

## CATEGORICAL EXCLUSION DOCUMENTATION FOR DNRC FOREST MANAGEMENT ACTIVITY

Project Name: Black Sheep Salvage Timber Permit

Proposed Implementation Date: August 2010

Proponent: Dept. of Natural Resources and Conservation

Type and Purpose of Action: Commercial harvest of an estimated 500 MBF of lodgepole pine and Douglas-fir sawtimber from approximately 71 acres. The proposed project would primarily address timber that has been affected by insect and disease infestations, focusing on removing dead, dying, susceptible and overstocked trees. The project would incorporate group selection, selection and regeneration harvest methods utilizing conventional/tractor harvest systems. The project would utilize existing roads with existing ford crossings of Sheep Creek and construct approximately 1030 feet of temporary, minimum standard new road to access the harvest area. Purpose of action is to generate revenue for the Common School Trust; remove overstocked and suppressed timber before its value is lost to insect and disease or wildfire; and improve the health, vigor and productivity of the forest in the proposed project area.

Location: NW4 Section 36, Township 9 South, Range 9 West

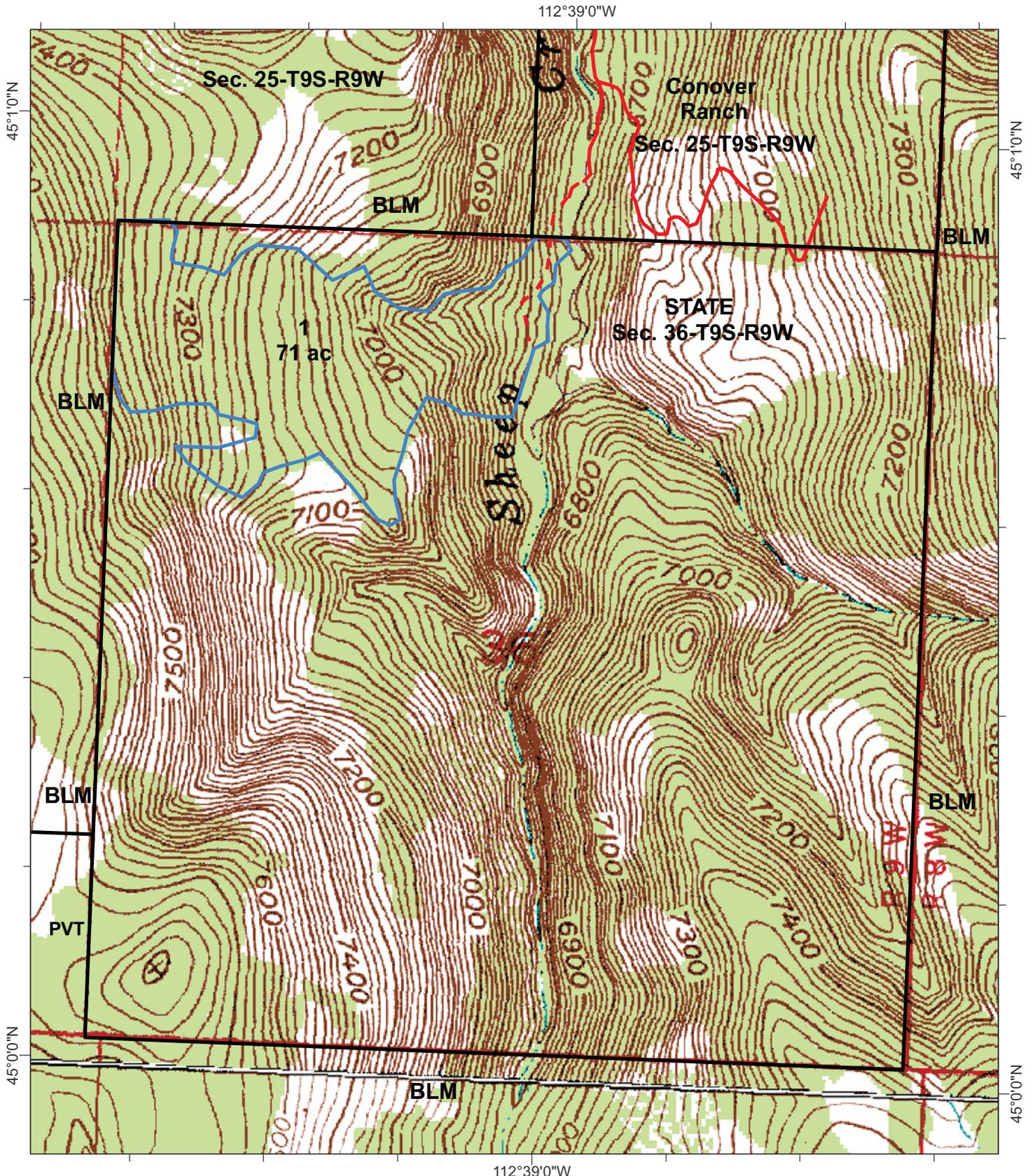
County: Beaverhead

### Category (refer to ARM 36.11.447 for additional detail):

- 1) Temporary Uses of Land with Negligible Effects
- 2) Plans and Policies
- 3) Leases and Licenses
- 4) Acquisition of Land or Interest in Land
- 5) Road Maintenance and Repair
- 6) Bridges and Culverts
- 7) Crossing Class 3 Streams
- 8) Temporary Road Use Permits
- 9) Road Closure
- 10) Material Stockpiles
- 11) Backfilling
- 12) Gathering Forest Products for Personal Use
- 13) Regeneration
- 14) Nursery Operations
- 15) Water Wells
- 16) Herbicides and Pesticides
- 17) Other Hazardous Materials
- 18) Fences
- 19) Waterlines
- 20) Removal of Small Trees
- 21) Removal of Hazardous Trees
- 22) Cone Collection
- 23) Timber Harvest (<100 MBF green or 500 MBF salvage)



**ATTACHMENT A**  
**Proposed Black Sheep Salvage Timber Permit**  
**Section 36-T9S-R9W, Beaverhead County**



1:10,330

— Access Road      - - - New Road



Harvest Area



## ATTACHMENT F

### Vegetative Analysis/Stand Prescription Black Sheep Salvage Timber Permit

The State parcel is located in the mid-reaches of Sheep Creek canyon in the northwest Blacktail Mountains. Slopes range from 25-65% with an elevation range of 6600-7700 feet. No previous harvesting has occurred within the State parcel. Harvesting has occurred on the private lands to the north of the State parcel over the past 25 years. The State parcel has ~474 forested acres which are dominated by Douglas-fir and lodgepole pine. The cover type is Douglas-fir within Douglas-fir/Pine Grass (Psme/Caru) habitat types and lodgepole pine within the Subalpine fir/Pine Grass (Abla/Caru) and Subalpine fir/Grouse Whortleberry (Abla/Vasc) habitat types. Forested stands are included in fire group six with Douglas-fir succeeding well and dominating most stands; and fire group seven with lodgepole as the seral species. The fire disturbance regime was likely low to moderate severity fires with stand replacing fires occurring in denser, overstocked areas. The absence of fire, in combination with encroachment, has resulted in mature/over mature, overstocked and suppressed stands which along with extended drought, have provided conditions for the current heavy infestations of Mountain Pine beetle, Douglas fir beetle and Spruce Budworm and higher susceptibility to fire. Soils are derived from calcareous parent material.

Unit 1 (71 ac/500 MBF) - Stand is composed predominately of lodgepole pine with a mix of Douglas fir sawtimber. No true old growth areas are found in the stand but scattered individuals and small clumps (<1 acres) of old relic Douglas-fir trees do occur within the proposed unit. Overall health and growth of the stand is poor. The stand is overstocked and suppressed and has heavy infestations of Mountain Pine beetle, Douglas fir beetle and Spruce Budworm. Majority of live lodgepole pine have poor crown ratios (<30%). Live Douglas fir have poor to good crown ratios. Dominate trees are 60-65' and co-dominates are 50-55' with an age range of 100-200 years. Yield capacity is 50-70 cu. ft/acre. Regeneration is light to moderate and understory vegetation is moderate to heavy. Coarse woody debris is moderate.

Treatments for lodgepole pine cover types would target all dead, dying and at-risk lodgepole pine and other shade intolerant species exhibiting signs of insect/disease, poor health and/or poor tree form characteristics for removal and overall stand density reduction, utilizing regeneration harvests. Older, large shade tolerant trees would be harvested to cull out defective or damaged trees, where applicable.

Treatments for Douglas-fir cover types would target dead, dying and at-risk trees for removal. The majority of the unhealthy trees are in the older age classes and would be targeted for harvest while the younger age classes would be favored for the residual stand. Trees of all age classes exhibiting signs of insect/disease, poor health and/or poor tree form characteristics would be designated for harvest. Additionally, overall stand density would be reduced by 50-60% of the merchantable volume, targeting shade tolerant species and trees exhibiting overstocked/suppressed conditions, utilizing group selection/selection harvests. This stand density reduction would be concentrated in areas of the stands containing younger-aged/small to medium sized trees while retaining some of the healthy older trees, if available and applicable. Large live trees, live cull trees, snags, cull snags, and coarse woody debris and fine materials would be protected and retained in sufficient quantities where applicable.

Severity of stand conditions would dictate harvest method used, emulating moderately severe ground fire to stand replacing fire. Harvest prescription would recover value from resources before it is lost, reduce overstocking, fire hazard, and additional insect and disease while promoting forest health, vigor and productivity. Additionally, harvest would open the stands to encourage natural regeneration of shade intolerant species; maintain lodgepole pine and Douglas-fir cover types while maintaining a semblance of historic stand conditions; and promote existing aspen stands.

Aspen Areas - A regeneration harvest of all conifer sawtimber within 100 feet of the aspen clone would be used to reduce conifer encroachment into aspen stands and promote aspen regeneration.

Submerchantable conifer and aspen would not be protected during harvest operations to further reduce conifer encroachment and induce suckering of aspen. Post harvest treatment to fall and lop any remaining submerchantable conifer trees.

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 15 years.

There is currently more total forest cover in Beaverhead County than in prior historical conditions. The proposed harvest represents ~15% of the total forested acres within the State parcel. Harvesting an estimated 500 MBF of timber would alter the forest cover on approximately 71 acres. The proposed levels of harvest and subsequent reduction in forest canopy would be similar or less than what would be expected to occur under the present natural conditions. Natural regeneration would be expected. No rare plants or cover types have been noted or observed within the project area.

#### MEASURES RECOMMENDED TO MITIGATE POTENTIAL IMPACTS:

- 1) Compliance with Forestry Best Management Practices (BMP's), Streamside Management Zone (SMZ) laws, the Montana Stream Protection Act (124 Permit) and applicable DNRC Forest Management Administrative Rules.
- 2) Limit equipment operations to periods when soils are dry (less than 20% soil moisture), frozen or snow covered (12 inches packed or 18 inches unconsolidated) to minimize soil compaction, rutting, vegetative disturbance and maintain drainage features. Control erosion by installing adequate drainage on roads and skid trails.
- 3) The Forest Officer shall approve a plan for felling, yarding and landing location in each harvest unit prior to the start of operations in the unit. The locations and spacing of skid trails and landings shall be designated and approved by the Forest Officer prior to operations and skid trails will not be spaced less than 60 feet. 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 sustained tractor skidding to slopes  $\leq 50\%$ . Limit scarification to 30-40% of the harvest area. 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) For slope stability on the road construction segments, construct cutslopes at 1:1 (run/rise) in common material and 1/4:1 for rock. Install adequate road drainage to control erosion concurrent with harvest activities and road opening and new construction. Provide effective sediment filtration along drainage features near crossing sites. On State lands, new construction would have adequate drainage provided and major skid trails would be closed with slash and debris and/or barriers, and adequate drainage provided.
- 5) All road 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.
- 6) At sale closure, grass seed roads, skid trails (where needed) and landings with an appropriate seed mixture.
- 7) 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.
- 8) Retain live, healthy older trees and stand attributes suitable for old growth development where available and applicable.
- 9) Contact DNRC wildlife biologist should any threatened or endangered species be encountered within the proposed project area.

# ATTACHMENT G

## BLACK SHEEP SALVAGE TIMBER PERMIT CHECKLIST FOR ENDANGERED, THREATENED AND SENSITIVE SPECIES

Pertains to Section II. 9. of the DS-252 DNRC Environmental Checklist  
(Rev. August 1, 2007)  
CENTRAL LAND OFFICE

Prepared by Chuck Barone

August 5, 2010

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>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 ~54 miles east of the project area. Grizzly bear use of the Blacktail Mountains may occur, however, the project area is currently considered outside of occupied habitat (Interagency Occupied Habitat Map, September 2002). Potential riparian habitat for grizzly bears within the project area is marginal. Human access levels are presently low due to private access. Approximately 0.2 miles of new road would be constructed to minimum standard to access the proposed harvest unit. The potential for any measurable increases in bear-human conflicts following the project activities are expected to be low. Adverse direct, indirect and cumulative impacts to bears as a result of this project are expected to be minimal.</p>
<p>Lynx (<i>Felis lynx</i>) Habitat: mosaics--dense sapling and old forest &gt;5,000 ft. elev.</p>	<p>[N] The proposed project area is located along the fringes of preferred lynx habitat. Suitable lynx habitat is potentially present in the Blacktail Mountains (MNHP 2009) and Lynx could occasionally use the project area. However, habitats high in coarse woody debris that are preferred for denning, and large acreages (&gt;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 naturally induced fragmentation, and the high level of interspersions of native grassland habitat and dry forest types. The majority of the habitat in would be categorized as "other" (429 ac – 67) habitat. Additionally, there are ~45 acres of "temporary non" habitat. There is no identified mature or young foraging or denning habitat within the State parcel. Of the ~429 acres of potential lynx habitat on the State parcel, ~71 acres are proposed for harvest. This would leave ~71 acres converted to temporary non habitat. Preferred lynx habitat is marginal within the proposed project</p>

	area due to the lack of highly desirable habitat conditions for lynx and their primary prey, snowshoe hares. Adverse direct, indirect or cumulative impacts to lynx as a result of this project are expected to be minor and temporary.
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<b>DNRC Sensitive Species</b>	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
<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 Greater Yellowstone Wolf Recovery Area for gray wolves. The nearest packs are the Horse Prairie pack to the west and the Jack Creek pack to the east. 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.</p>
<p>Bald Eagle (<i>Haliaeetus leucocephalus</i>) Habitat: late-successional forest &lt;1 mile from open water</p>	<p>[N] Bald Eagles have been documented within the quarter latilong (L36C) that encompasses the proposed project area (Skaar 1996, MNHP 2010). 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>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 (L36C) that encompasses the proposed project area (Skaar 1996, MNHP 2010). However, stands found within the proposed project area are presently experiencing heavy insect activity and could attract birds. No recent burns (<math>\leq 5</math> years old) have occurred within the State tracts or adjoining sections. Due to the size, location and short duration of this proposed project only minor potential for direct, indirect or cumulative effects to black-backed woodpeckers would be expected to occur.</p>
<p>Black-tailed Prairie Dog (<i>Cynomys ludovicianus</i>) Habitat: Prairie, shortgrass prairie, badlands</p>	<p>[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.</p>

<p>Flammulated Owl (<i>Otus flammeolus</i>) Habitat: late-successional ponderosa pine and Doug.-fir forest</p>	<p>[N] Flammulated Owls have been documented within the quarter latilong (L36C) that encompasses the proposed project area (Skaar 1996, MNHP 2010). The parcel involved in the proposed project maintains elevations that range from about 6,600-7,700 feet. Flammulated Owls have been found in warm, dry Douglas-fir cover types. The parcels involved in this project have similar vegetative conditions, represented by small, scattered patches but the associated higher elevations are not their preferred habitat. Direct, indirect and cumulative effects to Flammulated Owls would not be expected to occur under the alternatives considered.</p>
<p>Greater Sage-grouse (<i>Centrocercus urophasianus</i>) Habitat: sagebrush semi-desert</p>	<p>[N] Sage Grouse have been documented in the quarter latilong (L36C) that encompasses the proposed project area (Skaar 1996, MNHP 2010). Sagebrush semi-desert habitats suitable for use by Sage Grouse do not occur within one mile of the project area and no leks have been identified within one mile of the project area or haul route. 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., post June 15), and preferred sagebrush habitat would not be altered. Impacts to Sage Grouse are not anticipated.</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 within the quarter latilong (L36C) that encompasses the proposed project area (Skaar 1996, MNHP 2010). 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>Mountain Plover (<i>Charadrius montanus</i>) Habitat: short-grass prairie, alkaline flats, prairie dog towns</p>	<p>[N] Mountain Plovers have not been documented within the quarter latilong (L36C) that encompasses the proposed project area (Skaar 1996, MNHP 2010). 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>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. No impacts to Bog Lemmings 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 been documented within the quarter latilong (L36C) that encompasses the proposed project area (Skaar 1996, MNHP 2010). Cliff features suitable for use by nesting Peregrine Falcons occur within 1 mile of the project area but suitable prey and hunting habitat are minimal within the Sheep Creek canyon. No direct, indirect or cumulative effects associated with this project are anticipated.</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 (L36C) that encompasses the proposed project area (Skaar 1996, MNHP 2010). The project area is poorly suited for use by Pileated Woodpeckers. As suitable habitat is not present in the project area, no impacts to Pileated Woodpeckers would be expected to occur 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>

\* Skaar, P.D. 1996. Montana bird distribution, fifth edition. Montana National Heritage Program 2010. National Heritage Tracker.