APPENDIX H

2000 Robb/Ledford Grazing Lease Environmental Assessment

1400 So. 19th
Bozeman, MT 59718 February 23, 2000

TO: Governor's Office, Julie Lapeyre, Room 204, State Capitol, POB 200801, Helena, MT 59620-0801
Environmental Quality Council, Capitol Building, Room 106, POB 201704, Helena, MT 59620
Dept. Environmental Quality, Metcalf Building, POB 200901, Helena, MT 59620-0901
Montana Fish, Wildlife & Parks
Director's Office Mike Frisina
Wildlife Division Bob Harrington
Lands Division
Legal Unit
FWP Commissioners
Dennis Flath
MT Historical Society, State Historic Preservation Office, POB 201202, Helena, MT 59620-1202
MT State Library, 1515 E. Sixth Ave., POB 201800, Helena, MT 59620
James Jensen, Montana Environmental Information Center, POB 1184, Helena, MT 59624
Janet Ellis, Montana Audubon Council, POB 595, Helena, MT 59624
George Ochenski, POB 689, Helena, MT 59624
MT Wildlife Federation, P.O. Box 1175, Helena, MT 59624
Ira Holt, 548 Cielo Vista, Hamilton, MT 59840
Department of Livestock, Evaleen Starkel, 3rd Floor, Scott Hart Bldg, 301 Roberts, Helena, MT 59620
Beaverhead County Commission, Beaverhead County Courthouse, 2 So. Pacific, Dillon, MT 59725
Madison County Commission, POB 246, Virginia City, MT 59755
Representative Bill Tash, 240 Vista Drive, Dillon, MT 59725
Representative Karl Ohs, Box 212, Harrison, MT 59735
Representative Rick Dale, 175 Yellowstone Tr., Whitehall, MT 59759
Senator Chuck Swysgood, 506 So. Atlantic, Dillon, MT 59725
Senator Lorents Grosfield, HC 87 Box 2145, Big Timber, MT 59011

Ladies and Gentlemen:

Please find enclosed a draft copy of the Environmental Assessment (EA) for the proposed livestock-grazing plan on the Robb/Ledford Wildlife Management Area (WMA).

This draft EA is out for public review, comments will be accepted from February 23, 2000 until 5:00 p.m. on March 20, 2000. Comments received during that period will be considered in the final version.

Please send any comments to : Fish, Wildlife & Parks, Robb/Ledford WMA EA, 1400 So. 19th, Bozeman, MT 59718.

Sincerely,

Patrick J. Flowers
Regional Supervisor

Attachment

DRAFT (1/28/00 version)

ENVIRONMENTAL ASSESSMENT OF LIVESTOCK GRAZING ON THE ROBB LEDFORD WILDLIFE MANAGEMENT AREA

I. INTRODUCTION

In July 1988 the Montana Department of Fish, Wildlife and Parks (FWP) acquired 17,291 acres of deeded land from the Rocky Mountain Elk Foundation primarily for the purpose of protecting elk winter range. This property is known as the Robb/Ledford Wildlife Management Area (WMA). Along with the purchase, FWP acquired a lease of 10,818 acres of DNRC land associated with the deeded property. Additionally, there are 6,802 acres of BLM land associated with the WMA. The entire area associated with the WMA then, is 34,911 acres. All of these lands had been used for cattle grazing by the previous owners, the Ledford Creek Grazing Association (Association). At the time FWP purchased the WMA, the Association retained the grazing rights until November 1, 1990. Since that time, the Association has leased the grazing under a rest rotation grazing formula from June 15 through October 15 each year. In addition to the FWP deeded and DNRC lands directly tied to the WMA, the Association leases grazing on adjacent BLM, Forest Service and DNRC allotments. For further information on the grazing history or other aspects of the WMA, consult the 1999 Robb/Ledford WMA Management Plan (Management Plan). This Environmental Assessment reviews the potential impacts of continuing to allow livestock grazing on the WMA.

II. AUTHORITY AND DIRECTION

FWP has the authority under law (87-1-201) to protect, enhance and regulate the use of Montana's fish and wildlife resources for public benefit now and in the future. Any consideration of continued livestock grazing would have to conform with the direction of attaining the objectives of maintaining or improving wildlife, wildlife habitat and public access as outlined in the Management Plan (1999). Additionally, the Fish, Wildlife and Parks Commission must approve any grazing leases on Wildlife Management Areas owned by FWP. This Environmental Assessment is part of the decision-making process as directed by the Montana Environmental Policy Act (MEPA).

III. LOCATION OF THE PROJECT

The WMA is located in Madison and Beaverhead Counties in Southwestern Montana (Figure 1). It is situated on the western slopes of the Snowcrest Mountains approximately 20 miles south of Alder, Montana, along the Robb and Ledford Creek drainages of the Ruby River and a portion of the upper Blacktail Creek drainage. This WMA borders the Beaverhead National Forest (FS), Bureau of Land Management (BLM), Department of Natural Resources and Conservation (DNRC), Montana Fish, Wildlife & Parks Blacktail WMA, and private lands (Figure 1).

IV. PURPOSE AND NEED

The management of the WMA is directed towards meeting certain objectives as identified in the Management Plan (1999). A complete review of the objectives and strategies can be made by a review of that plan. A summary of the objectives include: (1) maintenance or improvement of the basic resource including vegetation, soil and water; (2) expanding benefits of FWP management to adjacent DNRC lands; (3) showcase the WMA as an area demonstrating where wildlife and livestock can co-exist while maintaining a healthy rangeland; (4) provide winter forage for elk; (5) provide habitat for all wildlife utilizing the WMA; (6) incorporate adjacent public lands into management of the WMA; (7) provide adequate public access; (8) maintain the natural character of the land; and (9) increase public awareness and appreciation for the diversity of wildlife on the WMA. FWP feels that all of the objectives listed above can be obtained by continuing and improving a properly managed livestock grazing system on the WMA. Certainly objectives 2, 3 and 6 are directly related to the continuation of livestock grazing. This EA will explore the alternatives of "no action" (which means continue the trajectory of the present management system which includes grazing and necessary improvements such as fence and water system maintenance and replacement). Whichever alternative is selected, the proper management of the natural resources on the WMA will be the foremost goal of FWP.

V. DESCRIPTION OF THE PREFERRED ALTERNATIVE

The Preferred Alternative will consolidate BLM and DNRC lands along with FWP deeded ground on the WMA into a coordinated grazing system called the Robb/Ledford Coordinated Grazing System (R/L System). Livestock utilizing this system would also make coordinated use of the adjacent FS Snowcrest Grazing Allotment (FS Allotment) and the adjacent Blacktail BLM Grazing Allotment (BLM Allotment). FWP presently leases over 10,000 acres of DNRC lands. An additional 3,600 acres of DNRC would be included in the R/L System through an exchange of use agreement with the present lessees, the Ledford Creek Grazing Association. This exchange of use allows DNRC lands (know as the McGuire property – Figure 2) leased by the Association to be included in with the R/L system. In exchange, the Association receives grazing rights in the R/L System on a value per value basis.

The R/L System will involve rest-rotation grazing principles described by Hormay (1970). The BLM Allotment (which will incorporate some FWP deeded lands) will be a two-pasture system where only one pasture will be grazed after seed-ripe in an alternating fashion each year.

The R/L System will incorporate 15,980 acres of FWP deeded land; 12,558 acres of DNRC leased land and 680 acres of scattered BLM tracts. After a realignment of fences, the R/L System will consist of 3 low elevation pastures and 3 high elevation pastures (Figure 3). Livestock grazing would occur during a 4-month period from June 15 until October 15th each year (Table 1). Livestock would be rotated through the low elevation and high elevation pastures. In mid-June (the approximate time for the beginning of rapid growth for Bluebunch wheatgrass (Agropyron spicatum) cattle would be placed in a low elevation pasture until early July. About the first of July, a significant number of cattle are moved to the adjacent FS Allotment. The remaining livestock on the WMA are moved to a higher elevation pasture within

FIGURE 2

A view into Sliderock and Spur Mountain Peaks. In the center of the photo is a portion of the 3,6000 acre McGuire property.

The R/L System where they would remain until vegetation matures and produces seed around August 15. At this time, another significant number of cattle are moved off of the R/L System to the BLM Allotment where they will remain for one month (until September 15). The remaining livestock on the WMA would be moved to a second high elevation pasture. On September 15, the cattle from the BLM Allotment return to this same second high elevation pasture on the WMA (R/L System). Cattle coming off of the FS Allotment on October 1 would also join the cattle in this second pasture. At this point, all of the livestock that had at first entered the R/L System in mid-June, are now back on the WMA. These animals would now be moved into the last (low elevation) pasture for the first two weeks of October and would leave the R/L System on October 15.

TABLE 1

ROBB CREEK WMA LIVESTOCK GRAZING ROTATION FORMULA

Robb Cr. WMA grazing rotation formula.

YEAR	PASTURES					
	[1]Battle Place(1L)	Lower Robb Cr(2L)	Dry Hollow (3L)	Ledford Ridge (1H)	Upper Robb Cr. (2H)	Swamp/Rock Cr. (3H)
2000	B[1]	C	A[1]	B	C	A
2001	C	A[1]	B[1]	C	A	B
2002[2]	A[1]	B[1]	C	A	B	C

[1]Grazing Treat Treatments: A[1] = Livestock grazing from mid-June to early-July
A = Livestock grazing from early-July to mid-August (seedripe)
B = Livestock grazing from mid-August (seedripe) to October 1
B[1] = Livestock grazing from October 1 to October 15.
C = Rest from livestock grazing for the entire year.

[2]In the year 2003 and every fourth year the rotation is repeated by beginning again with the rotation at year 2000.

In this system just described (R/L System), one-third of the pastures would be grazed from mid-June until seed ripe (mid-August), another third would be grazed from seed-ripe until October 15, and the other third would be rested. Annual livestock grazing on the WMA would be rotated so that over a three-year period each pasture receives all of the different treatments. Plants that are grazed by cattle during the growing season (June 15 - August 15) receive rest from livestock grazing during the next growing season, followed by complete rest from livestock use the third year. The animal stocking rate will be based on levels that will allow for the maintenance and enhancement of riparian and wildlife values within the system (Figure 4). Considering only the acreage grazed on a particular year and an approximate average of 6 acres/AUM, there would be a maximum of 1168 cow/calf pairs and steers allowed on the WMA. The R/L system would also employ riparian grazing strategies described by Ehrhart and Hansen (1997) and Ehrhart and Hansen (1998) that include salting, herding and stock water development.

FIGURE 4

Riparian area along Taylor Creek. Photo taken on October 23, 1998 after cattle grazing. Illustrates significant amount of residual cover remaining. This area is on deeded WMA, but grazed in conjunction with the BLM allotment.

The implementation of this system will require a significant realignment of the present pasture boundaries. The proposed stocking level is contingent upon the development of an adequate stock water system. An improvement in the watering system will be developed in cooperation with neighboring private ranches and the Natural Resources and Conservation Service (NRCS).

The system as designed above, would require the incorporation of the 3,600 DNRC McGuire property. Since the Association holds a 20-year lease on the McGuire, FWP would seek to give a long-term lease to the Association. FWP is limited to leasing their deeded property for periods of no more than 10 years. Additionally, FWP would want to review the progress in meeting WMA objectives after the first 3-year grazing cycle. Thereafter, it would be the intention of FWP to commit to a longer lease contingent on system compliance and the meeting of WMA objectives after the initial 3-year review period. Another caveat to a long-term lease hinges on FWP's ability to maintain the 10,818-acre DNRC lease. If this lease is not renewed in 2002 because of increased costs or other FWP lands priorities, the grazing program as outlined in the Preferred Alternative could not be maintained.

VI. DESCRIPTION OF REASONABLE ALTERNATIVES TO THE PREFERRED ALTERNATIVE.

1. No Action

   This alternative would have FWP continue to manage the WMA in the same manner, which is currently in operation. FWP would continue to lease the grazing rights on its 17,291 acres of deeded land and sub-lease (through a Pasturing Agreement) its 10,818 acres of DNRC leases. It would continue to manage the grazing on the 3,600 DNRC McGuire property in an exchange of use agreement with the Association. There would be no new grazing system set up. Grazing would continue to be regulated in the mixture of fenced pastures already in existence on the WMA. The AUM stocking level would remain similar to the preferred alternative. Upkeep and improvements would still be required under this alternative in fences, the water system and the potential installation of electric fencing to address the Tall larkspur poison problem.

2. Discontinue Livestock Grazing on the WMA

   This alternative would involve terminating the grazing rights on 17, 291 acres of FWP deeded lands and not sub-leasing the grazing of the 10,818 acres of DNRC land through a Pasturing agreement with a private lessee. Grazing rights on the 3,600 acre DNRC McGuire section would no longer be controlled by FWP.

VII. EVALUATION OF IMPACTS ON THE PHYSICAL ENVIRONMENT

1. Land, Water and Vegetation Resources

VEGETATIVE HEALTH

Preferred Alternative: Livestock grazing can impact soil and vegetation. Hoof action will have a variety of impacts on soil and vegetation while grazing will remove vegetative cover. The impacts of these activities would not be detrimental to overall soil and vegetative health in a properly managed system. Livestock grazing can be managed in a manner that will allow for soil and vegetation maintenance and/or improvement (Anderson and Scherzinger 1997, Frisina and Morin 1991, Frisina 1991, Alt et al. 1992, Yeo et al. 1993, and Werner and Urness 1996). Rangelands developed under a history of grazing of bison, elk and other ungulates. It is the degree and timing of such grazing that will determine the level of impacts on the land. The impacts of grazing livestock on the WMA will be mitigated through a properly managed grazing system. Plants need adequate rest in order to increase their root mass and carbohydrate storage. The Rest-rotation grazing as developed by Hormay (1970), will allow plants two years of growing season rest out of every three. This allows plants adequate opportunity to increase and/or maintain their vigor. In addition, grazing strategies in riparian areas will include herding, salting, fence location and water distribution systems to reduce the effects of livestock concentrations in these areas (Ehrhart and Hansen 1997, Ehrhart and Hansen 1998). The positive effects of this management system would be manifested on the associated DNRC lands as well as on FWP's deeded ground.

No Action Alternative: The impacts would be somewhat similar to the Preferred Alternative except: Since livestock would be continued to be confined to the existing pasture boundaries, impacts on vegetation in some areas would be greater due to less than desirable fence locations lending themselves to livestock concentrations.

No Grazing Alternative: Vegetative health would be maintained or improved on the deeded portion of the WMA. FWP would definitely lose grazing control of the 3,600 acre McGuire (DNRC) property. The McGuire property would receive annual grazing and potential reduction in vegetative health over time. Any potential benefits from the "late" season grazing treatment where matured seed is "planted" with livestock hoof action as a means to improve the establishment of new seedlings (Hormay 1970), would be lost on the deeded WMA. It is unknown what future grazing scenario the BLM might adopt in this situation.

RIPARIAN VEGETATION, STREAMBANKS AND FISHERIES

Preferred Alternative: Healthy riparian vegetation and stable stream banks are critical to maintaining a properly functioning stream, clean water and quality fish habitat. A viable fishery presently occurs on the WMA (for a full report of the fisheries values on the WMA, please consult the Management Plan). Species present include rainbow, rainbow-cutthroat hybrids, brown trout, brook trout, Westslope cutthroat trout (WCT), Mountain whitefish and mottled sculpin. WCT populations in the Rock Creek drainage are nearly pure strains of the species. The sensitivity of WCT to habitat condition and disturbance, plus the fact that it may soon be listed as a threatened species by the Fish and Wildlife Service, highlights the importance of stream viability. Livestock will remove certain amounts of vegetation and walk on stream banks in grazed pastures. This situation has the potential to create anywhere from a serious and extensive degradation problem down to a few isolated "sore" areas that might be found in stream crossings, etc. Although intensive livestock grazing prior to FWP's purchase of the WMA led to reduced riparian health on portions of the WMA (Riparian

Health Assessment, 1999), the condition of these areas has improved under the present grazing system (Paul Hansen, Montana Riparian Society, pers. comm., & Figures 5 & 6). Along with the important rest periods provided for in the rest-rotation system, livestock herding, pasture layout and the development of upland water sources (i.e. water tanks) will be important components of the R/L System to assure riparian areas improve and stay healthy. These methods have proven effective in riparian management systems (Ehrhart and Hansen 1997, and Ehrhart and Hansen 1998). Fence locations and the removal of narrow water gaps will help reduce livestock concentrations in these areas. Vegetation monitoring will be set up to assure the system is heading in the right direction so that adjustments can be made where necessary. Continued monitoring will be especially important on the WCT stream, Rock Creek. Any significant degradation attributable to livestock will be handled through necessary adjustments in AUM's, grazing patterns or whatever means FWP feels necessary to correct the situation.

No Action Alternative: The impacts on riparian habitats would be similar to the Preferred Alternative except: the existence of smaller pastures and cross fences will continue to cause livestock to concentrate in some areas causing some localized impacts to stream banks. Also, with more pastures and fences, there are more opportunities for fences to be breached by livestock.

Even under existing conditions and with some localized heavy use found in some areas of the WMA, the overall conditions of the riparian areas have improved under the present grazing system (Paul Hansen, Montana Riparian Society, pers. comm., Figures 5 & 6).

No Grazing Alternative: The riparian habitat health of the WMA deeded lands would maintain or improve. Continuous grazing that would likely occur on the DNRC lands (i.e. McGuire place) without FWP control, could lead to a further decline in riparian health in those areas.

ELK WINTER FORAGE

Preferred Alternative: Livestock will utilize the same sorts of vegetation used by wintering elk. Under the existing grazing system and livestock stocking level, significant residual forage in rest pastures and on secondary range (i.e. steeper terrain) in grazed pastures has provided standing crops of lightly or unutilized grass throughout

10/1/92

FIGURE 5

Comparative photos of Rock Creek 1992 and 1998. This pasture was grazed by livestock both years. Note improvement in willows. Stream bank vegetation has increased and raw banks decreased.

10/23/98

FIGURE 6

Top Photo: Ledford Creek
Bottom Photo: Spring Creek

Both photos were taken in 1999 following the early spring grazing treatment (Mid-June to July 1). Note stability of banks and good plant cover of willows, sedges, and other streambank vegetation.

much of the WMA (Figure 7). The proposed stocking level in the Preferred Alternative (approximately 6 acres/AUM on average) will be somewhat lighter (due to the inclusion of the McGuire property) than in the existing system.

Livestock grazing has had some positive benefits for elk in other areas. In the Elkhorn Mountains (Hunting District 380), Grover and Thompson (1986) found that elk selected feeding sites that were grazed by cattle the previous growing season. The removal of older forage by livestock may help establish a higher quality of feed for elk the following spring (Frisina 1992). Grazing by domestic livestock has been shown to improve accessibility, palatability and nutritive quality of forage plants preferred by wild herbivores (Jourdonnais and Bedunah 1990). It should be noted that any increased elk use on the WMA grazed lands may be more tied to the reduction in older standing residual forage than to increased nutritive value, since the nutritive value of grass is greatly diminished during the winter months when elk are normally on the WMA.

No Action Alternative: The impacts of this alternative on elk winter forage supplies will be similar to the Preferred alternative.

No Grazing Alternative: Abundant winter forage will exist on deeded and DNRC leased lands controlled by FWP. The DNRC McGuire property would not be under FWP grazing control and residual forage levels for elk would likely be reduced. By not grazing livestock, any benefits from removing old forage to improve the quality of grass for elk, would not exist on deeded FWP land. It is unknown what management direction the BLM might take in this situation since grazing on their lands has been tied to the Robb/Ledford WMA land base and livestock use.

GENERAL WILDLIFE HABITAT

Preferred Alternative: Livestock grazing will impact vegetation across the WMA relative to food and cover for a variety of game and non-game species. The impact will result in the reduction of vegetative cover in portions of the WMA, particularly in the lower elevations along riparian areas of grazed pastures. This impact will be reduced in the proposed grazing system by: one-third of the WMA being totally rested the entire grazing season; one-third of the WMA will not be grazed until after seed ripe in mid-August at a time when most bird nesting (including Sage grouse) would be completed; and the cattle stocking density will average no greater than 6 acres/AUM (compares to around 3.5 acres per AUM allowed on many public land leases such as what would be allowed on the McGuire if we didn't have control). This stocking level would be somewhat less than on the present WMA grazing system. While livestock may remove much of the forage along low elevation zones associated with riparian areas, there will be residual forage in portions of the grazed pastures where many of the steeper slopes in those same grazed pastures will receive little or no utilization from livestock (such as exists with the present grazing system - Figure 7). These lightly grazed areas provide food and cover for game and non-game species alike.

The distribution of grazed and ungrazed pastures may create a mosaic of habitats that can allow for a wide variety of species with different habitat requirements (DeGraaf et. Al. 1991).

No Action Alternative: The impacts to all wildlife species in general will be similar to those found in the Preferred Alternative.

No Grazing Alternative: Vegetation used for food and cover for most wildlife species would be at maximum values in all deeded and controlled lands on the WMA. Under this alternative, FWP would lose control of the 3,600-acre McGuire property and vegetative values for all wildlife species would decline due to continuous annual grazing and a higher stocking rate that would occur on the property without our control. It is unknown what might happen to the adjacent BLM property relative to grazing management and its consequences.

2. Air Resources

No significant impacts are expected from any of the three alternatives to air quality.

VIII. EVALUATION OF IMPACTS ON THE HUMAN ENVIRONMENT

1. Land Use

ACCESS

Access will not be different in any of the alternatives.

RECREATION

Preferred Alternative*:* The presence of cattle will not significantly restrict recreational use of the WMA. Some individuals may find livestock along their fishing stream or in other areas offensive, but this is not expected to be a significant problem to the majority of the public. Livestock will only occupy one-sixth of the WMA that is a part of the R/L System at any give time during the grazing season. Livestock will be removed by October 15th each year prior to the initiation of the majority of the big game hunting that occurs on the WMA. Hunters are allowed full access and use of the WMA, even in pastures that may be occupied by cattle.

No Action Alternative: Same as the preferred alternative.

FIGURE 7
Photos taken in 1999 following the early spring grazing treatment (Mid-June to July 1). Note cabin as reference. As noted in the lower photo, cattle made little use of vegetation on the slope of the hill in the background of the first picture.

No Grazing Alternative: Cattle would not be present on the WMA to offend some segments of the public who do not like to recreate on public land in the presence of livestock. There would be no grazing or grazing impacts along fishing streams that might be viewed negatively by some individuals. There would be no cattle present during the upland bird and big game seasons that occur prior to October 15.

2. Community Impacts

The Preferred Alternative: Private ranch operations will be allowed to utilize the WMA for summer livestock grazing. Summer pasture is in short supply and is important for the economic viability of ranches that do not have adequate summer grazing on their own land to support their operations. Many cattle ranches across the west have had to sell to land developers or wealthy out-of-state interests that curtail public access or subdividers. It is in the best interest of sportsmen and wildlife habitat to support keeping these smaller ranches viable. Sharing resources with the agricultural community creates a positive image of FWP in the local community that fosters good relations and communication between many ranchers, sportsmen and FWP.

No Action Alternative: Impacts are similar to the Preferred Alternative.

No Grazing Alternative: No grazing would be allowed on the WMA lands controlled by the FWP. Association members would have to locate other summer grazing lands for their livestock. It is unsure if the Association would be able to continue to graze the BLM lands since they are tied to the base property of the WMA. Livestock would have to be trailed for great distances from other summer pastures to the Snowcrest Forest Service pastures adjacent to the WMA

3. Cultural and Historic Resources

Livestock grazing has been a practice on southwest Montana rangelands since the latter half of the 1800's. The no grazing alternative would eliminate this resource on FWP deeded and DNRC leased land. No other cultural or historic resources are expected to be affected by any of the alternatives.

4. Risk/Health Hazards

None of the alternatives are expected to result in increased risk or health hazards. Weed control will involve the use of chemicals in all alternatives. These chemicals will be applied in recommended amounts that should have minimal impacts on non-target species.

5. Socio-Economic Assessment

NOTE: Costs associated with fencing for all alternatives are only based on best estimates and will likely vary some. Costs are spread over three year increments in many cases for comparison purposes. Costs may actually be spread out over longer periods in some situations.

The Preferred Alternative: The preferred alternative will result in FWP dollars and management oversight to implement and maintain a grazing system. This is a significant impact on FWP time and fiscal resources. The dollar costs involved (when the project is fully completed) includes roughly 26 miles of new internal fence construction at an estimated $6,400/mile (total estimated cost - $166,400). In addition, an electric fence would need to be constructed to keep livestock out of dense patches of Tall larkspur during certain periods of the grazing season when this plant is poisonous to cattle. Roughly 14 miles of one strand electric fence and posts would cost about $2,000/mile (total - $28,000).

When the new system is implemented, old fence will eventually be removed. Removing approximately 29 miles of fence lines would cost around $1,500/mile (total - $43,500).

It should be noted that the costs listed above for fencing - new fence ($166,400) + larkspur electric fence ($28,000) + old fence removal ($43,500) = ($237,900 total) would be spread over a period of several years. This is because interior fencing and fence removal can be spaced out over several years. Initial fence replacement, construction and removal will somewhat be governed by livestock rotation periods. Assuming the approximate fencing costs listed above are spread out over a 3-year grazing rotation period, the annual fencing costs would be $79,300/year. These figures do not include removal and replacement of exterior WMA fence common to all alternatives (see page19*).

Costs associated with fence maintenance are unknown at this time, but would be less than under the existing system (No Action Alternative) because the Preferred Alternative would have newer fences requiring less maintenance. New fences would also be located in areas that are compatible with the landscape.

FWP is working with the Natural Resources and Conservation Service (NRCS) and other local landowners to develop a reliable water source (Kelly Springs) for stock water on the WMA and surrounding private land. FWP's total obligation is unknown at this time, but could potentially be in the vicinity of $120,000. Construction of this pipeline is planned to start this summer (2000).

Costs associated with noxious weed management would likely be the same under either alternative because of our obligation to control weeds on property we manage.

The present cost of leasing the 10,818 acres of DNRC land associated directly with the WMA in 1999 was $11,907.90. This cost will likely rise some assuming the lease is

renewed in 2002. Through the use of a Pasturing Agreement between the Association, FWP and DNRC, the Association pays a fee to FWP for the use of these DNRC lands for grazing. FWP also assesses a grazing fee to the Association for grazing rights on the WMA deeded land at a value of $12.60/AUM. A majority of the grazing fees obligated to FWP by the Association are used in turn to obtain the McGuire property in an "exchange of use agreement" on a value for value basis (i.e. $25,000 of the cost of leasing the 3,600 acre McGuire property by the Association is deducted from fees charged the Association to lease FWP controlled property on the WMA).

No Action Alternative: The impact of this action will require a higher maintenance cost due to the old fence structure and the poor location of these fences. Over time, this will include removing old fences and replacing with new material. Since the old pasture structure would be kept in place, over-time, there actually would need to have more fence replaced since the total amount of fence in the old system is greater than in the new system in the Preferred Alternative.

It is estimated that the annual fence replacement costs for interior pasture could be as high as $68,466 over a three-year period. Adding the Larkspur fence cost would make this figure $77,799/year for a total cost of $233,397. These figures do not include removal and replacement of exterior WMA fence common to all alternatives (page 19*).

Water system costs would be the same as in the Preferred Alternative – approximately $120,000.

No Grazing Alternative: This alternative will not have the new construction costs related to the establishment of new pastures, but will require continued fencing to keep livestock off of the WMA. This will include boundary fence maintenance and replacement around the McGuire property. The McGuire property is right in the middle of the WMA. Involving this property there is approximately 11.5 miles of fence that would eventually cost around $90,850 to remove and replace. However, this cost would not be immediate and could again be spread over a number of years. Presently there is no boundary fence separating BLM and WMA lands in the Taylor Creek Drainage. Assuming BLM continues to graze this area, FWP would likely need to install 5.25 miles of additional boundary fence. This cost would be approximately $33,600. The total cost for both the fences would be $124,450. These figures do not include removal and replacement of exterior WMA fence common to all alternatives (page 19*).

Fence maintenance costs would be less than either the Preferred or the No Action alternative because we would not need to maintain interior fences.

Development and maintenance of a water system would not be necessary in the no grazing option. In this alternative, money would not be received from leased grazing of our deeded property or from a sub-lease of the DNRC lands (through a Pasturing Agreement) that we control. Without this transaction, the "exchange of use" agreement with the Association could not be implemented. The implementation of this alternative would have a negative economic impact on grazing lessees if they were unable to locate

other summer pasture within the same distance of their ranches. It's possible that adequate summer pasture is not even available in this area. The lessees normally hire a rider that could become unemployed with this option.

In all alternatives, the cost of leasing DNRC lands is expected to increase in the near future. In this alternative, there is a possibility that FWP might not be able to afford to continue to lease the 10,818 acres of DNRC. In this scenario, DNRC leases on this WMA may not be a cost to FWP in the future under this alternative.

This alternative would greatly decrease staff time, money and effort that would otherwise be expended on development and monitoring of a grazing system.

***COMPARISON OF COSTS (ASSOCIATED WITH GRAZING)**

ALTERNATIVE	FENCES	WATER SYSTEM
PREFERRED	$237,900 ($79,300/yr)	$120,000
NO ACTION	$233,397 ($77,799/yr)	$120,000
NO GRAZING	$124,450 ($33,600)	-0-

* These costs do not include maintenance and replacement of exterior WMA boundary fences. These would be the same in all three alternatives. This cost over time would be around $260,000. This cost includes eventual removal and replacement of 33 miles of old boundary fence at $1,500/mile removal and $6,400/mile replacement costs.

Preparer: Joel Peterson
Region Three Wildlife Manager

Contributors to preparation of EA:

Fred King: Grazing Maintenance Costs and Pictures
Mike Frisina: Grazing System Design