WHISKEY RIDGE CONSERVATION EASEMENT

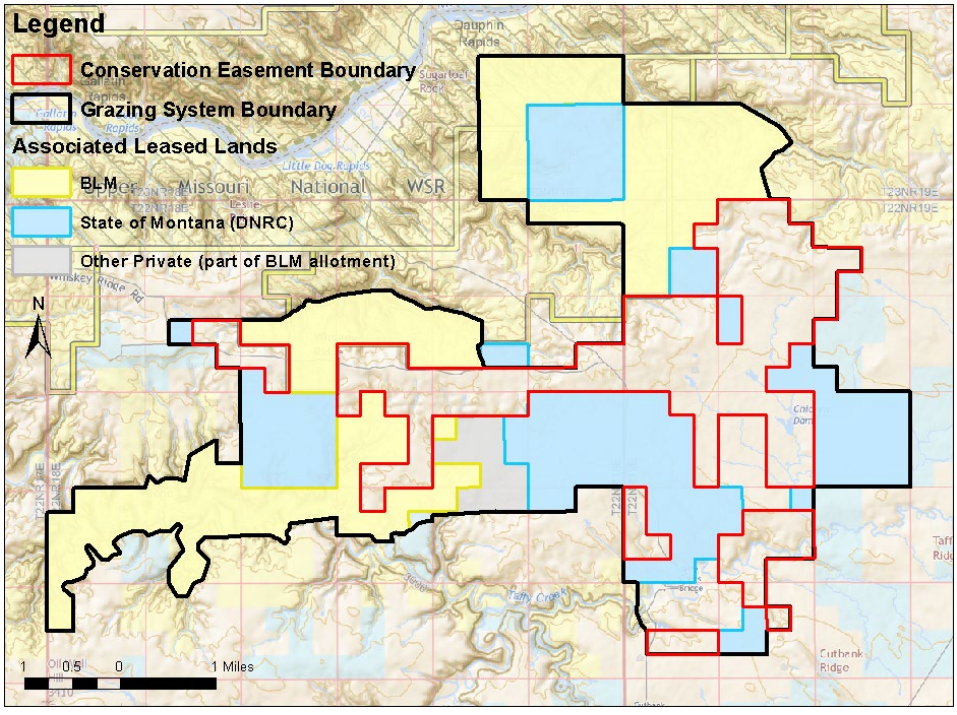
APPENDIX B – GRAZING SYSTEM

1) Land Unit Description

Montana Fish, Wildlife & Parks' (MFWP) conservation easements (CEs) require a Management Plan, referenced in the Deed of CE, which provide a living document to ensure the terms and conditions of the CE are met, reflect ongoing habitat management and recreational access, and provide flexibility for changing conditions on the Land. To warrant effective, long-term habitat management on the working ranchlands of the Whiskey Ridge CE, a grazing system or plan is required. The grazing system herein is a working document, mutually agreed upon by all parties involved, that will ensure habitat conditions are maintained and enhanced into the future.

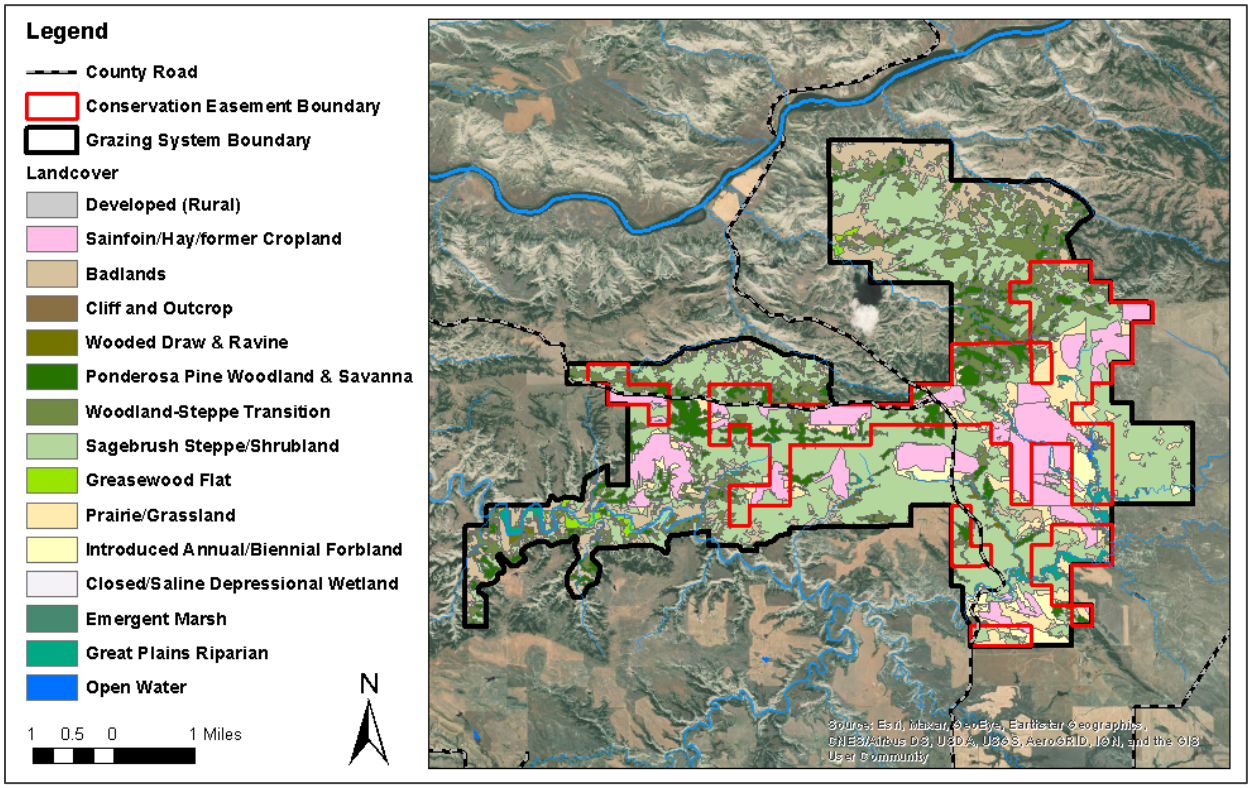
The grazing system on the Whiskey Ridge CE encompasses ~15,458 acres (approximately 4,619 deeded and 10, 839 leased public lands; Figure 1). The summer grazing system will follow MFWP's Minimum Standards for Grazing (Appendix A). Spring, fall, and winter pastures will receive treatments every other year, thereby also ensuring complete rest every other year.

Figure 1. Deeded and leased lands included in the grazing system.



A breakdown of the total acres under this grazing system is as follows: 12,462 acres native range, 2,248 acres non-native range (i.e., sainfoin/alfalfa hay fields), 233 acres wetland/riparian, and 133 acres developed (i.e., roads, buildings; Figure 2). Although the CE terms apply only to deeded lands, the grazing system incorporates leased DNRC and BLM lands. Therefore, the respective public land management agencies collaborated with MFWP to develop this grazing plan, and its implementation will be dependent upon further and pending MEPA/NEPA analysis for those respective agencies. This grazing system is divided into 16 pastures, which undergo a rest-rotation grazing system, as well as four husbandry (i.e., Landowner 1's discretion) pastures for a total of 20 individual pastures. This system is described in detail in Section 3, Grazing System.

Figure 2. Landcover types included in the Whiskey Ridge CE grazing system.



2) Current Management Narrative & Considerations

This section describes what has occurred with grazing management on the deeded and leased grazing lands (hereafter, the "Ranch"), prior to adoption of this grazing plan. The Ranch currently runs approximately 360 cow/calf pairs and 15 bulls. In addition to cattle, the Ranch owns 10-20 horses that reside year-round near the buildings.

A total of 20 different pastures make up the Ranch's current grazing operation (Figure 3). The main limitations of the Ranch's current grazing operation are water availability and variable weather, which can significantly affect turnout and removal dates. Dependable water limitations

occur in the Blind Canyon North, Blind Canyon South, and State #5B pastures. These three pastures have reservoirs that run dry or turn alkaline by mid-summer; thus, they are more ideal for grazing during spring/early summer. The State #5B, Mitchell #3A, Baker/Bart, and Road pastures also contain ~2000 acres of sainfoin/alfalfa, which the Ranch generally would prefer to graze during the early summer months. The Ranch does not currently hay any of the alfalfa on the property. The Taffy Creek pasture is imperative for fall/winter use, as it lacks pine trees. Pine needles contain a resin acid, which if consumed by pregnant cows can lead to late-term abortions.

Figure 3. Current pasture layout on the Whiskey Ridge CE.

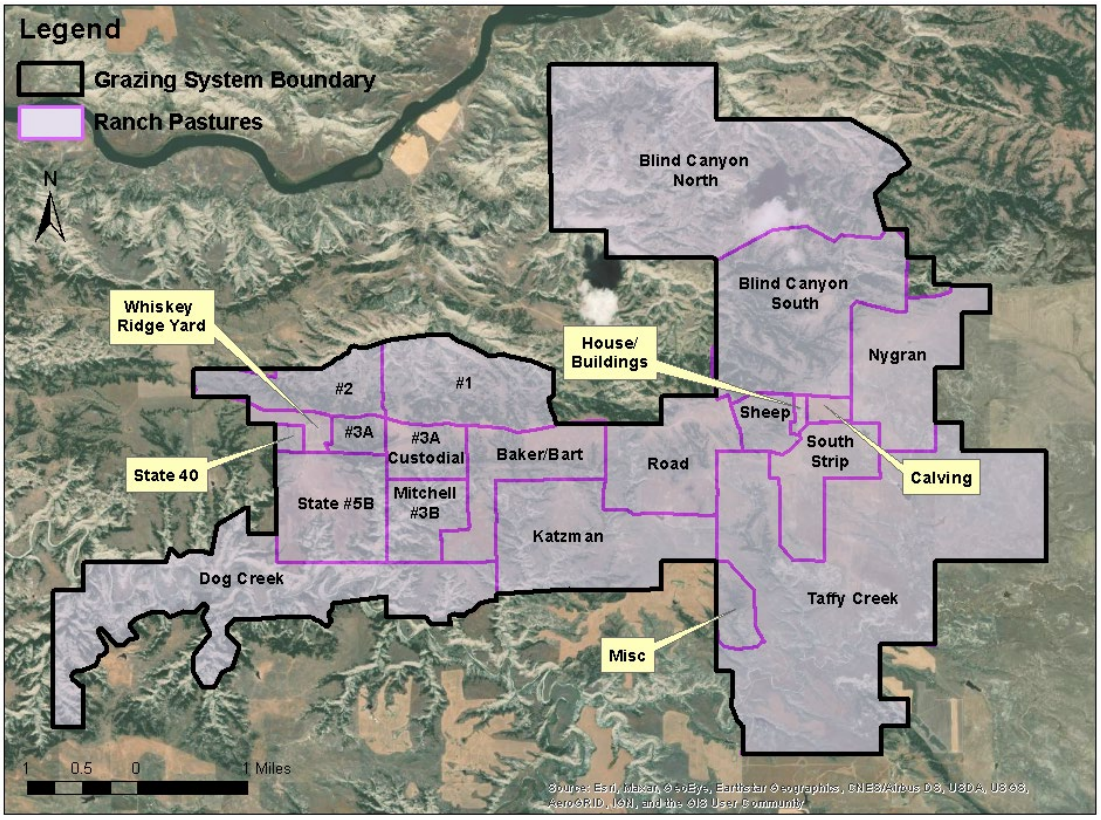


Figure 3 illustrates the Ranch's current pasture layout. A typical grazing year might go as follows: Livestock calve in the Calving pasture in March. After calving, livestock will reside in the Nygran pasture from mid-April until approximately May 1. Around May 1 (but up until May 20, depending on winter conditions/spring greenup), livestock move into the Blind Canyon pastures. Cattle stay in these pastures for approximately three-to-four weeks. From here, livestock move into the Road pasture, which serves as a holding pasture for approximately one week in early June. From the Road pasture, livestock move into #1, #2, and the State #5B pasture complex (which includes State 40, #3A, and Whiskey Ridge Yard). These pastures are fenced separately but livestock are free to move among them. Livestock stay in these six pastures from the second week in June through around the first week in July. From mid-July to pre-conditioning (which occurs in mid-to-late September), livestock move among the Mitchell #3B, #5A Custodial, Baker/Bart, and Katzman pastures. Post-conditioning, cattle are held in the Taffy

Creek pasture until shipping, which occurs at the end of October. After shipping, cattle come back into the Taffy Creek pasture for the duration of fall/winter, but sometimes depending on fall regrowth and weather, spend additional time back in the Road pasture.

The Ranch turns 15 bulls in with the cows when they leave the Blind Canyon allotment in early June. The bulls remain with the cows until pre-conditioning, when they are moved to and kept in South Strip pasture. Yearlings reside in the Sheep pasture. Horses are generally kept around the houses/buildings or in the South Strip pasture; occasionally they are held in the Misc pasture. The Dog Creek pasture, while it contains abundant forage, is rarely used and the Ranch has a difficult time keeping cattle in this pasture, mainly due to its steep topography.

3) Planned Management Narrative with Tables and Maps

To meet MFWP's Minimum Standards for Grazing Livestock, as required for a CE, this grazing system resembles current grazing practices on the Ranch but introduces scheduled deferment and/or a year of complete rest into the spring, summer, and fall pastures annually. Per CE terms, cattle and horses are the only classes of livestock permitted in the grazing system—any other class of livestock will require Department approval per CE terms (domestic sheep and goats are prohibited). As previously stated, some deeded and all leased BLM lands comprise portions of three BLM grazing allotments. Because this grazing system will involve changes to current permitted use in these allotments, implementing the grazing system described herein will be contingent upon NEPA analysis and approval by the BLM for changes in the Blind Canyon #20010 allotment and rangeland infrastructure improvements (described below) in the Whiskey Ridge #15132 allotment. The DNRC will also have to undergo MEPA for some of the needed rangeland improvements to occur. Outside of these NEPA and MEPA requirements, this grazing system will introduce additional rest, thereby continuing to meet allowable use requirements referenced in the respective leases.

Summer pastures will require a three-treatment rest-rotation grazing system, with a separate fall/spring schedule on remaining pastures. This grazing system comprises 20 pastures: 12 summer pastures (divided into three treatment groups, or pasture "sets"), four fall-through-spring pastures, and four additional pastures existing as "animal husbandry" pastures that can be used at the Landowner 1's discretion at any time of the year (Figure 4).

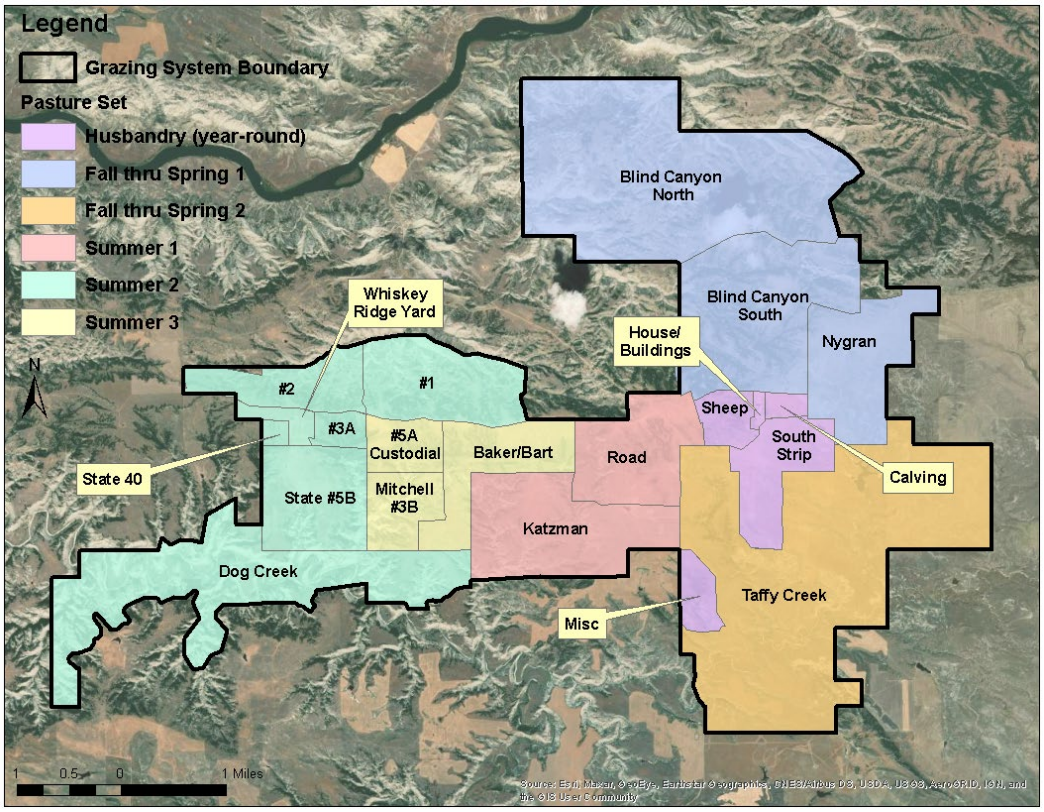
Fall Through Spring Grazing:

"Fall through Spring" (e.g., Fall/Winter/Spring) grazing will occur in pastures where cattle move into and out of the summer grazing system. These pastures will be available for livestock grazing and winter feeding. Cattle will stay in their scheduled Fall/Winter pasture until calving (where they move into the Calving or other husbandry pasture). After calving, they will move into their scheduled Spring pasture. Dates for spring grazing will be after calving through approximately May 15. Dates for fall and winter grazing/feeding will occur from post-conditioning (mid-September) through early March, when calving begins.

For fall through spring grazing, the Blind Canyon/Nygran pastures will operate as one unit (Fall thru Spring 1), and the Taffy Creek pasture as another (Fall thru Spring 2), alternating between

treatments every other year. In other words, Bling Canyon/Nygran will receive fall through spring grazing (beginning October through the following year's April) during even years (e.g., 2022, 2024, etc.) while Taffy Creek will receive fall through spring grazing during odd years (e.g., 2023, 2025, etc.). A "grazing year" therefore references May 15 thru the following year's May 15. Throughout the remainder of this document, odd years will be referred to as "2021-22, 2023-24," etc., and even years as "2022-23, 2024-25," etc.

Figure 4. Pastures and pasture groupings for the Whiskey Ridge CE grazing system.



Due to their lack of pine trees, both the Taffy Creek and Nygran pastures are critical for fall grazing (see landscape considerations above), which may often overlap early winter weather. Additionally, the Taffy Creek pasture contains stands of crested wheatgrass, which can be better managed through early spring grazing. Ideally, early spring grazing of crested wheatgrass will set it back to improve the health and productivity of native vegetation. The Blind Canyon pastures are ideal for early spring grazing because there is sufficient water and adequate forage in this pasture during this time as reservoirs dry or become alkaline as the season progresses. Without additional water developments, these pastures are unavailable for cattle grazing during summer months. Their location relatively close to the calving/husbandry areas also make them ideal sites for early spring grazing. Furthermore, big game scouting and hunting is a common recreational use of this area, so spring grazing is one of the better times to avoid potential hunter/recreationist and cattle conflicts during summer and fall months.

Summer Grazing:

The 12 summer pastures are divided into three pasture "sets." The first set comprises the Road and Katzman pastures (Summer 1). The second set comprises the #1, #2, State #5B, State 40, Whiskey Ridge Yard, #3A, and Dog Creek pastures (Summer 2). The third set comprises the Mitchell #3B, #5A Custodial, and Baker/Bart pastures.

Livestock (cow/calf pairs) will enter the summer grazing system approximately May 15. This date range is flexible; if green-up begins later pairs may remain in their spring pasture (Blind Canyon or Taffy Creek) until this time. Livestock will remain in one summer pasture set during the growing season, from approximately May 15 until July 15 (seed-ripe), and then move to the next scheduled pasture set for the post-seed ripe grazing period (approximately July 15 until September 15), when they would move to one of the husbandry areas for pre-conditioning. Livestock would then return to the grazing system in one of the Fall pastures (Nygran or Taffy Creek), where they remain until shipping. After shipping, livestock return to that same Fall pasture, where they remain through the winter months until calving begins (in one of the husbandry pastures). Feeding hay during winter is permitted in these pastures. Flexibility is key in any grazing plan; dates of use are approximate as annual conditions on the ground may vary.

Bulls and Horses:

About fifteen bulls will be run with the cow/calf pairs once they move into the summer grazing system and will remain with the cow/calf pairs until pre-conditioning. At pre-conditioning, bulls will be moved to one of the husbandry pastures until the next season. Horses reside year-round in the South Strip husbandry pasture but may be moved to any of the other husbandry pastures at any time. Any other class of livestock will require Department approval per CE terms.

Table 1 details the grazing schedule for each pasture or pasture set for one complete cycle, from 2021-22 through 2026-27 (the cycle starts over again in 2027-28). Figures 5, 6, 7, 8, and 9 illustrate the grazing schedule for a complete rotation through all three summer treatments and both fall through spring treatments. Upon completion of year 2026-27, the grazing rotation schedule starts over for year 2027-28.

Table 1. Whiskey Ridge CE grazing system schedule 2021-2027.

Year*	Summer Pastures			Fall through Spring Pastures		Husbandry
	Road, Katzman (1)	#1, #2, #3A, State #5A, State 40, Whiskey Ridge Yard, Dog Creek (2)	Mitchell #3B, Baker/Barker, #3A Custodial (3)	Taffy Ck (1)	Nygren, Blind Canyon N & S (2)	Sheep, House/Buildings, South Strip, Misc
2021-22	Early	Late	Rest	Use	Rest	Year-round
2022-23	Late	Rest	Early	Rest	Use	Year-round
2023-24	Rest	Early	Late	Use	Rest	Year-round
2024-25	Early	Late	Rest	Rest	Use	Year-round
2025-26	Late	Rest	Early	Use	Rest	Year-round
2026-27	Rest	Early	Late	Rest	Use	Year-round

Early = Livestock grazing from May 15 – seed ripe (growing season).
Late = Livestock grazing from post-seed ripe to – September 15 (after seed ripe).
Fall through Spring = Livestock grazing/feeding from October 1 – May 15 during "Use" years.
Rest = Rest from all livestock grazing entire calendar year.
*Year starts with entry into the summer grazing system, ~May 15, and goes through Spring the following year (e.g., the following May 15).

Figure 5. Map of the Whiskey Ridge CE grazing system for 2021-22, 2027-28, 2033-34, etc.

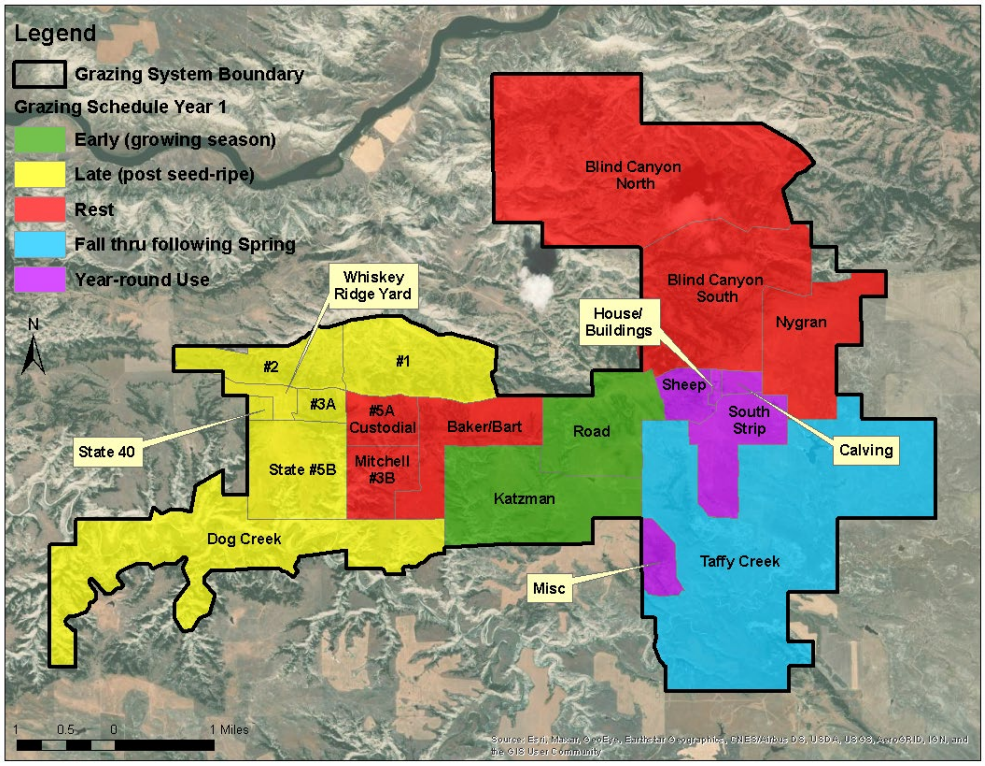


Figure 6. Map of the Whiskey Ridge CE grazing system for 2022-23, 2028-29, 2034-35, etc.

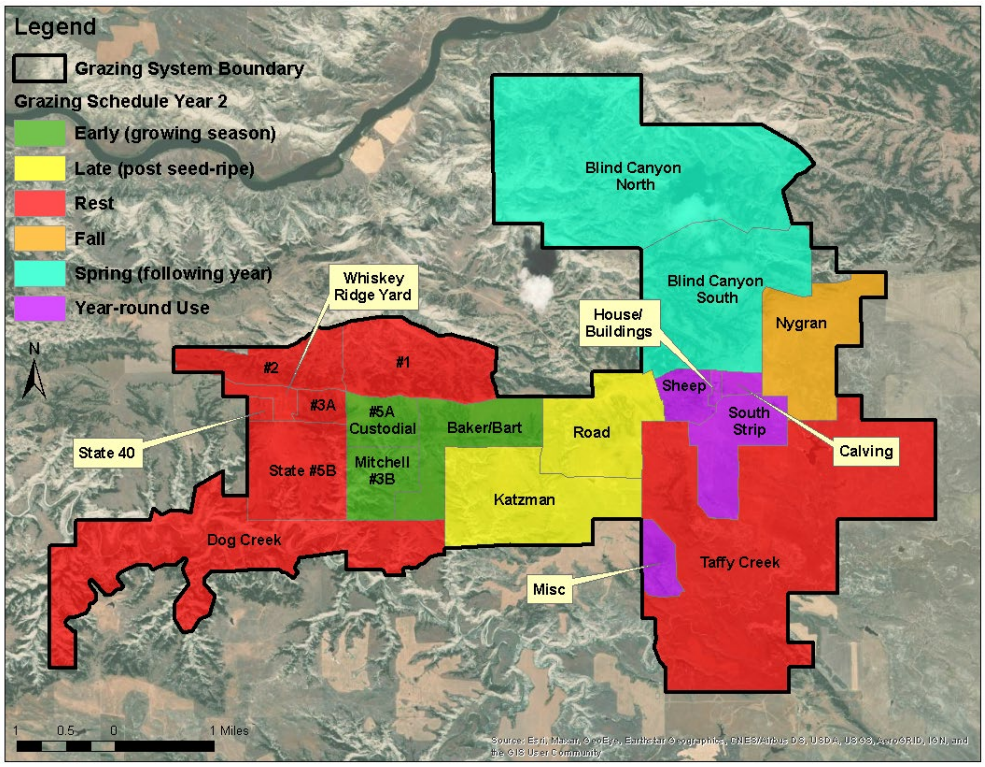


Figure 7. Map of the Whiskey Ridge CE grazing system for 2023-24, 2029-30, 2035-36, etc.

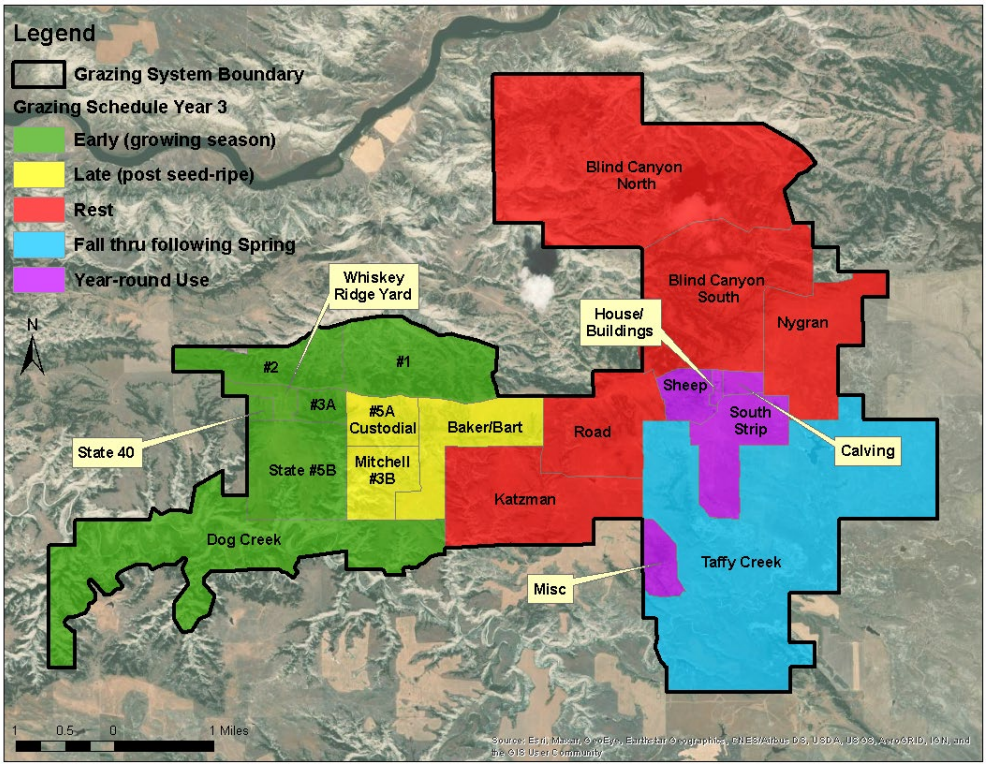


Figure 8. Map of the Whiskey Ridge CE grazing system for 2024-25, 2030-31, 2036-37, etc.

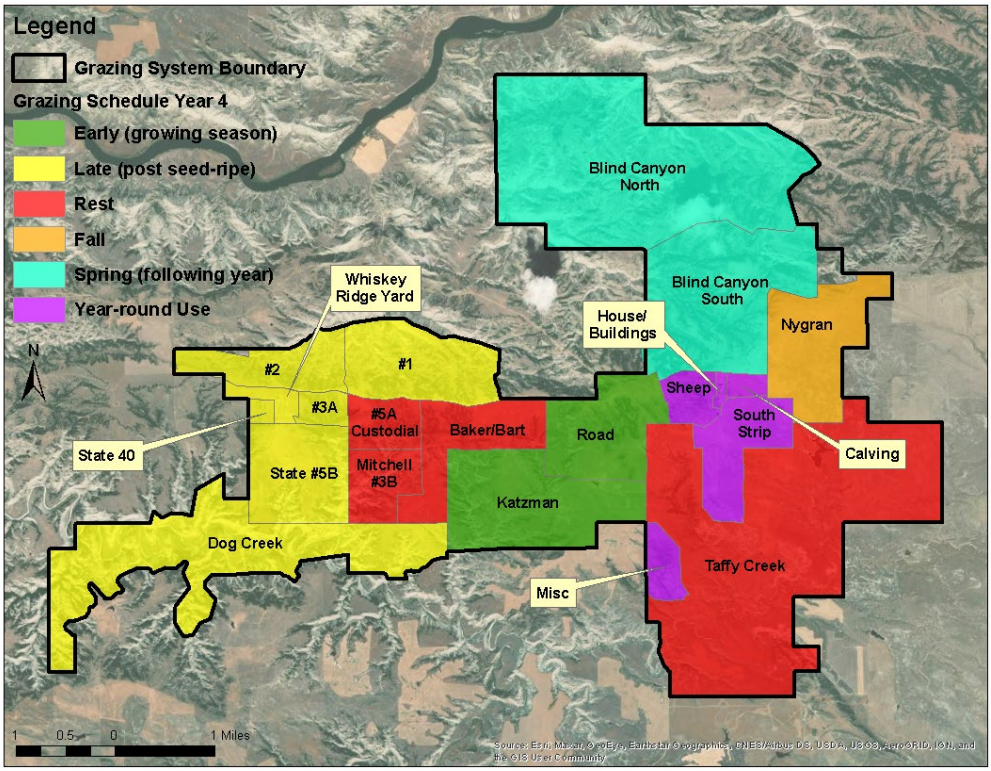


Figure 9. Map of the Whiskey Ridge CE grazing system for 2025-26, 2031-32, 2037-38, etc.

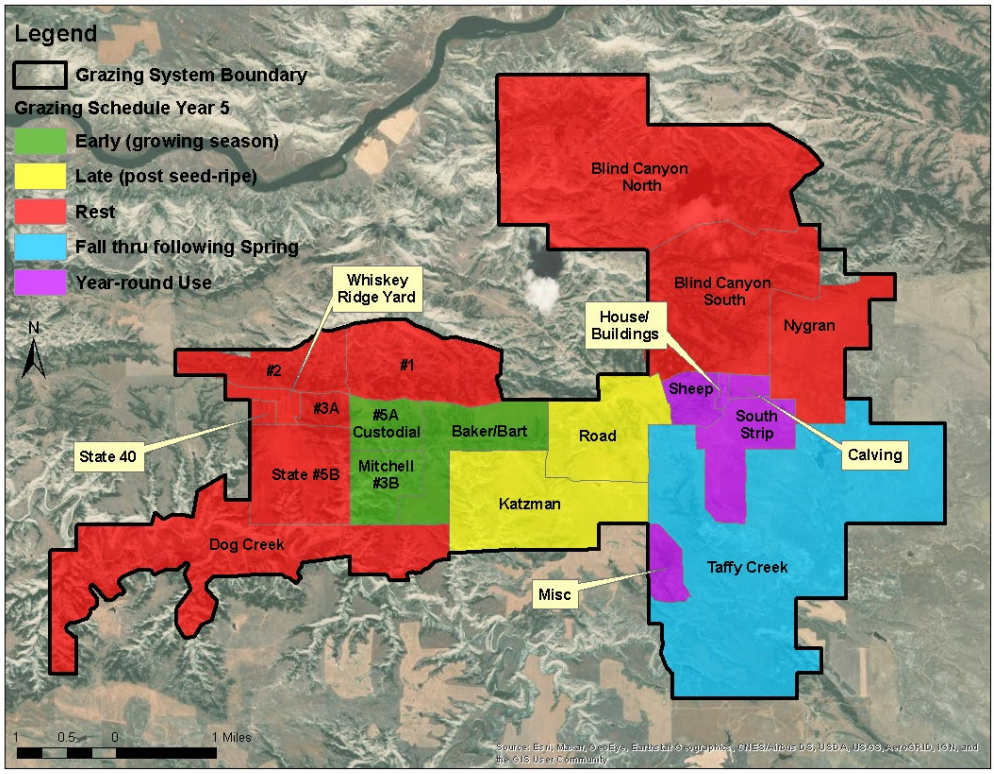
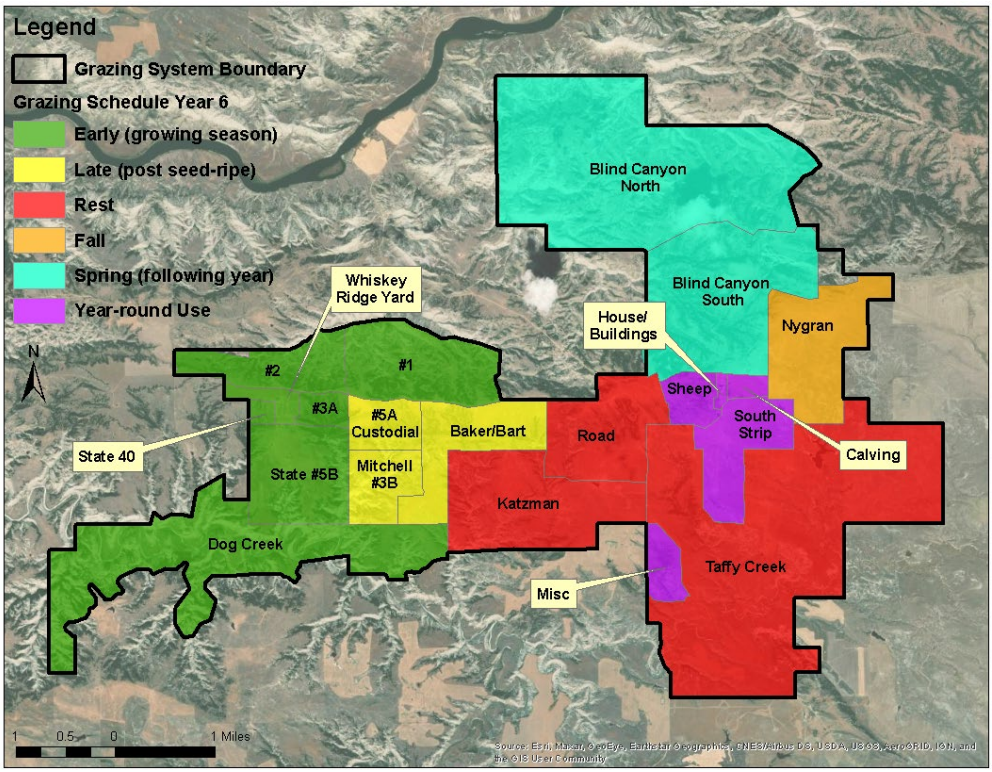


Figure 10. Map of the Whiskey Ridge CE grazing system for 2026-27, 2032-33, 2038-39, etc.



4) Stocking Rate

This grazing plan does not directly address stocking rate. Instead, the maximum stocking rate will be based on compliance with the grazing system, i.e., Landowner 1 will determine stocking rate based upon ability to comply with grazing system pastures and timing sequence—the land and grass availability will dictate livestock use and distribution in pastures. Stocking rates on leased BLM and DNRC lands will abide by those agencies' grazing leases.

5) Salt and Mineral Management

When salt and mineral supplements are used, they will be located away from riparian and wetland zones in a manner that will minimize impacts to these areas.

6) Range Improvements

To ensure maintaining and/or enhancing long-term range and wildlife habitat conditions and to implement the grazing system as described, some pastures require range infrastructure improvements, including fencing, pipelines, and tanks. Adequate water is an important component of any grazing system, and sufficient sources of water distribute cows in an effective manner, reducing over-use of some areas and under-use of others.

Table 5. Itemized rangeland improvements to implement the grazing system on the Whiskey Ridge CE.

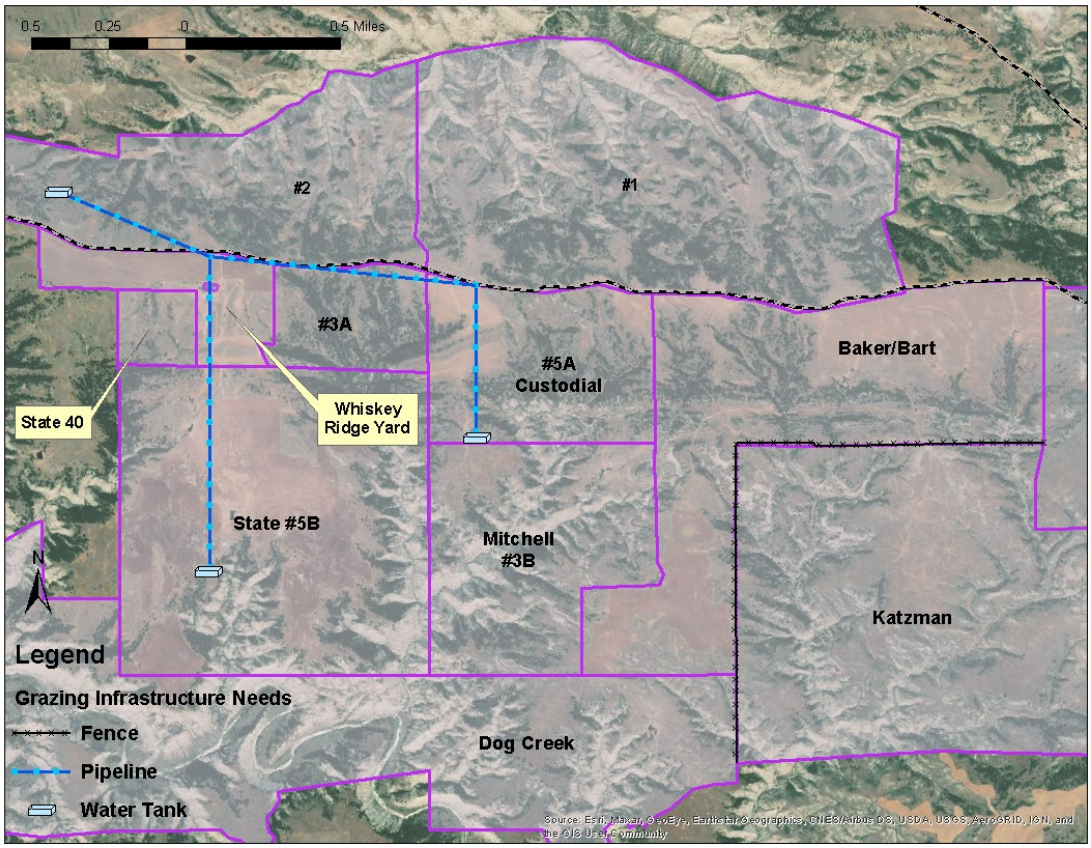
Grazing System Range Improvements				Estimated Costs and Responsibilities			
Project Type	**Component Description**	**Installation Date (Year)**	**Unit**	**Cost***	**FWP**	**Landowner 1**	**Total Cost**
Tank (permanent)	#2 Pasture	2021	1000 gal	$3.04/gal[1]	50%	50%	$3,040
Tank (permanent)	State Pasture	2021	1000 gal	$3.04/gal[1]	50%	50%	$3,040
Tank (permanent)	Mitchell Pasture	2022	1000 gal	$3.04/gal[1]	50%	50%	$3,040
Pipeline (30" deep)	Mitchell pasture – county road to tank	2022	2,597 ft	$2.00/ln-ft[2]	50%	50%	$5,194
Pipeline	County Road – connect end of pipeline at Mitchell pasture to pipeline in State pasture	2021	4,571 ft	$2.00/ln-ft[2]	50%	50%	$9,142
Pipeline	State pasture – county road to tank	2021	5,381 ft	$2.00/ln-ft[2]	50%	50%	$10,762
Pipeline	#2 pasture – county road to tank	2021	2,786 ft	$2.00/ln-ft[2]	50%	50%	$5,572
Fence	Rebuild Baker/Bart & Katzman boundary	2023	10,799 ft.	$2.50/ft.[3]	50%	50%	$26,997.50
Total Cost Estimate Rangeland Infrastructure:					$33,393.25	$33,393.25	$66.787.50

* Cost estimates based on 2018 NRCS cost-list, FWP Design and Construction Unit (2012-2017 bids), and the Rancher's Stewardship Alliance (RSA) 2017 cost-list.

[1] Includes installation and materials. Installation includes tank, earthwork, sub-grade prep, hydrant, overflow, gravel base and apron, all valving, and all other appurtenances from inlet to outlet.

[2] PVC/IPS/HDPE/PE buried 30" deep, includes labor and materials, such as typical appurtenances (fittings, anchors, thrust blocks, gate valves, air release valves, drain valve, pressure relief valve, pressure reducer, flow control valves).
[3] 3-to-5-strand barbed or smooth wire is $2.00/ln-ft, and $3.00/ln-ft. in "rough terrain." Includes labor and material, installed with wildlife-friendly considerations. Includes posts, wire, fasteners, gates.

Figure 6. Rangeland improvements proposed to implement the Whiskey Ridge CE grazing system.



To establish and implement the grazing plan, Landowner 1 and MFWP will cost-share 50:50 for new fence construction and pipeline/water tank installation as identified in Table 5 through the CE Buy-Sell Agreement. Rangeland infrastructure installations on leased lands (BLM, DNRC) will be subject to the NEPA/MEPA process by those respective agencies. Montana Fish, Wildlife, and Parks will cost-share rangeland infrastructure, including a total of 1.7 miles of new fence construction, 2.9 miles of pipeline installation, and addition of three new water tanks. Based on NRCS, MFWP, and Rancher Stewardship Alliance cost estimates, MFWP's contribution will not exceed $33,400. Federal Farm Bill, NRCS, or other program funding may also be used as a substitute to reduce costs, which would reduce the costs for Landowner 1 and MFWP evenly. Additional funding may be available via cost-share with the BLM or DNRC on public land leases. After installation of the infrastructure identified in Table 5 is completed to implement the grazing system, maintenance of the grazing system infrastructure shall be the responsibility of Landowner 1 as defined in the terms of the CE.

7) How the grazing plan addresses Fish and Wildlife Objectives

The overall objective of this grazing system is to maintain and enhance the vigor of native vegetation on deeded lands as well as associated leased public lands.

Providing season-long and year-long rest from grazing for two consecutive growing seasons via deferred (post seed-ripe) and year-long rest treatments, respectively, follows the basic principles of rangeland management, allowing plants to replenish energy reserves and restore vigor lost through grazing during the growing season. When livestock are permitted into the "late summer" pasture following seed-ripe, hoof action tramples mature seeds into the soil, thereby facilitating seed planting. The following year's rest treatment allows these seedlings to establish root systems and grow before growing-season livestock grazing commences again the following spring. This rest-rotation approach enables plants to maintain maximum vigor and thus recover more rapidly following grazing activity. The early spring grazing in the Taffy Creek pasture will ensure livestock benefit from the relatively high protein levels found in crested wheatgrass, prior to its maturity. This treatment will prevent further spread and may even reduce the levels of this non-native species over time.

This three-treatment, rest-rotation grazing system will support and enhance forage availability and palatability for wildlife and cattle, and provide other important habitat components (i.e., cover) for numerous big game, upland game bird, and nongame species inhabiting and breeding in the area. The grazing system also ensures that the primary land use remains as livestock grazing, which depends on maintaining productive vegetation and soils. It will also help maintain aesthetic and recreational values for the public.

The grazing system helps establish adequate quantity and quality of forage and cover for a variety of wildlife species using upland and riparian habitats. For instance, high quality, early spring forage will be available for wild ungulates the spring following the post seed-ripe treatment. These rested pastures will become critical for deer, elk, antelope, and bighorn sheep coming out of a negative energy balance from winter, as they prepare to fawn, calve, or lamb. Standing residual herbaceous cover in pastures subject to deferred and rest treatments provide valuable cover for ground nesting and ground brooding birds, primarily sage and sharp-tailed Grouse, as well as cover for small mammals and other wildlife. Critical food items such as seeds and insects also tend to be more abundant in these rested pastures. Periodic rest in upland pastures also helps maintain shrub (i.e., sagebrush) cover, important for browse as well as hiding and thermal cover for neonate ungulates and a variety of birds and other wildlife. Increased residual vegetation across the area will improve soil fertility, quality, stability, and moisture content which in turn will improve overall vegetation and habitat quality. Because of these values, season-long and yearlong-rested pastures remain unavailable from any type of agricultural harvest outside of scheduled grazing (i.e., haying, seed harvest).

8) Summary and Contingency Plan

The grazing system herein provides a flexible link between habitat protection and enhancement on the ground and terms of the Whiskey Ridge Deed of CE recorded with Fergus County. The

summer grazing system meets MFWP's Minimum Standard for Grazing Livestock such that every year, more than two-thirds of the pastures receive growing season rest.

In MFWP CE grazing systems, flexibility is important. For this grazing system, one complete rotational cycle occurs every six years; the summer pasture sets will cycle every three years. If after one summer cycle the grazing system is deemed not workable, upon mutual agreement Landowner 1 and MFWP can reassess pasture layout and timing, so long as a revised grazing system will continue to meet MFWP's grazing standards.

Additionally, environmental analysis needs to occur for the grazing system to be applied to associated BLM and DNRC lands; until the relevant NEPA/MEPA processes are complete (and changes are approved), the grazing system cannot be fully functional on this CE. Until such a time, Landowner 1 will continue to abide by those agencies' leases, and phase into this grazing system as he is able.