

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

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Flat Creek Allotment Change in Use

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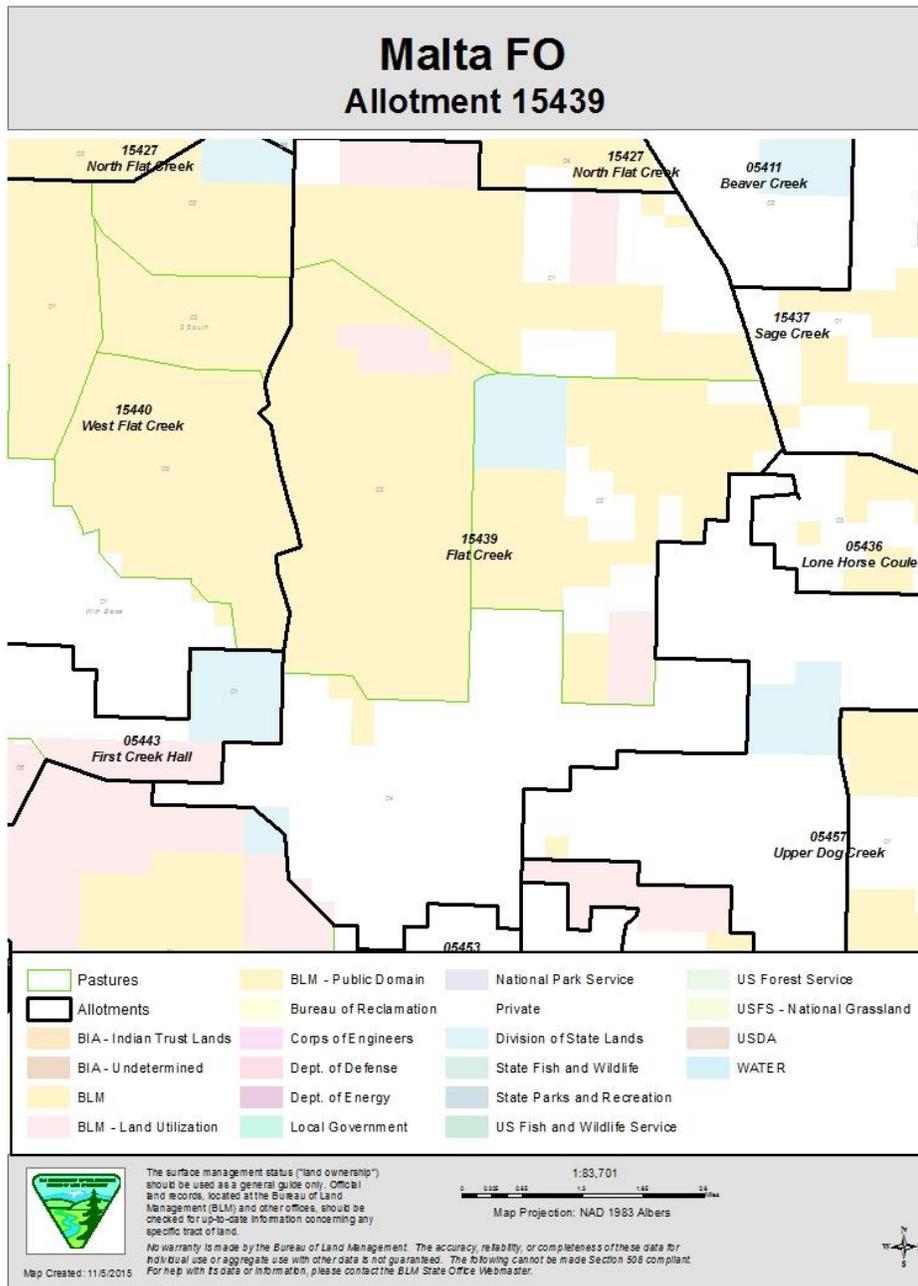
Chapter 1

Purpose and Need for the Proposed Action

Introduction

The Flat Creek Allotment (15439) is located in South Phillips County, 20 miles south of Malta, MT in Townships 24 & 25 North, Range 31 East (See Map 1).

Map 1: Flat Creek Allotment.



Background

The Flat Creek Allotment consists of a sizable and largely contiguous block of public land lying adjacent to the permittee's private base property holdings.

In 2014 the private land was sold to the American Prairie Reserve (APR). In February of 2015 APR applied for a change in kind of livestock from cattle to bison, a change to year around use, and authorization to remove all interior fencing.

Purpose and Need

The purpose of the action is to issue a new term grazing permit (Authorization #2504616) on the Flat Creek Allotment in accordance with all applicable laws, regulations, and policies and to authorize the construction, modification or removal of range improvements necessary for livestock and resource management. Terms and conditions for grazing use included on the new grazing permit would meet, or ensure progress is made toward meeting the Standards and Guidelines for Rangeland Health and resource objectives in the HiLine Resource Management Plan, including the desired conditions identified for Greater Sage-Grouse habitat. The need for the action is to respond to an application requesting a change in the kind of livestock, season of use and number of livestock grazing the Flat Creek grazing allotment as provided for in 43 CFR 4110.3-3.

The Decision to be Made

The BLM Malta Field Manager must decide what kind and how many livestock will be permitted to graze on the Flat Creek allotment. The field manager must determine under what terms and conditions the livestock will be permitted to graze on the allotment. The field manager must also decide how many and what kind of range improvements should be authorized on the allotment.

Scoping

Internal scoping of the proposed action was completed by e-mailing scoping requests to various resource specialists in the Malta Field Office, as well as other resource specialists in the Hi-Line District. Resource issues that identified problems, conflicts and suggestions were compiled, and resources that would not be affected to a degree that warranted further analysis were eliminated from further consideration.

External scoping of the proposed action was completed by issuing a press release which was published in numerous newspapers statewide initiating a 30 day scoping period calling for public comment. This resulted in approximately 140 letters and e-mails expressing support for or against the proposed action. No substantive new issues were identified and no additional alternatives were suggested. The proposed action was presented to the Central Montana Resource Advisory Council at their July 2015 meeting and they declined the opportunity to form a subgroup to look at the issue of "season long grazing".

Issues Identified for Analysis (Resource Issues)

Internal and external scoping identified the issues that are considered in this analysis. For each resource issue identified, one or more impact indicators are described. These indicators will be used to describe the affected environment and to evaluate the environmental consequences of implementing the various alternatives on each issue.

How would the proposed action and alternatives affect rangeland vegetation?

Resource Impact Indicator(s):

- Indicator 1 – Rangeland Health Standard 1 as determined by the 17 indicators of rangeland health.

How would the proposed action and the alternatives affect Water, Wetlands, and Riparian Resources?

Resource Impact Indicator(s):

- Indicator 1 – Departure from the proper quantitative attributes and processes that comprise the riparian and/or wetland areas own specific potential
- Indicator 2 – Alteration in the total acres or types of wetlands present

How would the proposed action and the alternatives affect big game migration and winter range?

Resource Impact Indicators:

- Annual livestock utilization of vegetation on big game winter range
- Miles of fence present on winter range

How would the proposed action and the alternatives affect greater sage-grouse habitat?

Resource Impact Indicator(s):

- Height and canopy cover of forbs and perennial grass in nesting habitat during nesting season.
- Annual livestock utilization in riparian areas and wetlands, including wet meadows.
- West Nile Virus considerations:
 - Number of reservoirs present;
 - Number of reservoirs available/accessible to livestock;
 - Number reservoirs complying with required design features to minimize West Nile virus risk (See Appendix C in HiLine RMP);
- Miles of fence within 1.2 miles of sage-grouse leks.

How would the proposed action and the alternatives affect other BLM Sensitive Species?

Resource Impact Indicator(s):

- Height and canopy cover of shrubs, forbs and perennial grass in nesting habitat during breeding and nesting seasons.
- Annual livestock utilization in riparian areas and wetlands, including wet meadows.
- Number of reservoirs available/accessible to livestock;
- Miles of fence within the allotment.

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.

How would the proposed action and the alternatives affect Cultural Resources, Paleontological Resources, and Native American Concerns?

A cultural records file search indicated the presence of numerous recorded sites within the allotment. Undoubtedly, there are a significant number more scattered throughout the area. However, issuance of a grazing permit and or change of kind of livestock are actions that generally does not involve any direct surface disturbance and as a non-surface disturbing type of activity has little or no potential or ability to significantly affect cultural or paleontological properties.

As a result, no cultural resource inventory is necessary prior to approving and authorizing this undertaking to proceed. If conscientious grazing practices are in effect, a finding of “No Historic Properties Affected” [36 CFR 800: No Historic Properties Affected; sites, etc. would not be affected directly or indirectly.] is appropriate.

Through previous consultation efforts this area has not been identified as being significant to any Native American Tribe or group.

How would the proposed action and the alternatives affect Invasive/Non-Native Species?

There are no known infestations within the proposed area. The change in use should not increase the potential for invasive species within the proposed area. If overuse should occur throughout the allotment especially around riparian and wetland zones the added disturbance may increase the potential for invasives to get a foothold.

How would the proposed action and the alternatives affect Recreation?

The proposed project is within lands not designated as either an Extensive Recreation Management Area or Special Recreation Management Area. This means this area will be managed to only address basic recreation and visitor services and resource stewardship needs such as visitor safety and use, and user conflicts. There are no developed recreation sites within the proposed project area and public use mainly consists of dispersed hunting activities. The recreational issues and types of use are the same or similar to those in the Telegraph and Box Elder grazing allotments where bison have been grazed since 2008. There have been no reports of negative impacts on the recreating public due to the presence of bison in these allotments. It is not expected that the proposed action or the existing management alternative will impact recreation in the area.

How would the proposed action and the alternatives affect Soils?

The additional season of use would occur when soils are typically snow covered, frozen and/or dry; therefore, effects would be minimized. The greatest amount of precipitation, historically, is received in May, June, and first part of July. Also, Standards for Rangeland Health would continue to be met ensuring soil health would be maintained. Soils in the uplands provide for the capture, storage and safe release of water. Evidence of accelerated erosion in the form of rills

and/or gullies, erosional pedestals, flow patterns, and compaction layers below the soil surface are minimal and match what are expected for a given Ecological Site. The 2014 Soil/Site Stability Attribute Ratings of Rangeland Health support this. As with the current permitted kind of livestock, there would be areas that get impacted such as around water, fence corners, and trails but; overall, throughout the allotment soil health would be maintained.

How would the proposed action and the alternatives affect Visual Resources?

The proposed project is within VRM Class II. While the proposal to remove interior fences would create a change from the current condition of the viewshed, this change would be minimal to moderate and would conform to the goals and objectives of the VRM II classification.

Chapter 2

The Proposed Action and Alternatives

Introduction

Alternatives were developed based upon National and State BLM direction and policy, existing condition and resource issues. Resource issues are discussed in Chapter 1. Other factors that influenced alternative development are discussed in Chapter 3.

Alternatives were developed based upon an applied for change in use at the permittee’s request.

Alternative A – No Action Alternative

The no action alternative would be to not approve the applied for change in use. It is no longer in compliance with the HiLine RMP. Livestock grazing by cattle would continue to be authorized under the following terms and conditions currently in place until the existing permit expires on 2/28/2025:

Allotment	Pasture	Livestock		Grazing Period		% PL	Type Use	AUMS
		Number	Kind	Begin	End			
15439 Flat Creek	Base	2	C	03/01	02/28	100	Custodial	21
		187	C	05/01	11/15	100	Custodial	1222

Other Terms and Conditions

Line 1 – Licensed for the surveyed AUMs on the public lands in the Base Pasture in Flat Creek Allotment. There are no restrictions on livestock numbers as long as the resource values on the public lands are not damaged.

Line 2 – This entry is authorized in conjunction with the terms and conditions in the Flat Creek Allotment Management Plan implemented in 1974.

Alternative B - Proposed Action

The proposed action is to issue a ten year grazing permit to the American Prairie Reserve with the following terms and conditions plus additional actions:

Allotment	Pasture	Livestock		Grazing Period		% PL	Type Use	AUMS
		Number	Kind	Begin	End			
15439 Flat Creek		385	I	03/01	02/28	27	Active	1247

Other Terms and Conditions

The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to meet the Standards of Rangeland Health as described in 43 CFR 4180

(Code of Federal Regulations; Administration of Grazing on Public Lands) and the Desired Seasonal Habitat Conditions for Greater Sage-Grouse as outlined in the approved HiLine RMP (2015).

If habitat conditions for Greater Sage-Grouse on more than half of 3 or more key sites within the allotment fail to be achieved due to livestock grazing as determined by on-the-ground monitoring, livestock numbers will be reduced by 10%, and may be reduced another 10% the following year if habitat conditions remain unimproved. Livestock numbers would only be restored to full numbers when a management action plan is in place to correct the reason(s) for the failure occurring.

Motorized wheeled cross-country travel for the permittee is limited to the administration of the grazing permit, including checking vegetation conditions, building or maintaining fences, delivering salt and supplements, moving livestock, and checking wells or pipelines as part of the implementation of the grazing permit.

Permitted Use will remain at 1243 AUMs

Additional Actions

Discontinue the existing Allotment Management Plan.
 Authorize removal of all interior fencing.

Alternative C – Cattle Grazing Alternative

The livestock grazing alternative would be to issue a ten year grazing permit to the American Prairie Reserve which would update the existing permit, utilizing the current infrastructure, and bring it into conformance with the requirements of the HiLine RMP with the following terms and conditions:

<i>Allotment</i>	<i>Pasture</i>	<i>Livestock</i>		<i>Grazing Period</i>		<i>% PL</i>	<i>Type Use</i>	<i>AUMS</i>
		<i>Number</i>	<i>Kind</i>	<i>Begin</i>	<i>End</i>			
<i>15439 Flat Creek</i>	<i>Base</i>	<i>2</i>	<i>C</i>	<i>03/01</i>	<i>02/28</i>	<i>100</i>	<i>Custodial</i>	<i>21</i>
		<i>228</i>	<i>C</i>	<i>05/01</i>	<i>11/15</i>	<i>82</i>	<i>Active</i>	<i>1223</i>

Other Terms and Conditions

Licensed for the surveyed AUMs on the public lands in the Base Pasture in Flat Creek Allotment.

Authorized in conjunction with the terms and conditions in the Flat Creek Allotment Management Plan implemented in 1974.

The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to meet the Standards of Rangeland Health as described in 43 CFR 4180 (Code of Federal Regulations; Administration of Grazing on Public Lands) and the Desired Seasonal Habitat Conditions for Greater Sage-Grouse as outlined in the approved HiLine RMP (2015).

If habitat conditions for Greater Sage-Grouse on more than half of 3 or more key sites within the allotment fail to be achieved due to livestock grazing as determined by on-the-ground monitoring, livestock numbers will be reduced by 10%, and may be reduced another 10% the following year if habitat conditions remain unimproved. Livestock numbers would only be restored to full numbers when a management action plan is in place to correct the reason(s) for the failure occurring.

Motorized wheeled cross-country travel for the permittee is limited to the administration of the grazing permit, including checking vegetation conditions, building or maintaining fences, delivering salt and supplements, moving livestock, and checking wells or pipelines as part of the implementation of the grazing permit.

Permitted Use will remain at 1243 AUMs.

Alternative D – No Grazing Alternative

The public land acreage within the Flat Creek Allotment would be devoted to a public purpose which precludes livestock grazing. The grazing permit would be canceled and use of the allotment by domestic livestock would be discontinued. The permittee would be given 2 years' prior notification before their grazing permit and grazing preference would be canceled as provided for in 43 CFR 4110.4-2.

No domestic livestock grazing would be authorized after the termination date unless a new environmental analysis is completed which determined that domestic livestock grazing could be authorized on all or some portion of the area. Private lands included in the allotment could continue to be grazed at the landowner's discretion. The landowner would be required to keep their livestock off BLM lands.

Internal pasture fences that are barriers to wildlife passage or that are within 1.2 miles of a Sage-Grouse lek would be removed. Other interior fences would remain in place but would not be maintained on a regular basis. All reservoirs and stock ponds on BLM would be evaluated to determine whether they should be maintained for wildlife or recreation purposes or be removed to initiate restoration of the natural hydrology of the drainage and/or reduce habitat for mosquitoes that facilitate the spread of West Nile virus. Project-specific dam removal would be authorized by a separate administrative decision.

Mitigation and Conservation Actions/Adaptive Management Common to Alternatives B and C

As per the approved HiLine RMP (2015) regarding grazing permits/leases within the SFA and GHMA, this allotment would be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permit and to ensure the Standards for Rangeland Health (43 CFR 4180) and Desired conditions for Greater Sage-Grouse Habitat requirements (Table 1) are being met.

If the desired conditions for Greater Sage-Grouse habitat requirements on more than half of 3 or more key sites within the allotment fail to be achieved due to livestock grazing as determined by

on the ground monitoring, livestock numbers would be reduced by 10%, and may be reduced another 10% the following year if habitat conditions remain unimproved. Livestock numbers would only be restored to full numbers when a management action plan is in place to correct the reason(s) for the failure occurring.

A timing limit of December 1 to May 15 should be applied for any surface disturbing activities associated with this permit. Exceptions to the timing limit could be approved by the Wildlife Biologist for the Malta Field Office.

Table 1. Desired Conditions for Greater Sage-Grouse Habitat from HiLine RMP (2015).

Habitat Indicators	Dominant Sagebrush, Soil Type and/or Ecological Site				
	Sagebrush on Saline and/or Sodic Soils	Sagebrush on Acid Shale Parent Materials	Silver Sagebrush on Overflow Sites	Silver Sagebrush on All Other Soils/Sites	Wyoming Big Sagebrush on All Other Soils/Sites
Sage-Grouse Breeding Habitat					
Sagebrush Canopy Cover	≥5%	≥5%	10-25%	≥2%	15-25%
Sagebrush Height	≥6 inches	≥6 inches	≥12 inches	≥12 inches	≥12 inches
Perennial Grass Heights (includes residual grasses)	≥5 inches	≥7 inches	≥7 inches	≥7 inches	≥7 inches
Perennial Grass Canopy Cover (such as green needlegrass)	≥10%	≥10%	≥15%	≥15%	≥10%
Perennial Forb Canopy Cover	≥3%	≥3%	≥10%	≥5%	≥5%
Perennial Forb Availability	≥3 species	≥3 species	≥5 species	≥5 species	≥5 species
Riparian Areas & Wet Meadows	Proper Functioning Condition				
Lek Security	Rocky Mountain juniper and/or Ponderosa pine with less than 1% canopy cover on shrub/grassland ecological sites within 3 kilometers (1.86 miles) of occupied leks				
Sage-Grouse Winter Habitat					
Sagebrush Availability	>10% canopy and >10 inches visible above snow				

All fences within 1.2 miles of leks should be marked to decrease the chance of sage-grouse collisions.

Reservoirs and pits should be monitored ensure they comply with required design features to minimize required design features as per Appendix C of the HiLine RMP.

The allotment will be monitored by the BLM every year for the first 3 years to ensure that rangeland health standards are continuing to be met and that no resource issues are identified.

Conformance with Land Use Plan

The public lands in the project area are managed according to decisions in the HiLine Resource Management Plan (RMP) approved in September 2015. The HiLine RMP can be accessed using the internet at <http://www.blm.gov/8qkd>.

The proposed action and all action alternatives are in conformance with the HiLine RMP (approved September 2015). The HiLine RMP can be accessed using the internet at <http://www.blm.gov/8qkd>. Although this action is not specifically addressed in the HiLine RMP, the transferring grazing permits and the orderly administration of livestock grazing is mentioned and provided for under the goals, objectives, management actions described for the following resources. Additional guidance is provided in the HiLine RMP Appendices.

3.2.8 Livestock Grazing

- A no grazing alternative will be considered in environmental assessments (EA) prepared as part of the grazing permit renewal process.
- AMPs will be updated and revised in response to monitoring and/or permit transfers.
- Where opportunities occur, cooperative efforts to utilize permittee/lessee monitoring and integrated ranch planning will be emphasized.

3.2.18 Vegetation – Rangeland

- Manage uplands to meet health standards and meet or exceed PFC within site or ecological capability.
- Manage existing stands of woody draw species to achieve diversity in age, class, structure, and provide habitat for wildlife.
- Site-specific sage-grouse habitat and management objectives will be incorporated into the respective AMPs or livestock grazing permits as appropriate.
- The BLM will manage water developments within Greater Sage-Grouse habitat to reduce the spread of West Nile virus.

3.2.19 Vegetation – Riparian and Wetland

- Develop site-specific objectives and management strategies for riparian and wetland areas during the development and implementation of proposed actions and activity plans.
- The BLM will enhance or restore riparian composition and structure beyond Properly Functioning Condition (PFC) in riparian areas where and when appropriate for other resource values. This may include, but is not limited to, establishing riparian pastures, stream corridor/ shoreline fencing, specialized grazing methods, winter grazing use, a different species of livestock, and rehabilitation protective measures.

- Maintain, restore, or improve riparian and wetland areas to achieve a healthy and productive ecological condition that provides benefits and values within site capability.
- Grazing techniques and practices will be implemented to reduce hot season (summer) grazing on riparian and meadow complexes within Greater Sage-Grouse Priority Habitat Management Areas (PHMA).

3.2.24 Wildlife

- Ensure that proposed land uses initiated or authorized by the BLM minimize damage to wildlife habitat and populations of special status species.
- Fences identified as potential barriers to wildlife movement or representing significant hazards for wildlife on BLM land will be inventoried. Fences will be prioritized for replacement or modification to maintain resource values including wildlife movements.
- The NEPA analyses for renewals and modifications of livestock grazing permits/leases that include lands within PHMA will include specific management thresholds based on the Desired Conditions for Greater Sage-Grouse Habitat (habitat objectives) presented in Table 3.2-4.

Relationship to Statutes, Regulations, or other Plans

The proposed action is tiered by reference to the following Environmental Assessments as they provide a great deal of background information:

- EA-MT-090-04-026 Change in Class of Livestock
- EA-MT-090-08-019 Middle Box Elder Allotment Change in Use
- DOI-BLM-MT-M010-2013-006-EA Box Elder Change in Use

Chapter 3

Affected Environment

Introduction

The affected environment section describes the existing condition and trend of issue-related elements of the human environment that may be affected by implementing the proposed action or an alternative. This discussion is organized by the resource issues that were identified in Chapter 1 and provides the baseline for comparison of impacts/consequences described in Chapter 4.

General Setting

Average precipitation in Phillips County, Montana, is around 12.54 inches annually. Approximately 80 percent of annual rainfall is observed between April and September. Temperatures can fluctuate from -50° F to 109° F. The average temperatures in January and July are 15° F and 72° F respectively. The frost-free period is approximately 131 days from May 13 through September 21 of each year.

Relevant Past and Ongoing Actions

The Flat Creek Allotment was adjudicated in 1964 and 1243 AUMs of Federal grazing privileges were allocated. In 1972 an AMP was developed implementing a 3 pasture rest-rotation grazing system. It was followed until the early 1990's when it was abandoned in favor of a deferred-rotation grazing system that has been loosely followed since. In 2014 the American Prairie Reserve purchased the base properties and the attached preference and the allotment went unused that year.

Range condition scoring conducted in 1987 and repeated in 1990 placed all three pastures of the allotment in “good” range condition. In 2008 the allotment was assessed as part of the Beaver Creek Watershed evaluation process and was found to be meeting all standards for rangeland health. The allotment was reassessed in 2014, and although no final report or determination has been completed, all indications were that all rangeland health standards were being met, or if not, were not caused by livestock grazing.

Resource Issues Brought Forward for Analysis

Resource Issue: Vegetation Rangelands

Approximately 6130 acres of private land associated with the base property that previously was not part of the allotment would be added and managed along with the BLM lands. These private lands were previously cropped and are generally located on soils considered much more productive than ordinary rangeland. All of these lands are being returned to grass production if not already in it (See Table 2).

Acreages, AUMs and Percentages

Table 2. Acreages, Exchange of Use AUMs and percentages by Alternatives

	Livestock Management Alternative and No Action Alternative			Proposed Action Alternative			No Livestock Grazing		
	Acres	AUMs	AUM %	Acres	AUMs	AUM %	Acres	AUMs	AUM%
Public	13075	1243	82	13075	1243	27	13075	0	0
Private	2190	239	16	8320	3343*	72	8320	3343	99
State	880	36	2	880	36	1	880	36	1

* The exchange-of-use contributions from private lands not previously part of the allotment were determined by taking forage production values provided by the APR which they derived from the web soil survey, multiplying those by a use factor of 0.4 (i.e. 40% use, which is consistent with the 40% allocation to livestock in the HiLine RMP), and dividing by an animal unit factor of 1000 lbs.

Resource Issue: Water, Wetlands, and Riparian Resources

Flat Creek has been listed as Water Quality Impaired (for 36.9 stream miles, from the headwaters to the mouth of Beaver Creek) by Montana Department of Environmental Quality (MDEQ) and the Environmental Protection Agency (EPA). Allotment 15439 encompasses much of the headwaters of Flat Creek, along with the main stem of Flat Creek, on Federal, State, and private surface. Flat Creek flows on BLM surface for a total of approximately 4.88 stream miles within Allotment 15439. The sources of impairment causes are unknown or natural, and no total maximum daily load (TMDL) has been developed for Flat Creek.

The water within Flat Creek has been identified as not supporting the standards set in place for the following beneficial uses: agricultural, aquatic life, and drinking water. Meanwhile, the quality of the water fully supports the beneficial use of Primary Contact Recreation (e.g., swimming). Flat Creek’s existing water quality impairments consist of heightened concentrations of arsenic, cadmium, copper, iron, zinc, lead, nitrate/nitrite, total nitrogen, phosphorous, suspended solids, and bedload solids. Additionally, low dissolved oxygen levels have been recorded in the water.

The BLM’s PFC surveys and MDEQ stream reach assessments clearly describe Flat Creek as having very limited potential. The riparian zone is limited to about 1 meter of sedges and Three-square Bulrush (*Schoenoplectus americanus*) on either side of the channel for most of the stream. The channel in the headwaters area is a small Rosgen-E channel that moves sediment well. In 1995 Functioning at Risk (FAR) conditions existed along Flat Creek due to the riparian zone exhibiting a heightened potential for bank instability. Riparian conditional assessments were conducted along Flat Creek in 2014 and the stream was in PFC.

The land uses in this watershed are grazing and flood irrigation. The grazing use is naturally limited by the lack of water and vegetation that occurs within the drainage. The stream reach on BLM surface is broken up four times due to ownership and hydrologic modifications. The lower end of the stream reach within the allotment has received some channel modifications that are likely greater than 50 years old and that impact riparian vegetation and saturation on private

surface (section 22) and public surface (section 14). The stream is called Flat Creek for a reason and, because of this, flood irrigation is partially a natural event that occurs each spring.

The South Fork of Sheep Coulee flows in an easterly direction on BLM surface in the northern most part of Allotment 15439. This stream reach exhibited FAR conditions when last assessed in 1995. The factors that existed along the reach included the susceptibility for bank erosion which was attributed to the saline conditions that were limiting vegetation establishment along the riparian zone and within the channel.

First Creek flows on BLM surface below First Creek Reservoir, which is a private reservoir. The reach is roughly 0.52 stream miles in length and has not yet been assessed for status or condition by the BLM.

Quantitative techniques to identify a riparian areas departure from desired potential attributes and processes may include the following measurements:

- Stream channel dimensions (indicate excess sedimentation or bank erosion)
- Sinuosity
- Gradient
- The ratio of the bankfull surface width to the mean depth of the bankfull channel
- Plant composition on the streambanks (on the greenline)
- Greenline-to-greenline width
- Plant composition across the riparian area
- Water level measurements (ground-water and surface-water)
- Amount (percentage or linear feet) of livestock streambank trampling.

When in close proximity to sagebrush communities, riparian, wetland, and other forb-rich communities are commonly considered suitable summer and/or late brood-rearing habitat for sage-grouse. Quantitative assessments conducted in the riparian zone can include vegetative species inventories that identify preferred forb availability. The functioning condition of riparian and wetland areas can impact the likelihood that cover and food resources are provided annually to sage-grouse. Suitable cover and food may be available from July through September in riparian and wet meadow areas when the majority of areas are in PFC.

The BLM has project records for 22 earthen water developments on BLM surface within Allotment 15439 (see 'Table 3' below). The BLM holds 40 water rights total, 21 of which have the purpose of Livestock and Wildlife Water within the Allotment.

Table 3: List of Range Improvement Reservoirs in the Flat Creek Allotment.

#	Record	Name	T.	R.	sec.	qrtr-qrtr	Allot	Yr.
1	440493	SHEEP COULEE RET RES	026	031	31	NENESE	15439	1974
2	442561	PR-209 RET RES	025	031	19	NWNE	15439	1943
3	442640	DON RET RES	025	031	8	SWSW	15439	1965
4	442641	MARTA RET RES	025	031	5	SENW	15439	1965
5	442642	RATTLER RET RES	025	031	14	SESW	15439	1965
6	442805	TEREX RET RES	025	031	19	SWSW	15439	1948

7	442828	FAWN RET RES	025	031	19	NWSE	15439	1973
8	442829	ONION PIT	025	031	7	NESW	15439	1973
9	442830	FENCE LINE RET RES	025	031	21	NWSE	15439	1973
10	442831	DONNA RET RES	025	031	17	NENE	15439	1973
11	442832	LITTLE DEER RET RES	025	031	30	SESW	15439	1973
12	442833	DON RET RES	025	031	20	SENE	15439	1973
13	442838	SALTY RET RES	025	031	17	NWNE	15439	1974
14	442839	BATWING RET RES	025	031	6	NESW	15439	1974
15	442840	CACTUS PIT	025	031	15	SWNW	15439	1974
16	442841	HAMMER RET RES	025	031	8	NENW	15439	1974
17	442842	SUN PRAIRIE RET RES	025	031	34	NENE	15439	1974
18	442843	THE HUB PIT RET RES	025	031	8	SESE	15439	1974
19	442844	CLEAR PIT	026	031	32	SESE	15439	1974
20	442845	FARMER RET RES	025	031	3	NENW	15439	1974
21	442846	HARD PAN RET RES	025	031	14	SWNW	15439	1974
22	442847	NUTTAL RET RES	025	031	10	NESE	15439	1974

Wetland vegetation and wetland habitat is present at the man-made water impoundments on BLM surface. Historic irrigation diversions exist on BLM surface. Much of Sun Prairie Flat, in the southwest portion of the allotment, has been identified by the U.S. Fish & Wildlife Service (Service) as Freshwater-Emergent-Wetland that is seasonally flooded (USFWS 2015). There are a total of 1,283 acres of Service-inventoried wetland on BLM surface within Allotment 15439 (see 'Table 4' below).

Table 4: List of Wetland Types and Wetland Acres on BLM Surface in the Flat Creek Allotment.

<u>Wetland Type**</u>	<u>Acres</u>	<u>sec.</u>	<u>qrtr-qrtr</u>	<u>Comments</u>
<i>T. 25 N., R. 31 E.</i>				
PEMA	0.49	3	NENW	
PABFh	0.09	3	SESW	
PEMAh	0.73	3	SESW	Additional 0.20 ac. saturates ground on private surface
PUSA	1.46	3	NWNW	
PUSA	0.02	3	NWNW	Additional 0.15 ac. saturates ground on private surface
PUSA	0.14	3	NWNW	Additional 0.20 ac. saturates ground on private surface
PABFh	1.85	5	SENE	
PEMC	0.13	5	SENE	
PEMCh	0.09	5	SENE	
PEMCh	0.11	5	SENE	
PABFh	0.17	5	SENE	
PEMCx	0.14	5	SENE	Also saturates ground in section 4
PEMC	1.14	5	SENE	Also saturates ground in section 4
PABFh	0.81	6	NESW	
PEMC	0.13	7	SWNW	Also saturates 1.62 ac. in Allotment 15440
PEMC	4.62	7	SWNW	Also saturates 1.08 ac. in Allotment 15440
PEMC	48.13	7	NWSE	
PEMA	0.64	7	SWNE	
PEMA	0.54	7	SWNE	

PEMC	1.25	7	SWNE	
PEMC	0.42	7	SWNE	
PEMCh	3.31	7	SENE	
PABFh	0.50	7	NESW	
PEMA	8.02	7	NWSE	
PEMC	1.84	7	NESW	
PUBFx	0.38	8	SWSW	
PEMC	0.44	8	SWSW	
PEMC	6.18	8	NWSW	
PABFh	1.31	8	NENW	
PABFh	0.38	8	SESE	
PEMAh	1.36	9	NENE	
PABFh	0.49	9	SENE	
PUBFx	0.43	10	NESE	
PEMC	1.48	11	SWSE	Additional 0.29 ac. saturates ground on private surface
PEMCx	0.07	11	NENE	
PABFh	0.44	14	SWNW	
PEMA	20.08	14	SW Qtr.	Connected to 2306.75 ac. PEMA wetland over multiple sections
PABFh	0.27	15	SWNW	
PEMAh	0.36	15	SWNW	
PEMA	175.75	15	S Half	Connected to 2306.75 ac. PEMA wetland over multiple sections
PEMCh	12.75	15	SESW	Additional 6.13 ac. saturates ground on private surface
PEMAh	0.96	15	SESW	Additional 4.42 ac. saturates ground on private surface
PEMAh	0.23	15	SWSE	Connected to 154.35 ac. PEMAh wetland over multiple sections
PEMAh	0.06	15	SESW	Connected to 154.35 ac. PEMAh wetland over multiple sections
PEMCh	1.54	17	NENE	
PABFh	1.61	17	SWNE	
PEMCh	0.60	17	SENE	
PEMCh	0.26	18	SWSE	
PABFh	1.13	19	NWNE	
PEMA	0.07	19	NWSW	
PABFh	2.11	19	NWSW	
PUBFx	0.76	20	SENE	
PABFh	0.90	21	NWSE	
PEMA	0.89	21	NESE	
PEMAx	0.08	21	NWSE	
PEMC	2.84	22	SWSE	Additional 2.34 ac. saturates ground on private surface
PEMC	0.67	22	SESE	
PEMC	1.80	22	NESE	
PEMA	159.86	22	S Half	Connected to 2306.75 ac. PEMA wetland over multiple sections
PEMAh	0.51	22	NWSW	Connected to 154.35 ac. PEMAh wetland over multiple sections
PUSC _x	0.03	22	SESW	Additional 0.04 ac. saturates ground on private surface
PEMA	66.79	22	N Half	Connected to 2306.75 ac. PEMA wetland over multiple sections
PEMC	37.91	22	SENE	Additional 6.13 ac. saturates ground on private surface
PEMAh	29.10	22	NWNE	Additional 124.40 ac. saturates ground on private surface Connected to 154.35 ac. PEMAh wetland over multiple sections
PEMCh	0.89	22	NWNE	Additional 9.64 ac. saturates ground on private surface
PEMAh	0.04	23	SESW	Connected to 154.35 ac. PEMAh wetland over multiple sections.
PEMA	10.61	23	NWNW	Connected to 2306.75 ac. PEMA wetland over multiple sections.

PEMA	238.10	27	S Half	Connected to 2306.75 ac. PEMA wetland over multiple sections.
PEMA	78.00	27	NW Qtr.	Connected to 2306.75 ac. PEMA wetland over multiple sections.
PEMA	34.06	28	NE Qtr.	Connected to 2306.75 ac. PEMA wetland over multiple sections.
PABFh	0.24	29	SESW	
PEMCh	0.12	29	NWSE	
PABFh	1.24	29	NWSE	
PABFh	0.44	30	SESW	
PEMC	0.49	31	SWSW	Additional 0.82 ac. saturates ground on private surface. Additional 2.24 ac. saturates State Land in Allotment 05433.
PEMC	0.19	31	NESE	Additional 0.55 ac. saturates ground on private surface.
PABF	0.01	31	NESE	Additional 0.10 ac. saturates ground on private surface.
PEMC	0.06	31	NESE	Additional 0.21 ac. saturates ground on private surface.
PEMC	1.72	31	NESE	
PABF	0.37	31	NESE	Additional 0.37 ac. saturates ground on private surface.
PEMC	0.10	31	SESE	
PABF	0.14	31	SESE	Additional 0.21 ac. saturates ground on private surface.
PABF	0.03	31	SESE	Additional 0.09 ac. saturates ground on private surface.
PABF	0.03	31	SESE	Additional 0.10 ac. saturates ground on private surface.
PABFh	1.39	31	SESE	Additional 0.65 ac. saturates ground on private surface.
PABFh	1.21	31	SESE	
L2ABFh	20.00	31	SWNE	Additional 183.6 ac. saturates ground on private surface. Additional 3.42 ac. saturates State Land in Allotment 05433.
PEMCh	4.19	31	NENW	Additional 1.65 ac. saturates ground on private surface.
PEMA	277.73	34	N Half	Additional 1,245.76 ac. saturates ground on private surface Connected to 2306.75 ac. PEMA wetland over multiple sections
PEMCx	0.23	34	NENE	
PEMC	0.56	34	SENE	Additional 81 ac. saturates ground on private surface
<i>T. 26 N., R. 31 E.</i>				
PABFh	0.38	31	NESE	Also saturates 0.14 ac. in Allotment 15427
PUSC	0.32	32	NESW	
PABFh	0.01	32	SESE	Also saturates 0.20 ac. in Allotment 15427

**Wetland Type Code Definitions:

[2] Littoral / [A] Temporarily Flooded / [AB] Aquatic Bed / [C] Seasonally Flooded / [EM] Emergent / [F] Semipermanently Flooded / [h] Diked/Impounded / [L] Lacustrine / [P] Palustrine / [UB] Unconsolidated Bottom / [US] Unconsolidated Shore / [x] Excavated

Resource Issue: Big Game Migration and Winter Range, BLM Sensitive Species, and Greater Sage-Grouse Habitat

The area of the proposed action is within Hunting District 620 in southwest Phillips County. This area has been identified as important winter range for big game species such as mule deer and American pronghorn.

The Flat Creek Allotment contains habitat for Sprague's pipit, a candidate species. A candidate species is one for which the Service has on file sufficient information on biological vulnerability and threats to support a proposal for listing as endangered or threatened, but for which preparation and publication of a proposal is precluded by higher priority listing actions.

There are a variety of other BLM Sensitive Species that may occur within this area including black-tailed prairie dog, Baird's sparrow, Brewer's sparrow, burrowing owl, chestnut-collared longspur, ferruginous hawk, golden eagle, loggerhead shrike, long-billed curlew, marbled godwit, mountain plover, Nelson's sharp-tailed sparrow, sage thrasher, Swainson's hawk, great plains toad, greater short-horned lizard, milksnake, northern leopard frog, plains spadefoot toad and western hog-nosed snake.

Flat Creek Allotment is also within the Sagebrush Focal Area (SFA) and the Greater Sage-Grouse Priority Habitat Management Area (PHMA). Although the Service has recently determined that the greater sage-grouse does not warrant listing under the Endangered Species Act, the BLM is a committed partner in the effort to conserve this species and its habitat. SFAs are landscapes with high breeding population densities of sage-grouse, high-quality sagebrush habitat and a preponderance of federal ownership or protected areas. These areas are prioritized for habitat improvement and vegetation management efforts. PHMAs are managed to avoid and minimize further disturbance to sage-grouse habitat. There are two known active greater sage-grouse leks within the Flat Creek Allotment and two additional leks within half a mile of the allotment boundary.

Chapter 4

Environmental Effects

Introduction

Potential effects include direct, indirect and cumulative effects. Direct effects are those which are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Cumulative effects result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.

Methodology and Analytical Assumptions

The effects analysis is based on scientific literature, professional judgment, experience, and field measurements. This analysis is organized by resource issues. Under each resource issue, the estimated effects common to the alternatives or those unique to a particular alternative are described. The analysis of effects focuses on the predicted or anticipated change to the resource impact indicator(s) identified for each resource issue.

How would the proposed action and the alternatives affect rangeland vegetation?

Impacts common to all alternatives

In comparing the ecology of cattle and bison, Allred et al. (2011) noted that popular management strategies which constrain animal movement and behavior, particularly through the use of fencing and rotation, may prevent many important interactions between animals and their environment, potentially reducing any conservation value both species might otherwise have. This is likely compounded when management which has been designed to accommodate the behavior of one species is imposed on a different species altogether with vastly different behaviors as studies have consistently shown to be the case between cattle and bison (Allred et al. 2011, Kohl, et al. 2013). Simply put, these are two different species with two different behaviors and they warrant different management approaches.

One of the primary objectives of rotational grazing from traditional rangeland management is to promote uniformity of use while at the same time limiting the impacts of cattle grazing behavior (e.g. the tendency of cattle to congregate in preferred areas) on the resource. More holistic and modern rangeland ecologists have come to recognize the importance and naturalness of heterogeneity across the landscape for not only the health and diversity of the rangeland, but also the multitude of wildlife species dependent upon that variability. Davies, et al. (2009) suggest that low-severity disturbances may actually make a plant community more resilient to more severe disturbances, particularly in those ecosystems like a mixed-grass prairie where fire and grazing are considered integral components of the natural ecosystem (Davies, et al. 2009, Biondini, et al. 1998, Fuhlendorf, et al. 2012, Fuhlendorf, et al. 2006).

A common belief among opponents of the proposed action is that year around grazing by bison would be harmful to the rangeland and incompatible with the ecology of the landscape and/or

other native wildlife species. It is illogical to think species that have occupied and cohabitated on this landscape since the last ice age would now somehow be incompatible with each other. There simply is no quantitative information to support this belief particularly when stocking rate is regulated. In fact it is questionable if grazing systems are even necessary when stocking rate is regulated at an appropriate level (Briske, et al. 2008, Holechek et al. 2001), particularly in a mixed-grass prairie ecosystem (Biondini, et al. 1998). Allred et al. (2011) noted that both cattle and bison can be mismanaged and cause habitat degradation. However to imply one has more of a place on the landscape, or is more wildlife friendly than the other simply lacks scientific base.

It has been suggested a dramatic shift in grassland species composition might be expected to more closely resemble the Historic Climax Plant Community (HCPC) described in current Ecological Site Descriptions (ESD) for the area. This was speculated on and considered an unknown in the Environmental Analysis conducted on the Box Elder Allotment in 2008 (EA-MT-090-08-019):

... it is expected that, over time (20+ years), native vegetation would begin to exhibit the characteristics of pre-European rangeland; it would be expected to display a wide range of variability in condition from areas of high use to areas of no use, or "patchiness" in response to season long versus rotational grazing.

Since then our level of experience and understanding has improved such that it is now known and agreed upon among professionals in both BLM and NRCS there are gross errors in some of the current ESDs for the area, several of which are in the final stages of revision (e.g. Silty/Loamy and Thin Claypan) to more accurately reflect current knowledge and understanding of the species composition and potential for those Ecological Sites. For example, it was once thought bluebunch wheatgrass should be a major species occurring on these sites in the HCPC, but it is now recognized it should not have even been considered a minor species, and likely was never present historically. Therefore the HCPC reference in current ESDs is not only ecologically inaccurate, it also is practically unattainable under any management scenario.

Anecdotal evidence based on the professional judgment of local resource specialists and supported by ocular estimates of range condition and photo-point monitoring is consistent with the findings of Biondini et al. (1998) that the major differences in vegetation on mixed-grass prairie are the result of differing levels of residual cover and litter associated with grazing intensity. Simply put, lighter grazing resulted in more left over grass, but no change in grass species composition was observed over an 8 year period. This is consistent with BLMs observations of similar management to that of the Proposed Action Alternative that has been in place since 2008 on the Box Elder Allotment, as well as from observations of a number of long-term grazing exclosures on BLM lands scattered throughout Phillips County. Based on this, no changes to the grassland species composition is expected to occur under any of the alternatives.

It is not uncommon for public perception and popular opinion to be at odds with science and fact concerning bison-cattle conflicts in the western USA (Ranglack et al., 2015). Public perception concerning any number of potentially negative aspects of American bison and their management is still widespread and prevalent in the local area. Many of these concerns were previously considered and addressed in both the *Change In Class Of Livestock EA* (EA-MT-090-04-026, 2005) conducted for the Telegraph Creek Allotment and the *Middle Box Elder Change In*

Livestock Use EA (EA-MT-090-08-019, 2008) conducted for the Box Elder Allotment. For example, it is still a widely held local belief that bison are impossible to keep contained even after 7 years of bison grazing on those two allotments with no more than a handful of isolated, minor and largely unknown escape incidences.

The proposed action and the alternatives considered would not affect rangeland vegetation. It is expected standards for rangeland health would continue to be met and no degradation to the resource would occur.

How would the proposed action and the alternatives affect Water, Wetlands, and Riparian Resources?

Alternative A - No Action

The quality of water within and downstream of Allotment 15439 would not be likely to change under the No Action Alternative. Flat Creek is listed by MDEQ and the EPA as water quality impaired and the identified causes of impairment are unknown and/or natural. In order to evaluate the condition of riparian vegetation and riparian function, which indicate causes and sources of current and potential water quality conditions, riparian areas would continue to be assessed and monitored for PFC.

Livestock's presence along streams could lead to alterations in the physical characteristics and conditions of the riparian zones, and could include a decline in water quality. Livestock tend to seek out water and succulent forage in riparian areas which can lead to trampling, the removal of vegetation on stream banks and streambeds, soil erosion, and loss of stream bank and streambed stability.

Allotment management would be directed at preventing livestock overutilization through the identification of riparian-wetland areas that are at a point where the resilience to withstand relatively high flow events is intact. The quantitative techniques listed within the Affected Environment section of this document can be applied to assess a riparian areas departure from the attributes and processes that comprise its own specific potential.

Best Management Practices (BMP's) would be implemented to prevent declining trends and to maintain or improve resource conditions. The 0.52 mile long unknown-condition reach of First Creek would be evaluated for riparian status and condition. The South Fork of Sheep Coulee would be re-assessed by BLM's interdisciplinary team using the PFC method.

The condition of wetland resources and total acres of wetlands within the Allotment 15439 is not expected to change due to pasture fences remaining in place and in use, and due to there being no change in season of use, numbers and kinds of livestock, or total AUMs.

Alternative B - Proposed Action

The environmental effects on Riparian Areas and Water Quality would be similar to those listed under Alternative A. Compared to domestic cattle, bison wander more, will use steeper terrain, select and consume drier, rougher forage, and spend less time in riparian areas and wetlands.

An alteration in the total acres or types of wetlands present, and a departure from the proper quantitative attributes and processes that comprise the riparian and/or wetland areas own specific PFC potential, would not be expected to occur within Allotment 15439 in response to the proposed stocking rates, the authorized change in kind of livestock, and the one-common-pasture-management proposal, which would include all private lands.

Alternative C – Cattle Grazing Alternative

The environmental effects on Water Quality and Riparian Areas under the Existing Management Alternative would be the same as those outlined under Alternative A and B. There would be no change expected in the condition of wetland resources and total acres of wetlands within Allotment 15439.

Cumulative Effects - Past, Present, and Reasonably Foreseeable Actions

The cumulative effects that could result, when the effects of the proposed action are added to or interact with other effects in the watershed during and after the issuance of a grazing permit, align very closely with the direct effects addressed under Alternative A and B.

Cumulatively, livestock grazing within Allotment 15439 could affect downstream riparian reaches and channel conditions on non-Federal surface. Due to the proposed action taking place within a watershed, heightened stream energy during run-off events is a primary issue of concern. The BLM will enhance or restore riparian composition and structure beyond PFC in riparian areas where and when appropriate for other resource values. This may include, but is not limited to, establishing riparian pastures, stream corridor/ shoreline fencing, specialized grazing methods, winter grazing use, a different species of livestock, and rehabilitation protective measures.

In conformance with Land Use Plans, grazing techniques and practices will be implemented to reduce hot season grazing on riparian and meadow complexes within Greater Sage-Grouse PHMAs. Alternative water facilities will be installed to relieve grazing impacts on riparian areas inside of priority sage-grouse habitat.

The cumulative effects of the alternatives are not likely to include heightened water quality impairment levels that would be caused directly by the presence of livestock. The BLM will identify and monitor all potential causes of riparian degradation and would make adjustments to minimize cumulative effects in areas that are found to not be meeting standards.

How would the proposed action and the alternatives affect big game migration and winter range?

Alternative A - No Action

Under this alternative, there would be no change to the kind of livestock or management regime therefore there would be no immediate change to big game migration and winter range conditions due to grazing under this alternative.

As per the approved HiLine RMP regarding grazing permits/leases within the SFA and PHMA, this allotment would be prioritized for field checks to help ensure compliance with the terms and

conditions of the grazing permit and to ensure the Standards for Rangeland Health and Desired conditions for Greater Sage-Grouse Habitat (Table 3) requirements are being met. If these conditions are not being met, necessary adjustments would have to be made to address the deficiencies. This could lead to improved winter grazing for big game but would not directly impact big game migration unless the corrective actions include changes in grazing infrastructure.

Alternative B - Proposed Action

Under this alternative, approximately 14.5 miles of interior fences would be removed and the entire allotment, including the private lands, would be grazed year round instead of seasonal and by bison instead of cattle. The removal of 14.5 miles of interior fences would decrease the barriers to big game migration within the allotment. It is doubtful conversion to year-round grazing by bison throughout the allotment would impact winter habitat conditions for wildlife.

Although Desired Conditions for Greater Sage-Grouse Habitat are specific to greater sage-grouse, these desired conditions are also beneficial to big game winter range. As long as these requirements are met, the allotment would continue to provide quality big game winter habitat. However, improper livestock utilization would negatively impact the availability of winter forage for big game.

Alternative C – Livestock Grazing Alternative

It is expected that the short-term impacts to big game migration and winter range, under this alternative, would be similar to Alternative A. The public lands within the allotment would still be required to meet the Standards of Rangeland Health as described in 43 CFR 4180 but they would also be required to meet the desired conditions for sage-grouse habitat in Table 3. In the long-term, this could lead to an improvement to big game winter range conditions. There would be no change to big game migration unless significant changes to the grazing infrastructure were implemented to adjust grazing utilization. Significant changes would need to be analyzed in a separate EA.

Alternative D – No Grazing Alternative

Of the 14.5 miles of interior fences within the allotment, only 2 miles are within 1.2 miles of an active sage-grouse lek. The remaining interior fences would not be maintained or removed nor would the boundary fence. Should the landowner choose to continue grazing on all of the private and state lease lands within the Flat Creek Allotment an additional 18 miles of fence would have to be built, leading to a net gain of 16 miles of fences. Fencing off the private and state lands would lead to increased fragmentation of the allotment as a whole and private fences would not be required to meet BLM wildlife standards which could impact big game migration.

Removal of grazing within the allotment could lead to a short-term increase in the availability of winter forage for big game, however lack of any type of vegetation management could impact winter habitat over the long term.

Approximately 26 pits and small reservoirs are scattered throughout the BLM-administered lands within Flat Creek Allotment. Removal of any or all of these water sources would lead to more

concentrated use by wildlife at other pits/reservoirs as well as in springs and riparian areas. This could cause increased impacts to resources at those sites.

Alternative methods would have to be utilized to maintain range health for wildlife within the allotment. Since the area is within the SFA, prescribed burning could only be used on a very limited basis. Efforts could be made to remove more of the interior fences and maintain water sources for wildlife use.

How would the proposed action and the alternatives affect greater sage-grouse habitat?

Alternative A - No Action

Under this alternative, there would be no change to the type of livestock or management regime therefore there would be no immediate change to sage-grouse habitat due to grazing under this alternative.

As per the approved HiLine RMP regarding grazing permits/leases within the SFA and PHMA, this allotment would be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permit and to ensure the Standards for Rangeland Health and Desired conditions for Greater Sage-Grouse Habitat (Table 3) requirements are being met. If these conditions are not being met, necessary adjustments would have to be made to address the deficiencies. This could lead to improved sage-grouse habitat over the long-term.

Alternative B - Proposed Action

Under this alternative, approximately 14.5 miles of interior fences would be removed and the entire allotment, including the private lands, would be grazed year round instead of seasonal and by bison instead of cattle. The removal of 14.5 miles of interior fences would decrease the chances of sage-grouse collisions. However, conversion to year-round grazing by bison throughout the allotment may impact the desired conditions for sage-grouse habitat (Table 3) if the allotment is not adequately monitored and swift actions are not taken to address deficiencies.

The public lands within the allotment would still be required to meet the Standards of Rangeland Health as described in 43 CFR 4180 and the Desired Conditions for Greater Sage-Grouse Habitat (Table 3) from the approved HiLine RMP (2015). As long as these requirements are met, the allotment would continue to provide quality greater sage-grouse habitat. However, improper livestock utilization would negatively impact the availability of sage-grouse habitat.

There are approximately 26 small reservoirs and pits scattered across BLM lands within the allotment. West Nile Virus would continue to be a concern where shoreline trampling occurs. Year-round grazing may lead to increased shoreline and riparian trampling where bison tend to concentrate and the chance of the virus occurring in those areas would also increase.

Alternative C – Livestock Grazing Alternative

It is expected that the short-term impacts to greater sage-grouse habitat, under this alternative, would be similar to Alternative A. The public lands within the allotment would still be required to meet the Standards of Rangeland Health as described in 43 CFR 4180 but they would also be

required to meet the desired conditions for sage-grouse habitat in Table 3. In the long-term, this could lead to improved or desired conditions for sage-grouse habitat. Any significant changes to the grazing infrastructure to improve grazing utilization would need to be analyzed in a separate EA.

There would continue to be approximately 8 miles of interior and boundary fences within 1.2 miles of active sage-grouse leks. Fence collisions would continue to be a concern.

There are approximately 26 small reservoirs and pits scattered across BLM lands within the allotment. West Nile Virus would continue to be a concern where shoreline trampling occurs.

Alternative D – No Grazing Alternative

Of the 14.5 miles of interior fences within the allotment, only 2 miles are within 1.2 miles of an active sage-grouse lek. The remaining interior fences would not be maintained or removed nor would the boundary fence. Should the landowner choose to continue grazing on all of the private and state lease lands within the Flat Creek Allotment an additional 18 miles of fence would have to be built, leading to a net gain of 16 miles of fences. Approximately 10 miles of the new fence would be located within 1.2 miles of active leks. Fencing off the private and state lands would lead to increased fragmentation of the allotment as a whole and private fences would not be required to meet BLM wildlife standards which could lead to increased sage-grouse fence collisions.

Removal of grazing within the allotment could lead to a short-term increase in forb and perennial grass height and canopy cover, however lack of any type of vegetation management could impact vegetation conditions over the long term. Since prescribed burning will be used on a very limited basis within the SFA, other less efficient and more expensive mechanical treatments would have to be utilized to maintain desired conditions for greater sage-grouse habitat (Table 3).

Approximately 26 pits and small reservoirs are scattered throughout the BLM-administered lands within Flat Creek Allotment. Removal of all or some of these water sources would lead to more concentrated use at other pits/reservoirs as well as in springs and riparian areas. Increased shoreline trampling at these sites would improve conditions for *Culex tarsalis*, thus increasing the chances of West Nile Virus to occur.

How would the proposed action and the alternatives affect other BLM Sensitive Species?

Alternative A - No Action

Under this alternative, there would be no change to the type of livestock or management regime therefore there would be no immediate change to wildlife habitat due to grazing under this alternative.

As per the approved HiLine RMP regarding grazing permits/leases within the SFA and PHMA, this allotment would be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permit and to ensure the Standards for Rangeland Health and Desired

conditions for Greater Sage-Grouse Habitat (Table 3) requirements are being met. If these conditions are not being met, necessary adjustments would have to be made to address the deficiencies. This could lead to improved wildlife habitat over the long-term.

Alternative B - Proposed Action

Under this alternative, approximately 14.5 miles of interior fences would be removed and the entire allotment, including the private lands, would be grazed year round instead of seasonal and by bison instead of cattle. The removal of 14.5 miles of interior fences would decrease habitat fragmentation and decrease the availability of perches for avian predators in the area. However, conversion to year-round grazing by bison throughout the allotment may impact vegetation height and canopy cover if grazing utilization isn't adequately monitored and swift actions are not taken to address deficiencies such as concentrated use in important wildlife habitat.

The public lands within the allotment would still be required to meet the Standards of Rangeland Health as described in 43 CFR 4180 and the Desired Conditions for Greater Sage-Grouse Habitat (Table 3) from the approved HiLine RMP (2015). As long as these requirements are met, the allotment would continue to provide quality wildlife habitat. However, improper livestock utilization would negatively impact upland habitat conditions.

There are approximately 26 small reservoirs and pits scattered across BLM lands within the allotment. Year-round grazing may lead to increased shoreline and riparian trampling and water turbidity where bison tend to concentrate. The availability of quality wetland and riparian habitat would be impacted.

Alternative C – Livestock Grazing Alternative

It is expected that the short-term impacts to wildlife habitat, under this alternative, would be similar to Alternative A. The public lands within the allotment would still be required to meet the Standards of Rangeland Health as described in 43 CFR 4180 but they would also be required to meet the desired conditions for sage-grouse habitat in Table 3. In the long-term, this could lead to improved or desired conditions for all or most wildlife in the area. Any significant changes to the grazing infrastructure to improve grazing utilization would need to be analyzed in a separate EA.

There would continue to be approximately 14.5 miles of interior fences available to avian predators as perch sites. Concentrated impacts to ground-nesting birds would continue along fencelines.

There are approximately 26 small reservoirs and pits scattered across BLM lands within the allotment. The allotment would continue to provide wetland habitat for wildlife species.

Alternative D – No Grazing Alternative

Of the 14.5 miles of interior fences within the allotment, only 2 miles would be prioritized for removal due to the proximity to active sage-grouse leks. The remaining interior fences would not be maintained or removed nor would the boundary fence. Should the landowner choose to continue grazing on all of the private and state lease lands within the Flat Creek Allotment an additional 18 miles of fence would have to be built, leading to a net gain of 16 miles of fences.

The increase in the availability of perch sites for avian raptors would increase nest and wildlife predation throughout most of the allotment. Fencing off the private and state lands would lead to increased fragmentation of the allotment as a whole and private fences would not be required to meet BLM wildlife standards which could impact wildlife movement and increase the chances of fence collisions.

Removal of grazing within the allotment could lead to a short-term increase in vegetation height and canopy cover, however lack of any type of vegetation management could impact vegetation conditions over the long term. Since prescribed burning would be used on a very limited basis if at all within the SFA, mechanical and chemical treatments would have to be utilized to maintain desired vegetative conditions. Not only are these treatments generally more expensive and less effective tools for habitat management, but their direct and indirect impacts to wildlife may be much greater than grazing in the short-term.

Approximately 26 pits and small reservoirs are scattered throughout the BLM-administered lands within Flat Creek Allotment. Removal of all or some of these water sources would lead to more concentrated use by wildlife at other pits/reservoirs as well as in springs and riparian areas. Increased shoreline trampling by wildlife at these sites could impact wetland and riparian health.

Cumulative Effects - Past, Present, and Reasonably Foreseeable Actions

It is not expected that the proposed action and, past, present and reasonably foreseeable actions would have consequential cumulative impacts due to the implementation of specific design standards, stipulations, mitigation measures, and adherence to standards and guidelines for livestock grazing.

The proposed action is similar to management that has been implemented in the Box Elder and Telegraph Creek Allotments in South Phillips County. The mission of the American Prairie Reserve is to “create and manage a prairie-based wildlife reserve that, when combined with public lands already devoted to wildlife, will protect a unique natural habitat, provide lasting economic benefits and improve public access to and enjoyment of the prairie landscape.” It’s reasonable to assume APR will continue to remove interior fences across lands they manage and convert grazing use from cattle to bison. Continued removal of fences and other man-made structures, along with their conservative grazing utilization thus far, should lead to improved habitat conditions for most wildlife species in south Phillips County.

Chapter 5

Consultation and Coordination

Introduction

A notice of availability regarding this EA was posted in the NEPA Register on BLM's ePlanning website: https://eplanning.blm.gov/epl-front-office/eplanning/lup/lup_register.do on 8/6/2015.

Persons, Groups, and Agencies Consulted

The following individuals, organizations and agencies were provided an opportunity to participate in the planning process and were provided a copy of this environmental assessment.

Scott Thompson, Montana Fish, Wildlife and Parks

List of Preparers

Josh Chase, Archeologist

Hal Moore, Natural Resource Specialist

BJ Rhodes, Rangeland Management Specialist

Kathy Tribby, Wildlife Biologist

Thomas Probert, Hydrologist

Josh Sorlie, Soil Scientist

Kathy Tribby, Outdoor Recreation Planner

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**United States Department of the Interior
Bureau of Land Management
Malta Field Office**

Finding of No Significant Impact

DOI-BLM-MT-010-2015-0004-EA
Flat Creek Allotment Change in Use EA

Background

Finding Of No Significant Impact

On the basis of the information contained in the EA (DOI-BLM-MT-010-2015-0004-EA), and all other information available to me, it is my determination that:

- (1) The implementation of the Proposed Action or alternatives with the applied stipulations will not have significant environmental impacts.
- (2) The Proposed Action is in conformance with the Record of Decision for the HiLine Resource Management Plan (RMP)
- (3) The Proposed Action does not constitute a major federal action having a significant effect on the human environment.

Therefore, an environmental impact statement or a supplement to the existing environmental impact statement is not necessary and will not be prepared.

This finding is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR '1508.27), both with regard to the context and to the intensity of the impacts described in the EA.

Context

The proposed action would occur in South Phillips County. The proposed action is in accordance with the HiLine Resource Management Plan (RMP). The proposed action is a site-specific action directly involving grazing administered by the BLM, which by itself does not have international, national, regional, or state-wide importance.

Intensity

I have considered the potential intensity/severity of the impacts anticipated from the implementation of the proposed action relative to each of the ten areas suggested for consideration by the CEQ. With regard to each:

1. Impacts that may be both beneficial and adverse. The EA describes both potential beneficial and adverse effects.
2. The degree to which the proposed action affects public health and safety. The proposed action would have no effect on public health and safety.

3. Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. There are no known historic or cultural resource sites that would be affected by the proposed action. A cultural resource file/ records search was conducted and the proposed action will not have a significant impact to eligible cultural properties. There are no parks, prime farmlands, WSAs, ACECs, or wild and scenic rivers in the planning area
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial. "Highly controversial" in the context of 40 CFR 1508.27 (b)(4), refers to substantial disagreement within the scientific community about the environmental effects of a proposed action. No unique or appreciable scientific controversy has been identified regarding the effects of the proposed action.
5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks. The analysis has not shown that there would not be any unique or unknown risks to the human environment.
6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. This project neither establishes a precedent nor represents a decision in principle about future actions.
7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.
8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources. The proposed action will not adversely affect any district, site, highway, structure, or object listed or eligible for listing in the National Register of Historic Places or cause loss or destruction of significant scientific, cultural, or historic resources.
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973. There are no threatened or endangered species or habitat in the area of the proposed action. There are no threatened or endangered plant species or habitat in the area.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. The proposed action does not threaten to violate any Federal, State, or local law.

/s/ Vinita Shea
Authorized Officer

Dec. 2, 2015
Date