyon 3 Trend Plot (06346-18) Data from 1987, 2003, and 2012

YEAR	1987		2003		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Needle & thread	45.00	4.13	20.00	2.38	0.00	0.00
Galleta	40.00	12.38	15.00	1.00	10.00	1.19
Colorado wildrye	5.00	0.75	15.00	1.63	0.00	0.00
Western wheatgrass	15.00	5.13	0.00	0.00	0.00	0.00
Desirable Species Percent Cover		22.38		5.00		1.19
Sandberg bluegrass	25.00	1.25	30.00	2.63	10.00	0.56
Prairie junegrass	0.00	0.00	0.00	0.00	15.00	1.00
Big sagebrush	55.00	21.50	40.00	24.63	55.0	18.1
Shadscale	5.00	0.75	5.00	1.88	0.00	0.00
Less Desirable Species Percent Cover		23.50		29.13		19.69
Broom snakeweed	45.00	11.75	0.00	0.00	10.0	0.6
Cheatgrass	15.00	3.88	10.00	0.25	12.50	0.31
Undesirable Species Percent Cover		15.63		0.25		0.88

Figure 14. Change in Desirable Cover at the Water Canyon 3 Site from 1987-2012



5.4.13 Bull Draw Fire Trend Plot

The Bull Draw Fire site (Table 20) was established within the Bull Draw fire scar. The trend of this site is typical of a burned area with early dominance by seeded grass species and the eventual increase of rabbitbrush. Although species diversity and cover has increased since 1995, the diversity has decreased since 2003 with the loss of orchard grass and Indian ricegrass. Slight utilization was noted in the area. In reviewing the data and Photos 26-28 it appears the burned area is continuing to stabilize.

Table 20. Bull Draw Fire Trend Plot (06346-24) Data from 1995, 2003, and 2012

YEAR	1995		2003		2012	
Species	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover	Percent Frequency	Percent Canopy Cover
Pubescent wheatgrass	70.00	15.63	75.00	28.13	32.50	7.69
Orchardgrass	55.00	11.00	5.00	0.13	0.00	0.00
Western wheatgrass	0.00	0.00	5.00	0.13	65.00	10.75
Indian ricegrass	0.00	0.00	5.00	0.75	0.00	0.00
Desirable Species Percent Cover		26.63		29.13		18.44
Sandberg bluegrass	0.00	0.00	5.00	0.75	2.50	0.38
Less Desirable Species Percent Cover		0.00		0.75		0.38
Cheatgrass	0.00	0.00	30.00	5.50	0.00	0.00
Rubber rabbitbrush	0.00	0.00	0.00	0.00	10.00	3.50
Broom snakeweed	0.00	0.00	0.00	0.00	5.00	0.44
Japanese brome	0.00	0.00	5.00	0.13	0.00	0.00
Undesirable Species Percent Cover		0.00		5.63		3.94

Figure 15. Change in Desirable Cover at the Bull Draw Fire Site from 1995-2012

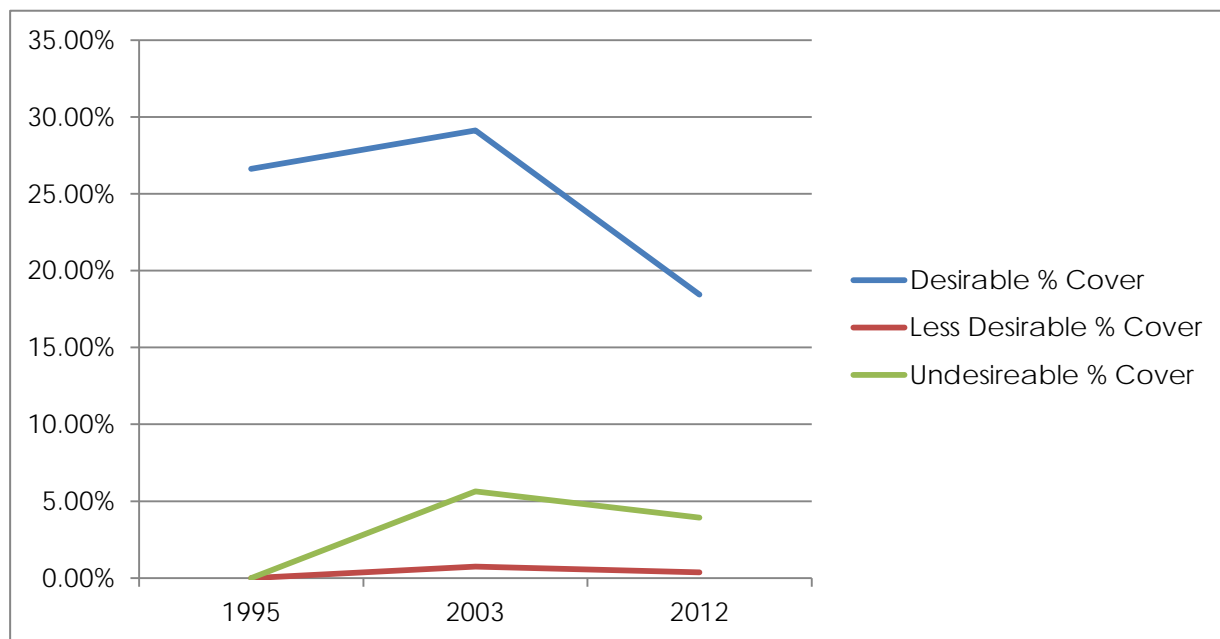


Photo 26



Bull Draw Fire Trend Plot Site. Photo taken 10/11/1995.

Photo 27



Bull Draw Fire Trend Plot Site. Photo taken 8/19/2003.

Photo 28



Bull Draw Fire Trend Plot Site. Photo taken 9/4/2012.

5.4.14 Wild Rose Fire

The Wild Rose Fire which burned 1,064 acres west of Texas Mountain on June 19-24, 2012 was not seeded to facilitate rehabilitation of the burned area as was done for the Bull Draw Fire. This fire was not seeded due to low probability of seedling establishment based on the wild horse population and concentrated use in that area. Without adequate relief from grazing pressure, it is unlikely desirable vegetation species will establish in sufficient density and diversity to persist throughout the burned area. As a result of the wildfire, this area is currently not meeting land health standards, without reduction of grazing pressure to promote establishment and reproduction of desirable species, it is unlikely that the area burned during the Wild Rose Fire will begin to move toward achieving land health standards.

5.4.15 Summary of Trend Plot Data

Some areas within the WDHA have already transitioned to vegetation communities with less desirable species composition. These communities are unable to adequately protect upland soil resources from erosion, do not contribute to efficient infiltration and permeability to maintain soil moisture necessary for optimal plant growth, provide less available forage for grazing animals, and are lacking in diversity and density necessary to ensure reproductive capability and sustainability. The Texas Creek 1, 2, and 3 sites are degraded and currently not meeting land health standards. The Texas Creek 4, Red Wash 1, Texas Mountain 1, Texas Mountain 2, and Water Canyon 2 sites are likely currently meeting land health standards but due to concentrated wild horse use within these areas and potential for overutilization, these sites are vulnerable to deterioration and failure to meeting land health standards. The Water Canyon 1 and Water Canyon 3 sites show a downward trend however these sites do not appear to be as vulnerable to

degradation due to limited wild horse presence in the area and livestock grazing management outlined in the Twin Buttes AMP. With minimal grazing pressure, the Bull Draw fire will likely continue to stabilize and improve, if the population of wild horses increases and wild horse use becomes more concentrated in this area, this site would be vulnerable to degradation. The Horse Draw site appears to be static from 2003 but is likely to show improvement due to negligible wild horse use and grazing management outlined in the Twin Buttes AMP. The Cottonwood trend site is the only site that appears to be improving; this area has received little or no wild horse use since 1994, and is within a GMA identified in the Twin Buttes AMP for rotational spring grazing deferment aimed at improving rangeland conditions.

All of the trend sites have shown a downward trend from 1987 when the population of wild horses within the WDHA was the lowest during the period of data analyzed (1987-2012). The Bull Draw Fire site was not established until 1995 to monitor progress of rehabilitation measures taken following a wildfire event, this site shows a downward trend from 2003 when the estimated wild horse population was approximately half the size of the populations inventoried in 2012. Without action it is likely that additional rangeland habitats both within and outside of the WDHA will decline to the point they are no longer capable of meeting land health standards.

5.5 Spring Monitoring

Within the WDHA there are seven known perennial springs which are all located within the summer range habitat (Map 15). Wild horses primarily use three of these springs: Palouse, Big Cedar, and Wild Rose as well as two unnamed seeps east of Texas Mountain. Pit reservoirs constructed in the area generally do not retain water throughout the summer and fall in sufficient quantities to provide reliable season long water. Due to the limited water sources available and concentrated wild horse distribution within the summer range, heavy use of these sources has occurred. The concentrated heavy use has led to degradation of riparian and upland communities that have crossed an ecological threshold in which they are unlikely to recover without human intervention. Photos 29-37 are of water sources located in the summer habitat around the Texas Mountain area. These photos were taken June 14th 2012; all water sources in Photos 29-37 are located in the livestock grazing deferment area.

Photo 29



Palouse Spring evidence of trampling and riparian degradation

Photo 30



Wild Rose Spring evidence of trampling and riparian degradation

Photo 31



Wild horse at Wild Rose Spring Standing in source, upland degradation of surrounding area

Photo 32



Big Cedar Spring, evidence of trampling and riparian degradation

Photo 33



Unnamed Seep, wild horse concentration around limited water source, upland and riparian degradation

Photo 34



Unnamed Seep, limited water source wild horses are concentrated around shown in photo 33

Photo 35



Small Seep with limited available water

Photo 36



Degraded uplands surrounding small seep

Photo 37



Degraded uplands surrounding small seep

Repeated excessive use of these areas has created degraded riparian zones that do not meet land health standards and are unlikely to fully recover without substantial investment of time and funding to protect and rehabilitate both the riparian zone and surrounding uplands. These sites are lentic riparian systems which should support diverse vigorous riparian vegetation communities however, riparian species are absent or severely lacking within all of these areas. The absence of riparian vegetation, repeated trampling, damage to spring source, and increased demand for water leave these areas vulnerable to erosion, irreversible impairment or complete loss of critical water resources.

6.0 Summary

During preparation of every land use plan for the WRFO since passage of The Act, the WDHA has been considered for designation as an HMA including a resource management plan amendment specifically focused on long term management potential of the HA. Through each land use plan it was determined that essential habitat is insufficient to sustain a healthy wild horse herd on healthy rangelands within the WDHA therefore, the HA has not been designated as an HMA. The WRFO established the Piceance-East Douglas HMA within the habitat used by wild horses at the passage of The Act; this area was chosen for long term management of wild horses as it provides the essential habitat components necessary to successfully manage a healthy wild horse herd while also maintaining a TNEB.

Data and observations for each of the elements to consider in making a determination that excess wild horses are present show that the current population of wild horses within the WDHA is not suitable to maintaining or making progress toward achieving land health standards. Concentrated overutilization of vegetation has led to a transition to undesirable vegetation communities that are not meeting land health standards within some areas of the WDHA. Rangelands that have not transitioned to undesirable states have shown a decline in desirable species composition and density, these sites are vulnerable to further deterioration to the point it is no longer capable of meeting or moving toward achieving land health standards especially following a drought year. Livestock grazing has been reduced or deferred within the WDHA to avoid long term degradation and reduced sustainability of the rangeland resources. Despite the reduction of livestock use, the population of wild horses within and outside of the WDHA has increased to the highest level since passage of The Act resulting in declining rangeland conditions vulnerable to long term degradation and impairment. Throughout the WDHA, many sites are not meeting or are moving toward not meeting land health standards. Based on the most current information contained in this document, a Thriving Natural Ecological Balance is currently not being maintained within the WDHA.

APPENDIX D. WEST DOUGLAS HERD AREA REVIEW OF CURRENT SITUATION MEMO



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

White River Field Office
220 East Market Street
Meeker, CO 81641

In Reply Refer To:
4700 (CO-LLCON05000)

January 14, 2015

MEMORANDUM

FROM: Heather Sauls, White River Field Office, Acting Renewable Resources Staff
Supervisor

TO: Kent Walter, White River Field Office, Field Manager

SUBJECT: West Douglas Herd Area Review of Current Situation

INTRODUCTION

The West Douglas Herd Area (WDHA) is located in northwestern Colorado, southwest of Rangely and approximately 50 miles north of Grand Junction. The WDHA encompasses 123,387 acres of federal land administered by the Bureau of Land Management (BLM) White River Field Office (WRFO) and 4,754 acres of private land. All of the West Douglas Herd Area is within Rio Blanco County, Colorado.

As you are aware, in 2012, the litigation (*Colorado Wild Horse and Burro Coalition, Inc. v. Salazar*, No. 10-1645-RMC (D.D.C.)), on the 2005 West Douglas Herd Area Amendment was dismissed by the U.S. District Court as not ripe for judicial review. Based on the dismissal of that court case, WRFO staff have prepared a review of the current situation and history of the management within the WDHA. This review is based on the requirements under the Wild Free-Roaming Horses and Burros Act of 1971 (WFRHBA or The Act) and the BLM's Manual 4700 for determining whether an excess of wild horses exists. Those requirements are as follows:

1. Review of the current inventory of lands within its jurisdiction;
2. Information contained in any land use planning completed pursuant to Section 1712 of Title 43;
3. Information contained in court ordered environmental impact statements as defined in Section 1902 of Title 43; and

4. Additional information as it becomes available, including research and study mandated by The Act, or in the absence of the information above on the basis of all information currently available.

In accordance with 16 USC § 1332(f), "excess animals" means wild free roaming horses or burros 1) which have been removed from an area by the Secretary pursuant to application law or, 2) which must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area.

In addition, the BLM's 4700 Manual (Wild Free-Roaming Horses and Burros Management) provides additional guidance of elements to consider when making a determination of excess, including the following:

- Determinations of Excess (Section 4.3). Before issuing a decision to gather and remove animals, the authorized officer shall first determine whether excess WH&B are present and require immediate removal. In making this determination, the authorized officer shall analyze grazing utilization and distribution, trend in range ecological condition, actual use, climate (weather) data, current population inventory, wild horses and burros located outside the HMA in areas not designated for their long-term maintenance and other factors such as the results of land health assessments which demonstrate removal is needed to restore or maintain the range in a TNEB.
- Elements to consider (Section 7.1.2). In making a determination that excess wild horses and burros are present and require immediate removal, the authorized officer shall analyze current information for the following elements: grazing utilization and distribution; trend in range ecological condition; actual use; climate (weather) data; current population inventory; wild horses and burros located outside the HMA, or in herd areas (HAs) not designated for their long-term maintenance; and other factors such as the results of land health assessments which demonstrate removal is needed to restore or maintain the range.

REVIEW OF ELEMENTS FOR EXCESS WILD HORSES DETERMINATION

The history of wild horses in the WDHA is summarized in Attachment 1 (Wild Horse Management History and Current Conditions within the West Douglas Herd Area). This history document has outlined how the wild horses that reside in the WDHA or areas adjacent to the WDHA have been impacting the landscape and the ability to preserve and maintain a thriving, natural ecological balance and multiple-use relationship in the area. Attachment 1 provides the WRFO's review of all of the necessary elements that pertain to the WDHA based on The Act and BLM Handbook 4700. The following, outline some of the key points within Attachment 1 which provide the background and rationale for the overall recommendation below.

Wild horses Outside of the West Douglas Herd Area Boundary:

In accordance with 43 C.F.R. § 4700.0-5, the BLM's 4700 Manual defines a herd area "as the areas of public lands identified as habitat used by wild horses at the time The Act was passed (December 15, 1971)." HAs are those areas in which the BLM has the authority to manage wild

horses. See 16 U.S.C. § 1331 and 43 C.F.R. § 4710.4. Therefore, those wild horses that are currently located outside of the boundary of the WDHA are outside of the areas in which the BLM has the authority to manage and maintain wild horses. Therefore, these wild horses are excess and in accordance with The Act and must be removed from those areas outside of the boundary.

Wild Horses within the West Douglas Herd Area Boundary:

The most recent planning effort was the West Douglas Herd Area Resource Management Plan Amendment (2005), which removed all of the Animal Unit Months (AUM) temporarily allocated to wild horses in previous planning documents. The removal of AUMs for wild horses within the WDHA, while still maintaining a population of wild horses and cattle results in overstocking and overutilization and without reductions in AUMs for livestock results in not maintaining a thriving natural ecological balance in accordance with The Act. In addition, the 2005 Amendment identified that all of the wild horses within and outside of the WDHA (those located west of Douglas Creek) are in areas not designated for their long-term management. This was based on the intensive management required to maintain genetic viability of the herd, provide adequate horse habitat and suitable conditions for other competing uses, to keep horses within the boundaries of the management area, and to carry-out gathers in the localized rough terrain (Decision Record for CO-WRFO-05-083-EA).

Attachment 1, pages 4-30 provides an overview of all of the BLM-WRFO's Land Use Plans and Court Ordered EISs. These plans address wild horse management within the WDHA and decisions not to designate the area for the long-term management of the wild horse herds. Since the passage of the The Act the WRFO has completed nine land use planning efforts, analyzing several alternatives for long term management of wild horses within the WDHA. The decision of all of the land use planning efforts was to remove wild horses west of Douglas Creek, all determining that the BLM could not maintain a thriving natural ecological balance and multiple-use relationship west of Douglas Creek.

Trend

The WRFO reviewed existing trend monitoring data for range sites throughout the WDHA (pages 56-93, Attachment 1). This review indicates a downward trend in desired plant communities throughout the WDHA (with the exception of the Cottonwood site), which has resulted in a failure to meet land health standards on the Texas Creek sites and will likely result in not meeting land health standards unless continued over utilization is addressed. Trend data collected in the summer of 2012 using the Daubenmire canopy coverage and frequency transect methods was compared to the 2003 trend data as well as other additional historical data. These data indicate persistent declines in perennial herbaceous ground cover and in the composition of native grasses and forbs in rangeland communities within the WDHA, presumably because of incompatible stocking levels or duration of growing season use (including use of allocated AUMs for livestock) by wild horses.

Spring Monitoring

Within the WDHA there are seven known perennial springs which are all located within the summer range habitat (Map 15). Wild horses primarily use three of these springs: Palouse, Big Cedar, and Wild Rose as well as two unnamed seeps east of Texas Mountain. Pit reservoirs

constructed in the area generally do not retain water throughout the summer and fall in sufficient quantities to provide reliable season long water. Due to the limited water sources available and concentrated wild horse distribution within the summer range, heavy use of these sources has occurred. The concentrated heavy use has led to degradation of riparian and upland communities that have crossed an ecological threshold in which they are unlikely to recover without human intervention. Photos 29-37 (Attachment 1) are of water sources located in the summer habitat around the Texas Mountain area.

Current Population of Wild Horses

The current estimated population of approximately 300 wild horses west of Douglas Creek are located either within the WDHA, which has not been designated for long term management of wild horses or outside of the area they were found in 1971. Due to limited summer range, forage conditions, and limited availability of water within the WDHA, the WRFO anticipates that current populations have resulted in wild horse expansion to areas outside of the WDHA boundary. In addition continued increases in population will result in additional wild horses moving further outside of the WDHA boundary in search of habitat.

Livestock Use

The WRFO has reviewed the livestock permittee's actual use. Livestock use within the Winter/Spring pasture, which covers the majority of the WDHA, has been well below the authorized use of 8,932 AUMs (Tables 5 and 6, Attachment 1). All long-term trend sites within the HA are located within the Winter/Spring pasture.

The permittee in the southern portion of the WDHA has been voluntarily deferring use of the areas within the summer ranges since 2005. Maps 17 and 18 show this deferred grazing area. In 2014, the permittee and the BLM entered into a Memorandum of Understanding regarding this deferred area and outlined the criteria that would have to be met prior to allowing cattle back onto these ranges in order to allow for the restoration and maintenance of the range once excess wild horse populations are removed.

Although the actual amount of available forage for each year shown may be less due to environmental factors such as drought, the forage allocation unused by livestock would likely be enough to support the wild horse population within the WDHA if wild horse use were evenly distributed across the HA. The available forage is for the entire WDHA, population inventories and on the ground observation of wild horse distribution shows that wild horse use is concentrated within their preferred habitat centered on the limited summer range in the southern portion of the WDHA. Wild horse use does not occur uniformly across the entire WDHA resulting in over utilization of these areas.

Summary

Data and observations for each of the elements required by BLM Handbook 4700-1 to make a determination that excess wild horses are present show that the current population of wild horses within the WDHA is not suitable to maintaining or making progress toward achieving land health standards (Section 5.0, Attachment 1). Concentrated overutilization of vegetation has led to a transition to undesirable vegetation communities that are not meeting land health standards within some areas of the WDHA. Rangelands that have not transitioned to undesirable states

have shown a decline in desirable species composition and density; these sites are vulnerable to further deterioration to the point it is no longer capable of meeting or moving toward achieving land health standards which is compounded during periods of drought. Livestock grazing has been reduced and/or deferred within the WDHA to avoid long term degradation and reduced sustainability of the rangeland resources. Despite the reduction of livestock use, the population of wild horses within and outside of the WDHA has increased to the highest level since passage of The Act resulting in declining rangeland conditions vulnerable to long term degradation and impairment. Throughout the WDHA, many sites are not meeting or are moving toward not meeting land health standards.

RECOMMENDATION TO MANAGEMENT

Based on information provided in the Wild Horse Management History and Current Conditions within the West Douglas Herd Area, there are approximately 300 wild horses using an area that has not been designated through the land use plan for long term management of wild horses. It is apparent that a thriving natural ecological balance does not exist within the WDHA, even after these areas have been voluntarily deferred from livestock grazing. Because a thriving natural ecological balance does not exist, the wild horses within the WDHA are considered excess and the White River Field Office must begin the development of a gather plan to remove excess wild horses from within and outside of the WDHA.

Attachment 1: Wild Horse Management History and Current Conditions within the West Douglas Herd Area

APPENDIX E. WEST DOUGLAS HERD AREA EXCESS WILD HORSE DETERMINATION DECISION



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

White River Field Office
220 East Market Street
Meeker, Colorado 81641
www.blm.gov/co



In Reply Refer To:
4700 (CO-LLCON05000)

January 27, 2015

MEMORANDUM

FROM: Field Manager, White River Field Office

TO: District Manager, Northwest Colorado District

SUBJECT: West Douglas Herd Area Excess Wild Horse Determination Decision

INTRODUCTION:

As you are aware, in 2012, the litigation (*Colorado Wild Horse and Burro Coalition, Inc. v. Salazar*, No. 10-1645-RMC (D.D.C.)), on the 2005 West Douglas Herd Area (WDHA) Amendment was dismissed by the U.S. District Court as not ripe for judicial review. Based on the dismissal of that court case, I instructed the WRFO staff to prepare a report of the current situation and history of the management within the WDHA and surrounding area to help in making a determination in whether an excess of wild horses exists within the WHDA and the adjacent area.

This report (attachment A) was completed on January 14, 2015 and was based on the requirements under the Wild Free-Roaming Horses and Burros Act of 1971 and the BLM's Manual 4700 for determining whether an excess of wild horses exists. The report concluded with a recommendation that I consider the wild horses within the WDHA to be excess and begin the development of a gather plan to remove excess wild horses from within and outside the WDHA.

I have concluded my review of said report and have carefully considered in accordance with 16 USC § 1332(f), "excess animals" means wild free roaming horses or burros 1) which have been removed from an area by the Secretary pursuant to application law or, 2) which must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area.

DECISION

Based upon my review of said report (attachment A), and after consideration of all applicable laws, regulations and rules, it is my decision that all wild horses within the WDHA and those that have relocated outside the WDHA boundaries are excess. Therefore, I have instructed my staff to begin the process to implement the development of a removal plan for all excess wild horses from within and adjacent to the WDHA boundaries in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in those areas.

A handwritten signature in blue ink, reading "Kent C. Walther". The signature is written in a cursive style with a large initial 'K' and a stylized 'W'.

Attachment A: Memorandum Dated: January 14, 2015, West Douglas Herd area Review of Current Situation

APPENDIX F. SCOPING COMMENTS

As of March 9, 2015 WRFO had received comments from 19 individuals or organizations and 9,096 form letters. The majority of these comments were related to the proposed gather operation in the WDHA, although a few of the comments were directed towards both the WDHA and the PEDHMA. Substantive comments are those that question the accuracy of the information in the EA, the assumptions used for the analysis, present new information relevant to the analysis, or present reasonable alternatives other than those analyzed in the EA (BLM NEPA Handbook, Section 6.9.2.1). Scoping comments received by the public are summarized below.

The BLM also received many other comments that indicated various individuals, organizations, and agencies were either in support of or against the proposed gather of excess wild horses within the WDHA.

Proposed Gather Operations

- There is a potential conflict with the big game hunting seasons.
- The BLM should address the removal of all horses in the WDHA separately from the horses trespassing outside the HA.
- Consider allowing local residents to contract with BLM to conduct water and hay trapping, if that becomes necessary.
- The BLM needs to account for costs of the proposed action, including costs for rounding up, processing, short-term holding, and long-term maintenance of the horses for life provided.
- The BLM needs to explain why many wild horses are in the West Douglas Herd Area.
- Alternative 3 in the WD HA scoping description should be eliminated from consideration. This alternative would create an 80:20 stallion/mare ratio on the range, a condition that would cause massive social disruption and increased aggression, as a larger number of stallions would compete for a smaller number of mares. This alternative does not comply with federal law or BLM's own wild horse management policies. Wild horse populations should be managed using naturally occurring sex ratios.

Information to Include in the EA

- Impacts on Environment & Wildlife – Effects of stampeding horses and helicopter drives and conducting a large scale horse roundup operation on threatened and endangered species of flora and fauna, including sage grouse.
- Cumulative Impacts – Impacts of roundup in conjunction with other past, present and future actions, including the use of public land for oil and gas development and production, and livestock grazing.

Wild Horse Use outside of the Piceance-East Douglas HMA or West Douglas HA

- The BLM should identify where wild horses are located outside of the Piceance-East Douglas and explain the factors that result in wild horses using areas outside of the HMA.

- The BLM should identify the dates of removal and the number of horses that were removed previously from the WDHA.

Excess Determination Memo

- Is the BLM trying to avoid judicial review by making an excess determination through an information memorandum?

The BLM's Wild Horse and Burro Policy on Excess Wild Horses

- There are disagreements about how the BLM has interpreted the Free Roaming Wild Horse and Burro Act in its policy, specifically in guidance related to establishing appropriate management levels, minimally feasible levels of management, and excess determinations.

Management Direction the West Douglas Herd Area

- There is disagreement about whether or not there is enough forage for both wild horses and livestock within the West Douglas Herd Area and some people advocate for either only managing for wild horses or only managing for livestock.
- There is concern that the BLM has not provided sufficient evidence that there are excess wild horses within the WDHA.

Information Presented in the Management History and Current Conditions Document (Appendix C)

Population Dynamics

- There is concern about the accuracy of the wild horse population estimates and the assumptions and methodology that the BLM has used to generate those estimates, with particular emphasis on recruitment and mortality rates.
- There are concerns about the genetic integrity of the wild horses within the WDHA.

Range Conditions

- While degraded range condition is acknowledged for some areas, in other areas, there is disagreement about the range condition, the factors leading to the current condition, the availability of water sources, and distribution of wild horses and livestock across rugged topography.

Conclusions Based on Range Conditions

- There is disagreement about whether or not there are adequate forage and water resources to support a wild horse herd within the WDHA due primarily to the body condition of the wild horses.

Alternative Management Direction for the West Douglas Herd Area

- There were proposals to reduce or eliminate livestock grazing within the WDHA.

- There was a proposal reduce livestock grazing and use fertility control on the wild horses within the WDHA.
- There was a proposal for the BLM to work with private landowners to develop Cooperative Agreements to allow for wild horse use of private lands.
- There was a proposal to design a reserve for wild horses that would allow the population to remain genetically viable in the long-term and also would result in a naturally self-regulating population size.
- There were proposals to develop additional range improvements, such as water developments or highway underpasses to allow for increased interactions between wild horse populations. to
- Gelding and spaying should be prohibited to prevent behavioral impacts, risk of infection, bleeding and potentially compromised survival ability on the range.

Information Requested to Be Included in an Impacts Analysis

- The BLM should justify the need to remove wild horses and provide the public with data to verify that it is wild horses that are causing damage to the range and not domestic livestock.
- The BLM should disclose all forage allocations per each grazing allotment for the past 10 years so that comparisons can be made in regards to forage availability for livestock, wild horses, and wildlife.
- The BLM should disclose water usage by various types of projects, including mineral exploration and development, renewable energy projects, livestock grazing, wild horses, etc.
- The BLM should identify all fencing within and around the WDHA and PEDHMA and evaluate whether or not fences are impacting seasonal migration of wild horses and there ability to access water sources.
- The BLM should identify how many of the total cattle guards are “horse safe” to prevent wild horses from breaking their legs.
- The BLM should include information from Colorado Parks and Wildlife regarding the hunting of predators within the PEDHMA and surrounding areas.
- The BLM should provide detailed population information for the past 20 year, including the number of bands, stallions, mares, 3yr olds, 2yr olds, yearlings, and foals.
- The BLM should provide previous information related to previous genetic testing and describe methods that could be used to recover and/or maintain genetic viability of wild horse herds within the WDHA and PEDHMA.
- The BLM should discuss impacts to sage-grouse populations.

APPENDIX G. RESPONSE TO PUBLIC COMMENTS

As of May 22, 2015 the WRFO had received comments from 54 individuals or organizations and 10,279 form letters. The majority of these comments were related to the proposed gather operation in the WDHA, although some comments were directed towards both the WDHA and the PEDHMA. Substantive comments are those that question the accuracy of the information in the EA, the assumptions used for the analysis, present new information relevant to the analysis, or present reasonable alternatives other than those analyzed in the EA (BLM NEPA Handbook, Section 6.9.2.1). Preliminary EA comments received by the public are summarized below.

The BLM also received other comments that indicated various individuals, organizations, and agencies were either in support of or against the proposed gather of excess wild horses within the WDHA (i.e., White River and Douglas Creek Soil Conservation Districts, Rio Blanco County Board of County Commissioners, and several big game hunters to the area).

SUMMARY OF PUBLIC COMMENTS

#	Comment Received From	Summarized Comment	BLM Response
1	Organization/ Individuals	There is a lack of data on West Douglas wild horses, specifically in regards to population, mortality rates, and sex ratios.	Refer to Appendix C, Section 4.0., Population and Distribution of Wild Horses in West Douglas HA.
2	Organization/ Individuals	The BLM is not following its own laws, regulations, hand books, and protocols.	The EA clearly explains the appropriate authorizations for the proposed action. Refer to Section 1.6 in the EA.
3	Organization/ Individuals	The BLM is not managing wild horses in all of the HAs where wild horses were found in 1971.	The BLM's regulations at 43 CFR 4710.3-1 require the delineation of HMAs within HAs where wild horses can be managed for the long term and where AMLs can be established that give consideration for the habitat requirements of the animals.
4	Organization/ Individuals	The BLM is reducing the number of wild horses within the HA to zero.	The WDHA was never designated as an HMA and therefore never had an AML. Without the HMA designation and an AML the wild horses are excess by definition and the BLM is proposing to remove excess wild horses.
5	Organization/ Individuals	The West Douglas wild horses' DNA is different.	The West Douglas wild horses' 2010 Genetic Analysis from Dr. Cothran indicated that the horses' ancestry appears to be primarily from North American breeds probably representing ranch stock so is not unique to the wild horses managed by BLM and Forest Service in the 13 western states.
6	Organization/ Individuals	There is no evidence for a 20% annual growth rate. BLM's assumption of a consistent 20-percent annual growth-rate is questioned.	The National Academies of Science Report (2013) concluded that a 20% growth rate was the best estimate to use. The report noted that using a 20% growth rate was probably contributing to the under estimation of wild

		Population estimates are an over estimation – please explain.	horse populations.
7	Organization/ Individuals	Holding facilities and long term pastures are in violation of the Wild Horse Act.	Each facility and pasture has been reviewed per the NEPA and is outside the scope of this EA.
8	Organization/ Individuals	Does the BLM have the space and monetary means to care for the removed wild horses?	The National Program Office has allocated funds for the removal and care for the wild horses removed in this EA.
9	Organization/ Individuals	What is the Agencies position on euthanasia of healthy wild horses and sale without limitation?	This is outside the scope of this analysis. Refer to Washington Office Instruction Memorandum 2015-070 which states reasons for ending an animal's life as an act of mercy, health or safety. Washington Office Instruction Memorandum 2014-132 describes the policies and procedures for the sale of wild horses along with providing guidance on selling animals to individuals and organizations that will provide good homes and humane care.
10	Organization/ Individuals	Per a conversation with Ginger Kathrens and Neil Kornzy regarding the euthanasia, is it true that the wild horses only safe from euthanasia until January 2017?	This is outside the scope of this analysis.
11	Organization/ Individuals	The BLM consistently demonstrates a bias for grazing allotments over wild horses.	The 1997 RMP and the 2005 WDHA Amendment considered a range of management options regarding both wild horses and livestock grazing. It was determined that the PEDHMA should be managed for wild horses while the WDHA should not.
12	Organization/ Individuals	Can energy development have a major impact on wild horses at this time?	Currently oil and gas leases issued prior to the passage of The Act which remain effective encompasses 64% of the WDHA although this area has been extensively developed, further development is possible without lease stipulations to protect wild horse habitat. For those leases that were issued after the passage of The Act there is potential for further development without lease stipulations for the protection of wild horse habitat as these leases were issued without wild horse habitat stipulations because the area was not identified for the long-term management of wild horses.
13	Organization/ Individuals	What is the BLM definition of an “active” well vs. an “inactive” well?	An active well is listed as producing, injection well, shut in, or permitted and an inactive well has been plugged and abandoned according to Colorado Oil and Gas Conservation Commission (COGCC).
14	Individuals	Commenters expressed opposition to the removal of 167 wild horses.	The purpose and need explains the necessity for removal and the authorities are also explained in Section 1.3 of the EA.
15	Individuals	The National Academy of Science recommends the use of fertility control	The BLM is following this recommendation within HMAs to reduce the numbers of wild

		rather than removal as a more affordable option then removals.	horses required to be removed. Wild horses outside of HMAs are not managed and are required to be removed once the determination is made that they are excess.
16	Individuals	The BLM should relocate the wild horses instead of removing them.	At the present time there is not any space within any HMA to take these excess wild horses.
17	Individuals	The BLM should explore options for range improvements to accommodate the wild horses.	The wild horses not within the HMA are not managed, which excludes the necessity to construct or maintain range improvements solely for the benefit of wild horses.
18	Individuals	The BLM should use a phased approach to removals and the least stressful possible methods.	Phased removals will be necessary since the BLM can only remove wild horses as space and funds are available. BLMs Standard Operating Procedures for the humane treatment of wild horses during removal is included in the EA (Appendix B).
19	Individuals	Livestock vastly outnumber horses in this HA.	The allotments where the livestock graze are larger than the HA. Only a portion of the allotment is within the HA.
20	Individuals	The BLM did not address social impacts.	Refer to Section 4.2 of the EA.
21	Individuals	The DNA for the removal of wild horses from Piceance-East Douglas HMA is inadequate.	The purpose of a DNA is to evaluate whether existing NEPA analysis is still adequate and valid. Through the DNA worksheet, the BLM has determined that the analysis in the PEDHMA EA is still adequate.
22	Individuals	The BLM should give consideration of an alternative to implement BLM regulation (43 CFR 4710.5) that authorizes reductions to, or elimination of, livestock grazing in order to provide habitat for wild horses. This alternative cannot legally be dismissed by BLM. This CFR does not pertain only to emergency situations and should be utilized whenever necessary to provide for wild horses.	Implementation of 43 CFR 4710.5 is a Land Use Planning level decision which is outside the scope of this EA. As described in Appendix C of this EA, the WDHA has not been designated for long-term management of wild horses through the land use planning process. This alternative was considered in the Draft Amendment completed in 2004 along with 5 others analyzed in detail and 2 other alternatives considered but eliminated from detailed analysis. This alternative was not carried forward in the WDHA RMP Amendment finalized in 2007 because it was not found to be implementable. Refer to Section 2.2.3 and Appendix A of CO-WRFO-05-083-EA.
23	Individuals	Livestock actual use (4,697 AUMs) in the HMAs exceeds wild horse use based on BLM estimated population (4,500 AUMs). In fact, the BLM authorizes 31 times more forage to livestock than wild horses in the PEDHMA and nearly 150 times more forage to livestock than wild horses in the WD HA (based on interim AML of 50). Adjustments to livestock	This is outside the scope of this EA, see response to comment 22. Annual livestock use is authorized only at levels which do not exceed forage allocations established through the land use planning process and site specific NEPA analysis for individual allotments.

		grazing levels can be made to accommodate current wild horse populations in both areas.	
24	Individuals	The BLM should give consideration of an alternative to implement a Catch, Treat and Release (CTR) program to manage wild horse populations through PZP fertility control, not through removals, pursuant to NAS recommendations. Horses should not be removed from the range. Horses should be captured in a manner that preserves the integrity of social bands. Preference should be given to bait/water trapping over helicopter roundups.	This alternative would not meet the purpose and need to gather and remove excess wild horses, assuming BLM could achieve a 0% annual recruitment rate through fertility control, the need to remove excess wild horses would not be addressed. As no excess wild horses would be returned following the gather operation individual bands would not be segregated at trap site or temporary holding facilities. Helicopter drive trapping has been proven as an humane and effective gather method and the EA has analyzed the use of all approved gather methods.
25	Individuals	The BLM should give consideration to range improvements, including water developments, oil/gas mitigations (such as strictly enforced speed limits and habitat restoration), and wildlife corridors and/or highway underpasses for wildlife, to better distribute the wild horse population throughout the HA/HMAs and promote interaction between wild horse populations to increase genetic variability in the herds.	Construction and maintenance of range improvements within the HMA as well as preservation of free roaming behavior of wild horses are considered as the needs are identified and require the necessary separate NEPA analysis which is outside of the scope of this EA. Because WDHA has not been designated for long-term management of wild horses BLM does not consider where and what types of range improvements may be necessary for the specific benefit and management of wild horses.
26	Individuals	I support the BLM's scientifically sound decisions to eliminate sex ratio skewing, and gelding stallions and spaying mares on the range, as these actions would have drastic behavioral impacts. Surgical sterilization also presents unacceptable risks of infection, bleeding and potentially compromised ability to survive on the range.	Thank you for your comment.
27	Individuals	Economic Impacts-The true costs of the roundup must be weighed against the cost savings of leaving horses on the range and reducing subsidized livestock grazing. This cost, along with the cost of public subsidy of livestock grazing on these lands, must also be included in the analysis.	For purposes of complying with NEPA, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations. 40 CFR 1502.23.
28	Individuals	The analysis should address the implications of the BLM's lack of holding space-and the stockpiling of 50,000 wild horses in holding facilities-on the long-term welfare and safety of horses captured and removed from these HMAs. In addition, the effect of	Analyzing impacts to animals in holding facilities are conducted under a separate EA. Each HMA maintains its own DNA records to insure genetic variability within the herds. The National Program Office has allocated funds for the removal and care for the wild

		decreasing the population size on the genetic viability of the remaining herds must also be analyzed.	horses removed in this EA.
29	Individuals	The BLM should plan to incorporate the following findings of the NAS review of the BLM Wild Horse and Burro Program into the analysis and determination for the proposed action: current management approach of removals is fueling high population growth rates; appropriate management levels lack scientific basis, transparency and equity; using fertility control is more cost effective over the long run than continuing to remove horses from the range; only acceptable and approved fertility control method currently available without further research is PZP.	The NAS review found that free-ranging horse populations are growing at high rates because their numbers are held below levels affected by food limitation and density dependence. The NAS review also found that density dependence, due to food limitation, will reduce population growth rates in equids and other large herbivores through reduced fecundity and survival. Case studies show that animal responses to density dependence will include increased numbers of animals that are in poor body condition and are dying from starvation. Rangeland health is also affected by density dependence. Density dependence management would not be consistent with maintaining healthy wild horses within a thriving natural ecological balance. The land use planning decisions and appropriate management level establishment for the PEDHMA included consideration of rangeland inventories and public participation. The use of PZP to reduce the population growth will not meet the purpose and need to remove excess wild horses and is outside of the scope of this EA.
30	Individuals	On page 2, paragraph 1, the report states that it is your intent to remove all but 210 wild horses from the area in and around the PEDHMA. Of the 210 wild horses that will remain how many are effective breeders?	The BLM would only gather down to 210 wild horses within the PEDHMA if no wild horses were gathered within the WDHA (so that 167 wild horses could be gathered in the PEDHMA). Although the WRFO does not currently have the complete age structure and sex ratio data, the removal of individual wild horses during gather operations would take into account the need to leave an adequate population of breeding wild horses to ensure the healthy, genetic variability and self-sustaining population.
31	Individuals	On page 2, paragraph 2, the report states the “predominant land uses within the ‘gather’ area are livestock grazing, recreation and energy development. The Decision Language from the Land Use Plan states on page 2-26: Objective: “Manage for a wild horse herd within the Piceance-East Douglas Herd Management Area (HMA) so that a <i>thriving ecological balance is maintained for all plant and animal species on that range</i> ” and your report	The wild horse population within the PEDHMA has increased to a level which exceeds the Appropriate Management Level (AML) established through the land use planning process which allocated forage to wild horses within the PEDHMA. Annual livestock use is authorized only at levels which do not exceed forage allocations established through the land use planning process and site specific NEPA analysis for individual allotments. No reductions to authorized livestock grazing are identified in this EA. Although wildlife

		calls for a 44% reduction in the current number of wild horses in the HMA. Will this reduction of the wild horse population be accompanied by a 44% reduction of any livestock grazing as well as any other big game wild life in the area? If not, what percentage of livestock and big game wild life will be reduced?	populations are managed by CPW, BLM does reserve forage for wildlife in land use planning documents; no reductions to wildlife forage allocations are identified in this EA.
32	Individuals	On page 3, paragraph 1, the report states: "Wild horse will be managed to provide a healthy, viable breeding population with a diverse age structure." And then goes on to state that "North Piceance and West Douglas Herd Areas will be managed in the short-term to provide forage for a herd of 0-50 horses in each herd area. The long term objective will be to remove all wild horses from these areas." Could you please refer me to the court case or cases that allowed you to ignore the language of the 1971 WFRHBA and removal all of these wild horses from the "area where presently found, as an integral part of the natural system of the public lands"?	Appendix C of the EA includes the information where the BLM completed all necessary analysis to designate an HMA or areas where wild horses would not be managed in the long term.
33	Individuals	Your proposed action (page 4) details round ups using helicopter drive-trapping and/or helicopter assisted roping. How is this in compliance with "All management activities shall be the minimal feasible level" and "It is illegal to maliciously or negligently injure or harass wild horses or burros protected by the Act, treat them inhumanely or use them for commercial gain"? While BLM claims the injury and death rate are "low"-according to the wording of the ACT, there is no "margin of error" and <i>every</i> horse is allowed the <i>same</i> protection. This gather is just one example of many wild horse deaths which all are afforded the same protection under the Act. Why does this report propose a method of round up that is not minimally feasible, and, as past records seem to indicate, would most likely cause these wild horses to be injured and harassed? ... the "malicious and negligent" would come from using the same method that killed wild horses in the past.	<p>The BLM has established Standard Operating Procedures for the humane gathering and handling of wild horses is included as Appendix B of the EA.</p> <p>BLM Handbook H-4700-1 describes Minimal Feasible Level of Management as: "The minimum number of habitat or population management tools or actions necessary to attain the objectives identified in approved LUPs and HMAPs for a HMA or HMA complex." Use of helicopters to capture wild horses within the WDHA is considered to be the most efficient population management action due to the terrain, cover, wary nature of the wild horses, and time frame to complete the proposed gather operation in 2015. Gather operations utilizing helicopters have proven to be a safe, humane and efficient method to capture wild horses.</p>
34	Individuals	Why is the euphemism "gather" used in	The BLM utilizes the term gather to describe

		the title and throughout the document for a wild horse round up?	the operations associated with capturing and holding wild horses.
35	Individuals	The agency has failed to demonstrate any alleged environmental degradation was caused by the wild horses nor that rangelands would improve with their removal, and the subsequent plan of action for their removal is not compliant with the WFRHBA and subsequent legislation.	Appendix C of the EA includes data which supports the finding that a Thriving Natural Ecological Balance is not being maintained within the WDHA including within areas which have been deferred from livestock grazing beginning in 2005.
36	Individuals	This unfair over-magnification of the wild horses' presence and impacts is clearly happening here with the WDHA and it flies in the face of the law! For this reason, I respectfully request that an Environmental Impact Statement be conducted on the proposed WDHA wild horse roundup contained in the above named Environmental Assessment, for it would surely have a devastating effect on this unique and valuable wild horse population.	<p>The BLM makes a determination on whether or not to prepare an Environmental Impact Statement (EIS) based upon the significance of the effects. "Significance" has specific meaning in the NEPA context and is based on consideration of both the context and the intensity of the action (40 CFR 1508.27). The BLM has provided detailed consideration of not only the context but also the intensity in the attached Finding of No Significant Impact and has determined that an EIS is not required.</p> <p>The White River Resource Area Proposed RMP and Final Environmental Impact Statement (FEIS) (1996) disclosed potential impacts associated with removing wild horses from the WDHA. That analysis can be found in Chapter 4 of the FEIS in sections labeled as impacts from proposed wild horse management (on various resources, including wild horses) and ultimately resulted in a plan decision to not manage for wild horses in the WDHA.</p>
37	Individuals	The BLM needs to include complete and up-to-date census; band sizes and range; sex and age information in the environmental assessment in order to include accurate wild horse population information.	Appendix C of the EA includes data relevant to the current population and range within the WDHA (Section 4.0). For the WDHA, where BLM has not identified the area for long-term management of wild horses, the total population was one of the considerations in determining whether excess wild horse were present.
38	Individuals	Basically I find your determination of excess, or overpopulation, to be based on a clever set up of the wild horses in which they are given no chance to fill their ecological niche in their legal area and to naturally self-stabilize their numbers, once this niche is filled. For this reason, I am presenting another alternative for your consideration, and this is Reserve Design (an important discipline of Conservation Biology).	This alternative is not consistent with the 1997 RMP and 2005 RMP Amendment to manage wild horses within the PEDHMA and remove the wild horses from the WDHA. Refer to Appendix C, Section 3.0, Land Use Planning Decisions for Wild Horses.
39	Individuals	Take advantage of folks who visit the	The WRFO has been working with a local

		herds often-photographing, naming, and documenting to find out exact horse numbers, bands, and population. These folks would love to work in coordination with your office to have documented herds.	volunteer who has been photographing and recording wild horses within the PEDHMA and is always interested in continuing coordination with volunteers.
40	Individuals	The BLM should permanently reduce livestock grazing, which has been proven by several studies to drastically reduce the habitat of the sage grouse.	<p>This is outside the scope of this EA, livestock use is authorized only at levels which do not exceed forage allocations established through the land use planning process and site specific NEPA analysis for individual allotments. No reductions to authorized livestock grazing are identified in this EA.</p> <p>This alternative was considered in the Draft Amendment completed in 2004 along with 5 other analyzed in detail and 2 other alternatives considered but eliminated from detailed analysis. This alternative was not carried forward in the WDHA RMP Amendment finalized in 2007 because it was not found to be implementable. Refer to Section 2.2.3 and Appendix A of CO-WRFO-05-083-EA.</p>
41	Individuals	The BLM should reduce the energy development which has also been shown to negatively affect the sage grouse habitat, not only from the developed pad sites but also the miles and miles of roads which disturb the native landscape.	<p>Energy development is authorized through the land use planning process and site specific NEPA analysis completed on specific projects. Reducing energy development is outside of the scope of this EA.</p> <p>Currently 83 percent of the area is subject to valid existing rights for energy related development leases.</p>
42	Individuals	Protect predators such as mountain lions, bears, wolves, and other such carnivores effectively control wild horse populations by targeting the weak, the sick, the young, and the old. The BLM should police the use of poison on the public lands.	Colorado Parks and Wildlife is responsible for the number of big game licenses that are issued and are in support of the proposed gather operation. The NAS review found predation will not typically control population growth rates of free ranging wild horses. This is outside of the scope of this EA.
43	Individuals	If absolutely necessary for small wild horse removals, utilize bait and water trapping (not helicopters which have not proven to be effective in the past 2 roundups as the contractor has not been able to locate the horses). Water and bait trapping have proven to be successful and more economical.	In recent gathers the BLM requested the helicopter to fly a specific area for any wild horses that may have been missed. This strategy gives the appearance that there are no more wild horses to be gathered but that is not the case. For example in 2010 the BLM was only allowed to gather wild horses from outside of the HMA so the fly area was only a portion of a larger area. During 2010 gather operations, 73 wild horses were gathered utilizing helicopter capture techniques, and during 2011 gather operations, 276 wild horses were gathered utilizing helicopter capture techniques.

			Helicopter drive trapping is proven as a humane and effective gather technique approved by BLM.
44	Individuals	It is nearly impossible to comment on these plans with any degree of knowledge about “the big picture” because there is a lack of information about other uses. What are all the detrimental contributors to the “thriving natural ecological balance”? What are all the “multiple uses” and each one’s contribution to the problems being attributed to the wild horses? How much are natural causes contributing to the problems-causes like drought, other water users? No plan should be proposed without the information on all other users, their numbers, frequency of use, estimated percentage of impact on the “thriving natural ecological balance and multiple-use relationship.”	Refer to Appendix C of the EA for information regarding the history of the area, multiple uses, climate, range conditions, spring locations and condition, and distribution of livestock and wild horses.
45	Individuals	The plan talks about the 2012 gather due to lack of water. What caused it, and why was water not a problem in 2014 or 2015 and how was there sufficient water for cattle?	Northwestern Colorado experienced severe drought conditions in 2012. Refer to Climate data Section 5.3 in Appendix C of the EA. Livestock grazing has been deferred since 2005 in the area of the WDHA where water shortage occurred.
46	Individuals	The plan says the horses could be better managed within the adjacent PEDHMA but there is no alternative to move them from WDHA.	The PEDHMA is currently above AML, wild horses could not be moved from the WDHA to the PEDHMA without increased risk of rangeland degradation.
47	Individuals	A veterinarian must be at the gather – consultation alone is inadequate.	The BLM will update the EA to include an APHIS veterinarian on site during the gather operations.
48	Individuals	The BLM needs to prove without a doubt that the West Douglas horses were not on the area of the WDHA at the time the 1971 Wild Horse and Burro Act became law.	As described in Appendix C of the EA, 9 wild horses were documented within the WDHA during the first aerial census for wild horse populations within the WRFO following passage of The Act. The WDHA has not been designated as an HMA for the long term management of wild horses.
49	Individuals	In the areas where the horses share the range with cattle, how has the BLM proven that the horses are responsible for overgrazing, again, aside from removing their AUMs?	Refer to Section 5.1, 5.2, and 5.4 in Appendix C of the EA, livestock grazing has been deferred within the Texas Mountain Conservation Area since 2005, livestock grazing has also been reduced throughout the WDHA, despite reduced or deferred livestock use, these areas are not maintaining a Thriving Natural Ecological Balance.
50	Individuals	I know that the WRFO has been asked to remove some of the West Douglas horses that have moved outside of the	The past several years during winter/spring months the average wild horses that come onto the private lands southwest of the WDHA

		WDHA to the southwest of the WDHA. I did not see in the EA any kind of record of these gathers, how many horses were removed, and the impact this could have had on overall herd population. Since those mustangs were still protected under the Wild Horse and Burro Act at the time they were gathered, I would like to see 1) dates of removal and the number of horses removed, either by the agency or by private individuals; 2) where they were removed from, and 3) testimony from the private individuals who contacted the agency to help remove the animals from private land.	averages two per year and are usually young studs. These horses are not gathered but rather end up in the corrals in an attempt to get with the domestic horses located in the area. However, in spring 2013 the BLM removed 4 head; 2 males aged 16 and 3, 1 mare aged 10, and 1 colt. The 16 year old male had been previously gelded. The BLM was notified of this group of horses in 2010 and at that time were also believed to be released domestics.
51	Individuals	As for genetic viability, Dr. Cothran's remarks (Section 4.2) that "the overall pattern of variability suggest a larger population that has been reduced in size and has experienced a loss of genetic variation" Indicate to me that original management practices-or lack thereof-have compromised this herd. What caused the reduction of size of the herd and subsequent genetic deterioration? What else but fragmented and fenced original range combined with "multiple use management" favoring oil and gas development and livestock grazing could have reduced the size of the herd? It seems to me that the administrative decisions to remove the West Douglas herd came first and that BLM has been trying to back those up with after-the-fact rangeland monitoring studies. And, it seems the same for the Cothran comments.	The BLM does not manage the wild horse population within the WDHA for a healthy viable breeding population due to the lack of designation as an HMA.
52	Individuals	If the gather should proceed, the WRFO must be specific as to the type of gather operations that will be used in the WDHA. I urge the WRFO to use bait and water trapping to gather the horses, and to keep mares and foals together.	The EA analyzes the use of bait/water trapping along with helicopter trapping refer to Section 3.1 for a description of gather methods. Refer to Appendix B, Section A. 6. regarding holding of mares and foals.
53	Individuals	The WRFO should also consider allowing the public and media to observe the gather, should it move forward, at a site that allows observers to actually see the gather, corral, and loading operations.	Public and Media visitation of gather operations will be conducted in accordance with WO-IM-2013-058. Refer to Section 3.5, #2.
54	Individuals	Any new energy development in the WDHA should provide mitigation for	This is outside the scope of this EA. Environmental impacts and mitigation is

		habitat/forage for wild horses as well as other wildlife.	considered in site specific EAs as energy related projects are proposed.
55	Individuals	Alternative 3 in the WDHA must be eliminated from consideration. This alternative would create an 80:20 stallion/are ratio on the range, a condition that would cause massive social disruption and increased aggression, as a larger number of stallions would compete for a small number of mares.	Refer to Section 5.4.4 of the EA for description of impacts associated with this alternative.
56	Individuals	Effects of stampeding horses and helicopter drives and conducting large scale horse roundup operation on threatened and endangered species of flora and fauna, including sage grouse.	Potential impacts to resources from gather operations including special status species are analyzed within the EA. Refer to sections 4.2 and 5.8.
57	Individuals	With regard to the DNA for Piceance-East Douglas, the WRFO relies on a four-year-old EA to avoid a fresh EA. A Federal Court in NV recently found that BLM's use of a stale EA was insufficient.	There is no specified time period that an EA is still adequate. The purpose of a DNA is to evaluate whether existing NEPA analysis is still adequate and valid. Through the DNA worksheet, the BLM has determined that the analysis in the PEDHMA EA is still adequate.
58	Individuals	Aerial Census: Probable over count. BLM noted, in a previous EA, that it was becoming increasingly difficult to identify individual horses due to the loss of color diversity in the herd. Therefore, it is likely that horses were double-counted in 2012 when the last inventory was taken.	During the 2012 aerial inventory, one band of 9 horses was observed twice, due to the age structure and markings of individual horses within the band, the BLM was able to recognize that the band had been observed twice and therefore only accounted for once in the total population report. It is not believed that any other individuals or bands were double counted.
59	Individuals	If the same contractor was used for both the helicopter census and the proposed helicopter roundup, additional concerns are raised regarding a potential conflict of interest.	A separate contractor who does not have a National Gather Contract with the BLM was used for the aerial inventory.
60	Individuals	Explain the reason for the delay in genetic analysis of the West Douglas herd that was submitted for testing in 2006 with a completed report in 2010.	In 2006, hair follicle samples were sent to Dr. Cothran's within the week from the conclusion of the gather operation. The BLM waits for the analysis reports on Dr. Cothran's schedule; therefore the delay is not with BLM.
61	Individuals	In his report, Dr. Gus Cothran advised that variants and other aspects of genetic variability were "below the mean" and "well below the mean." He noted that variability had declined since his previous analysis of the herd's genetics. He attributed the loss of diversity to "small population size." These results point to the failure of WRFO's management-approach . Reform is required. WRFO needs to conduct at 100% evaluation of both the PED and	The WDHA was not designated for long-term management of wild horses so past gather operations could account for the "well below the mean" genetic variability. If any wild horses are gathered from within the PEDHMA during 2015 hair follicle samples could be taken and sent for testing to further analyze the viability. In general, Dr. Cothran recommends the introduction of one or two new mares to a given area to increase genetic diversity.

		WD herds. Per those results, and per guidance from Dr. Gus Cothran, and per consultation with wild-horse-and-burro advocates, BLM must then develop best management practices to restore and maintain gene-pool diversity via a robust population-level. An AML is valid only if it provides for an optimal population, one that can easily self-sustain its genetic viability and bounce back from random catastrophic events. The current AML and absence of AML do not provide for self-sustaining, genetically-viable herds. Therefore, the one AML must be increased and the other properly established in accordance with the best science available.	
62	Individuals	WRFO's plan to remove all mares caught in the proposed roundup would work to skew the herds' gender-balance in favor of studs. Mares are more easily captured than stallions, especially when those mares have foals. Stallions – especially bachelor stallions are more likely to escape. The helicopter-contractor would go for the easy targets to make his numbers and cut his costs.	This alternative is being considered because the WDHA has not been designated for long term management of wild horses, because mares are potentially easier to gather in difficult areas, as well as, adjusting the sex ratio to favor stallions would reduce the recruitment rate and therefore reduce the number of wild horses to be gathered in future gather operations.
63	Individuals	To provide for a genetically-viable herd, the AML must be reformed. The Land-Use Plan and other appropriate documents must be amended to set the low-ground of the AML at 2,500 horses. That is the recommendation of the International Union for Conservation of Nature (IUCN), the world's oldest and largest global environmental organization.	Forage allocation for the PEDHMA for livestock and wild horses is 9,036 AUMs, 2,500 wild horses (low end of AML) would be 30,000 AUMs or 332% of current forage allocation without accounting for any other grazing animals. This level of use would result in rangeland degradation within a short time period. The current AML for PEDHMA was established to maintain a healthy wild horse herd while maintaining a thriving natural ecological balance and multiple-use relationship. Adjustment of the AML is outside of the scope of this EA.
64	Individuals	West Douglas HA needs to have an AML – a proper AML. WRFO needs to officially recommission West Douglas as wild-horse habitat with a low-ground AML of 2,500 per IUCN guidelines.	Refer to Appendix C, Section 3.0 for Land Use Planning information in regards to decisions to not designate the WDHA as an HMA. Establishment of an AML in the WDHA is outside of the scope of this EA.
65	Individuals	There is a requirement plainly stated in the Wild and Free-Roaming Horses and Burros Act, which stipulates that their land is to be “devoted principally but not necessarily exclusively to their welfare ...”	The Act states the Secretary may designate specific ranges on public lands to sustain an existing herd or herds of wild free-roaming horses and burros, Appendix C, section 3.0 outlines the process that BLM took and the decisions to designate the amount of land necessary to sustain a healthy wild horse herd

			representative of the population found within the WRFO in 1971. Establishment of Herd Management Areas is outside of the scope of this EA.
66	Individuals	HMAs should be designated “no surface occupancy” (NSO) areas – to preserve aesthetic and recreational values and to avoid disturbing the horses’ natural behavior.	Surface stipulations to protect and maintain resource values (including wild horse habitat) as well as control timing of surface disturbing activity are established through land use planning. Development of surface stipulations is outside the scope of this EA.
67	Individuals	BLM may argue that actual livestock use is lower than authorized or permitted use. But because actual use is whatever the permit-holders report on Form 41330-5, and because BLM essentially takes the permit-holders’ at their word and bills accordingly ... eventually ... after-the-fact ... maybe ... or maybe not – see Cliven Bundy – the actual-use number is unverified and likely grossly under-reported.	Form 4130-5 discloses that it is a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction. WRFO conducts compliance inspections within grazing allotments to ensure grazing permittees are operating within the terms and conditions of their permit, including location and number of livestock.
68	Individuals	WRFO needs to investigate how the boundary lines of the HA and HMA were first set and promptly correct any errors and omissions. The boundaries must conform to their proper configuration and must provide corridors for the horses’ seasonal migrations as well as access to water.	This information can be found within Appendix C in Section 3.0 of the EA.
69	Individuals	When horses stray, WRFO should round them back in! Encourage the outsiders to return to their proper place, then address those factors that cause the animals to leave home: 1) do the HMAs have perimeter fences, 2) do the fences need repair, 3) do the gates need to be checked frequently and closed, 4) would palatable plantings draw the wild horses back inside the HMAs?, 5) have mineral licks placed well-inside the HMAs, and 6) have guzzlers been installed to provide water sources within the boundaries of the HMAs?	The WRFO is currently in the process of conducting an environmental assessment to add fencing to the HMA boundary (DOI/BLM/CON0520140035EA) where wild horses gain access to areas outside the HMA. Generally, wild horses seek areas beyond the HMA boundary due to the lack of adequate cover, forage, space, and water which can frequently be contributed to an over population of wild horses in a given area.
70	Individuals	Helicopters are dangerous to humans, an inhumane roundup method, and the documented abusive behavior by helicopter pilots during gathers.	Safety concerns and the treatment of wild horses is addressed in Appendix B within this EA.
71	Individuals	The DNA, EA, and FONSI do not support the proposed wild horse gather and removal in the West Douglas HA, Piceance-East Douglas HMA, and surrounding areas. WRFO is advised to	As described in Appendix C, Section 3.0 of the EA, WRFO has taken a hard look at wild horse management within WRFO through several land use planning documents. The proposed gather would implement the decisions of the

		reform its wild-horse program per the best science and to manage the wild horses in genetically-viable, self-sustaining herds.	RMP to manage a genetically viable self-sustaining wild horse population within the PEDHMA
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