United States Department of the Interior

BUREAU OF LAND MANAGEMENT
National Wild Horse and Burro Program Office
P.O. Box 12000 (1340 Financial Blvd.)
Reno, Nevada 89520-0006
http://www.blm.gov

November 18, 2009

In Reply Refer To:
4700 (WO-260)

Environmental Assessment
(DOI-BLM-MT-BO50-2010-001-EA)
Ennis Long-Term Holding (LTH) Pasture
For Excess Wild Horses

Dear Interested Party:

The Bureau of Land Management (BLM) is asking the public to review and comment on the enclosed Environmental Assessment for the Ennis LTH Pasture for Excess Wild Horses (DOI-BLM-MT-BO50-2010-001-EA) by December 18, 2009. The Environmental Assessment is also posted at http://www.blm.gov/mt/st/en/fo/dillon_field_office.html

The purpose of this Environmental Assessment (EA) is to analyze the potential environmental impacts associated with the BLM's proposal to operate and maintain a LTH pasture for a maximum of 1,500 excess wild horses over the next 5 years on private lands owned or controlled by the BLM-selected contractor near Ennis, Montana.

The need for the Proposed Action is to provide for the long-term maintenance and humane care of excess wild horses off of public rangelands. This allows the BLM to continue to make progress toward achieving a thriving natural ecological balance and multiple use relationship on the public lands as required by the 1971 WFRHBA. Wild horses that have not been adopted because of age or other factors have been placed on private land sanctuaries in Oklahoma, Kansas and South Dakota in the past.

The overall goal for the proposed Ennis LTH Pasture is to manage for healthy wild horses and to maintain private lands in a healthy condition. To meet this goal, wild horses must be stocked at a level which assures ample forage is available even in the event of extreme drought, possible wildfire, or other unanticipated situation. As a result, the EA analyzes three alternatives: the Proposed Action, Alternative A and No Action.

Comments should be emailed or postmarked no later than December 18, 2009 to:

BLM - National Wild Horse and Burro (WH&B) Program
Attn: Susie Stokke
PO Box 12000
Reno, NV 89520-0006
sstokke@blm.gov

The BLM is particularly interested in knowing if the public has any additional issues, information or alternatives (not already identified) which BLM should consider.

The expected decision date for the Ennis LTH Pasture is about December 26, 2009.

If you have any questions or would like additional information, please call Susie Stokke at (775) 861-6623.

Sincerely,

Susan J. Stokke

for Dean Bolstad,
Deputy Division Chief,
National Wild Horse and Burro Program

Enclosure

Questions and Answers
Environmental Assessment

Questions and Answers

What is the BLM asking the public to do?
The BLM is asking interested parties to review and comment on the Environmental Assessment for the Ennis LTH Pasture. Comments should be emailed or postmarked no later than December 18, 2009 to:

BLM - National Wild Horse and Burro Program
Attn: Susie Stokke
PO Box 12000
Reno, NV 89520-0006
sstokke@blm.gov

What kind of comments would be most helpful?
The BLM is particularly interested in knowing if the public has any additional issues, information, or alternatives (not already identified) which BLM should consider.

Will a public meeting (or hearing) be held on this issue?
No. A scoping letter dated September 25, 2009 was sent to interested individuals, groups and agencies. Native American tribes were also contacted by letter dated September 25, 2009 to determine if there were cultural or religious concerns associated with the BLM's proposal. A total of twenty eight (28) responses were received in response to public scoping. In addition to public scoping, the BLMs proposal has been widely publicized in several Montana newspapers.

Why is the BLM considering implementing a LTH Pasture for Excess Wild Horses in Ennis, Montana?
Long-term holding pastures are designed to provide unadoptable wild horses, with humane, life-long care in a natural setting, off the public rangelands. Wild horses that have not been adopted because of age or other factors have been placed on private land sanctuaries in Oklahoma, Kansas and South Dakota in the past.

What is the BLM's goal?
The overall goal for the proposed Ennis LTH Pasture is to manage for healthy wild horses and to maintain the offered private lands in a healthy condition. To meet this goal, wild horses must be stocked at a level which assures sufficient forage is available even in the event of extreme drought, possible wildfire, or other unanticipated situation.

What does the BLM's environmental assessment analyze?
BLM's environmental assessment analyzes the potential environmental impacts associated with grazing wild horses as compared to cattle on the private land owned or controlled by the BLM-selected contractor. A range of alternatives which include the Proposed Action, Alternative A, and No Action is analyzed. The BLM also proposes an appropriate stocking rate for wild horses on the Spanish Q Ranch based on an in-depth analysis of the available data, including NRCS Ecological Site Data developed for Madison County, Montana.

What is the BLM proposing?
The Proposed Action is to operate and maintain a LTH Pasture for a maximum of 1,500 excess wild horses on private land owned or controlled by the BLM-selected contractor on about 16,367 acres in Madison County, about one mile north and west of Ennis, Montana. Horses would receive supplemental feed (locally grown hay) for a minimum of 4 months each year. As part of the Proposed Action, approximately 13 miles of new fence construction would be constructed in

accordance with the fence specifications in the contract. These specifications were developed to assure wild horses do not stray outside the LTH Pasture. The specifications require a 4-strand fence with the top wire at a height of 48" and a 12" spacing between the four wires.

How does Alternative A differ from the Proposed Action?
Under Alternative A, initial stocking would be limited to 805 wild horses. Horses would receive supplemental feed (locally grown hay) for 4 months each year. Fence specifications would be modified to be more wildlife friendly. Alternative A would also incorporate an adaptive approach to management of wild horses on the Spanish Q Ranch as follows:

- On the ground monitoring would be completed by BLM at the end of the first year's pasture period. If additional forage is determined to be available, an appropriate number of wild horses (up to another 100) could be added at the start of year two.
- BLM would then complete monitoring at the end of the year two pasture period to determine if up to another 95 wild horses could be added.
- No more than 1,000 wild horses would be authorized to graze during the 5-year contract period.
- Grazing by wild horses must meet the following forage utilization monitoring criteria: (1) use at the end of the pasture period shall average 50% by weight or less of key forage (grass) species on the majority of the ranch's upland range sites, and (2) a minimum of 4" stubble height must remain on sedges in the majority of the ranch's riparian areas (non-fishery streams).
- Should monitoring indicate there is insufficient forage available (or that resource damage is occurring in a number of key range sites), wild horse numbers would be reduced as indicated (also see EA, page 24). Appropriate numbers of wild horses would be gathered and relocated (shipped) to either a BLM short-term corral facility or another grassland pasture with surplus capacity.
- BLM would continue to monitor animal and rangeland health conditions through the remainder of the contract period. Additional adjustments in wild horse stocking levels or in on the ground management would be made, as appropriate, based on monitoring results.

How does the No Action Alternative differ from the Proposed Action?
Under the No Action Alternative, the ranch would continue to graze an average of 793 animal units of cattle from as early as April to as late as December for up to 8 months use during some years. This includes 411 AUMs authorized use on BLM administered land, as well as State leases and a USFS grazing permit during specified seasons of use and defined Terms and Conditions. About half the pasture units would be un-grazed in any given year (rest-rotation grazing strategy). Livestock would receive supplemental feed (hay) in the lower pastures from 4 up to 6 months depending on the winter. The hay provided would be locally grown on other private ranch property owned or leased by the contractor.

What is the decision to be made? When will the decision be made? Who will make the decision?
The authorized officer will decide whether to release the funds necessary to operate and maintain a LTH pasture over the next 5 year period for up to a maximum of 1,500 excess wild horses (geldings) on 16,367 acres of private or State land owned or controlled by the BLM-selected contractor, within Madison County, near Ennis, Montana. The BLM's decision will be made on or about December 26, 2009. The decision will be made by the authorized officer (Dean Bolstad, Deputy Division Chief, National Wild Horse and Burro Program).

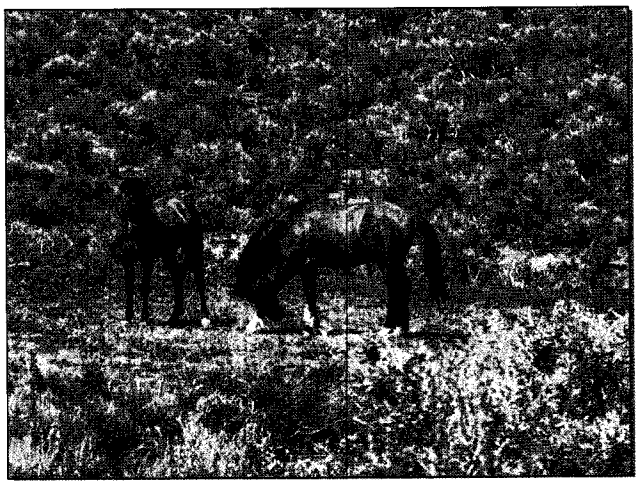
BLM

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

Environmental Assessment
DOI-BLM-MT-BO50-2010-001-EA
November 18, 2009

Ennis Long-Term Holding Pasture for Excess Wild Horses Environmental Assessment

Proposed Action/Location: Proposed is pasturing and maintaining up to a maximum of 1,500 excess wild horses on about 16,367 acres of private or State land owned or controlled by the BLM-selected contractor (the Spanish Q Ranch), within Madison County, about one mile north and west of Ennis, Montana.



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NATIONAL SYSTEM OF PUBLIC LANDS

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1.0 Purpose of and Need for the Proposed Action

1.1 Introduction and Background

The Bureau of Land Management (BLM) is proposing to operate and maintain a Long-Term Holding (LTH) pasture for a maximum of 1,500 excess and non-reproducing wild horses (geldings) over the next five years. The LTH pasture would be operated by the BLM-selected contractor on about 16,367 acres of private or State land owned or controlled by the contractor (known as the Spanish Q Ranch). The ranch is located in Madison County, about one mile north and west of Ennis, Montana (see Map 1). Horses would be delivered beginning in about January 2010.

In 1971, the Wild Free-Roaming Horses and Burros Act (WFRHBA) became a Federal law. The WFRHBA requires the protection, management and control of wild free-roaming horses and burros (WH&B) on public lands at population levels that assure a thriving natural ecological balance and multiple use relationship, and avoids a deterioration of the range. The BLM and the Forest Service (FS) are responsible for management of WH&B on public lands managed by each agency. The BLM manages WH&B on about 32 million acres in 180 separate herd management areas in ten western states.

The primary purpose of herd management is to protect both the animals and their habitat. Due to the lack of natural predators and resistance to disease, WH&B herds increase at relatively high rates in North America. When populations of wildlife, wild horses, wild burros, and/or domestic livestock exceed the capabilities of their habitat, the environment begins to decline, and there is no longer a thriving ecological balance. If the decline in the environment is prolonged, it leads to poor rangeland condition and accelerates a decrease in the health of the animals. If animals are not removed from this declining range, the animals could be injured or die from starvation, dehydration, or succumb to the elements. Before these conditions arise, the BLM removes the excess animals.

Excess WH&B removed from the public lands are placed in private maintenance through the BLM's Adopt-A-Horse program, made available for sale, or sent to long-term holding pastures. WH&B are prepared at BLM-operated short-term holding facilities (corrals). Animals newly arrived at these facilities are examined, sorted by sex, age and condition, tested for infectious diseases, vaccinated and treated by a veterinarian. The animals are also freeze marked on the neck to facilitate identification.

WH&B remain at the holding facility for a minimum of 30 days after arrival. Booster vaccinations are given to the animals within 30 days. While the animals are at the holding facility they are fed grass and/or alfalfa hay. The animals are closely observed for sickness, injury, loss of appetite and other factors that may affect their health and welfare. Sick or injured animals are separated and quarantined from the general population.

Existing long-term grassland pastures are designed to provide excess wild horses with humane, life-long care in a natural setting off the public rangelands. About 22,000 excess wild horses that have not been adopted or sold because of age or other factors have been placed on private land pastures in Oklahoma, Kansas, and South Dakota.

Only wild horses with a negative Coggins test (Equine Infectious Anemia) are shipped to LTH pastures. Wild horses are also inoculated against disease (5-way vaccine). Each animal is freeze marked with a unique 8-digit number on the left side of their neck. The last four digits of the number are also freeze marked on the animal's hip. Following freeze marking, hair grows stark white which makes the animals readily identifiable from either the ground or the air. The BLM contracts with Animal Health and Plant Inspection (APHIS) veterinarians who are available to provide wild horses in LTH pastures with professional veterinarian care. Wild horses proposed for

shipping to the Ennis LTH pasture will already be acclimated to a cold climate and would be expected to readily adjust to their new environment.

1.2 Purpose of the Proposed Action

The purpose of this Environmental Assessment (EA) is to analyze the potential environmental impacts associated with the BLM's proposal to operate and maintain a LTH pasture for up to a maximum of 1,500 excess and non-reproducing wild horses (geldings) over the next 5 years on private or State land owned or controlled by the BLM-selected contractor near Ennis, Montana.

1.3 Need for the Action

The need for the Proposed Action is to provide for the long-term maintenance and humane care of excess wild horses off of public rangelands. This allows the BLM to continue to make progress toward achieving a thriving natural ecological balance and multiple use relationship on the public lands as required by the 1971 WFRHBA.

The overall goal for the proposed Ennis LTH Pasture is to manage for healthy wild horses and to maintain the offered private or State land in a healthy condition. To meet this goal, wild horses must be stocked at a level which assures sufficient forage is available even in the event of extreme drought, possible wildfire, or other unanticipated situation.

Project objectives include:

- Maintain excess wild horses on private land in pastures large enough to allow free-roaming behavior and with the food, water, and shelter necessary to sustain the animals in good condition.
- Maintain non-reproducing herds consisting of wild horses of all ages separated in pastures with younger, adoptable animals (5 years and younger) separate from older, unadoptable animals (6 years and older). Additional wild horses will be brought in, as horses (depending on age), are either shipped to adoptions, sold or die over the life of the contract. All males are gelded (sterile).
- Minimize, to the extent possible, the handling of wild horses by humans and sorting of the animals through chutes, gates, and corrals.
- Provide regular on the ground observation and periodic counts of the wild horses to ascertain their well being and safety.
- Provide management by individuals who are knowledgeable and experienced about the behavior and nutritional requirements of equines.

1.4 Scope of this Environmental Analysis – Scope, Plan Conformance, Critical Elements and Resource Issues

1.4.1 Scope of this Environmental Analysis

Wild horse safety and welfare was carefully considered during the development of the contract specifications. These include the requirements for the working facilities and for the feeding and humane care of the wild horses throughout the life of the contract (a maximum of 5 years). The contract for the Ennis LTH Pasture will be terminated or adjusted by BLM for nonperformance if it becomes necessary to do so.

The scope of this environmental assessment (EA) is limited to the potential impacts which could result from grazing wild horses on lands historically used to pasture cattle.

1.4.2 Conformance with Land Use Plan

The BLM is required to develop land use plans in accordance with the requirements of the Federal Land Policy and Management Act. The removal of excess wild horses in order to achieve a thriving natural ecological balance and multiple use relationship is addressed in all BLM land use plans written for lands which contain wild horse herds. The placement of excess wild horses on private lands owned or leased by the contractor is not subject to land use planning regulations.

1.4.3 Critical Elements

Table 1: Supplemental Authorities for the Human Environment

Supplemental Authorities	Not Present	Present, But Not Affected	May Be Affected*	Comments/Rationale
Air Quality		X		Activities will not change from the existing ranching operation; air quality would not be impacted.
Areas of Critical Environmental Concerns (ACECs)	X			Federally designated ACECs are not located on non-federal lands.
Cultural Resources		X		Activities will not change from the existing ranching operation, with the exception that use will be by wild horses as compared to cattle.
Environmental Justice		X		No change from the existing ranch operation is expected.
Farmlands, Prime or Unique	X			Resource not present.
Floodplains			X	See discussion under wetland/riparian zones below.
Hazardous and Solid Wastes		X		No hazardous wastes will be generated as a result of the proposed long-term holding pasture. All solid wastes generated by the wild horses will bio-degrade directly into the soils of the pastures.
Invasive Non-native Species			X	See discussion below.
Native American Religious Concerns		X		
Soils and Vegetation Resources			X	See discussion below.
Threatened or Endangered Species		X		
Wetlands/Riparian Zones			X	A number of wetland/riparian zones are present within the ranch property. See discussion below.
Wildlife			X	See discussion below.
Wild and Scenic Rivers		X		Federally designated Wild and Scenic Rivers are not located on non-federal lands.
Wilderness Characteristics		X		Federally designated Wilderness Areas are not located on non-federal lands.

* An "X" in this box means that the resource is further discussed in the affected environment and potential impacts are evaluated in the environmental impact section of this EA.

1.4.4 Resource Issues

The identified resource issues drive the development of alternatives. A range of alternatives is developed to respond to the identified resource issues (and the purpose and need for the action) to different degrees. A scoping letter dated September 25, 2009 was sent to interested individuals, groups and agencies. Twenty eight (28) responses were received in response to the BLM's proposal. Of these:

- 11 supported the project proposal and 6 were not in support of the project proposal;
- 14 expressed concern about the proposed fences and their potential impact on wildlife (this comment is incorporated in Issue 1);
- 22 expressed concern about the proposed stocking rate (this comment is incorporated in Issue 2);
- 6 expressed concern about the potential for horses to stray outside the ranch boundary (this comment is also incorporated in Issue 1 – also refer to the EA, page 9);
- 4 asked if the horses would be reproducing or non-reproducing animals (refer to EA, page 3);
- 6 expressed concern about the potential for spread of noxious weeds (this comment is incorporated in Issue 3);
- 11 expressed concern about potential impacts to wildlife (this comment is incorporated in Issues 1 and 3);
- 4 expressed concern about animal health (refer to EA, page 3);
- 1 expressed concern about use of BLM land as part of the proposal (this comment is incorporated in Issue 1);
- 4 expressed concern about potential impacts to predators as a result of BLMs proposal (this comment is incorporated in Issue 3).
- 1 comment expressed concern about the disposal of any wild horse remains (refer to EA, page 25).

The following resource issues were identified as a result of scoping and in response to consultation with Native American tribes and other local and state agencies and were used to drive development of the alternatives:

❒ **Issue 1.** What are the potential impacts associated with fencing public (BLM) lands located within the planning area to exclude use by wild horses? Once fenced, how will the public lands be managed?

- Potential impacts to elk, deer and antelope movement.

❒ **Issue 2.** What is the appropriate stocking rate for excess wild horses on the offered private lands?

- Contractor's initial estimate of carrying capacity.
- Montana NRCS Ecological Site Data (Soil Survey) estimate of carrying capacity.
- Ecological Site and Condition Inventory estimate of carrying capacity.
- Estimate of carrying capacity based on actual livestock use.

❒ **Issue 3.** What impacts will use by wild horses have as compared to use by cattle in the planning area?

- Potential risk for spread of invasive plants or noxious weeds.
- Potential impacts to soils and vegetation resources.
- Potential impacts to wetland/riparian zones.
- Potential impacts to wildlife habitat.
- How predators (i.e., wolves or bears) will be handled.

1.4.4.1 Issues Beyond the Scope of this Environmental Analysis

The suggestion for the BLM to undertake a public education program explaining wild horse reproduction rates in the wild is beyond the scope of the current environmental analysis. The BLM continues its efforts to explain to the American public that herd growth rates can average about 20% per year in the wild. To address this issue, the BLM has been aggressively pursuing an effective fertility control method since 1978; however, current methods are experimental (research) and a method effective in slowing herd growth rates on a population-wide basis has not yet been found.

Relative to the suggestion that the BLM hold public hearings regarding the proposed Ennis LTH pasture, the BLM is not required to hold public hearings. In addition to public scoping, the BLM's proposal has been widely publicized in several Montana newspapers. For additional information regarding the BLMs public scoping and consultation process, refer to the EA (Section 5.0).

Concerns about wild horse unloading/loading and potential traffic impacts in the subdivision immediately north and west of Ennis are beyond the scope of the current environmental analysis because the BLM's proposal does not include trucking wild horses through the subdivision. Rather, under the Proposed Action, wild horses would be unloaded at the corrals on the Mitchell Place off Quarter Horse Drive (approximately 4 miles west of Ennis).

A suggestion that existing livestock grazing permits for public lands within the ranch interior be retired as mitigation is also beyond the scope of the current environmental analysis. This is because the livestock grazing permits presently held by the ranch are issued under a different regulatory authority and any proposed changes (including retiring the permits) must undergo a separate site-specific environmental analysis and decision process.

1.5 Decision to Be Made

The authorized officer will decide whether to release the funds necessary to operate and maintain a LTH pasture over the next 5 year period for up to a maximum of 1,500 excess wild horses (geldings) on 16,367 acres of private or State land owned or controlled by the BLM-selected contractor, within Madison County, near Ennis, Montana. The BLM's decision would be made about December 26, 2009.

1.6 Applicable Legal and Regulatory Requirements

The following statutes and resultant regulations are of primary concern to this environmental assessment:

- The National Environmental Policy Act of 1969, as amended.
- The Wild Free-Roaming Horse and Burro Act of 1971, as amended.
- Federal Land Policy and Management Act of 1976.
- Clean Water Act of 1987, as amended, 33 USC 1251, 1977.
- Montana Water Quality Act Title 75 Montana Code Annotated.
- Montana Water Use Act Title 85 Montana Code Annotated.
- Constitution of Montana Article IX – Environment and Natural Resources, Section 3 Water Rights.
- Title 43, Code of Federal Regulations 4700.
- National Historic Preservation Act of 1966, as amended (1992).
- Threatened and Endangered Species Act of 1973, as amended.

1.7 Coordination Requirements

The Proposed Action does not conflict with any known State or local planning or zoning ordinance. The proposal is consistent with the land uses occurring within the Madison County, Montana area and is intended to maintain the ranch property in open space/agricultural use.

The proposed construction of about 13 miles of new fence to exclude public (BLM) and one section of State land (Section 16) within the Spanish Q Ranch's interior as part of the Proposed Action does not conform to the Montana Department of Fish, Wildlife and Parks (MDFWP) guidelines for wildlife-friendly fences or the BLM's fencing manual H-1741-1. These guidelines recommend a maximum top wire at 42" in height, with a smooth (not barbed) bottom wire placed 16" above ground to facilitate wildlife movement/passage.

2.0 Description of Alternatives

2.1 Process Used To Formulate Alternatives

This section of the EA describes the Proposed Action and Alternatives, including any that were considered but eliminated from detailed analysis. Three alternatives are considered in detail:

- Proposed Action Alternative
- Alternative A
- No Action Alternative

The action alternatives respond to the identified resource issues and the purpose and need for the action to differing degrees. Implementation of the No Action Alternative would not meet the purpose and need for the action either in whole or in part; it is included as a basis for comparison with the action alternatives.

2.2 Alternatives Considered but Eliminated from Further Analysis

An alternative to consider an exchange of use for public lands within the ranches interior was considered but dismissed from detailed study. Under this alternative, wild horse use of public lands within the ranch's interior would have been authorized, eliminating the need for about 13 miles of new fence construction. While this would benefit wildlife by avoiding any additional impediments to their movement, it would be contrary to federal law. Under the WFRHBA, the BLM is limited to managing wild horses only on those areas of public lands in the West where they were found when the Act passed in 1971. No wild horses or burros were found in 1971 within the planning area. Therefore, it would be illegal for the BLM to pasture wild horses on these public lands.

Another alternative considered but dismissed from detailed study was to modify the specifications for new fence construction to fully meet the MDFWP or the BLM wildlife-friendly fence guidelines. Under this alternative, fences would be constructed with a maximum top wire height of 42". This alternative was dismissed due to the high potential for unauthorized wild horse use of public lands within the ranch's interior and the potential risk for wild horses to stray onto adjacent National Forest lands. Top wire heights of less than 48" would also increase the potential for wild horses to stray onto Highway 287, which would represent a substantial risk to public health and safety due to the potential for vehicle-horse collisions.

A proposed land exchange would block up public lands in the western portion of the ranch which would eliminate the need for at least some of the fencing necessary to exclude wild horse use from public lands. The proposed exchange would also have potential to improve the BLM's manageability of the area and improve recreation

access. However, a land exchange could not be evaluated and completed in time to be considered as part of the current LTH pasture proposal (an estimated 3-5 years would be needed to evaluate and/or complete such an exchange). A land exchange would also be outside the scope of the current environmental analysis. Therefore, this alternative was dismissed from detailed study in this EA.

2.3 Description of Alternatives

2.3.1 Proposed Action Alternative

The Proposed Action Alternative is to operate and maintain a LTH pasture for a maximum of 1,500 excess and non-reproducing wild horses (geldings). The Ennis LTH Pasture would be operated and maintained by the BLM selected contractor on about 16,367 acres of private or State (Section 36) pasture land owned or controlled by the contractor in Madison County, about one mile north and west of Ennis, Montana (Map 1). Animals would be added beginning in about January 2010 until the capacity of 1,500 wild horses was reached.

The contract requirements include specifications for the necessary corrals, chutes and runways, and the requirements for pastures, supplemental feed, feed supplements, and water. Since the ranch has been operated as a cattle ranch by the present owner for over 40 years, the corral facilities needed to handle the animals are in place, eliminating the need for any new construction. However, existing corrals would be modified by raising the steel panels to increase the height from 60" in height at present to 72" high (no new surface disturbance would be required).

About 3,160 acres of public (BLM) land and 640 acres of State of Montana land within the ranch's perimeter would be fenced to exclude use by wild horses (use of State Section 36 in T 5 S, R 2 W would be authorized for use by wild horses under a Special Use Permit issued by the Montana Department of Lands). Approximately 13 miles of new fence construction would be required. New fences would be constructed to meet the following construction specification as outlined in the LTH Pasture Contract: 4 strand barb wire, 48" top wire height, 12" between wires. The majority of the existing ranch fences would need to be modified to meet this standard. Total reconstruction of the fence along Highway 287 is also proposed. No new surface disturbance would be required to modify existing fences.

Two to four loads of horses would be delivered every other week until the capacity of the facility has been reached. Horses will be added, as needed, to replace natural mortality, or animals sold or sent to adoptions. Upon arrival, wild horses will be placed into pens and held until they recover from the stress of shipping and become acclimated to the new environment. During this period, they will be fed using the same equipment used to provide feed in the pastures. This practice will allow the animals to become accustomed to the equipment and in the habit of expecting feed when the equipment arrives. Once the wild horses are accustomed to being fed, they can be led from one pasture to another using the feeding equipment.

Wild horses will use the ranch's pasture land for up to 8 months. As grass matures, wild horses would be allowed to drift or gradually be moved from lower to higher elevations and back again with the seasons. About half the units would not be grazed in any given year (rest-rotation grazing strategy). Horses will be kept in the lower elevation units (about 3,069 acres) during the winter season where they will receive supplemental feed (about 25 pounds/day/horse grass/alfalfa hay mix with a protein content of 12% or better as verified by Montana State University) for about 4 months.

Salt blocks will be distributed at salt licks, with multiple licks available in all pasture units, and monitored weekly. Minerals will be added as necessary during the winter season. Salt and mineral supplements will be moved

periodically to encourage movement of wild horses and to promote a more even pattern of forage utilization. Wild horses in their native habitat are accustomed to ranging long distances from water to find adequate forage. The placement of supplements should not be required to obtain movement, but will assure movement into desired areas.

Watering will occur from the various streams and natural springs on the property. Wild horses generally spend limited time at water sources. They generally water and graze near the source until the entire band has watered, then move to higher ground in search of forage and security.

2.3.2 Alternative A

Under Alternative A, the initial wild horse stocking rate would be based on analysis of the Natural Resource Conservation Service's (NRCS) range site data developed for Madison County, Montana (1981) and in consideration of actual livestock use together with ecological site condition and inventory data collected for the ranch (October 2009). This data suggests an initial stocking level of 805 wild horses, with the opportunity to increase stocking to a maximum of 1,000 wild horses should on the ground monitoring indicate additional forage is available. The final wild horse stocking level would be determined based on actual use of the ranch by wild horses (i.e., Alternative A would incorporate an adaptive approach to management of wild horses on the Spanish Q Ranch as follows):

- On the ground monitoring would be completed by the BLM at the end of the first year's pasture period. If additional forage is determined to be available, an appropriate number of wild horses (up to another 100) could be added at the start of year two.
- The BLM would then complete monitoring at the end of the year two pasture period to determine if up to another 95 wild horses could be added.
- No more than 1,000 wild horses would be authorized to graze during the 5-year contract period.
- Grazing by wild horses must meet the following forage utilization monitoring criteria: (1) use at the end of the pasture period shall average 50% by weight or less of key forage (grass) species on the majority of the ranch's upland range sites, and (2) a minimum of 4" stubble height must remain on sedges in the majority of the ranch's riparian areas (non-fishery streams).
- Should monitoring indicate there is insufficient forage available (or that resource damage is occurring in a number of key range sites), wild horse numbers would be reduced as indicated (also see EA, page 24). Appropriate numbers of wild horses would be gathered and relocated (shipped) to either a BLM short-term corral facility or another grassland pasture with surplus capacity.
- The BLM would continue to monitor animal and rangeland health conditions through the remainder of the contract period. Additional adjustments in wild horse stocking levels or in on the ground management would be made, as appropriate, based on monitoring results.

The proposed management would be a reverse (deferred) rotation grazing strategy in which wild horses would be drifted generally west to east in one year and from east to west in the following year. Early spring or late fall use would be rotated between two Crested wheatgrass seedings, about 480 acres of irrigated meadow and/or hay land aftermath, and about 1,000 acres of native rangeland within the Mitchell Lease. The smaller pastures adjacent to the corral facility would be used to transition the horses to the ranch. Winter use by wild horses would be rotated between one of three winter feed areas in alternating years. Depending on the weather, wild horses would be fed hay for about 4 months, and pasture on native range, meadow, hay land aftermath, or seedings for about 8 months each year (refer to Appendix 4 for an example of the grazing schedule proposed for year one).

At the initial estimated stocking level, about 1 to 1.5 months of unused forage (about 1200-1250 AUMs) should be available for use in the event of an emergency or other unplanned situation. To assure wild horses remain in a

healthy condition or prevent rangeland damage, additional supplemental feed would be provided to wild horses, as needed, in the event of wildfire, drought, early or late snowfall, or other unforeseen circumstance.

The contractor would also construct any new fences almost entirely on private land and would modify the specifications for the new fences to be built to be more wildlife-friendly as follows:

- Suspension fences with four smooth wires spaced at 48", 34", 26" and 18" rather than standard wood post-barb wire construction would be required. If possible, use of a top wire coated with a white plastic resin to increase wildlife visibility should be used. To lessen the potential fence maintenance workload, construction of let-down sections at key wildlife crossings could also be considered.
- Existing interior pasture fences would be similarly modified.
- Upon termination of the LTH pasture contract, the contractor would be required to either remove any new fences constructed on public land in entirety or to reconstruct them as necessary to fully comply with MDFWP's wildlife-friendly guidelines.

Fences would be constructed and/or modified before wild horses are allowed to use areas of the offered property adjacent to Highway 287, or BLM or National Forest administered lands (e.g., first priority – reconstruction/ modification of fences on the Mitchell lease; second priority – east half of the ranch; third priority – west half of the ranch).

2.3.3 No Action Alternative

Under the No Action Alternative, the ranch would continue to pasture an average of 793 animal units of from as early as April to as late as December for up to 8 months use during some years. About half the pasture units would be un-grazed in any given year (rest-rotation grazing strategy). BLM and State Land Leases and a USFS permit are also included with the private land under this alternative. Livestock would receive supplemental feed (hay) in the lower pastures from 4 up to 6 months depending on the winter. The hay provided would be locally grown on other private ranch property owned or leased by the contractor. Under this alternative, the ranch would also have the option of increasing livestock stocking to historic levels of approximately 1,400 cow calf pairs and 600 yearlings if economic conditions should permit, build additional fences on their private land to any standard desired, or subdivide the property.

2.4 Summary Comparison of Alternatives

Table 2: Summary Comparison of the Alternatives

Item	Proposed Action	Alternative A	No Action
Number Animals	Maximum of 1,500 non-reproducing wild horses (geldings).	Initial stocking would be limited to 805 wild horses, with the opportunity to increase stocking to a maximum of 1,000 wild horses if on the ground monitoring indicates additional forage is available. Stocking could also be reduced below 805 horses if monitoring indicates insufficient forage is available (adaptive management).	An average of 793 animal units for about 4,758 AUMs of cattle use (April to December in some years). Of this, an estimated 1,061 AUMs of use is attributable to unfenced BLM or State land within the ranch's interior.
Grazing Strategy	Rest-Rotation	Deferred-Rotation	Deferred or Rest-Rotation

Salt and Minerals/ Supplemental Feed	Salt would be provided at various locations throughout the year. Supplemental feed (good quality hay) would be provided to wild horses (or cattle) for about 4 months during the winter. Minerals would be added as needed during the winter feed season.		
Proposed Fences	About 13 miles of new fence construction would be required to exclude public (BLM) and State land (Section 16) within the ranch interior from use by wild horses. Fences would be constructed to meet contract specifications.	Same as Proposed Action, with the exception that the specifications for new fence construction would be modified to be more wildlife-friendly. Upon termination of the contract, any new fences constructed on public land would be removed in entirety or modified to fully meet MDFWP wildlife-friendly fence guidelines.	No new fencing would be required, although the ranch could elect to construct additional fences on their private land at any time.
Management of Fenced Public Lands	Existing grazing permits would continue; however, no cattle use of fenced BLM lands on the east side of the ranch would be expected because available water is located on private lands outside the fenced area. Some cattle use (consistent with existing permit terms and conditions) may occur on BLM and State land on the west side of the ranch, in accordance with existing permit terms and conditions.	Same as Proposed Action.	The livestock operator would continue to be authorized to graze cattle on BLM and State lands in accordance with the existing permit terms and conditions.
Stocking Rate	Effective stocking rate of about .68 acres per animal per month under a rest-rotation grazing strategy, in which only half the ranch would be used in any given year. This level of stocking would be much higher than is typical for southwest Montana.	Alternative A incorporates an adaptive approach to wild horse management. The initial stocking rate of would be 2.54 acres per horse per month (805 wild horses) on a deferred use basis, with the opportunity to increase stocking to a maximum of 2.04 acres per horse per month pending the results of on-the-ground monitoring. Conversely, should monitoring indicate insufficient forage is available or that resource damage is occurring, an appropriate number of wild horses would be removed and shipped to a short-term corral or other grassland pasture with surplus capacity.	Effective stocking rate of about 2.58 acres per animal unit per month based on the current average livestock use.
Invasive Plants and Noxious Weeds	The potential risk for invasive weeds such as knapweed to become established and/or spread would be expected to be high due to the proposed stocking rate. Areas of bare ground conducive to invasive weed establishment could be expected at a number of locations.	There would be low risk for establishment or spread of invasive plants under this alternative as management would be adapted as needed to assure forage utilization is maintained at moderate levels with minimal trampling/trailing or creation of bare ground conducive to invasive weed establishment or spread. Cheatgrass may spread along any new trails in the lower elevations	At the current stocking level, potential impacts would be expected to be similar to Alternative A.

		of the ranch.	
Soils and Vegetation Resources	Heavy to severe utilization of key forage species would be expected at the proposed stocking rate. This would be expected to result in deteriorating range ecological condition in both the short and long-term. Less infiltration and increased runoff would be expected and the resulting surface or rill erosion would result in increased sedimentation throughout the ranch.	The reverse (deferred rotation) grazing strategy coupled with adaptive management of wild horses should assure forage utilization is maintained at moderate levels. This would be expected to maintain the current mostly good ecological condition of the ranch.	As above.
Wetland/Riparian Zones	Wetland/riparian area condition would be expected to sharply decline as a result of heavy to severe utilization, trampling and trailing damage, and increased sedimentation.	Adaptive management of wild horses would be expected to maintain or slightly improve wetland/riparian area condition over the existing situation as wild horses tend to spend less time near water than cattle.	At the current stocking level, potential impacts would be expected to be similar to Alternative A, except that cattle tend to spend more time near water than horses.
Wildlife	New fences would be constructed using the non-wildlife friendly specifications outlined in the LTH Pasture contract. Ease of wildlife movement would be directly impacted and there would be a high risk for mortality of individual animals as a result. The amount of forage and habitat available for use by wildlife would be expected to sharply decline as a result of heavy to severe utilization, trampling and trailing damage by wild horses. USDA Wildlife Services would not control predation on wild horses under this alternative.	Specifications for construction of new fences would be modified to be more wildlife friendly. Additionally, upon termination of the contract, any new fences constructed on public land would be removed in entirety or modified to meet MDFWP and BLM wildlife-friendly fence guidelines. Through adaptive management, moderate levels of grazing utilization by wild horses would be maintained. Moderate use, coupled with a deferred rotation grazing strategy, would be expected to maintain the amount of forage and the quality of the habitat available for use by wildlife. USDA Wildlife Services would not control predation on wild horses under this alternative.	The construction of new fences to exclude public land within the ranch interior would not be required and there would be no impact to wildlife movement (passage) above the current situation. However, the ranch could elect to construct additional fences to any standard on their private lands at any time. No change in the amount of forage and the quality of the habitat available for use by wildlife would be expected, unless the cattle stocking rate is substantially increased above that which has occurred over the past 11 years. Predation concerns with livestock would be reviewed by USDA Wildlife Services.

3.0 Affected Environment

3.1 General Setting

The proposed LTH pasture is located in Madison County, about 1 mile north and west of Ennis, Montana, within portions of T5 and 6S, R1 and 2E. The 16,367 acre ranch is comprised of five distinct units forming one contiguous pasture. Pasture units start at 5,000 feet above sea level (asl) and go to 7,500 feet asl, allowing animals to move to the higher pastures for forage as grasses mature in the higher elevations.

The ranch has numerous ravines, timber, brush, canyons and rock outcroppings, providing natural protection to animals from the weather. Trees include aspen, spruce, lodge pole pine, and fir. Each pasture unit has at least one feature that provides shelter to the animals. Available forage consists predominantly of abundant stands of Bluebunch Wheatgrass, Idaho Fescue, and Columbia Needlegrass, typical of rangelands east of the Continental Divide in southwestern Montana. All units have adequate year-round water from mountain creeks and natural springs on the property.

The climate in Madison County is semiarid and is characterized by warm, dry summers and cold winters with deep mountain snowpack in the higher elevations. Average annual precipitation varies based on elevation. Normally, about 12 inches of precipitation falls in Ennis (4,700 feet), but the Ennis LTH pasture is generally higher and would receive between 12 and 19 inches of total annual precipitation, seventy five percent of which would fall between April and September. Snow accumulations in Ennis average 30 inches per year. NRCS precipitation data collected at two collection facilities near Ennis indicate that since 2000 there has been a 10% decrease in total annual precipitation as compared to the previous 30 years (1971-2000). Temperatures range from an average low of 30.4 degrees Fahrenheit to an average high of 56 degrees Fahrenheit on an annual basis. The highest average temperature occurs in July and August and reaches the low 80's, with average lows in the teens during December through February. Wind velocity averages less than 10 mph predominately from the south. Storms usually last only a few days, but snow can accumulate and remain for extended periods of time during the winter months.

The ranch has run varying numbers of cattle over the past 40 years. Approximately 11 years ago, the roughly 32,000 acre ranch was split into three different entities: most of the farm ground went to one entity; the livestock (cattle) went to a second entity; and the summer pasture (Spanish Q Ranch) went to the third entity. The Spanish Q Ranch currently comprises 12,560 acres of privately owned land. Prior to the ranch's split, Spanish Q reports pasturing 2000 yearling steers (1,400 AU equivalents) in some years, and up to 1,400 cow/calf pairs and 600 replacement heifers (1,820 AU) for an average of 6 months each year on the offered property. For the past 11 years, an average of 793 animal units of cattle have grazed the private and unfenced State and public (BLM) lands from as early as April to as late as December (up to 8 months) in some years. Depending on the winter, supplemental feed (good quality hay) is provided to cattle for 4-6 months during the winter. This hay is produced on private lands owned or controlled by the contractor outside the planning area.

The ranch holds grazing leases for the BLM land within the ranch interior, on the adjacent Beaverhead-Deerlodge National Forest and for two sections of State of Montana land (about 1,280 acres). State or BLM lands were not included in the initial proposal. However, through consultation with the Montana Department of Lands, the State land in Section 36 would be authorized for use by wild horses under a special use permit while Section 16 would be fenced in conjunction with the adjacent BLM land to exclude use by wild horses. Table 3 summarizes the federal grazing permits the Spanish Q Ranch presently holds.

Table 3: Authorized Livestock Use (Federal Grazing Permits)

Allotment	Number	Kind	Season	AUMs	% Public
Fletcher-Moore*	33	cattle	5/15-12/01	218	100
Granite-Moore*	245	cattle	6/1-6/30	99	41
Granite-Moore*	245	cattle	10/15-11/14	102	41
Granite Creek (USFS)	300	cattle	7/10-10/20	259	100

* Grazing use is authorized on unfenced public (BLM) land in conjunction with private ranch land. The private-public rangeland is grazed under a rest-rotation (graze every other year) grazing strategy. This strategy was designed to maintain good ecological condition. It includes five geographical areas comprised of private, State, and BLM lands

with a separate Forest Service Allotment. Cattle generally graze on the east side (pastures 4 and 5) one year, and on the west side (pastures 1, 2, and 3) the next. Each area is scheduled for rest on alternating years. The Fletcher-Moore BLM Allotment is part of the east side grazing area, and the Granite-Moore BLM Allotment is part of the west-side rotation. The goal is to limit use by cattle of the East Fork of Granite Creek to about 30 days every other year.

More recently, the Spanish Q Ranch leased the Mitchell Place. The Mitchell Lease lies immediately south of the Spanish Q Ranch private lands and comprises 3,069 acres. Of this, approximately 1,500 acres is seeded to Crested wheatgrass, and another 480 acres is planted to a mix of orchard grass and alfalfa under pivot sprinkler systems, or is irrigated meadow. Hay ground produces an estimated 3 tons a year (2 tons of hay with approximately 1 ton per acre available for aftermath grazing). A corral facility off Quarter Horse Lane (4 miles west of Ennis) would be used to unload, sort, and handle wild horses.

With the addition of the Mitchell Lease and use of State Section 36 under a special use permit issued by the Montana State Department of Lands, a total of 16,367 acres would be available for use by wild horses.

3.2 Description of Affected Resources/Issues

The following elements of the human environment (resources) are present and may have potential to be affected by the Proposed Action. The existing situation (affected environment) relative to these resources is described below:

3.2.1 Invasive Non-Native Species

Infestations of invasive non-native plant species such as Spotted knapweed (*Centaurea stobe*) and Houndstongue (*Cynoglossum officinale*) are found at many locations in southwest Montana. Houndstongue, a biennial to short-lived perennial plant, which produces pyrrolizidine alkaloids, is toxic to livestock, especially horses when ingested in small amounts over time or in large quantities. Most poisonings occur when animals consume contaminated hay, but can also occur when consumed during grazing in pasture conditions. Houndstongue is scatted along riparian areas and drainages within the Spanish Q Ranch.

Noxious weeds can become established or spread through vehicle use, improper grazing management, or following wildfire or other disturbance. When noxious weeds like these become established, they out-compete and replace desirable native vegetation. This results in less forage and habitat available for use by wildlife and livestock. The amount of bare ground can also increase, leading to surface or rill erosion and increased sedimentation which can adversely impact water quality over time. Maintaining land health through proper grazing management can help to prevent the establishment or spread of noxious weeds or other invasive non-native plant species.

Under the Montana Weed Act, private landowners are responsible for the control of any noxious weeds found on their property. At the present time, the ranch is spot treating small infestations of Spotted knapweed, Musk thistle (*Carduus nutans*), Houndstongue, and Common burdock (*Arctium minus*) on about 400-600 acres of private land, in partnership with the Madison County Weed Board. There are also minor amounts of cheatgrass (*Bromus tectorum*) present in small patches, primarily along drainage bottoms, disturbed areas (salting areas, roads), and south facing slopes in the lower elevations of the ranch.

3.2.2 Soils and Vegetation Resources

Ocular estimates of range ecological condition during the October 13, 2009 field site visit by the BLM interdisciplinary team (IDT) indicate the offered property is mostly in good ecological condition with Bluebunch wheatgrass, needlegrass and other perennial grasses dominant throughout all the major range sites. The ranch is

currently operated under a rest-rotation grazing strategy with use alternated between the west and east half in alternating years. Further on-the-ground ocular estimates of site condition for the dominant ecologic sites by Natural Resource Options Inc. (NRO) of Bozeman, Montana during October 25-26, 2009 indicate approximately 12% of the ranch is in excellent ecological condition; 70% of the ranch is good ecological condition; and 18% is in fair or high fair ecological condition.

In 2009, approximately 951 animal units of cattle grazed the ranch. Livestock were turned out about April 1st on the Mitchell Lease, and were moved to privately owned lands on the west half of the ranch about July 1st. Cattle were removed on October 11th. Actual use for the 2009 grazing season is estimated at 2,853 AUMs on the Mitchell Lease and 3,329 AUMs use on private, BLM and State land for a total of 6,182 AUMs of cattle use (2.15 acres/AU). Of this, approximately 1,061 AUMs of use is attributable to unfenced BLM or State land within the ranch's interior. This level of use resulted in light to moderate utilization in upland range sites as determined through ocular estimates (October 13, 2009). Under the current rest-rotation grazing strategy, the west half of the ranch would be rested in 2010.

The major soil types are Oro Fino Poin, Oro Fino Loam, Tiban Sandy Loam with Shurley Rock and Sebud Hapgood Rock Outcroppings. Most of these soil types are classified as sandy, gravelly, or flaggy sandy loams which are comprised of small or large stones for maintenance of wild horse hoof condition. NRCS data for Madison County, Montana indicates soils are low to moderately productive, ranging from a low of about 200 pounds to about 1900 pounds or more total production per acre depending on the ecological site. Production can vary from 100 to 500 pounds per acre from year to year depending on the site and the timing and amount of precipitation received.

Carrying Capacity Analysis

In response to the BLM's solicitation for additional LTH pastures, the contractor's initial estimate of the ranch's carrying capacity was 14,218 AUMs of forage (about 1,777 animals for 8 months of the year). The contractor derived the estimate using the Average Animal Weight (AAW) Method of Determining Stocking Rate (Utah State University Extension, Dale R. Zobel, Beef Extension Specialist). At this stocking level, the effective stocking rate would be about .55 acres per horse per month (under a rest-rotation grazing strategy in which only half the ranch would be used). During the remainder of the year (about 4 months), wild horses would receive supplemental feed (grass/alfalfa hay mix). The contractor's initial carrying capacity estimate was supported with additional information from Dr. Randy Wiedmeier from Utah State University which suggests a forage demand of 16.3 pounds digestible matter per day, or about 489 pounds per month, as the amount of forage needed to meet a horse's energy demand.

This compares to the BLM's estimated forage demand of 800 pounds per horse per month (about 3% of the average wild horse's body weight, or 25 pounds of dry matter per day). Although the average wild horse weighs between 800-1,000 pounds, individual horses can vary in size from as little as 800 pounds to more than 1,200 pounds. By estimating carrying capacity based on a forage demand of 800 pounds per horse per month, the BLM accounts for the variability in animal size and can assure adequate forage is available to maintain wild horses in a healthy condition.

The BLM evaluated the NRCS Soil Survey (Ecological Site Data) for Madison County, Montana (1981) with the objective of developing an initial estimate of the ranch's potential carrying capacity. Analysis of this data indicates available forage could range from about 5,566 AUMs in below normal precipitation years to about 6,831 AUMs in normal precipitation years. The data suggests the ranch has the capability to support between 696-854 wild horses (for up to 8 months, with supplemental feed provided for the remaining 4 months of the year). At this level of use, the effective stocking rate would range from 2.4 to 2.93 acres per horse per month. For additional information,

refer to Appendix 2.

While NRCS soil survey data is typically used as a starting point when developing an estimate of potential carrying capacity, additional data is often collected to correlate soil survey information with actual on the ground conditions. Accordingly, an on-the ground evaluation of the ranch was completed by NRO during October 25-26, 2009. The objective of the evaluation was to inventory the ecological sites on the ranch, determine their current condition, and make recommendations to the BLM regarding the ranch's carrying capacity. Because the ranch is mostly in good ecological condition and in view of the actual use by cattle on only half the ranch over the past 11 years (rest-rotation), NRO expressed confidence in the ranch's ability to pasture 950 to 1,000 wild horses for up to 8 months a year.

The ecological site and condition information NRO collected was used to calculate the number of AUMs for the ranch. AUMs were determined by dividing the total number of acres surveyed by the Acres/AUM specified by the ecological condition for each site. The NRCS Ecological Range Site and Condition methodology was used to arrive at ecological condition and AUM calculations (the Montana Foothills and Mountains Ecological Site and Condition Guides were used).

The information provided by NRO suggests a potential carrying capacity of 7,693 AUMs for the ranch. NRO also recommended retaining approximately 1 to 1.5 months of unused AUMs for emergency situations (approximately 1,200 to 1,250 AUMs). The unused AUMs would be available in the event of drought of other unforeseen situations such as fence repair, water shortages, improved pasture or hay land renovations, etc. Allowing for 1,250 AUMs of unused forage, approximately 6,443 AUMs would be available for use by wild horses. This data suggests initially stocking the ranch with about 805 wild horses would be appropriate. If monitoring should indicate additional forage is available for use, the potential exists to increase stocking to a maximum of 1,000 wild horses during the 5 year contract period. At this level of use, the effective stocking rate would potentially range from 2.05 to 2.54 acres per horse per month. Refer to Appendix 3.

In evaluating the ranch's potential carrying capacity, BLM also considered the actual livestock use information provided. This data indicates an average use by 793 animal units of cattle for about 6 months over the past 11 years (Appendix 1). This resulted in an average estimated use of about 4,758 AUMs per year (of this, approximately 1,061 AUMs is attributable to unfenced BLM or State land within the ranch's interior). In 2009, with the addition of the Mitchell Lease, the ranch reports an additional 2,853 AUMs of use by cattle. Review of the actual use data suggests a potential carrying capacity under a deferred-rotation grazing strategy of roughly 6,355-8,894 AUMs (794-1,100 wild horses). Based on this estimate of potential carrying capacity, the effective stocking rate would potentially range from about 1.86 to 2.58 acres per horse per month.

A summary comparison of BLMs carrying capacity analysis is provided in Table 4.

Table 4. Summary Comparison of Carrying Capacity Analysis

Item	Initial Estimate	NRCS Soil Survey	Ecological Site Inventory	Actual Cattle Use
Potential AUMs	14,218	5,566 – 6,831	7,693	6,355-8,894
Animal Units (AU)	1,777	696-854	805 – 1,000	794-1,100
Effective Stocking Rate	.55 ac/AU/Month	2.4-2.93 ac/AU/Month	2.05-2.54 ac/AU/Month	1.86-2.58 ac/AU/Month
Forage Demand	16.3#/Horse/Day	25#/Horse/Day		

The BLM's goal is to maintain land and animal health. Because wild horses cannot be easily gathered and removed in the event of drought or wildfire, forage production estimates for above normal precipitation years are typically not considered when determining horse stocking rates. Therefore, the above estimates are made in consideration of the forage variability which can result between below normal to normal precipitation years. This allows the BLM greater flexibility in the event of drought, wildfire, or other unforeseen circumstances in LTH pastures.

3.2.3 Wetland/Riparian Zones

There are seven streams on the property: Frieler, Postlewaite, Bobtail, Slade Creek, the East, West and Middle Fork of Moore Creek, the East and West Fork of Granite Creek, and Fletcher Creek. Flow rates vary from 35 miner's inches to 150 miner's inchers. In Montana, 40 miner's inches equal one cubic foot per second. One natural spring provides flows of 35 gallons per minute (gpm). The Lower Garden Tanks Well provides 28 gpm.

Ecological site and condition inventory information indicates that 243 acres of woodland/wet meadow is in high fair ecological condition, 708 acres of sub-irrigated meadow is in good condition; and 160 acres of sub-irrigated meadow is in fair condition.

Abundant residual vegetation remains following the 2009 grazing season with the exception of 2 ½ miles including Granite Creek and the upper portion of the Moore Creek tributary. Along Moore Creek, mixed age classes of aspen, alder and willow are present in most locations, although older age classes are dominant. Abundant residual vegetation remains along the stream banks and includes sedge species and redtop. Woody debris is evident at several locations. Stream banks appear stable; however, there are relatively few undercut banks, and the channel is relatively wide and shallow, or braided in some locations. Cattle grazing impacts to about 2 ½ miles of riparian habitat along the East Fork of Granite Creek and Moore Creek tributary did occur in 2009 and include trampling/trailing, heavy herbaceous utilization, bank alteration and increased sediment inputs in the stream.

3.2.6 Wildlife

Pronghorn, mule deer, whitetail deer, elk and moose utilize the Spanish Q Ranch and surrounding public lands year-round. The area is important elk, mule deer, and antelope winter range, as well as elk calving habitat. The wild horses have the highest probability for forage competition with elk since both species' diets are dominated by grasses, while mule deer and antelope winter diets mainly consist of shrub species. However, deer and antelope diets include grass during other seasons, especially during spring green-up. As a result, there could be dietary overlap between deer and antelope and wild horses at this time of the year. Fences impede wildlife movement and are an entanglement hazard. Antelope, fawns and calves tend to go under fences, therefore a higher bottom wire is preferred (≥16 inches). To facilitate movement over fences, it is recommended that the top wire height doesn't exceed 42 inches.

Predators in the area include mountain lions, wolves, black bear, coyote and possible transient grizzly bear. Besides mountain lions and possibly wolves, the other predators would be more likely to scavenge on horses that are already dead, rather than actual predation on the horses. If predation on the wild horses were to occur, no predator control would be implemented which would be beneficial for the predators.

4.0 Environmental Consequences

4.1 Introduction

This section of the EA documents the potential environmental impacts which would be expected with implementation of the Proposed Action, Alternative A, or No Action Alternative. These include the direct impacts (those that result from the management actions) and indirect impacts (those that exist once the management action has occurred). By contrast, cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

4.2 Predicted Effects of Alternatives

The direct and indirect impacts to these resources which would be expected to result with implementation of the Proposed Action or No Action Alternatives are discussed in detail below.

4.2.1 Invasive Non-Native Species

Under the Proposed Action Alternative, the potential risk for noxious weeds such as knapweed to become established and/or spread would be very high due to the proposed effective stocking rate of .68 acres per horse per month (under a rest-rotation grazing strategy). At this stocking rate, utilization by wild horses would be expected to be heavy to severe, which would result in a decrease in plant vigor and increased bare ground in the short term. Over the longer term, land health would deteriorate leaving substantial areas of bare ground which would be conducive to invasive weed establishment or spread at a number of locations.

Due to the adaptive management approach incorporated in Alternative A, there would be low risk for establishment or spread of invasive plants. Under this alternative, the stocking rate could potentially range from 2.05 to 2.54 acres per horse per month, with wild horse numbers adjusted either up or down as needed based on the results of site-specific monitoring. By adapting wild horse management to assure moderate or lower levels of forage utilization, coupled with a deferred rotation grazing strategy, minimal trampling/trailing or creation of bare ground conducive to invasive weed establishment or spread would be expected. Where new trails are created, the disturbance would be expected to facilitate an increase in invasive plants, especially cheatgrass in the lower elevations of the ranch.

Under the No Action Alternative, the ranch would be expected to continue to treat some infestations of Spotted knapweed Musk thistle, Houndstongue, and burdock on about 400-600 acres of private ranch land. There are minor amounts of cheatgrass evident at some locations; however, due to good range condition and precipitation zones, cheatgrass would not be expected to spread unless the ranch was severely overgrazed over a period of time.

4.2.3 Soils and Vegetation Resources

Impacts of the Proposed Action

The direct impact of the Proposed Action Alternative would be to pasture a maximum of 1,500 excess wild horses as compared to an estimated 793 animal units of cattle over the past 11 years under a rest-rotation grazing strategy. Under this strategy, only about half of the ranch property would be grazed in a year, with the balance rested (no use). This number of wild horses would be nearly double the expected carrying capacity based on the NRCS Ecological Site Data for Madison County, Montana. Grazing this number of wild horses would be expected to result in heavy to severe utilization of key forage species, a decrease in plant vigor, and an increase in trailing and

trampling damage. Less infiltration and increased runoff would lead to an increase in the amount of bare ground in the short-term. Over the longer-term, the diversity and abundance of desirable native vegetation would be reduced and deteriorated land health conditions could be expected.

Impacts of Alternative A
Under Alternative A, a maximum of 1,000 wild horses would be pastured under a reverse (deferred) rotation grazing strategy. Because Alternative A would implement an adaptive approach to wild horse management, the initial stocking would be limited to 805 wild horses. Additional wild horses (up to a maximum of 1,000 horses) could be added pending results of on the ground monitoring following grazing in year one and two. However, should monitoring indicate there is insufficient forage available as indicated by utilization levels in excess of 50% by weight on key forage species on the majority of the ranch, less than 4" stubble height remaining on sedge in the majority of the riparian areas, or there is evidence that resource damage is occurring in a substantial number of key range sites, an appropriate number of wild horses would be removed by gathering them and shipping them to either a BLM short-term corral facility or another long-term grassland pasture with surplus capacity.

The entire ranch property would be grazed every year with use rotated from west to east in one year and from east to west the following year. Use by this number of wild horses would be consistent with the expected carrying capacity for the ranch, based on ecological site condition and inventory data (October 2009). As described above, should monitoring indicate there is insufficient forage available or that resource damage is occurring, wild horse numbers would be reduced. As a result of this adaptive management approach, forage utilization would be expected to average no more than 50% of the key forage species (moderate utilization), and rangeland health (soils and vegetation condition) would be expected to be maintained in its current mostly good ecological condition. The indirect impact of wild horse grazing would be that, unlike cattle, they tend to spend more time on the ridge tops rather than water sources. Given the stocking rate proposed in Alternative A, the impacts should remain minimal in the upland areas, as found in the existing situation.

Based on the initial estimated stocking level of 805 wild horses, about 1 to 1.5 months of unused forage (about 1,200-1,250 AUMs) should be available in the event of an emergency or other unplanned situation. Should this amount of unused forage be insufficient to maintain wild horses in a healthy condition and to prevent potential damage to the ranch's native rangeland and seeded pastures, the contractor would be required to provide additional supplemental feed (good quality hay), as needed.

Impacts of the No Action Alternative
Under the No Action Alternative, the ranch would continue to be grazed by an average of about 793 animal units of cattle for up to 8 months in some years. Under the current management, the ranch is in good ecological condition at the present time with a desirable diversity of grasses, forbs, and shrubs evident on most range sites.

3.2.5 Wetland/Riparian Zones

Impacts of the Proposed Action
Implementation of the Proposed Action Alternative would be expected to result in deteriorated wetland/riparian zone conditions throughout the ranch. Expected impacts would include heavy to severe utilization of herbaceous and woody vegetation, bank shearing and trampling and trailing damage by wild horses, and increased sedimentation due to the proposed stocking rate. A decline in water quality over the current situation would also be expected.

Impacts of Alternative A
Under Alternative A, an adaptive approach to wild horse management would be implemented to assure desired levels of residual vegetation are maintained in wetland/riparian areas. As a result, the condition of wetland/riparian zones would be expected to be maintained or improved slightly over the existing situation as wild horses tend to spend less time near water than cattle. Under this alternative, initial stocking would be limited to 805 wild horses, and no additional horses would be added unless monitoring in year one and year two determines additional forage is available. (Wild horse numbers would also be reduced if monitoring should indicate insufficient forage is available or that resource damage is occurring).

The direct impact of grazing up to a maximum of 1,000 head of wild horses is not likely to be much different than the cattle grazing which has occurred on the ranch during the past decade. Due to the number and distribution of streams, natural springs, and water provided by the Lower Garden Tanks Well, wild horses would not generally be expected to spend large amounts of time at any one water source. With less time spent in the riparian areas, an increase in the amount of residual vegetation remaining at the end of the grazing period would be expected. There would also be less trampling and compaction and less damage to the stream banks. No increase in sediments entering the streams should occur over the present situation and water quality would be expected to be maintained or slightly improved.

Impacts of the No Action Alternative
Under the No Action Alternative, wetland/riparian zones would be expected to be maintained in their current condition and water quality would also be maintained at its present level.

3.2.6 Wildlife

Impacts Common to the Proposed Action and Alternative A
Under either alternative, no control of predators would be undertaken; some wild horses could potentially be killed by predators. Predators would also be likely to cause at least some wild horses to stray onto adjacent National Forest or fenced public or State land. The contractor would be required to recapture those animals and return them to the Spanish Q Ranch. Should the contractor be unable to contain the animals within the Spanish Q Ranch interior, the BLM would either adjust (reduce the number of wild horses) or the contract would be re-evaluated as necessary.

Impacts of the Proposed Action
Under the Proposed Action Alternative, about 13 miles of new fence would be constructed using the non-wildlife friendly specifications outlined in the LTH pasture contract. Ease of wildlife movement would be directly impacted and there would be a high risk for mortality of at least some individual animals as a result. Due to the proposed high stocking rate, the amount of forage and habitat available for use by wildlife would be expected to sharply decline as a result of heavy to severe utilization, trampling and trailing damage by wild horses. Elk winter range would be negatively impacted, forcing elk to move to surrounding areas. The heavy use may result in the wild horses foraging on and trampling shrub species important for deer and antelope winter range, forcing these species to other areas.

Impacts of Alternative A
With implementation of Alternative A, the specifications for construction of the new fences would be modified to be more wildlife friendly. Upon termination of the contract, any new fences constructed on public lands would be removed in entirety or modified to meet MDFWP wildlife-friendly fence guidelines. While these fences would be more wildlife friendly, they would still be an entanglement hazard because the top wire height (48") exceeds the

recommended height (42" maximum), This potential risk should be somewhat reduced as a 14" spacing between the top and second wires would be implemented.

Stocking rate estimates, coupled with a deferred rotation grazing strategy and an adaptive management approach to wild horse management would be expected to maintain moderate grazing utilization by wild horses and to maintain the amount of forage and the quality of habitat available for use by wildlife. Since there is dietary overlap between elk and wild horses, elk could possibly be displaced from areas where the two species compete for forage. Some potential for dietary overlap between deer and antelope and wild horses could also result, especially during spring green-up.

Impacts of the No Action Alternative
Under the No Action Alternative, no new fences would be constructed and there would be no impact to wildlife movement (passage) above the current situation. Predator problems with the livestock would continue to be reviewed and handled by USDA Wildlife Services. Continuing to stock the ranch with 793 animal units of cattle would also be expected to maintain the forage and water currently available for use by wildlife on both unfenced public and private ranch land.

However, should the ranch elect to increase their livestock use above that experienced over the past 11 years, dietary overlap between elk and cattle could result in elk being displaced where the two species compete for forage. Heavier use by cattle could also result in cattle foraging on and trampling shrub species important for deer and antelope winter range, forcing these species to other areas. Similarly, if the ranch elects to modify the fences on their private ranch lands by increasing the top wire height, an entanglement hazard to wildlife could result. Should the ranch be subdivided in the future, less open space, forage and habitat would be available for resident wildlife.

4.3 Cumulative Effects for All Alternatives

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

According to the 1994 BLM *Guidelines for Assessing and Documenting Cumulative Impacts*, the cumulative analysis should be focused on those issues and resource values identified during scoping that are of major importance. Accordingly, the issues of major importance to be analyzed are: **Soils and Vegetation** and **Wildlife.**

Past
During the past 40 years, the ranch owner reports the Spanish Q Ranch property was used by up to 2,000 cattle. Cattle were typically pastured for an average of about 6 months (up to a maximum of 8 months in some years) and fed hay for about 4-6 months during the winter. Fewer cattle have been grazed during the past decade since the ranch was split into three separate entities about 11 years ago. At the present time, the ranch is comprised of native vegetation typical of southwestern Montana and is mostly in good ecological condition. A number of riparian areas (streams) traverse the ranch property. Ecological site and inventory data indicates meadows are mostly in fair-high fair or good ecological condition.

Excess wild horses are currently being grazed on ten other LTH pastures; six in Oklahoma, three in Kansas, and one in South Dakota. The carrying capacity of the existing facilities is about 22,000 animals. By grazing wild

horses in LTH pastures in these areas, the animals are able to live out their lives in a natural setting rather than on fragile public rangelands in the ten western states. This has allowed the BLM to make progress toward achieving a thriving natural ecological balance and multiple use relationship in 180 herd management areas in the ten western states.

Present

Under the Proposed Action Alternative, the lands proposed for use as LTH pasture for wild horses, would be grazed by a maximum of 1,500 excess wild horses (geldings). Use by wild horses would exceed the estimated carrying capacity which was derived from NRCS Ecological Site data developed for Madison County, Montana by nearly two times. Heavy to severe utilization of key forage species and trailing and trampling damage in wetland/riparian zones would be expected in the short term. Over the long term, land health conditions would be expected to sharply decline and water quality would likely be adversely impacted due to increased erosion, sedimentation and water temperatures. This would be likely to impact water quality and habitat for fish in the Madison and Ruby River drainages which are fed by streams within the Spanish Q Ranch. About 13 miles of new fence construction would be required to exclude public lands within the ranch perimeter from use by wild horses. New fences would be constructed and existing fences would be modified to meet the contract specifications (4-strand, 48" top wire, 12" between wires). Impacts to wildlife movement and to the forage and water available for their use could be expected.

With implementation of Alternative A, the lands proposed for use as a LTH pasture for wild horses would be initially grazed by 805 wild horses, with the opportunity to increase stocking to a maximum of 1,000 wild horses under a deferred-rotation grazing strategy if monitoring indicates additional forage is available (wild horse numbers would also be reduced if monitoring indicates there is not enough forage as indicated by utilization objectives exceeded on a majority of the range, or resource damage is occurring on a number of key range sites). Initially, use by wild horses would be below the estimated carrying capacity as derived from NRCS site data and the ecological site and condition inventory data collected for the ranch (October 2009). By adjusting wild horse numbers as indicated based on site-specific monitoring results, forage utilization of key forage species would be expected to be maintained at moderate levels. Moderate utilization, coupled with the deferred rotation grazing strategy, would be expected to maintain or improve the current upland and riparian health conditions.

Fence specifications for any new fences to be constructed would be modified to be more wildlife friendly than in the Proposed Action. While these fences would be more wildlife friendly than the Proposed Action, the 48 inch top-wire exceeds the recommended maximum height of 42 inches and would present an entanglement potential for wildlife, specifically young animals. This potential impact would be somewhat reduced by implementing a 14" spacing between the top and second wire.

To limit the potential for wild horses to stray outside the ranch interior, the contractor is required to complete any necessary fence modifications/new fence construction on pastures bordering Highway 287, or BLM or National Forest administered lands before wild horses have access to these lands. Should the contractor be unable to effectively maintain wild horses within the ranch perimeter, wild horse numbers will be reduced as necessary or the contract would be re-evaluated.

Under the No Action Alternative, the ranch would continue to pasture up to 793 animal units of cattle for a maximum of about 8 months each year, with hay fed during the balance of the year. Range and riparian conditions would be expected to be maintained in their current condition. No new fences would be constructed to exclude public or State lands from use (i.e., the ranch owner holds a permit to graze his cattle on the public and State lands within the ranches interior). No impact to wildlife movement (passage) or the available forage and water over the current situation would be expected.

Reasonably Foreseeable Future Actions

Six new LTH pastures are proposed for implementation in fiscal year (FY) 2010. These include one in Montana, one in South Dakota, one in Iowa, one in Kansas, and two in Oklahoma, for a total estimated capacity for about 9,000 excess wild horses. The BLM proposes to add additional long-term pastures for up to 5,000 horses per year during FY2011-2014.

By adding additional long-term grassland pastures, excess wild horses are able to live out their lives in a natural pasture setting off of the public rangelands. This would allow the BLM to continue to make progress toward achieving appropriate management levels of wild horses and burros on public rangelands in the West (about 26,600 animals) by about FY2014. By achieving and maintaining appropriate management levels, the BLM will also make progress towards the goal of assuring healthy wild horses and burros on healthy rangelands, and toward preserving and maintaining a thriving natural ecological balance and multiple use relationship on the public lands in accordance with the provisions outlined in the 1971 WFRHBA.

The Spanish Q Ranch could elect to construct additional fence on their private lands at any time. Fences could be constructed using specifications of the owner's choosing and may or may not follow wildlife friendly fence guidelines. The Spanish Q Ranch has indicated the desire to install a pivot and create about 160 additional acres of irrigated pasture on the Mitchell Lease. This area is currently poorly vegetated and could be improved through installation of the pivot and seeding.

The Spanish Q Ranch could also elect to increase cattle stocking in the future; such an increase could impact range and riparian condition of private ranch lands to varying degrees depending on the actual stocking level. Should the ranch elect to increase livestock stocking in the future, dietary overlap between elk and cattle could result in elk being displaced where the two species compete for forage. Heavier use by cattle could also result in cattle foraging on and trampling shrub species important for deer and antelope winter range, forcing these species to other areas.

Similarly, if the ranch elects to modify the fences on their private ranch lands by increasing the top wire height, an entanglement hazard to wildlife could result. Alternatively, the Spanish Q Ranch could elect to subdivide the property which could lead to a loss of open space and lands in agricultural use, and to a reduction in the amount of forage and habitat available for use by wildlife, within the Madison County area over time.

The BLM Dillon Field Office is concerned about the number of dead and dying trees on public lands within the ranches interior. A timber sale to remove some of the dead and dying trees is proposed in 2010. In the absence of timber harvest, the potential for lightning or human-caused wildfire is increased. Pending access, 435 acres of timber are proposed for commercial harvest to salvage the dead/dying timber and improve forest health.

Summary of Past, Present, and Reasonably Foreseeable Future Actions

Lagging adoption (or sale) demand for excess wild horses had led to thousands of horses being held in short-term corrals or on long-term grassland pastures. The operation and maintenance of private grassland pastures allows the BLM to manage excess wild horses in a natural setting off of fragile public rangelands in the West. Without these private pastures, the BLM could be required to consider implementing the authority provided in the 1971 WFRHBA which allows for the humane destruction or sale without limitation of excess wild horses or burros for which there is no adoption or sale demand. Although long-term grassland pastures result in an economic cost to the American taxpayer, they allow the BLM to preserve and protect excess wild horses for the balance of their lives. This also avoids the public controversy that would be associated with their humane destruction or sale without limitation. The savings which results from contracting for LTH pastures averages about $4.45 per horse per day. From this perspective, cumulative beneficial effects from the operation and maintenance of LTH pastures are expected.

Relative to the proposed Ennis LTH pasture, the Proposed Action would result in stocking the offered private lands at a level that could lead to deteriorated land health conditions in the short and longer-term. Additionally, construction of new non-wildlife friendly fences would be expected to adversely affect individual elk and deer as they move through the area.

By contrast, with implementation of Alternative A, an adaptive management approach would be implemented which would result in wild horses being stocked at a number which would achieve (and not exceed) utilization objectives for the ranch over the life of the contract. Although the potential exists that utilization levels could be exceeded in year one, mitigation measures require that appropriate numbers of wild horses would be removed based on site-specific resource monitoring. As a result, land health conditions would be expected to be maintained over both the short and longer-term.

The specifications for new fence construction would also be modified to allow for antelope passage and to reduce potential impacts to individual elk or deer moving through the area. Provision is also made to remove any fences constructed on public land in entirety or to further modify the fences to meet the MDFWP wildlife-friendly fence guidelines at contract close. The No Action Alternative would result in impacts similar to Alternative A, with the exception that cattle use riparian areas to a greater degree than wild horses.

The direct cumulative impacts of Alternative A coupled with impacts from past, present, and reasonably foreseeable future actions would capitalize on the opportunity to pasture up to a maximum of 1,000 excess wild horses over the next 5 years in a pasture setting off the public rangelands. Mitigation is also proposed which would adjust wild horse numbers (either up or down) based on the results of on-the-ground monitoring and to terminate the contract for non-performance.

Alternative A would substitute wild horses for the cattle use which is presently occurring and would potentially help to maintain the ranch as a viable economic agricultural unit and avoid the need to consider subdivision of the ranch property or other management options which could further reduce open space in Madison County. By contrast, implementation of the Proposed Action Alternative would be expected to result in adverse impacts to the human environment which could not be mitigated without re-locating about one-half the wild horses to another area over the short-term.

5.0 Monitoring and Mitigation Measures, List of Preparers, Consultation and Coordination

5.1 Monitoring and Mitigation Measures

❒ The new fences to be built to exclude public land (BLM and State Section 16) from use by wild horses would be constructed almost entirely on private property. Where new fences cross public access routes, gates which are easily opened and closed, or cattle guards would be installed.

❒ Any new fences would be built to the following specifications to be more wildlife-friendly:

- Suspension fences with four smooth wires spaced at 48", 34", 26" and 18" rather than standard wood post-barb wire construction would be required. If possible, use of a top wire coated with a white plastic resin to increase wildlife visibility should be used. To lessen the potential fence maintenance workload, construction of let-down sections at key wildlife crossings could also be considered.
- Existing interior pasture fences would be similarly modified.

- Upon termination of the LTH pasture contract, the contractor would be required to either remove any new fences constructed on public land in entirety or to reconstruct them as necessary to fully comply with the MDFWP's wildlife-friendly guidelines.

❒ Fences would be constructed and/or modified before wild horses are allowed to use areas of the offered property adjacent to Highway 287, or BLM or National Forest administered lands (e.g., first priority – reconstruction/ modification of fences on the Mitchell lease; second priority – east half of the ranch; third priority – west half of the ranch).

❒ To assure upland range sites are maintained in their current mostly good ecological condition, the maximum allowable upland utilization by wild horses on key forage grasses would be 50% by weight.

❒ To protect wetland/riparian zone condition, a minimum of 4" stubble height on sedge must be retained at the end of the pasture (grazing) period along Frieler, Postlewaite, Bobtail, Slade Creek, the East, West and Middle Fork of Moore Creek, the East and West Fork of Granite Creek, and Fletcher Creek. All are non-fishery streams.

❒ Initial stocking would be limited to 805 wild horses, with the opportunity to increase stocking to a maximum of 1,000 wild horses should on the ground monitoring indicate additional forage is available.

❒ An adaptive approach to management of wild horses on the Spanish Q Ranch is incorporated as follows:

- On the ground monitoring would be completed by the BLM at the end of the first year's pasture period. If additional forage is determined to be available, an appropriate number of wild horses (up to another 100) could be added at the start of year two.
- The BLM would then complete monitoring at the end of the year two pasture period to determine if up to another 95 wild horses could be added.
- No more than 1,000 wild horses would be authorized to graze during the 5-year contract period.
- Grazing by wild horses must meet the following forage utilization criteria: (1) use at the end of the pasture period shall average 50% by weight or less of key forage (grass) species on the majority of the ranch's upland range sites, and (2) a minimum of 4" stubble height must remain on sedges in the majority of the ranch's riparian areas (non-fishery streams).
- Should monitoring indicate there is insufficient forage available (or that resource damage is occurring in a substantial number of key range sites), wild horse numbers would be reduced as indicated. Appropriate numbers of wild horses would be gathered and relocated (shipped) to either a BLM short-term corral facility or another long-term grassland pasture with surplus capacity.
- The BLM would continue to monitor animal and rangeland health conditions through the remainder of the contract period. Additional adjustments in wild horse stocking levels or in on the ground management will be made, as appropriate, based on monitoring results.

❒ Refer to Appendix 5 for the site-specific monitoring plan for the ranch. Based on monitoring, management practices or stocking levels will be altered if monitoring data shows a change is needed.

❒ Should the contractor be unable to effectively maintain wild horses within the ranch perimeter (i.e., there is a recurring pattern of horses straying onto the adjacent National Forest, fenced public lands or onto Highway 287), wild horse numbers would be reduced as necessary or the contract re-evaluated.

- ❒ Grazing would be under a deferred-rotation strategy. Under this strategy, wild horses would be allowed to naturally drift from the west to the east in one year and from the east to the west the following year. Early spring use would be rotated between two Crested wheatgrass seedings and about 480 acres of hayland aftermath or irrigated meadow within the Mitchell Lease. The smaller pastures adjacent to the corral facility would be used to transition the horses to the ranch. Winter use by wild horses would be rotated between one of three winter feed areas in alternating years. Depending on the weather, wild horses would be fed hay for about 4 months, and pasture on native range, meadow or seedings for about 8 months each year.

- ❒ To maintain animal health and prevent rangeland damage, the contractor is required to provide additional supplemental feed (good quality hay) to wild horses in the event of an unusual situation (i.e., wildfire or drought).

- ❒ The contractor will conduct regular on-the-ground observation and periodic counts of the wild horses to ascertain their well being and safety.

- ❒ At a minimum, the BLM will also conduct annual counts of wild horses to assure they are in a healthy condition. Counts will generally be conducted on the winter feed areas.

- ❒ The contractor is responsible for assuring wild horses remain within the ranch interior and for recovering any animals which stray outside the private or leased ranch land.

- ❒ Disposal of any wild horse remains will be completed in accordance with state and local requirements.

- ❒ Montana Code Annotated 2009 at 60-7-201 states in part: "A person who owns or possesses livestock may not permit the livestock to graze, remain upon, or occupy a part of the right-of-way if the highway is part of the national system of interstate highways or a state highway designated as part of the federal-aid primary system." This is interpreted to mean that if livestock, or in this case, wild horses are on Highway 287, the owner (contractor) is liable in the event of a vehicle/wild horse collision. To minimize this potential, the contractor plans to replace the existing fence along the Highway 287 right-of-way.

- ❒ The contract for the Ennis LTH Pasture will be terminated or adjusted as necessary by the BLM for nonperformance.

5.2 Consultation and Coordination

A scoping letter was mailed to interested individuals, groups, or agencies on September 25, 2009. Native American tribes were also contacted by letter dated September 25, 2009 to determine if there were cultural or religious concerns associated with BLM's proposal. A total of 28 responses was received (refer to EA, page 6).

Personal contacts were made by telephone on September 16-17, 2009 with the State of Montana Department of Natural Resources Conservation Area Manager (Tim Egan); the Region 3 Supervisor for the Montana Department of Fish, Wildlife and Parks (Pat Flowers); Dave Shultz, Madison County Commissioner; Sue Heald, Ennis District Ranger (Beaverhead-Deerlodge National Forest); and State of Montana Department of Natural Resources and Conservation Area Manager (Craig Campbell). A field site visit of the planning area was made by the BLM IDT on October 13, 2009. Included in the site visit were one or more representatives from the BLM Dillon Field Office, BLM's National Wild Horse and Burro Program, the MDFWP, Beaverhead-Deerlodge National Forest, Madison County Commissioners (2); Skyline Sportsmen, and the Spanish Q Ranch and their independent range consultant.

This environmental assessment was also provided to those expressing an interest for a 30-day review and comment period beginning November 18th and ending on December 18, 2009. The BLMs final decision will be made about December 26, 2009.

5.3 List of Preparers

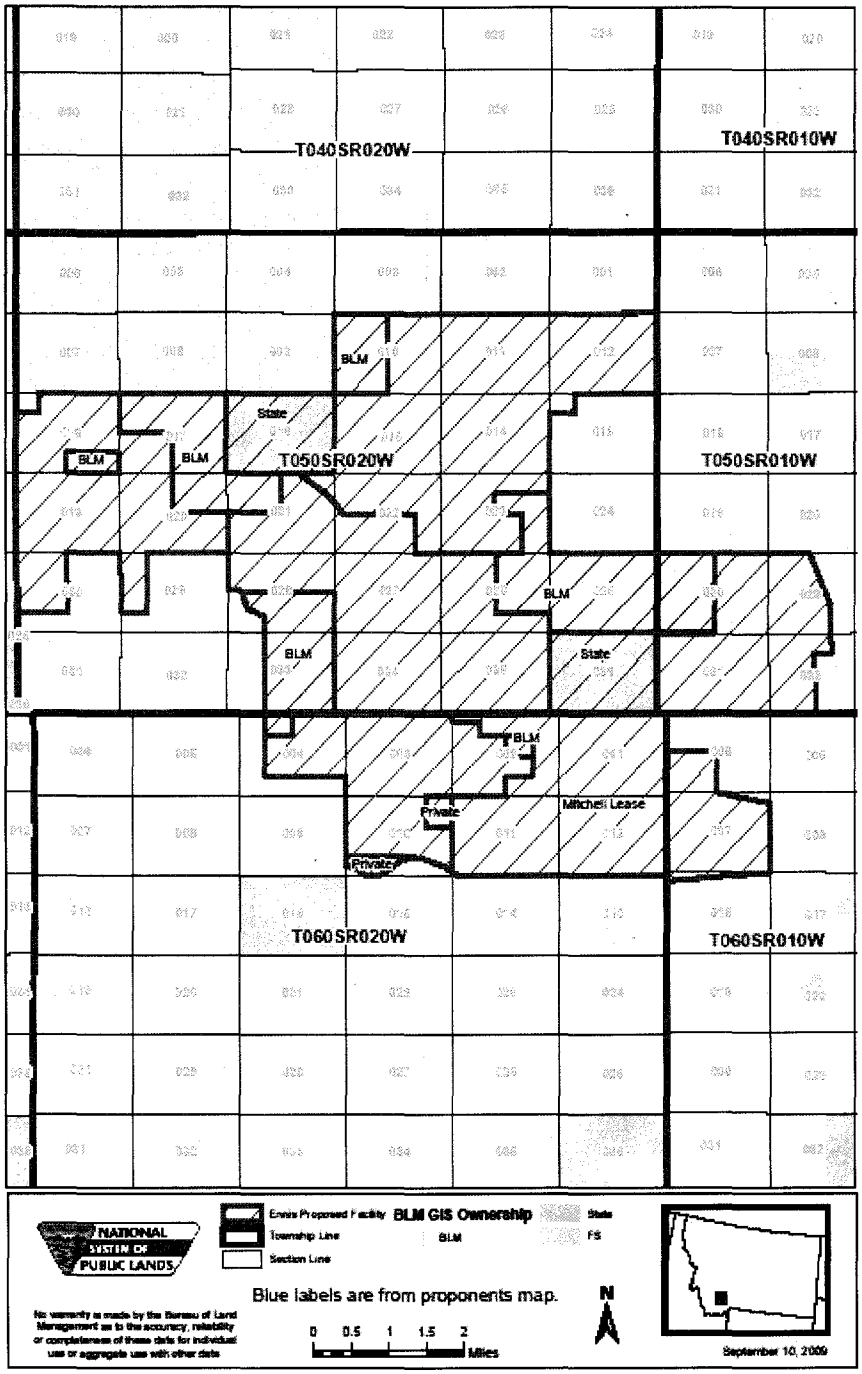
Susie Stokke, National WH&B Program Specialist, NPO-Reno
Tim Bozorth, Field Manager, Dillon Field Office
Pat Fosse, Assistant Field Manager, Dillon Field Office
David Early, Rangeland Management Specialist, Dillon Field Office
Katie Benzel, Wildlife Biologist, Dillon Field Office
Ryan Martin, Rangeland Management Specialist, Dillon Field Office
Paul Hutchinson, Fisheries Biologist, Dillon Field Office
Mike Mooney, Noxious Weed Specialist, Dillon Field Office
Stephen Armiger, Hydrologist, Dillon Field Office

6.0 Appendices

Map 1: Project Location Map
Appendix 1: Analysis of the Actual Livestock Use Data Reported for the Spanish Q Ranch
Appendix 2: Carrying Capacity Estimate (NRCS Site Data)
Appendix 3: Carrying Capacity Estimate (Ecological Site Condition and Inventory Data)
Appendix 4: Example – Year One Grazing Schedule
Appendix 5: Ranch Monitoring Plan

Map 1: Project Location Map

Ennis, Montana



(**Note:** BLM land and State Section 16 to be excluded from wild horse use through fencing).

Appendix 1: Analysis of the Actual Livestock Use Data Reported for the Spanish Q Ranch

Year	Number	Class	Animal Units* (AU)	Remarks
1998	1,400	cow/calf pairs	1,400	
	600	yearlings	420	
1999	700	cow/calf pairs	700	
	250	yearlings	175	
2000	250	cow/calf pairs	250	
	600	yearlings	420	
2001	600	cow/calf pairs	600	
2002	600	cow/calf pairs	600	
2003	600	cow/calf pairs	600	
2004	600	cow/calf pairs	600	
2005	600	cow/calf pairs	600	
2006	600	cow/calf pairs	600	
2007	800	cow/calf pairs	800	
2008	800	cow/calf pairs	800	
2009	1063	yearlings	744	
	207	cow/calf pairs	207	
			9,516	

* Yearlings = .7 AU	AU	9,516	
* Pairs = 1 AU	Season of Use	X 6 months	(Estimated)
	Total Use	57,096 AUMs /12 years	
	Average Use Ave. Season	4,758 AUMs /6 months	(11 years)
	Ave. Animal Units	793	

Note: BLM and State Land Leases and a USFS permit were also included with private land as part of this actual use.

Appendix 2: Carrying Capacity Estimate (NRCS Site Data)

Proposed Ennis LTH Pasture			Below Normal PPT		Normal PPT		
Pasture	Range_Site	Acres	AUM/Ac	AUMs	AUM/Ac	AUMs	Comments
Mitchell Lease	Limy-Droughty (LyDr) 9-14" p.z.	352	0.18	**63.27**	0.18	**63.27**	
Mitchell Lease	Sandy (Sy) 9-14" p.z.	67	1.66	**111.22**	1.66	**111.22**	Pivot - Alfalfa Aftermath
Mitchell Lease	Loamy Steep (LoStp) LRU 44B-A	253	0.22	**55.70**	0.22	**55.70**	
Mitchell Lease	Shallow to Gravel (SwGr) 9-14" p.z.	50	1.66	**83.00**	1.66	**83.00**	Pivot - Alfalfa Aftermath
Mitchell Lease	Loamy (Lo) LRU 44B-A	47	1.66	**78.00**	1.66	**78.00**	Pivot - Alfalfa Aftermath
Mitchell Lease	Shallow to Gravel (SwGr) LRU 43B-A	19	0.12	**1.92**	0.19	**3.61**	
Mitchell Lease	Silty (Si) 9-14" p.z.	318	1.66	**527.88**	1.66	**527.88**	Pivot - Alfalfa Aftermath
Mitchell Lease	Sandy (Sy) 9-14" p.z.	535	0.66	**353.10**	0.66	**353.10**	Crested Wheatgrass
Mitchell Lease	Loamy (Lo) LRU 44B-A	931	0.66	**614.46**	0.66	**614.46**	Crested Wheatgrass
Mitchell Lease	Shallow to Gravel (SwGr) LRU 43B-A	290	0.07	**20.30**	0.07	**20.30**	
Mitchell Lease	Limy (Ly) 9-14" p.z.	44	0.66	**29.04**	0.66	**29.04**	Crested Wheatgrass
Mitchell Lease	Shallow to Gravel (SwGr) LRU 43B-A	133	0.07	**9.31**	0.07	**9.31**	
Mitchell Lease	Limy (Ly) 9-14" p.z.	9	0.22	**1.98**	0.22	**1.98**	
		3,046		**1949.18**		**1950.87**	
Unlabeled	Loamy Steep (LoStp) LRU 44B-D	219	0.36	78.84	0.47	102.93	
Unlabeled	Droughty Steep (DrStp) LRU 43B-E	82	0.36	29.52	0.45	36.9	
Unlabeled	Limy (Ly) 9-14" p.z.	467	0.24	112.08	0.36	168.12	
Unlabeled	Shallow to Gravel (SwGr) 9-14" p.z.	14	0.12	1.68	0.19	2.66	
Unlabeled	Loamy Steep (LoStp) LRU 44B-D	1,106	0.36	398.16	0.47	519.82	
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	32	0.05	1.60	0.08	2.56	
Unlabeled	Limy (Ly) 9-14" p.z.	0	0.24	0.00	0.38	0	
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	10	0.05	0.50	0.08	0.8	
Unlabeled	Shallow to Gravel (SwGr) 9-14" p.z.	241	0.12	28.92	0.19	45.79	
Unlabeled	Droughty Steep (DrStp) LRU 43B-E	156	0.36	56.16	0.45	70.2	
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	5	0.05	0.25	0.08	0.4	
Unlabeled	Loamy (Lo) LRU 44B-A	0	0.25	0.00	0.36	0	
Unlabeled	Loamy (Lo) LRU 44B-A	3	0.25	0.75	0.36	1.08	
Unlabeled	Limy (Ly) LRU 44B-A	90	0.27	24.30	0.44	39.6	
Unlabeled	Sandy (Sy) 9-14" p.z.	585	0.21	122.85	0.31	181.35	
Unlabeled	Loamy (Lo) LRU 44B-A	79	0.25	19.75	0.36	28.44	
Unlabeled	Droughty Steep (DrStp) LRU 43B-E	171	0.36	61.56	0.45	76.95	
Unlabeled	Loamy Steep (LoStp) LRU 44B-A	539	0.22	118.58	0.33	177.87	

Unlabeled	Loamy (Lo) LRU 44B-A	134	0.25	33.50	0.36	48.24
Unlabeled	Sandy (Sy) 9-14" p.z.	237	0.21	49.77	0.31	73.47
Unlabeled	Shallow to Gravel (SwGr) LRU 43B-A	27	0.07	1.89	0.12	3.24
Unlabeled	Shallow to Gravel (SwGr) LRU 43B-A	344	0.07	24.08	0.12	41.28
Unlabeled	Shallow to Gravel (SwGr) LRU 43B-A	44	0.07	3.08	0.12	5.28
Unlabeled	Shallow to Gravel (SwGr) 9-14" p.z.	313	0.12	37.56	0.19	59.47
Unlabeled	Loamy (Lo) LRU 44B-A	9	0.25	2.25	0.36	3.24
Unlabeled	Shallow to Gravel (SwGr) LRU 43B-A	8	0.07	0.56	0.12	0.96
Unlabeled		56	0	0.00	0	0
Private	Sandy (Sy) 9-14" p.z.	2	0.21	0.42	0.31	0.62
Private	Loamy Steep (LoStp) LRU 44B-D	9	0.36	3.24	0.47	4.23
Private	Shallow to Gravel (SwGr) LRU 43B-A	33	0.07	2.31	0.12	3.96
Private	Shallow to Gravel (SwGr) 9-14" p.z.	18	0.12	2.16	0.19	3.42
Private	Sandy (Sy) 9-14" p.z.	9	0.21	1.89	0.31	2.79
Private	Loamy Steep (LoStp) LRU 44B-D	25	0.36	9.00	0.47	11.75
Private	Shallow to Gravel (SwGr) 9-14" p.z.	30	0.12	3.60	0.19	5.7
Unlabeled	Loamy Steep (LoStp) LRU 44B-D	0	0.36	0.00	0.47	0
Unlabeled	Loamy Steep (LoStp) LRU 43B-E	151	0.41	61.91	0.54	81.54
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	14	0.05	0.70	0.08	1.12
Unlabeled	Droughty Steep (DrStp) LRU 43B-E	370	0.36	133.20	0.45	166.5
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	20	0.05	1.00	0.08	1.6
Unlabeled	Douglas-fir/pinegrass	24	0.05	1.20	0.08	1.92
Unlabeled	Droughty Steep (DrStp) LRU 43B-E	51	0.36	18.36	0.45	22.95
Unlabeled	Loamy Steep (LoStp) LRU 44B-D	36	0.36	12.96	0.47	16.92
Unlabeled	Loamy Steep (LoStp) LRU 44B-D	1,114	0.36	401.04	0.47	523.58
Unlabeled	Droughty Steep (DrStp) LRU 43B-E	88	0.36	31.68	0.45	39.6
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	21	0.05	1.05	0.08	1.68
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	10	0.05	0.50	0.08	0.8
Unlabeled	Douglas-fir/pinegrass	33	0.05	1.65	0.08	2.64
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	9	0.05	0.45	0.08	0.72
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	13	0.05	0.65	0.08	1.04
Unlabeled	Loamy (Lo) LRU 44B-D	129	0.48	61.92	0.48	61.92
Unlabeled	Shallow to Gravel (SwGr) LRU 43B-A	13	0.07	0.91	0.12	1.56
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	13	0.05	0.65	0.08	1.04
Unlabeled	Loamy Steep (LoStp) LRU 44B-D	505	0.36	181.80	0.47	237.35
Unlabeled	Loamy Steep (LoStp) LRU 44B-A	16	0.22	3.52	0.33	5.28
Unlabeled	Shallow to Gravel (SwGr) 9-14" p.z.	627	0.12	75.24	0.19	119.13

Unlabeled	Shallow to Gravel (SwGr) LRU 43B-A	16	0.07	1.12	0.12	1.92
Unlabeled	Sandy (Sy) 9-14" p.z.	205	0.21	43.05	0.31	63.55
Unlabeled	Loamy Steep (LoStp) LRU 44B-D	260	0.36	93.60	0.47	122.2
Unlabeled	Shallow to Gravel (SwGr) LRU 43B-A	39	0.07	2.73	0.12	4.68
Unlabeled	Shallow Droughty (SwDr) LRU 44B-D	42	0.41	17.22	0.52	21.84
Unlabeled	Shallow to Gravel (SwGr) 9-14" p.z.	30	0.12	3.60	0.19	5.7
Unlabeled	Shallow to Gravel (SwGr) LRU 43B-A	5	0.07	0.35	0.12	0.6
Unlabeled	Shallow to Gravel (SwGr) 9-14" p.z.	0	0.12	0.00	0.19	0
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	44	0.05	2.20	0.08	3.52
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	125	0.05	6.25	0.08	10
Unlabeled	Droughty Steep (DrStp) LRU 43B-E	67	0.36	24.12	0.45	30.15
Unlabeled	Limy (Ly) 9-14" p.z.	42	0.24	10.08	0.36	15.12
Unlabeled	Loamy Steep (LoStp) LRU 44B-D	2,323	0.36	836.28	0.47	1091.81
Unlabeled	Loamy Steep (LoStp) LRU 44B-D	260	0.36	93.60	0.47	122.2
Unlabeled	Douglas-fir/pinegrass	317	0.06	19.02	0.09	28.53
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	38	0.05	1.90	0.08	3.04
Unlabeled	Shallow Droughty (SwDr) LRU 44B-D	58	0.41	23.78	0.52	30.16
Unlabeled	Shallow to Gravel (SwGr) 9-14" p.z.	228	0.12	27.36	0.19	43.32
Unlabeled	Douglas-fir/pinegrass-pinegrass phase	46	0.05	2.30	0.08	3.68
Unlabeled	Sandy (Sy) 9-14" p.z.	14	0.21	2.94	0.31	4.34
Unlabeled	Droughty Steep (DrStp) LRU 43B-E	180	0.36	64.80	0.45	81
Unlabeled	Shallow to Gravel (SwGr) 9-14" p.z.	112	0.12	13.44	0.19	21.28
		12,807		**3510.94**		**4720.65**
State	Limy-Droughty (LyDr) 9-14" p.z.	16	0.18	2.88	0.28	4.48
State	Loamy Steep (LoStp) LRU 44B-D	14	0.36	5.04	0.47	6.58
State	Sandy (Sy) 9-14" p.z.	356	0.21	74.76	0.31	110.36
State	Loamy Steep (LoStp) LRU 44B-A	19	0.22	4.18	0.33	6.27
State	Shallow to Gravel (SwGr) LRU 43B-A	145	0.07	10.15	0.12	17.4
State	Shallow to Gravel (SwGr) LRU 43B-A	84	0.07	5.88	0.12	10.08
State	Loamy (Lo) LRU 44B-A	12	0.25	3.00	0.36	4.32
		646		**105.89**		**159.49**
		16,499		**5,566.01**		**6,831.01**
				696		**854**

Note: Unlabeled denotes private land.

Appendix 3: Carrying Capacity Estimate (Ecological Site Condition and Inventory Data)

Site No.	Acres	Range Site	Condition	Ac/AUM	Total AUMS
1	4942	Loamy, 15-19"	Good – 70%	2.3	2148.7
2	243	Woodland/Wet Meadow	High Fair – 50%	2.0	122.7
3	2566	Thin Hilly, 19+"	High Fair – 49%	3.0	855.3
4	900	Shallow, 15-19"	Good – 66%	2.0	450.0
5	708	Subirrigated 15-19"	Good – 54%	1.2	585.1
6	2871	Loamy Steep 15-19"	Good – 67%	2.6	1100.0
7	1882	Loamy 10-14"	Excellent – 80%	2.7	697.0
8	160	Subirrigated 10-14"	Fair – 46%	1.7	94.1
9	115	Rock Outcrop	Ungrazeable	0	0
CWG	1500	Crested Wheatgrass	Good	1.50	1000.0
Hay	480	Hayland aftermath	Good	.75	640.0
	16,367				**7,693.0**
				Reserve (Unused AUMs)	(1,250)
				AUMs (Planned for Use)	6,443
				Number Horses (Initial Stocking Level)	805

Appendix 4: Example – Year One Grazing Schedule

805 HORSES						
Pasture	Acres	Dates	Months	Horse AUMs	Available AUMs	Unused AUMs
Crested	1500	4/15 to 9/30	0.5	-403	1000	597
Native Mitchell	1041	5/1-5/15	0.5	-403	453	50
Pasture 1	2993	5/16-6/30	1.5	-1208	1301	93
Pasture 2	2618	7/1-8/08	1.25	-1006	1091	85
Pasture 3	2036	8/9-9/09	1	-805	814	9
Pasture 4	4060	9/10-11/10	2	-1610	1624	14
Pasture 5	1639	11/11-11/30	0.75	-604	607	3
Hayland Aftermath	480	12/1-12/15	0.5	-403	800	397
Winter Feeding		12/16-4/14	4			
Summary	**16367**			**-6442**	**7690**	**1248**

Note(s): Leaves 1 to 1.5 months forage unused (emergencies).
Initial stocking rate = 2.54 acres/horse/month.

Appendix 5: Ranch Monitoring Plan

Monitoring Item	How	Who	When	Actions to Take (Adaptive Management)
Forage utilization and use pattern mapping.	Key species method (ocular estimates by weight of key forage grasses). Map utilization zones as follows: 0-5%, 6-20%, 21-40%, 41-60%, 61-80%, 80-94%, and 95-100%.	National Wild Horse and Burro Project Inspector(s)	At the end of the pasture use period (late October/early November).	Year 1 & 2: If monitoring indicates there is insufficient forage available, an appropriate number of wild horses will be gathered and removed. (Additional supplemental feed will be provided to wild horses in the interim, as needed). If monitoring indicates additional forage is available, wild horse numbers may be increased by up to another 195 head (a maximum of 1,000 wild horses for the balance of the contract period). Further modifications to be made as needed in years 3-5.
Residual forage remaining in riparian/wetland areas.	Measure height of Nebraska sedge within the green line of representative stream reaches.	As above.	As above.	As above.
Baseline riparian condition and trend.	Riparian functional assessment.	As above.	Year 1 and Year 5	
Wild horse counts/animal condition and location.	Physical count and animal condition inspection (Henneke condition classes) on winter feed ground. Visual observations/ reports of horses straying beyond the ranch interior.	As above. BLM Dillon Field Office, Beaverhead-Deerlodge NF, Adjacent Landowners, Interested Public	Minimum of once annually. Individuals noting wild horses outside the ranch property should call Lili Thomas at (775) 861-6457.	Reduce the number of wild horses or re-evaluate the contract as needed pending a recurring pattern of wild horses outside the offered ranch property.