Environmental Assessment Checklist

Project Name: Sheep Canyon Limited Access Timber Sale Proposed Implementation Date: June 2025 Proponent: Dillon Unit, Central Land Office, Montana DNRC County: Beaverhead

Type and Purpose of Action

Description of Proposed Action:

The Dillon Unit of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the Sheep Canyon Timber Permit. The project is located approximately 14 miles south of Dillon, Montana (refer to Attachments vicinity map A-1 and project map A-2) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	9S 9W S36	640	135
Public Buildings			
MSU 2 nd Grant			
MSU Morrill			
Eastern College-MSU/Western College-U of M			
Montana Tech			
University of Montana			
School for the Deaf and Blind			
Pine Hills School			
Veterans Home			
Public Land Trust			
Acquired Land			

Objectives of the project include:

- Sanitize forest stands of insects and disease infected trees
- Promote forest resilience while reducing the probability of uncharacteristically severe wildfire
- Emulate historic disturbance regimes to promote future stand structure and species composition that would be similar to historic conditions
- Generate revenue for the Common School Trust through timber harvest

Proposed activities include:

Action	Quantity
Proposed Harvest Activities	# Acres
Clearcut	
Seed Tree	135
Shelterwood	
Selection	
Old Growth Maintenance/Restoration	
Commercial Thinning	
Salvage	
Total Treatment Acres	135
Proposed Forest Improvement Treatment	# Acres
Pre-commercial Thinning	
Site preparation/scarification	
Planting	
Proposed Road Activities	# Miles
New permanent road construction	1.5
New temporary road construction	
Road maintenance	
Road reconstruction	
Road abandoned	
Road reclaimed	
Other Activities	

Duration of Activities:	3 years
Implementation Period:	June 2025-Novemeber 2027

The lands involved in this proposed project are held in trust by the State of Montana. (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The Board of Land Commissioners and the DNRC are required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run for the beneficiary institutions (Section 77-1-202, MCA).

The DNRC would manage lands involved in this project in accordance with:

- > The State Forest Land Management Plan (DNRC 1996),
- > Administrative Rules for Forest Management (ARM 36.11.401 through 471),
- The Montana DNRC Forested State Trust Lands Habitat Conservation Plan (HCP) (DNRC 2010)
- > and all other applicable state and federal laws.

Project Development

SCOPING:

- DATE:
 - o July 3, 2024
- PUBLIC SCOPED:
 - The scoping notice was posted on the DNRC Website: <u>https://dnrc.mt.gov/News/scoping-notices</u>
 - Statewide Scoping List
- AGENCIES SCOPED:
 - Montana Fish, Wildlife, and Parks
 - Bureau of Land Management Dillon Field Office
 - United States Forest Service Dillon Ranger District
 - Beaverhead County Commissioners
- COMMENTS RECEIVED:
 - How many: One external comment was received during the scoping period from Montana Fish, Wildlife, and Parks.
 - Concerns: Montana FWP requested a project design that would promote a mosaic of forest structures through the retention of mature trees while thinning forest overstories to stimulate plant diversity and forage opportunity by an array of wildlife. FWP recommended the removal of conifers within and in proximity to aspen patches to promote browsing opportunity. FWP expressed concerns about the potential increase in noxious weeds and invasive species due to ground disturbance. Recommendations for wildlife habitat include retaining standing or downed large-diameter Douglas-fir that have signs of use by cavity nesters.
 - Results: The project would be designed to retain varying densities of large, mature overstory trees while creating canopy openings that will encourage plant and forage production. The project area will be monitored for cheatgrass and noxious weeds and DNRC will facilitate herbicide application as needed. Any conifer removal within or near aspen groves will be encouraged in harvest units. Temporary roads will be reclaimed to prevent motorized use after harvest competition. All existing and new permanent roads occur on a road system originating on private ownership where public use is prohibited. Large snag retention will be stipulated at a minimum density of 2 trees per acre to maintain cavity nester habitat.

DNRC specialists were consulted, including: Jeff Schmalenberg, Resource Management and Planning Section Supervisor Emilia Grzesik, Forest Management Planner Patrick Rennie, Archaeologist Chris Forristal, Forest Management Program Wildlife Biologist

Internal and external issues and concerns were incorporated into project planning and design and will be implemented in associated contracts.

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS

NEEDED: (Conservation Easements, Army Corps of Engineers, road use permits, etc.)

- United States Fish & Wildlife Service- DNRC is managing the habitats of threatened and endangered species on this project by implementing the Montana DNRC Forested Trust Lands HCP and the associated Incidental Take Permit that was issued by the United States Fish & Wildlife Service (USFWS) in February of 2012 under Section 10 of the Endangered Species Act. The HCP identifies specific conservation strategies for managing the habitats of grizzly bear, Canada lynx, and three fish species: bull trout, westslope cutthroat trout, and Columbia redband trout. This project complies with the HCP. The HCP can be found at <u>https://dnrc.mt.gov/TrustLand/about/planning-andreports</u>.
- Montana Department of Environmental Quality (DEQ)- DNRC is classified as a major open burner by DEQ and is issued a permit from DEQ to conduct burning activities on state lands managed by DNRC. As a major open-burning permit holder, DNRC agrees to comply with the limitations and conditions of the permit.

A Short-term Exemption from Montana's Surface Water Quality Standards (318 Authorization) may also be required from DEQ if activities such as replacing a bridge on a stream would introduce sediment above natural levels into streams.

• **Montana/Idaho Airshed Group-** The DNRC is a member of the Montana/Idaho Airshed Group which was formed to minimize or prevent smoke impacts while using fire to accomplish land management objectives and/or fuel hazard reduction (Montana/Idaho Airshed Group 2010). As a member, DNRC must submit a list of planned burns to the Airshed Group's Smoke Monitoring Unit describing the type of burn to be conducted, the size of the burn in acres, the estimated fuel loading in tons/acre, and the location and elevation of each burn site. The Smoke Monitoring Unit provides timely restriction messages by airshed. DNRC is required to abide by those restrictions and burn only when granted approval by the Smoke Monitoring Unit when forecasted conditions are conducive to good smoke dispersion.

ALTERNATIVES CONSIDERED:

No-Action Alternative: Timber harvest would not occur and no revenue would be generated for the Common School Trust. There would be no new road construction.

<u>Action Alternative:</u> Approximately 700 MBF of timber would be harvested from 135 acres and would generate income for the Common School Trust. Access to the project area occurs on a private road system. Approximately 1.5 miles of new road would be constructed and connected to an existing private road system.

Impacts on the Physical Environment

Evaluation of the impacts on the No-Action and Action Alternatives including <u>direct, secondary,</u> <u>and cumulative</u> impacts on the Physical Environment.

VEGETATION:

Vegetation Existing Conditions:

Harvest Unit	Habitat Group	Fire Regime	Current Cover Type	Age Class (years)	DFC	RX	Acres
1	Warm and dry (eastside)	Low	Douglas Fir	100- 149	Douglas Fir	Seed Tree	40
2	Warm and dry (eastside)	Low-to- mixed	Douglas Fir	100- 149	Douglas Fir	Seed Tree	16
3	Warm and dry (eastside)	Low	Douglas Fir	40-99	Douglas Fir	Seed Tree	14
4	Cool and dry to moist (eastside)	Mixed	Lodgepole Pine	100- 149	Lodgepole Pine	Seed Tree	40
5	Warm and dry (eastside)	Low-to- mixed	Douglas Fir	100- 149	Douglas Fir	Seed Tree	25

<u>Fire Hazard/Fuels</u>: Fuel hazards are exacerbated by declining forest health throughout the majority of the project area. Insect infestations have led to an abundance of mature trees that possess poor health and vigor, creating conditions in which dead and down fuels are present. The current arrangement and volume of ground fuels and dead and dying timber increase the probability of uncharacteristically high fire intensity and would pose safety and tactical concerns for fire management operations. The project area is not within the wildland-urban interface, as the nearest municipality, Dillon, Montana, is 14 air miles away. Expansive valley bottom and agricultural fields are separate residential areas from the project vicinity.

<u>Insects and Diseases</u>: Douglas-bark beetle and associated spruce budworm infestations occur frequently throughout the project area. Root disease is intermittently present in Douglas-fir throughout much of the east and northeast facing portions of the project area. Dominant and codominant lodge pole pine are in declining condition with high rates of mistle toe and stem decay.

<u>Sensitive/Rare Plants</u>: The Montana Natural Heritage Program does not indicate any plant species of concern in their database.

<u>Noxious Weeds</u>: Canada Thistle (Cirsium arvense), Spotted Knapweed (Centaurea stoebe), Houndstounge (Cynoglossum officinale)

						Im	pact						Can	Comment
Vegetation		Di	rect			Seco	ondary			Cum	ulative		Impact Be	Number
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	miligaled?	
No-Action														
Current Cover/DFCs			х				X				X		N/A	
Age Class			х				х				X		N/A	
Old Growth	х				х				х					
Fire/Fuels				х			X				X		N/A	
Insects/Disease			х				X				X		N/A	
Rare Plants	х				х				х					
Noxious Weeds	х				х				х					
Action														
Current Cover/DFCs	х				х				x					
Age Class	х				х				х					
Old Growth	х				х				х					
Fire/Fuels		х				X				Х			Y	1
Insects/Disease	х				х				х					
Rare Plants	х				х				x					
Noxious Weeds			x				X			X			Y	2

Comments:

- 1. Short term fuel accumulations will occur due logging operations through the harvest of green standing trees. Harvest of dead and downed timber will not result in a net increase in fuel accumulations.
- 2. Timber harvest and associated road work may lead to an increase in the occurrence of noxious weeds.

Vegetation Mitigations:

- 1. Excess logging slash that is not necessary for soil erosion mitigation will be piled and burned in accordance to Logging Slash Reduction Laws.
- 2. DNRC plans to complete herbicide treatments of noxious weeds on the state parcel and segments of the access roads on adjacent ownerships to control existing weed infestations. All equipment would be washed and inspected prior to start of work. All new roads would be reseeded to site adapted grass to reduce the threat of noxious weed spread. Project areas would be monitored for noxious weeds after harvest operations are complete and herbicide treatments may be applied if needed.

SOIL DISTURBANCE AND PRODUCTIVITY:

Soil Disturbance and Productivity Existing Conditions:

The project area is located on moderately steep slopes with deep soils weathered from limestone and shale colluvium. Forest soils are moderately productive, deep, and well drained with gravelly loam textures. Risk of soil displacement, compaction and erosion is low to moderate if Best Management Practices (BMP's) for forestry are adhered to.

Areas of marginal slope stability occur within the project area. These areas are the landslide debris from previous large-scale failures outside of DNRC's ownership. These types of rotational failures are common in the Blacktail range with movement typically as a result of seismic activity or historic precipitation events.

Forest sites in the project area are low to moderately productive with predominant limitations being temperature and precipitation. Coarse woody debris volumes are higher than normal for typical Douglas fir stands in this region and were ocularly estimated at 10-15 tons per acre and accumulating in trend.

No previous timber harvest has occurred within the areas proposed for harvest and no detrimental soil disturbance was observed during field review. Soil productivity in the harvest area has not been previously affected by past management activities.

Soil Disturbance						Im	pact						Can	Comment
and Productivity		Di	rect			Seco	ondary			Cum	ulative		Impact Be	Number
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	willigated?	
No-Action														
Physical Disturbance (Compaction and Displacement)	x				x				x				N/A	
Erosion	х				х				х				N/A	
Nutrient Cycling	х				х				х				N/A	
Slope Stability	х				х					x			No	3
Soil Productivity	х				х				х				N/A	
Action														
Physical Disturbance (Compaction and Displacement)		x			x					x			Yes	1
Erosion		Х			х				х				Yes	1
Nutrient Cycling		X			х				х				Yes	2
Slope Stability		X				X				X			Yes	3
Soil Productivity		X			x				х				Yes	2

Comments:

- 1. Physical disturbance from compaction and displacement would be expected on skid trails and landings. Past monitoring on DNRC timber sales from 1988 to 2010 has shown an average of 12.2 percent soil effects across all parent materials and soil types. Sales harvested prior to 1990 exhibited impacts of 16.8 percent; sales harvest post-1990 showed impacts averaging 7.3 percent of the harvest area. This provides a information regarding the application and effectiveness of Forestry Best Management Practices (BMPs) and the Streamside Management Zone (SMZ) law. Detrimental soil effects are expected to be less the 20% within the harvest units and soil productivity will be maintained.
- 2. Coarse and fine woody debris provide a crucial component in forested environments through nutrient cycling, microbial habitat, moisture retention and protection from mineral soil erosion (Harmon et al., 1986). As required in the timber sale contract, both fine and coarse woody debris would be retained and maintained at levels consistent with the forest habitat type to reduce potential impacts to forest productivity. Although fine woody debris would be left on site for nutrient retention, a reduction in annual fine material recruitment would result from this alternative for up to 20 years.
- 3. Road locations were carefully placed to minimize exposure to areas of marginal instability and avoided where possible. Construction practices such as proper compaction and adequate drainage will mitigate slope failures to a low degree of risk for both direct and indirect effects. Harvest activities and road construction present a low risk of cumulative effects of potentially reactivating large-scale historic slumps.

Soil Mitigations:

1. Limit equipment operations to periods when soils are relatively dry, (less than 20 percent oven-dried weight), frozen, or snow-covered in order to minimize soil compaction and rutting and maintain drainage features. Check soil moisture conditions prior to equipment start-up.

2. The logger and sale administrator would agree to a skidding plan prior to equipment operations. Skid-trail planning would identify which main trails to use and how many additional trails are needed. Trails that do not comply with BMPs (i.e. trails in draw bottoms) would not be used unless impacts can be adequately mitigated. Regardless of use, these trails may be closed with additional drainage installed, where needed, or grass-seeded to stabilize the site and control erosion.

3. Tractor skidding should be limited to slopes of less than 45 percent unless the operation can be completed without causing excessive displacement or erosion. Based on site review, short, steep slopes may require a combination of mitigation measures, such as adverse skidding and/or directional felling and skidding from more moderate slopes.

4. Keep skid trails to 20 percent or less of the harvest unit acreage. Provide drainage in skid trails, landings and roads concurrent with operations.

5. Slash disposal: Limit the combination of disturbance and scarification to 30 to 40 percent of the harvest units. No dozer piling on slopes over 35 percent; no excavator piling on slopes over 40 percent, unless the operation can be completed without causing excessive erosion. Consider lopping and scattering or jackpot burning on the steeper slopes. Consider disturbance incurred during skidding operations to, at least, partially provide scarification for regeneration.

6. Retain 10-15 tons of large woody debris and a feasible majority of all fine litter following harvesting operations. On units where whole tree harvesting is used, implement one of the following mitigations for nutrient cycling: 1) use in-woods processing equipment that leaves slash on site; 2) for whole-tree harvesting, return-skid slash and evenly distribute within the harvest area; or 3) cut tops from every third bundle of logs so that tops are dispersed as skidding progresses.

WATER QUALITY AND QUANTITY:

Proposed harvesting would manage less than 1.5 percent of Sheep Creek watershed forested acres; forest cover comprises approximately 48% of the 28 mi² watershed; annual precipitation is low with all proposed harvest units receiving approximately 22 to 28 inches of precipitation annually. No new stream crossings are proposed and existing stream crossing on private lands meet BMP's. The proposed harvest does not include harvesting within 50 feet of Class 1 streams.

Water Quality and Quantity Existing Conditions:

Waters in the Sheep Creek watershed are classified as B-1 (HUC 100200020403). Waters classified B-1 are to be maintained suitable for drinking, culinary, and food processing purposes, after conventional treatment; bathing, swimming, and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply.

The Sheep Creek watershed does not support a fishery, and no other water body receives water from Sheep Creek due to irrigation diversions. No species of concern or species listed as sensitive are present. Haul route roads meet BMP's and no existing sediment sources were inventoried during field review. Due to the low risk of sediment delivery to Sheep Creek, no SMZ or RMZ timber harvest is proposed and no streams supporting a fishery present in the project area, no effects to fisheries resources are expected and no further analysis is warranted.

Water Quality & Quantity		D	irect			lm Seco	pact ondary			Cum	ulative	•	Can Impact Be	Comment Number
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	willigated?	
No-Action														
Water Quality	х				х				х					
Water Quantity	х				х				х					

Water Quality & Quantity		Di	irect			Im Seco	pact ondary			Cum	ulative)	Can Impact Be Mitigated 2	Comment Number
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	wiitigateu	
Action														
Water Quality	х				х				х				Yes	1
Water Quantity	х				х				х				Yes	2

Comments:

1. No existing sediment sources were documented during review. No new stream crossings are proposed and no existing stream crossings exist in the project area. No SMZ or RMZ harvest is proposed. As a result, no effects to water quality is Sheep Creek are expected.

2. Because DNRC is proposing management on a very small portion of the forested watershed area and annual precipitation is low, it is unlikely that a measurable increase in annual water yield will occur.

Water Quality & Quantity Mitigations:

- 1. Follow all applicable Best Management Practices for Forest Management.
- 2. Implement all applicable Administrative Rules for Forest Management.
- 3. Implement all Streamside Management Zones laws.
- 4. Apply all applicable conservation commitments within Montana's Forest Management Habitat Conservation Plan.

WILDLIFE:

Wildlife Existing Conditions:

The project area is comprised of both forested and unforested grassland habitat used by a variety of wildlife species. Forest habitat is dominated by mature Douglas-fir stands with lesser amounts of lodgepole pine. The project area occurs along a forest grassland ecotone that provides habitat for many native songbirds, raptors, big game species, and predators. Forested stands make up approximately 80.4% (514 acres) of the project area and occur as naturally fragmented patches interspersed within rocky slopes and grassland/shrublands. Some existing forested area in the project area is present due to range encroachment during the last 150 years. In general, open forested stands are present on drier, south and west-facing slopes, while north and east-facing slopes contain more dense, decadent stands of Douglas-fir and lodgepole pine. An aspen stand is also present. Approximately 86 acres of salvage harvest occurred in the project area between 2010 and 2012, resulting in more open forest conditions. Numerous small to moderate-sized snags are found in forested portions of the project area. Coarse woody debris amounts are patchy in some locations due to the mature age of stands and past forest management. Some rock outcrop and scree features occur in portions of the project area. No open roads are present within the project area, however approximately 0.9 miles of existing restricted road provide limited motorized access for occasional forest or grazing management access. Non-motorized public use of the project area is likely low except during the big game hunting season. The project area and surrounding cumulative areas are comprised of the relatively isolated Blacktail Mountain range, which are made up of similar wildlife habitats as the project area and include a Bureau of Land Management wilderness study area. Primary land management/owners in this area are the Bureau of Land Management and Montana DNRC.

No-Action:

Under the no action alternative, none of the proposed vegetation treatments would occur. Thus, no direct, indirect or cumulative effects to habitat and associated species would be expected as a result of the proposed activities.

Action Alternative (see Wildlife table below):

						lm	pact						Can	
Wildlife		Di	irect			Sec	ondary			Cum	ulative		Impact be	Comment
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	Mitigated ?	Number
Threatened and Endangered Species														
Grizzly bear (Ursus arctos) Habitat: Recovery areas, security from human activity		x				X			x				Y	1
Lynx (<i>Felis lynx</i>) Habitat: mosaics- -dense sapling and old forest >5,000 ft. elev.		x				X			x				Y	2
Wolverine proposed Threatened (Gulo gulo)	x				x				x				Ν	3
Sensitive Species														
Bald eagle (Haliaeetus leucocephalus) Habitat: Late- successional forest within 1 mile of open water	x				x				x				NA	4
Black-backed woodpecker (Picoides arcticus)	x				x				x				NA	4

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						Im	pact						Can	
Wildlife		Di	rect			Seco	ondary			Cum	ulative		Impact be	Comment
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	Mitigated ?	Number
Habitat: Mature														
to old burned or														
beetle-infested														
forest														
Black-tailed														
prairie dog														
(Cynomys														
ludoviscianus)														
Habitat:	Х				Х				Х				NA	4
grasslands, short-														
grass prairie,														
sagebrush semi-														
desert														
Flammulated														
owl														
(Otus														
, flammeolus)														
Habitat: Late-														
successional	Х				X				Х				NA	4
ponderosa pine														
and Douglas-fir														
forest														
Greater sage														
arouse														
(Centrocercus														
urophasianus)														
Habitat:	Х				X				Х				NA	4
sadebrush semi-														
desert														
Peregrine falcon														
(Falco														
perearinus)														
Habitat: Cliff														
features near	X				X				Х				NA	4
open foraging														
areas and/or														
wetlands														

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						Im	pact						Can	
Wildlife		Di	rect			Seco	ondary			Cum	ulative		Impact be	Comment
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	Mitigated ?	Number
Pileated woodpecker (Dryocopus pileatus) Habitat: Late- successional ponderosa pine and larch-fir	x				x				x				NA	4
forest Fringed myotis														
(Myotis thysanodes) Habitat: low elevation ponderosa pine, Douglas-fir and riparian forest with diverse roost sites including outcrops, caves, mines	x				x				x				NA	4
Hoary bat (Lasiurus cinereus) Habitat: coniferous and deciduous forests and roost on foliage in trees, under bark, in snags, bridges		x				x				x			Y	5
Townsend's big- eared bat (<i>Plecotus</i> <i>townsendii</i>) Habitat: Caves, caverns, old mines	x				x				x				NA	4

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		Impact											Can	
Wildlife		D	irect			Sec	ondary			Cum	ulative		Impact be	Comment
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	Mitigated ?	Number
Big Game Species														
Elk		X				X				Х			Y	6
Whitetail	Х				Х				Х				NA	4
Mule Deer		X				X				X			Y	6

Comments:

- 1. The proposed project area lies 22 miles west of Non-Recovery Occupied Habitat associated with the Greater Yellowstone grizzly bear Recovery Zone (Wittinger et al. 2002). Grizzly bears could potentially travel through the project area and utilize preferred riparian habitat, however appreciable use of the project area is unlikely. The proposed action would harvest approximately 121 acres (34.4%) of forest cover within the project area. Habitat connectivity would be reduced on these 121 acres, however, forest patches in this landscape are relatively discontinuous and interspersed with grasslands. Preferred habitat associated with riparian areas would not be harvested or altered. Approximately 1.5 miles of new, permanent restricted road would be constructed to access the harvest units and facilitate long-term access for fire/forest management. All roads would prohibit public motorized access, but some additional disturbance could occur. Temporary disturbance and removal of hiding cover would be additive to other past and ongoing projects in the vicinity of the project area. Given the scope and scale of the proposed activities, and relatively marginal habitat quality for grizzly bears combined with low likelihood of bear presence, adverse direct, secondary and cumulative impacts to grizzly bears as a result of this project are expected to be low to negligible.
- 2. Within the 640-acre project area there are currently approximately 504 acres (79.0% of project area) of lynx potential habitat, 405 acres of which is currently suitable habitat. Of these 405 acres of suitable habitat, 118 acres (29.3% of suitable habitat) would be treated and converted to temporary non-suitable habitat. Thus, approximately 226 acres of suitable habitat (67.3% of existing) would remain following harvest within the project area. It is estimated that the stands being reduced to temporary non-suitable condition would take approximately 15-20 years to regenerate to sufficient canopy heights to return these acres to a "suitable" habitat class. Some patches of advanced regeneration comprised of shade-tolerant tree species would be retained (where available) to provide habitat structure and maintain these tree species in harvested stands. Because the project area lies along the edge of a grassland/forest ecotone, suitable habitat for lynx is relatively isolated and existing connectivity is low; the likelihood of lynx using the area is low. No observations of lynx have been recorded within 50 miles of the project area in the last 40 years (MNHP 2025). Thus, given the relatively small acreage proposed for treatment, minimal likelihood of lynx presence, and existing habitat quality and

connectivity, low adverse direct, indirect, and cumulative effects to Canada lynx would be anticipated.

- 3. No potentially suitable wolverine habitat exists within the proposed Project Area. The Project Area does not maintain deep snow into late spring and does not contain high-elevation alpine habitat with avalanche chutes or denning habitat. Appreciable use of the area is not expected. Given the large home range area (average 150+ sq. miles) wolverines occupy, and long distances wolverines typically cover during their movements, the proposed activities would not be expected to measurably affect use of the area by wolverines. Thus, no direct, secondary, or cumulative effects to wolverines would be expected to occur under the proposed action.
- 4. This project area is either out of the range of the normal distribution for this species or suitable habitat is not present. Thus, no direct, secondary, or cumulative effects would be anticipated.
- 5. The proposed activities would directly affect approximately 135 acres of potential hoary bat habitat. Hoary bats typically roost in tree foliage (Bachen et al. 2020) and if present they could be temporarily displaced by timber harvesting. Tree and crown closure reductions under the action alternative would likely improve habitat quality and the possibility of use by foraging bats in these stands by creating a more open understory. Potential disturbance would only be expected from late May through September, when hoary bats are in Montana. After the conclusion of activities, continued use of harvested areas by hoary bats would be anticipated. At least 2 large snags and 2 large snag recruitment trees per acre (>21 inches dbh, or largest size class available) would be retained and could provide potential roosting habitat.
- 6. The project area provides suitable habitat for mule deer and elk during all seasons except for winter, as winter range is lacking (DFWP 2008). Under the proposed action, 135 acres of forested habitat (26.3% of forest present) would have tree density and associated crown cover reduced, which could influence local use of the area by big game for several decades. Of these 135 acres, tree removal would impact approximately 53 acres of mature forest with over 40% crown closure that likely provides potential thermal cover to ungulates during hot weather. Relatively well-stocked stands providing potential thermal cover would remain on approximately 76 acres in the project area following the proposed harvest and 231 total acres of hiding cover would persist to provide security for big game. New restricted road construction of 1.5 miles would not measurably increase long-term motorized disturbance in the project area, however short-term harvesting activities could temporarily displace big game species. Harvesting activities are unlikely to occur during the winter months under typical winter conditions. Given the location, relatively small size of the proposed activities, and habitat attributes found on the project area and surrounding area, minor adverse direct, secondary and cumulative effects to mule deer and elk would be anticipated.

Wildlife Mitigations:

- A minimum of two snags and two snag recruitment tree per acre, of the largest diameter class, would be retained. Cull live trees and cull snags would be retained where possible given human safety considerations.
- Retain at least one large log >15 inch diameter and >20 feet long (or of the largest diameter available) per acre to comply with lynx HCP commitment LY-HB2(1).
- Retain patches of advanced regeneration comprised of shade-tolerant tree species to provide habitat structure and maintain these tree species as a part of the stand species mix.
- Following project work, existing and new restricted roads would remain closed to motorized public access.
- All applicable Administrative Rules for Forest Management and commitments in Montana's Forest Management Habitat Conservation Plan would be applied.

References:

- Bachen, D.A., A. McEwan, B. Burkholder, S. Blum, and B. Maxell. 2020. Accounts of Bat Species Found in Montana. Report to Montana Department of Environmental Quality. Montana Natural Heritage Program, Helena, Montana. 58 p.
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- MNHP. 2025. Natural Heritage Map Viewer. Montana Natural Heritage Program. Retrieved on May 6, 2025, from http://mtnhp.org/MapViewer.
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Air Quality			Can	Comment										
	Direct					Sec	ondary			Cum	ulative		Impact Be	Number
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	willigated?	
No-Action														
Smoke	Х				Х				Х				NA	
Dust	Х				Х				Х				NA	
Action														
Smoke		Х				X				X			1	1
Dust		Х				X				Х			Y	2

AIR QUALITY:

Comments:

 Slash consisting of tree limbs and tops and other vegetative debris would be piled throughout the project area during harvesting. Slash would ultimately be burned after harvesting operations have been completed. Burning would introduce particulate matter into the local airshed, temporarily affecting local air quality. Over 70% of emissions emitted from prescribed burning is less than 2.5 microns (National Ambient Air Quality PM 2.5). High, short-term levels of PM 2.5 may be hazardous. Within the typical column of biomass burning, the chemical toxics are: Formaldehyde, Acrolein, Acetaldehyde, 1,4 Butadiene, and Polycyclic Organic Matter.

2. Timber harvesting and log hauling could create dust, which may affect local air quality. However, because the dust would be localized to skid trails and haul roads and the project is relatively small and located in a remote area, effects to air quality are expected to be low. The greatest impact of dust would be along the county road where it passes through the Matador Ranch Headquarters.

Air Quality Mitigations:

- Burning within the project area would be short in duration and would be conducted when conditions favor good to excellent ventilation and smoke dispersion as determined by the Montana Department of Environmental Quality and the Montana/Idaho Airshed Group. The DNRC, as a member of the Montana/Idaho Airshed Group, would burn only on approved days.
- If the Forest Officer considered the dust level as unacceptable where the haul route passes through the Matador Ranch Headquarters, the application of dust abatement, such as magnesium chloride may be required.

ARCHAEOLOGICAL SITES / AESTHETICS / DEMANDS ON ENVIRONMENTAL RESOURCES:

Will Alternative	Impact													Comment
result in potential impacts to:	Direct					Seco	ondary			Cum	ulative		Impact Be	Number
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	miligated?	
No-Action														
Historical or Archaeological Sites	x				x				x					
Aesthetics	х				х				х					
Demands on Environmental Resources of Land, Water, or Energy	x				x				x					
Action														
Historical or Archaeological Sites		x				x				x			Y	1
Aesthetics			x			x			х				Y	2
Demands on Environmental Resources of Land, Water, or Energy		x				x					x		Y	3

Comments:

- Scoping letters were sent to those Tribes that requested to be notified of DNRC timber sales. No response was returned that identified a specific cultural resource issue. A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search results revealed that no cultural or paleontological resources have been identified in the APE, but it should be noted that Class III level inventory work has not been conducted there to date.
- 2. Under the No Action Alternative there would be no changes to aesthetics. There would be both positive and negative impacts to aesthetics associated with the implementation of the Action Alternative. Positive impacts include cleaning up dead standing timber and greening up of the hillsides with regeneration conifer stands and understory vegetation. Negative impacts include visibility of road cuts, landings, slash piles and skid trails. Negative impacts would be of relatively short duration as slash piles would be burned, landings grass seeded, and skid trails re-vegetate.
- 3. The project area is leased for grazing. It is not expected that cattle would be displaced by logging operations and once harvest is complete, more area will come into grass production with a reduction in canopy cover.

Mitigations:

- Because the topographic setting and geology suggest a low to moderate likelihood of the presence of cultural or palaeontologic resources, proposed timber harvest activities are expected to have *No Effect* to *Antiquities*. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.
- 2. For aesthetics, road cuts would be grass seeded promptly following construction and roads and landing would be grass seeded upon completion of sale activities.
- 3. Gate status, whether gates need to be closed or left open and any modifications of fencing would be coordinated with the grazing lessee.

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 curr

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.

• N/A

Impacts on the Human Population

Evaluation of the impacts on the proposed action including <u>direct, secondary, and cumulative</u> impacts on the Human Population.

Will Alternative	Impact													Commont
result in potential		Di	rect			Seco	ondary			Cum	ulative		Impact Be	Number
Impacts to:	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	willgaled?	
No-Action														
Health and Human Safety	x				x				x					
Industrial, Commercial and Agricultural Activities and Production	x				x				x					
Quantity and Distribution of Employment	x				x				x					
Local Tax Base and Tax Revenues	х				x				x					
Demand for Government Services	x				x				x					
Access To and Quality of Recreational and Wilderness Activities	x				x				x					
Density and Distribution of population and housing	x				x				x					
Social Structures and Mores	x				x				x					
Cultural Uniqueness and Diversity	x				x				x					
Action														
Health and Human Safety		x			x				x				Y	1
Industrial, Commercial and Agricultural Activities and Production	x				x				x					
Quantity and Distribution of Employment		x			x				x				Ν	2
Local Tax Base and Tax Revenues	x													
Demand for Government Services	x													

Will Alternative	Impact													Comment
result in potential impacts to:	Direct					Seco	ondary			Cum	ulative		Impact Be	Number
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High	willigated ?	
Access to and Quality of Recreational and Wilderness Activities		x			x				x				Y	3
Density and Distribution of population and housing	x				x				x					
Social Structures and Mores	x				x				x					
Cultural Uniqueness and Diversity	x				x				x					

Comments:

- 1. Some minor additional short-term risk to health and human safety could be present related to increases in logging traffic during operations.
- 2. Due to the relatively small size and short duration of the proposed project, impacts to the quantity and distribution of employment would exist but on a nearly unmeasurably small scale.
- 3. Most of the year the project area receives very little to no recreational use. Access to the project area is significantly limited by private right-of-ways and topographic barriers. Recreational use is the heaviest and most widely spread out during the big game rifle season on public lands near the project area. All other times of the year, the area outside of the Blacktail road corridor sees virtually no recreational use. Due to the isolated location of the project area, relatively small size of the project, and short duration of activity, it is unlikely implementation of the Action Alternative will have much measurable direct or secondary impacts to recreation. No cumulative impacts are expected from the Action Alternative.

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.*

• N/A

Other Appropriate Social and Economic Circumstances:

Costs, revenues and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return. The estimated stumpage is based on comparable sales analysis. This method compares recent sales to find a market value for stumpage. These sales have similar species, quality, average diameter,

product mix, terrain, date of sale, distance from mills, road building and logging systems, terms of sale, or anything that could affect a buyer's willingness to pay.

No Action: The No Action alternative would not generate any return to the trust at this time.

Action: The timber harvest would generate additional revenue for the Common School Trust. The estimated return to the trust for the proposed harvest is \$27,630.00 based on an estimated harvest of 614 board feet (4,605 tons) and an overall stumpage value of \$6.00 per ton. Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives, they are not intended to be used as absolute estimates of return.

References

- DNRC 1996. State forest land management plan: final environmental impact statement (and appendixes). Montana Department of Natural Resources and Conservation, Forest Management Bureau, Missoula, Montana.
- DNRC. 2010. Montana Department of Natural Resources and Conservation Forested State Trust Lands Habitat Conservation Plan: Final EIS, Volume II, Forest Management Bureau, Missoula, Montana.

Does the proposed action involve potential risks or adverse effects that are uncertain but extremely harmful if they were to occur?

Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant? No

Environmental Assessment Checklist Prepared By:

Name: Riley Stevenson Title: South Zone Forester Date: May 7, 2025

Finding

Alternative Selected

Upon review of the Checklist EA and attachments, I find the Action Alternative, as proposed, meets the intent of the project objectives as stated in the *Type and Purpose of Action*. The lands involved in this project are held by the State of Montana in trust for the support of specific beneficiary institutions and DNRC is required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run (*Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X Section 11; and, 77-1-212 MCA*). The Action Alternative was designed to be in full compliance of the State Forest Lands Manage Plan

(SFLMP), the Administrative Rules for Forest Management (Forest Management Rules; ARM 36.11.401 through 471), as well as other applicable state and federal laws.

Significance of Potential Impacts

The identified resource management concerns have been fully addressed in the environmental analysis that was conducted. Specific project design features and various recommendations of the resource management specialists have been implemented to ensure that this project will fall within the limits of acceptable environmental change. For example, the project is designed to:

- Incorporate Best Management Practices (BMP's) in the design and construction of 1.15 miles of new road.
- Retain coarse woody debris to be left on site in amounts recommended by Graham, et.al (1994) and fine debris as much as practicable, maintaining nutrient cycling in harvest units, helping maintain soil productivity, as well as to provide habitat substrates for wildlife.
- Limit the area of adverse soil impacts, equipment operations would be limited to periods when soils are dry (<20% soil moisture), frozen or snow covered (12" packed or 18" unconsolidated) as well as limited to slopes <45%.
- Implement mitigation measures to reduce the proliferation of weeds including requiring all off-road equipment to be washed prior to operation on site, sowing grass seed on roads after harvest, and applying herbicide along roadsides and on spots of weed outbreaks.
- Retain at least 2 large snags and 2 large snag recruitment trees (largest size available) per acre within harvest units across the project area.
- Retain patches of advanced regeneration comprised of shade-tolerant trees species to provide habitat structure and maintain these tree species as a part of the stand species mix.
- Retain at least one large log >15-inch diameter or of the largest diameter available per acre.

Need for Further Environmental Analysis

EIS More D

More Detailed EA

X No Further Analysis

Environmental Assessment Checklist Approved By:

Name: Timothy Egan Title: Dillon Unit Manager Date: 05/19/2025 Signature: /s/ Timothy Egan Attachment A - Maps

A-1: Timber Sale Vicinity Map



A-2: Timber Sale Harvest Units

