

Environmental Assessment Checklist

Project Name: Beaver Creek Forest Management Project
Proposed Implementation Date: July, 2025
Proponent: Stillwater Unit, Northwest Land Office, Montana DNRC
County: Lincoln

Type and Purpose of Action

Description of Proposed Action:

The Stillwater Unit of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the Beaver Creek Forest Management Project. The project is located approximately 7 miles southwest of Trego, Montana in Lincoln County (Attachments A -- Maps) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	T33N R26W S16	640	277

Objectives of the project include:

- The proposed harvest of 500-1,000 thousand board feet (Mbf) would contribute to the DNRC’s sustained yield as mandated by state statute (77-5-223, MCA) to sell approximately 60 MMBf of timber annually and continue to produce revenue over time. The revenue generated from this proposal would benefit Common Schools trusts.
- Enhance the vigor of the regenerated timber stands
- Regenerate new stands of timber
- Promote biodiversity on State ownership by managing for appropriate or desired stand structures and species composition based on ecological characteristics such as topography, habitat type, disturbance regimes, and unique characteristics.
- Reduce fire hazard and associated risks of loss to the State of Montana and privately-owned land in the Lincoln County wildland urban interface.

Proposed activities include:

Action	Quantity
Proposed Harvest Activities	# Acres
Shelterwood	60.2
Commercial Thinning	37.8
Overstory Removal	124.0

Action	Quantity
Total Commercial Harvest Acres	222.0
Proposed Forest Improvement Treatment	# Acres
Pre-commercial Thinning	179.0
Site preparation/scarification	60.2
Proposed Road Activities	# Miles
Road maintenance	4.5
Noxious weed management	4.5

Duration of Activities:	5 years 3 Months
Implementation Period:	July 2025-October 2030

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:
 - November 25, 2024 to January 11, 2025
- PUBLIC SCOPED:
 - The scoping notice was posted on the DNRC Website:
<https://dnrc.mt.gov/News/scoping-notice>
 - Adjacent landowners, statewide scoping list, and Stillwater Unit scoping list
- AGENCIES SCOPED:
 - Fish, Wildlife and Parks and Confederate Salish and Kootenai Tribes
- COMMENTS RECEIVED:
 - How many: Zero

DNRC specialists were consulted, including:

- Josh Harris, Hydrologist
- Justin Cooper, Wildlife Biologist
- Patrick Rennie, Archeologist
- Joe Rizzi, Forester & Project Leader

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 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.
- **Montana Department of Fish, Wildlife and Parks (DFWP)-** A Stream Protection Act Permit (124 Permit) is required from DFWP for activities that may affect the natural shape and form of a stream’s channel, banks, or tributaries. Such activities include:
 - Culvert replacement on a perennial spring crossing on USFS 3585 Beaver-Deseve
- **United States Forest Service-** A cost share and surface rock replacement agreement is in place with the Kootenai National Forest on USFS 3585 Beaver-Deseve and USFS Beaver – Edna Cr

ALTERNATIVES CONSIDERED:

No-Action Alternative: Under this alternative, no timber would be harvested, and no revenue would be generated for the Common Schools trust. Firewood harvesting, recreational use, fire suppression and noxious weed control may still occur. Natural events such as plant succession, tree mortality due to insects and diseases, windthrow, down fuel accumulation, in-growth of ladder fuels, and wildfires would continue to occur.

Action Alternative: A commercial timber harvest would take place to remove approximately 500-1,000 MBF of timber using ground based harvesting methods on 222.0 acres. Specific harvest unit data is provided in Attachment B – Beaver Creek FMP Prescription Table. Using this table with the maps A-1: Timber Sale Vicinity Map and A-2: Timber Sale Harvest Units in Attachment A -- Maps, will provide additional detail for this project.

Silvicultural prescriptions applied under this alternative would generate new stands of timber on 60.2 acres using shelterwood prescriptions. Existing stands of timber would have enhanced vigor on 161.8 acres using overstory removal and commercial thinning prescriptions.

In addition to the proposed harvest treatments, post-harvest actions will also be required to ensure successful regeneration of new stands as well as reductions in fuel loading. Mechanical site preparation would occur on 60.2 acres. Pre-commercial thinning would occur on 179.0 acres of overstocked, sapling stands to enhance the vigor of the residual stands. Weed spraying would occur on all associated roads within the proposed Beaver Creek FMP project area.

Road maintenance and Best Management Practices (BMPs) improvements would be performed on approximately 4.5 miles of existing roads.

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	Habitat Group	Fire Regime	Current Cover Type	Age Class (years)	DFC	RX	Acres
1	Cool and moist (westside)	Mixed	Mixed Conifer	0-39	Western Larch/Douglas Fir	Overstory Removal	5.5
2	Cool and moist (westside)	Mixed	Western Larch/Douglas Fir	0-39	Western Larch/Douglas Fir	Overstory Removal	31
3	Cool and moist (westside)	Mixed	Western Larch/Douglas Fir	200+	Western Larch/Douglas Fir	Overstory Removal	40.6
4	Moderately cool and moist (westside)	Mixed-to-Stand Replacing	Western Larch/Douglas Fir	200+	Western Larch/Douglas Fir	Overstory Removal	41.7

5	Cool and moist (westside)	Mixed	Mixed Conifer	0-39	Western Larch/Douglas Fir	Overstory Removal	6.1
6	Moderately warm and dry (westside)	Low-to-mixed	Western Larch/Douglas Fir	150-199	Western Larch/Douglas Fir	Shelterwood Harvest	27.5
7	Moderately warm and dry (westside)	Low-to-mixed	Western Larch/Douglas Fir	40-99	Western Larch/Douglas Fir	Commercial Thinning	37.8
8	Moderately warm and dry (westside)	Low-to-mixed	Western Larch/Douglas Fir	100-149	Western Larch/Douglas Fir	Shelterwood Harvest	32.7
9	Cool and moist (westside)	Mixed	Western Larch/Douglas Fir	200+	Western Larch/Douglas Fir	Precommercial Thinning	29.0
10	Cool and moist (westside)	Mixed	Lodgepole Pine	0-39	Western Larch/Douglas Fir	Precommercial Thinning	6.0
11	Moderately cool and moist (westside)	Mixed-to-Stand Replacing	Douglas Fir	150-199	Western Larch/Douglas Fir	Precommercial Thinning	1.5
12	Moderately cool and moist (westside)	Low-to-mixed	Douglas Fir	0-39	Western Larch/Douglas Fir	Precommercial Thinning	12.0
13	Cool and moist (westside)	Mixed	Subalpine Fir	0-39	Western Larch/Douglas Fir	Precommercial Thinning	4.2
14	Cool and moist (westside)	Mixed	Subalpine Fir	0-39	Western Larch/Douglas Fir	Precommercial Thinning	0.9

Fire Hazard/Fuels: Units 1-5 are regenerated seedling stands with a poorly stocked overstory and little down fuel. Units 6-8 are dense, multi-storied, dry site stands. Little down fuel occurs in the stands although ladder fuels present could allow wildfire to spread into the overstory. Units 9-14 are overstocked sapling stands with little down fuel accumulation. As these stands enter the stem exclusion phase an increase in fuels could be expected.

Insects and Diseases: *Dendroctonus pseudotsugae* (Douglas-fir beetle) has been observed in the project area causing mortality in over-mature Douglas-fir.

Sensitive/Rare Plants: The Montana Natural Heritage Program was queried for potential species of concern and species of concern of all vascular plant species in January 2025. Within the project area *Botrychium ascendens* (Upward-lobed Moonwort) and *Botrychium crenulatum* (Wavy Moonwort) were identified. Adjacent and upstream to the project area *Geocaulon lividum* (Northern Toadflax) populations were identified. *Geocaulon lividum* occurs in moist spruce forest, often bordering wetland areas, in the montane zone and may be expected to occur in the project area.

Noxious Weeds: *Centaurea stoebe* (Spotted Knapweed), *Hypericum perforatum* (St. Johnswort), *Leucanthemum vulgare* (Oxeye Daisy), *Hieracium caespitosum* (Meadow Hawkweed) and *Hieracium aurantiacum* (Orange Hawkweed) are found in and around the proposed project area. Current occurrences are found mainly along existing roads, dispersed

recreation sites and some old landings and skid trails. Incursions of noxious weeds into most forested sites have not been observed.

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					
Age Class	X				X				X					
Old Growth	X				X				X					
Fire/Fuels	X				X				X					
Insects/Disease	X				X				X					
Rare Plants	X				X				X					
Noxious Weeds		X			X				X					
Action														
Current Cover/DFCs		X				X				X			No	V-1
Age Class		X				X				X			No	V-1
Old Growth	X				X				X					
Fire/Fuels		X				X				X			Yes	V-2
Insects/Disease		X				X				X			Yes	V-3
Rare Plants	X				X				X					
Noxious Weeds		X				X				X			Yes	V-4

Comments:

V-1: The proposed silvicultural prescriptions are designed to maintain or transition the stands from their current cover towards the desired future conditions. The impact on age classes would be low as well. Overstory removal treatments would move stands towards 0-39 age class whereas shelterwood, commercial thin and pre-commercial thin treatments would maintain current age classes.

V-2: Though the risk of wildfire would still exist post-harvest, silvicultural treatments within proposed units would assist in moderating fire intensity should a wildfire occur. Treatments applied would reduce the vertical and horizontal continuity of fuel loadings.

V-3: Trees that have become weakened by insects, disease, and/or weather could become susceptible to bark beetle attack and would be removed by forest management actions of the project.

V-4: Noxious weeds are present along open and closed roads within the project area. Further soil disturbance and logging equipment activity could increase the amount and distribution of noxious weeds in the project area.

Vegetation Mitigations:

- Require all tracked or wheeled equipment to be cleaned of noxious weeds prior to beginning project operations.
- Control the spread of noxious weeds with pre- and post-herbicide treatments on established weed populations.
- Require prompt vegetation seeding of all disturbed roadside sites. Roads used and closed as part of this proposal would be reseeded and reshaped to prevent motorized use.
- If rare plants are found during the project period, operations would be diverted away from the population and further reviewed by DNRC and plant specialist.

SOIL DISTURBANCE AND PRODUCTIVITY:

Soil Disturbance and Productivity Existing Conditions: The proposed project area is in the northeast portion of the Salish Mountains, approximately 7.5 miles southwest of Trego, Montana, in Lincoln County. The area is geologically underlain by Belt Supergroup units, which are defined by limestone, dolomite, and argillite. Reviewing landtype data from the Soil Survey of Kootenai National Forest Area, Montana, and Idaho (MT634), the following map units were identified within the project area: 328—*Andic Cryochrepts, glaciated mountain slopes* (319 acres), 329 - *Andic Cryochrepts, moraines, dense, brittle substratum* (179 acres), and 3200—*Rattlebone very gravelly loam, 8 to 35 percent slopes* (145 acres). These landtypes are associated with moderate compaction risk, indicating the potential for soil compression and reduced porosity. The landforms indicate severe displacement risk on hillsides and moderate risk along small mountain streams. However, these soil types are expected to only have moderate erosion risks.

Records for this section indicate timber management activities have been ongoing since the 1940s. These activities include timber sales, timber permits, and permits for Christmas trees and firewood. The most recent timber sales in this section are Jim Beaver Salvage and Jim Beaver Timber Sale. Jim Beaver Salvage was sold in 2024 and is projected to remove 182 Mbf of timber. Jim Beaver Timber Sale was projected to remove between 2 and 3.5 MMBf, which sold in 2010. Soil disturbance from past activities in the harvest units is considered low, around 5%, as vegetation on existing skid trails is present throughout the project area. Harvest intensity is considered low for the proposed treatment. This project includes road maintenance of 4.15 miles of road and will include mechanical site preparation.

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					

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			
Slope Stability	X				X				X						
Soil Productivity	X				X				X						
Action															
Physical Disturbance (Compaction and Displacement)		X				X				X				Yes	S-1, S-4
Erosion		X				X				X				Yes	S-2, S-4
Nutrient Cycling		X				X				X				Yes	S-3
Slope Stability	X				X				X						
Soil Productivity		X				X				X				Yes	S-1, S-3

Comments:

- S-1: Monitoring of DNRC timber harvest shows the level of total detrimental soil impacts in a harvest area averages 13.2% for traditional ground-based operations, localized to primary skid trails and log landing sites (DNRC 2011). Detrimental soil impacts are considered substantive when they exceed 20% of a harvest area (DNRC 1996). Soil productivity is expected to be maintained when soil function is maintained within 80% of a harvest unit.
- S-2: Standard implementation of forest BMPs to control erosion concurrent with harvest activities would mitigate any erosion concerns in the project area. Primary or highly impacted skid trails would be covered with slash and debris.
- S-3: Coarse woody debris would be left on-site in volumes recommended to help maintain soil moisture and forest productivity, generally in the 4 to 24 tons per acre range for habitat types found in the harvest locations (Graham et. al. 1994). Because coarse woody debris would be left on site in amounts recommended by scientific literature, benefits to nutrient cycling and forest productivity would be maintained over the long term.
- S-4: To mitigate erosion and compaction in the forested area, it is recommended to utilize existing skid trails and roads. By incorporating these pathways into the forest management plan, disturbance to the soil can be minimized. Implementing erosion control techniques, vegetation restoration, and drainage systems along these trails and roads will further enhance their effectiveness in minimizing erosion and compaction, promoting sustainable forest management practices.

Soil Mitigations:

- ARM 36.11.422 (2) and (2) (a) state that appropriate BMPs shall be determined during project design and incorporated into implementation. To ensure that the incorporated BMPs are implemented, the specific requirements would be incorporated into the DNRC Timber Sale Contract. As part of this alternative design, the following BMPs and

recommendations are considered appropriate and would be implemented during harvesting operations:

- 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.
- On ground-based units, 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.
- Tractor skidding should be limited to slopes of less than 40% 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 to a ridge or winchline, and skidding from more moderate slopes of less than 40%.
- Keep skid trails to 20% or less of the harvest unit acreage. Provide for drainage on skid trails and roads concurrently with operations.
- Slash disposal: Limit the combination of disturbance and scarification to 30 to 40% of the harvest units. No dozer piling on slopes over 35%; no excavator piling on slopes over 40% 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.
- Compliance with Forestry Best Management Practices (BMPs), Streamside Management Zone (SMZ) laws, Montana DNRC Forested Trust Lands HCP and applicable DNRC Forest Management Administrative Rules.

References:

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

DNRC. 2009. Jim/Beaver Timber Sale Project Checklist Environmental Assessment. Montana Department of Natural Resources and Conservation Stillwater Unit, Olney, Montana.

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.

Johns, W.M. 1970. Geology and mineral deposits of Lincoln and Flathead counties, Montana. Montana Bureau of Mines and Geology.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of

Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/> (accessed 12 September 2024)

WATER QUALITY AND QUANTITY:

The proposal would result in harvesting approximately less than 1% of the Middle Fortine Creek watershed. The proposal will not include harvest in the Stream Management Zone (SMZ) or harvest in the Riparian Management Zone (RMZ) next to Beaver Creek. Due to the small size of the proposed harvest in relation to the watershed size and the mitigation measures proposed, the risk of detrimental impacts to water quality and quantity would be low. The project will include one new crossing for a spring that crosses and channelizes below the road prism and current crossings in the proposed haul route will meet BMPs.

Water Quality and Quantity Existing Conditions: The Middle Fortine Creek Watershed is approximately 23,550 acres and includes several named and unnamed first- and second-order tributaries, including Beaver, Butcher, Jim, Lime, and Steward creeks. The climate is semi-arid; precipitation averages 24 inches per year, and most occurs during winter months. Middle Fortine Creek Watershed is approximately 82% forested, with ownership distributed as 67 % Federal, 23% Private, and 10% State.

Relatively central to the project, Beaver Creek flows south through State lands to its confluence with Fortine Creek. Elevations in the Beaver Creek watershed range from approximately 3,400 to 5,200 feet above sea level. Current crossing structures have been inventoried and assessed for BMPs. The project is not expected to negatively impact the water rights within the watershed. The closest water right is downstream for livestock.

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			Yes	W-2, W-3
Water Quantity		X				X				X			Yes	W-1

Comments:

- W-1: Harvesting 0.9% of the watershed is not likely to result in any measurable impacts on water quantity for downstream users.
- W-2: Due to the harvest systems utilized, unit size, and distance relative to stream channels, there is a temporary risk of low direct and secondary water quality impacts for the proposed actions. 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.

W-3: The project will impose a 50-foot SMZ (extended to 100 feet on slopes greater than 35%) for Beaver Creek and a 100-foot RMZ along class 1 streams. No harvest will occur within the SMZs and RMZs where implemented, leaving 100 percent tree retention. The potential risk of direct, secondary, or cumulative impacts on water quality due to sediment delivery is low.

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.
- Implementation of Montana DNRCs Habitat Conservation Plan commitments for Riparian Management Zones and Sediment Delivery.

References:

DNRC 2009. Beaver/Swift/Skyles Timber Sale Project Environmental Analysis. Montana Department of Natural Resources and Conservation, Olney, MT.

DNRC. 2009. Jim/Beaver Timber Sale Project Checklist Environmental Assessment. Montana Department of Natural Resources and Conservation Stillwater Unit, Olney, Montana.

DNRC. 2024. Jim Beaver Salvage. Montana Department of Natural Resources and Conservation Stillwater Unit, Olney, Montana.

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: A review of available fisheries information indicates westslope cutthroat trout (*Oncorhynchus clarkii lewisi*), brook trout (*Salvelinus fontinalis*), and rainbow trout (*Oncorhynchus mykiss*) are present in Beaver Creek. Electrofishing was conducted in 2008 to verify fish presence and composition in Beaver Creek. With SMZ buffers along Beaver Creek, there is a very low risk of adverse direct, secondary, or cumulative effects on the water temperature, protecting spawning areas for the present fish species.

Beaver Creek has two class 1 tributaries flowing between proposed harvest units within the project area. These class 1 streams will have a 100-foot RMZ along both sides. Due to the limited acreage of the proposed harvest, low harvest intensity, and RMZs, the proposed actions have a high likelihood of non-detectable direct, secondary, or cumulative effects on westslope cutthroat or aquatic habitats.

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					
Flow Regimes	X				X				X					
Woody Debris	X				X				X					
Stream Shading	X				X				X					F-1
Stream Temperature	X				X				X					F-1
Connectivity	X				X				X					
Populations	X				X				X					

Comments:

F-1: Implementing 100-foot RMZs and no harvest within RMZs are expected to limit any measurable impacts on fisheries resources. Applying Montana Best Management Practices for Forestry, mitigations prescribed within the Montana Stream Protection Act permit, and the Montana Streamside Management Zone Law and Administrative Rules for Forest Management will all provide adequate protection against sediment delivery and protect riparian functions important to fisheries resources. No direct, secondary, or cumulative effects to fisheries resources are expected to occur due to the implementation of this project.

Fisheries 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.
- Implementation of Montana DNRCs Habitat Conservation Plan commitments for Riparian Management Zones and Sediment Delivery.

References:

“Fish, Wildlife & Parks.” *FISHMT: Waterbody Search*, available at myfwp.mt.gov/fishMT/explore (accessed 12 September 2024).

WILDLIFE:

Wildlife Existing Conditions: The Project Area is comprised of habitat conditions that favor native wildlife species associated with mature forest types containing a variety of canopy closure levels and scattered stands of young, regenerating forest harvested within the last 25 years. This area consists of a single DNRC-managed parcel totaling 640 acres. The parcel is bordered by a mix of forested United States Forest Service (USFS) and private lands with mixed forest management practices and very little development. The Project Area contains an estimated 289 acres of forest with relatively closed canopies ($\geq 40\%$ canopy closure), which includes an estimated 206 acres of mature forest with relatively closed canopies (trees ≥ 65 feet in height with $\geq 40\%$ canopy closure). Of these mature forest acres, none are considered old-growth forest using Green et al. (1992) standards. An estimated 432 acres of open forest (trees ≥ 9 " dbh with $< 40\%$ canopy closure) exists throughout the Project Area. Insects and disease are active within the Project Area, reducing live tree abundance and canopy closure in some patches. One stand of old-growth, totaling 19 acres, was recently removed from the Project Area in 2024 due to insect damage (DNRC 2024). A total of 464 acres within the Project Area (72.2% of the Project Area) have been harvested (over the past 40 years) and now consist of regenerating stands. Approximately 4.4 miles of roads are present within the Project Area, of which 1.2 miles are open year-round, and 3.2 miles are restricted from public motorized use. Public motorized use of the open roads is likely high due to the proximity to nearby occupied homes and recreation within the surrounding area. Restricted roads receive limited motorized use for resource and fire-management purposes and little to no motorized activity from April 1 to June 15.

No-Action: The proposed forest management activities would not occur. In the short-term, gradual reductions in canopy cover and mature forest habitat suitability are likely to continue due to tree mortality from insects and disease, primarily Douglas-fir bark beetle. Thus, no additional short-term cumulative effects to mature forested habitat suitability and connectivity would be anticipated but minor long-term adverse effects to habitat suitability are likely under the No-Action Alternative.

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 <i>(Ursus arctos)</i> Habitat: Recovery areas, security from human activity		X				X				X			Yes	WI-1
Lynx (<i>Felis lynx</i>) Habitat: SF hab.types, dense sapling, old forest, deep snow zone		X				X				X			Yes	WI-2
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	X				X				X					WI-3

Beaver Creek Forest Management Project
 Montana Department of Natural Resources and Conservation EACv2.0

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Habitat: open cottonwood riparian forest with dense brush understories (Lake and Flathead counties)														
Wolverine (<i>Gulo gulo</i>) Habitat: high elevation areas that retain high snow levels in late spring	X				X				X					WI-3
Sensitive Species														
Bald eagle (<i>Haliaeetus leucocephalus</i>) Habitat: Late-successional forest within 1 mile of open water	X				X				X					WI-3
Black-backed woodpecker (<i>Picoides arcticus</i>) Habitat: Mature to old burned or beetle-infested forest	X				X				X					WI-3
Common loon (<i>Gavia immer</i>) Habitat: Cold mountain lakes, nest in emergent vegetation	X				X				X					WI-3
Fisher (<i>Martes pennanti</i>) Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian		X				X				X			Yes	WI-4
Flammulated owl (<i>Otus flammeolus</i>) Habitat: Late-successional ponderosa pine and Douglas-fir forest		X				X				X			Yes	WI-5
Peregrine falcon (<i>Falco peregrinus</i>) Habitat: Cliff features near open	X				X				X					WI-3

Wildlife	Impact												Can Impact be Mitigated?	Comment Number	
	Direct				Secondary				Cumulative						
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High			
foraging areas and/or wetlands															
Pileated woodpecker <i>(Dryocopus pileatus)</i> Habitat: Late-successional ponderosa pine and larch-fir forest			X				X				X			Yes	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						WI-3
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				Yes	WI-7
Townsend's big-eared bat <i>(Plecotus townsendii)</i> Habitat: Caves, caverns, old mines	X				X				X						WI-3
Big Game Species															
Elk			X				X			X				Yes	WI-8
Whitetail			X				X			X				Yes	WI-8
Mule Deer	X				X				X						WI-8
Moose			X				X			X				Yes	WI-8
Other															
Mature Forest		X				X				X					WI-9

Comments:

WI-1. Grizzly Bear – Proposed timber harvest and pre-commercial thinning would affect approximately 126 acres of grizzly bear hiding cover (19.7% of the Project Area) within non-recovery occupied grizzly bear habitat (*Wittinger 2002*). Of the 343 acres of hiding cover currently in the Project Area, the proposed action would reduce vegetation density below what is

necessary to provide hiding cover on 60 acres (17.5% of available hiding cover). To mitigate for potential adverse effects, all points within proposed harvest units would be within 600 feet of vegetative or topographic screening/cover. No new roads would be built, but motorized use of 4.4 miles of open and existing restricted roads within the Project Area would increase during project implementation. Visual screening would not be affected along open roads. Existing restricted roads used for harvesting would remain restricted during and after the conclusion of the project. Additionally, timing restrictions would be applied from April 1 – June 15 during project implementation to provide security for grizzly bears in the spring. Any grizzly bears using the Project Area could be temporarily displaced by the proposed activities for up to five years. The Action Alternative would be additive to any ongoing human development and vegetation management projects on lands within the surrounding area.

WI-2. Canada Lynx – Approximately 257 acres of suitable lynx habitat exists in the Project Area (40.1% of the Project Area) with another 243 acres of temporary nonsuitable lynx habitat (37.8% of the Project Area). An estimated 53 acres of suitable lynx habitat (20.6% of suitable habitat within the Project Area) would be affected by the proposed Action Alternative. Of these acres, 3 acres (0.01% of suitable lynx habitat in the Project Area) would be treated with harvest prescriptions that would not retain enough conifer cover to continue providing suitable lynx habitat immediately post-harvest. Additionally, 11 acres of suitable summer foraging lynx habitat would be treated with a pre-commercial thinning treatment, which would reduce tree density below the required stocking to serve as summer forage and convert these acres to other suitable lynx habitat. The remaining 39 acres would receive treatments that would reduce some suitable habitat attributes but would continue to provide suitable lynx habitat overall. Motorized use of 4.4 miles of restricted roads within suitable lynx habitat would increase during project implementation. To ensure that forest structure attributes preferred by lynx and lynx prey (snowshoe hares) remain following harvest, some patches of advanced regeneration and shade-tolerant trees would be retained within portions of suitable lynx habitat. Additionally, 4 to 24 tons/acre of coarse woody debris would be retained in accordance with DNRC Forest Management Rules (ARM 36.11.414) and retention of downed logs ≥ 15 -inch diameter would be emphasized. Lynx habitat connectivity within the Project Area would not be substantially reduced under the Action Alternative. Lynx have not been observed near the Project Area in over 25 years (*MTNHP 2025*); therefore, the likelihood of lynx using the Project Area is low. However, any lynx that might be using the area could temporarily be displaced from the Project Area for up to five years by the proposed activities. Disturbance and habitat alteration by the proposed DNRC activities would be additive to any ongoing forest management projects on adjacent private and public lands within the Large CEAA, including proposed salvage projects on DNRC lands. However, the Large CEAA consists of approximately 86.0% suitable habitat for lynx and provides sufficient connected habitat for lynx persistence at the larger landscape level.

WI-3. 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-4. Fisher – Approximately 151 acres of suitable fisher habitat (23.5% of the Project Area) and another 216 acres of preferred cover types (totaling 57.2% of the Project Area) exist within the Project Area. Of the suitable habitat acres, 36 acres (23.7% of suitable fisher habitat in the Project Area) would receive treatments that would reduce some suitable habitat attributes but would continue to provide fisher habitat overall. Approximately 94 acres of preferred cover types, which do not currently contain adequate forest structure for fishers, would undergo a reduction in vegetation that would increase the time until those acres grow into suitable habitat. Fisher habitat connectivity would remain relatively similar across the Project Area, although it is currently limited by interspersed unsuitable cover types and low availability of suitable habitat on

adjacent private lands. To reduce some 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. Riparian fisher habitat connectivity within the Project Area would not be substantially reduced under the Action Alternative. Overall, the lack of fisher observations within the last 25 years (MTNHP 2025) and prevalence of unsuitable forest types, which are avoided by fishers (Olson *et al.* 2014), the likelihood of fishers using the Project Area is low. Should any fishers be present within the Small CEAA, habitat alteration and potential disturbance would be additive to any activities occurring on surrounding private lands. However, considering the small amount of harvest at the scale of the Small CEAA, and lack of fisher observations (Krohner 2022, MTNHP 2025), low adverse effects to fishers in the Large CEAA would be expected.

WI-5. Flammulated Owl – Approximately 75 acres of preferred flammulated owl habitat would be affected by the proposed activities (11.7% of the potential habitat available within the Project Area). These 75 acres would be treated with a prescription that improves overall conditions for flammulated owls after harvest. To retain potential nesting trees for flammulated owls within the project area, snags and large snag recruitment trees (>21 inches dbh) would be retained to meet ARM 36.11.411. If harvesting occurred during the summer or early fall period, flammulated owls could be temporarily displaced by the proposed activities adjacent to suitable habitat. Should any flammulated owls be present within the Project Area, habitat alteration and potential disturbance would be additive to any ongoing human development and vegetation management projects on lands within the surrounding area.

WI-6. Pileated Woodpecker – The proposed activities would affect approximately 57 acres of Pileated Woodpecker habitat (77.1% of habitat available in the Project Area). All 57 acres would be treated with harvest prescriptions causing these stands to become unsuitable for pileated woodpecker use post-harvest. Approximately 17 acres of suitable pileated habitat (2.6% of the Project Area) would remain along the edges of the Project Area post-harvest in two isolated patches, each approximately 8 acres in size. Considering the amount and intensity of previous management within the Project Area, the lack of well-connected large patches of suitable habitat, and the lack of pileated woodpecker observations (MNHP 2025), appreciable use of the Project Area would not be expected. To decrease 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, with an emphasis on logs >15" diameter. The Project Area would be less likely to support breeding pileated woodpeckers if they are currently present, although any breeding territory within the Small CEAA would be expected to extend into the Project Area via remaining habitat patches. Habitat alterations due to the proposed action would be additive to recent forest management projects on adjacent private and public lands within the Small CEAA. Habitat availability within the Small CEAA is relatively abundant and well connected due to the time since previous harvests and lack of development on private lands. Approximately 3,164 acres (54.8% of the Small CEAA) would remain as suitable habitat and relatively well-connected. Overall, continued use of the Small CEAA by pileated woodpeckers would be anticipated.

WI-7. Hoary bat – The proposed activities would affect approximately 82 acres of potential hoary bat habitat (40.0% of the available habitat in the Project Area). Because hoary bats typically roost in trees and snags, they could be temporarily disturbed by timber harvesting. Potential disturbance would only be expected from June through September, when hoary bats are in Montana. After the conclusion of activities, continued use of the Project Area, including

harvested areas, by hoary bats would be anticipated. To reduce potential adverse effects on hoary bats, snags and large snag recruitment trees (>21 inches dbh) would be retained, where possible, to help provide roosting habitat (*ARM 36.11.411*). Should any hoary bats be present within the Project Area, habitat alteration and potential disturbance would be additive to any activities occurring or planned on surrounding lands. Hoary bats are considered common and widespread throughout Montana, but wind energy and diseases such as white-nosed syndrome pose threats to their population (Bachen et al 2020).

WI-8 Big game – The proposed activities would reduce thermal cover on potential elk, moose, and white-tailed deer winter range (*DFWP 2008*). The proposed harvest would affect 37 acres of high-quality thermal cover (79.4 % of thermal cover available in the Project Area; stands consisting of trees ≥ 25 feet tall and $\geq 60\%$ canopy closure). Additionally, the proposed activities would impact approximately 61 acres of connective marginal thermal cover (21.1% of total thermal cover; stands consisting of trees ≥ 25 feet tall and $\geq 40\%$ canopy closure). The harvest prescription would remove all 37 acres of high-quality thermal cover and 23 acres of marginal thermal cover (20.8% of total thermal cover available). High-quality thermal cover with $\geq 60\%$ canopy cover would persist within an isolated 10 acre stand within the Project Area after harvest (1.6% of the Project Area). Approximately 219 acres of marginal thermal cover containing between 40-60% canopy cover that would provide connectivity to remaining thermal cover outside the Project Area where 69.7% of the Large CEAA would persist as thermal cover. Approximately 126 acres of hiding cover (36.7% of available hiding cover within the Project Area) would be affected by timber harvest. Shelterwood harvests would remove up to 60 acres of hiding cover (17.6% of hiding cover within the Project Area). Commercial thinning, overstory removal, and pre-commercial thinning treatments would reduce hiding cover quality but retain enough vegetation to maintain adequate hiding cover on the remaining 66 acres. Hiding cover would persist on 44.0% of the Project Area after harvest. No new roads would be built, and visual screening would be retained adjacent to open roads to increase security and reduce human-caused mortality. Impacts to hiding cover and thermal cover/snow intercept under the Action Alternative would be additive to any ongoing vegetation management projects on private and public lands within the Large CEAA, including proposed salvage projects on DNRC lands. Thermal cover ($\geq 40\%$ canopy closure) would remain on 28,367 acres of the Large CEAA (69.7% of the Large CEAA). Overall, measurable big game population changes at the scale of the Large CEAA would not be expected as a result of the Action Alternative.

WI-9. Mature Forest – The proposed action would affect approximately 82 acres of mature forest (40.0% of mature forest within the Project Area) with a reasonably closed canopy ($\geq 40\%$ canopy closure). Harvest prescriptions would reduce live tree densities and bring overstory canopy cover below 40% on 53 acres of mature forest (25.8% of the mature forest in the project area). Approximately 153 acres of mature forest (23.8% of the Project Area) would remain within the Project Area post-harvest. Connectivity of mature and old-growth forest would be reduced overall; however, connectivity would remain high within forested riparian areas along Beaver Creek. Forest management projects on DNRC, USFS and private lands have removed some mature forest and continue to alter mature forest stands within the small CEAA; the proposed action would be additive to these changes at the broader spatial scale. However, mature forest would remain on approximately 52.9% of the Small CEAA and relatively well connected through DNRC and USFS lands.

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 $\frac{1}{2}$ 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 36.11.432(1)(c).
- 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.
- Prohibit all harvesting-related motorized activities more than 100 feet from open roads from April 1 – June 15.
- Within commercial harvest units, retain patches of advanced regeneration trees as per LY-HB4 (*USFWS and DNRC 2010*).
- Retain shade-tolerant trees (grand fir, subalpine fir, and spruce) <3 feet tall that do not pose competition risks to crop trees as per LY-HB4 (*USFWS and DNRC 2010*) in all pre-commercial thinning units.
- Maintain visual screening along open roads by conserving seedling and submerchantable trees in addition to some merchantable timber.
- Retain at least 2 snags and 2 snag recruits per acre >21 inches dbh or the next 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 coarse-woody debris according to ARM 36.11.414 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, mule deer, and white-tailed deer distribution in Montana. *In* Individual GIS data layers. Available online at: <https://gis-mtfwp.opendata.arcgis.com/>
- DNRC. 2024. Jim Beaver Salvage Environmental Assessment Checklist. Montana Department of Natural Resources and Conservation; Stillwater Unit, Olney, MT.
- Green, P., J. Joy, D. Sirucek, W. Hann, A. Zack, and B. Naumann. 1992. Old Growth Forest Types of the Northern Region. R-1 SES. USDA Forest Service, Northern Region, Missoula MT 60pp.
- 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.
- Montana Natural Heritage Program. 2025. Environmental Summary Report. for Latitude 48.53720 to 48.69655 and Longitude -114.79604 to -115.06174. Retrieved on March 21, 2025, from <http://mtnhp.org/MapView>.
- Olson, L. E., J. D. Sauder, N. M. Albrecht, R. S. Vinkey, S. A. Cushman, and M. K. Schwartz. 2014. Modeling the effects of dispersal and patch size on predicted fisher (*Pekania [Martes] pennanti*) distribution in the U.S. Rocky Mountains. *Biological Conservation* 169:89-98.
- 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.

Wittinger, W. 2002. Grizzly bear distribution outside of recovery zones. Unpublished memorandum. Report on file at Unpublished memorandum 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			YES	AQ-1
Dust		X				X				X			YES	AQ-2

Comments:

AQ-1: The project area is in Airshed 1 as defined by the Montana/Idaho Airshed Group. No impact zones, as described by the Montana/Idaho Airshed Group, are within or near the project area. Under the Action Alternative, slash piles consisting of tree limbs, tops, and other vegetative debris would be generated throughout the project area during harvesting, site preparation, and fuels reduction activities. These slash piles would be burned after operations have been completed. Burning within the project area would be short term and would be conducted when conditions favor good to excellent ventilation and smoke dispersion as determined by the Montana DEQ and Montana/Idaho Airshed Group. The DNRC, as a member of the Montana/Idaho Airshed Group, would burn only on approved days.

AQ-2: Log hauling may increase the dust levels on portions of native surfaced state roads.

Air Quality Mitigations:

- Only burn on days approved by the Montana/Idaho Airshed Group and DEQ.
- Conduct test burn to verify good smoke dispersion.
- Dust abatement strategies such as slow driving speeds, a restricted haul period, and/or application of dust abatement on some road segments may be considered as needed..

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					

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			
Aesthetics	X				X				X						
Demands on Environmental Resources of Land, Water, or Energy	X				X				X						
Action															
Historical or Archaeological Sites	X				X				X						ARCH-1
Aesthetics		X				X				X					AEST-1
Demands on Environmental Resources of Land, Water, or Energy	X				X				X						

Comments:

ARCH-1: 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.

Because the state parcel has been heavily logged, 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.

AEST-1: Proposed harvest units are adjacent to, or visible from the 3585, Beaver Cr – Deseve Cr road. At certain locations along this road skid trails and landings would be visible.

Mitigations:

- Blend unit edges and incorporate irregular shaped boundaries to mimic natural disturbance events
- Design skid trails and landing areas in a manner which reduces the visual impact adjacent to open roads by retaining more trees.

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.*

- Jim Beaver Salvage EA – June 2024
- Jim Beaver Timber Sale Project EA – December 2009
- Fortine Creek Timber Sale – 1989
- Beaver Creek Timber Sale PER – October 1983

Impacts on the Human Population

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

Recreation Existing Conditions:

The project area is accessible from the Beaver Creek Road which enables low seasonal use by the local community. The area is primarily used for hunting and site-seeing. The proposed haul route is open yearlong to motorized use that currently receive low amounts of public traffic.

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			YES	S-1
Industrial, Commercial and Agricultural Activities and Production	X				X				X					E-1

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			
Quantity and Distribution of Employment		X			X				X						E-2
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				YES	R-1	
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:

S-1: Mitigations have been developed for all log hauling to allow for safe travel and shared use of open roads through the duration of the project

E-1: Due to the relatively small size of the proposed forest management project, no measurable direct, indirect or cumulative effects would be likely

E-2: Employment within the logging industry is common in Lincoln County, and this project would contribute to local employment

R-1: The project area receives moderate hunting pressure during the general firearm hunting season. Harvesting operations may diminish hunting opportunities temporarily during the Fall. There are no active trapping licenses on this parcel.

Mitigations:

- Restrict log hauling activities to the “work week” (Monday – Friday). Prior approval for holiday or weekend hauling could be granted by the Forest Officer on a case-by-case basis.

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.

- There are no locally adopted environmental plans or goals associated with this proposal

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 based on an estimated harvest of 1.0 MM board feet (6,000 tons) and an overall stumpage value of \$25 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?

No

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

No

Environmental Assessment Checklist Prepared By:

Name: Joe Rizzi
Title: Management Forester
Date: March 28, 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 section of this document. This project received no public comments during the 30-day scoping period.

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). An estimated \$150,000.00 would be generated for the Common Schools Trust.

The Action Alternative complies with all pertinent environmental laws, the DNRC SFLMP and HCP, and is based upon a consensus of professional opinion on limits of acceptable environmental impact. For these reasons and on behalf of DNRC I have selected the Action Alternative to be implemented on this project.

Significance of Potential Impacts

After a review of the scoping documents and comments, project file, Forest Management Rules, SFLMP and HCP checklists, and Department policies, standards, and guidelines, I find that all the identified resource management concerns have been fully addressed in this Checklist EA and its attachments. Specific project design features and various recommendations by the resource management specialists will be implemented to ensure that this project will fall within the limits of environmental change. Taken individually and cumulatively, the proposed activities are common practices, and no project activities are being conducted on important unique or fragile sites.

I find there will be no significant impacts to the human environments as a result of implementing the Action Alternative. In summary, I find that the identified impacts will be controlled, mitigated, or avoided by the design of the project to the extent that the impacts are not significant.

Need for Further Environmental Analysis

EIS

More Detailed EA

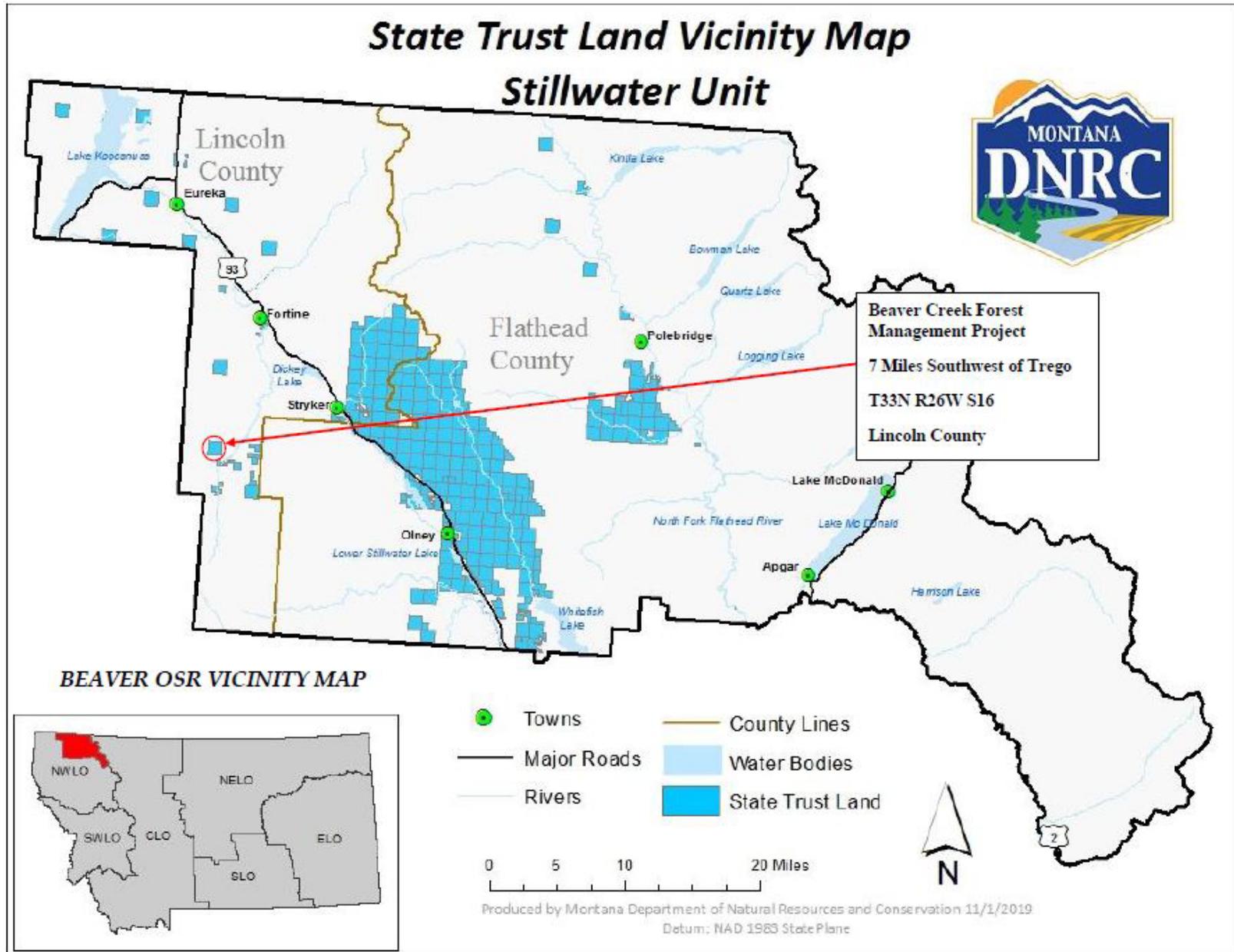
No Further Analysis

Environmental Assessment Checklist Approved By:

Name: Dave Ring
Title: Stillwater Unit Manager
Date: April 7, 2025
Signature: /s/ David A. Ring

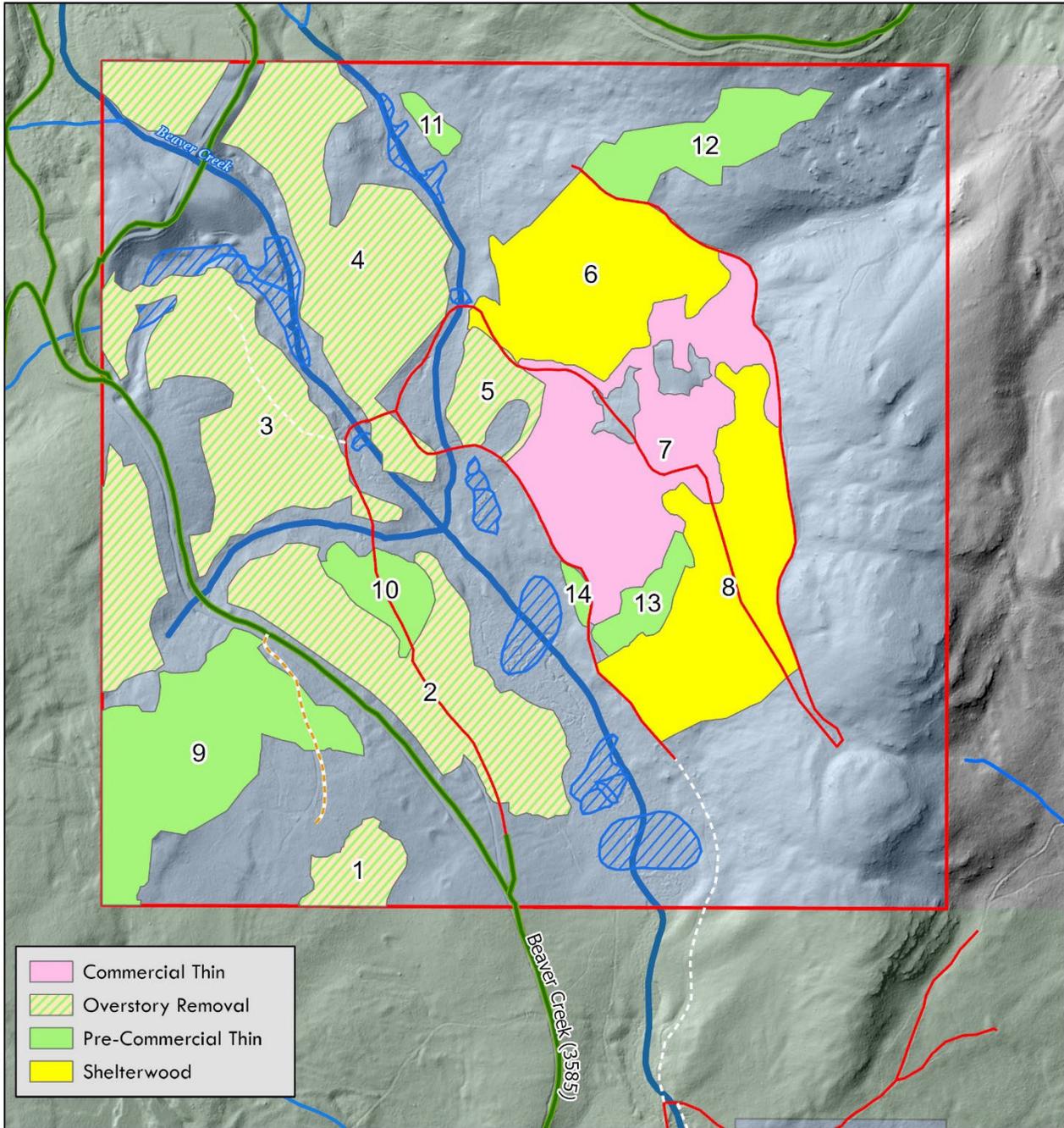
Attachment A - Maps

A-1: Timber Sale Vicinity Map



A-2: Timber Sale Harvest Units

Beaver Creek Forest Management Project
T33N R26W S16
Proposed Activity



Attachment B - Beaver Creek FMP Prescription Table

Unit	Acres	Prescription	Unit Details
1	5.5	Overstory Removal	-Tractor harvest -WL>DF 4 TPA or 104' spacing -Evaluate for PCT 3 years post harvest -WL & DF @ 14' spacing > LPP & ES @ 10' spacing
2	31.0	Overstory Removal	-Tractor harvest -WL>DF 4 TPA or 104' spacing -Evaluate for PCT 3 years post harvest -WL & DF @ 14' spacing > LPP & ES @ 10' spacing
3	40.6	Overstory Removal	-Tractor harvest -WL>DF 4 TPA or 104' spacing -Evaluate for PCT 3 years post harvest -WL & DF @ 14' spacing > LPP & ES @ 10' spacing
4	41.7	Overstory Removal	-Tractor harvest -WL>DF 4 TPA or 104' spacing -Evaluate for PCT 3 years post harvest -WL & DF @ 14' spacing > LPP & ES @ 10' spacing
5	6.1	Overstory Removal	-Tractor harvest -WL>DF 4 TPA or 104' spacing -Evaluate for PCT 3 years post harvest -WL & DF @ 14' spacing > LPP & ES @ 10' spacing
6	27.5	Shelterwood	-Tractor harvest -PP>WL>DF 25 TPA or 42' spacing -Mechanical scarification 40% CARU release -Rely on natural regeneration
7	37.8	Commercial Thin	-Tractor harvest -PP>WL>DF>LPP 109 TPA or 20' spacing
8	32.7	Shelterwood	-Tractor harvest -PP>WL>DF 25 TPA or 42' spacing -Mechanical scarification 40% CARU release -Rely on natural regeneration
9	29.0	Pre-Commercial Thin	-WL & DF @ 14' spacing > LPP & ES @ 10' spacing
10	6.0	Pre-Commercial Thin	-WL & DF @ 14' spacing > LPP & ES @ 10' spacing
11	1.5	Pre-Commercial Thin	-WL & DF @ 14' spacing > LPP & ES @ 10' spacing
12	12.0	Pre-Commercial Thin	-WL & DF @ 14' spacing > LPP & ES @ 10' spacing
13	4.2	Pre-Commercial Thin	-WL & DF @ 14' spacing > LPP & ES @ 10' spacing
14	0.9	Pre-Commercial Thin	-WL & DF @ 14' spacing > LPP & ES @ 10' spacing