

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	Fox Gulch Timber Permit	<b>RECEIVED</b> MAR 23 2006 LEGISLATIVE ENVIRONMENTAL POLICY OFFICE
<b>Proposed Implementation Date:</b>	July 1, 2006	
<b>Proponent:</b>	Department of Natural Resources and Conservation / Dillon Unit	
<b>Location:</b>	S1/2S1/2 Section 16, Township 4 South, Range 15 West	
<b>County:</b>	Beaverhead	

### I. TYPE AND PURPOSE OF ACTION

Commercial timber permit to harvest an estimated 80 MBF of Douglas-fir timber from approximately 13.5 acres of tractor ground. Purpose of action is to generate revenue for the school trust, improve forest health and productivity by removing overstocked and insect damaged timber, and bring treated portions of stand closer to a semblance of historic conditions. (See Attachments A for vicinity and site specific locations).

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

A field review was conducted in May 2005 by Stan Quimbley and DNRC forester Chuck Barone.

Letters were sent in October 2005 to the following seeking comments for the proposed timber harvest:

Fish, Wildlife and Parks, Regional Supervisor, P. Flowers

Dick Hirschy Cattle, Inc.

Forty Bar Ranch, Inc./Russel Peterson (Lessee)

Jack Hirschy Livestock, Inc.

Other contacts:

DNRC, Archaeologist, P. Rennie

FWP, Wildlife Biologist, C. Fager

Montana Natural Heritage Program

Montana Fisheries Information System

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

The Beaverhead County Weed Control administers the State weed laws in Beaverhead County. The County Weed Control would be contacted by the DNRC and given a weed plan for the project.

A Beaverhead County burning permit would be required if slash burning is done.

A 124 permit from MT FWP would be required for the temporary dry crossing of Fox Gulch.

#### 3. ALTERNATIVES CONSIDERED:

Action Alternative: Harvest ~80 MBF of overstocked and insect damaged timber from an estimated 13.5 acres of State land, located in Section 16-T4S-R15W.

Stand treatments would consist of harvesting approximately 60% of the merchantable sawtimber utilizing group selection and seed tree harvests. Harvest design is intended to maintain a semblance of historic conditions while improving forest health and productivity by the removal of overstocked and insect damaged timber,

emulating mixed severity and stand replacing fires. Approximately 655 feet of temporary, minimum standard new spur road, involving a temporary dry crossing of Fox Gulch, would be needed to access the harvest unit. Approximately 900 feet of temporary constructed skid trail would be needed to access the west half of the 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.*

The sale area is located on moderate to steep slopes with a slope range of 20-55%. No unusual or unique geologic features were noted in the proposed harvest area. General area is an intermontane basin of valley-fill sediments composed of volcanic debris and debris from rocks of the local mountain ranges. Primary soils within the proposed harvest area are moderate to well bonded, volcanic ash sandstone and siltstone containing secondary interbeds of limestone and marl and lenses of pebble and cobble conglomerate. These soils tend to be poorly consolidated and non-resistant with a moderate erosion hazard. Appropriate erosion control measures would be required on all roads and skid trails.

The primary soil concerns associated with timber harvest are direct effects of rutting and displacement of surface soils by equipment operation and road construction. Harvest operations would retain a proportion of coarse woody debris and fine slash to help provide erosion control, shade and organic matter to maintain soil productivity

Soil effects would be minimal and long-term productivity would be maintained or improved by implementing mitigation measures, BMP's and reducing the stocking to make nutrients available to retained trees. There are no apparent direct and indirect impacts to soils in the proposed project area. No significant impacts or cumulative effects are expected to soil resources.

#### 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 project area lies within the mid-reaches of Fox Gulch drainage, an intermittent stream located in the Big Hole River drainage. No cold-water fisheries are present within the Fox Gulch watershed and it is not tributary to any other streams.

The Missouri River drainage, including tributaries to the Big Hole River, 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.

Harvest and road levels within the Fox Gulch watershed are well below the levels of forest crown removal that are normally associated with increased water yields. It is unlikely that there are measurable effects on stream flow regimes (water yield, magnitude, and duration of peak flows) due to vegetation manipulation in the Fox Gulch watershed.

Approximately 655 feet of temporary, minimum standard new spur road and 900 feet of temporary constructed skid trail would be needed to access the harvest unit. The new spur road would involve minimum ground disturbance due to the gentle nature of the topography approaching the proposed harvest unit. The constructed skid trail would involve excavation on slopes ranging from 25-50%. A temporary dry crossing of Fox Gulch, in conjunction with the new spur road, would be needed. The crossing is on gentle ground and would be utilized with minimal excavation. The crossing would require a 124 permit from the MT FWP. At the end of the project the spur road and skid trail would be closed with slash and debris, have adequate drainage installed and disturbed areas seeded. No adverse effects to downstream water quality or cold-water fisheries are expected to occur due to the proposed crossing.

Harvest activities would occur on moderate to steep slopes ranging from 20 to 50% with moderate erosion risk. Slopes >45% would be harvested utilizing a winch and cable line. Timber harvest and road activities would implement all applicable forestry BMP's and additional mitigation measures to avoid or minimize the risk of soil erosion and potential for sediment delivery. No direct, indirect, or cumulative impacts to water quality or the cold-water fisheries due to accelerated rates of sediment or nutrient delivery are expected to result from the proposed actions. Since no streamside riparian timber harvests are proposed, no direct or indirect effects to stream temperatures or channel form and function are anticipated.

The proposed timber harvest and minor road construction are not expected to contribute to adverse cumulative watershed impacts due to modified stream flow regimes. No harvesting has occurred within the Fox Gulch watershed and the proposed levels of harvest are well below the levels normally associated with detrimental increases in water yield, peak flow, or duration of peak flows. Subsequently, no direct, indirect, or cumulative impacts to water quality or beneficial uses are anticipated to result from bank destabilization and in-stream sedimentation. Given the low relative harvest area (0.5% of watershed), no harvesting within the SMZ and minimal road construction away from fisheries resources, no foreseeable direct, indirect or cumulative impacts are anticipated to cold-water fisheries or any other beneficial uses associated within the Fox Gulch watershed. No direct, indirect, or cumulative impacts to water quality, cold-water fisheries, or other beneficial uses in the Big Hole River are expected to result from the proposed actions.

Due to the size and duration of the proposed project, minimal road construction and additional recommended mitigation measures, no impacts are expected to occur to water quality, water yield, watershed conditions, or fisheries in the Fox Gulch 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. The DEQ and the Cooperative Airshed groups regulate particulate emissions during this period. Burning times are coordinated to 1) limit burning periods of acceptable smoke dispersion and 2) to limit the cumulative generation of particulates.

## **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 on the edge of the west Pioneer Mountains within the grassland interface. Slopes range from 10-55% with an elevation range of 6600-6900 feet. No harvesting has occurred within the Fox Gulch watershed. The State parcel has ~26 forested acres which are dominated by Douglas-fir found on north slopes with some lodgepole and limber pine found in the west end of the stand. The cover type is Douglas-fir and the habitat type is Douglas-fir/Elk Sedge (Psme/Cage). Forested stands are included in fire group five with Douglas-fir the climax species and a vigorous seral with lodgepole and limber pine as accidental individuals or minor seral species. The fire disturbance regime was likely low severity fires occurring at a 35 to 40 year interval, maintaining a more mature stand in a fairly open condition with stand replacing fires occurring in denser, overstocked areas. The absence of fire, in combination with encroachment, has resulted in overstocked

and suppressed stands. These conditions make the stands more susceptible to fire and attack from insects and disease.

Overall health and growth of the stand is poor in the older tree component and poor to fair in the younger tree component. The stand is overstocked and suppressed and has spruce budworm damage in the upper crowns and pockets of Douglas-fir bark beetle. No true old growth areas are found in the stand but scattered individuals and small clumps (<2 acres) of old relic Douglas-fir trees do occur within the proposed unit. Historically, these remnants were typically naturally fragmented, open-park like communities maintained by frequent low intensity fires.

The proposed harvest represents 1.2% of the total forested acres within the Fox Gulch watershed. Harvesting an estimated 80 MBF of timber would alter the forest cover on approximately 13.5 acres. Harvest design is intended to maintain a semblance of historic conditions while promoting forest health and productivity by reducing overstocking by the emulation of mixed severity and stand replacing fires. Natural regeneration would be expected.

No rare plants or cover types have been noted by the Montana Natural Heritage Program or observed within the proposed project area.

The DNRC requires the washing of equipment, seeding of grass and monitoring of disturbed areas to minimize the potential of noxious weeds being introduced. There is low risk of direct, indirect, or cumulative impacts due to weeds.

(See Attachments B – Vegetative Analysis/Stand Prescription)

#### **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 and songbirds potentially use this area. Fox Gulch has no cold-water fisheries.

Fox Gulch Drainage lies within the Pioneer Elk Management Unit. Elk security, bull elk vulnerability and potential reductions in hunter opportunity are a primary concern expressed by DFWP in this hunting district. Achieving this goal can be hampered when available cover at the landscape level is reduced appreciably through timber harvest activities, road management, or natural disturbances, such as wildfires.

There are vast amounts of federal lands adjacent to the proposed project area, which have never been harvested and provide excellent hiding cover. Under their current management, these federal lands are not likely to be harvested unless a major natural disturbance occurs, such as wildfire or insect and disease.

Although security cover is limited in the proposed project area, no significant impacts to wildlife are anticipated due to the size of the proposed project. The proposed project would not affect the present public access, which presently provides low human levels.

Due to the size and duration of the proposed project, minimal new construction and additional recommended mitigation measures, no impacts are expected to wildlife and fisheries habitats.

(See Attachments E & F – Checklist for Endangered, Threatened and Sensitive Species; Montana Natural Heritage Program)

#### **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 cold-water fisheries are present within the Fox Gulch watershed and it is not tributary to any other streams.

No threatened or endangered species have been documented within the proposed project area. Preferred habitat for grizzly bear, lynx and bald eagles is not present within the project area. Occasional use of the area from these species could potentially occur but is generally considered outside of their normal occupied habitat.

The proposed project falls within the Central Idaho Nonessential Experimental Area for gray wolves. The closest pack in the vicinity of the project area is the Battlefield pack, approximately 16 air miles to the northwest. Individuals from these packs or transients from other packs could occasionally use portions of the project area, however, due to the size, nature and location of the proposed project, activities associated with this proposal are not expected to effect wolves or recovery efforts.

A Sage Grouse lek has been documented north of the access road to the proposed project area ~one-mile to the northwest of the harvest unit. All logging and road construction related operations would be restricted during the Sage Grouse mating/rearing season (April 1-June 15). Any effects to habitat or disturbance-related effects would be expected to be minimal, due to the operations restrictions and preferred sagebrush habitat would not be appreciably altered. Impacts to sage grouse are not anticipated.

No other sensitive species/species of special concern have been documented or observed within the proposed project area.

Due to the size and duration of the proposed project, minimal road construction and additional recommended mitigation measures, no impacts are expected to occur to any endangered, threatened or sensitive species.

(See Attachments E & F – Checklist for Endangered, Threatened and Sensitive Species; Montana Natural Heritage Program)

**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

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

There are no cultural resource concerns within the proposed project area. No additional archaeological investigative work is recommended prior to harvest activities.

**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 project area is visible to a lightly populated area and from a small segment of Highway 278. Due to the proposed harvest design impacts concerning aesthetics are expected to be minimal.

**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.*

NONE

**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.*

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

A range evaluation was conducted in September 1997.

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 would 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 would 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 would 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 and the small possibility of a few people temporarily relocating to the 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 having possessing a valid state lands recreational use license or FWP conservation license may conduct recreational activities on the tract. 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 would 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 \$15,493.60 (80 MBF of sawtimber @ \$193.67/MBF). This estimate is intended for comparison of alternatives, not as an absolute estimate of return.

Income from a grazing license of \$1,300.20/year for 220 AUM of use would continue with or without the harvest proposal.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Chuck Barone	<b>Date:</b> March 2, 2006
	<b>Title:</b> Dillon Unit Forester	

**V. FINDING**

**25. ALTERNATIVE SELECTED:**

After review, I have selected the proposed Action Alternative, to harvest approximately 80 MBF of overstocked and insect damaged timber from an estimated 13.5 acres of School Trust land and to construct approximately 1550 feet of temporary, minimum standard new spur road and a temporary skid trail to access the harvest unit. 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, 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, BMP compliance, and project administration, 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, rutting and vegetative disturbance.
- 3) Retain all fine litter as feasible and 5-10 tons/acre of large woody debris >3" diameter. Minimize soil disturbance by general skid trail planning and limit tractor skidding to slopes ≤ 45%. Slopes >45% would be harvested utilizing a winch and cable line. Slash would be left in the harvest units where feasible, and distributed on skid trails upon completion of use, for nutrient cycling, to control erosion and to provide shade and protection for seedlings.
- 4) Install adequate road drainage to control erosion concurrent with harvest activities and road construction and reconditioning. Provide effective sediment filtration along drainage features near crossing sites. All new construction and skid trails would be closed with slash and debris and adequate drainage provided.
- 5) The temporary dry crossing would comply with the guidelines and specifications stated in the 124 permit.
- 6) All road construction and logging equipment would be power washed and inspected prior to being brought on site. Sale area would be monitored for weeds following harvest and a treatment plan would be developed should noxious weeds occur.
- 7) No road construction or logging related activities would occur during sage grouse mating/rearing season (April 1 – June 15).
- 8) At sale closure, grass seed temporary crossing, roads, skid trails (where needed) and landings with an appropriate seed mixture.
- 9) One snag and one snag recruit per acre, of the largest diameter class, would be retained where applicable. Cull live trees and cull snags would be retained where applicable.

**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**

EIS                     
  More Detailed EA                     
  No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Richard Moore	<b>Title:</b> Dillon Unit Manager	
<b>Signature:</b>	<i>Richard A. Moore</i>		<b>Date:</b> 3/8/2006

ATTACHMENTS

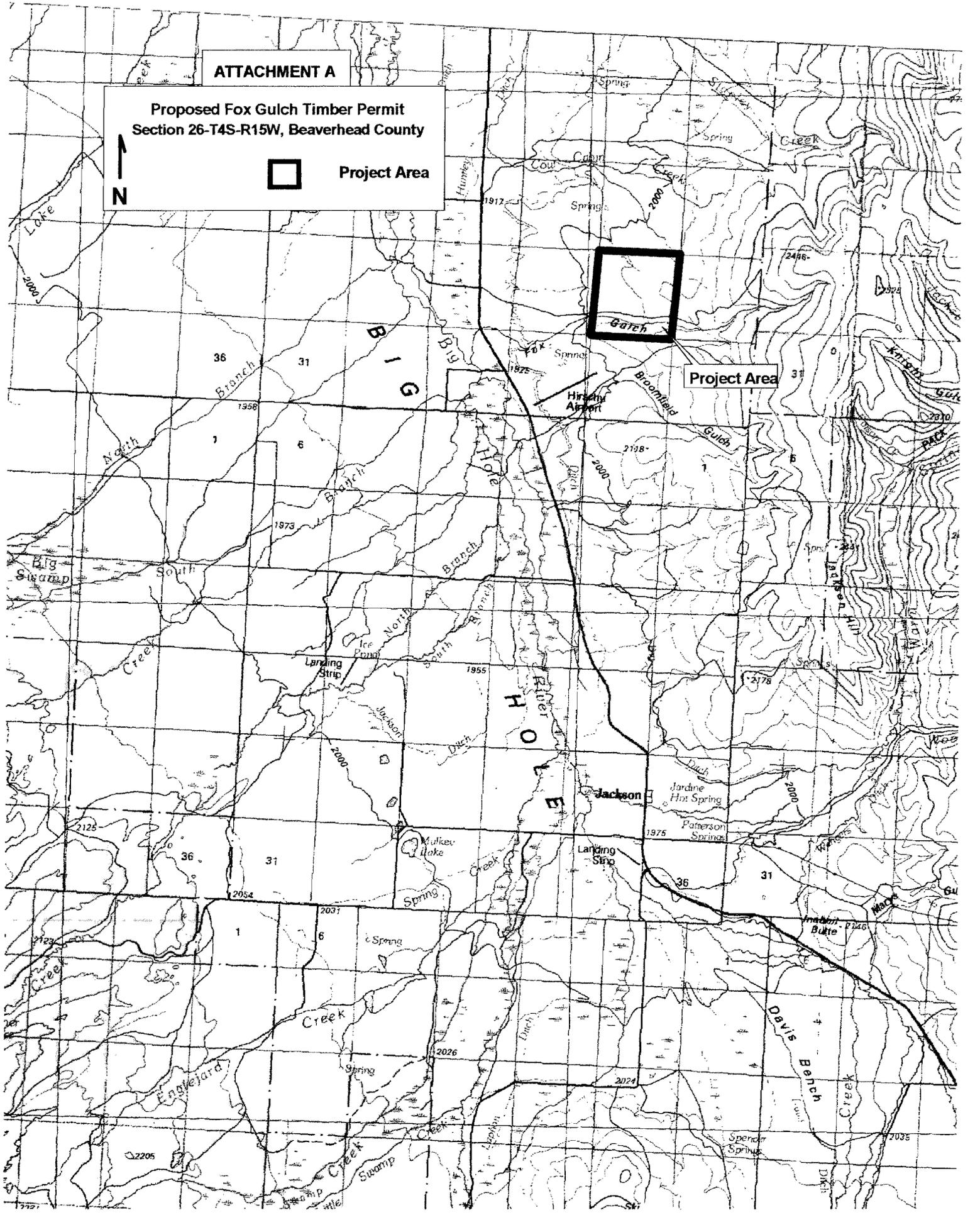
- A – Site Specific Map/Vicinity Map
- B – Vegetative Analysis/Stand Prescription
- E – Checklist for Endangered, Threatened and Sensitive Species
- F – Montana Natural Heritage Program

**ATTACHMENT A**

**Proposed Fox Gulch Timber Permit  
Section 26-T4S-R15W, Beaverhead County**



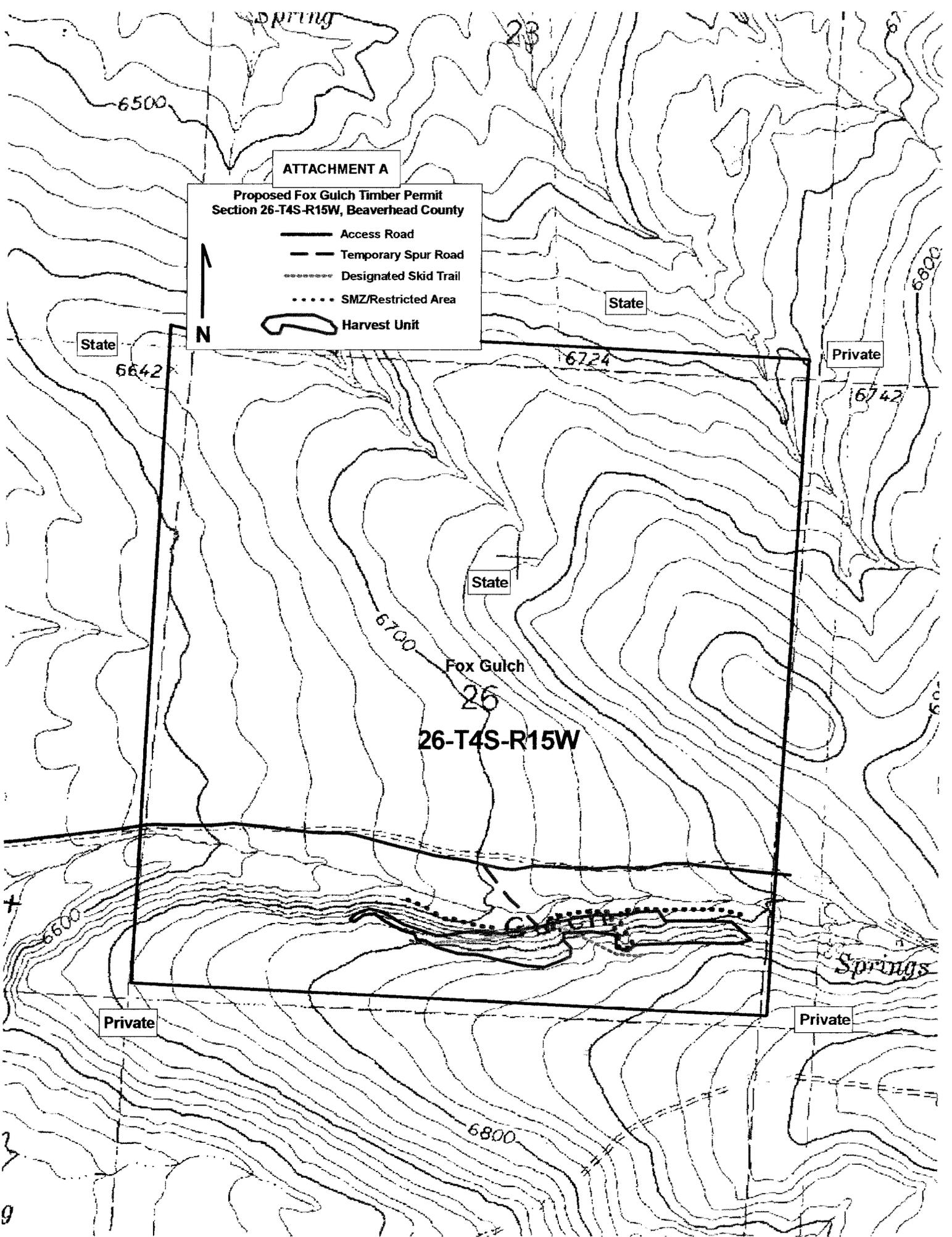
**Project Area**



**ATTACHMENT A**

**Proposed Fox Gulch Timber Permit  
Section 26-T4S-R15W, Beaverhead County**

-  Access Road
-  Temporary Spur Road
-  Designated Skid Trail
-  SMZ/Restricted Area
-  Harvest Unit



State

State

Private

State

Fox Gulch  
26  
**26-T4S-R15W**

Private

Private

## ATTACHMENT B

### Vegetative Analysis/Stand Prescription Fox Gulch Timber Permit

The State parcel is located on the edge of the west Pioneer Mountains within the grassland interface. Slopes range from 10-55% with an elevation range of 6600-6900 feet. No harvesting has occurred within the Fox Gulch watershed. The State parcel has ~26 forested acres which are dominated by Douglas-fir found on north facing slopes with some lodgepole and limber pine found in the west end of the stand. The cover type is Douglas-fir and the habitat type is Douglas-fir/Elk Sedge (Psme/Cage). Forested stands are included in fire group five with Douglas-fir the climax species and a vigorous seral with lodgepole and limber pine as accidental individuals or minor seral species. The fire disturbance regime was likely low severity fires occurring at a 35 to 40 year interval, maintaining a more mature stand in a fairly open condition with stand replacing fires occurring in denser, overstocked areas. The absence of fire, in combination with encroachment, has resulted in overstocked and suppressed stands. These conditions make the stands more susceptible to fire and attack from insects and disease.

Unit 1 (13.5 ac/80 MBF) - Stand is composed predominately of a mix of DF small to medium sawtimber. No true old growth areas are found in the stand but scattered individuals and small clumps (<2 acres) of old relic Douglas-fir trees do occur within the proposed unit. These older trees exhibit large fire scars and most likely have some kind of trunk rot. Historically, these remnants were typically naturally fragmented, open-park like communities maintained by frequent low intensity fires. Overall health and growth of the stand is poor in the older tree component and poor to fair in the younger tree component. The stand is overstocked and suppressed and has spruce budworm damage in the upper crowns and pockets of Douglas-fir bark beetle. Majority of trees have poor crown ratios (<30%) and those with slightly better crowns are rounded or flattened. Dominate trees are 60-65' and co-dominates are 50-55' with an age range of 100-200 years. Yield capacity is 35-45 cu. ft/acre. Regeneration and understory vegetation is negligible due to livestock use. Coarse woody debris is minimal.

A group selection/seed tree harvest removing 55-60% of the merchantable sawtimber volume would be used to reduce over stocking and suppression, fire hazard, and insect and disease. Desirable dominate/co-dominate trees would be left for seed source where available along with the large, old relic trees, and the remaining sawtimber to be removed. Due to areas of un-operable ground and sub-merchantable timber, islands of unharvested timber would be scattered throughout the stand.

Retain all fine litter and 5-10 tons/acre of large woody debris >3" diameter as feasible. Consolidate remaining slash at landings for burning. Conduct regeneration survey in 7-9 years and a thinning survey in 20-25 years.

There is currently more total forest cover in Beaverhead County than in prior historical conditions. The proposed harvest represents 52% of the total forested acres within the State parcel and 1.2% of the total forested acres within the Fox Gulch watershed. Harvesting an estimated 80 MBF of timber would alter the forest cover on approximately 13.5 acres. Harvest design is intended to maintain a semblance of historic conditions while promoting forest health and productivity by reducing overstocking through the emulation of mixed severity and stand replacing fires. Natural regeneration would be expected. No rare plants or cover types have been noted or observed within the project area.

ATTACHMENT E

CHECKLIST FOR ENDANGERED, THREATENED AND SENSITIVE SPEICES  
 Pertains to Section II. 9. of the DS-252 DNRC Environmental Checklist  
 CENTRAL LAND OFFICE

Prepared by Chuck Barone

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)
Bald Eagle ( <i>Haliaeetus leucocephalus</i> ) Habitat: late-successional forest <1 mile from open water	[N] Indirect evidence of overwintering Bald Eagles has been documented within the quarter latilong (L36D) that encompasses the proposed project area (Skaar 1996, MNHP 2003). Bald Eagles and a nest were believed to have been observed within the proposed project area (R. Peterson, Lessee, Pers. Comm. June 2005). Inspection of the proposed project area revealed no evidence of past or present bald eagle habitation. No nesting habitat occurs on, or within one mile of the proposed project area, and the project area occurs outside of any bald eagle nesting home range. Thus, no direct, indirect or cumulative effects to bald eagles associated with this project are anticipated.
Gray Wolf ( <i>Canis lupus</i> ) Habitat: ample big game pops., security from human activity	[N] The proposed project falls within the Central Idaho Nonessential Experimental Area for gray wolves. The closest pack in the vicinity of the project area is the Battlefield pack, approximately 16 air miles to the northwest. Individuals from these packs or transients from other packs could occasionally use portions of the project area, however, due to the size, nature and location of the proposed project, activities associated with this proposal 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.
Grizzly Bear ( <i>Ursus arctos</i> ) Habitat: recovery areas, security from human activity	[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 approximately 70 miles southeast of the project area. The project area is comprised of dry forest types not typically preferred by bears. Grizzly bear use of the Pioneer Mountains may occur, however, the project area is currently considered outside of occupied habitat (Interagency Occupied Habitat Map, September 2002). Riparian habitats preferred by bears do not occur in the project area. Human access levels are presently moderate due to the public access. Approximately 655 feet of temporary new road would be

	result of this project.
Northern Bog Lemming ( <i>Synaptomys borealis</i> ) Habitat: sphagnum meadows, bogs, fens with thick moss mats	[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.
Harlequin Duck ( <i>Histrionicus histrionicus</i> ) Habitat: white-water streams, boulder and cobble substrates	[N] Harlequin ducks have not been documented in the quarter latilong (L36D) that encompasses the proposed project area (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.
Peregrine Falcon ( <i>Falco peregrinus</i> ) Habitat: cliff features near open foraging areas and/or wetlands	[N] Peregrine Falcons have been documented within the quarter latilong (L36D) that encompasses the proposed project area (Skaar 1996, MNHP 2003). However, no cliff features suitable for use by nesting peregrine falcons are known to occur within 1 mile of the project area. No direct, indirect or cumulative effects associated with this project are anticipated.
Mountain Plover ( <i>Charadrius montanus</i> ) Habitat: short-grass prairie, alkaline flats, prairie dog towns	[N] Mountain Plovers have not been documented in the quarter latilong (L36D) that encompasses the proposed project area (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.
Townsend's Big-Eared Bat ( <i>Plecotus townsendii</i> ) Habitat: caves, caverns, old mines	[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.
Black-tailed Prairie Dog ( <i>Cynomys ludovicianus</i> ) Habitat: grasslands, short-grass prairie, sagebrush semi-desert	[N] Grassland habitats suitable for use by black-tailed prairie dogs do not occur within one mile of the proposed project area. Impacts to black-tailed prairie dogs are not anticipated.
Sage Grouse ( <i>Centrocercus urophasianus</i> ) Habitat: sagebrush semi-desert	[N] Breeding Sage Grouse have been documented in the quarter latilong (L36D) that encompasses the proposed project area (Skaar 1996, MNHP 2003). Sagebrush semi-desert habitats suitable for use by sage grouse do occur within one mile of the project area. A Sage Grouse lek has been documented north of the access road to the proposed project area ~one-mile to the northwest of the harvest unit (C. Fager, FWP, Pers. Comm. January 2006). All operations would be restricted during the Sage Grouse mating/rearing season (April 1- June 15). Any effects to habitat or disturbance-related effects would be expected to be minimal, due to the operations restrictions and preferred sagebrush habitat would not be appreciably altered. Impacts to sage grouse are not anticipated.



***Centrocercus urophasianus***

**Element Occurrence Map Label: 5744**

**Common Name: Greater Sage-grouse**

**Species of Concern (Y) / Potential Concern (W): Y**

**Element Subnational ID: 10626**

**Description: Vertebrate Animal**

**EO Number: 1050**

**Natural Heritage Ranks:**

**State: S3  
Global: G4**

**Federal Agency Status:**

**U.S. Fish & Wildlife Service:  
U.S. Forest Service: SENSITIVE  
U.S. Bureau of Land Management: SENSITIVE**

**Survey Site:**

**Survey Date:**

**First Observation Date:**

**Last Observation Date:**

**Acreage: 31**

**Min Elevation Feet:**

**Max Elevation Feet:**

**EO Data**

---

**General Comment**

---

**General Description**

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200 meter buffer around a Greater Sage-Grouse lek. This location represents the center of a surrounding 4 mile radius area that defines the Inferred Extent for the species. The Inferred Extent represents the probable habitat occupied by the Greater Sage-Grouse for nesting and foraging based on known habitat requirements and the direct observation of the species at this location.



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# Species of Concern Data Report

Tuesday, October 11, 2005

Visit <http://mtnhp.org> for additional information.

## ***Lynx canadensis***

**Element Occurrence Map Label: 4303**

**Common Name: Lynx**

**Species of Concern (Y) / Potential Concern (W): Y**

**Element Subnational ID: 13134**

**Description: Vertebrate Animal**

**EO Number: 450**

### Natural Heritage Ranks:

**State: S3**

**Global: G5**

### Federal Agency Status:

**U.S. Fish & Wildlife Service: LT**

**U.S. Forest Service: THREATENED**

**U.S. Bureau of Land Management: SPECIAL STATUS**

**Survey Site:**

**Survey Date:**

**First Observation Date:**

**Last Observation Date:**

**Acreage: 22,494,298**

**Min Elevation Feet: 1,870**

**Max Elevation Feet: 11,187**

### EO Data

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### General Comment

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### General Description

---



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ATTACHMENT F

# Species of Concern Data Report

Tuesday, October 11, 2005

Visit <http://mtnhp.org> for additional information.

## Carex idaho

Element Occurrence Map Label: 3178

Common Name: Idaho Sedge

Species of Concern (Y) / Potential Concern (W): Y

Element Subnational ID: 13049

EO Number: 17

Description: Vascular Plant

### Natural Heritage Ranks:

State: S2

Global: G2

### Federal Agency Status:

U.S. Fish & Wildlife Service:

U.S. Forest Service: SENSITIVE

U.S. Bureau of Land Management: SENSITIVE

Survey Site: BIG HOLE RIVER

Survey Date: 1955-09-08

First Observation Date: 1955-09-08

Last Observation Date: 1955-09-08

Acreage: 557

Min Elevation Feet: 6,397

Max Elevation Feet: 6,397

### EO Data

Specimen collected.

### General Comment

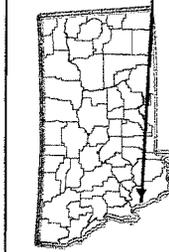
### General Description

Low sedgy meadow.

# Montana Species of Concern Fox Gulch

- Species of Concern**
- Vascular Plant
  - Nonvascular Plant
  - Other Botanical
  - Vertebrate Animal
  - Invertebrate Animal
  - Other Zoological
  - Animal Inferred Extant
  - Ecological Sites

**SPECIES OF CONCERN:** A polygon feature representing only what is known about the species' current or historical distribution, not necessarily the species' full range. The species' full range is inferred from the species' current or historical distribution. The species' full range is inferred from the species' current or historical distribution. The species' full range is inferred from the species' current or historical distribution.



- Land Management**
- US Bureau of Land Management
  - US Bureau of Reclamation
  - US Fish and Wildlife Service
  - National Park Service
  - US Forest Service
  - Other USDA
  - Army Corps of Engineers
  - Other Department of Defense
  - Undesignated state
  - DNR/DC (state trust lands)
  - Montana Fish, Wildlife & Parks
  - University, Institutions, MDT
  - DNR/DC (water project lands)
  - Local Government
  - Bureau of Indian Affairs Trust
  - Tribal Lands
  - Plum Creek
  - Private Land Trusts

Not all legend items may occur on the map. Features shown on this map do not imply public access to any lands. This map displays management status, which may vary from ownership.

