

DNRC - Trust Land Management Division
CHECKLIST ENVIRONMENTAL ASSESSMENT

RECEIVED

AUG 18 2004

D.N.R.C.

Project Name:	Sweetwater Timber Permit
Proposed Implementation Date:	July 25, 2004
Proponent:	CR logging, Inc.
Location:	NW1/4NE1/4 AND NW1/4 Section 36, Township 8 South, Range 7 West
County:	Madison

I. TYPE AND PURPOSE OF ACTION

A limited access timber permit for the harvest of an estimated 100 MBF of Douglas fir, lodgepole pine, spruce and subalpine fir timber from approximately 20 acres. Purpose of the action is to generate revenue for the school trust, improve forest health through removal of overstocked timber, reduce susceptibility to insect, disease and fire and bring treated portions of stand closer to a semblance of historic conditions. (See Attachment A for vicinity and site specific locations).

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: **RECEIVED**
Provide a brief chronology of the scoping and ongoing involvement for this project.

A field review was conducted in July 2004 by Dillon Unit Manager Richard Moore and DNRC Forest Ranger Barone. SEP 28 2004

Letters were sent to the following seeking comments for the proposed timber harvest: **LEGISLATIVE ENVIRONMENTAL POLICY OFFICE**

- MT Dept. of Fish, Wildlife and Parks, Regional Supervisor, P. Flowers
- MT Dept. of Fish, Wildlife and Parks, Fisheries Management Biologist, R. Oswald
- Bureau of Land Management, T. Bozorth
- Ruby Dell Ranch
- Sauerbier Ranches, Inc. (Lessee)

Other contacts:

- DNRC, Archaeologist, P. Rennie
- Montana Natural Heritage Program
- Montana Fisheries Information System

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The Madison County Weed Board administers the State weed laws in Madison County. The Weed Board is contacted by the DNRC and given a weed plan for each project.

A Madison County burning permit would be required if slash burning is done. The DEQ, in conjunction with the Cooperative Airshed groups, regulate the volume of particulate emissions from open burning of slash. The DNRC is a part of this airshed group.

3. ALTERNATIVES CONSIDERED:

Action Alternative: Harvest approximately 100 MBF of overstocked timber from an estimated 20 acres of State land.

Stand treatments would consist of group selection/selection harvests in overstocked areas. Harvest design is directed at reducing the susceptibility to insect and disease attack, and fire by reducing overstocking of the stand.

Approximately 650 feet of temporary new road would be needed to access harvest unit. Excess slash would be consolidated at landings and burned.

No Action Alternative: Current management actions would be maintained and forest management and harvesting actions would be deferred. This tract is currently leased for grazing.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Soils within the proposed sale area are mainly the Shadow complex and Macfarlane stony sandy loams, formed in colluvium and glacial fill from mixed sources. Localized areas of Mikesell series (grey-brown) clayey soils may occur as wet spots and should be avoided during the harvest process. Permeability is moderately rapid while surface runoff and water erosion hazard are moderate. Slopes are 35-45% with short pitches up to 50%, and are suitable for tractor operations.

The primary risks to long-term soil productivity are direct effects of rutting and displacement of surface soils on steep slopes by equipment operation and road construction. A combination of mitigation measures would be implemented to maintain soil productivity and control or reduce the area and degree of soil impacts. Operations would retain a portion of coarse woody debris and fine litter for nutrient cycling, soil moisture retention, erosion control, and provide shade and organic matter to enhance survival of seedlings through droughty periods. Wider tree spacing and removal of overstocking should reduce plant competition for limited soil nutrients and improve growth on all harvest sites. Implementation of BMP's and recommended mitigation measures should reduce the area and degree of soil impacts of harvest areas to control erosion and maintain soil productivity.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The proposed project area includes Timber Creek, a tributary of the West Fork of Sweetwater Creek, a subbasin of Sweetwater Creek. The West Fork of Sweetwater Creek is not listed on the Montana 303(d) list as an impaired stream. Sweetwater Creek is listed on the Montana 303(d) list as an impaired stream. Probable causes of the listing include bank erosion, dewatering, flow alteration, and other habitat alterations, and the probable sources include agriculture and grazing-related sources. As described, the Sweetwater Creek 303(d) listing is not associated with forest management activities. The project is not expected to have any direct, indirect, or cumulative downstream impacts to water quality, water yield, watershed conditions, or fisheries in the West Fork of Sweetwater Creek or Sweetwater Creek.

The Missouri River drainage, including Sweetwater Creek, is classified as B-1 in the Montana Surface Water Quality Standards. The B-1 classification is for multiple use waters suitable for domestic use after conventional treatment, growth and propagation of cold-water fisheries, associated aquatic life and wildlife, and agricultural and industrial uses. The State has adopted Forestry Best Management Practices through its Nonpoint Source Management Plan as the principle means of controlling nonpoint source pollution from silvicultural activities.

Cold-water fisheries do exist in the West Fork of Sweetwater Creek and Sweetwater Creek, however, none are known to exist in Timber Creek.

Implementation of appropriate Best Management Practices and mitigation measures would (1) provide adequate large woody debris rates of recruitment, (2) provide adequate levels of stream shading, (3) provide a filtration zone of adequate size, and (4) a high level of tree density within the SMZ.

Given the low relative harvest area, minimal road construction away from the watershed, and minimal harvest within the SMZ, no foreseeable direct, indirect or cumulative impacts are anticipated to any beneficial uses associated with the Sweetwater Creek watershed.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The project includes piling and burning of logging slash. Localized short duration particulate emissions occur during slash burning. Slash burning is normally conducted in late October through November. Particulate emissions during this period are regulated by the DEQ and the Cooperative Airshed groups. The DNRC, as a member of the airshed group, coordinate burning times to 1) limit burning periods of acceptable smoke dispersion and 2) to limit the cumulative generation of particulates between all members of the airshed group.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The State parcel is located in the upper reaches of the Sweetwater Creek drainage on the southeast side of the Sweetwater Hills. Lands within the proposed project area occur in the foothills with generally broad and gentle ridge tops. Slopes range from 10-65% with an elevation range of 7,100-7,900 feet. Forested acres within the State parcel are dominated by Douglas-fir with a mix of lodgepole pine, spruce and subalpine fir on the moister, north facing slopes. Riparian areas tend to be mixed conifer dominated by spruce. The parcel was harvested under the Sweetwater Pass Timber Sale in 1986, totaling ~41 acres.

The proposed harvest consists of three units totaling 20 acres of Douglas-fir and Douglas-fir/lodgepole pine/spruce mix. Lodgepole pine and spruce represent ~50% and Douglas-fir ~50% of the merchantable sawlog volume within the harvest units. Predominately pure Douglas-fir stands tend to be overstocked and suppressed, leaving them more susceptible to fire and attack from insects and disease. Parent stands were likely more open and park like, periodically burned every 35-45 years by mixed severity ground fires. Overstocking has resulted where there has been an absence of fire. Encroachment occurs readily along the forest edge. Regeneration is sparse with little understory vegetation or coarse woody debris. Areas of mixed species are also overstocked and suppressed, having moderate regeneration and understory with low to moderate coarse woody debris.

Stand treatments would consist of a regeneration harvest for whitewood species such as lodgepole pine, spruce and subalpine fir. Group selection and selection harvests would be utilized for Douglas-fir, removing ~50% of the merchantable sawlog volume.

Surviving old Douglas-fir trees (greater than 150 years old) are found scattered in harvest units 1 and 2 as individual trees or clumps. Harvest unit 2 would meet the minimum requirements for old growth as currently defined under the State Forest Land Management Rules (SFLMR). Large live trees, snags and coarse woody debris, which are important attributes associated with old growth and future development of old growth, would be retained within the harvest units. The main block of old trees, located to the west of unit 1, would not be harvested. To the best of our knowledge, using the present available information, the current forest inventory data indicates the percentage of Douglas-fir old growth cover types on state land is nearly twice the estimated percentage that is likely to have historically occurred on State lands in Beaverhead and Madison Counties. The small amount of old growth acreage to be harvested under this proposal would have a negligible effect on the percentage of Douglas-fir old growth remaining on state lands in Beaverhead and Madison Counties.

Of the 640 acres of State ownership, ~207 acres are forested. There is presently more total forest cover than in prior historical conditions due to range encroachment and fire suppression. Harvesting an estimated 100 MBF of timber would alter the forest cover on approximately 20 acres. The proposed harvest would involve 9.7% of the total forested acres on the State tract and 3.1% of the entire tract. Harvest design is intended to maintain a

semblance of historic conditions through emulating mixed severity and stand replacing fires while addressing forest health issues. Natural regeneration would be expected.

No rare plants or cover types have been noted or observed within the project area or the State tract.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

A variety of big game, small mammals, raptors, songbirds and grouse potentially use this area. No fisheries are present within the proposed project area. FWP has concerns over security cover for elk in the Gravellys Elk Management Unit, in which the project is located.

Due to the size, nature, duration and location of the proposed project, no impacts are expected to wildlife and fisheries habitats.

(See Attachments B & C – Checklist for Endangered, Threatened and Sensitive Species; Montana Natural Heritage Program/Montana Fisheries Information System)

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

No threatened or endangered species have been documented within the project area. Occasional use of the area from grizzly bear could potentially occur but is generally considered outside of their normal occupied habitat. The proposed project area falls within the Yellowstone Nonessential Experimental Area for gray wolves. The Gravelly and Freezeout Packs reside in the vicinity of the project area, however, the majority of packs activities occurs ~10 miles southeast of the project area. Individuals from these packs or transients from other packs could occasionally use portions of the project area. Preferred habitat for lynx is not present within the proposed project or surrounding area.

No cold-water fisheries exist within the project area, however they do exist in the West Fork of Sweetwater Creek and Sweetwater Creek. The primary species of interest is westslope cutthroat trout (WCT), which are listed as a Class-A Montana Animal Species of Concern. The Department of Natural Resources and Conservation (DNRC) has also identified westslope cutthroat trout as a sensitive species. Due to the low fisheries values in Timber Creek there are no specific fisheries concerns.

Other species of concern noted within the area are the Great Basin Pocket Mouse and Ferruginous Hawks. The Great Basin Pocket Mouse has been documented ~1.75 miles south of the project area and Ferruginous Hawks have been sighted within 1 mile of the project area.

Due to the size, nature, duration and location of the proposed project, no impacts are expected to occur to any endangered, threatened or sensitive species.

(See Attachments B & C – Checklist for Endangered, Threatened and Sensitive Species; Montana Natural Heritage Program/Montana Fisheries Information System)

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

The DNRC cultural resource site database was searched and SHPO was consulted. There are no cultural resources known to exist within the proposed project area. No additional archaeological investigative work is recommended.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The proposed harvest units are visible from the Sweetwater county road, located ~2 miles to the east of the State parcel. The proposed project area would not be visible to any populated areas. Due to the location of the project and proposed harvest methods, it is unlikely that aesthetics would be impacted adversely.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

No cumulative impacts are expected.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

A range evaluation was conducted in May 2000.

An environmental review was prepared in January 1986 for the Sweetwater Pass Timber Sale.

DNRC adopted the Administrative Rules for Forest Management on March 13, 2003, applicable to management activities on forested State lands.

No cumulative impacts are expected.

IV. IMPACTS ON THE HUMAN POPULATION

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

NONE

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

NONE

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

People are currently employed in the wood products industry. Due to the relatively small size of the timber sale program, there will be no measurable cumulative impact from this proposed action on employment.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

People are currently paying taxes from the wood products industry in the region. Due to the relatively small size of the timber sale program, there will be no measurable cumulative impact from this proposed action on tax revenues.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

There will be no measurable cumulative impacts related to demand for government services due to the small size of the timber sale program, the short-term impacts to traffic, the small possibility of a few people temporarily relocating to the area, or the presence of other timber sales in the adjacent area.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

In March 2003, DNRC adopted the Administrative Rules for Forest Management ARM 36.11.401 through 36.11.450 (the "Rules"). This project is planned under the requirements of the Rules.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Persons possessing a valid state lands recreational use license may conduct recreational activities on the tract with permission from the private landowner with controlling access. The proposed project would not affect the existing access for the general public.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

There will be no measurable cumulative impacts related to population and housing due to the relatively small size of the timber sale program, and the fact that people are already employed in this occupation in the region.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

NONE

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

NONE

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The estimated return to the trust would be \$17,760.00 (100 MBF of sawtimber @ \$175.00/MBF and 260 tons of pulpwood @ \$1.00/ton)

Income from a grazing license of \$746.54/year for 153 AUM of use would continue with or without the harvest proposal.

EA Checklist Prepared By:	Name: Chuck Barone	Date: August 10, 2004
	Title: Dillon Unit Forester	

V. FINDING

25. ALTERNATIVE SELECTED:

After review, I have selected the proposed Action Alternative, to harvest approximately 100 MBF of overstocked timber from an estimated 20 acres of School Trust land and construct approximately 650' of temporary new road. I believe this alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area while promoting forest health and diversity, moving the stand toward a semblance of historic conditions, and generating revenue for the school trust from timber harvest.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I conclude all identified potential impacts will be avoided or mitigated by the project size, short duration, timing, design, contract provisions, project administration, and BMP compliance, and no significant impacts will occur as a result of implementing the selected alternative.

MEASURES RECOMMENDED TO MITIGATE POTENTIAL IMPACTS:

- 1) Compliance with Forestry Best Management Practices (BMP's) and Streamside Management Zone (SMZ) laws.
- 2) Limit equipment operations to periods when soils are dry, frozen or snow covered to minimize soil compaction and rutting.
- 3) Install and maintain adequate drainage on roads, landings and skid trails.
- 4) Retain all fine litter as feasible and 5-10 tons/acre of coarse woody debris >3" diameter.
- 5) Construct road in accordance with DNRC road specifications. Effectively close new road construction with slash and debris.
- 6) All road construction and logging equipment will be power washed and inspected prior to being brought on site. Sale area will be monitored for weeds following harvest and a treatment plan will be developed should noxious weeds occur.
- 7) Promptly seed newly disturbed soils on temporary roads, main skid trails (where needed) and landings with an appropriate seed mixture.

- 8) Ground-based skidding equipment (tractors and skidders) would be limited to slopes of 45% (50% on short, unsustained pitches).
- 9) Skid trails will have erosion controls installed and/or adequate slash where needed.
- 10) One snag and one snag recruit per acre, >21" dbh, will be retained where applicable. Cull live trees and cull snags will be retained where applicable.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS
 More Detailed EA
 No Further Analysis

EA Checklist Approved By:	Name: Richard A. Moore Title: Dillon Unit Manager	
Signature:	<i>Richard A. Moore</i>	Date: August 16, 2004

ATTACHMENTS

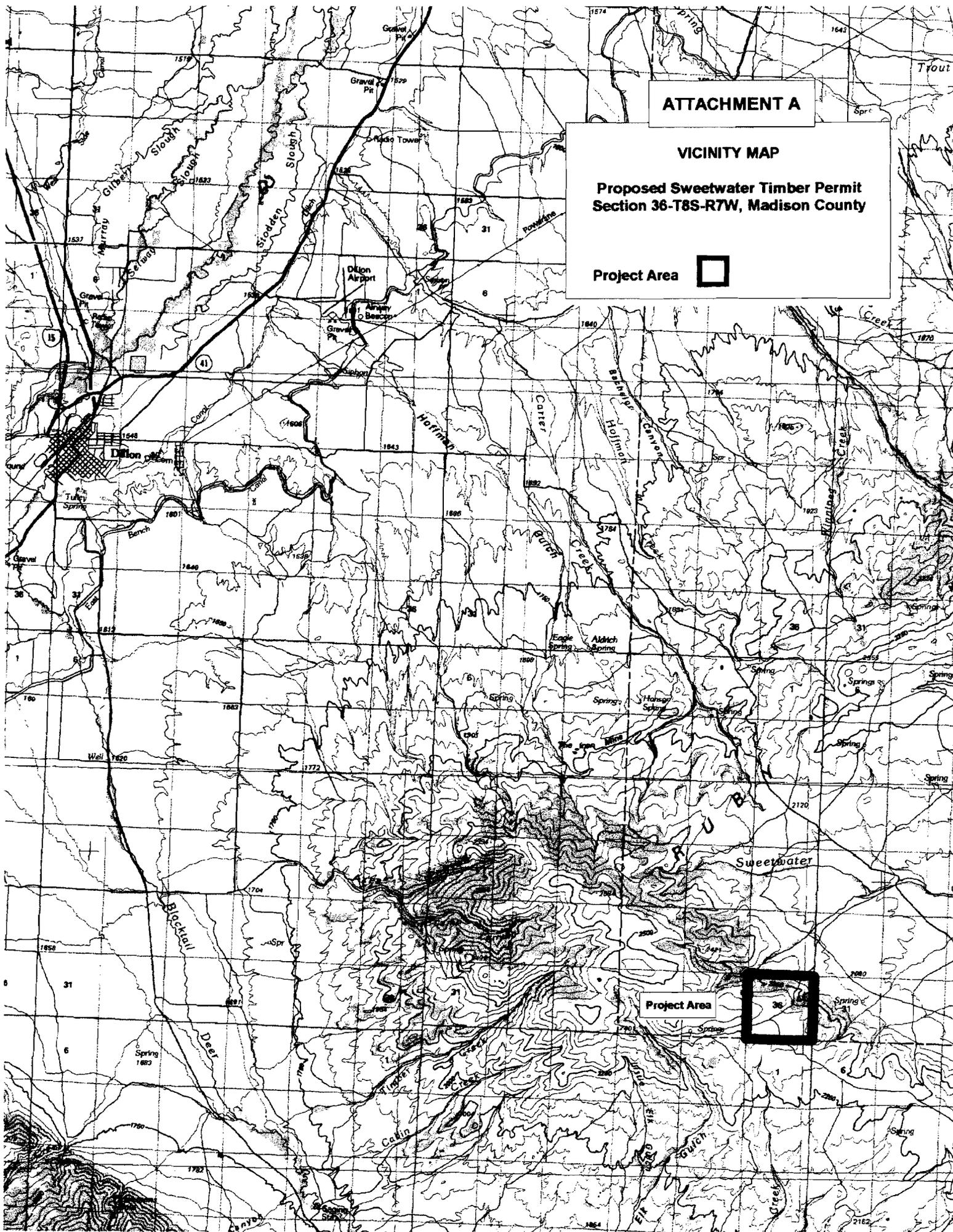
- A - Vicinity Map/Site Specific Map
- B - Checklist for Endangered, Threatened and Sensitive Species
- C - Montana Natural Heritage Program/ Montana Fisheries Information System

ATTACHMENT A

VICINITY MAP

**Proposed Sweetwater Timber Permit
Section 36-T8S-R7W, Madison County**

Project Area

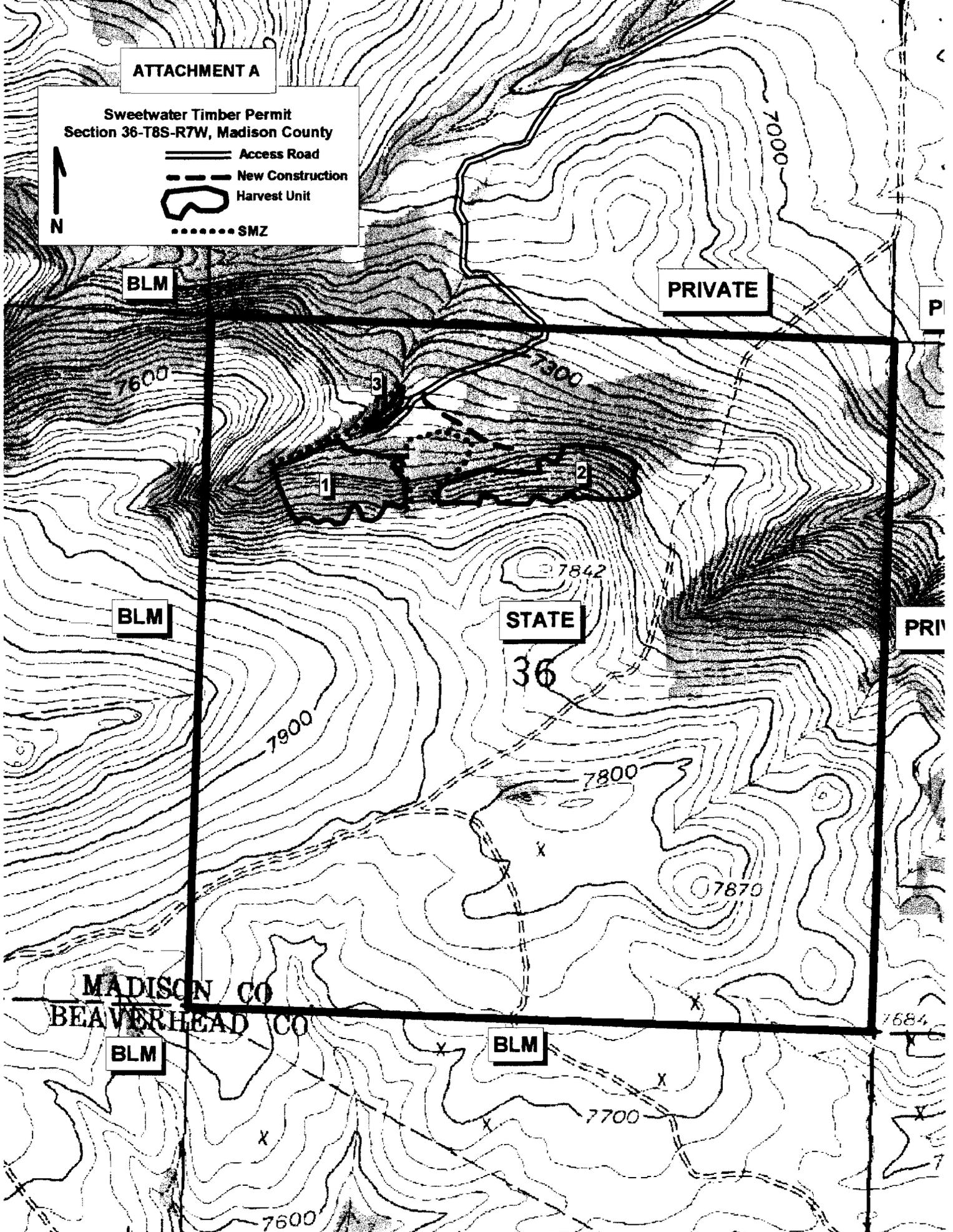


ATTACHMENT A

**Sweetwater Timber Permit
Section 36-T8S-R7W, Madison County**



-  Access Road
-  New Construction
-  Harvest Unit
-  SMZ



BLM

PRIVATE

BLM

STATE

PRIV

36

**MADISON CO
BEAVERHEAD CO**

BLM

BLM

7684

7600

7700

7870

7842

7900

7600

7000

3

1

2

ATTACHMENT B

CHECKLIST FOR ENDANGERED, THREATENED AND SENSITIVE SPEICES
CENTRAL LAND OFFICE

Threatened and Endangered Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
<p>Bald Eagle (<i>Haliaeetus leucocephalus</i>) Habitat: late-successional forest <1 mile from open water</p>	<p>[N] Indirect evidence of overwintering Bald Eagles has been documented within the quarter latilong (L37D) that the proposed project is located in (Skaar 1996, MNHP 2003). Forested habitat within the project area occurs too far away from bodies of water of suitable size for use by nesting or perching eagles. Habitat found within the project area is too distant to provide ample foraging opportunities and it is not suitable. No nesting habitat occurs on, or within one mile of the proposed project area, and the project area likely occurs outside of any bald eagle nesting home range. No direct, indirect or cumulative effects to bald eagles associated with this project are anticipated.</p>
<p>Gray Wolf (<i>Canis lupus</i>) Habitat: ample big game pops., security from human activity</p>	<p>[N] The proposed project area falls within the Yellowstone Nonessential Experimental Area for gray wolves. The Gravelly and Freezeout Packs reside in the vicinity of the project area, however, the majority of packs activities occurs ~10 miles southeast of the project area. Individuals from these packs or transients from other packs could occasionally use portions of the project area, however, due to the size, nature, duration and location of the proposed project, activities associated with this project are not expected to effect wolves or recovery efforts. Should a new den be located within one mile of the project area, activities would cease and a DNRC Biologist would be contacted immediately. Mitigations would then be developed and implemented to minimize adverse impacts to wolves prior to initiating any activity.</p>
<p>Grizzly Bear (<i>Ursus arctos</i>) Habitat: recovery areas, security from human activity</p>	<p>[N] The proposed project area lies outside of any grizzly bear recovery area. The nearest recovery area is the Yellowstone Grizzly Bear Recovery Zone (USFWS 1993) situated ~42 miles east of the project area. The project area is comprised of dry forest types not typically preferred by bears. Grizzly bear use of the Sweetwater Hills may occur, however, the project area is currently considered outside of</p>

	<p>occupied habitat (Interagency Occupied Habitat Map, September 2002). Riparian habitats preferred by bears occur in the project area along the unnamed tributary on the northwest boundaries of units 1 and 3. This creek supports relatively low levels of hiding cover, and human access levels are presently moderate. Approximately 650' of temporary new road would be constructed and effectively closed following project completion to minimize the potential for newly created access that could further reduce existing levels of security. Potential for any measurable increases in bear-human conflicts following project activities are not expected. Due to the size, nature, duration and location of the proposed project, activities associated with this proposal are not expected to effect grizzly bears. Adverse direct, indirect and cumulative impacts to grizzly bears as a result of this project are not expected.</p>
<p>Lynx (<i>Felis lynx</i>) Habitat: mosaics—dense sapling and old forest >5,000 ft. elev.</p>	<p>[N] Habitats high in coarse woody debris that are preferred for denning and large acreages (>50 acres) of dense conifer regeneration at high elevations that are preferred for foraging are not present in the project area. Lynx habitat is marginal due to the lack of highly desirable habitat conditions for lynx and their primary prey, snowshoe hares. Due to the generally low suitability of habitat in the project area and adjacent lands and the size, nature, duration and location of the proposed project, direct, indirect or cumulative impacts to lynx would not be expected to occur as a result of this project.</p>

<p>DNRC Sensitive Species</p>	<p>[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)</p>
<p>Flammulated Owl (<i>Otus flammeolus</i>) Habitat: late-successional ponderosa pine and Douglas-fir forest</p>	<p>[N] Flammulated owls have not been documented within the quarter latilong (L37D) that the proposed project is located in (Skaar 1996, MNHP 2003). The elevations that range from about 7,400-7,600 feet and Douglas-fir cover types characteristic of this area are not preferred habitat for flammulated owls. Direct, indirect and cumulative effects to flammulated owls would not be expected to occur as a result of this project.</p>

<p>Black-Backed Woodpecker (<i>Picoides arcticus</i>) Habitat: mature to old burned or beetle-infested forest</p>	<p>[N] Black-backed woodpeckers have not been documented within the quarter latilong (L37D) that the proposed project is located in (Skaar 1996, MNHP 2003). Stands found within the project area are not presently experiencing substantial insect activity, and no recent burns (≤5 years old) occur within the State parcel or surrounding area. Thus, foraging and nesting opportunities are presently limited. Due to the size, nature, duration and location of the proposed project, no direct, indirect or cumulative effects to black-backed woodpeckers would be expected to occur as a result of this project.</p>
<p>Pileated Woodpecker (<i>Dryocopus pileatus</i>) Habitat: late-successional ponderosa pine and larch-fir forest</p>	<p>[N] Pileated woodpeckers have not been documented within the quarter latilong (L37D) that the proposed project is located in (Skaar 1996, MNHP 2003). The project area is suited for use by pileated woodpeckers but habitat availability is limited. Due to the size, nature, duration and location of the proposed project, no impacts to pileated woodpeckers would be expected to occur as a result of this project.</p>
<p>Northern Bog Lemming (<i>Synaptomys borealis</i>) Habitat: sphagnum meadows, bogs, fens with thick moss mats</p>	<p>[N] No sphagnum meadows or bogs occur in the proposed project area. Thus, no impacts to bog lemmings would be expected to occur as a result of this project.</p>
<p>Harlequin Duck (<i>Histrionicus histrionicus</i>) Habitat: white-water streams, boulder and cobble substrates</p>	<p>[N] Harlequin ducks have not been documented in the quarter latilong (L37D) that the proposed project is located in (Skaar 1996, MNHP 2003). No high gradient streams suitable for use by harlequins occur within the project area or along proposed haul routes. No impacts to harlequin ducks would be expected to occur as a result of this project.</p>
<p>Peregrine Falcon (<i>Falco peregrinus</i>) Habitat: cliff features near open foraging areas and/or wetlands</p>	<p>[N] Peregrine Falcons have not been documented within the quarter latilong (L37D) that the proposed project is located in (Skaar 1996, MNHP 2003). No cliff features suitable for use by nesting peregrine falcons occur within 1 mile of the project area. No direct, indirect or cumulative effects associated with this project are anticipated.</p>
<p>Mountain Plover (<i>Charadrius montanus</i>) Habitat: short-grass prairie, alkaline flats, prairie dog towns</p>	<p>[N] Mountain Plovers have not been documented in the quarter latilong (L37D) that the proposed project is located in (Skaar 1996, MNHP 2003). No short-grass prairie or prairie dog towns occur on, or within one mile of the proposed project area. No impacts to mountain plovers are expected as a result of this project.</p>

<p>Townsend's Big-Eared Bat (<i>Plecotus townsendii</i>) Habitat: caves, caverns, old mines</p>	<p>[N] The DNRC is unaware of any mines or caves within the proposed project area or close vicinity that would be suitable for use by Townsend's big-eared bats. Impacts to Townsend's big-eared bats are not anticipated as a result of this project.</p>
<p>Black-tailed Prairie Dog (<i>Cynomys ludovicianus</i>) Habitat: grasslands, short-grass prairie, sagebrush semi-desert</p>	<p>[N] The project area is situated outside of the distribution of black-tailed prairie dogs. Impacts to black-tailed prairie dogs are not anticipated.</p>
<p>Sage Grouse (<i>Centrocercus urophasianus</i>) Habitat: sagebrush semi-desert</p>	<p>[N] Sage Grouse have not been documented in the quarter latilong (L37D) that the proposed project is located in (MNHP 2003). Sagebrush semi-desert habitats suitable for use by sage grouse do occur within the project area. However, no sage grouse breeding leks are known to occur within the project area. Should sage grouse be present in the vicinity of the project area, any effects to habitat or disturbance-related effects would be expected to be minimal, due to the late start-up date of activities (i.e., July 25), and preferred sagebrush habitat would not be altered. Impacts to sage grouse would not be anticipated.</p>

Montana Natural Heritage Program

Map Label	Scientific Name	Common Name
1	Perognathus parvus	Great Basin Pocket Mouse

BIOLOGICAL INFORMATION **Species of Concern (M/P/Other/Endangered)**

Element Subnational ID	13209	EO Number	5	Global Rank	G5	State Rank	S2S3
USFWS Endangered Species Status		Forest Service Status		BLM Status			
Observation Dates: Last	1961-06-28	First	1961				
EO Data	2 FEMALES COLLECTED.						
General Description							
General Comments							
Directions	WAGNER CREEK, 30 MILES SOUTHEAST OF DILLON.						
References							
Specimen	WRIGHT, P.L. (S.N.). 1961. SPECIMEN #6748, 6749. MONTU.						

Representation Accuracy	Low (>0%, <=20%)						
Size (acres): Observed		EO Rep. Size (acres):	49431.4				
Min. Elevation (feet)	6,100	Max. Elevation (feet)	7,972				
County	Beaverhead, Madison						
USGS Quadrangle Map	Ashbough Canyon, Beech Creek, Elk Gulch, Price Creek, Price Creek NE, Red Canyon						
Land Owner/Manager	BLM: DILLON FIELD OFFICE, STATE TRUST LAND						
Township/Range/Section	008S006W - 31, 008S007W - 34, 008S007W - 35, 008S007W - 36, 009S006W - 04, 009S006W - 05, 009S006W - 06, 009S006W - 07, 009S006W - 08, 009S006W - 09, 009S006W - 10, 009S006W - 15, 009S006W - 16, 009S006W - 17, 009S006W - 18, 009S006W - 19, 009S006W - 20, 009S006W - 21, 009S006W - 22, 009S006W - 23, 009S006W - 26, 009S006W - 27, 009S006W - 28, 009S006W - 29, 009S006W - 30, 009S006W - 31, 009S006W - 32, 009S006W - 33, 009S006W - 34, 009S006W - 35, 009S007W - 01, 009S007W - 02, 009S007W - 03, 009S007W - 04, 009S007W - 05, 009S007W - 08, 009S007W - 09, 009S007W - 10, 009S007W - 11, 009S007W - 12, 009S007W - 13, 009S007W - 14, 009S007W - 15, 009S007W - 16, 009S007W - 17, 009S007W - 18, 009S007W - 19, 009S007W - 20, 009S007W - 21, 009S007W - 22, 009S007W - 23, 009S007W - 24, 009S007W - 25, 009S007W - 26, 009S007W - 27, 009S007W - 28, 009S007W - 29, 009S007W - 30, 009S007W - 31, 009S007W - 32, 009S007W - 33, 009S007W - 34, 009S007W - 35, 009S007W - 36, 010S006W - 02, 010S006W - 03, 010S006W - 04, 010S006W - 05, 010S006W - 06, 010S006W - 07, 010S006W - 08, 010S006W - 09, 010S006W - 10, 010S006W - 15, 010S006W - 16, 010S006W - 17, 010S006W - 18, 010S006W - 19, 010S006W - 20, 010S007W - 01, 010S007W - 02, 010S007W - 03, 010S007W - 04, 010S007W - 05, 010S007W - 06, 010S007W - 08, 010S007W - 09, 010S007W - 10, 010S007W - 11, 010S007W - 12, 010S007W - 13, 010S007W - 14, 010S007W - 15, 010S007W - 16, 010S007W - 17, 010S007W - 21, 010S007W - 22, 010S007W - 23, 010S007W - 24						

Montana Natural Heritage Program

Map Label	Scientific Name	Common Name
2	<i>Oncorhynchus clarki lewisi</i>	Westslope Cutthroat Trout

Biological Information Species of Concern: Potential Species:

Element Subnational ID	14899	EO Number	4	Global Rank	G4T3	State Rank	S2
USFWS Endangered Species Status		Forest Service Status		BLM Status		SPECIAL STATUS	

Observation Dates: Last First

EO Data APPROXIMATE NUMBERS OF STREAMS: - WITH PURE POPULATIONS = 6; - WITH POTENTIALLY PURE POPULATIONS = 0; - WITH 90-99% PURE POPULATIONS = 10. IDENTIFIED 'POPULATION AGGREGATES':NONE.

General Description POPULATIONS TESTED PURE IN: BIVENS, GEYSER, HARRIS, N FK RAMSHORN, W FK SWEETWATER, & WHITE BEAR CREEKS.

General Comments FOR INFORMATION ON SPECIFIC POPULATIONS, CONTACT MONTANA FISH, WILDLIFE & PARKS OR QUERY THE MONTANA RIVERS INFORMATION SYSTEM @ <http://nris.state.mt.us/wis/mris1.html>.

Directions THIS OCCURRENCE INCLUDES ALL STREAM SEGMENTS WITHIN THE RUBY RIVER WATERSHED THAT SUPPORT POPULATIONS THAT ARE 90% OR MORE PURE.

References Montana Department of Fish, Wildlife & Parks. 1999. Memorandum of understanding and conservation agreement for westslope cutthroat trout (*Oncorhynchus clarki lewisi*) in Montana. 28pp.
 Montana Fish, Wildlife & Parks. 1959-to date. Montana Rivers Information System. Information Services Unit, Fisheries Division, Helena, MT. <http://nris.state.mt.us/wis/mris1.html> or 406-444-3345.

Specimen

Montana Natural Heritage Program

Map Label	Scientific Name	Common Name
3	<i>Buteo regalis</i>	Ferruginous Hawk

Biological Information

Element Subnational ID	EO Number	Global Rank	State Rank	USFWS Endangered Species Status	Forest Service Status	BLM Status	Special Status
14338	19	G4	S2B				SPECIAL STATUS

Observation Dates: Last 1997-05 First 1977

EO Data BREEDING POPULATION OF ABOUT 100-200 PAIRS. THE BOUNDARIES FOR THIS OCCURRENCE ENCOMPASS ALL REPORTED NEST OBSERVATIONS AND ADDITIONAL SUITABLE & CONTIGUOUS HABITAT LOCATED WITHIN THE GENERAL AREA. (SPECIFIC OBSERVATION DATA ON FILE AT MTNHP.)

General Description SHORT-GRASS PRAIRIES WITH OCCASIONAL TREES AND BRUSHY DRAWS.

General Comments FULL EXTENT OF OCCUPIED BREEDING HABITAT IS UNKNOWN. THE LIMA-SWEETWATER BREAKS AREA IS MOST PRODUCTIVE, ARGENTA BENCH AREA IS LEAST PRODUCTIVE.

Directions A LARGE AREA CENTERED ON CLARK CANYON RESERVOIR, INCLUDING THE WESTERN CENTENNIAL, HORSE PRAIRIE, SAGE CREEK AND SWEETWATER CREEK VALLEYS AND THE ARGENTA BENCH.

References Atkinson, E. 1992. [Series of raptor nest inventory forms resulting from surveys conducted in Beaverhead County.]
Flath, D. L. 1981. Job progress report. Statewide Wildlife Research. 16 pp.

Specimen

Montana Species of Concern Sweetwater

Search Area

Biological Data

- Vertebrate animal
- Community
- Invertebrate animal
- Nonvascular Plant
- Other
- Vascular Plant

Conservation Easements

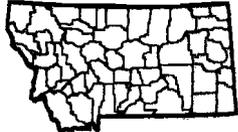
Special Designations

- Other special Areas (ACEC, RNA, PRMA)
- Research Natural Areas (all agencies)
- Wilderness (all agencies)
- Wild and Scenic Rivers (all agencies)

Land Status

- Bureau of Land Management
- Bureau of Reclamation
- Army Corps of Engineers & US Dept of Defense
- National Park Service
- US Forest Service
- Other US Dept of Agriculture
- US Fish & Wildlife Service
- Bureau of Indian Affairs Trust
- Tribal
- State Trust
- Montana Fish, Wildlife, & Parks
- University & Institutions
- County & City
- Plum Creek
- Private Conservation
- Other private

Water



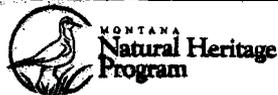
Species locations depicted outside the search area have imprecisely known locations and may actually occur within the search area.

Not all legend items may occur on map.

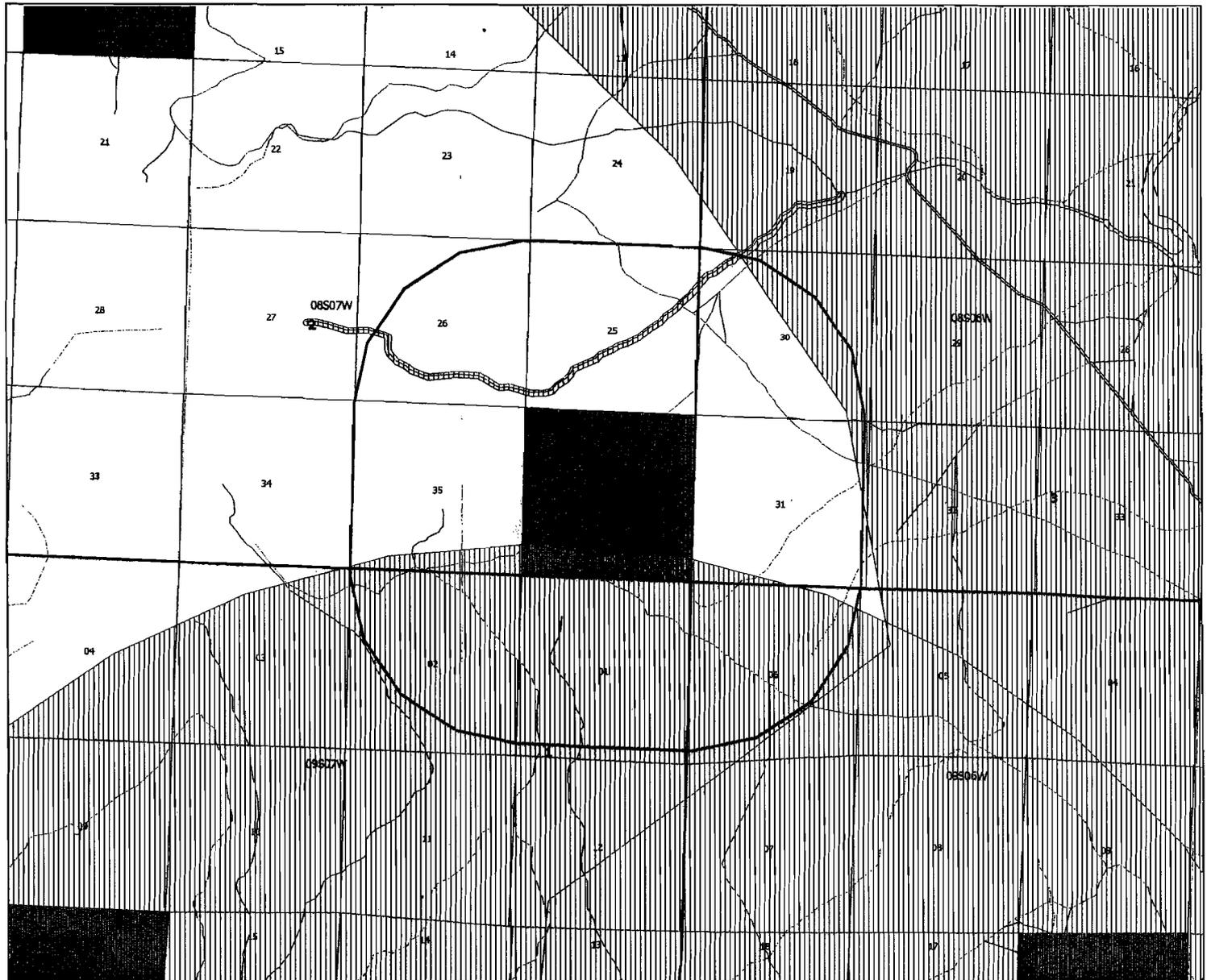
Features shown on this map do not imply public access to any lands.

This map displays management status, which may differ from ownership.

Refer to accompanying documentation for full explanation of map features.



Natural Resource Information System
Montana State Library
PO Box 201600
Helena, MT 59620-1600
(406) 444-2000 mnhp@state.mt.us



August 06 2004
08m0008

0.8 0 0.8 1.6 Miles



Report 1 of 1
Select Form

Map Waterbody

Sweetwater Creek Tributary Of: Ruby River

Total Length (Mi): 22.9

Report is based on River Miles(rm): (0.0 to 22.9)

View list of tributaries to the Sweetwater Creek and their river miles

Hydrologic Units:

10020003 Ruby,

Counties:

Madison,

FWP Management

Waterbody Location	Region/Fish District	Management
From (rm 0.0) to (rm 22.9)	3 / Central	Trout Water

Fish Species Present

Species	Abundance	Water Use	Data Quality
Mottled Sculpin			
From (rm 0.0) to (rm 8.9)	Common	Year-round resident	Extrapolated based on surveys
Rainbow Trout			
From (rm 0.0) to (rm 8.9)	Common	Year-round resident	Extrapolated based on surveys
Westslope Cutthroat Trout			
From (rm 16.0) to (rm 20.5)	Common	Year-round resident	Extrapolated based on surveys

Population Trend Data

From (rm 9.2) to (rm 9.3)

Date: 7/29/1992

Collector: Oswald, Dick

Species	Method	Length-(Min-Max (In))	DQR	Total	Units
Rainbow X Cutthroat Trout	Total number captured or presence only	N/A-N/A	Low quality	8	no estimate, count or presence only
Mottled Sculpin	Total number captured or presence only	N/A-N/A	Low quality	0	no estimate, count or presence only
Rainbow Trout	Total number captured or presence only	4.5-11.5	Low quality	8	no estimate, count or presence only

Genetics

Genetic sampling not collected on this stream.

Angling Use - Days Per Year

From (rm 0.0) to (rm 22.9)

Year	Total			Resident			Non Resident			Ranking	
	Press.	s.d.	Trips	Press.	s.d.	Trips	Press.	s.d.	Trips	State	Region
2001	50	50	1	0	0	0	50	50	1	1203	269
1999	76	54	2	76	54	2	0	0	0	1246	274
1997	34	34	1	34	34	1	0	0	0	1636	372
1995	47	47	1	47	47	1	0	0	0	1409	313
1991	49	35	2	0	0	0	49	35	2	1412	329
1984	85	85	1	0	0	0	85	85	1	753	141
1983	554	429	4	418	418	2	136	96	2	525	102
1982	50	50	1	50	50	1	0	0	0	1233	272

Angling Use Data Source:

Data provided by a biannual Statewide Angling Use Survey conducted via mail by Montana Fish, Wildlife and Parks Information Services Unit in Bozeman.

Fish Stocking Since 1990
No Stocking Data Available

Fisheries Resource Values

	Habitat Class	Sport Class	Final Value
From (rm 0.0) to (rm 0.7)	6	5	Limited
From (rm 0.7) to (rm 8.9)	4	4	Moderate
From (rm 8.9) to (rm 22.9)	6	5	Limited

Fisheries Classification Data Source:

A complex series of ratings and points were assigned to various MFISH data fields and used to determine the Sport Fisheries Values and the Species and Habitat Value for all surveyed streams in Montana. The final resource was determined as the higher of the two values.

Protected Designation
No Protected Data Available

FWP Dewatering Concern Area

Area Affected: (Mile 0.0) to (River Mile 3.3) Level of Concern
Chronic Dewatering

Dewatered Stream Section Data Source:

Created 1991/updated 1997 by MFWP fisheries biologists. Streams that support important or contribute to important fisheries that are significantly dewatered by man-caused flow depletions. Chronic: dewatering is a significant problem in virtually all years; Periodic: dewatering is a significant problem only in drought or water-short years.

FWP Instream Flow Protection/Quantification
Instream Flows not determined.

Stream Channel Conditions

From (rm 0.7) to (rm 8.9)

Bank Vegetation: N/A

Riparian Vegetation: N/A