Montana Fish, Wildlife & Parks

2300 Lake Elmo Drive
Billings, MT 59105

February 22, 2010

TO: Environmental Quality Council
Director's Office, Dept. of Environmental Quality
Montana Fish, Wildlife & Parks*
- Director's Office
- Parks Division
- Fisheries Division
- Wildlife Division
- Lands Section
  - Design & Construction
  - Legal Unit
  - Regional Supervisors

Mike Volesky, Governor's Office *
Sarah Elliott, Press Agent, Governor's Office*
Maureen Theisen, Governor's Office*
Montana Historical Society, State Preservation Office
Janet Ellis, Montana Audubon Council
Montana Wildlife Federation
Montana State Library
George Ochenski
Montana Environmental Information Center
Wayne Hirst, Montana State Parks Foundation
FWP Commissioner Shane Colton*
Montana Parks Association/Our Montana (land acquisition projects)
David Moore, DNRC Area Manager, Southern Land Office
County Commissioners
* (Sent electronically)

Ladies and Gentlemen:

In accordance with the Montana Environmental Policy Act, Montana Fish, Wildlife and Parks (MFWP) is required to assess the impacts a proposal or project might have on the human and natural environments. Further, the MFWP's land lease-out policy, as it pertains to the disposition of interest in Department lands (89-1-209) requires that an EA be written for all new leases, lease extensions or lease renewals. This draft EA assesses the potential impacts from grazing cattle on the Haymaker Game Range relative to a proposed Lease Renewal.

We would appreciate any comments, accepted through March 5, 2010 by 5:00 p.m., you might have regarding the draft EA.

If you have questions or need additional copies of the draft EA, please contact Montana Fish, Wildlife & Parks at 247-2940. Please send any written comments by mail to: Jay Newell at Montana Fish, Wildlife & Parks, 2300 Lake Elmo Drive, Billings MT 59105; or by e-mail to jnewell@midrivers.com.

Thank you for your interest,

Gary Hammond
Regional Supervisor

Enclosure

Draft Environmental Assessment for
Haymaker Game Range Grazing Allotment
Haymaker Game Range, Wheatland County, Montana

DRAFT

Prepared by

Jay Newell, Biologist

Montana Fish, Wildlife and Parks

February 2010

For the

Montana Fish, Wildlife and Parks Commission

In accordance with the Montana Environmental Policy Act, Montana Fish, Wildlife and Parks (MFWP) is required to assess the impacts a proposal or project might have on the human and natural environments. Further, the MFWP's land lease-out policy, as it pertains to the disposition of interest in Department lands (89-1-209) requires that an EA be written for all new leases, lease extensions or lease renewals. This EA assesses the potential impacts from grazing cattle on the Haymaker Game Range.

A. LOCATION OF PROJECT

The Haymaker Wildlife Management Area (HWMA) is located approximately 15 miles north of Twodot, MT in the foothills of the Little Belt Mountains (Fig. 1). The HWMA includes 1360 acres of land on which the south facing slopes and large grassy benches provide winter range for elk numbering 30 to 600. The primary public access point is up Morrisy Coulee where people must traverse 2.5 miles of private land before entering the game range. The Lewis and Clark National Forest lies just to the north of the HWMA.

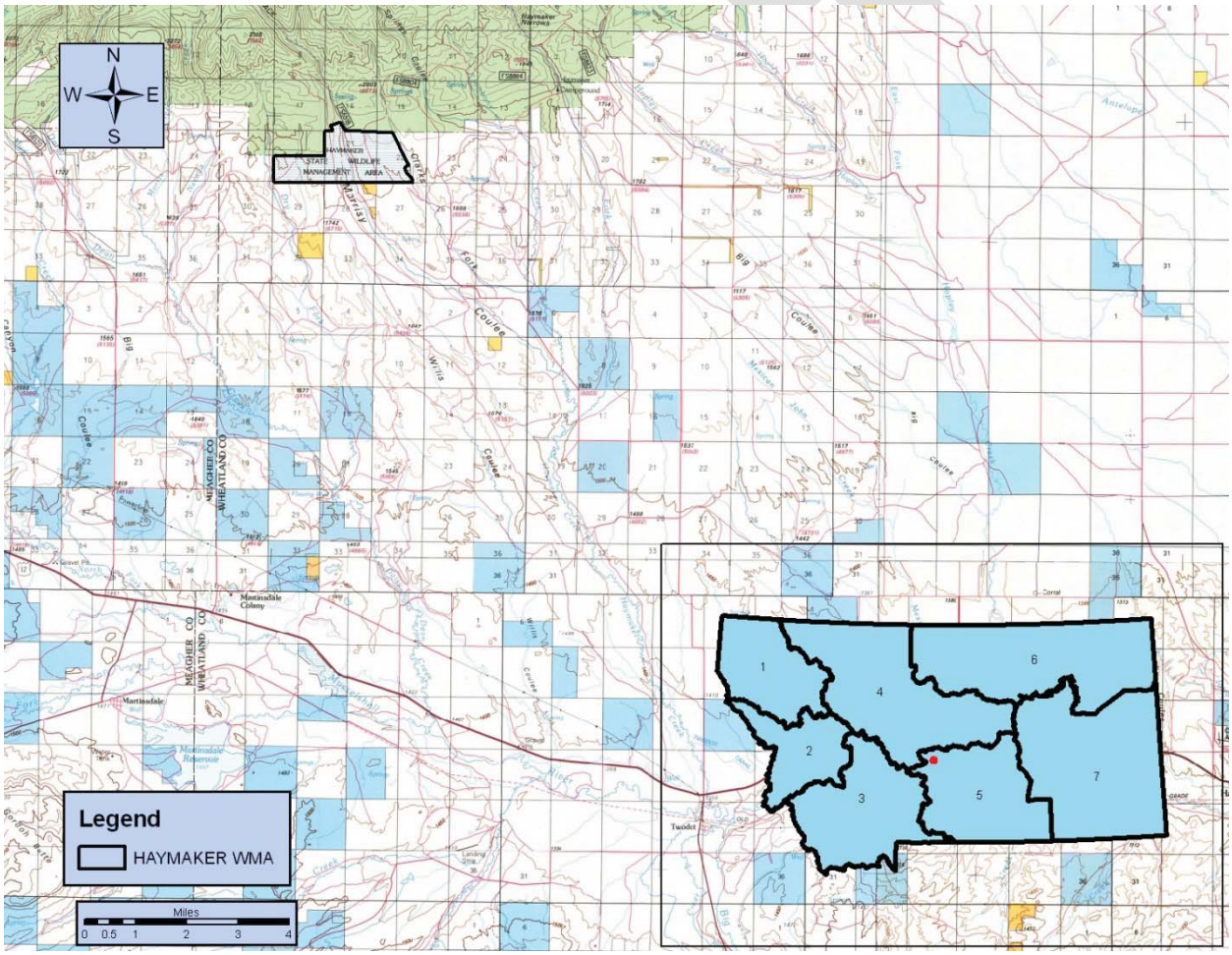


Figure 1. Location of HWMA, Region 5.

B. PROJECT NEED

The HWMA received little elk use in its early years of existence. Domestic livestock were not allowed to graze the area from 1957-1982 and little to no use by elk was observed during that time-period. In 1982 Mr.

A.L. Hormay was contracted by the MFWP to develop a grazing plan for the HWMA with the primary objective to make the range more attractive to wintering elk. His letter (attached) suggested that the residual growth from years of non-use had made the range unattractive to wintering elk and he recommended a rest-rotation system for cattle designed to remove old residual growth prior to the main growing season. The plan recommended constructing a fence down Morrisy Coulee which would divide the game range in half and then instituting a rest-rotation system with only half the game range grazed each year (Fig. 2). Cattle would be removed from the HWMA when Bluebunch wheatgrass (Agropyron spicatum) was in the low boot stage. The early grazing period, April through May, would help to remove the previous year's residual grass and stimulate new growth. Cattle have been grazing the HWMA in each year since 1984 except in 1989.

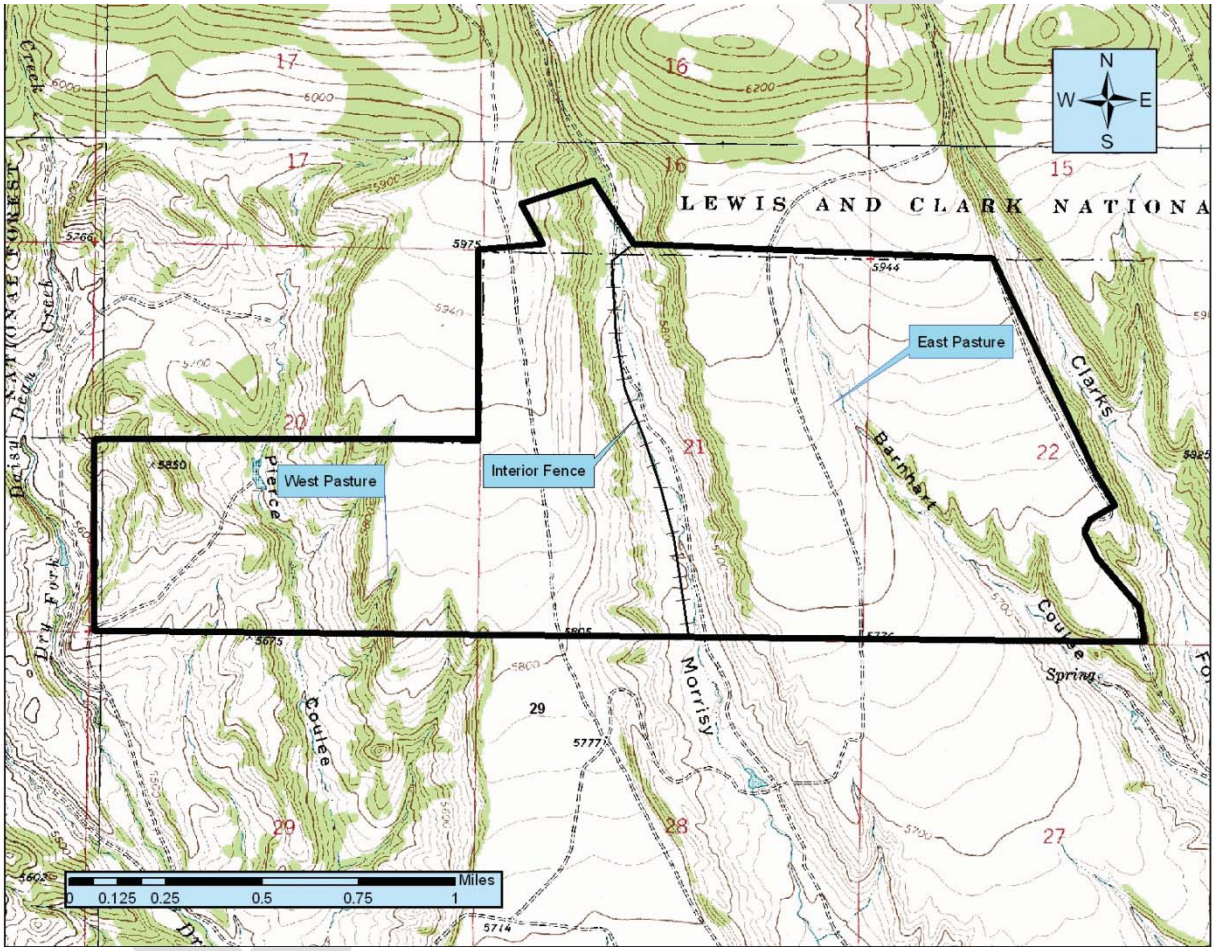


Figure 1. Layout of pastures on the HWMA.

C. PROJECT SCOPE

As recommended, the HWMA was split into two pastures with water sources developed in both pastures. The current grazing period usually begins about the 20th of April and cattle are removed sometime around the 1st of June. Cattle are allowed to graze one pasture each year. Elk use has been monitored annually since 1985-86, except in 2005-06 by counting pellet groups along permanent pellet transects. In addition, vegetation measurements were taken in 1986, 1988 and 1996. Elk use and vegetation are monitored by MFWP personnel.

D. ENVIRONMENTAL CHECKLIST

POTENTIAL IMPACTS ON PHYSICAL ENVIRONMENT

	MAJOR	MOD.	MINOR	NONE	UNK.	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life & habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Demands on environmental resources of land water, air & energy				X		
8. Unique, endangered, fragile, or limited resources				X		
9. Historical & archeological sites				X		X

DRAFT

E. EXPLANATION OF IMPACTS TO THE PHYSICAL ENVIRONMENT

1. Terrestrial and aquatic life and habitats.

Although cattle will be introduced into the HWMA in late spring they will not displace large wintering herds of elk which will have begun to leave the winter range area. The grazing system design should ensure that there will be minimal impacts to the vegetation and cattle should actually help to improve forage conditions on the game range. There will be very little impact to the riparian areas since grazing will not occur during the summer months although impacts around a man-made reservoir in the west pasture will be unavoidable. The nonuse period for each pasture every other year will be 22 months. Bluebunch wheatgrass is susceptible to over-grazing so that it will be important to ensure that most grazing takes place during the dormant period.

Elk pellet transects indicate that there has been no reduction in elk use since grazing began in 1984. In fact, elk use in the winter of 2008-09 was the highest on record and 73.8% higher than average. Cattle grazing on the HWMA appeared to be having little influence on elk behavior. The west

pasture of Haymaker has received more elk use than the east pasture in all years except 2003, whether or not it was grazed the previous spring. In winters following spring grazing we have averaged 259 and 88 elk-months of use in the west and east pastures, respectively while in winters following rest we have averaged 288 and 92 elk-months use in the west and east pastures, respectively. Vegetation measurements indicate no change in the vegetation.

Comments from the original draft EA, written in February 2006, indicated a concern that a large number of elk were calving in the Haymaker Area. In late March of each year Department Personnel check and repair fences and read elk pellet transects on the HWMA. Depending upon the weather and the amount of snow, observations indicate that a majority of the elk are beginning to use higher elevations at this time if snow free. If the area is not snow free elk are often still concentrated on the HWMA but this also delays placement of the cattle on the Game Range. Although some calving does take place in the area around Haymaker the reduced use experienced on the Game Range (660 acres which is ½ of total acreage of the WMA) is minimal compared to the number of adjacent acres which do not have cattle during this time period. In dry years grasses do not respond as well to the system but only half of the HWMA is grazed in any given year.

2. Water Quality, Quantity and Distribution.

A minor impact to water quality will occur at the man-made pond in the west pasture. All other water developments are stock tanks, which were placed on the game range in 1986. In most years the major drainage on the Game Range (Morrisy Coulee) does not have water flowing in it. Water distribution on the game range has been enhanced due to the development of water sources.

Comments on the 2006 draft EA indicated a concern that we were not increasing water developments on the Game Range. Our goal is not to increase cattle use but to remove residual vegetation so that the current year's growth is enhanced. By grazing in the spring cattle demand less water and we are able to get a better distribution of cattle over the entire HWMA.

3. Geology and Soil Quality, Stability and Moisture.

Some soil impacts could occur especially in areas around stock tanks and the pond. In addition, some soil losses may occur in years of high moisture. Overall the improvements in range condition should offset any potential soil losses.

4. Vegetation cover, Quantity and Quality.

As forage plants are utilized residual cover from the previous years growth will be removed. New plant growth will receive greater amounts of sunlight and new growth will be stimulated. Plant and soil disturbance due to cattle disturbances should enhance seed placement and germination. Concentrations of cattle especially in the southwest corner of HWMA will have to be monitored closely so that competition between cattle and elk will not become a problem.

Comments on the 2006 draft EA indicated a concern about the introduction of noxious weeds. We have been grazing the Game Range since 1984 and no noxious weeds have been introduced to date. There has been some supplemental feeding taking place on the HWMA but to date, it hasn't caused the introduction of noxious weeds. It should also be noted that the current lessee owns land adjacent to the game range south and east of the east pasture of the HWMA and to my knowledge noxious weeds have not become a problem on their property.

5. Aesthetics.

For some, domestic cattle and signs of cattle use are out of place on native rangeland. The HWMA receives very little public use except during the hunting season and virtually no use while cattle are on the range.

DRAFT

Comments on the 2006 draft EA indicted a concern that the iron tubs used to salt cattle were an eyesore. The lessee is now required to remove tubs after the grazing season.

9. A comment on the 2006 draft EA was received from the State Historic Preservation Office concerning investigations of prehistoric or historic sites. Since the proposal didn't propose increasing disturbance levels we will not need to do a cultural resource inventory survey at this point.

F. ENVIRONMENTAL CHECKLIST
POTENTIAL IMPACTS ON HUMAN ENVIRONMENT

	MAJOR	MOD.	MINOR	NONE	UNK.	COMMENTS ON ATTACHED PAGES
1. Social structures and mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Access to & quality of recreational & wilder-activities				X		
7. Quantity and distribution of employment				X		X
8. Distribution & density of populations & housing				X		
9. Demands for energy				X		
10. Locally adopted environ-plans & goals				X		

7. Comments on the 2006 Draft EA indicated a concern that the Department has not repaired fences on the HWMA. In recent years we have hired a contractor to repair the perimeter and interior fences at the game range. Starting in 2009 we have asked the lessee to be responsible for repairing fences. As far as we know there has not been a problem with cattle from the game range trespassing on adjacent property. We have had some problems with cattle on the HWMA during the

DRAFT

rest period. In addition to the annual maintenance, we have rebuilt portions of the boundary fence in the last ten years.

G. DISCUSSION AND EVALUATION OF REASONABLE ALTERNATIVES

1. Alternative 1. No grazing. If no grazing is allowed it is likely that the following impacts would occur.

a. The greater residual carryover will make plants less palatable to elk, resulting in a reduction in winter elk use.

b. There would be a slight loss in income to local operators and the community and there may be increased grazing pressure on adjacent lands.

2. Alternative 2. Proposed alternative. Graze the game range as we have in the past. Monitor elk use and vegetation, using this data to adjust grazing if needed. If the proposed alternative is accepted the following benefits will be realized

a. Elk use will likely remain at the current levels or increase. Pellet group transect have been read on the HWMA in each year since 1986 except 2005-06. Elk use has fluctuated between 178 and 668 elk months of use and averaged 381 elk months of use per year. Elk use has been above average over the last three years at 454 elk months per year.

b. Increased revenue to adjacent ranches. Since 1988 between 63 and 451 AUM's, average = 201 AUMs, have been taken off of the game range.

3. Alternative 3. Change existing grazing plan.

a. Because a professional range scientist helped develop the grazing plan we see no reason to change the system at this point. In the future it would be desirable to change management if adjacent landowners wanted to participate in a grazing system, which would improve a greater land base or if data indicated a change was necessary.

b. Currently the goals of removing residual vegetative cover and increasing elk use on the game range are being met.

DRAFT

GRAZING PLAN FOR

HAYMAKER WILDLIFE MANAGEMENT AREA

DEVELOPED BY A.. L. HORMAY

AUGUST L. HORMAY
RANGE MANAGEMENT CONSULTANT

101 ACADIA STREET • SAN FRANCISCO, CALIFORNIA 94131

April 30, 1983

Charles D. Eustace
Regional Game Manager
Montana Department of
Fish and Game
1125 Lake Elmo Drive
Billings, Montana 59105

Dear Charles:

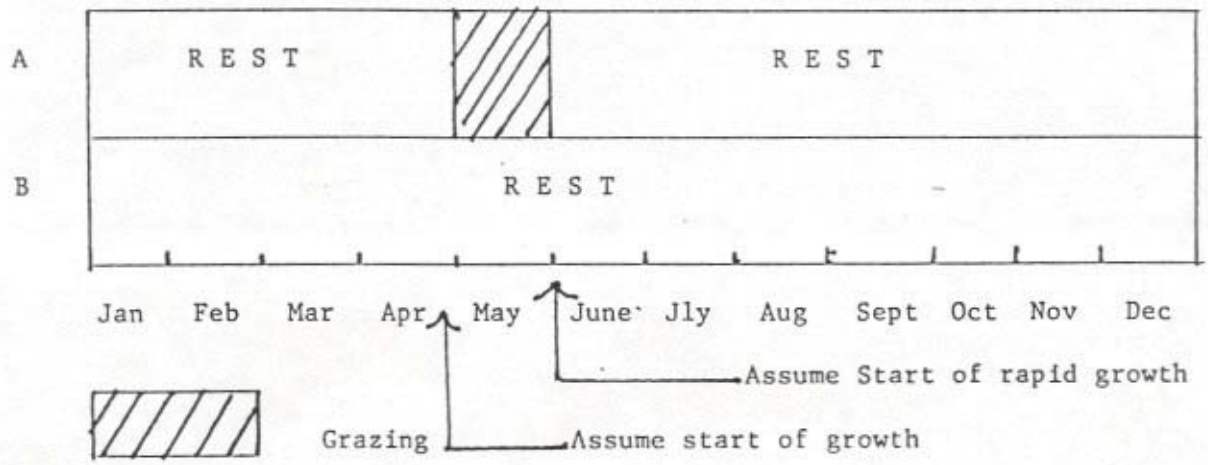
I am sorry I'm getting these grazing recommendations for the Haymaker and Cooney Reservoir areas to you so late. Enclosed are two work maps for reference.

I designed a 2-pasture rest-rotation grazing system specially for these areas. It is formulated to improve the vegetation and make as much of it available for wildlife and recreational purposes as possible.

The grazing formula for the system and the grazing schedule for the pastures are shown below.

Grazing Formula

Grazing Treatments



Grazing Pasture Schedule

Year	Pasture 1	Pasture 2
	Grazing Treatments	
1	A	B
2	B	A
3	A	B
4	B	A

The two pastures should have about the same grazing capacity. But this is not vital. Only one of the pastures is grazed each year. This use is only for about one month early in the growing season before the vegetation starts growing rapidly.

The production and quality of the vegetation on both Haymaker and Cooney have been reduced considerably by stifling old growth that has accumulated in the crowns of the plants, woody and herbaceous alike. This growth can be removed with livestock grazing and most affectively with grazing early in the growing season when new growth is scant and livestock are obliged to eat old growth.

The grazing period can start anytime around the beginning of the growing season but should end when the vegetation starts growing rapidly. After this time use of new growth increases and old growth decreases. Also grazing after this time reduces the production of new growth during the season and weakens the plants.

Plants grazed up to the time rapid growth begins have potential for producing near normal yield of herbage thereafter during the season. This growth is of high quality, in green and dry condition. With this system all of it is left ungrazed and available for wildlife and other uses.

These beneficial results are obtained proper application of treatment A. Treatment B is necessary for maintaining plants in high vigor.

There is need for grazing on the Cooney area to reduce fire hazard in and around campgrounds and other areas as well as to improve the vegetation. Grazing on heavily used recreational sites should not pose serious conflicts because grazing would occur but once in two years and early in the season when recreational activity is light. In fenced areas grazing could be regulated as desired.

A 2-pasture system could be established on Haymaker with about a mile of fence. Two systems are in the picture on Cooney, one on the north side of the reservoir and the other on the south side. See areas (1), (2) and (3) on the map. Area (1) could be split in two. Areas (2) and (3) could form the pastures in the second setup.

Many stockmen have need for grazing at the time it is available under this system. Hopefully Mr. Miller, Mr. Stovall and Mr. Bensch have such needs and will be interested in grazing on the areas.

It is late I know but if at all possible try to get treatment A applied on one or more of the areas on a trial basis yet this spring, so you can see first hand what can be accomplished with this treatment. Observe how much old growth is removed and how much new growth is produced during the season after grazing is ended.

Only one pasture is needed for such a trial. The Haymaker range and areas (1), (2) and (3) on Cooney could be used as pastures. So there are four opportunities for applying the treatment.

Let the ranchers decide the period of use and stocking rate in the pastures. Heavy use is desired. The range will not be damaged nor current herbage production reduced with the heaviest stocking. But be sure grazing is ended when rapid growth begins. This is marked by the time flower stalks of the principal forage grass on the range start showing low in boot.

Please call me at my home in San Francisco if you have questions or I can be of further help. My telephone number is (415) 587-3155.

Sincerely,

A. L. Hormay

A. L Hormay

ALH/pbs

Enclosure