

Environmental Assessment Checklist

Project Name: 8% Timber Sale

Proposed Implementation Date: June 2025

Proponent: Libby Unit, Northwest Land Office, Montana DNRC

County: Lincoln

Type and Purpose of Action

Description of Proposed Action:

The Libby Unit of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the 8% Timber Sale. The project is located within the Kootenai River drainage approximately 2 miles Northeast of Libby, MT. (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	Sec. 36, T31N, R31W	348	325
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:

- Generate approximately \$150,000-200,000 in revenue for the Common Schools Trust
- Increase agency accessibility to the parcel
- Sell approximately 1.5-2 million board feet of timber to generate revenue for the Common Schools Trust and to meet annual timber harvest levels mandated by State Law.

- Use silvicultural treatments to promote the development of historic stand conditions, emphasizing retention and/or regeneration of Ponderosa Pine and Western Larch, while improving stand health and vigor.
- Manage these lands in a way that would reduce fuels and the potential for a wildfire to become a stand replacing fire, putting at risk adjacent land ownerships and the timber asset that currently exists, and capture the value of that asset before tree mortality erodes additional value.

Proposed activities include:

Action	Quantity
Proposed Harvest Activities	# Acres
Clearcut	
Seed Tree	
Shelterwood	312
Selection	
Old Growth Maintenance/Restoration	
Commercial Thinning	
Salvage	
Total Treatment Acres	312
Proposed Forest Improvement Treatment	# Acres
Pre-commercial Thinning	
Site preparation/scarification	
Planting	
Proposed Road Activities	# Miles
New permanent road construction	2.24
New temporary road construction	
Road maintenance	3.48
Road reconstruction	
Road abandoned	
Road reclaimed	
Other Activities	# Acres
Shaded Fuel Breaks	13

Duration of Activities:	Approximately 3 years
Implementation Period:	June 2025-2028

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:
 - April 18, 2024 - May 18, 2024
- PUBLIC SCOPED:
 - The scoping notice was posted on the DNRC Website:
<https://dnrc.mt.gov/News/scoping-notice>
 - Adjacent landowners
 - Statewide and Libby Unit scoping lists
- Public Notice published in the Western News on April 23, 30, May 7, 14 & 21, 2024
- AGENCIES SCOPED:
 - Montana Fish, Wildlife and Parks
 - US Forest Service
 - All Montana Tribal Organizations
 - Lincoln County
- COMMENTS RECEIVED:
 - How many: Two comments were received from Lincoln County residents.
 - Concerns: One comment letter indicated broad support for forest management in the area. One comment questioned distribution of revenue from the timber sale.
 - Results: Distribution of revenue from timber sales on TLMD managed lands are allocated to the appropriate trust. The 1889 Enabling Act granted the State of Montana the 16th and 36th section of each township in Montana "for the support of common schools". Any alternative distribution of revenue would be outside the scope of this sale.

DNRC specialists were consulted, including Jessica Mannion (Management Forester), Dave Marsh (Forest Management Supervisor), Tim Spoelma (Silviculturist), Victoria Forristal (Wildlife Biologist), Joshua Harris (Hydrologist/Soils/Fisheries), Patrick Rennie (Archeologist), and Emilia Grzesik (Forest Management Planner).

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 <https://dnrc.mt.gov/TrustLand/about/planning-and-reports>.

- **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: Under this alternative, no timber would be harvested and therefore no revenue would be generated from the project area for the Common Schools Trust at this time. No road construction or road maintenance would occur at this time as well. Salvage logging, firewood gathering, recreational use, fire suppression, and noxious-weed control may still occur. Natural events, such as forest succession, tree mortality due to insects and diseases, windthrow, down fuel accumulation, in-growth of ladder fuels, and wildfires, would continue to occur. The threat of high intensity wildfire spread to adjacent land ownerships would not be reduced.

Action Alternative: The Action Alternative would conduct a timber sale harvesting approximately 1.5-2 million board feet of timber, generating revenue for the Common Schools Trust. The proposed timber sale would utilize a shelterwood harvest prescription. This prescription would assist in decreasing potential spread of insects and disease, harvesting the value of impacted trees, and opening stands to allow for the larger, dominant trees to persist. In addition to the proposed harvest, there would be approximately 2.24 miles of permanent new road construction and approximately 3.48 miles of existing road maintenance. Following timber harvest, a healthy, dominant overstory of approximately 27-36 seed trees per acre would be left on average, comprised primarily of ponderosa pine (PP), western larch (WL), and Douglas-fir (DF). The target stand would be a Ponderosa Pine desired cover type. Natural regeneration of PP, WL and DF would be promoted. Wildland fuel loading would be reduced.

Impacts on the Physical Environment

Evaluation of the impacts on the No-Action and Action Alternatives including **direct, secondary, and cumulative** impacts on the Physical Environment.

VEGETATION:

Vegetation Existing Conditions:

Harvest Unit (s)	Habitat Group	Fire Regime	Current Cover Type	Age Class (years)	DFC	RX	Acres
1	Warm and Dry (westside)	Low	Ponderosa Pine	100-149	Ponderosa Pine	Shelterwood Harvest	13
1/2A/2B	Moderately warm and dry (westside)	Low	Ponderosa Pine/ Western Larch/Douglas Fir	100-149	Ponderosa Pine	Shelterwood Harvest	244
1/2B	Moderately warm and dry (westside)	Mixed	Ponderosa Pine	100-149	Ponderosa Pine	Shelterwood Harvest	75
1	Warm and Dry (westside)	Low	Ponderosa Pine	100-149	Ponderosa Pine	Shelterwood Harvest	17

Old Growth: There is no old growth currently present in the project area. Two potential old growth stands totaling 60 acres were field verified not to meet the criteria listed in DNRC's old growth definition to be classified as old growth. Both stands are considered potential old growth recruitment stands.

Fire Hazard/Fuels: The current stand is largely overmature with visible evidence of increasing insect and disease mortality. The increasing presence of dead fuels on the forest floor would indicate a higher likelihood for fire to spread more rapidly, and with greater intensity. The slopes in this parcel are steep (roughly 30 - 60%), which adds to the potential for rapid fire spread. Due to the proximity of residential development (within one mile north, northwest and southwest) to the proposed harvest units, the risk of wildfire to the community is a concern. There is also an additional risk of wildfire spreading to adjacent private and federal forest land to the south, east and southeast.

Insects and Diseases: Douglas-fir beetle and Western Larch Mistletoe are currently present in the stand. Timber harvest would focus on treating affected areas within the project area. This may require harvesting pockets and/or openings larger than the prescribed 35-40 ft. spacing in these areas.

Sensitive/Rare Plants: There are no current records of sensitive, endangered, threatened, or rare plant species located in the proposed sale parcel. (MNHP).

Noxious Weeds: Common noxious weeds are present in the project area. These include spotted knapweed, St. John's wort, and ox-eye daisy.

Vegetation	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Current Cover/DFCs		X				X				X			Y	V-1
Age Class	X				X				X					
Old Growth	X				X				X					
Fire/Fuels		X			X				X				Y	V-2
Insects/Disease		X				X				X			Y	V-3
Rare Plants	X				X				X					
Noxious Weeds	X				X				X					
Action														
Current Cover/DFCs		X				X				X			Y	V-1
Age Class	X				X				X					
Old Growth	X				X				X					
Fire/Fuels		X			X				X				Y	V-2
Insects/Disease		X				X				X			Y	V-3
Rare Plants	X				X				X					
Noxious Weeds		X				X				X			Y	V-4

Comments: Details of timber harvest:

Shelterwood Treatment: The prescription would protect much of the desirable, existing, advanced regeneration and provide daylight conditions for desirable tree species to become established. Overstory leave tree selection would favor retention of healthy, vigorous, dominant trees, most often, the tallest and/or largest diameter class available. Leave tree species selection would be in the following order of preference: ponderosa pine (PP), western larch (WL), and Douglas-fir (DF). Leave tree spacing would range from 35-40 feet. Natural regeneration would be encouraged. Monitoring post-harvest would indicate any future planting necessary to promote desired species and stocking levels.

Vegetation Mitigations:

V-1: No action would have low impacts on current cover/ desired future condition (DFC) as shade tolerant species would continue to grow and move the stand away from the DFC of ponderosa pine. The action alternative would encourage cover types to move towards DFC through proposed harvest and reforestation activities.

V-2: No action would have low direct impacts as the mortality continues to increase each year due to forest health concerns. This aids in the accumulation of fuels, adding to fire and fuel hazard.

V-3: No action would have low direct impacts on insect and disease as mortality would continue to increase each year due to the spread of these concerns. The action alternative would significantly reduce insect and disease threats through proposed harvest, hazard reduction, and regeneration.

V-4: Noxious weeds would be managed through contract mitigations and through ongoing, cooperative efforts. To prevent the spread of noxious weeds from roads to “off-road”, logging equipment would be inspected and required to be free of weed parts prior to mobilizing to the site. Monitoring post-harvest would indicate any future weed-spraying/ herbicide use necessary in stands and landings.

SOIL DISTURBANCE AND PRODUCTIVITY:
Soil Disturbance and Productivity Existing Conditions:

The project area is 348 acres on State Trust Land located in Sec. 36, T31N, R31W, within the Kootenai River drainage basin and approximately 2 miles Northeast of Libby, MT. Using ground-based and cable-based systems, the proposed project would harvest approximately 2.5 million board feet of timber to meet management goals. To access timber, up to 3 miles of new road would be constructed, and up to 4 miles of existing road would be maintained. Follow-up treatments will include machine piling and scarification, slash burning, weed spraying, hand planting tree seedlings, and a shaded fuel break. A portion of the project area near Jennings Haul Road was affected by a fire in 2023. Impacts from previous logging activities have ameliorated but are visible on the landscape, with skid trails measured approximately 100 feet apart throughout the area.

The project area is geologically underlain by the Upper and Lower units of the Missoula Group (MBMG, 2007). Soils are predominantly Andic Dystrochrepts-Rock outcrop complex, glaciated mountain slopes. The risk of compaction and displacement from forest management activities is considered low to moderate outside of an isolated portion of Typic Eutroboralfs (323), which is considered high. The erosion risk for the topsoil layers is slight to moderate (NRCS, 2024).

No-Action Alternative: No direct or indirect impacts would occur to soils resources beyond those described in Soils Existing Conditions. Cumulative effects (other related past and present factors; other future, related actions; and any impacts described in Soils Existing Conditions would continue to occur.

Soil Disturbance and Productivity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Physical Disturbance (Compaction and Displacement)	x				x				x					
Erosion	x				x				x					
Nutrient Cycling	x				x				x					
Slope Stability	x				x				x					
Soil Productivity	x				x				x					

Soil Disturbance and Productivity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Action														
Physical Disturbance (Compaction and Displacement)		x				x				x			Y	S1
Erosion		x				x				x			Y	S2
Nutrient Cycling		x				x				x			Y	S3
Slope Stability	x				x				x					
Soil Productivity		x				x				x			Y	S3

Comments:

- S1.** Cumulative effects would be controlled by limiting the area of adverse soil impacts to less than 20 percent of harvest areas (DNRC, 1996) through the implementation of BMPs, skid trail planning, and limiting operations to dry, over snow, or frozen conditions (see Mitigation Section of this analysis). Harvest units that would be cable-yarded are expected to have detrimental soil impacts on 6.8 percent of the harvest area (DNRC, 2011). The proposed harvesting activities would rely on the existing road system, skid trails (where appropriate), and landing sites to reduce the area of new direct adverse effects. A larger area, not to exceed 40% (and likely less), would be directly physically disturbed if scarification by dispersed skidding is deemed necessary for germination of desired tree species, but the risk of moderate or high cumulative impacts would be low with adherence to mitigation listed in the following section.
- S2.** Hillslope erosion would potentially result from the harvest of trees, yarding, and skid trail development associated with the project. The magnitude, area, and duration of erosion are expected to be lowered by BMPs and mitigations (refer to the following Mitigations Section of this analysis). Also, the risk of erosion on disturbed soils, such as skid trails, will be mitigated by standard BMPs that limit the concentration of runoff that can lead to erosion. Therefore, the risk of unacceptable adverse direct, indirect, or cumulative impacts would be low.
- S3.** Coarse woody debris would be left on-site in volumes recommended to help maintain or improve soil moisture and forest productivity. The dominant habitat types within the project area are PSME/PHMA-PHMA, PSME/PHMA-CARU, PSME/SYAL-AGSP, and PSME/CARU-AGSP; these habitat types would have an optimal CWD concentration ranging between 4 to 24 tons per acre (Graham et al., 1994). Tree limbs/tops would be left on site in feasible amounts that meet the optimal CWD concentrations listed here and in the mitigation section at the end of this analysis. The concentrations of CWD in the harvest areas are expected to increase with the project over the existing condition. Fine debris removal would also be minimized as much as practicable. Given these measures and the mitigation described below, the risk of measurable adverse direct, secondary, or cumulative impacts to nutrient cycling would be low.

Soil Mitigations:

- Limit equipment operations to periods when soils are relatively dry, (less than 20 percent), frozen, or snow-covered to minimize soil compaction and rutting and maintain drainage features. Check soil moisture conditions prior to equipment start-up.
- The logger and sales administrator will agree to a skidding plan prior to equipment operations. Skid-trail planning will identify which main trails to use and how many additional trails are needed. Trails not complying with BMPs (i.e., trails in draw bottoms) will only be used if impacts can be adequately mitigated.
- Tractor skidding will be limited to slopes of less than 45 percent unless the operation can be completed without causing excessive displacement or erosion.
- Skid trails will be kept to 20 percent or less of the harvest unit acreage and have adequate drainage concurrently with operations.
- Slash will be distributed within harvest units, including large (≥ 3 -inch diameter) and fine material (such as branches and leafy material), to maintain or achieve the amount of coarse woody material appropriate to the dominant habitat type within the project area:
 - Douglas-fir/ninebark (DF/PHMA) is **4 to 9 tons per acre** (Graham et al., 1994)
 - Douglas-fir/pinegrass (DF/CARU) is **13 to 24 tons per acre** (Graham et al., 1994)
- Compliance with Forestry Best Management Practices (BMP's), Streamside Management Zone (SMZ) laws, Montana DNRC Forested Trust Lands HCP and applicable DNRC Forest Management Administrative Rules.

References:

Montana Department of Natural Resources and Conservation (DNRC), 1996. Forestry Best Management Practices: State Forest Management Plan. Montana DNRC, Forest management Bureau. Missoula, MT.

Montana Department of Natural Resources and Conservation (DNRC), 2011. DNRC compiled soils monitoring report on timber harvest projects, 2006-2010, 1st Edition. Department of Natural Resources and Conservation, Forest Management Bureau, Missoula, MT.

Graham, R.T., Harvey, A.E., Jorgensen, M.F., Jain, T.B., and Page-Dumrose, D.S., 1994, Managing Course Woody Debris in Forests of the Rocky Mountains. U.S., Forest Service Research Paper INT-RP-477. Intermountain Research Station. 16p.

NRCS, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/> accessed [6/19/2024]

Montana Bureau of Mines and Geology, 2007, Geologic Map of Montana - Compact Disc:
Montana Bureau of Mines and Geology: Geologic Map 62-C, 73 p., 2 sheets, scale
1:500,000. This map was digitized in 2012 as a result of a contract between the U.S.
Geological Survey and the Montana Bureau of Mines and Geology.

WATER QUALITY AND QUANTITY:
Water Quality and Quantity Existing Conditions:

The project is located in the Mitchell Creek-Kootenai River watershed, which is approximately 50 sq miles, receives an average annual precipitation of 25.4 inches, and ownership is 55% federal, 27% industrial, and 4.4% state-managed. The water quality use region is listed as B-1, which is 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 (DEQ) and no waters are on the impaired waters list.

During a 2024 field review, an interment class 3 with approximately 127 feet of scoured channel was observed high in the draw. No other channelization was observed in the project area, and no surface water connection to the Kootenai River was found. The proposed new construction for the project will not be within 300 feet of any perennial stream, and the haul route will utilize existing forest and county roads. The project has 1.14 acres of optional hand falling within the SMZ.

Water Quality & Quantity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Water Quality	x				x				x					
Water Quantity	x				x				x					
Action														
Water Quality		x				x				x			Y	W1, W2
Water Quantity	x				x				x					W3, W4

Comments:

- W1. The project will impose a 50-foot SMZ. All submerchantable trees must be protected and retained in the entire SMZ to the fullest extent possible. The potential risk of direct, secondary, or cumulative impacts on water quality due to sediment delivery is low.
- W2. New road construction and crossing structures have the potential to increase sedimentation into the dry draws but is not expected to be measurable and therefore impacts would be considered low.
- W3. The harvest systems utilized, the location and size of harvest units relative to stream channels, the implementation of Forest Management BMPs, low precipitation levels observed in the project area, and surface water disconnection from downstream waters supporting beneficial uses, the risk of additional direct water quality impacts

for the proposed actions is not measurable. Considering these impacts in combination with past and current activities, the proposed action is not likely to elevate the cumulative watershed effect beyond the existing condition.

- W4. The proposed harvest is not expected to impact current water uses due to the size and scale of the project. In concert with implementing BMPs and streamside buffers, this harvest level is not expected to have measurable effects on the timing, magnitude, or duration of peak flows in disconnected downstream receiving waters.

Water Quality & Quantity Mitigations:

- Best Management Practices for Forestry would be implemented and monitored for effectiveness concurrent with all forest management activities.
- Implementation of Montana Administrative Rules for Forest Management and Streamside Management Zones.
- Implementing Montana DNRCs Habitat Conservation Plan commitments for Riparian Management Zones and Sediment Delivery.

References:

Montana Department of Environmental Quality (DEQ), 2011. Montana Average Annual Precipitation 1981-2010. Montana Dept. of Environmental Quality, Helena, MT

Montana Department of Natural Resources and Conservation (DNRC). Habitat Conservation Plan - Trust Land Management Division - Fish, Wildlife, and Parks Management Bureau, 2010

FISHERIES:

Fisheries Existing Conditions:

The Kootenai River contains the following sensitive species of concern: Bull trout, Westslope Cutthroat trout (WCT), and Torrent sculpin. While other species are known or presumed to be present in the project area, impacts on Bull trout and WCT will be addressed and are expected to affect other species similarly. The Class 3 in the project area does not have enough sustained flow to support aquatic life. Fisheries parameters that may be affected by timber harvest include (1) sedimentation due to harvest activities and transport, (2) stream temperature due to changes in shading from riparian vegetation, (3) increases or decreases and changes to channel complexity—generally due to changes in coarse woody debris recruitment.

No-Action: No direct or indirect impacts would occur to affected fish species or affected fisheries resources beyond those described in Fisheries Existing Conditions. Cumulative effects (other related past and present factors; other future, related actions; and any impacts described in Fisheries Existing Conditions) would continue to occur.

Action Alternative (see Fisheries table below):

Fisheries	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Sediment	x				x				x					
Flow Regimes	x				x				x					
Woody Debris	x				x				x					
Stream Shading	x				x				x					
Stream Temperature	x				x				x					
Connectivity	x				x				x					
Populations	x				x				x					
Action														
Sediment		x				x				x			Y	F1
Flow Regimes	x				x				x					F4
Woody Debris		x				x				x			Y	F2
Stream Shading		x				x				x			Y	F2
Stream Temperature		x				x				x			Y	F3
Connectivity	x				x				x					F4
Populations	x				x				x					F4

Comments:

- F1. Roads within the project are 300 feet or greater from the Kootenai River, and no stream crossings will be installed with the project. Use of the haul route may result in additional sediment delivery, but the potential increase is likely immeasurable, resulting in a very low risk of any potential impact.
- F2. The proposed project will require a 50-foot SMZ for the class 3 segment. While a low risk of having low impacts on woody debris and stream shading is possible, they are very unlikely to affect the Kootenai River.
- F3. Although stream temperature data is limited for the Kootenai River, upstream USGS gages indicate an average yearly temperature of 8.36 °C, which is suitable for westslope cutthroat and bull trout. The removal of trees in the SMZ has the potential to reduce the shade along approximately 127 feet of stream. This would be expected to have a moderate risk (50% chance) of having low impacts (measurable but not detrimental) on shading and temperature.
- F4. Due to the proposed project's scope and intensity and the Kootenai River's size and magnitude, no measurable effects are likely on the flow regime, fisheries population, or connectivity.

Fisheries Mitigations:

- All rules and regulations pertaining to the Stream Side Management Zone Law will be followed. An SMZ width of 100 feet is required on Class I and II streams when the slope is greater than 35%. An SMZ width of 50 feet is required on class I and II streams when

the slope is less than 35%. An SMZ width of 50 feet is required on class III streams regardless of slope.

- Implementing Montana DNRCs Habitat Conservation Plan commitments for Riparian Management Zones and Sediment Delivery.
- No additional project-specific mitigations are necessary beyond the project design and the mitigations listed in the Water Resources analysis.

References:

Montana Fish, Wildlife & Parks, (2024). Montana Fish Distribution, mFish database, <https://fwp.mt.gov/gis/maps/mFish/?zoomFeatures=%7BlayerName:%22STREAMS%22,features:%5B%7BLLID:%221123386455677%22%7D%5D,fadeOutTimer:4%7D>. Accessed 19 June 2024.

WILDLIFE:

Wildlife Existing Conditions: The Project Area consists of a single DNRC-managed parcel totaling 348 acres. The parcel is included in DNRC's Habitat Conservation Plan (USFWS and DNRC 2010). The Project Area is comprised of habitat conditions that favor native wildlife species that utilize closed-canopy mature forest. The Project Area contains 302 acres of mature Douglas-fir, western larch, and ponderosa pine stands (trees $\geq 9"$ dbh with $\geq 40\%$ canopy closure). There is no old growth in the parcel using Green et al. (1992) standards. Approximately 37 acres consist of more open forest where mature trees are more widely spaced ($< 40\%$ canopy closure). In the northern portion of the Project Area, there are 9 acres that are not forested and include a paved open road (0.7 miles), railroad corridor (0.6 miles), gravel pit, and agricultural fields. In 2023, a 4-acre wildfire burned a mix of open and closed canopy forest, and many snags remain standing. There are patches of Douglas-fir beetle and western larch mistletoe scattered throughout the unit. There are no existing restricted roads in the parcel. The Kootenai River is in close proximity to the northern border of the parcel. Public non-motorized use is likely low in this parcel except during the big game hunting season when it likely elevates.

Cumulative effects analysis areas (CEAA) encompass lands near the Project Area and include the 3,869-acre Small CEAA for animals with smaller home ranges like pileated woodpeckers, and a 34,953-acre Large CEAA for animals that travel across larger areas such as big game. Ownership in the Large CEAA consists of 6.2% DNRC, 46.5% USDA Forest Service, 39.2% industrial forest lands, 7.7% private land and 0.3% Army Corp of Engineers. The primary land use in the CEAs is commercial timber harvest. Over the last 25 years, multiple timber projects have altered wildlife habitat on both public and private lands; these changes have been accounted for in this analysis. Additionally, the U.S. Forest Service has proposed multiple timber sales under the Ripley Project (USDA 2021) which includes units adjacent to the Project Area and throughout the CEAA. Additional information on cumulative effects analysis areas and analysis methods are available upon request.

No-Action Alternative: None of the proposed activities would occur. Forest insects and disease will likely continue to cause reduced growth and mortality in some trees. Openings in the forest may occur where susceptible trees die. An increase in stand-replacement wildfire risk would be anticipated. In the long-term, habitat suitability for mature forest-associated species would remain similar or increase compared to current conditions.

Action Alternative (see Wildlife table below):

Action Alternative (see wildlife table below):														
Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Threatened and Endangered Species														
Grizzly bear (Ursus arctos) Habitat: Recovery areas, security from human activity	X				X				X					WI-1
Lynx (Felis lynx) Habitat: SF hab.types, dense sapling, old forest, deep snow zone	X				X				X					WI-2
Yellow-billed cuckoo (Coccyzus americanus) Habitat: open cottonwood riparian forest with dense brush understories (Lake and Flathead counties)	X				X				X					WI-2
Wolverine (Gulo gulo) Habitat: high elevation areas that retain high snow levels in late spring	X				X				X					WI-2
Sensitive Species														
Bald eagle (Haliaeetus leucocephalus) Habitat: Late-successional forest within 1 mile of open water		X				X				X			Y	WI-3
Black-backed woodpecker (Picoides arcticus) Habitat: Mature to old burned or beetle-infested forest	X				X				X					WI-2
Common loon (Gavia immer) Habitat: Cold mountain lakes, nest in emergent vegetation	X				X				X					WI-2

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Fisher <i>(Martes pennanti)</i> Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian			X				X			X			Y	WI-4
Flammulated owl <i>(Otus flammeolus)</i> Habitat: Late-successional ponderosa pine and Douglas-fir forest		X				X				X			Y	WI-5
Peregrine falcon <i>(Falco peregrinus)</i> Habitat: Cliff features near open foraging areas and/or wetlands	X				X				X					WI-2
Pileated woodpecker <i>(Dryocopus pileatus)</i> Habitat: Late-successional ponderosa pine and larch-fir forest				X				X		X			Y	WI-6
Fringed myotis <i>(Myotis thysanodes)</i> Habitat: low elevation ponderosa pine, Douglas-fir and riparian forest with diverse roost sites including outcrops, caves, mines		X				X				X			Y	WI-8
Hoary bat <i>(Lasiurus cinereus)</i> Habitat: coniferous and deciduous forests and roost on foliage in trees, under bark, in snags, bridges		X				X				X			Y	WI-9
Townsend's big-eared bat <i>(Plecotus townsendii)</i>	X				X				X					WI-2

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Habitat: Caves, caverns, old mines														
Big Game Species														
Elk			X				X			X			Y	WI-10
Whitetail				X				X		X			Y	WI-10
Mule Deer			X				X			X			Y	WI-10
Moose		X				X				X			Y	WI-10
Other														
Mature Forest				X				X		X			N	WI-11

Comments:

WI-1. Grizzly Bear – The Project Area is not within a recovery zone and is over 4.4 miles from non-recovery occupied habitat (Wittinger 2002). While occasional presence of a grizzly bear in the parcel is possible, appreciable use by grizzly bears would not be expected due to the absence of preferred habitat and distance from occupied grizzly bear habitat. As grizzly bears continue to expand their range outside of recovery zones, bears could occasionally travel through the parcel during their long-range movements, but appreciable changes to potential movement patterns would not be anticipated.

WI-2. This species was evaluated, and it was determined that the Project Area lies outside of the normal distribution for the species, and/or suitable habitat was not found to be present.

WI-3. Bald Eagle – The Project Area falls within the historic territories of several bald eagle pairs (MNHP 2024). The proposed harvest is located over 1 mile from any nest site recorded in the Montana Natural Heritage program database (MNHP 2024). The northern portion of the Project Area is in close proximity to the Kootenai River where eagles are likely to forage. No large trees would be harvested within 300 feet of the river and habitat characteristics important to bald eagles such as large emergent trees, snags, and potential perch and roost trees would be retained. Any eagles foraging in close vicinity to active harvesting operations could be temporarily displaced. Disturbance associated with logging traffic along the Jennings Haul Route would increase, however the proximity of the nest sites to open roads, the railroad corridor, and residences suggests that these eagles are habituated to moderate levels of human disturbance and would not likely be appreciably affected by this increase in disturbance from the proposed activities. Thus, low adverse direct, secondary, or cumulative effects to bald eagles would be anticipated.

WI-4. Fisher – Currently, there are approximately 122 acres (35.0% of the Project Area) of suitable fisher habitat in the Project Area. The proposed shelterwood prescription on all 122 acres (100.0% of available habitat in the Project Area) would reduce the canopy closure to 25-32%, which is to open to be considered suitable fisher habitat, and fishers would not be expected to use these stands post-harvest. Additionally, removal of some clumps of trees due to insects and disease would create some small openings in the canopy. No riparian fisher habitat would be impacted by the proposed activities. To reduce some potential adverse effects on fishers, at least 2 large snags and 2 large snag recruitment trees per acre (>21 inches dbh) would be retained (ARM 36.11.411). These snags are important habitat features that provide resting and denning sites for fishers (Olson 2014). Fisher habitat in the Project Area is connected where it occurs; however, it is disconnected from other suitable habitat patches by forest types that are not preferred by fisher. The proposed project would further decrease

connectivity both within the Project Area and within the Large CEAA. Approximately 2.3 miles of new permanent road would be constructed, which could increase fur trapper access into the Project Area. Increases to public access would be for non-motorized use only, as all permanent roads would be restricted by gates or berms and would be closed after logging is complete. Potential fisher habitat would remain in 40.0% (13,968 acres) of the Large CEAA. Should any fishers be present within the CEAA, habitat alteration and potential disturbance would be additive to any activities occurring or planned on surrounding lands. However, the likelihood of fishers using the Project Area or CEAA is low given the fragmentation of existing habitat and absence of fisher observations in the area within the last 30 years (Krohner et al. 2022, MNHP 2024).

WI-5. Flammulated Owl – Currently 341 acres of flammulated owl cover types are present within the Project Area. However, stand conditions on 204 acres of these acres are too dense (192 acres) or too open (12 acres) for flammulated owl use. Under the Action Alternative, approximately 322 acres (94.4%) of flammulated owl cover types would be altered. On 313 of these acres, the proposed shelterwood treatment would retain larger seral tree species and reduce canopy closure to 25-32% which could improve conditions for flammulated owls, particularly in stands that are currently too dense for owl use. Additional small openings in the canopy would occur where additional trees are harvested due to insect and disease concerns. An additional 9 acres of fuels treatments would retain the overstory and create a more open understory which may also benefit flammulated owls. To maintain potential nesting structures, at least 2 large snags per acre (>21 inches dbh, or largest size class available) would be retained (ARM 36.11.411). Within the Small CEAA, forest cover types preferred by flammulated owls are moderately well represented and there are multiple records of flammulated owls using this area over the last 25 years (MNHP 2024). However, existing stand structure through most of the CEAA is too dense or too open to currently be considered suitable for flammulated owl use. Furthermore, large snags and live trees needed by owls may be absent on private land that has been logged due to differing forest management practices. Overall, the Action Alternative is anticipated to have minor beneficial impacts to flammulated owls.

WI-6. Pileated Woodpecker – The proposed activities would alter 279 acres of suitable pileated woodpecker habitat (80.3% of habitat available in the Project Area). A shelterwood treatment on 272 acres (90.5% of existing habitat) would reduce canopy closure of mature trees to 25%-32% making these stands unsuitable for use by breeding pileated woodpecker post-harvest. Approximately 27 to 36 mature trees an acre would be retained and some occasional use by foraging woodpeckers is possible, but nesting is not expected. Additional small openings in the canopy could occur where clumps of trees are removed due to insect and disease concerns. The proposed fuels treatment on 7 acres would retain sufficient canopy closure to continue to provide suitable habitat where it exists. Post harvest, 8.2% (29 acres) of the Project Area would remain suitable pileated woodpecker habitat. To reduce potential adverse effects on pileated woodpeckers, 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 all snags cut for safety reasons would be left in the harvest unit (ARM 36.11.411). Additionally, 4 to 24 tons/per acre of downed wood would be retained. The proposed activities would reduce pileated woodpecker habitat in the Small CEAA by 14.0% and 1,677 acres (43.4% of Small CEAA) of habitat would remain. Habitat in the Small CEAA would continue to be relatively well-connected and continued use of the Small CEAA by pileated woodpeckers would be anticipated. The habitat alterations to the proposed project would be additive to other forest management activities in the Small CEAA including recent harvests on private lands and the planned USFS Ripley Project (USDA 2021).

WI-8 Fringed myotis - Approximately 322 acres of potential fringed myotis foraging habitat would be affected by the proposed timber harvest. Fringed myotis utilize a variety of habitats and roost sites including pine and Douglas-fir forests and rock crevices (Keinath 2004). Potential disturbance would only be expected from April through October, when fringed myotis are in Montana. If present in the Project Area, they could be temporarily displaced by timber harvesting. To minimize impacts to fringed myotis, 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 roosting habitat.

WI-9. Hoary bat – The proposed activities would affect approximately 322 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. 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 roosting habitat.

WI-10. Big Game – The entire 348-acre Project Area is considered winter range for white-tailed deer, mule deer, moose, and elk (DFWP 2008). The proposed harvest would impact 316 of these acres (90.8% of available winter range in the Project Area). High-quality thermal cover for big game occurs where canopy closure is $\geq 60\%$ and conifers are ≥ 8 meters tall. Marginal thermal cover includes areas where forest canopy closure is 40-60% and conifers are ≥ 8 meters tall. The proposed activities would remove 225 acres (96.5% of existing) of high thermal cover and 70 acres (73.5% of existing) of marginal thermal cover in the Project Area. The proposed shelterwood harvest would result in canopy closure of approximately 25%-32% and resulting stands would have little capacity to provide effective thermal cover and snow intercept. Currently, insect and disease are reducing crown closure (lowering thermal cover/snow intercept) within some mature stands in the Project Area. Harvest of affected trees could create some small openings in the canopy. Treated stands should exhibit better health and growth that would result in improved thermal cover over time. Post-harvest, 8 acres (2.3% of Project Area) of high-quality thermal cover and 25 acres (7.2% of Project Area) of marginal thermal cover would remain in the Project Area. However, the effectiveness of remaining thermal cover/snow intercept would be low because the stand is fragmented by the open road and the railroad corridors. Connectivity to potential thermal cover on adjacent lands would be decrease because large areas of mature forest would be removed.

Hiding cover within the Project Area would be reduced on 304 acres (91.3% of available hiding cover). Some submerchantable trees would be retained where possible within harvest units, however the existing quantity of regenerating trees that could provide hiding cover is already low. The undulating topography would continue to reduce sight distances in the Project Area. Post-harvest, approximately 29 acres (8.4% of Project Area) within the Project Area will retain tree density sufficient to provide hiding cover. Approximately 2.3 miles of new permanent restricted road would be constructed in the Project Area. All permanent roads would be restricted by gates or berms after harvest activities are complete. The new roads could facilitate an increase in non-motorized public access into the Project Area. An increase in roads facilitating human access combined with a reduction in hiding cover could result in increased mortality risk to big game species due to hunting.

The Action Alternative would reduce high quality thermal cover in the Large CEAA by 2.2%, and 11,001 acres (31.5%) would continue to provide high quality thermal cover and snow intercept for big game. Marginal thermal cover in the CEAA would decrease by 1.8% (70 acres) and

remain on 3,896 acres (11.1% of CEAA). The proposed harvest would reduce hiding cover in the Large CEAA by 1.1% and hiding cover would remain abundant (78.0% of the Large CEAA) within the Large CEAA. Impacts to thermal cover, hiding cover, and security under the Action Alternative would be additive to other forest management projects in the Large CEAA, including recent harvests on private and DNRC lands (DNRC 2017) as well as the planned USFS Ripley Project (USDA 2021). Measurable big game population changes at the scale of the Large CEAA would not be expected as a result of the Action Alternative.

WI-11. Mature Forest – The proposed action would alter approximately 293 acres of mature forest (96.9% of mature forest within the Project Area). Mature forest would be retained on 2 of these acres that would undergo a fuels treatment. Shelterwood harvest on the remaining 291 acres (96.3% of existing mature forest) would reduce live tree densities to approximately 27-36 trees per acre and reduce overstory canopy closure to 25%-32%, which is too open to be considered mature forest. Additional small openings in the canopy would occur where clumps of trees are removed due to insects and disease. Thus, these stands would no longer be suitable for wildlife species that prefer dense mature forest with more shaded canopies. However, habitat suitability for species that utilize more open forests would increase under the proposed Action Alternative. The proposed activities would remove most of the mature forest in the Project Area; as a result, connectivity of mature forest in the Project Area would be largely absent. After harvest, 11 acres (3.3% of the Project Area) of poorly connected mature forest would remain in the Project Area. Within the Small CEAA, proposed activities would remove approximately 14.3% of existing mature forest. These changes would be additive to forest management activities occurring at a broader spatial scale. Mature forest would remain moderately abundant (45.5% of the Small CEAA) and relatively well-connected through the southern and eastern portion of the Small CEAA.

Wildlife Mitigations:

- If a threatened or endangered species is encountered, consult a DNRC biologist immediately. Similarly, if undocumented nesting raptors or wolf dens are encountered within ½ mile of the Project Area, contact a DNRC biologist.
- Contractors will adhere to food storage and sanitation requirements as described in the timber sale contract. Ensure that all attractants such as food, garbage, and petroleum products are stored in a bear-resistant manner.
- Prohibit contractors and purchasers conducting contract operations from carrying firearms while on duty as per *ARM 36.11.444(2)*.
- Effectively close restricted roads and skid trails in the Project Area via a combination of gates, kelly humps, rocks, and stumps. Maintain public motorized restrictions on restricted and temporary roads during and after harvest activities.
- Retain at least 2 snags and 2 snag recruits per acre >21 inches dbh or the next largest available size class, particularly favoring ponderosa pine, western larch and Douglas-fir for retention. If snags are cut for safety concerns, they must be left in the harvest unit.
- Retain 4-24 tons/acre of coarse-woody debris and emphasize retention of 15-inch diameter downed logs, aiming for at least one 20-foot-long section per acre (USFWS and DNRC 2010).

Literature:

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.

- DFWP 2008. Maps of moose, elk and mule deer distribution in Montana. Individual GIS data layers. August 12, 2008. Montana Fish, Wildlife and Parks. Helena, MT. <https://gis-mtfdwp.hub.arcgis.com/search?tags=wildlife>
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- Krohner, J. M., Lukacs, P. M., Inman, R., Sauder, J. D., Gude, J. A., Mosby, C., Coltrane, J. A., Mowry, R. A. and J. J. Millspaugh. 2022. Finding fishers: determining fisher occupancy in the Northern Rocky Mountains. The Journal of Wildlife Management, 86(2): 1-20.
- MNHP. 2024. Natural Heritage Map Viewer. Montana Natural Heritage Program. Retrieved on November 12, 2024, from <http://mntnhp.org/MapView>.
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- USFWS and DNRC. 2010. Montana Department of Natural Resources and Conservation Forested Trust Lands Habitat Conservation Plan, Final Environmental Impact Statement, Volumes I and II., U.S. Department of Interior, Fish and Wildlife Service, Region 6, Denver, Colorado and Montana Department of Natural Resources and Conservation, Missoula, MT.
- USDA Forest Service. 2021. Ripley Project Decision Notice. Libby Ranger District, Kootenai National Forest, Lincoln County, MT.
- Wittinger, W. 2002. Grizzly bear distribution outside of recovery zones. Unpublished memorandum. Report on file at USDA Forest Service, Region 1, Missoula, MT.

AIR QUALITY:

Air Quality	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Smoke	X				X				X					
Dust	X				X				X					
Action														
Smoke		X				X				X			Y	AQ-1
Dust		X			X				X				Y	AQ-2

Comments:

AQ-1: The project area is in Montana Airshed 1 and inside the Libby impact zone. Slash piles consisting of tree limbs, tops and other vegetative debris would be created throughout the project area during harvesting. These slash piles would ultimately be burned in accordance with the Montana Airshed coordination group and the Libby Impact Zone after harvesting operations have been completed. Burning that may occur on adjacent properties in combination with the proposed action could potentially increase cumulative impacts to the local airshed. Thus,

cumulative impacts to air quality due to slash pile burning associated with the proposed action would also be expected to be minimal.

AQ-2: Dust may be generated by log hauling activities during dry conditions. However, because dust would be localized to skid trails and haul roads and operating seasons would be short in duration, effects to air quality as a result of dust generated during harvest activities are expected to be low.

Air Quality Mitigations:

- Burning within the project area would be short in duration and would be conducted when conditions favor good ventilation and smoke dispersion. Actions would adhere to the Montana/Idaho State Airshed Group regulations and Montana Department of Environmental Quality.
- The DNRC, would burn only on approved days. DNRC would also follow Lincoln County air quality regulations. Thus, direct, secondary, and cumulative effects to air quality due to slash pile burning associated with the proposed action would be minimal.
- Dust abatement may be required on portions of roads effecting subdivision residences if deemed necessary by the Forest Officer.

ARCHAEOLOGICAL SITES / AESTHETICS / DEMANDS ON ENVIRONMENTAL RESOURCES:

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Historical or Archaeological Sites	X				X				X					
Aesthetics	X				X				X					
Demands on Environmental Resources of Land, Water, or Energy	X				X				X					
Action														
Historical or Archaeological Sites		X				X				X			Y	A-1
Aesthetics		X				X				X			Y	A-2
Demands on Environmental Resources of Land, Water, or Energy	X				X				X					

Comments:

A-1: Tribal agencies on the statewide scoping list were scoped, none identified a specific cultural resource concern. 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 revealed that no cultural or paleontological resources have been identified in the APE. Because of the past logging history of the tract, the overall steep terrain (from an archaeological perspective), lack of springs, and lack of geology that would suggest caves, rock shelters, or sources of tool stone, no additional archaeological investigative work will be conducted in response to this proposed development.

A-2: The project area, proposed units, and roads would be visible from the open roads listed: Jennings/Champion Haul Road, and Highway-37. All harvest units would be visible from roads within the project area and from properties near the harvest units. Active forest management is prevalent in this area and is evident on many viewsheds surrounding the town of Libby. Within the project area, harvest treatment would open the stands to approximately 27-36 trees per acre or 35-40 foot spacing.

Mitigations:

- 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.
- Following harvest, roads, landings, and slash would be visible, but forest improvement work and burning of slash piles and landings would be planned within a few years of harvest and this would speed up the recovery of the vegetation that would eventually mitigate the aesthetic impacts of logging.
- Harvested stands would naturally regenerate following harvest. If natural regeneration is not successful, tree planting may be implemented to facilitate regeneration.
- New road construction would be grass seeded.

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.*

- Kootenai National Forest, Ripley Project Environmental Assessment, April 2020 (USFS project 55001)
- Kootenai National Forest, Ripley Project Decision Notice, May 2021 (USFS project 55001)

Due to similar objectives and the relatively small scale of the proposed state action, cumulative impacts would be expected to be minimal.

Impacts on the Human Population

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

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
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	X				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	H-1
Industrial, Commercial and Agricultural Activities and Production		X			X				X				Y	H-2
Quantity and Distribution of Employment		X			X				X				Y	H-3
Local Tax Base and Tax Revenues	X				X				X					
Demand for Government Services	X				X				X					
Access To and Quality of	X				X				X					

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Recreational and Wilderness Activities														
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:

H-1: No unusual safety concerns are associated with the proposed project. Health and safety risks posed by the project would be minimal.

H-2: A consistent flow of timber contributes to the supply and demand of these timber products.

H-3: The proposed project would open employment opportunities locally in the logging industry.

Mitigations: N/A

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.

- DNRC is unaware of any zoning or management plans pertaining to this area.

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 Schools Trust. The estimated return to the trust for the proposed harvest is \$150,000 -\$200,000 based on an estimated harvest of 1.5-2 million board feet (10,965-14,620 tons) and an overall stumpage value of \$13.68 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?

None that are known or anticipated

Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant?

None that are known or anticipated

Environmental Assessment Checklist Prepared By:

Name: Jessica Mannion
Title: Management Forester
Date: January 15, 2025

Finding

Alternative Selected

Upon review of the Checklist EA and appendices, I find that the action alternative as proposed meets the intent of the project objectives as stated on page 1, Type and Purpose of Action. It complies with all pertinent environmental laws, DNRC State Forest Land Management Plan, and a consensus of professional opinion on limits of acceptable environmental impact. The No Action Alternative does not meet the project objectives. For these reasons I have selected the Action Alternative for implementation on this project.

Significance of Potential Impacts

After a thorough review of the scoping documents, Department policies, standards, guidelines, and the State Forest Land Management Plan (SFLMP), I find all the identified resource management concerns have been fully addressed in this Checklist EA and its attachments. The action alternative provides for income to the Common Schools trust and promotes the development of a healthy, biologically diverse, and productive forest. It also provides the opportunity to improve access and road maintenance within the project area. I find there will be no significant impacts to the human environment as a result of implementing the action alternative. Specific project design features and various resource management specialist recommendations have been implemented to ensure that this project will fall within the limits of acceptable environmental change and result in no significant effects.

Need for Further Environmental Analysis

☐

EIS

☐

More Detailed EA

☒

No Further Analysis

Environmental Assessment Checklist Approved By:

Name: Logan Sandman

Title: Libby Unit Manager

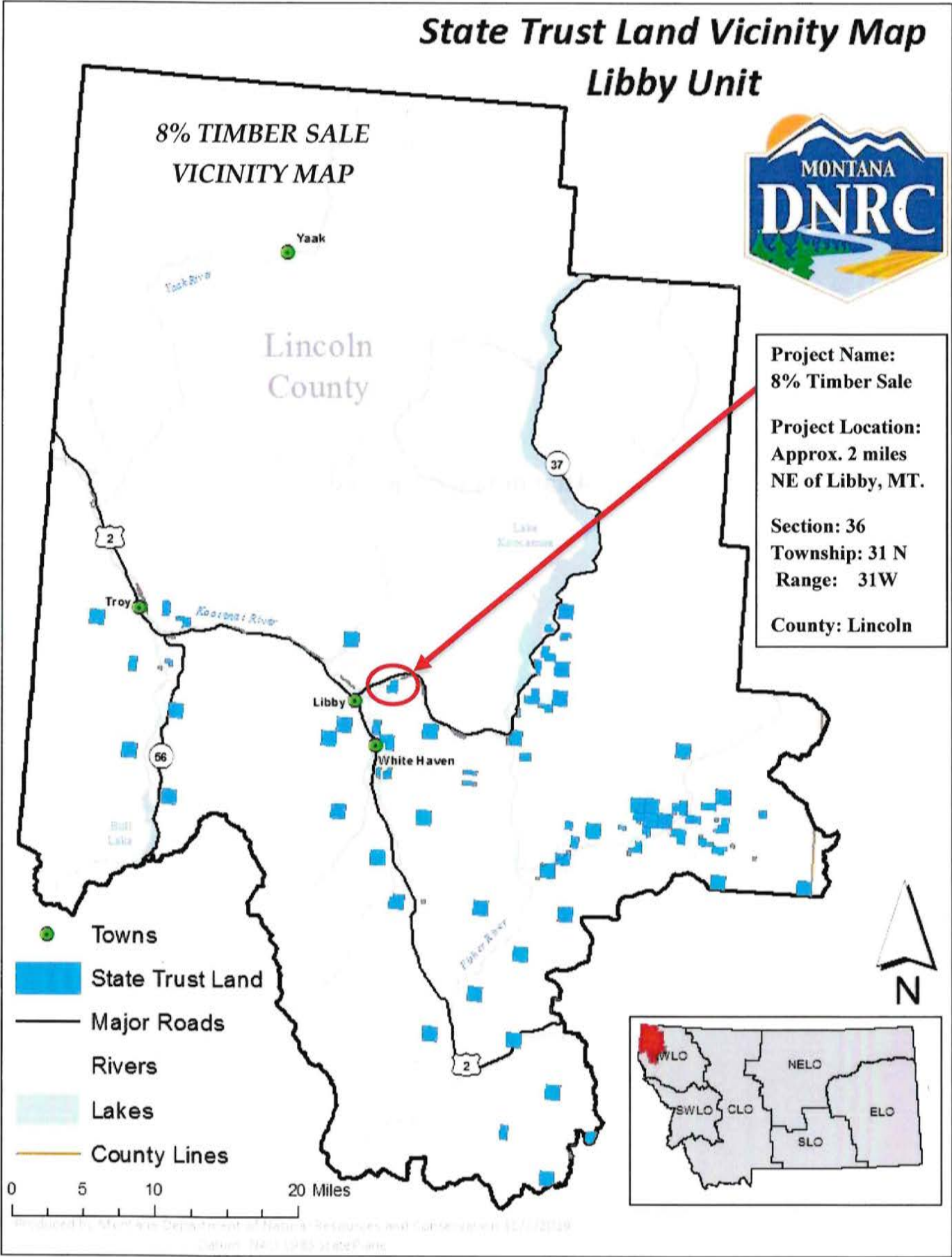
Date: 2/11/2025

Signature: /s/



Attachment A - Maps

A-1: Timber Sale Vicinity Map



A-2: Timber Harvest Units

