

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

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Draft Environmental Assessment MT- L060-2015-016-EA  
5/18/15

Project Title  
**Blindhorse Canyon Trail**

*Location: NW4, W2NE4, Sec. 5, T25N, R8W, Teton County*



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# **CHAPTER 1**

## **INTRODUCTION AND NEED FOR THE PROPOSED ACTION**

### **INTRODUCTION**

The Montana Department of Fish, Wildlife and Parks (FWP) have requested the Bureau of Land Management (BLM) to construct a trail segment that would connect with a non-motorized access trail on State Land located within the Blackleaf Wildlife Management Area. The trailhead is located at Ostle (Antelope) reservoir on State land and managed by FWP. The newly constructed BLM trail segment would complete an unencumbered publicly accessible non-motorized travel route from State Land up to the BLM's Blindhorse Outstanding Natural Area, (ONA). Furthermore, the trail within the Blindhorse ONA connects with a Forest Service trail system allowing non-motorized access into the Bob Marshall Wilderness.

### **PURPOSE AND NEED FOR THE PROPOSED ACTION**

The purpose of the action is to provide an alternative public access route to the BLM's Blindhorse ONA from Ostle (Antelope) Reservoir located on the State Managed Blackleaf Wildlife Management Area (WMA). Currently the trail leaves MT FWP land and crosses a portion of private land before entering back into BLM land. The section across private land is no longer available for public use. This is a popular area for outdoor enthusiasts who enjoy hiking, hunting, photography, horseback riding, etc. Without the proposed connecting trail system the recreating public would only be able to access the Blindhorse ONA from a trailhead located 9.5 miles away by road at the Blackleaf Trailhead. Once on the Blackleaf trail it is about 5.25 miles to the Blindhorse ONA. The total length of the proposed new connecting trail segment across BLM is approximately 4300 feet and would be intended for non-motorized uses only.

The need for this action is to respond to FWP's request to provide for enhanced public access to the Blindhorse ONA as authorized by the Federal Land Policy & Management Act (FLPMA) under section 102 (a) (8).

### **DECISION TO BE MADE**

This environmental assessment (EA) discloses the environmental consequences of implementing the proposed action or alternatives to that action. BLM's Lewistown Field Manager (FM) will be the Deciding Official. Based on the information provided in this EA, the FM will decide whether to allow construction of the new trail segment, with appropriate mitigation measures, or reject it.

### **CONFORMANCE WITH BLM LAND USE PLAN(S)**

Section 102 (a) (8) of FLPMA (Public Law 94-579) states in part that: "The public lands...will provide for outdoor recreation and human occupancy and use". This action is in conformance with the Headwaters Resource Management Plan (RMP) 1984 and more specifically the Rocky Mountain Front Outstanding Natural Area Activity Plan (1989)

## ISSUES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS

The following issues were identified during scoping but were eliminated from further study for the reasons outlined below.

**Livestock Management:** Livestock grazing will not be impacted by the proposed project. The proposed project occurs within the Chicken Coulee Grazing Allotment (#06303). The Chicken Coulee grazing allotment is currently allocated for 210 cattle between 7/1 and 9/30. Between 2007 and 2010 all allotments along the Rocky Mountain Front, including the Chicken Coulee allotment were assessed for upland range health. The Chicken Coulee allotment was found to meet or exceed all minimum requirements for upland health. Historically the majority of livestock grazing occurs south of the proposed project area.

A gate would be installed on the east-west boundary fence that occurs between the BLM and Blackleaf WMA. This would not disrupt the current grazing management program, and is supported by the grazing permittee.

## CHAPTER 2 DESCRIPTION OF ALTERNATIVES

### INTRODUCTION

This chapter describes the process used to develop the proposed alternative along with the No Action alternative. It also describes those alternatives considered but eliminated from further analysis. This chapter also discloses the objectives that the BLM intends to reach if the proposed action is implemented and describes the steps that would be taken to minimize unnecessary environmental degradation.

**No Action:** If no new trail segment is constructed the recreating public would continue to access Blindhorse ONA by traveling 9.5 miles away by road to the Blackleaf Trailhead or by walking throughout the project area without the benefit of a designated trail.

**Proposed Action:** The BLM proposes to designate, re-construct and construct a non-motorized hiking trail within the NW4, W2NE4 Section 5, T26N, and R8W that would provide the recreating public reasonable, unencumbered access from the MT FWP managed trailhead located at Ostle Reservoir to the Blindhorse ONA, (see map appendix A) . The proposed project would require re-constructing existing game trails, designating routes through open areas along with some new construction. The completed trail would provide a connector route from the Blackleaf wildlife management area up to the adjacent USFS lands and Bob Marshall Wilderness. The connector segment would mostly contour along the easterly slopes of the foothills of the Rocky Mountain Front before dropping down into Blindhorse Canyon. After crossing Blind Horse canyon there are existing “game trails” that would be re-constructed before connecting with an existing trail leading westerly to USFS ground. Natural topography and vegetative screening would be used during construction of the new trail. Upon completion, access to the new trail segment, through the WMA would be subject to WMA restrictions, (Currently closed May 15th through Dec. 1st).

Construction and re-construction of the trail would include using hand tools to create a tread width of approximately 12 – 18 inches along with clearing brush and small trees to accommodate pack horse travel (approximately 4 to 6 foot width). Construction would take approximately two weeks in August 2015. Trail work crews would use non-motorized travel to access and construct the trail, carry bear spray and follow food storage requirements. Sustained trail grades would generally be less than 10% and trail

width would be approximately 18” maximum. Clearing of vegetation will require some chainsaw use as well as hand tools. One stream crossing would be designated and would be constructed in a way that minimizes soil disturbance and erosion into the stream channel by selecting low approach grade and firm approaches that permit crossing streams at right angles. FWP would install and maintain a gate on the east-west boundary fence that occurs between the BLM and Blackleaf WMA. The trail length would be approximately 4,300 feet and would be for non-motorized use only.

Food storage requirements during trail development:

***Storage and Disposal (Pack In/Pack Out)***

Food storage compliance is required. Trail crews shall store and dispose of garbage, food and other possible wildlife-attractants by one of the following methods when unattended to avoid wildlife issues:

- a. Secured in a hard-sided camper, trailer or vehicle.
- b. All unattended food/bear attractants will be stored in an Interagency Grizzly Bear Committee (IGBC) certified container.
- c. Suspended at least 10 feet (from the bottom of the suspended item) and 4 feet out from any upright support (i.e. tree or pole).
- d. Leftover food or food waste products shall be packed out and disposed of properly.

## **CHAPTER 3 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS**

**INTRODUCTION AND GENERAL SETTING**

The proposed project area is located in the NW4, W2NE4 Section 5, T26N, and R8W approximately 22 miles NW of Choteau, MT in Teton County. The trail would mostly contour along the east slope of the Rocky Mountain Front foothills at an elevation of approximately 5700’ with a short segment dropping to about 5500’ as it crosses Blindhorse Creek. The site is almost entirely forested and dominated by a mix of Limber Pine and Douglas-fir along with scattered Aspen. The forest floor is a mix of native bunchgrasses (fescues) and shrubs, (cinquefoil and junipers) along with some drier site forbs. Soils are generally rocky with intermittent and shallow duff layers derived mostly from limestone.

<b>CRITICAL ELEMENTS</b>		
<b>Determination*</b>	<b>Resource</b>	<b>Rationale for Determination</b>
NP	Air Quality	The proposed project is not within any designated Class I air sheds.
NP	Areas of Critical Environmental Concern	The proposed project is not within any designated ACEC’s.
PI	Cultural Resources	See Cultural Resources section, chapter 3.
NP	Environmental Justice	The proposed action would have no disproportionately high or adverse human health or environmental effects on minority and/or low-income populations.
NP	Farmlands (Prime or Unique)	The proposed project area does not support any classified farmlands (prime or unique) that could be affected by the proposed action.
NP	Floodplains	There are no flood plains within the project area.
PI	Invasive, Non-native Species	See Noxious, Invasive and Non-Native Species section, chapter 3.

NP	Native American Religious Concerns	No Native American Religious concerns are known in the area, and none have been noted by tribal authorities. Should recommended inventories or future consultations with Tribal authorities reveal the existence of such sensitive properties, appropriate mitigation and/or protection measures may be undertaken.
PI	Threatened and Endangered Species	See Wildlife and T&E section, chapter 3
NP	Wastes (hazardous or solid)	There are no known hazardous or solid wastes currently located in the proposed project area.
NI	Water Quality (drinking/ground)	Water resources, while present, are not affected to a degree that requires detailed analysis. At an 18-inch trail width, the maximum surface disturbance is roughly 1/2 an acre spread over approximately 3 square miles. The only direct interface with water resources is where the proposed trail crosses Blindhorse Creek. The trail crosses at an existing game trail crossing, and the approach in and out of the stream crossing is on flat, cobble terrain. In addition, Blindhorse Creek is an intermittent stream at the proposed crossing. For the fore mentioned reasons, water resources are not affected to a degree that requires detailed analysis.
NI	Wetlands/Riparian Zones	
NP	Wild and Scenic Rivers	There are no Wild and Scenic Rivers within the project area.
NP	Wilderness	The project is not located within any Wilderness or proposed wilderness areas.

\*Possible determinations:

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present and may be impacted to some degree. Will be analyzed in affected environment and environmental impacts. (NOTE: PI does not mean impacts are likely to be significant in any way).

**Cultural Resources:** The BLM inventoried 1113 acres of public land in the Blind Horse ONA as part of a Section 110 (proactive inventory), documented in the inventory report “Class III Cultural Resource Inventory of the Blind Horse North Project, Teton County, Montana” (11-MT-060-002). The area of the disturbance associated with this proposal falls within the surveyed area.

Two sites have been documented in the area.

Site Number	Site Type	Site Name	National Register Status
24TT0639	Historic	Sunstone Road	Ineligible
24TT0640	Historic	Pamburn Pack Trail	Ineligible

**Invasive and Non-Native Species:** The proposed trail route was monitored for existing invasive and non-native species. There are no known Invasive and Non-native plant species within the project area at this time.

**Wildlife, Migratory Birds and Special Status Species:** Appendix 2 lists all Proposed, Endangered, Threatened, Candidate and BLM sensitive species with potential to occur in the analysis area. The analysis area includes 0.25 miles on each side of the proposed trail.

*Threatened, Endangered, Proposed and Candidate Species*

The Threatened Grizzly Bear and Canada Lynx have potential to occur. The Red Knot is listed with potential to occur in Teton County (USFWS 2015), however, no habitat occurs in the analysis area and will not be addressed further. Whitebark pine is a Candidate species with potential to occur in Teton County, and is addressed in the BLM sensitive species section. No Proposed species occur in the analysis area.

Canada lynx

No Critical Habitat occurs on BLM lands, but does occur on adjacent Forest Service lands west of the project area. The project area occurs in mapped lynx core habitat (USFS 2007) and is adjacent to occupied habitat on the Lewis & Clark National Forest. Nearly all lynx observations are over six miles southwest of the project area (MNHP 2015). The following excerpt from the Lynx Conservation Assessment and Strategy (2013) summarizes the population status, distribution and habitat. *Lynx generally occurred in moist subalpine fir potential vegetation types, above the dry ponderosa pine and Douglas-fir potential vegetation types, and below the alpine zone (Squires et al. 2010).*

Grizzly bear

The grizzly bear population has expanded throughout Montana, particularly since 2000. Lewistown Field Office lands along the Rocky Mountain Front and east of the Rocky Mountain Front are within the boundaries of the NCDE and are recognized as occupied grizzly bear habitat. Areas east of the NCDE boundary receive periodic grizzly bear reports and are becoming more frequent as the population continues to increase. Kendall, et al. (2009) estimated 765 grizzly bears in the Northern Continental Divide Ecosystem (NCDE) in 2004. Mace, et al. (2012) radio-collared and monitored 83 female grizzly bears in the NCDE and estimated a 3.03 percent average annual population growth between 2004 and 2011, resulting in an estimate of 942 grizzly bears in 2011 (NCDE Draft Grizzly Bear Conservation Strategy 2013).

The proposed project is within the Northern Continental Divide Ecosystem (NCDE) recovery zone for grizzly bears in the Birch Teton Bear Management Unit (BMU) and Teton subunit. The 2011 habitat baseline for motorized access and developed sites are shown below. Open motorized routes do not occur on BLM lands in the project area. There are no known conflicts with grizzly bears and recreation in the project area.

Habitat Baseline 2011 – Motorized Access in Teton Bear Management Subunit

<b>BMU</b>	<b>Subunit Name</b>	<b>Principal Agency</b>	<b>OMRD</b>	<b>TMRD</b>	<b>CORE</b>
Birch Teton	Teton	LCNF-Rocky Mtn Front RD	12	4	75

OMRD=Open Motorized Route Density

TMRD=Total Motorized Route Density

CORE=Security Core Habitat

Habitat Baseline 2011 – Developed sites in Birch Teton Bear Management Unit

<b>BMU</b>	<b>Residences</b>	<b># Sites</b>	<b>Type of capacity</b>	<b>Campgrounds</b>	<b>Day-use</b>	<b>Trailheads</b>	<b>Admin.</b>
Birch Teton	7	1	6 cabins; 1 room	3 (23)	3	8	1

### *BLM Sensitive Species and Migratory Birds*

Habitats along and adjacent to the proposed trail are primarily dry montane conifer forests. Appendix 2 lists habitats for all LFO special status species (including sensitive species) and those with potential to occur in the analysis area.

**Recreation:** The area is currently being used by casual recreationists who access the area from an FWP recreation site at Ostle (Antelope) reservoir. There are a series of non-designated/maintained trails that lead from the reservoir up to the general project area. Game trails and natural openings allow for recreationists to “wander” from FWP controlled land onto public land and eventually work their way over to Blindhorse canyon. Steep and rocky game trails allow for minimal access across Blindhorse creek and eventually up onto an existing trail leading westerly through Blindhorse ONA and on up to the USFS ground. Users of the area are not using the same routes thereby creating “braided” travel ways in the area. Use by horseback is non-existent due to dense vegetation in areas. The general public’s only other means of accessing Blindhorse ONA is to travel an additional 9.5 miles away by road to the Blackleaf Trailhead and then walking the Blackleaf trail an additional 5.25 miles until reaching the Blindhorse ONA.

**VRM:** BLM manages lands with inherent scenic value. BLM uses a Visual Resource Management (VRM) system to inventory and manage visual resources on public land. The primary objectives of VRM are to help identify visual (scenic) values and to minimize visual impacts on BLM land from proposed projects and management activities. The VRM classification system uses four classes to describe the different degrees of modification allowed to the landscape. VRM classes are based on a process that considers scenic quality, sensitivity to changes in the landscape and distance zone. The four VRM classes are numbered I to IV; the lower the number the more sensitive and scenic the area.

The proposed trail is located in VRM Class I based on the Rocky Mountain Front Outstanding Natural Area Activity Plan Environmental Assessment. The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

The Blindhorse ONA terrain is characterized with steep mountains, canyons, limestone outcrops, foothills and various water sources. Vegetation consists mostly of mixed pine and grasses, but also includes aspen and riparian species.

**Soils:** Soils were identified from the Natural Resources Conservation Service’s (NRCS) Soil Survey Geographic (SSURGO) dataset and the Web Soil Survey website: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Soil surveys were performed by the NRCS according to National Cooperative Soil Survey (NCSS) standards. Pertinent information for review and analysis is from the SDM and the National Soil Information System (NASIS) database for the area.

Soil types affected by the proposed action on BLM lands developed from colluvium, residuum, and till parent material. Effective rooting depths range from 10 to greater than 60 inches and correspond directly to soil depths that range from shallow (10-20 inches deep) to deep (> 60 inches). The shrink-swell potential ranges from low to moderate. The predominant soil components are located within an unspecified woodland vegetation classification; and two ecological site descriptions, Limy (ly) rru 46-n 13-17” ppz. and Silty (si) rru 46-n 13-19” ppz. Dominant soil types are well drained and are not flooded or ponded. Water movement in the most restrictive layer is moderately low (.06 to .20 inches/hour) to moderately high (.57 to 1.98 inches/hour). Organic matter content in the soil surface horizon ranges from 1 percent to 75 percent.

A majority of the soil disturbance associated with the proposed action on BLM lands will occur within the following three soil map units (SMU): 193E – Loberg-Whiteore-Garlet stony loams, 8 to 35 percent slopes; 693F – Whiteore-Garlet-Starley stony loams, 15 to 60 percent slopes; and 696E – Whiteore-Teton-Tibson complex, 8 to 35 percent slopes. Please see Appendix 1 for detailed descriptions of the major soils that occur within these soil map units (SMU). Descriptions of non-soil and minor SMU components are not included.

**Vegetation:** Dominate ecological sites in this area include Silty 13-19” precipitation zone (R046XN252MT) and Limy 13-19” precipitation zone (R046XN254MT). Other common ecological sites found within the area include shallow 20-24”, shallow 11-14”, and loamy 20-24”. Vegetation types within this area consist of the grassland and forestland species expected to be found within the identified ecological sites. Portions of the project area are covered by forestlands. In addition, mixed shrub communities are common in coulees and benches.

The following are descriptions of the plant communities that may occupy the identified ecological sites. Because these sites have been maintained in PNC or Late Seral condition, the Historical Climax Plant Community data from the Ecological Site Descriptions has been referenced.

R046XN252MT: This community is represented by a level to rolling grassland dominated by cool season bunchgrasses, with several species of forbs occurring in small percentages. Minor variations in the plant community will occur as an expression of climatic patterns, topography and landform, elevation, soils, fire pattern and history, and grazing.

This plant community contains a high diversity of tall and medium height, cool season grasses (rough fescue, bluebunch wheatgrass, Idaho fescue, green/Columbia/Letterman’s/western needlegrass, bearded/slender wheatgrass, porcupinegrass, mountain brome) and short grasses (Cusick and Sandberg bluegrass, spike oatgrass, and prairie junegrass). There are abundant forbs (geranium, prairie clovers) which occur in smaller percentages.

This plant community is well adapted to the Northern Rocky Mountain Foothills climatic conditions. The diversity in plant species allows for drought tolerance. Individual species can vary greatly in production depending on growing conditions (i.e., timing and amount of precipitation, and temperature), and provides diverse habitat for many wildlife species.

These plants have strong, healthy root systems that allow production to increase significantly with favorable growing conditions. This plant community provides for soil stability and a properly functioning hydrologic cycle. Abundant plant litter is available for soil building and moisture retention. Plant litter is properly distributed with very little movement off-site and natural plant mortality is very low. The soils associated with this site provide a very favorable soil-water-plant relationship.

R046XN254MT: This site developed under Northern Rocky Mountain foothills climatic conditions, which included the natural influence of large herbivores and occasional fire. This site is considered highly resilient to disturbance as it has very few soil limitations for plant growth.

This plant community contains a high diversity of tall and medium height, cool and warm season grasses (bluebunch wheatgrass, thickspike wheatgrass, rough fescue (mainly above 15 inch MAP), plains muhly), and short grasses and sedges (Sandberg or Cusick bluegrass, plains reedgrass, prairie junegrass, threadleaf sedge). There are abundant forbs (prairie clovers, dotted gayfeather) which occur in smaller percentages.

Sub-shrubs (winterfat) and shrubs (black sagebrush) can be common in some locations.

This plant community is well adapted to the Northern Rocky Mountain foothills climatic conditions. The diversity in plant species allows for drought tolerance. Individual species can vary greatly in production depending on growing conditions (timing and amount of precipitation, and temperature).

Plants on this site have strong, healthy root systems that allow production to increase significantly with favorable moisture conditions. This plant community provides for soil stability and a properly functioning hydrologic cycle. Abundant plant litter is available for soil building and moisture retention. Plant litter is properly distributed with very little movement off-site and natural plant mortality is very low. The soils associated with this site provide a moderate soil-water-plant relationship.

**Coniferous Forest:** The project area is predominantly forested and is dominated by primarily Limber Pine (*Pinus flexilis*) along with Douglas-fir (*Pseudotsuga menziesii*). The understory is comprised of both Rough Fescue (*Festuca scabrella*) and Idaho Fescue (*Festuca idahoensis*). Minor amounts of Juniper along with some cinquefoil were also noted in the area.

### **NO ACTION**

Under the No Action alternative no new trail would be established. There would be no new impacts to the resources described in the affected environment.

### **PROPOSED ACTION**

This section analyzes the impacts of the proposed action to those resources described in the affected environment.

**Cultural Resources:** The proposed trail will incorporate the route of the Sunstone Road into its alignment. No historic properties will be affected by the proposed undertaking.

**Invasive and Non-Native Species:** The designation of a trail along with the increased use by recreationist at the Ostle (Antelope) reservoir trailhead is likely to increase the potential for the spread of invasive and non-native species. The BLM will continue to monitor the new trail route for any signs of Invasive and Non-Native Species. BLM will work with FWP and local cooperators/volunteer organizations to locate and eradicate any Invasive and Non-Native Species within the area. FWP will provide contact information and weed management plan for the trailhead to the BLM.

**Wildlife, Migratory Birds and Special Status Species:** Direct and Indirect Effects (Common to all). The proposed BLM trail would be approximately 500 meters shorter than the previous trail that crossed private property (Figure 1) and would designate a legal access route to the Blindhorse ONA. Trail construction and vegetation clearing for up to a six foot corridor for two weeks in August 2015 would increase short-term human use in the area. Vegetation clearing would mainly consist of removing the lower limbs of trees, with no changes in habitat or vegetation type. These activities would temporarily displace wildlife adjacent to the trail, including grizzly bears until construction is completed.

Following trail completion, non-motorized trail use would increase seasonally from May 15 to Dec 1 (when the Blackleaf WMA is open), with the highest use expected during the big game hunting season. Horseback use would also increase with the improved trail. Trail access from the Blackleaf WMA trailhead located at Antelope/Ostle reservoir would be concurrent with management of the Blackleaf WMA.

## *Threatened, Endangered, Proposed and Candidate Species*

### Canada lynx

Trail construction and vegetation clearing for up to a six foot corridor for two weeks in August 2015 would increase short-term human use in the area. Vegetation clearing would mainly consist of removing the lower limbs of trees (mostly limber pine or Douglas fir), with no changes in habitat or vegetation type. Following trail completion, non-motorized trail use would increase seasonally from May 15 to Dec 2 (when the Blackleaf WMA is open), with the highest use expected during the big game hunting season. Horseback use would also increase with the improved trail. No trail use would occur from December 3rd to May 14<sup>th</sup> and access to the area would be the same as currently occurs due to the seasonal dates at the existing trailhead on the Blackleaf WMA. No changes in winter recreation or snow compaction would occur as a result of the project.

Forested vegetation (primarily limber pine and Douglas-fir) is dryer and lower than the subalpine fir preferred by lynx and the minor amounts of vegetation limbing would not change lynx or snowshoe hare (lynx primary prey) forage or use in the area.

The proposed action would have **No Effect** on Canada lynx or their habitat.

### Grizzly bear

Non-motorized trail construction and designation, food storage and bear spray requirements by trail crews during construction would minimize disturbance and potential for grizzly bear encounters.

The proposed activities would result in no changes in Open Motorized Route Density (OMRD), Total Motorized Route Density (TMRD) or Security Core habitat in the Teton BMU subunit. There would also be no changes to developed sites in the Birch Teton BMU as a result of the proposed action.

Constructing the proposed trail **may affect, not likely to adversely affect** the grizzly bear or its habitat.

The Biological Assessment determination is based on the following rationale: 1) The proposed trail is within the NCDE grizzly bear recovery zone and grizzly bears are known to occur and use the vicinity; 2) there have been no reported incidents involving recreation and grizzly bears in the area; 3) trail construction and improvement would increase short-term and long-term use in the area; 4) trail crew food storage and bear spray requirements would minimize bear encounters; 5) no changes in Open Motorized Route Density, Total Motorized Route Density or Security Core habitat would occur in the Teton BMU subunit; 6) No changes in developed recreation facilities would occur in the Birch Teton BMU and 7) proposed non-motorized trail construction, improvements and use are insignificant and discountable.

### *BLM Sensitive Species and Migratory Birds*

Sensitive species impacts would be limited to minor disturbance associated with trail construction, followed by use when the trail is seasonally open. Construction would occur after bird nesting season and have no impact on nest success. Habitats available for wildlife currently would not be altered by minor limbing and trail formalization. There would be no changes in any wildlife populations and no discernable changes in current wildlife/wildlife use in the area.

**Recreation:** The proposed trail will be designated on the ground by BLM personnel and constructed utilizing hand tools and chainsaws, (no heavy equipment). The trail will be constructed to a standard that minimizes erosion potential while following the shortest possible routes to connect from the FWP lands to the existing trail south of Blindhorse Creek. Sustained trail grades will generally be less than 10% and trail width will be approximately 18” maximum. Where sustained grades exceed 10%, drainage features such as, but not limited to, water bars, out slopes, energy dissipaters, etc. will be incorporated to lessen erosion potential. Vegetation will be cleared to a minimum height and width that will allow for horseback riding.

**VRM:** Implementation of the proposed action will lead to a linear feature in an otherwise natural-appearing terrain. The impact is not expected to provide a continuous or substantial contrast with form, line, color, and texture of the existing topography. The new portion of the trail will be constructed with hand crews only for the dimensions of hikers and horses. The trail will be strategically placed to blend with the surrounding environment. Blending will occur with the natural screening of the vegetation and the terrain. No additional facilities will be created, since the trailhead currently exists on FWP at Ostle Reservoir.

**Soils:** Soil physical properties would be directly affected from disturbance associated with the proposed action. The proposed action is expected to disturb a maximum of .148 acres of surface soil across .8 miles of BLM lands. Approximately 82 % of the proposed action will occur across soil types where significant erosion hazards may exist, and 18 % where moderate erosion hazards may exist however erosion potential will be mitigated by the trail design features that minimize erosion potential.

Surface soil disturbance associated with the proposed action is expected to have a direct impact on soil bulk density and infiltration. The direct impacts are expected to be minimal because the new trail will be constructed on existing game trails as much as possible, the trail grade will be limited to less than 10%, and natural drainage features will be incorporated in areas where sustained grades exceed 10%. The natural draining features will be designed to divert water from the trail before it builds up an erosive force. Furthermore; erosion potential will be minimized by aligning the trail to the contours and angles of the natural slopes.

One stream crossing will be designated and will be constructed in a way that minimizes soil disturbance and erosion into the stream channel.

**Vegetation:** The proposed trail would be constructed and or re-constructed on primarily existing game trails and open rocky terrain. Subsequently, only minimal ground disturbance and vegetation/tree clearing is expected. All cut material will be lopped and scattered so as to avoid any excessive fuel loading and to facilitate natural decay. Therefore, no impacts to upland health and the subsequent vegetation are anticipated.

## **CUMULATIVE IMPACTS**

Cumulative impacts are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions.

**The proposed action would add approximately 1 mile of designated seasonal non-motorized trail in the Blindhorse ONA. The construction/re-construction of a designated hiking trail would likely minimize the negative/cumulative impacts of a “braided” trail system.**

## CHAPTER 4

### PERSONS, GROUPS, AND AGENCIES CONSULTED

During preparation of the EA, the public was notified of the proposed action through a posting on the Lewistown Field Office NEPA Register on 3/2/2015. Contacts established in response to the notice are shown below. A public 30-day public comment period was offered beginning May 19, 2015 through a posting in BLM's website and local papers: The Choteau Acantha and the Pondera County Independent Observer.

**Table 4.1. List of Persons, Agencies and Organizations Consulted**

<b>Name/Agency</b>	<b>Purpose &amp; Authorities for Consultation or Coordination</b>	<b>Findings &amp; Conclusions</b>
Ryan Rausher/MT FWP	Cooperating Agency	Initiated project/supporter
East Slope Back Country Horsemen (March, 2015)	User group	Supporter of project/volunteer organization to help with maintenance/upkeep
Montana Spirit Organic Ranch	Grazing allotment Permittee	No issues; supportive of project
Jodi Bush/ USFWS	Concurrence request for the Threatened Grizzly Bear	
Rocky Mountain Front Land Managers Forum (Feb 13, 2015)	Scoping with local land management agencies	No issues; supportive of project

### List of Preparers

**Table 4.2. List of Preparers**

<b>Name (and agency, if other than BLM)</b>	<b>Title</b>	<b>Responsible for the Following Section(s) of this Document</b>
<b>Bruce Reid</b>	<b>Forester</b>	<b>Team Lead</b>
<b>Kelly McGill</b>	<b>Recreation Planner</b>	<b>Recreation/VRM</b>
<b>Tom Darrington</b>	<b>RMS</b>	<b>Vegetation/Livestock Management</b>
<b>Chad Krause</b>	<b>Hydrologist</b>	<b>Water Quality/Riparian and Wetlands</b>
<b>Matt Comer</b>	<b>Wildlife Biologist</b>	<b>Wildlife/T&amp;E species</b>
<b>Steve Smith</b>	<b>NRS</b>	<b>Weeds</b>
<b>Zane Fulbright</b>	<b>Archeologist</b>	<b>Cultural Resources</b>

## LITERATURE CITATION

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# APPENDICES

## APPENDIX 1: Soil Map Units

### Map Unit 193E - 193E – Loberg-Whitore-Garlet stony loams, 8 to 35 percent slopes

Loberg (35%): The Loberg component makes up 35 percent of the map unit. Slopes are 8 to 35 percent. This component is on mountain slopes. The parent material consists of colluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Whitore (25%): The Whitore component makes up 25 percent of the map unit. Slopes are 8 to 35 percent. This component is on mountain slopes. The parent material consists of till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 45 percent.

Garlet (25%): The Garlet component makes up 25 percent of the map unit. Slopes are 8 to 35 percent. This component is on mountain slopes. The parent material consists of till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

### Map Unit 693F – Whitore-Garlet-Starley stony loams, 15 to 60 percent slopes

Whitore (35%): The Whitore component makes up 35 percent of the map unit. Slopes are 15 to 60 percent. This component is on mountain slopes. The parent material consists of till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 45 percent.

Garlet (30%): The Garlet component makes up 30 percent of the map unit. Slopes are 15 to 60 percent. This component is on mountain slopes. The parent material consists of colluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Starley (20%): The Starley component makes up 20 percent of the map unit. Slopes are 15 to 60 percent. This component is on mountain slopes. The parent material consists of residuum. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 28 percent.

### Map Unit 696E – Whitore-Teton-Tibson complex, 8 to 35 percent slopes

Whitore (45%): The Whitore component makes up 45 percent of the map unit. Slopes are 15 to 35 percent. This component is on mountain slopes. The parent material consists of till. Depth to a root restrictive layer is greater than 60 inches. The natural

drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 45 percent.

Teton (20%): The Teton component makes up 20 percent of the map unit. Slopes are 8 to 35 percent. This component is on mountain slopes. The parent material consists of residuum. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 6 percent. This component is in the R046XN252MT Draft Silty (si) Rru 46-n 13-19" P.z. ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Tibson (20%): The Tibson component makes up 20 percent of the map unit. Slopes are 8 to 35 percent. This component is on mountain slopes. The parent material consists of till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 28 percent.

