



1400 So. 19th
Bozeman, MT 59718

September 13, 2010

Dear Interested Citizen:

Enclosed you will find for your review the Draft Environmental Assessment (EA) for a Montana Fish, Wildlife & Parks (FWP) proposal to acquire a 151-acre Wildlife Management Area in the Robert E. Lee Range northwest of Canyon Creek in Lewis and Clark County. The purpose of this proposal is to secure additional fish and wildlife habitat and to enhance compatible recreational opportunities and access for the public.

FWP will hold a public hearing in Helena on September 22nd (Wednesday) at 7:00 p.m. in the FWP Commission Room at the FWP Headquarters in Helena to discuss the proposed acquisition and to take public comment.

The EA may also be obtained by mail from the FWP Helena Area Resource Office in Helena and the Regional Headquarters in Bozeman, by phoning (406) 495-3260, or on the FWP web site <http://fwp.mt.gov> ("Recent Public Notices," beginning September 13th, 2010).

Comments should be directed by mail to Canyon Creek WMA Addition Project, Montana Fish, Wildlife & Parks, Helena Area Resource Office, PO Box 200701, Helena, MT 59620 or by email to jsika@mt.gov. Comments must be received by FWP no later than 5 p.m. on Tuesday, September 28th, 2010.

As part of the decision making process under MEPA, I expect to issue the Decision Notice for this EA very soon after the end of the comment period. The Montana Fish, Wildlife & Parks Commission has the final decision-making authority for FWP land acquisition proposals, and the Commission will be asked to render its decision on this proposal during its October 7th, 2010 meeting. Approval will also be necessary from the Montana Board of Land Commissioners.

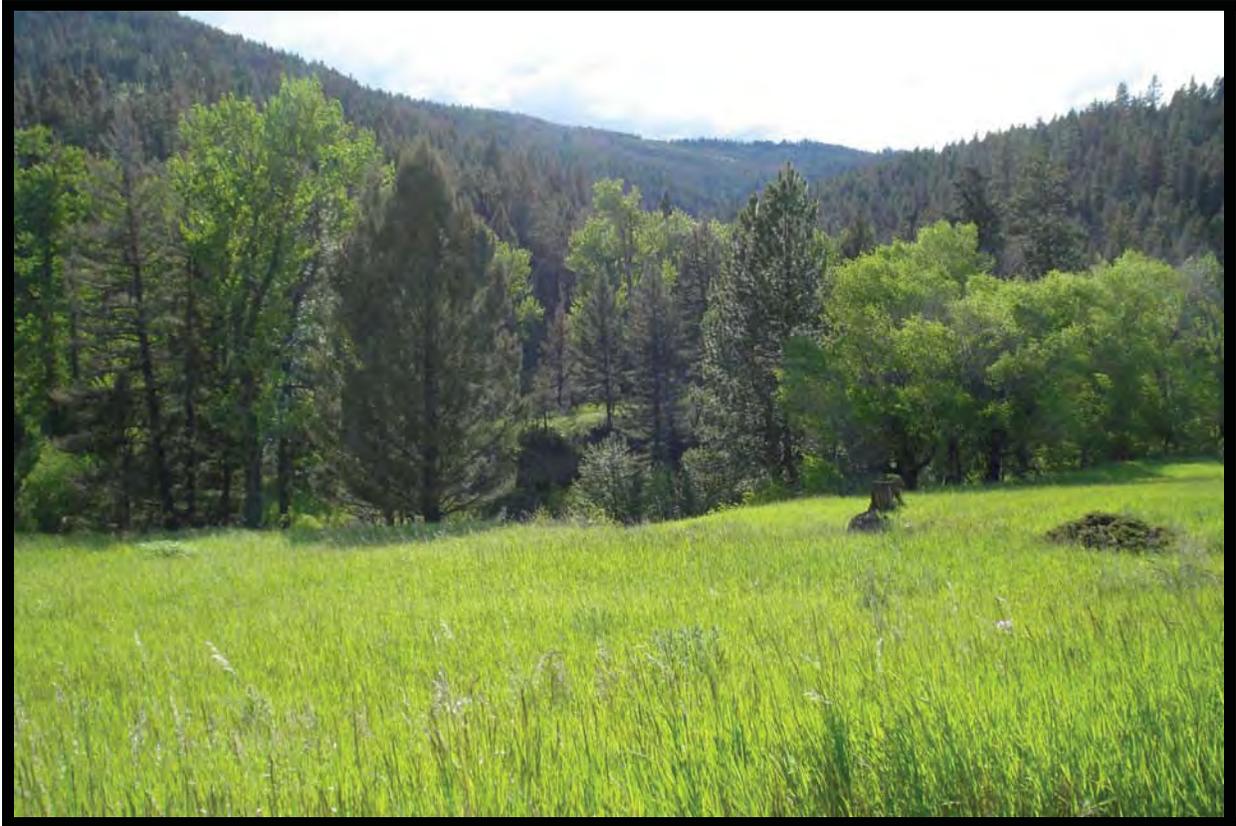
Sincerely,

A handwritten signature in black ink, appearing to be "Pat Flowers". The signature is written in a cursive style with some loops and a horizontal line at the bottom.

Pat Flowers
Region 3 Supervisor

Draft Environmental Assessment

PROPOSED LAND ACQUISITION – R-3
Canyon Creek Wildlife Management Area Addition



September 2010



***Montana Fish,
Wildlife & Parks***

Draft Environmental Assessment MEPA, NEPA, MCA 23-1-110 CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of proposed state action:

Montana Fish, Wildlife and Parks (FWP) proposes to acquire via fee title 151.09 acres from the Ball Family in the Robert E. Lee Range northwest of Canyon Creek, Montana. This property will be an addition to the existing Canyon Creek Wildlife Management Area (WMA).

2. Agency authority for the proposed action:

FWP has the authority to purchase lands that are suitable for game, bird, fish or fur-bearing animal restoration, propagation or protection; for public hunting, fishing, or trapping areas; and for state parks and outdoor recreation per Montana state statute 87-1-209.

Funding for the proposed acquisition will come from the Montana Fish and Wildlife Conservation Trust (MFWCT). The maintenance account and other costs/fees associated with acquisition will be provided by FWP with general hunting license and Habitat Montana funds, respectively. The property is located within the focus area of the MFWCT, which applies funds gained from the sale of Canyon Ferry cabin-site leases to land conservation, with an emphasis on projects in the upper Missouri River drainage.

Per state law, 87-1-201(9) MCA, FWP is required to implement programs that address fire mitigation, pine beetle infestation, and wildlife habitat enhancement giving priority to forested lands in excess of 50 contiguous acres in any state park, fishing access site, or wildlife management area under the department's jurisdiction. FWP will develop and implement forest management plans for this property to meet the intent of this statute.

FWP is also required to deposit 20% of the purchase price, capped at \$300,000/acquisition, for properties it acquires (87-1-209 and 23-1-127 (2) MCA). Such an account would be used for weed maintenance, fence installation or repair of existing fences, garbage removal, implementation of safety and health measures required by law to protect the public, erosion control, streambank stabilization, erection of barriers to preserve riparian vegetation and habitat, and planting of native trees, grasses, and shrubs for habitat stabilization. Such maintenance activities should be consistent with the good neighbor policy.

Additionally, Montana state statute 23-2-102 provides authority for the proposed purchase. "Montana is uniquely endowed with scenic landscapes and areas rich in recreational value. This outdoor heritage enriches the lives of citizens, attracts new residents and businesses to the state, and is of major significance to the expanding tourist industry. It is the purpose of this part to give authority to the Department of Fish, Wildlife, and Parks to plan and develop outdoor recreational resources in the state, which authority shall permit receiving and expending funds including federal grants for this purpose."

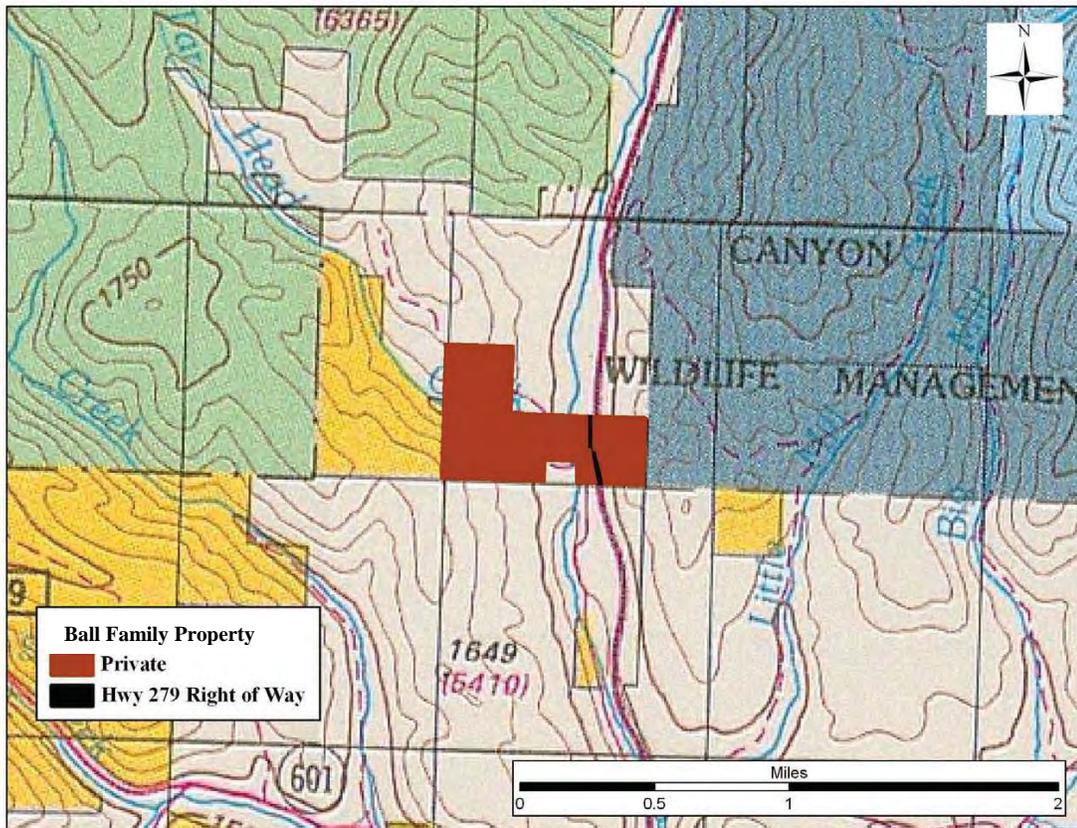
3. **Name, address and phone number of project sponsor (if other than the agency):**
Montana Fish and Wildlife Conservation Trust
P.O. Box1993
Helena, MT 59624

4. **Anticipated Schedule:**
Public Comment Period: September 13th – September 28th, 2010
Submission to FWP Commission for Approval: October 2010
Submission to the Land Board for Approval: October 2010

5. **Location affected by proposed action**
The property is located about 20 miles northwest of Helena, Montana near the town of Canyon Creek along Hwy 279. Portions of the property are both east and west of the highway, in hunting districts 339 and 343 respectively, with the far eastern property boundary adjoining the Canyon Creek WMA. The property is depicted in brown in Figure 1 below.

Township 13 North Range 6 West
Section 03 Tract one, tract two, tract three, and tract four as further described by COS# 317433

Figure 1. Location of the Ball Family property.



6. Project size -- estimate the number of acres that would be directly affected that are currently:

Total acres: 151.09

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential	<u>0</u>		
Industrial	<u>0</u>	(e) Productive:	
(existing shop area)		Irrigated cropland	<u>0</u>
(b) Open Space/	<u>40.16</u>	Dry cropland	<u>0</u>
Woodlands/Recreation		Forestry	<u>85.93</u>
(c) Wetlands/Riparian	<u>25</u>	Rangeland	<u>0</u>
Areas		Other	<u>0</u>

8. Permits, Funding and Jurisdiction.

(a) Permits: A Montana Department of Transportation Approach Permit will be necessary if a new approach to the property is pursued after acquisition.

(b) Funding:

Montana Fish and Wildlife Conservation Trust \$635,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities: None.

9. Narrative summary of the proposed action:

Through the MFWCT, Montana Fish, Wildlife and Parks (FWP) proposes to acquire via fee title 151.09 acres from the Ball Family in the Robert E. Lee Range northwest of Canyon Creek, Montana. This property will be an addition to the existing Canyon Creek WMA.

Property ownership adjunct to this parcel includes FWP, Bureau of Land Management (BLM), and private lands. It adjoins the Canyon Creek WMA to the east for ~¼ mi and adjoins BLM land to the west for ~¼ mi, both of which adjoin U.S. Forest Service lands (USFS). Some areas of the nearby Helena National Forest are inventoried as roadless. The project area is all private land. The targeted property was used historically by the Ball Family for its recreational opportunities. There is an irrigation canal that traverses the property, and there is an underground spring on the property east of the highway. There are no water rights currently filed appurtenant to the property, therefore no water rights will transfer with acquisition. All mineral rights will be transferred with acquisition. The property is partially fenced. There is a 6-acre parcel that is privately owned and is not fenced within the targeted property. The targeted property extends east and west of Hwy 279, in hunting districts 339 and 343, respectively.

The existing Canyon Creek WMA encompasses 2210 acres, which provide yearlong habitat for elk, upland game birds, small mammals, and birds and seasonal habitat for deer, bear, forest carnivores, raptors, and endemic and neo-tropical migrant birds. Little Mill Creek, Big Mill Creek, and Sawmill Gulch flow through the WMA and contain brook trout. These streams have been considered for westslope cutthroat trout restoration.

Public recreation opportunities include hunting, wildlife viewing, hiking, horseback riding, and picnicking. Public access to adjacent public lands (USFS and Department of Natural Resources and Conservation [DNRC]) is also provided with this WMA. The existing WMA is within hunting district 339.

The vegetation of the targeted 151 acres is dominated by coniferous forest and upland grassland with some riparian areas. The timber was logged at least as recently as the 1980s. At the present time, Douglas fir and ponderosa pine are the predominant conifer species present. There are already some ponderosa pine snags that are substantial in both diameter and height, and some ponderosa pine appear to be succumbing to mountain pine beetle infestation. The Douglas fir appears to be healthy at the present time, but some of the Douglas fir in the Flesher Pass area has died out, likely due to infestation of spruce budworm. Tar Head Creek flows through the property to its confluence with Canyon Creek, which also flows through the property. This property provides habitat similar to the existing WMA. Although a thorough reconnaissance of the cover types has not been completed, it is likely that they are similar to the existing WMA.

On the existing WMA:

- Grasslands are dominated by rough fescue/Idaho fescue (*Festuca scabrella*/*Festuca idahoensis*) and Idaho fescue/bluebunch wheatgrass (*Festuca idahoensis*/*Agropyron spicatum*) with mountain big sagebrush (*Artemisia tridentata vaseyana*) interspersed in some areas.
- The most common forest cover type is Douglas-fir/rough fescue (*Pseudotsuga menziesii*/*Festuca scabrella*). This cover type occupies the majority of the WMA. Small areas of Douglas-fir/Idaho fescue (*Pseudotsuga menziesii*/*Festuca idahoensis*), Douglas-fir/elk sedge (*Pseudotsuga menziesii*/*Carex* spp.) and Douglas-fir/pinegrass (*Pseudotsuga menziesii*/*Calamagrostis rubescens*) also occur within the WMA.
- Riparian vegetation communities occur along the three creek drainages and are described by cover type below. Riparian is defined as sites that have permanent water tables at or near the surface for a significant period in the growing season. The dominant riparian cover type is the Douglas-fir/red-osier dogwood (*Pseudotsuga menziesii* /*Cornus canadensis*) type. This type is dominated by scattered Douglas fir, black cottonwood (*Populus trichocarpa*) and aspen (*P. tremuloides*) with an understory that includes red-osier dogwood, bebb's willow (*Salix bebbiana*), sandbar willow (*S. interior*), Douglas hawthorn (*Crataegus douglasii*), woodrose (*Rosa woodsii*), snowberry (*Symphoricarpos albus*), water birch (*Betula occidentalis*) and alder (*Alnus* spp.). A few sites may be classified marginally as the Englemann spruce/red-osier dogwood (*Picea engelmanni*) cover type. A few small sites lack conifer trees and could be classified as willow types. Most riparian areas in these units show signs of past livestock use that has resulted in reduced coverage of riparian species, browse lines on shrubs, and invasion by non-native plants especially Canada thistle (*Cirsium arvense*), Kentucky bluegrass (*Poa pratensis*), common tansy (*Tanacetum vulgare*), houndstongue (*Cynoglossum officinale*), and diffuse and spotted knapweed (*Centaurea diffusa*, *C. maculosa*).

The benefits of the additional property not only include increasing the amount of existing, contiguous protected wildlife habitat and further protection of a stream corridor containing native westslope cutthroat trout but also include increasing public access to public lands

in a strategic location. The following are details of the resource values FWP wants to protect:

- Although limited in size, acquisition of this property will secure additional habitat and movement connectivity for wildlife across Hwy 279 between the WMA and nearby public lands (USFS, BLM, DNRC). Species of Concern (SOC) verified to occur in this vicinity include wolverine (*Gulo gulo*), Canada lynx (*Lynx Canadensis*), grizzly bear (*Ursus arctos*), pileated woodpecker (*Dryocopus pileatus*), golden eagle (*Aquila chrysaetos*), and westslope cutthroat trout (*Oncorhynchus clarki lewisi*). Unverified SOC for this area includes fisher (*Martes pennant*). No plant SOC were listed in the Natural Heritage Program database for this vicinity. A complete list of those species that are predicted to be present in the vicinity is included in Appendix A. This property is within the Continental Divide wildlife movement corridor, which is a priority area for the conservation of species that exist at low densities, such as Canada lynx, grizzly bear, and wolverine. In that scope, this property is part of a larger landscape effort.
- The proposed acquisition will not only further protect the stream corridor from invasion by non-native fish species but may also expedite FWP's efforts to further enhance and extend the current distribution of westslope cutthroat. Although not currently listed as a "Conservation Population," implementation of habitat improvement projects may be simplified if the lower portion of the stream was located on public lands. Habitat improvements, such as barriers to prevent immigration of non-native rainbow and brook trout, stream bed restoration, or improvements to the riparian corridor, may allow additional treatment to improve the Tar Head cutthroat population and elevate its conservation status.
- Acquisition of this property will secure more direct public access to adjacent public lands in a strategic location for fishing, hunting and other non-motorized recreation. The proposed acquisition will also provide another point of public access to the southwest corner of the existing WMA (see Figure 1). Hunter use is expected to exceed 500 hunter days annually. Angler access will increase, and there will be additional fishing opportunity for brook trout and rainbow trout, both of which occur in Canyon Creek. At present, there is no public access to public lands near the west side of Hwy 279, except at Flesher Pass. Public access to the Tar Head and Trout Creek drainages on the Helena National Forest is from above through the Stemple Pass area. This property will provide more direct public access to the Tar Head and Trout Creek drainages from below. Finally, elk are harvested in the WMA and in the Tar Head and Trout Creek drainages, and acquisition of additional land adjacent to the WMA is expected to further disperse hunters. This property will also allow hiking and wildlife viewing, and it is near the Continental Divide, which is a national scenic trail.

If the acquisition is completed, the additional 151 acres of the Canyon Creek WMA will be managed under the guidance of the *Canyon Creek Wildlife Management Area Management Plan* (2002; see Appendix D). Minimal development of public facilities such as parking areas and interior roads and trails is planned in order to maintain the undeveloped, primitive nature of the area. The following regulations apply:

- Winter wildlife closure: WMA closed to all unauthorized activities from December 1st through May 14th.
- Motor and wheeled vehicles must stay on authorized roads only.

- WMA open to day-use only.
- Weed-seed free feed products are required.
- Commercial use of the WMA is prohibited.

The overall objectives of the project are to:

- Maintain or improve the wildlife and fisheries values that exist on the property.
- Provide recreational opportunity on the property.
- Provide strategic public access to adjoining public lands.
- Enhance ability to achieve population management objectives of wildlife.

10. Description and analysis of reasonable alternatives:

Alternative A: No Action – FWP would not acquire the Ball Family Property

Under the No Action Alternative, FWP would not acquire the property from the Ball Family. Eventually, the property would likely be sold to a private entity, and the opportunity for public access in this strategic location would be unlikely to be obtained by FWP through another property in the area.

Alternative B: Proposed Action – For FWP to acquire 151 acres from the Ball Family for addition to the Canyon Creek WMA

Through the MFWCT, FWP proposes to acquire via fee title 151.09 acres in the Robert E. Lee Range both east and west of Hwy 279 northwest of Canyon Creek, Montana. The property includes portions of the Tar Head drainage as well as the confluence of Tar Head and Canyon Creeks.

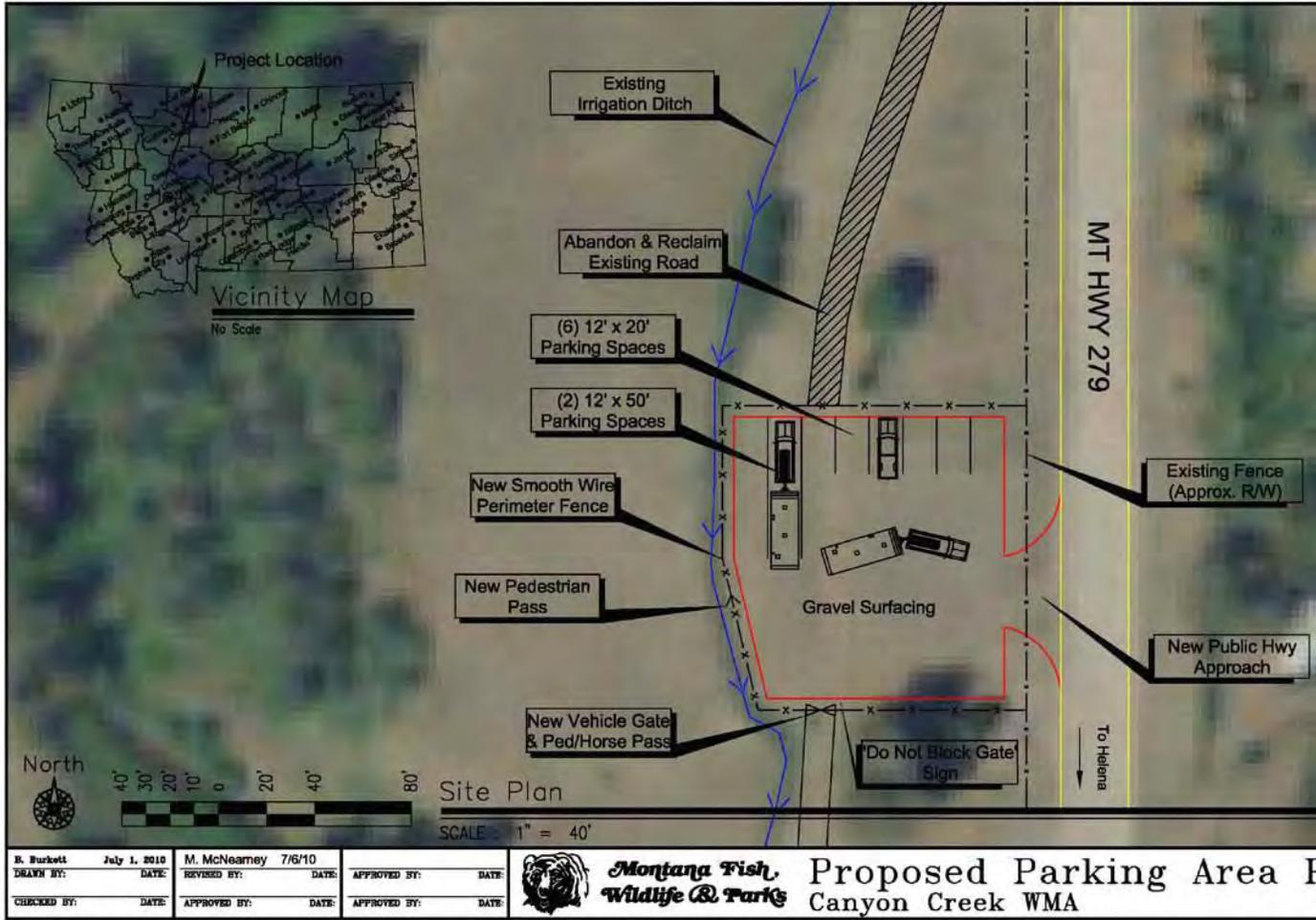
The property will be an addition to the existing Canyon Creek WMA. Therefore, the *Canyon Creek Wildlife Management Area Management Plan (2002)* will be the basis for management of the property (Appendix D).

No developments will be made within the property. Existing infrastructure demolition and removal, debris removal, and boundary and parking fence and barrier erection are anticipated after acquisition to provide resource protection and for public safety. Adjacent to the west side of Hwy 279, FWP plans to establish one graveled, designated parking area that would accommodate up to eight vehicles, including one to two vehicles with horse trailers (Figure 2). FWP plans to install appropriate signage at the new area if the acquisition is completed. FWP will consult with the State Historic Preservation Office (SHPO) prior to any ground disturbing activities.

The expected cost of acquisition is \$635,000 plus set aside funds for maintenance. MFWCT funds will be used to purchase the property. The maintenance account will be provided by FWP from general hunting license funds.

For the immediate future, no new FWP staff are planned to be hired to manage the property.

Figure 2. Proposed parking area plan for the Canyon Creek WMA Addition.



PART II. ENVIRONMENTAL REVIEW CHECKLIST

The analysis of the physical and human environments discussed on the following pages is limited to Alternative B. The reason for this is that the potential impacts of the No Action alternative are difficult to define, because the final decision regarding the potential sale of the property is left to the discretion of the current owners. If the property is sold to a different buyer, existing wildlife habitat and water resources could be negatively affected if the new property owner intended to subdivide and develop the acres.

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. <u>LAND RESOURCES</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. **Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?		X				
c. **Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				

The proposed action will have no effect on existing soil stability, geologic substructure, or any unique geologic or physical features within the new WMA area. If FWP acquires the property, establishing a parking area will require grading and/or soil movement, and gravel will be placed over the designated lot. FWP will consult with the SHPO prior to any ground disturbing activities. The parking area will accommodate up to eight vehicles with enough space for a vehicle with a trailer to turn around. The parking area will require additional fencing and/or barriers to protect resource values and to reduce the possibility of pioneering roads and driving into the irrigation canal.

2. <u>AIR</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. **Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)		X				
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. ***For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regs? (Also see 2a.)		X				

The proposed action will have no effect on ambient air quality within the property. Motorized and wheeled vehicles will be required to travel on existing, authorized roads. There is a road easement through the property for access by one adjoining neighbor. Within the new WMA area, public parking will be at the edge of the property adjacent to the west side of the highway, and public use will be restricted to walk-in use only from the parking area.

3. <u>WATER</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. *Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X				
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of floodwater or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. ***For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)		N/A				
m. ***For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		N/A				

The proposed acquisition is not expected to affect the existing quality and quantity of Canyon Creek or Tar Head Creek, because no disturbance of these creeks is planned by FWP. It is unknown if Canyon Creek or Tar Head Creek are part of a floodplain, because floodplain maps are not available for that area. There is an irrigation canal that traverses the property, and it is unknown if it is an active source of water for farmers. It was dry on a June 21 and July 2, 2010 site visit.

4. VEGETATION Will the proposed action result in?	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X				
b. Alteration of a plant community?		X				
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?			X		Yes	4.e.
f. ****For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		N/A				
g. Other:		X				

Under FWP management, wildlife and fisheries values will be protected, and where necessary, the productivity of soils, water, and vegetation will be improved while striving for maximum vegetation diversity dependent on soil types. There is no prime or unique farmland on the land. There is an irrigation canal that traverses the property.

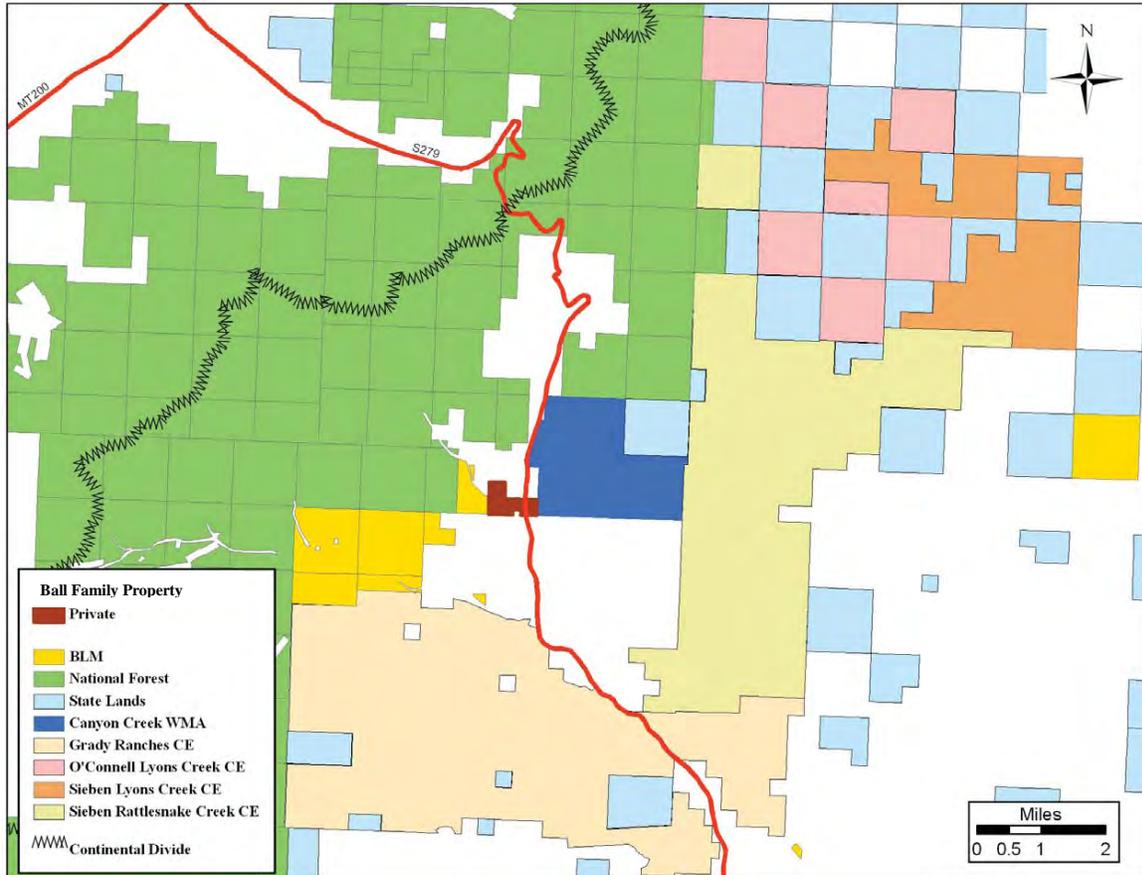
4.e. FWP will document compliance with 7-22-2154, MCA, on weed inspections for land acquisitions. The property will be inspected for noxious weeds by the county weed management district with assistance from the FWP Helena area wildlife biologist. A partial reconnaissance of the property for noxious weeds identified the following along a very old road bed running above yet adjacent to Tar Head Creek west of the highway: houndstongue, Canada thistle, knapweed, and leafy spurge. Knapweed was identified on the approach to the property east of the highway. FWP will implement noxious weed management with guidance from the FWP *Statewide Integrated Noxious Weed Management Plan* (June 2008) and will utilize properly prescribed chemicals on a prioritized basis. Biological agents, mowing, pulling, and/or other methods will be researched and utilized where chemical control is inappropriate. Limitations on motorized use of the property will be implemented to minimize the introduction and spread of noxious weeds. Weed-seed free feeds will be required. There may be a legal road easement through a portion of the property for one adjoining landowner, and there may be a legal stock driving/trailing easement through the property for another adjoining landowner.

** 5. FISH/WILDLIFE Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?		X				
c. Changes in the diversity or abundance of nongame species?		X				
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				5.f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?			X			5.g.
h. ****For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)		N/A				
i. ***For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		N/A				

5.f. Species of Concern (SOC) that are verified in this vicinity include wolverine, Canada lynx, grizzly bear, pileated woodpecker, golden eagle, and westslope cutthroat trout. Unverified SOC for this area include fisher. No plant species were listed in the Natural Heritage Program database for this vicinity. Under FWP management, wildlife and fisheries values, including threatened and endangered species, will be protected, and where necessary, the productivity of soils, water, and vegetation will be improved while striving for maximum vegetation diversity dependent on soil types.

5.g. The property will be open to public access, hunting, fishing, and other non-motorized recreation consistent with a wildlife management area. Public use of nearby public lands (BLM, USFS, and FWP) will also likely increase due to access through this property. Therefore, wildlife may be stressed and dispersed in the immediate area. However, this impact is expected to be minor and consistent with FWP wildlife management. Further, the property is located adjacent to and near a great deal of public lands (BLM, USFS, and FWP) and private lands with FWP conservation easements, which provide additional habitat for wildlife to disperse to (see Figure 3 below).

Figure 3. FWP conservation easements proximate to the Ball Family Property.



B. HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT *					Comment Index
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	
a. Increases in existing noise levels?			X			6.a.
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				

6.a. Because the property will be open to public access and hunting, there will likely be an increase in the discharge of firearms both on the property and on adjacent public lands during hunting seasons. Therefore, there may be “nuisance noise” during hunting seasons. It is expected that this will be intermittent, and therefore this impact is considered minor.

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				

8. <u>RISK/HEALTH HAZARDS</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X		Yes	8.a. & c.
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?			X		Yes	8.a. & c.
d. ***For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		N/A				

8.a. & c. Chemical spraying is part of FWP's weed management plan to limit the infestation of noxious weeds on its properties per the guidance of the FWP *Statewide Integrated Noxious Weed Management Plan* (June 2008). Weed treatment and storage and mixing of the chemicals will be in accordance with standard operating procedures. Certified professionals will utilize permitted chemicals and apply them in accordance with product labels and as provided for under law.

9. <u>COMMUNITY IMPACT</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?			X		Possibly	9.e.

The proposed action will have no effect on local communities or alter the distribution of population in the area.

9.e. The existing approach to and road on the property on the west side of highway cuts in sharply from the north to the south-southwest. It is unlikely that the Montana Department of Transportation would approve public use of the existing approach. A new approach and parking area for public use for this portion of the WMA is expected to be established. It is likely that the placement of a new approach will reduce potential traffic hazards (see Figure 2 above).

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				10.b.
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased use of any energy source?		X				
e. **Define projected revenue sources		X				
f. **Define projected maintenance costs.			X			10.f.

10.b. The 2009 taxes for the property were approximately \$950. FWP is required by law to make tax payments to counties equal to the amount that a private landowner would be required to pay per Montana Code 87-1-603. No changes to the tax amount paid to Lewis & Clark County are anticipated.

10.f. Projected maintenance costs include weed management, signage, and parking area and fence maintenance.

** 11. <u>AESTHETICS/RECREATION</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. **Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)		X				
d. ***For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c.)		N/A				

The proposed action will increase local recreation opportunities, because the property will be in public ownership and is adjacent to additional public lands (BLM, USFS, and FWP). The proposed action will have no affect on any scenic vista or the viewshed of the area or other aesthetic character, because no major developments will be implemented on this property under FWP ownership and the viewshed will be protected in perpetuity.

12. <u>CULTURAL/HISTORICAL RESOURCES</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. **Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				12.a.
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. ****For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a.)		N/A				

12.a. No destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance is anticipated while under FWP ownership. FWP's proposed acquisition will have a positive effect on any cultural or historical resources by securing and managing them in public ownership. By Montana law (22-3-433 MCA), all state agencies are required to consult with the SHPO on the identification and location of heritage properties on lands owned by the state that may be adversely impacted by a proposed action or development project. It is uncertain if unrecorded historic sites would be affected by the activities of an owner other than FWP. There are three old cabins and the framing of an old structure currently on the property. The structures are all in very poor condition and could be a public safety hazard if entered or disturbed. These structures may be demolished after FWP acquires the property due to public safety concerns.

C. SIGNIFICANCE CRITERIA

13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u> Will the proposed action, considered as a whole:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		X				13.b.
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. ***For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		N/A				
g. ****For P-R/D-J, list any federal or state permits required.		N/A				

13.b. Chemical spraying is part of FWP's weed management plan to limit the infestation of noxious weeds on its properties per the guidance of the FWP *Statewide Integrated Noxious Weed Management Plan* (June 2008). Weed treatment and storage and mixing of the chemicals will be in accordance with standard operating procedures. Biological agents, mowing, pulling, and/or other methods will be researched and utilized where chemical control is inappropriate. Limitations on motorized use of the property will be implemented to minimize the introduction and spread of noxious weeds. Weed-seed free feeds will be required.

Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

WMA Management: The existing *Canyon Creek Wildlife Management Area Management Plan* (2002) will be used to manage this property. FWP will document compliance with 7-22-2154, MCA, on weed inspections for land acquisitions. The property will be inspected for noxious weeds by the county weed management district. FWP will implement noxious weed management with guidance from the FWP *Statewide Integrated Noxious Weed Management Plan* (June 2008) and will utilize properly prescribed chemicals on a prioritized basis. Biological agents, mowing, pulling, and/or other methods will be researched and utilized where chemical control is inappropriate. Limitations on motorized use of the property will be implemented to minimize the introduction and spread of noxious weeds. Weed-seed free feeds will be required.

Historic Sites: By Montana law (22-3-433 MCA), all state agencies are required to consult with the SHPO on the identification and location of heritage properties on lands owned by the state that may be adversely impacted by a proposed action or development project. FWP consulted with SHPO for a cultural resource file search regarding this proposed acquisition in June 2010, and SHPO responded with the following: ... *We feel that there is a low likelihood cultural properties will be impacted as a result of this land acquisition. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time...* (see Appendix C for SHPO's response letter and report).

PART III. NARRATIVE EVALUATION AND COMMENT

This property is being pursued for acquisition primarily because of the public access opportunities that it will provide into both the Tar Head and Trout Creek drainages. The property will be a good addition to the Canyon Creek WMA and will secure additional habitat for many species, including elk, mule deer, moose, bears, wolves, and wolverine. Acquisition may also enhance FWP's ability to achieve population management objectives of wildlife, by providing hunting access in a strategic location, and may also expedite FWP's efforts to further enhance and extend the current distribution of westslope cutthroat. FWP ownership will secure this public access and habitat in perpetuity. No subdivision or development will occur on the land. Through noxious weed management, habitat quality may improve over time by reducing the quantity and abundance of noxious weeds that currently exist on the property.

PART IV. PUBLIC PARTICIPATION

1. Public involvement:

The public will be notified in the following manners to comment on this current EA, the proposed action, and the alternative:

- Two public notices in each of these papers: *Helena Independent Record* and *Bozeman Chronicle*.
- Direct mailing to adjacent landowners and interested parties to ensure their knowledge of the proposed project;
- Public notice on the Fish, Wildlife & Parks web page: <http://fwp.mt.gov>.

Copies of this EA will be available for public review at the FWP Helena Area Resource Office in Helena and the Regional Headquarters in Bozeman and on the FWP web site.

A public meeting will be held on September 22nd, 2010 at 7 p.m. in the FWP Commission Room at the FWP Headquarters in Helena to provide the public a venue to submit comments and have questions answered by FWP staff. This level of public notice and participation is appropriate for a project of this scope having few limited physical and human impacts.

2. Duration of comment period:

The public comment period will extend for 16 days following the posting of this EA on the FWP website. Written comments will be accepted until 5:00 p.m., September 28th, 2010 and can be mailed to the address below:

Canyon Creek WMA Addition Project
Montana Fish, Wildlife & Parks
Helena Area Resource Office
PO Box 200701
Helena, MT 59620

or email comments to:

jsika@mt.gov

PART V. EA PREPARATION

1. Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)? No

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.

An EIS is not required. Based on the assessment above, which has identified a very limited number of minor impacts from the proposed action, an EIS is not required and an environmental assessment is the appropriate level of review.

2. **Person(s) responsible for preparing the EA:**
Jenny Sika, FWP R3 Wildlife Biologist, Helena, MT
Rebecca Cooper, MEPA Coordinator, Helena, MT
Eric Roberts, FWP R4 Fisheries Biologist, Helena, MT

3. **List of agencies or offices consulted during preparation of the EA:**
Montana Fish, Wildlife & Parks:
 - Design and Construction Bureau, Helena
 - Fisheries Bureau, Helena Area Resource Office
 - Lands Bureau, Helena
 - Legal Bureau, Helena
 - Wildlife Bureau, Helena Area Resource Office, Montana State Library, & BozemanMontana Natural Heritage Program, Helena MT
Montana State Historic Preservation Office, Helena MT

APPENDICES

- A – Predicted Species List
- B – FWP *Canyon Creek WMA Addition Fee Title Acquisition Socio-economic Assessment* (2010)
- C – SHPO Response Letter and Cultural Resource File Search Report
- D – *Canyon Creek WMA Management Plan* (2002) – **Please note: This is a separate document in the electronic version of this EA, *CanyonCrWMA_Add_AppD.pdf*.**

APPENDIX A: PREDICTED SPECIES LIST

Table 1. List of species predicted to be present in the vicinity of the proposed Canyon Creek WMA Addition property. Prepared by Scott Story, FWP.

Common Name	Scientific Name
Long-toed Salamander	<i>Ambystoma macrodactylum</i>
Rocky Mountain Tailed Frog	<i>Ascaphus montanus</i>
Western Toad	<i>Bufo boreas</i>
Boreal Chorus Frog	<i>Pseudacris maculata</i>
Plains Spadefoot	<i>Spea bombifrons</i>
Northern Leopard Frog	<i>Rana pipiens</i>
Columbia Spotted Frog	<i>Rana luteiventris</i>
Harlequin Duck	<i>Histrionicus histrionicus</i>
Turkey Vulture	<i>Cathartes aura</i>
Northern Harrier	<i>Circus cyaneus</i>
Sharp-shinned Hawk	<i>Accipiter striatus</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Rough-legged Hawk	<i>Buteo lagopus</i>
Golden Eagle	<i>Aquila chrysaetos</i>
American Kestrel	<i>Falco sparverius</i>
Merlin	<i>Falco columbarius</i>
Peregrine Falcon	<i>Falco peregrinus</i>
Gyr Falcon	<i>Falco rusticolus</i>
Prairie Falcon	<i>Falco mexicanus</i>
Gray Partridge	<i>Perdix perdix</i>
Spruce Grouse	<i>Falcipennis canadensis</i>
Dusky Grouse	<i>Dendragapus obscurus</i>
Ruffed Grouse	<i>Bonasa umbellus</i>
Greater Sage-Grouse	<i>Centrocercus urophasianus</i>
Sharp-tailed Grouse (Columbian)	<i>Tympanuchus phasianellus columbianus</i>
Sharp-tailed Grouse (Plains)	<i>Tympanuchus phasianellus jamesi</i>
Wild Turkey	<i>Meleagris gallopavo</i>
Mourning Dove	<i>Zenaida macroura</i>
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>
Flammulated Owl	<i>Otus flammeolus</i>
Western Screech-Owl	<i>Megascops kennicottii</i>
Great Horned Owl	<i>Bubo virginianus</i>
Snowy Owl	<i>Bubo scandiacus</i>
Northern Pygmy-Owl	<i>Glaucidium gnoma</i>
Burrowing Owl	<i>Athene cunicularia</i>
Barred Owl	<i>Strix varia</i>

Table 1 continued.

Common Name	Scientific Name
Great Gray Owl	<i>Strix nebulosa</i>
Long-eared Owl	<i>Asio otus</i>
Short-eared Owl	<i>Asio flammeus</i>
Boreal Owl	<i>Aegolius funereus</i>
Northern Saw-whet Owl	<i>Aegolius acadicus</i>
Common Nighthawk	<i>Chordeiles minor</i>
Common Poorwill	<i>Phalaenoptilus nuttallii</i>
Vaux's Swift	<i>Chaetura vauxi</i>
Calliope Hummingbird	<i>Stellula calliope</i>
Rufous Hummingbird	<i>Selasphorus rufus</i>
Belted Kingfisher	<i>Megaceryle alcyon</i>
Lewis's Woodpecker	<i>Melanerpes lewis</i>
Williamson's Sapsucker	<i>Sphyrapicus thyroideus</i>
Red-naped Sapsucker	<i>Sphyrapicus nuchalis</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Hairy Woodpecker	<i>Picoides villosus</i>
American Three-toed Woodpecker	<i>Picoides dorsalis</i>
Northern Flicker	<i>Colaptes auratus</i>
Pileated Woodpecker	<i>Dryocopus pileatus</i>
Olive-sided Flycatcher	<i>Contopus cooperi</i>
Western Wood-Pewee	<i>Contopus sordidulus</i>
Willow Flycatcher	<i>Empidonax traillii</i>
Hammond's Flycatcher	<i>Empidonax hammondii</i>
Dusky Flycatcher	<i>Empidonax oberholseri</i>
Cordilleran Flycatcher	<i>Empidonax occidentalis</i>
Say's Phoebe	<i>Sayornis saya</i>
Western Kingbird	<i>Tyrannus verticalis</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
Tree Swallow	<i>Tachycineta bicolor</i>
Violet-green Swallow	<i>Tachycineta thalassina</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
Barn Swallow	<i>Hirundo rustica</i>
Gray Jay	<i>Perisoreus canadensis</i>
Steller's Jay	<i>Cyanocitta stelleri</i>
Clark's Nutcracker	<i>Nucifraga columbiana</i>
Black-billed Magpie	<i>Pica hudsonia</i>
American Crow	<i>Corvus brachyrhynchos</i>

Table 1 continued.

Common Name	Scientific Name
Common Raven	<i>Corvus corax</i>
Black-capped Chickadee	<i>Poecile atricapillus</i>
Mountain Chickadee	<i>Poecile gambeli</i>
Boreal Chickadee	<i>Poecile hudsonica</i>
Red-breasted Nuthatch	<i>Sitta canadensis</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Pygmy Nuthatch	<i>Sitta pygmaea</i>
Brown Creeper	<i>Certhia americana</i>
House Wren	<i>Troglodytes aedon</i>
American Dipper	<i>Cinclus mexicanus</i>
Golden-crowned Kinglet	<i>Regulus satrapa</i>
Ruby-crowned Kinglet	<i>Regulus calendula</i>
Western Bluebird	<i>Sialia mexicana</i>
Mountain Bluebird	<i>Sialia currucoides</i>
Townsend's Solitaire	<i>Myadestes townsendi</i>
Swainson's Thrush	<i>Catharus ustulatus</i>
Hermit Thrush	<i>Catharus guttatus</i>
American Robin	<i>Turdus migratorius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Sage Thrasher	<i>Oreoscoptes montanus</i>
Brown Thrasher	<i>Toxostoma rufum</i>
Sprague's Pipit	<i>Anthus spragueii</i>
Bohemian Waxwing	<i>Bombycilla garrulus</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>
Northern Shrike	<i>Lanius excubitor</i>
Loggerhead Shrike	<i>Lanius ludovicianus</i>
Warbling Vireo	<i>Vireo gilvus</i>
Solitary Vireo	<i>Vireo solitarius</i>
Orange-crowned Warbler	<i>Vermivora celata</i>
Yellow Warbler	<i>Dendroica petechia</i>
Yellow-rumped Warbler	<i>Dendroica coronata</i>
Townsend's Warbler	<i>Dendroica townsendi</i>
American Redstart	<i>Setophaga ruticilla</i>
Northern Waterthrush	<i>Seiurus noveboracensis</i>
MacGillivray's Warbler	<i>Oporornis tolmiei</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Wilson's Warbler	<i>Wilsonia pusilla</i>

Table 1 continued.

Common Name	Scientific Name
Western Tanager	<i>Piranga ludoviciana</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Lazuli Bunting	<i>Passerina amoena</i>
Indigo Bunting	<i>Passerina cyanea</i>
Green-tailed Towhee	<i>Pipilo chlorurus</i>
Spotted Towhee	<i>Pipilo maculatus</i>
American Tree Sparrow	<i>Spizella arborea</i>
Chipping Sparrow	<i>Spizella passerina</i>
Clay-colored Sparrow	<i>Spizella pallida</i>
Brewer's Sparrow	<i>Spizella breweri</i>
Vesper Sparrow	<i>Pooecetes gramineus</i>
Lark Sparrow	<i>Chondestes grammacus</i>
Lark Bunting	<i>Calamospiza melanocorys</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Grasshopper Sparrow	<i>Ammodramus savannarum</i>
Fox Sparrow	<i>Passerella iliaca</i>
Song Sparrow	<i>Melospiza melodia</i>
Lincoln's Sparrow	<i>Melospiza lincolnii</i>
White-throated Sparrow	<i>Zonotrichia albicollis</i>
Harris's Sparrow	<i>Zonotrichia querula</i>
Dark-eyed Junco	<i>Junco hyemalis</i>
McCown's Longspur	<i>Calcarius mccownii</i>
Lapland Longspur	<i>Calcarius lapponicus</i>
Chestnut-collared Longspur	<i>Calcarius ornatus</i>
Snow Bunting	<i>Plectrophenax nivalis</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Western Meadowlark	<i>Sturnella neglecta</i>
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Pine Grosbeak	<i>Pinicola enucleator</i>
Purple Finch	<i>Carpodacus purpureus</i>
Cassin's Finch	<i>Carpodacus cassinii</i>
House Finch	<i>Carpodacus mexicanus</i>
Red Crossbill	<i>Loxia curvirostra</i>
White-winged Crossbill	<i>Loxia leucoptera</i>
Common Redpoll	<i>Carduelis flammea</i>
Hoary Redpoll	<i>Carduelis hornemanni</i>

Table 1 continued.

Common Name	Scientific Name
Pine Siskin	<i>Carduelis pinus</i>
American Goldfinch	<i>Carduelis tristis</i>
Evening Grosbeak	<i>Coccothraustes vespertinus</i>
Masked Shrew	<i>Sorex cinereus</i>
Vagrant Shrew	<i>Sorex vagrans</i>
Dusky or Montane Shrew	<i>Sorex monticolus</i>
Water Shrew	<i>Sorex palustris</i>
Little Brown Myotis	<i>Myotis lucifugus</i>
Yuma Myotis	<i>Myotis yumanensis</i>
Long-eared Myotis	<i>Myotis evotis</i>
Fringed Myotis	<i>Myotis thysanodes</i>
Long-legged Myotis	<i>Myotis volans</i>
California Myotis	<i>Myotis californicus</i>
Western Small-footed Myotis	<i>Myotis ciliolabrum</i>
Silver-haired Bat	<i>Lasionycteris noctivagans</i>
Big Brown Bat	<i>Eptesicus fuscus</i>
Hoary Bat	<i>Lasiurus cinereus</i>
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>
Pika	<i>Ochotona princeps</i>
Mountain Cottontail	<i>Sylvilagus nuttallii</i>
Snowshoe Hare	<i>Lepus americanus</i>
White-tailed Jack Rabbit	<i>Lepus townsendii</i>
Yellow-pine Chipmunk	<i>Tamias amoenus</i>
Red-tailed Chipmunk	<i>Tamias ruficaudus</i>
Yellow-bellied Marmot	<i>Marmota flaviventris</i>
Richardson's Ground Squirrel	<i>Spermophilus richardsonii</i>
Columbian Ground Squirrel	<i>Spermophilus columbianus</i>
Golden-mantled Ground Squirrel	<i>Spermophilus lateralis</i>
Red Squirrel	<i>Tamiasciurus hudsonicus</i>
Northern Flying Squirrel	<i>Glaucomys sabrinus</i>
Northern Pocket Gopher	<i>Thomomys talpoides</i>
Beaver	<i>Castor canadensis</i>
Deer Mouse	<i>Peromyscus maniculatus</i>
Northern Grasshopper Mouse	<i>Onychomys leucogaster</i>
Bushy-tailed Woodrat	<i>Neotoma cinerea</i>
Southern Red-backed Vole	<i>Clethrionomys gapperi</i>
Heather Vole	<i>Phenacomys intermedius</i>
Meadow Vole	<i>Microtus pennsylvanicus</i>

Table 1 continued.

Common Name	Scientific Name
Montane Vole	<i>Microtus montanus</i>
Long-tailed Vole	<i>Microtus longicaudus</i>
Water Vole	<i>Microtus richardsoni</i>
Sagebrush Vole	<i>Lemmyscus curtatus</i>
Muskrat	<i>Ondatra zibethicus</i>
Western Jumping Mouse	<i>Zapus princeps</i>
Porcupine	<i>Erethizon dorsatum</i>
Coyote	<i>Canis latrans</i>
Red Fox	<i>Vulpes vulpes</i>
Swift Fox	<i>Vulpes velox</i>
Black Bear	<i>Ursus americanus</i>
Raccoon	<i>Procyon lotor</i>
Marten	<i>Martes americana</i>
Fisher	<i>Martes pennanti</i>
Short-tailed Weasel	<i>Mustela erminea</i>
Least Weasel	<i>Mustela nivalis</i>
Long-tailed Weasel	<i>Mustela frenata</i>
Mink	<i>Mustela vison</i>
Wolverine	<i>Gulo gulo</i>
Badger	<i>Taxidea taxus</i>
Striped Skunk	<i>Mephitis mephitis</i>
Northern River Otter	<i>Lontra canadensis</i>
Canada Lynx	<i>Lynx canadensis</i>
Bobcat	<i>Lynx rufus</i>
Mountain Lion	<i>Puma concolor</i>
Elk or Wapiti	<i>Cervus canadensis</i>
Mule Deer	<i>Odocoileus hemionus</i>
White-tailed Deer	<i>Odocoileus virginianus</i>
Moose	<i>Alces alces</i>
Pronghorn	<i>Antilocapra americana</i>
Painted Turtle	<i>Chrysemys picta</i>
Greater Short-horned Lizard	<i>Phrynosoma hernandesi</i>
Rubber Boa	<i>Charina bottae</i>
Eastern Racer	<i>Coluber constrictor</i>
Gophersnake	<i>Pituophis catenifer</i>
Terrestrial Gartersnake	<i>Thamnophis elegans</i>
Common Gartersnake	<i>Thamnophis sirtalis</i>
Prairie Rattlesnake	<i>Crotalus viridis</i>

APPENDIX B: FWP *CANYON CREEK WMA ADDITION FEE TITLE ACQUISITION*
SOCIO-ECONOMIC ASSESSMENT (2010)

**CANYON CREEK
WILDLIFE MANAGEMENT AREA ADDITION
FEE TITLE ACQUISITION
SOCIO-ECONOMIC ASSESSMENT**

MONTANA FISH, WILDLIFE AND PARKS

Prepared by:
Rob Brooks
July 2010

I. INTRODUCTION

House Bill 526, passed by the 1987 Legislature (MCA 87-1-241 and MCA 87-1-242), authorizes Montana Fish, Wildlife and Parks (MFWP) to acquire an interest in land for the purpose of protecting and improving wildlife habitat. These acquisitions can be through fee title, conservation easements, or leasing. In 1989, the Montana legislature passed House Bill 720 requiring that a socioeconomic assessment be completed when wildlife habitat is acquired using Habitat Montana monies. These assessments evaluate the significant social and economic impacts of the purchase on local governments, employment, schools, and impacts on local businesses.

This socioeconomic evaluation addresses the fee title purchase of property presently owned by the Ball family. The report addresses the physical and institutional setting as well as the social and economic impacts associated with the proposed fee title acquisition.

II. PHYSICAL AND INSTITUTIONAL SETTING

A. Property Description

The Ball Property is located near Canyon Creek, MT in Lewis and Clark County about 20 miles from Helena, MT. The property that MFWP would acquire encompasses approximately 151 acres. A detailed description of this property is included in the environmental assessment (EA).

B. Habitat and Wildlife Populations

Vegetation consists of timber, native grasslands and riparian areas. Elk, deer, and black bears utilize the land as well as a host of other species. In addition, a number of species of concern such as grizzly bears, Canada lynx, and wolverine use the property for movement from one area to another.

C. Current Use

The Ball property is predominately timber land and has been logged as recently as the 1980's.

D. Management Alternatives

- A) No purchase
- B) MFWP Fee Title purchase the property fee title

Alternative B, the fee title purchase will provide long-term protection of the native habitats and wildlife this land sustains and will provide additional public access opportunities to the existing Canyon Creek WMA, adjacent Bureau of Land Management lands and Forest Service lands.

No Purchase Alternative

This alternative requires some assumptions since use and management of the property will vary depending on what the current owners decide to do with the property if this transaction does not happen. The economic impacts associated with this alternative have not been calculated.

III. SOCIAL AND ECONOMIC IMPACTS

Section II identified the management alternatives this report addresses. The fee title purchase will provide long term protection of important wildlife habitat, and provide for public access. Section III quantifies the social and economic consequences of the two management alternatives following two basic accounting stances: financial and local area impacts.

Financial impacts address the cost of the fee title transfer to MFWP and discuss the impacts on tax revenues to local government agencies including school districts.

Expenditure data associated with the use of the property provides information for analyzing the impacts these expenditures may have on local businesses (i.e. income and employment).

Financial Impacts

Montana Fish, Wildlife and Parks will use monies from the Montana Fish and Wildlife Conservation Trust to purchase the Ball property fee title. The purchase price is \$635,000.00.

MCA 87-1-209 and 23-1-127 require that FWP establish an account to ensure that maintenance activities including weed control, fence maintenance, etc. are funded. This maintenance account is capped at 20% of the purchase price or \$300,000, whichever is less. In the case of the Ball property acquisition the account will be \$127,000.

The financial impacts to local governments are the potential changes in tax revenues resulting from the fee title purchase. The fee title purchase of the Ball property by MFWP will not change the tax revenues that Lewis and Clark County currently collects on this land. MFWP is required by Montana Code 87-1-603 to pay “to the county a sum equal to the amount of taxes which would be payable on county assessment of the property were it taxable to a private citizen.” The taxes on this land were approximately \$950.00 in 2009.

B. Economic Impacts

The fee title purchase will improve recreational opportunities which will have a neutral to positive impact to local businesses.

FINDINGS AND CONCLUSIONS

The fee title purchase by Montana Fish, Wildlife and Parks will provide long term protection for wildlife habitat and habitat connectivity, maintain the open space integrity of the land, ensure public recreation opportunities and provide for improved access to Forest Service lands that border Bureau of Land Management lands adjacent to this property.

The fee title purchase and title transfer to MFWP will not cause a reduction in tax revenues on this property from their current levels to Lewis and Clark County under Montana Code 87-1-603.

The financial impacts of the fee title purchase on local businesses will be neutral to positive in both the short and long run.

APPENDIX C: SHPO RESPONSE LETTER AND CULTURAL RESOURCE FILE
SEARCH REPORT

Big Sky. Big Land. Big History.
Montana
Historical Society

*Historic Preservation
Museum
Outreach & Interpretation
Publications
Research Center*

June 29, 2010

Jenny Sika
FWP
PO Box 200701
Helena MT 59620

RE: CANYON CREEK WMA ACQUISITION. SHPO Project #: 2010062902

Dear Jenny:

I have conducted a cultural resource file search for the above-cited project located in Section 3, T13N R6. According to our records there has been one previously recorded site within the designated search locale. Site 24LC1187 is the Stemple-Gould Historic Mining District. In addition to the site there has been one previously conducted cultural resource inventory done in the area. I've attached a list of the report. If you would like any further information regarding the site or report you may contact me at the number listed below.

We feel that there is a low likelihood cultural properties will be impacted as a result of this land acquisition. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should ground disturbing activities take place for a new approach/drive we would ask that a cultural resource inventory be conducted in order to determine whether or not sites exist and if they will be impacted.

If you have any further questions or comments you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. Thank you for consulting with us.

Sincerely,



Damon Murdo
Cultural Records Manager
State Historic Preservation Office

File: FWP/WILDLIFE/2010

225 North Roberts Street
P.O. Box 201201
Helena, MT 59620-1201
(406) 444-2694
(406) 444-2696 FAX
montanahistoricalsociety.org



State Historic Preservation Office

Cultural Resource Annotated Bibliography System
CRABS Section Report

July 06, 2010

Township:13N Range:06W Section:3 CRIS Report

PASSMANN DORI

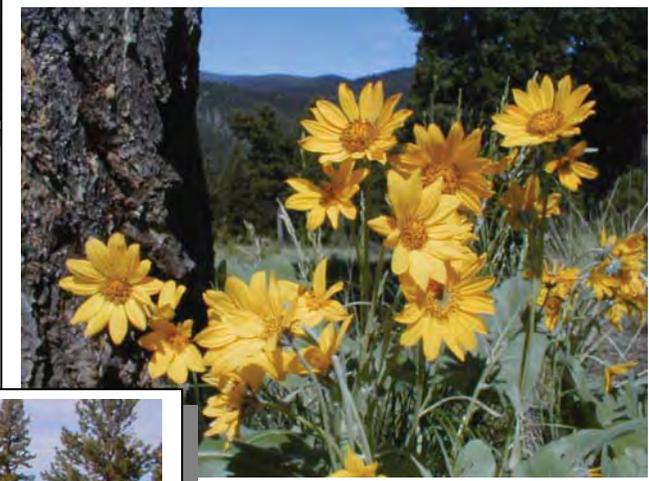
12/9/1997 MILL CREEK PROPERTY LAND EXCHANGE

CRABS Document Number: LC 6 19794 Agency Document No:

APPENDIX D: *CANYON CREEK WMA MANAGEMENT PLAN (2002)*

**Please note that this is a separate document in the electronic version of this EA:
*CanyonCrWMA_Add_AppD.pdf.***

**CANYON CREEK
WILDLIFE MANAGEMENT AREA
MANAGEMENT PLAN**



September 2002

**CANYON CREEK
WILDLIFE MANAGEMENT AREA
MANAGEMENT PLAN**

**Prepared by:
Gayle Joslin**

September 2002

PLAN APPROVAL:

Pat Flowers, Supervisor
Region 3
Montana Fish, Wildlife & Parks

Date

Don Childress, Administrator
Wildlife Division
Montana Fish, Wildlife & Parks

Date

TABLE OF CONTENTS

LIST OF FIGURES	3
INTRODUCTION.....	4
GOAL.....	4
OBJECTIVES	5
MONITORING.....	10
APPENDICES.....	13
Appendix A: HISTORY	13
Appendix B: PHYSICAL DESCRIPTION.....	14
Legal Description.....	14
Location and Topography	14
Climate.....	15
Geology.....	15
Vegetation.....	16
Water Rights	32
Mineral Rights	32
Signs and Boundary Markers.....	32
Public Use Facilities	32
Appendix C: WILDLIFE DATA	32
Winter Elk Surveys of Hunting District 339.....	33
Mule Deer Trend Surveys – Northwest Region 3.....	33
Vertebrate Species List for the Canyon Creek WMA – partial listing.....	36
Appendix D: TRAVEL PLAN.....	39
Appendix E: LEGAL DOCUMENTS	41
Appendix F: BASELINE INVENTORY	41
Appendix G: TIMBER MANAGEMENT PLAN.....	41
Appendix H: WORK PLANS.....	42
REFERENCES.....	45

LIST OF FIGURES

FIGURES

Figure 1	Canyon Creek Wildlife Management Area Location, Structures, and Facilities.....	11
Figure 2	Wildlife Conservation Easements adjacent to Canyon Creek Wildlife Management Area.....	12
Figure 3	Canyon Creek Wildlife Management Area Cover Types.....	17
Figure 4	Satellite Imagery Mapping of Vegetation on the Canyon Creek WMA.....	19
Figure 5	Canyon Creek Wildlife Management Area entrance sign	31
Figure 6	Wildlife Movement Corridor through Central Montana in relation to the Canyon Creek Wildlife Management Area	35
Figure 7	Canyon Creek Travel Plan Map	40

INTRODUCTION

The Canyon Creek Wildlife Management Area (WMA) was purchased by the Montana Department of Fish, Wildlife and Parks (MFWP) in 1996 from John and Nina Baucus of the Sieben Ranch Company. This purchase was part of a complex land transaction that involved not only the Canyon Creek fee title property but also conservation easements on the Sieben-Rattlesnake (10,867 acres), the Sieben-Lyons Creek (4,040 acres) and the O'Connell-Lyons Creek (4,154 acres) properties. (MFWP holds an easement on property in the Yellowstone drainage called Mill Creek, thus this property is referred to here as Canyon Creek, although the local reference is to Mill Creek.)

The primary purpose in acquiring Canyon Creek (2,210 acres) was to protect important wildlife habitats from subdivision and human development when it was divested from the Sieben Ranch Company. In addition, public hunting access to the property and adjacent public lands was an objective. The WMA was purchased for \$663,000 from hunting license revenues earmarked by House Bill 526 for the Habitat Montana program.

This Management Plan provides for the needs of wildlife (protect and/or enhance soil, water, vegetation) by addressing terms of road management, and other land use practices, with emphasis on improving wildlife habitat. It is intended that this plan be updated periodically to maintain its value as a flexible working document. Appendices include baseline natural resource inventory including historical and physical descriptions, wildlife survey data, a travel plan, timber management plan, copies of lease agreements, and annual work plans. Unless otherwise noted, strategies described in the following section will be the responsibilities of FWP. Hunter access is provided to both the WMA and adjacent public land. Important hunting access is provided from State Highway 279.

When acquired, the future of the Canyon Creek property was undetermined. While one option was to retain the property and manage it as a wildlife management area, another possibility was to exchange or sell the property with conservation covenants attached in order to maintain wildlife values. The property is currently being managed as a WMA.

GOAL

To conserve and improve the soil and vegetation of the wildlife management area while providing yearlong habitat for elk, upland game birds, small mammals and birds; seasonal habitat for deer, bear, forest carnivores, raptors, endemic and neo-tropical migrant birds; hunting and other recreational opportunities for the public and access to public lands.

This Management Plan provides for the needs of wildlife (protect and/or enhance soil, water, vegetation) by addressing terms of road management, and other land use practices, with emphasis on improving wildlife habitat. Unless otherwise noted, strategies described in the following section will be the responsibilities of FWP. Hunter access is provided to both the WMA and adjacent public land. Important hunting access is provided from State Highway 279.

OBJECTIVES

Objective 1: Maintain and/or improve the wildlife values which exist on the Canyon Creek property by protecting and, where necessary, improving the productivity of soils, water, and vegetation, striving for maximum vegetation diversity dependent on soil types.

Issue Incomplete vegetation analysis and documentation. Canyon Creek WMA has been in state ownership since 1996. Through the Baseline Inventory, vegetation photo plots have been initiated. Gross distribution of habitat types and vegetation baseline information has been collected, but we have a limited understanding of plant composition and potential wildlife forage production.

Strategy Increase our vegetation sampling base to include appropriately selected vegetation transects and possible expansion of photo plots. Explore techniques of estimating forage production at various geographic sites and on areas of differential elk use.

Issue Cattle grazing has resulted in impacts to riparian areas and possibly to grasslands. Prior to 1996, cattle use of the property was heavy and concentrated in riparian zones.

Strategy Remove cattle from the WMA to allow the range and riparian areas to rest and rejuvenate. This will significantly increase the amount of available forage for elk and deer.

Issue Trespass cattle. Boundary fences (except on the south boundary) do not exist and trespass cattle are a re-occurring problem.

Strategy Boundary fencing will be required to realize an effective management plan. Approximately 6 miles of boundary fence would need to be constructed. Prioritize key fence construction needs. Select a fence type that requires minimal maintenance and poses the least hazard to elk and deer. Inspect fences annually and work closely with neighbors on cooperative fence management.

Issue Thermal cover.

Strategy Evaluate the quantity, quality and location of existing thermal cover on the WMA.

Strategy Summer riparian thermal cover is improving with the preemption of cattle use on the WMA.

Strategy Although timber harvest is an option if the property were exchanged/sold, limitations on harvest would be imposed to ensure thermal cover retention, particularly since significant timber harvest has occurred on the area. Cavity nesting bird species would benefit from retention of conifer thermal cover.

Issue Some wildlife values and other potentially unique features in Canyon Creek have not been thoroughly inventoried by FWP.

Strategy If the property were to leave MFWP management, unique features that may exist such as springs, bogs, wallows, raptor nesting sites, hibernacula (bats), and sensitive plant species would be mapped if resources are available.

Issue Wildfire control. A fire suppression agreement with the Montana Department of Natural Resources and Conservation covers the WMA.

Strategy Periodically evaluate the existing written agreement with the Department of Natural Resources and Conservation that provides fire fighting services when needed for wildfires.

Issue Noxious weeds can significantly reduce range quality. Noxious weeds compete with desirable forage plants and create a poor public impression of the WMA. A variety of exotic plants (weeds) have invaded the Canyon Creek property, primarily along roadways. Several are on the state noxious weed list including spotted knapweed, diffuse knapweed, Canada thistle, and Dalmatian toadflax, among others. Surrounding properties have similar exotic plant populations.

Strategy FWP will implement a weed control plan utilizing properly prescribed chemicals on a prioritized basis. Biological agents, mowing, pulling and/or other methods will be researched and utilized where chemical control is inappropriate.

Strategy Limitations on motorized use of the property will be implemented to minimize the introduction and spread of noxious weeds.

Strategy If the property is exchanged/sold, the new landowner will be encouraged to annually evaluate distribution and abundance of weeds and aggressively control them through the use of herbicides, physical removal, biological control, and road management. Herbicides may be applied during the appropriate growth stage using the minimum amounts necessary.

Issue Implementation of conservation terms will require monitoring if the WMA is ever sold or exchanged. Initially, the Canyon Creek property was acquired with the understanding that it might be sold or exchanged in a transaction that would result in no net loss of acres of lands involved in the Habitat Montana Program. Such an exchange/sale would involve placement of conservation terms on the property.

Strategy The purpose in applying conservation terms if the property is ever sold or exchanged, would be to prevent certain land uses that may negatively impact wildlife. FWP will monitor land use on the Canyon Creek property through ground methods and aerial observation (i.e. during big game surveys, aerial photographs, and possibly satellite imagery).

Strategy If leased prior to sale or exchange, FWP will work with the lessee to make sure activities are carried out in a manner prescribed by the lease to assure natural vegetation diversity, riparian health, and soil integrity.

- Strategy Some of the major land use restrictions that are designed to protect wildlife values, and may be implemented on the Canyon Creek property include:
- Sagebrush manipulation or control will be prohibited. Sagebrush is an important native shrub that provides cover, browse, and nesting sites for an abundance of wildlife species and adds to the area's overall habitat diversity.
 - Residential subdivision will be prohibited.
 - Surface disturbance that could result from mineral exploration, development or extraction will be prohibited if subsurface mineral rights are not obtained; otherwise, mineral exploration, development or extraction will not be allowed.
 - Timber harvest would be managed to maintain and provide for wildlife habitat needs; big game summer and winter thermal cover would be emphasized.
 - Crop cultivation will be prohibited. Grass and shrub lands will remain intact.
 - Fences that inhibit wildlife movements, including woven wire fences will not be allowed. Fencing design will meet wildlife needs with the recommendation that the bottom strand of wire should be at least 18" above ground, and the top wire should be no higher than 42".
 - Use of snowmobiles will be prohibited to protect wintering wildlife.

Objective 2: Manage the western portion of hunting district 339 for a wintering population of 600 elk, and 250 mule deer; provide for upland game bird production and maintain existing nongame species.

Issue Severe winters. Periodically, severe winters result in unavailable forage for extended periods due to deep snow. The combination of snow and extreme cold can result in increased elk and deer mortality, low production and/or survival of young.

Strategy Improve riparian communities that provide emergency winter food sources such as shrubs, aspen bark and forbs, also provide thermal cover to minimize energy losses by removing livestock use. Apply habitat improvement strategies to provide high quality fall and spring forage to aid animals in reducing the effects of winter related stress. Adjust hunting season strategies to harvest more or fewer animals as appropriate. Monitor the effects of severe winters and heavy elk use on vegetation.

Issue Game damage.

Strategy On adjacent properties, game damage problems will be managed through public hunting wherever possible. Game damage materials will be provided on an as needed basis to landowners who allow public hunting.

Strategy The elk population will be managed within the framework of the Elk Management Plan. Current peak population ranges from 570 to 660 in the western portion of HD339. Based on 3-year averages, future elk management objectives will not exceed this range, with a target of 600.

Issue Upland game birds. The riparian shrub community supports a marginal population of ruffed grouse. Grouse and hunting of grouse depend on the presence of healthy aspen groves and thick shrub cover. There may be opportunities to improve habitat for blue and ruffed grouse and other species of upland game birds.

Strategy Rejuvenate riparian zones by preventing livestock use. Protecting riparian areas will serve other objectives mentioned above. Explore the possibility of improving bird habitat using the Upland Game Bird Habitat Enhancement Program.

Issue Nongame species. Little has been done to document the species of birds, mammals, amphibians and reptiles that inhabit the WMA. Species of special concern may occur.

Strategy As time and resources permit, conduct nongame surveys documenting species occurrence, distribution and seasonal use on the WMA. Bird lists and other information could be made available to the public at trailhead facilities.

Objective 3: Provide public hunting access.

Issue Access to the property and adjacent public lands.

Strategy Canyon Creek, regardless of whether it is managed as a WMA or a conservation easement under private ownership, would provide hunter access to the property itself, to adjacent public lands, and to adjacent conservation easement lands.

Issue Effects of public access. Increased public access, particularly with respect to vehicles, can result in habitat damage. Motorized use of the WMA was uncontrolled by the previous landowner. Numerous logging roads exist on the property and have been used by motorized users during the hunting season and at other times of year resulting in pioneering of roads, spread of noxious weeds, erosion, and reduced use of the area by wildlife.

Strategy Manage motorized travel to provide wildlife security and minimize losses of wildlife habitat. Prohibit all off road vehicle use. Implement seasonal closures and provide adequate signing and parking facilities to protect WMA soils and vegetation.

Strategy Retain wildlife use on the WMA and adjacent public property. Use of the WMA by people on foot or horseback, as compared to motorized users, will result in less

displacement of wildlife to adjacent private lands.

Strategy Methods to minimize hunter management workload would be devised for a potential new owner, should the property be exchanged/sold. Necessary assistance would be provided at the request of the landowner, to alleviate possible problems with managing hunter access (e.g. hunter permission slips, hunter sign-in roster, signing roads, enforcing rules, and establish parking areas).

Issue Low public awareness of management program. The public may be unaware of the MFWP management objectives and programs on the WMA.

Strategy Improve signing for the WMA near the entrance to the property. Provide a map of the area and information about the purpose and management of the WMA. Where appropriate, erect signs explaining specific management treatments that the public can view and evaluate for themselves. Conduct WMA tours and speak to groups as needed. Involve sportsmen, landowners, agencies and universities in the management of the WMA. Make the management plan available to individuals who express interest.

Issue Public unfamiliarity with regulations. The public may be unaware of WMA regulations and activities permitted on the area.

Strategy Post the regulations and dates when public use is permitted. Post the affected WMA boundaries with closure notices during seasons when certain activities are prohibited. Post notices of special hunting regulations.

Strategy Commercial use is not allowed.

Strategy Develop an informational brochure about the WMA.

Issue Confusion over boundaries. The public may be unaware of the WMA boundaries. The problem is greatest during the hunting season.

Strategy Post boundaries and maintain proper signing. Develop an informational brochure with an adequate map. Coordinate with the DNRC and Forest Service to incorporate the WMA on resource maps used by the public.

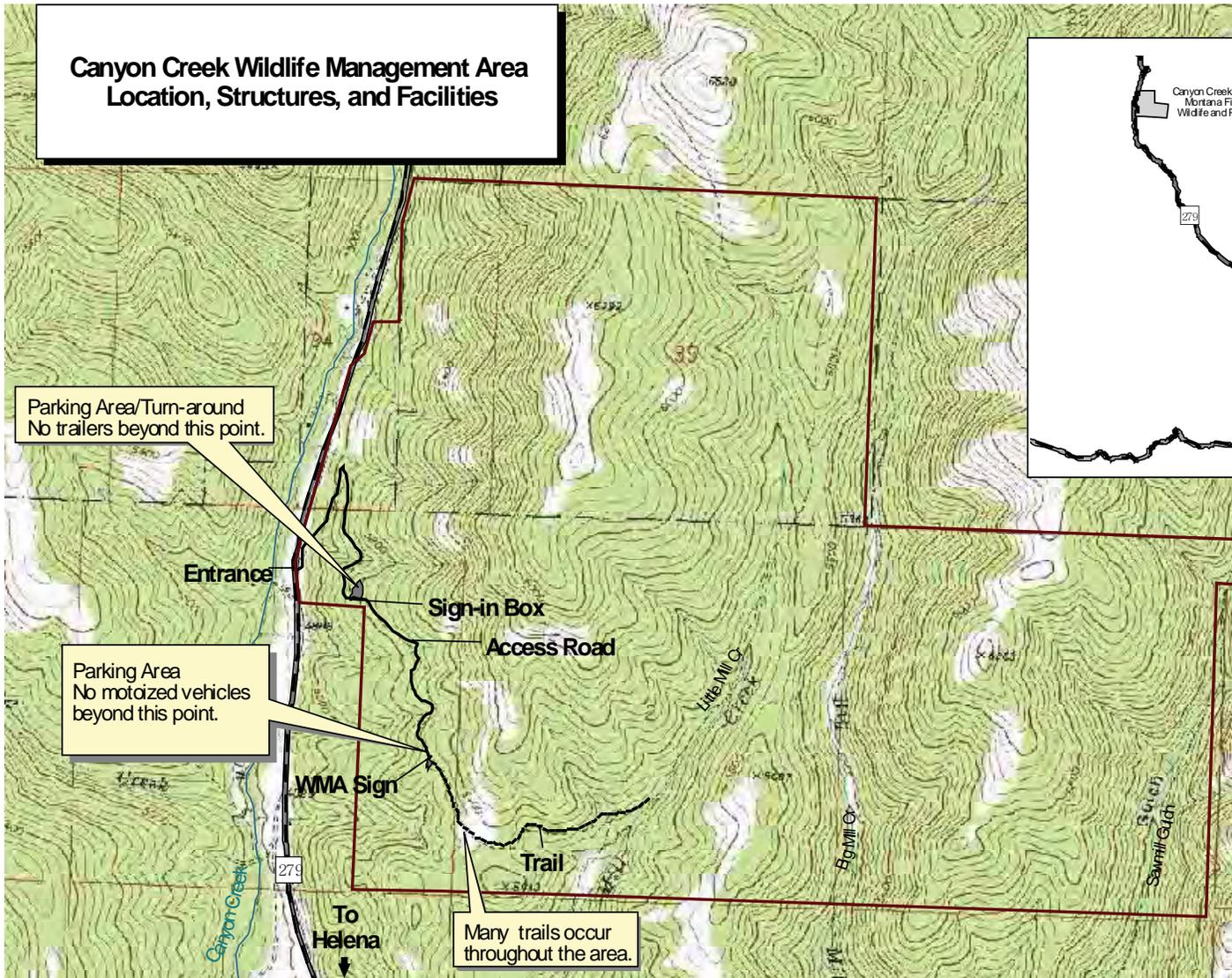
MONITORING

Annual work plan will be a yearly addendum to the management plan. The work plan uses strategies outlined in the management plan and develops projects that will accomplish stated objectives. The work plan is the action document that carries out the management plan. Work plans are the link between planning and accomplishing tasks on the ground.

The combination of Management and Work Plans allows the Department and the public to see what we have set out to accomplish, how it will be done and what we have or have not accomplished. The work plan projects are the items that will be monitored annually to see if they are solving stated problems and keeping us on track. Monitoring the work plan design and annual completion reports is a critical part of the Management Plan.

Wildlife monitoring will be conducted as has been done in the past, including annual elk surveys and mule deer post-season and spring green-up trend surveys.

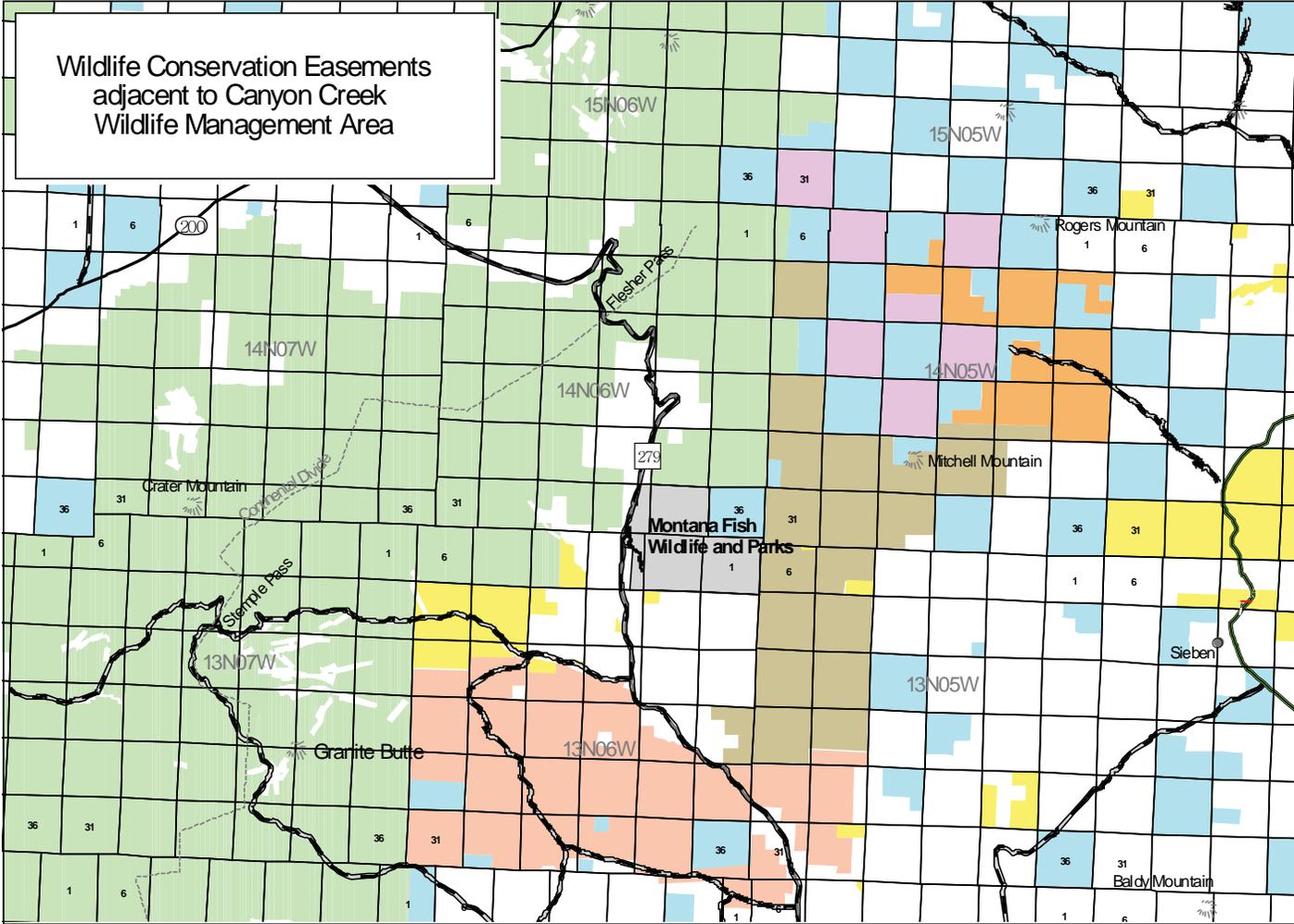
Canyon Creek Wildlife Management Area Location, Structures, and Facilities



0 0.5 1 Miles



 Canyon Creek WMA
 279 Lincoln Highway



Wildlife Conservation Easements
adjacent to Canyon Creek
Wildlife Management Area

0 1 2 Miles



- | | | | |
|---|---------------------------|---|-----------------------------|
|  | Bureau of Land Management |  | Grady Ranches CE |
|  | National Forest |  | O'Connell Lyons Creek CE |
|  | State Lands |  | Sieben Lyons Creek CE |
|  | Canyon Creek WMA |  | Sieben Rattlesnake Creek CE |
|  | |  | Other Private Land |



APPENDIX A: HISTORY

The Canyon Creek Wildlife Management Area (WMA) was purchased by FWP on September 4, 1996 from John and Nina Baucus of the Sieben Ranch Company for \$663,000 (Figure 1). This purchase was part of a complex land transaction that involved not only purchase of the Canyon Creek property, but also purchase of conservation easements on the Sieben-Rattlesnake, the Sieben-Lyons Creek and the O'Connell-Lyons Creek properties (Figure 2).

The Canyon Creek area was first settled in the 1840s by Europeans. The remains of a small log structure is present near the Little Mill Road turnoff but its history is unknown. The south half of Section 2 was owned by Eddie Anders who ran a sawmill, ranched and raised chickens in the early 1900's. Section 35 was ranched by the Strom family during the same period. Most of the Mill Creek property was acquired by the Sieben Ranch prior to 1946 and the remaining small track was acquired in 1952.

The property has experienced moderate to heavy timber harvest that has resulted in a network of logging roads which, except for designated routes, have subsequently been closed to unauthorized motorized travel. The area had been grazed by sheep and cattle until 1996, and more recently by trespass cattle. The Canyon Creek-Mill Creek portion of the Sieben Ranch livestock grazing operation proved to be difficult to manage due to steep, rugged, and timbered terrain. The area was utilized seasonally during spring and fall by domestic sheep as they were trailed between the main ranch, and summer range lands in the headwaters of the Blackfoot River. The ranch was restructured in the late 1990's, involving a partial shift from sheep to cattle. Operation costs associated with inaccessibility of the parcel proved to be problematic for effective livestock grazing, so after a portion of the timber was logged in the 1970's and 90's, this 2,210 acre parcel was split off from the main body of ranch lands and offered for sale.

During the 1980's the private property owner adjoining the Canyon Creek property on the south partially restricted public hunting and planted barley, alfalfa and other grain crops in the mountain meadows. Crop damage by elk occurred almost immediately. A series of game damage assistance efforts ensued including special hunts and aversive tactics. The property ultimately changed ownership that resulted in closure to all hunting. The adjacent private land hunting closure created a sanctuary where elk numbers increased and took refuge during the hunting season, but emerged during other times of the year, resulting in crop damage for adjacent landowners.

The Sieben Ranch traditionally allowed public hunting on their property, the manner in which hunters distributed themselves along the southern property boundary however, resulted in a firing-line situation that elk were reluctant to cross. Upon purchase of the Canyon Creek property by FWP, a walk-in only hunting strategy was implemented that alleviated hunter congestion along the boundary fence line.

Canyon Creek WMA offers secure habitat during the hunting season and a secure corridor that wildlife use to move north and east from adjoining private property and onto national forest, state, and Sieben-Rattlesnake Conservation Easement lands. Therefore, in addition to providing important winter range, acquisition of the Canyon Creek property has also been important in

redistributing elk onto state, federal, and private lands where hunting is allowed and wildlife management objectives can be realized.

APPENDIX B: PHYSICAL DESCRIPTION

Legal Description

Township 13 North, Range 6 West, P.M.M.

- Section 1: Lots 1,2,3 and 4; S $\frac{1}{2}$ N $\frac{1}{2}$; SE $\frac{1}{4}$ and SW $\frac{1}{4}$ (All Fractional)
- Section 2: Lots 1,2,3, and 4; S $\frac{1}{2}$ NE $\frac{1}{4}$; S $\frac{1}{2}$ NW $\frac{1}{4}$; S $\frac{1}{2}$ (All Fractional)
- Section 3: Lot 1, that portion of Lot 2 East of Highway, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ (as disclosed by Deed recorded on book 172, Page 211)

Township 14 North, Range 6 West, P.M.M.

- Section 34: those portions of Lot 3, NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, and NW $\frac{1}{4}$ SE $\frac{1}{4}$ East of Highway, Lot 4; SE $\frac{1}{4}$ NE $\frac{1}{4}$; NE $\frac{1}{4}$ SE $\frac{1}{4}$ (as disclosed by Deed recorded in Book 172, page 211)
- Section 35: NE $\frac{1}{4}$; NW $\frac{1}{4}$; N $\frac{1}{2}$ SE $\frac{1}{4}$; N $\frac{1}{2}$ SW $\frac{1}{4}$ and Lots 1,2,3 and 4 (All Fractional)

Containing in all 2,210 acres, more or less.

Location and Topography

The Canyon Creek property is located approximately 26 air miles northwest of Helena, east of State Highway 279, and 3 miles southeast of Flesher Pass on the Continental Divide (Figure 1).

This 2,210 acre area (3.4 square miles) is composed of rolling ponderosa pine-Douglas fir-grasslands, and the riparian headwaters of three drainages: Little Mill Creek, Big Mill Creek, and Sawmill Gulch. All three drain into Canyon Creek, a tributary of Little Prickly Pear Creek and then the Missouri River.

The WMA adjoins the Helena National Forest on the north, Montana Department of Natural Resources and Conservation land and the Sieben Ranch (Rattlesnake Creek) Conservation Easement on the east, private property on the south, and state highway 279 on the west (Figure 2). There are 3 miles of boundary in common with public land.

The elevation ranges from 4,880 feet along Highway 279 near Canyon Creek to 6,292 feet at the head of Little Mill Creek. The headwaters of all three drainages extend to the north beyond the property; thus few northerly exposures occur on the WMA, resulting in east, west, and southerly exposures conducive to big game winter range.

Climate

The Canyon Creek WMA occurs 8 air miles south of, and at the same elevation as Rogers Pass, the nearest weather station. Rogers Pass has similar climatological conditions, at an elevation of 5610 feet. Thirty-seven years of detailed weather data is available from Rogers Pass.

Fifteen to 20 inches of precipitation is received annually, with approximately half of the annual precipitation falling as snow. Over the course of the winter, about 88 inches of snow falls, with an average of 13.5 inches falling per month from December through April. May and June are the wettest months, each averaging approximately 3.06 inches of precipitation. Average monthly maximum temperatures range from 32.6 (F) in January to 81.2 (F) in July, while average minimum temperatures range from 12.6 (F) in January to 49.6 (F) in July.

ROGERS PASS 9 NNE, MONTANA (247159)

Period of Record Monthly Climate Summary

Period of Record : 8/21/1964 to 12/31/2001

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	32.6	38.7	44.4	53.8	63.2	71.5	81.2	80.7	69.2	58.1	41.7	34.0	55.8
Average Min. Temperature (F)	12.6	18.3	22.4	29.6	37.6	44.5	49.6	48.3	39.1	32.8	22.5	15.2	31.0
Average Total Precipitation (in.)	0.89	0.65	1.23	1.70	3.06	3.07	1.42	1.72	1.68	1.16	0.72	0.97	18.28
Average Total SnowFall (in.)	13.2	11.5	15.2	12.8	4.5	0.0	0.0	0.0	3.0	4.1	8.9	14.7	87.8
Average Snow Depth (in.)	4	3	2	1	0	0	0	0	0	0	1	2	1

Percent of possible observations for period of record.

Max. Temp.: 90% Min. Temp.: 89.8% Precipitation: 90.4% Snowfall: 76.9% Snow Depth: 83%
Check [Station Metadata](#) or [Metadata graphics](#) for more detail about data completeness.

In contrast, the Canyon Creek weather station is located 9 air miles south of the WMA along State Highway 279, at an elevation of 4320 feet and only receives 10.82 inches of annual precipitation.

Average snow accumulation during winter months is limited, creating ideal wintering conditions on east, west and south slopes of the WMA.

Geology

The Canyon Creek WMA occurs at an elevation, and along a portion of the Continental Divide that has experienced a complicated geologic history. According to Perry (1986), in western Montana, Middle Cambrian strata lie directly on the quartzites and argillites of the Precambrian Belt Series. The general character of the Cambrian strata is that of sandstone at the base

(Flathead Formation), overlain first by shale (Wolsey Formation) and then by limestone (Meagher Formation). There are no Ordovician or Silurian sediments at this elevation and latitude. But limestones from the Devonian Period submerged nearly all of Montana, laying down about 1,000 feet of strata, first as limestone and dolomite (Jefferson Formation), then products of evaporation in marine seas occurred, and finally shales were deposited. Deposition of dark shale (Three Forks Formation) occurred near the end of this period. During the Mississippian Period, thousands of feet of Madison limestones were laid down, then additional limestones of the lower Amsden Formation were deposited upon them. The white sand of the Quadrant Formation during the Pennsylvanian period extend just north of Helena and may not occur on the WMA. Neither are there any apparent deposits from the Permian, the final period of the Paleozoic Era.

The Triassic Period of the Mesozoic Era was a period of erosion, followed by the Jurassic which was characterized by an inland sea that created the Ellis formation. However, there are eight formations that are missing during this period in this portion of the state, and are thus important to the oil and gas industry because the Ellis formation merges directly into the Madison formation which often bears oil and gas. The Cretaceous Period produced a series of large volcanoes on the edge of the inland sea, very near to the Canyon Creek WMA (Wolf Creek area). These were the first volcanoes in Montana since early Precambrian times. This period brought an end to encroachment of marine waters.

The Cenozoic Era began with uplifting of the first Rocky Mountains during the early Tertiary Period, and then a second uplifting that resulted in the second Rocky Mountains being formed. The Quaternary Period brought glacial ice up to two miles deep, that extended south to the Missouri River and ultimately changed the course of that river. However, this ice sheet probably did not cover the WMA. Because the WMA was part of a high elevation ridge that became the Continental Divide, it was ice free and likely provided wildlife habitat throughout the Ice Age.

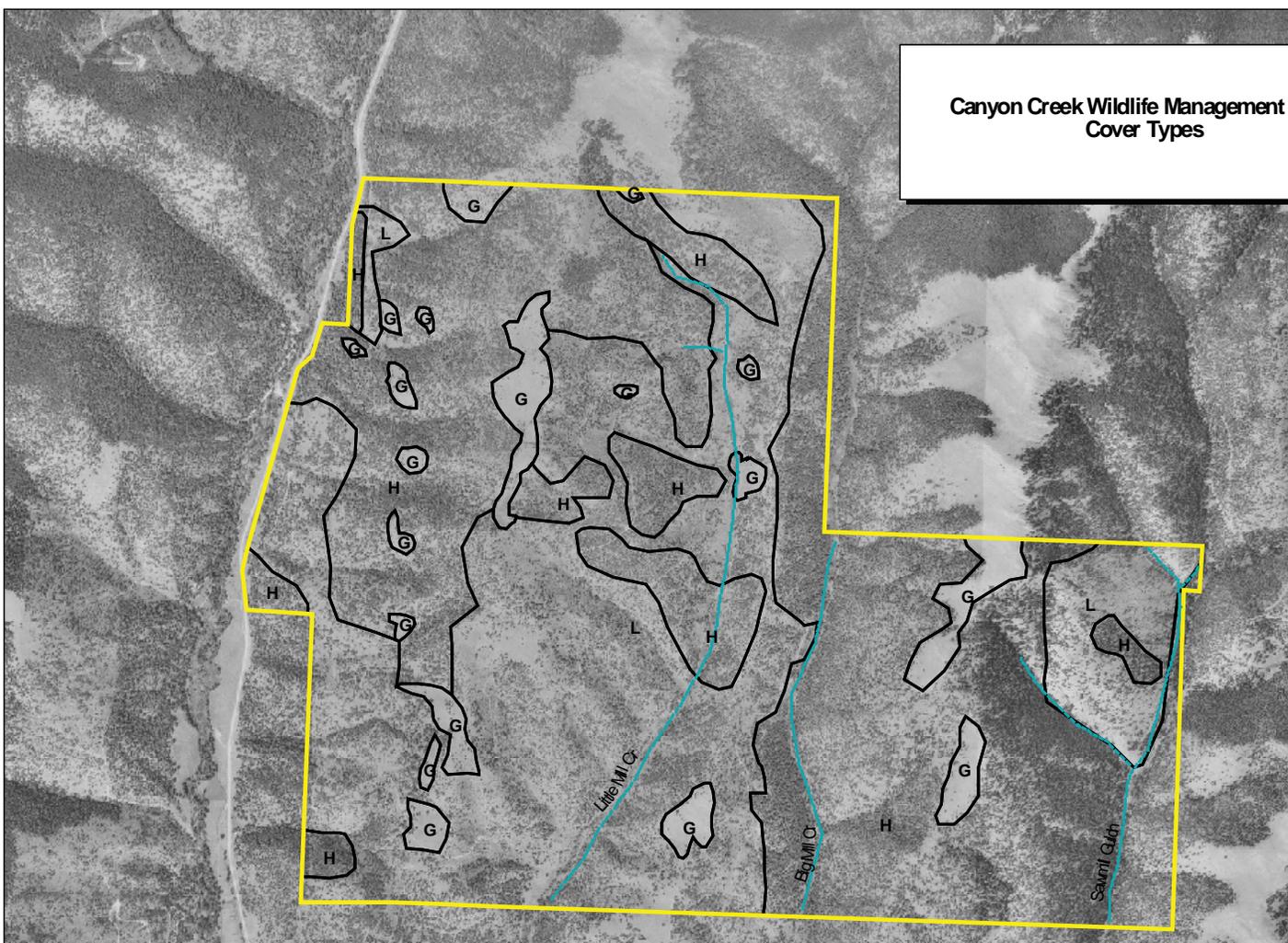
Vegetation Description

Cover Types

In a broad context, three vegetation cover types are delineated in Figure 3, including grassland, conifer forest (heavy and light timber), and riparian types.

Grassland. Figure 3 identifies locations of moderately large grassland areas. Small grassland openings also occur throughout the conifer forest due to natural occurrences or past logging. These grasslands are dominated by grass species but some sites have patches of mountain big sagebrush (*Artemisia tridentate*). The most common grassland habitat type on the WMA is the rough fescue/Idaho fescue type (*Festuca scabrella*/*Festuca idahoensis*). The other most common grassland habitat type is the Idaho fescue/bluebunch wheatgrass type (*Festuca idahoensis* /*Agropyron spicatum*). Small areas of mountain sagebrush/rough fescue type are also present.

Canyon Creek Wildlife Management
Cover Types



- H** Heavy Timber
- L** Light Timber
- G** Grassland
-  Riparian
-  Canyon Creek WMA Boundary



Conifer Forest. The most common forest habitat type is Douglas-fir/rough fescue (*Pseudotsuga menziesii/Festuca scabrella*). This habitat type occupies the majority of the WMA. Small areas of Douglas-fir/Idaho fescue (*Pseudotsuga menziesii/Festuca idahoensis*), Douglas-fir/elk sedge (*Pseudotsuga menziesii/Carex spp.*) and Douglas-fir/pinegrass (*Pseudotsuga menziesii/Calamagrostis rubescens*) also occur within the WMA.

Riparian. Riparian vegetation communities occur along the three creek drainages (Figure 3). Riparian is defined as sites that have permanent water tables at or near the surface for a significant period in the growing season. The dominant riparian habitat type is the Douglas-fir/red-osier dogwood (*Pseudotsuga menziesii /Cornus canadensis*) type. This type is dominated by scattered Douglas fir, black cottonwood (*Populus trichocarpa*) and aspen (*P. tremuloides*) with an understory that includes: red-osier dogwood, bebb's willow (*Salix bebbiana*), sandbar willow (*S. interior*), Douglas hawthorn (*Crataegus douglasii*), woodrose (*Rosa woodsii*), snowberry (*Symphoricarpos albus*), water birch (*Betula occidentalis*) and alder (*Alnus spp.*). A few sites may be classified marginally as the Englemann spruce/red-osier dogwood (*Picea engelmannii*) habitat type. A few small sites lack conifer trees and could be classified as willow types. Most riparian areas in these units show signs of past livestock use that has resulted in reduced coverage of riparian species, browse lines on shrubs, and invasion by non-native plants especially Canada thistle (*Cirsium arvense*), Kentucky bluegrass (*Poa pratensis*), common tansy (*Tanacetum vulgare*), houndstongue (*Cynoglossum officinale*), and diffuse and spotted knapweed (*Centaurea diffusa*, *C. maculosa*).

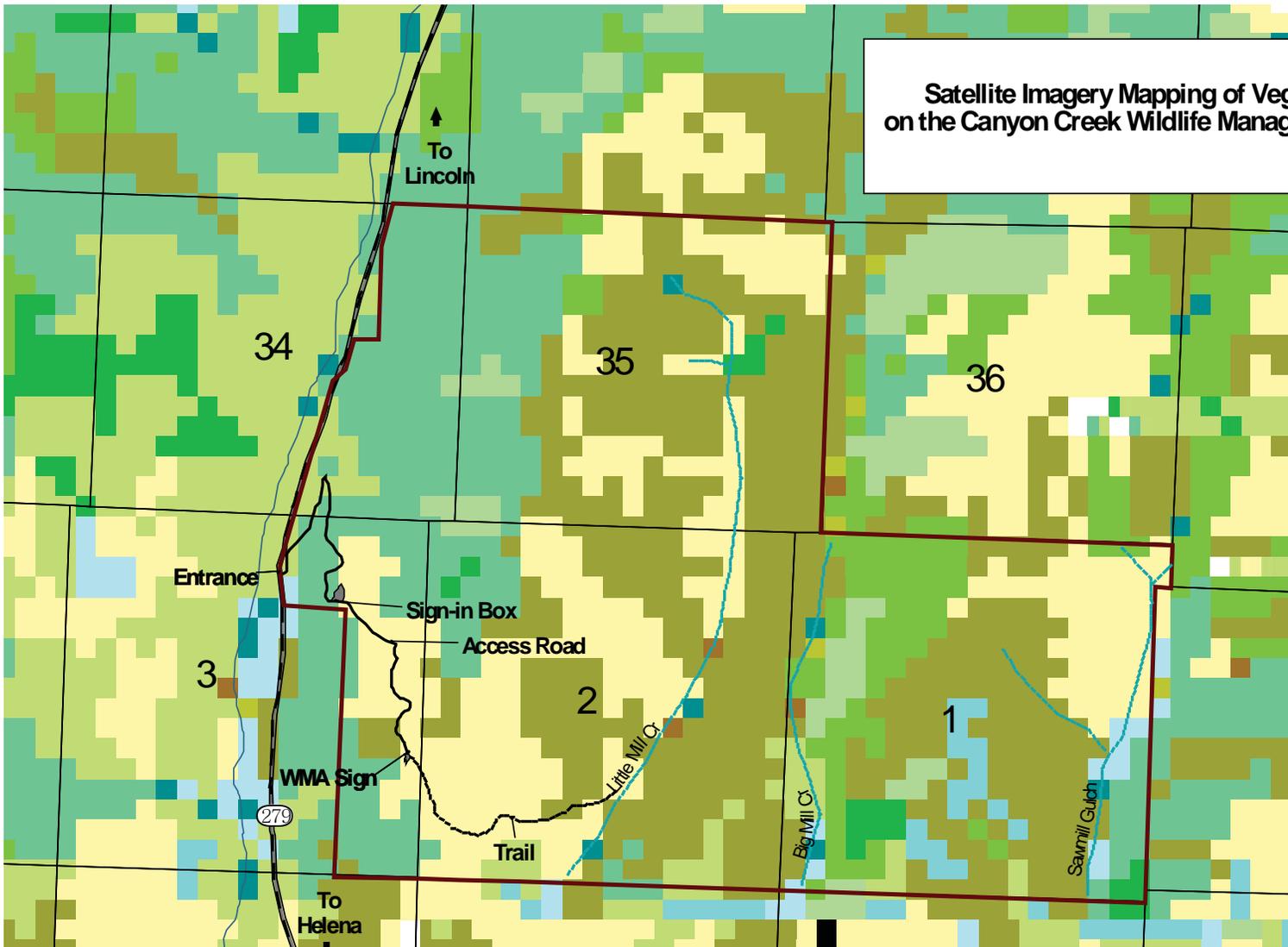
Existing Vegetation and Ground Cover based on GAP: Landsat Thematic Mapper Imagery

Upland cover types mapped to a 90 m² (0.8 ha) minimum map unit, were taken from the Montana GAP Analysis project (Redmond et al. 1998) (Figure 4). The term "GAP" refers to the gaps in national, regional, and state information relative to vegetation and vertebrate distribution. The Montana GAP project has compiled and analyzed vegetation and vertebrate data at the state wide level to identify areas within the state where biodiversity may be at risk as a result of human influence.

Redmond et al. (1998) provides caveats regarding the type of use and scale to which GAP information can be reliably applied. Although the Canyon Creek WMA occurs at a much smaller scale than is recommended for analysis of information (100,000 acres), descriptions of existing vegetation and land cover at a gross level is appropriate. The minimal map unit used in the GAP project is a pixel size of 90 m², therefore potentially important habitat microsites such as seeps, springs, and narrow riparian zones are not represented. Although these types are extremely important landscape components for wildlife, the more expansive upland categories of ground cover are described in the standard format as presented in Fisher et al. (1998).

Low/Moderate Cover Grassland. Low to moderate cover grasslands with total grass cover from 20-70%. Dominated by short to medium height grasses and forbs. Twelve dominant species are listed (Appendix C) including arrowleaf balsamroot (*Balsamorhiza sagittata*), bluebunch wheatgrass (*Agropyron spicatum*), blue grama (*Bouteloa gracilis*), bluestem (*Andropogon spp.*), among others. Includes rangelands and non-irrigated pastures.

Satellite Imagery Mapping of Vegetation
on the Canyon Creek Wildlife Management Area



Canyon WMA Boundary

Riparian



- | | | |
|------------------------------|-----------------------------|---------|
| Low/Moderate Cover Grassland | Douglas Fir/Lodgepole Pine | No Data |
| Mxed Mesic Shrubs | Mxed Subalpine forest | |
| Sagebrush | Mxed Xeric forest | |
| Lodgepole Pine | Conifer Riparian | |
| Ponderosa Pine | Graminoid and Forb Riparian | |
| Douglas Fir | Shrub Riparian | |



Mixed Mesic Shrubs. Shrublands where mesic shrubs are dominant, with shrub cover from 20-100%. Usually associated with moist sites. Dominant species in part include: alder (*Alnus spp.*), buffalo berry (*Shepherdia argentea*), ceanothus (*Ceanothus spp.*), snowberry (*Symphoricarpos spp.*), Western serviceberry (*Amelanchier alnifolia*), whortleberry (*Vaccinium scoparium*).

Sagebrush. Shrublands dominated by sagebrush (*Artemisia spp.*) with 20-80% cover. Associated grass and forb species: bluebunch wheatgrass, blue gamma (*Andropogon gracilis*), Idaho fescue (*Festuca idahoensis*), western wheatgrass (*Agropyron smithii*).

Lodgepole Pine. Conifer forest dominated by lodgepole pine (*Pinus contorta*) with 20-100% cover. Associated shrub species: huckleberry, (*Vaccinium spp.*), Oregon grape (*Berberis repens*), shiny-leaf spirea (*Spirea betulifolia*), whortleberry. Associated grass and forb species: arnica (*Arnica spp.*), beargrass (*Xerophyllum tenax*), pinegrass (*Calamagrostis rubescens*).

Ponderosa Pine. Conifer forest dominated by ponderosa pine (*Pinus ponderosa*) with 20-80% cover. Associated shrub species: big sagebrush (*Artemisia tridentata*), ninebark (*Physocarpus malvaceus*), snowberry. Associated grass and forb species: bluebunch wheatgrass, blue grama, Idaho fescue.

Douglas-fir. Conifer forest dominated by Douglas-fir (*Pseudotsuga menziesii*) with 20-90% cover. Associated shrub species: ninebark, shiny-leaf spiraea, snowberry. Associated grass and forb species: bluebunch wheatgrass, Idaho fescue, pinegrass.

Douglas-fir/Lodgepole Pine. Conifer forest with codominance of Douglas-fir and lodgepole pine with cover from 40-90%. Associated shrub species: huckleberry, Oregon grape, shiny-leaf spirea, whortleberry. Associated grass species: pinegrass.

Mixed Subalpine Forest. Mixed conifer forest with greater than 10% subalpine fir (*Abies lasiocarpa*) cover with total tree cover from 20-80%. Associated shrub species: huckleberry, menziesia (*Menziesia ferruginea*), whortleberry. Associated grass and forb species: arnica, beargrass, elk sedge (*Carex geyeri*).

Mixed Xeric Forest. Mixed xeric conifer forests with total tree cover from 20-100%. Predominately Douglas-fir and ponderosa pine stands. Associated shrub species: ninebark, shiny-leaf spirea, snowberry.

Conifer Riparian. Riparian areas dominated by conifer forest, with total tree cover from 20-100%. Associated shrub species: alder, bunchberry (*Cornus canadensis*), serviceberry, thimbleberry (*Rubus parviflorum*), twin flower (*Linnaea borealis*). Associated grass and forb species: queens cup beadlily (*Clintonia uniflora*).

These ten vegetation types, as presented in the Montana Land Cover Atlas (Fisher et al.1998, in the Montana GAP Project), occur on the Canyon Creek WMA. Although Figure 4 indicates that *Graminoid and Forb Riparian* and *Shrub Riparian* cover types are present on the WMA, classical conditions for these types do not seem to be present. Dominant species, state range, elevation information, and visual examples are presented for each type present on the WMA.

Montana Land Cover Atlas is inserted in next 10 pages in printed version of plan.

CANYON CREEK WILDLIFE MANAGEMENT AREA

-  BUREAU OF LAND MANAGEMENT
-  NATIONAL FOREST
-  STATE LANDS
-  SIEBEN CONSERVATION EASEMENT
-  CANYON CREEK WILDLIFE MANAGEMENT AREA
-  PRIVATE



- WINTER WILDLIFE CLOSURE: WMA closed to all unauthorized activities from December 1 to May 14.
- Motor and wheeled VEHICLES must stay on authorized roads only.
- WMA open to DAY-USE only.
- WEED SEED FREE FEED products are required.
- COMMERCIAL use of the WMA is prohibited.



**Montana Fish
& Parks**

Water Rights

There are no water rights associated with the property. Three tributaries that flow through the WMA originate on national forest land upstream from the property. Historic water use has been mainly for livestock watering. Limited domestic use occurred by early residents. No evidence of wells, spring developments, irrigation diversions or water rights filings was found related to this property (Dutton 1998).

Mineral Rights

No mineral resources have been identified on the WMA, and no mining activity is present although a small pit at the entrance to the property appears to have been used for gravel or rock. In an Environmental Assessment report prepared by Hydrometrics (1996) for MFWP to evaluate the pending purchase of this property, the statement is made, "it appears that either Sieben Ranch Co. or the U.S. government own all the minerals." A separate mineral title report by MFWP has not been completed on the property.

Signs and Boundary Markers

Minimal signing occurs on the Canyon Creek WMA. The entrance from Highway 279 is marked only by a road sign that indicates, "Little Mill Creek Road". Approximately 1 mile up the road, a small sign at the lower parking area advises visitors to park trailers there because there is not a turn-around at the upper parking area. A large sign (Figure 5) at the upper parking area provides and map with land ownership and regulations for the area.

Current deer and elk regulation signs are posted at the entrance to the WMA.

The Canyon Creek WMA has 8 miles of boundary in common with other landowners. Only the southern 2¼ miles of boundary is currently fenced (as of 2002), although old fencing exists along portions of the eastern boundary and some old internal fencing remains.

Public Use Facilities

An access road and two parking areas constitute the public use facilities on the property. The WMA is being managed as an undeveloped day-use site for hunting opportunity and dispersed outdoor recreation. Many miles of old logging routes occur on the property that provide hiking trails. Motorized use beyond the upper parking lot is not allowed.

APPENDIX C: WILDLIFE DATA

The Canyon Creek WMA provides yearlong elk and mule deer habitat and winter range that is contiguous with the Rattlesnake Conservation Easement property. Up to 200 elk utilize the WMA seasonally, while others travel across the WMA as they move between summer ranges west of the Continental Divide and winter ranges to the east.

Post hunting season population surveys for elk are conducted annually between December and April across the entire hunting district (339). Distribution and classification of individual animals is noted. These surveys are on record in the Helena Area Resource Office as well as the Region 3 Office in Bozeman.

ELK POPULATION SURVEYS OF HUNTING DISTRICT 339, 1989-2002

YEAR	AntlsPerm	TOTAL	#BULS	COW	CALF	%M	B:COW	CF:COW
2002	300	640	62	424	154	9.7	14.6	36.3
2001	400	661	84	424	153	12.7	19.8	36
2000	400	821	57	616	148	6.9	9.3	23.9
1999	400	776	62	571	143	7.9	10.9	25
1998	400	720	29	590	101	4	4.9	36
1997	400	902	60			6.6	10.4	36
1996	400	739	60	558	121	8.1	10.7	21.7
1995	300	610	31	469	110	5	7	23.5
1993	300	835	22			2.6	3.9	40.5
1992	300	774	26			3.4	4.6	33
1991	150	700	25	490	185	3.6	5.1	37.8
1989	100	660	19	334	182	2.9	4.8	54.5

The Canyon Creek WMA comprises a portion of the Northwest Region 3 Mule Deer Survey. This survey covers a portion of hunting districts 339 and 343. One segment of the survey is conducted annually in December to obtain classification information, particularly presence and relative age of bucks, while the second segment of the survey is conducted in April to determine fawn recruitment. The purpose of this survey is to provide long-term trend information about mule deer population fluctuations, and serve as the basis for establishing mule deer hunting seasons. These surveys are also on file in the HARO and Bozeman offices.

Early Winter Mule Deer Survey - NORTHWEST REGION 3 (HD339)

YEAR	# OBS	Fn:100Fe	Fn:100Ad	Male:100F	%Ant.Male	%2.5yr+M
1996-97	305	72.6	71.3	1.7	1.0	0
1997-98	92	15.4	15.0	2.6	2.2	0
1998-99	163	86.2	86.2	0	0	0
1999-	201	62.4	57.0	9.4	5.5	1.5
2000-01	253	60.8	52.4	16.1	9.1	0
2001-02	312	32.4	28.4	14.1	9.6	1.6

Spring Green Grass Survey of Mule Deer – (HD339)

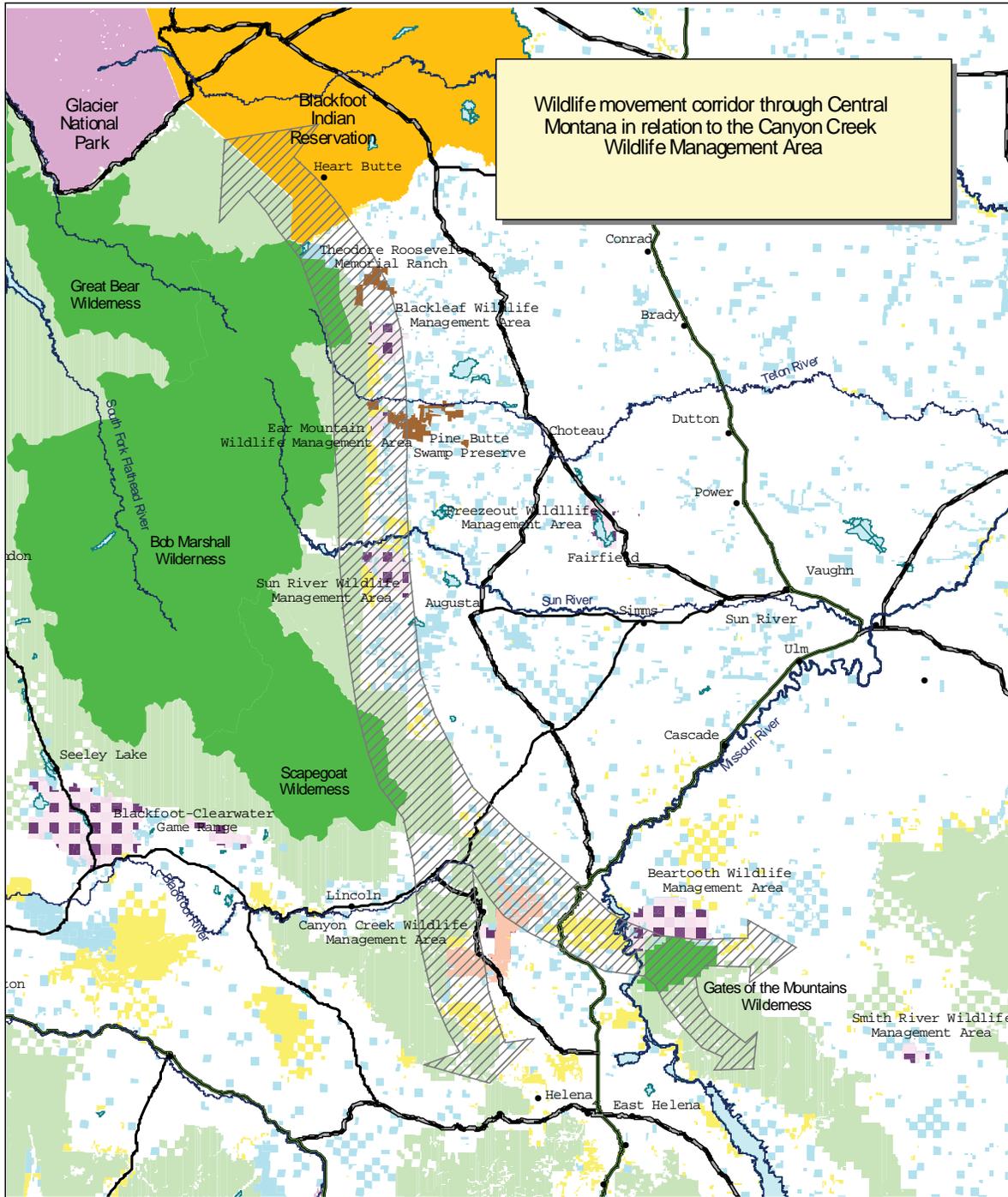
YEAR	# OBS	Fn:100Ad
1999	520	55.2
2000	380	55.7
2001	455	48.7
2002	593	46.4

Mountain lions, black bear, blue grouse, occasional white-tailed deer and a variety of non-game species are also present on the WMA, but structured survey data for these species are not gathered. Grizzly bear occur in the immediate vicinity, and one female had denned in the general area and is known to have raised at least two sets of cubs through the late 1990's and into the early decade of 2000. Gray wolves likely spend some time on and travel through the WMA. The

general area of the wildlife movement corridor as noted in Figure 6 is confirmed to be used by grizzly bear, raptors, elk, mule deer, mountain goats, and bighorn sheep, and is likely used by black bear, wolves, and other forest carnivores as well. This movement corridor is actually the geographic transitional zone between the high plains and the east slope of the Rocky Mountains. It provides relatively gentle, yet adequately secure terrain suitable for moving in a north-south direction through Montana. South of Rogers Pass, the prairie-mountain zone becomes more complicated as island mountain ranges seem to encroach upon the continental divide. The movement corridor splits with one arm continuing south along the continental divide and the other arm veering eastward to cross the Missouri River¹ and several island mountain ranges to the east. It is here, just south of Rogers Pass, as the eastern arm of the corridor begins to swing toward the Missouri River, that the Canyon Creek WMA occurs.

A list of wildlife species known to be present or presumed to be present based on existing habitat, local knowledge, and database searches of species occurrence catalogued by the Montana Natural Heritage Program for Quarter Lati-Long (LL) 27 are provided here.

¹ Wildlife cross the Missouri River between the Sleeping Giant BLM Wilderness and Ming Bar on the Beartooth Wildlife Management Area (*Prehistory to Posterity*, Montana Outdoors, March/April 1997)



- Wilderness
- Private Conservation Parcels
- FWP Wildlife Management Areas
- Grady/O'Connell/Sieben Easements
- Bureau of Land Management
- National Forest
- State Lands
- National Parks
- Indian Reservations



0 10 20 Miles



**Montana Fish,
Wildlife & Parks**

Vertebrate Species List for the Canyon Creek WMA – partial listing.

Amphibians

Scientific Name	Common Name	SC
SC: Y = species of special concern; N = no special status; W = watch		
<i>Ambystoma macrodactylum</i>	Long-toed salamander	N
<i>Rana luteiventris</i>	Columbia spotted frog	Y

Reptiles

Scientific Name	Common Name	SC
SC: Y = species of special concern; N = no special status; W = watch		
<i>Charina bottae</i>	Rubber boa	N
<i>Coluber constrictor</i>	Racer	N
<i>Pituophis catenifer</i>	Gopher snake or bullsnake	N
<i>Thamnophis elegans</i>	Western terrestrial garter snake	N

Birds

Scientific Name	Common Name	SC
SC: Y = species of special concern; N = no special status; W = watch		
<i>Cathartes aura</i>	Turkey vulture	N
<i>Haliaeetus leucocephalus</i>	Bald eagle	Y
<i>Accipiter striatus</i>	Sharp-shinned hawk	N
<i>Accipiter cooperii</i>	Cooper's hawk	N
<i>Accipiter gentilis</i>	Northern goshawk	Y
<i>Buteo swainsoni</i>	Swainson's gawk	Y
<i>Buteo jamaicensis</i>	Red-tailed hawk	N
<i>Buteo regalis</i>	Ferruginous hawk	Y
<i>Buteo lagopus</i>	Rough-legged hawk	N
<i>Aquila chrysaetos</i>	Golden eagle	N
<i>Falco sparverius</i>	American kestrel	N
<i>Falco columbarius</i>	Merlin	N
<i>Falco peregrinus</i>	Peregrine falcon	Y
<i>Falco mexicanus</i>	Prairie falcon	N
<i>Perdix perdix</i>	Gray partridge	N
<i>Falcipecten canadensis</i>	Spruce grouse	N
<i>Dendragapus obscurus</i>	Blue grouse	N
<i>Bonasa umbellus</i>	Ruffed grouse	N
<i>Columba livia</i>	Rock dove	N
<i>Zenaida macroura</i>	Mourning dove	N
<i>Otus asio</i>	Eastern screech-owl	W
<i>Otus kennicottii</i>	Western screech-owl	W
<i>Bubo virginianus</i>	Great horned owl	N
<i>Nyctea scandiaca</i>	Snowy owl	N
<i>Strix varia</i>	Barred owl	N
<i>Strix nebulosa</i>	Great gray owl	Y
<i>Asio otus</i>	Long-eared owl	N
<i>Asio flammeus</i>	Short-eared owl	N
<i>Aegolius funereus</i>	Boreal owl	Y
<i>Aegolius acadicus</i>	Northern saw-whet owl	N
<i>Chordeiles minor</i>	Common nighthawk	N

Scientific Name	Common Name	SC
SC: Y = species of special concern; N = no special status; W = watch		
<i>Stellula calliope</i>	Calliope hummingbird	N
<i>Selasphorus rufus</i>	Rufous hummingbird	N
<i>Sphyrapicus varius</i>	Yellow-bellied sapsucker	N
<i>Sphyrapicus thyroideus</i>	Williamson's sapsucker	N
<i>Sphyrapicus nuchalis</i>	Red-naped sapsucker	N
<i>Picoides pubescens</i>	Downy woodpecker	N
<i>Picoides villosus</i>	Hairy woodpecker	Y
<i>Picoides tridactylus</i>	Three-toed woodpecker	
<i>Colaptes auratus</i>	Northern flicker	N
<i>Dryocopus pileatus</i>	Pileated woodpecker	Y
<i>Contopus cooperi</i>	Olive-sided flycatcher	N
<i>Contopus sordidulus</i>	Western wood-pewee	N
<i>Tachycineta bicolor</i>	Tree swallow	N
<i>Tachycineta thalassina</i>	Violet-green swallow	N
<i>Stelgidopteryx serripennis</i>	Northern rough- winged swallow	N
<i>Riparia riparia</i>	Bank swallow	N
<i>Petrochelidon pyrrhonota</i>	Cliff swallow	N
<i>Hirundo rustica</i>	Barn swallow	N
<i>Perisoreus canadensis</i>	Gray jay	N
<i>Cyanocitta stelleri</i>	Steller's jay	N
<i>Nucifraga columbiana</i>	Clark's nutcracker	N
<i>Corvus brachyrhynchos</i>	American crow	N
<i>Corvus corax</i>	Common raven	N
<i>Poecile atricapillus</i>	Black-capped chickadee	N
<i>Poecile gambeli</i>	Mountain chickadee	N
<i>Poecile hudsonicus</i>	Boreal chickadee	N
<i>Poecile rufescens</i>	Chestnut-backed chickadee	N
<i>Sitta canadensis</i>	Red-breasted nuthatch	N
<i>Sitta carolinensis</i>	White-breasted nuthatch	N
<i>Sitta pygmaea</i>	Pygmy nuthatch	N
<i>Certhia americana</i>	Brown creeper	N
<i>Salpinctes obsoletus</i>	Rock wren	N
<i>Troglodytes aedon</i>	House wren	N
<i>Troglodytes troglodytes</i>	Winter wren	N
<i>Cistothorus palustris</i>	Marsh wren	N
<i>Cinclus mexicanus</i>	American dipper	N
<i>Regulus satrapa</i>	Golden-crowned kinglet	N
<i>Regulus calendula</i>	Ruby-crowned kinglet	N
<i>Sialia mexicana</i>	Western bluebird	N
<i>Sialia currucoides</i>	Mountain bluebird	N
<i>Myadestes townsendi</i>	Townsend's solitaire	N
<i>Catharus fuscescens</i>	Veery	N
<i>Catharus ustulatus</i>	Swainson's thrush	N
<i>Catharus guttatus</i>	Hermit thrush	N
<i>Hylocichla mustelina</i>	Wood thrush	N
<i>Turdus migratorius</i>	American robin	N
<i>Ixoreus naevius</i>	Varied thrush	N
<i>Bombycilla garrulus</i>	Bohemian waxwing	N

Scientific Name	Common Name	SC
SC: Y = species of special concern; N = no special status; W = watch		
<i>Bombycilla cedrorum</i>	Cedar waxwing	N
<i>Lanius excubitor</i>	Northern shrike	N
<i>Vireo gilvus</i>	Warbling vireo	N
<i>Dendroica petechia</i>	Yellow warbler	N
<i>Dendroica coronata</i>	Yellow-rumped warbler	N
<i>Dendroica townsendi</i>	Townsend's warbler	N
<i>Oporornis tolmiei</i>	MacGillivray's warbler	N
<i>Geothlypis trichas</i>	Common yellowthroat	N
<i>Wilsonia pusilla</i>	Wilson's warbler	N
<i>Piranga ludoviciana</i>	Western tanager	N
<i>Spizella arborea</i>	American tree sparrow	N
<i>Spizella passerina</i>	Chipping sparrow	N
<i>Calamospiza melanocorys</i>	Lark bunting	N
<i>Melospiza melodia</i>	Song sparrow	N
<i>Zonotrichia leucophrys</i>	White-crowned sparrow	N
<i>Junco hyemalis</i>	Dark-eyed junco	N
<i>Agelaius phoeniceus</i>	Red-winged blackbird	N
<i>Xanthocephalus xanthocephalus</i>	Yellow-headed blackbird	N
<i>Euphagus cyanocephalus</i>	Brewer's blackbird	N
<i>Molothrus ater</i>	Brown-headed cowbird	N
<i>Leucosticte tephrocotis</i>	Gray-crowned rosy-finch	N
<i>Pinicola enucleator</i>	Pine grosbeak	N
<i>Carpodacus cassinii</i>	Cassin's finch	N
<i>Loxia curvirostra</i>	Red crossbill	N
<i>Loxia leucoptera</i>	White-winged crossbill	N
<i>Carduelis flamma</i>	Common redpoll	N
<i>Carduelis hornemanni</i>	Hoary redpoll	N
<i>Carduelis pinus</i>	Pine siskin	N
<i>Carduelis tristis</i>	American goldfinch	N
<i>Coccothraustes vespertinus</i>	Evening grosbeak	N

Mammals

Scientific Name	Common Name	SC
SC: Y = species of special concern; N = no special status; W = watch		
<i>Sorex cinereus</i>	Masked shrew	N
<i>Sorex preblei</i>	Preble's shrew	Y
<i>Sorex vagrans</i>	Vagrant shrew	N
<i>Sorex monticolus</i>	Dusky or Montane shrew	N
<i>Sorex nanus</i>	Dwarf shrew	Y
<i>Sorex palustris</i>	Water shrew	N
<i>Sorex merriami</i>	Merriam's shrew	Y
<i>Sorex hoyi</i>	Pygmy shrew	N
<i>Sorex haydeni</i>	Hayden's shrew	N
<i>Myotis lucifugus</i>	Little brown myotis	N
<i>Myotis yumanensis</i>	Yuma myotis	W
<i>Myotis evotis</i>	Long-eared myotis	N

Scientific Name	Common Name	SC
SC: Y = species of special concern; N = no special status; W = watch		
<i>Myotis thysanodes</i>	Fringed myotis	Y
<i>Myotis volans</i>	Long-legged myotis	N
<i>Myotis ciliolabrum</i>	Western small-footed myotis	N
<i>Myotis septentrionalis</i>	Northern myotis	Y
<i>Lasionycteris noctivagans</i>	Silver-haired bat	N
<i>Eptesicus fuscus</i>	Big brown bat	N
<i>Lasiurus borealis</i>	Eastern red bat	N
<i>Lasiurus cinereus</i>	Hoary bat	N
<i>Euderma maculatum</i>	Spotted bat	Y
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	Y
<i>Antrozous pallidus</i>	Pallid bat	Y
<i>Ochotona princeps</i>	American pika	N
<i>Sylvilagus floridanus</i>	Eastern cottontail	W
<i>Sylvilagus nuttallii</i>	Mountain cottontail	N
<i>Sylvilagus audubonii</i>	Desert cottontail	N
<i>Lepus americanus</i>	Snowshoe hare	N
<i>Lepus townsendii</i>	White-tailed jack rabbit	N
<i>Lepus californicus</i>	Black-tailed jack rabbit	Y
<i>Brachylagus idahoensis</i>	Pygmy rabbit	Y
<i>Tamias minimus</i>	Least chipmunk	N
<i>Tamias amoenus</i>	Yellow-pine chipmunk	N
<i>Tamias ruficaudus</i>	Red-tailed chipmunk	N
<i>Tamias umbrinus</i>	Uinta chipmunk	Y
<i>Marmota monax</i>	Woodchuck	
<i>Marmota flaviventris</i>	Yellow-bellied marmot	N
<i>Marmota caligata</i>	Hoary marmot	N
<i>Spermophilus townsendii</i>	Townsend's ground squirrel	N
<i>Spermophilus richardsonii</i>	Richardson's ground squirrel	N
<i>Spermophilus armatus</i>	Uinta ground squirrel	N
<i>Spermophilus columbianus</i>	Columbian ground squirrel	N
<i>Spermophilus tridecemlineatus</i>	Thirteen-lined ground squirrel	N
<i>Spermophilus franklinii</i>	Franklin's ground squirrel	N
<i>Spermophilus lateralis</i>	Golden-mantled ground squirrel	N
<i>Spermophilus elegans</i>	Wyoming ground squirrel	N
<i>Cynomys ludovicianus</i>	Black-tailed prairie dog	Y
<i>Cynomys leucurus</i>	White-tailed prairie dog	Y
<i>Sciurus carolinensis</i>	Eastern gray squirrel	N
<i>Sciurus niger</i>	Eastern fox squirrel	N
<i>Tamiasciurus hudsonicus</i>	Red squirrel	N

Scientific Name	Common Name	SC
SC: Y = species of special concern; N = no special status; W = watch		
<i>Glaucomys sabrinus</i>	Northern flying squirrel	N
<i>Thomomys talpoides</i>	Northern pocket gopher	N
<i>Thomomys idahoensis</i>	Idaho pocket gopher	N
<i>Perognathus fasciatus</i>	Olive-backed pocket mouse	N
<i>Perognathus flavescens</i>	Plains pocket mouse	N
<i>Perognathus parvus</i>	Great Basin pocket mouse	Y
<i>Dipodomys ordii</i>	Ord's kangaroo rat	N
<i>Chaetodipus hispidus</i>	Hispid pocket mouse	Y
<i>Castor canadensis</i>	American beaver	N
<i>Peromyscus maniculatus</i>	Deer mouse	N
<i>Peromyscus leucopus</i>	White-footed mouse	N
<i>Onychomys leucogaster</i>	Northern grasshopper mouse	N
<i>Neotoma cinerea</i>	Bushy-tailed woodrat	N
<i>Clethrionomys gapperi</i>	Southern red-backed vole	N
<i>Phenacomys intermedius</i>	Heather vole	N
<i>Microtus pennsylvanicus</i>	Meadow vole	N
<i>Microtus montanus</i>	Montane vole	N
<i>Microtus longicaudus</i>	Long-tailed vole	N
<i>Microtus ochrogaster</i>	Prairie vole	N
<i>Microtus richardsoni</i>	Water vole	N
<i>Lagurus curtatus</i>	Sagebrush vole	N
<i>Ondatra zibethicus</i>	Muskrat	N
<i>Synaptomys borealis</i>	Northern bog lemming	Y
<i>Rattus norvegicus</i>	Norway rat	N
<i>Mus musculus</i>	House mouse	N
<i>Zapus hudsonius</i>	Meadow jumping mouse	Y
<i>Zapus princeps</i>	Western jumping mouse	N
<i>Erethizon dorsatum</i>	Common porcupine	N
<i>Myocastor coypus</i>	Nutria	N
<i>Canis latrans</i>	Coyote	N
<i>Canis lupus</i>	Gray wolf	Y
<i>Vulpes vulpes</i>	Red fox	N
<i>Vulpes velox</i>	Swift fox	Y
<i>Urocyon cinereoargenteus</i>	Common gray fox	N
<i>Ursus americanus</i>	Black bear	N
<i>Ursus arctos horribilis</i>	Grizzly bear	Y
<i>Procyon lotor</i>	Common raccoon	N
<i>Martes americana</i>	American marten	N
<i>Martes pennanti</i>	Fisher	Y
<i>Mustela erminea</i>	Ermine	N
<i>Mustela nivalis</i>	Least weasel	N
<i>Mustela frenata</i>	Long-tailed weasel	N
<i>Gulo gulo luscus</i>	North American wolverine	Y

Scientific Name	Common Name	SC
SC: Y = species of special concern; N = no special status; W = watch		
<i>Taxidea taxus</i>	American badger	N
<i>Spilogale putorius</i>	Eastern spotted skunk	W
<i>Spilogale gracilis</i>	Western spotted skunk	W
<i>Mephitis mephitis</i>	Striped skunk	N
<i>Lutra canadensis</i>	Northern river otter	N
<i>Felis/Puma concolor</i>	Mountain lion	N
<i>Lynx canadensis pop 1</i>	Lynx (US Lower 48)	Y
<i>Felis rufus</i>	Bobcat	N
<i>Cervus elaphus</i>	Wapiti or Elk	N
<i>Odocoileus hemionus</i>	Mule deer	N
<i>Odocoileus virginianus</i>	White-tailed deer	N
<i>Alces alces</i>	Moose	N

**APPENDIX D: TRAVEL PLAN
CANYON CREEK
WILDLIFE MANAGEMENT AREA
TRAVEL PLAN**

Goal: *Manage for the welfare of Montana's wildlife and provide hunting opportunities that are compatible with wildlife habitat.*

The Canyon Creek property was acquired by Montana Fish, Wildlife & Parks in 1996, to protect wildlife habitat and provide hunter opportunity. The property includes portions of Canyon Creek, Little Mill Creek, Big Mill Creek and Sawmill Gulch (Figure 5). The Canyon Canyon Creek property adjoins Helena National Forest and Montana Department of Natural Resources and Conservation lands to the north, and the Sieben Ranch-Rattlesnake Conservation Easement to the east.

The Canyon Creek Wildlife Management Area (WMA) provides a unique tool to help redistribute big game animals from concentrated use on adjacent private lands, to a broader area of huntable public and conservation easement lands.

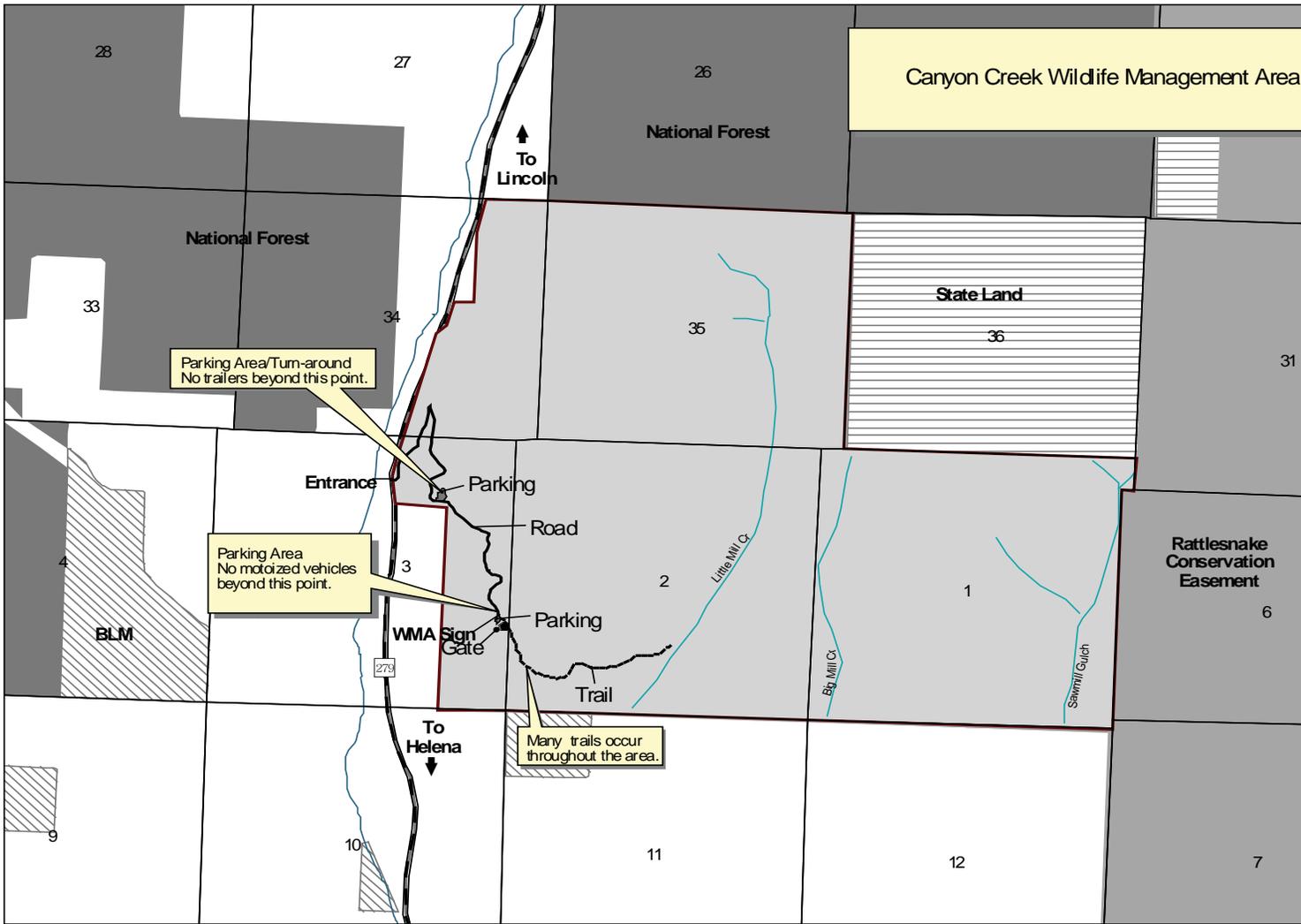
A wildlife movement corridor extends through the WMA along the Continental Divide to public lands and private conservation easement lands adjoining the WMA. Elk move between public and private lands if security is adequate. In an effort to maintain unhindered movement of wildlife, motorized use of the WMA is not allowed. Elk will move off of private lands (much of which is closed to hunting) and onto public lands and hunter-accessible private lands, ultimately resulting in improved hunter opportunities and wildlife management.

Public use (467 vehicles during the first week of the general hunting season, 1997) and interest in the area have resulted in implementation of restrictions to reduce human impacts on wildlife and their habitat. Area closure during winter and early spring and a restrictive travel plan (Figure 7) limits disturbance of wintering big game animals and reduces their movement onto adjoining private lands.

Minimal development of public facilities such as camping and parking areas and interior roads and trails is planned in order to preserve the undeveloped, primitive nature of the area. The following regulations apply to the WMA:

1. **Winter Wildlife Closure:** WMA closed to all unauthorized activities from December 1 to May 14.
2. Motor and wheeled **Vehicles** must stay on authorized roads only.
3. WMA open to **Day-Use** only.
4. **Weed Seed Free Feed** products are required.
5. **Commercial** use of the WMA is prohibited.

Thank you for your continuing support and commitment to Montana's wildlife.



-  Bureau of Land Management
-  National Forest
-  State Lands
-  Sieben Conservation Easement
-  Canyon Creek Wildlife Management Area

This is your area to use and enjoy, but while you are here, please note the following:

1. Winter Wildlife Closure: WMA closed to all unauthorized activities from December 1 to May 14.
2. Motor and wheeled Vehicles must stay on authorized roads only.
3. WMA open to Day-Use only.
4. Weed Seed Free Feed products are required.
5. Commercial use of the WMA is prohibited.



APPENDIX E: LEGAL DOCUMENTS

The following are on file in the Helena Area Resource Office in the Canyon Creek WMA file.

Warranty Deed – September 4, 1996

APPENDIX F: BASELINE INVENTORY

Canyon Creek Property – Baseline Inventory was prepared by Land and Water Consulting Inc. of Missoula subsequent to purchase of the property, in anticipation of possible exchange or sale of the property with conservation covenants attached. This 28 page document, including maps, photos, and hiding cover models (including computer program) is on file in the Helena Area Resource Office in the Canyon Creek WMA file.

APPENDIX G: TIMBER MANAGEMENT PLAN

Timber Management Plan – Canyon Creek Property, 2210 acres was prepared by Ottman Forestry Consultants Inc. of Missoula, Montana, in October 1997, subsequent to purchase of the property, in anticipation of possible exchange or sale of the property with conservation covenants attached. This 7 page document, including maps and photos of conifer forests occurring on the WMA, details how the timber on the WMA might be harvested and still retain thermal cover and hiding cover features for the area.

mule deer. Biologists will evaluate survey data and initiate needed population and land management procedures to maintain and where possible increase wildlife on the area. Habitat work will include enforcement of restrictions on trespass livestock grazing and contract weed spraying.

Elk, deer, upland game bird harvest monitored through the Silver City Check Station - annually
Weed spraying - annually
Compile nongame and bird species lists – on-going effort
Raptor nests – on-going effort
Place boundary signs on the south boundary fence - 2003
Expand photo monitoring and GPS locate each site – 2003, then every 3 to 5 years
Evaluate and prioritize fencing needs – 2003
Develop an informational brochure for the WMA - 2004
Unique feature survey - 2004
Establish vegetation exclosures as part of the vegetation monitoring program if funding is available - 2004
Evaluate upland game bird habitat enhancement possibilities – 2006
Sensitive plant surveys – if property is ever exchanged

Regional Supervisor Approval:

Div. Administrator Approval:

END OF YEAR PROJECT REPORT / JOB PROGRESS REPORT
FY02: July 1, 2001 – June 30, 2002

Division Wildlife Region 3 SBAS Project Number _____
Project Title Canyon Creek Wildlife Management Area
Federal Aid Project Number _____ (if Fed Aid Project)
Date Project Started 07/01/96 Ending Date on-going (or indicate if ongoing)

- A. List work scheduled to be completed for this project (include performance standards from your FY01 work plan). Write either “completed”, “not completed”, or “partially completed” beside each item listed to indicate work actually done last FY.

List tasks from work plan:

Wildlife Biologist’s Duties:

- Conduct population, habitat, and hunter harvest surveys for the hunting district that includes the WMA. Completed/On-going
- Population surveys are conducted in the winter for elk and in the winter and spring for mule deer. Completed/On-going

- Evaluate survey data and initiate needed population and land management procedures to maintain and where possible increase wildlife on the area. Completed/On-going
 - Habitat work includes enforcement of restrictions on trespass livestock grazing Completed/On-going
 - Contract weed spraying. Completed/Ongoing
 - Monitor harvest of elk, deer, and upland game birds through the Silver City Check Station. Completed/On-going
- B. Describe any variance between work scheduled and work completed and explain: (i.e., problems incurred and resulting impacts to attainment of project objectives).

No major variance between work scheduled and completed was encountered or major problems incurred during this report period.

- C. Discuss impact(s) of project variance to MFWP programs (as related to objectives stated in the strategic plan, species plans or other long range documents). Also discuss any significant accomplishments of this project (state in terms of outputs produced if possible, i.e. recreation days, etc.)
- ✓ A management plan for the CCWMA was initiated.
 - ✓ Meetings were held with adjacent landowner John Baucus to discuss possible unintentional use of the WMA by Sieben Ranch cattle as the Sieben Ranch initiates implementation of a rest rotation pasture system adjacent to the CCWMA.
 - ✓ New Wildlife Management Area sign was installed at the upper parking area.
 - ✓ A visitor use Roster Box was installed at the lower parking area.
 - ✓ A metal gate and wooden jack-leg fence have been installed at the upper parking areas.
 - ✓ Upper and lower parking areas, turn-around area, and the road have been graded.
 - ✓ Weed spraying has been conducted annually with a boom sprayer since 1999, and has been successful in substantially reducing the infestation of knapweed, Canada thistle, and mullein along roadways.
 - ✓ Livestock have been restrained from entering the WMA in an effort to allow stream banks to stabilize, and improvements are now becoming visible after 6 years. Trespass cattle did occur on the WMA in 2001 from the Lyons Creek Conservation Easement when Rick Dean contracted pasture from Andersons and did not keep track of the cattle. His contract was terminated by Anderson's.
 - ✓ Photo points have been established on the WMA. Additional work to quantify all locations will be made in 2003
 - ✓ Thermal cover analysis has been conducted for the WMA.
 - ✓ Timber management plan recommendations were provided for the WMA

REFERENCES

Dutton, B. 1998. Canyon Creek Property – Baseline Inventory. May 1998. Land and Water Consulting Inc., P.O. box 8254, Missoula, MT 59807 Project #S96-015T4 52pp.

Fisher, F.B., J.C. Winne, M.M. Thornton, T.P. Tady, Z. Ma, M.M. Hart, and R.L. Redmond. 1998. Montana land cover atlas. Unpublished report. Montana Cooperative Wildlife Research Unit, University of Montana, Missoula. viii + 50 pp.

Hydrometrics, Inc. 1996. Phase I Environmental Assessment of the Sieben Ranch Mill Creek Property. Prepared for Montana Department of Fish, Wildlife and Parks.

Montana Fish, Wildlife and Parks. 1996. Sieben Ranch-Rattlesnake Conservation Easement, Canyon Creek Acquisition, Lyons Creek Conservation Easement: Environmental Assessments; Management Plans; Socio-Economic Assessments. June 1996. Montana Fish, Wildlife & Parks, Helena, MT 62pp.

Ottman, J. 1997. Mill Creek Timber Management Plan. October 1997. Ottman Forestry Consultants Inc. Missoula, MT 27pp.

Perry, E.S. 1986. Montana in the Geologic Past. Montana Bureau of Mines and Geology, Montana College of Mineral Science and Technology. Reprint 5. 78pp.

Redmond, R.L., M.M. Hart, J.C. Winne, W.A. Williams, P.C. Thornton, Z. Ma, C.M. Tobalske, M.M. Thornton, K.P. McLaughlin, T.P. Tady, F.B. Fisher, S.W. Running. 1998. The Montana GAP Analysis Project: final report. Unpublished report. Montana Cooperative Wildlife Research Unit, University of Montana, Missoula. xiii + 136 pp. + appendices.

[WMA\CanyonCr\CanyonCrMgmtPlan2002]