Environmental Assessment Checklist

Project Name: Taylor to Swift Forest Management Project
Proposed Implementation Date: November 2025
Proponent: Stillwater Unit, Northwest Land Office, Montana DNRC
County: Flathead

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 Taylor to Swift Timber Sale Project. The project is located approximately 7 miles northwest of Whitefish in Flathead County, (refer to Attachments vicinity map **A-1** and project map **A-2**) and includes the following sections: sections 6, 7, 18-20, 29-33 of Township 32 north, range 22 west, and sections 1 and 12 in T32N R23W.

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	**T32N R23W S01, 12**	**0.37**	**0**
Public Buildings			
MSU 2nd Grant	**T32 R22W S 18,19, 30, 32**	**1,328**	**145**
MSU Morrill	**T32N R22W S32**	**476**	**25**
Eastern College-MSU/Western College-U of M	**T32N R22W S07**	**632**	**21**
Montana Tech	**32N R22W S06, 17, 29**	**784**	**77**
University of Montana			
School for the Deaf and Blind	**T32N R22W S20, 33**	**479**	**304**
Pine Hills School			
Veterans Home			
Public Land Trust			
Acquired Land			

Objectives of the project include:

- Generate revenue for the following trusts: MSU 2nd Grant, Montana Tech, MSU Morrill, Eastern College, MSU/Western College-UM, School for the Deaf and Blind, Common Schools.

- Promote biodiversity on State ownership by managing for appropriate or desired stand structures and species compositions based on ecological characteristics such as topography, habitat type, disturbance regime, and unique characteristics.
- Capture economic value of dead and dying trees and promote the regeneration of healthier, more resilient trees.
- Ensure current recreational values such as the Whitefish Trail System are maintained through harvest unit boundary design and prescription selection.
- Establish an effective shaded fuel break on the entire length of Lower Whitefish Road to facilitate enhanced wildland fire protection access adjacent to the boundary of the City of Whitefish (CoW) -Wildland Urban Interface (CoW - WUI). The CoW - WUI is depicted on maps A-2 through A-5 in Attachment A on pages 13-16.
- Contribute to the Montana DNRC's Annual Sustained Yield.

Proposed activities include:

Action	Quantity
Proposed Harvest Activities	# Acres
Salvage	**16**
Seed Tree	**19**
Shelterwood	**427**
Old Growth Maintenance/Restoration	**4**
Shade Fuel Break	107
Total Treatment Acres	**573**
Proposed Forest Improvement Treatment	# Acres
Site preparation/scarification	**426**
Planting	**241**
Proposed Road Activities	# Miles
New permanent road construction	**1.4**
New temporary road construction	**3.7**
Road maintenance	**28.9**
Road reconstruction	
Road abandoned	**0.5**
Road reclaimed	
Other Activities	

Duration of Activities:	4 years
Implementation Period:	Jun 16-March 31st annually

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:
  - October 18 to November 19, 2024
- PUBLIC SCOPED:
  - The scoping notice was posted on the DNRC Website: https://dnrc.mt.gov/News/scoping-notices
  - In October and November 2024 DNRC solicited public participation for 32 days on the Taylor to Swift Forest Management Project. The Initial Proposal with maps was sent to agencies, individuals, licensees, and other organizations that have expressed interest in DNRC's management activities, including contacts on both the Statewide and Stillwater Unit timber scoping lists.
- AGENCIES SCOPED:
  - MT Fish, Wildlife, and Parks (FWP)
  - United States Forest Service (USFS)
  - Internal DNRC staff
  - Montana Tribal Agencies
- COMMENTS RECEIVED:
  - How many: Eight comments were received in total
  - Concerns: Five comments from local residents were received with concerns about wildlife, forestry and silviculture, old growth, biodiversity, noxious weeds, riparian habitat, fire suppression and mitigation, climate change, carbon emissions, recreation, economics and trust revenue. One comment from FWP expressed concerns about fuel breaks and important wildlife habitat characteristics such as snags and old growth. Whitefish Legacy Partners, a non-profit organization from Whitefish, Montana, commented about recreation, wildlife habitat, riparian habitat, public access, and further opportunities to participate in the MEPA process. Lastly, a representative from the Northern Cheyenne Tribe requested a cultural resources report on the project area.
  - Results (how were concerns addressed): Following the completion of the scoping period, DNRC sent out communications to commenters with an acknowledgement of comment receipt. All concerns and questions that were received during scoping have been analyzed in this Environmental Assessment (EA) document or have been dismissed from the analysis with rationale. Any issues brought up during the scoping period that were dismissed from analysis are documented in the table below.

ISSUES ELIMINATED FROM FURTHER ANALYSIS	RATIONALE
• Please do a full Environmental Analysis, not just a Checklist EA. • Please perform a full Environmental Analysis, followed by another public comment period. • Given the high value of resources in the sale area, a full Environmental Impact Statement should be developed which includes opinions from other agencies as indicated by the scoping process. • The public should be provided with more opportunity to comment after the State's proposal is presented with specifics and details… A checklist environmental analysis (Checklist EA) would not be considered sufficient and a "long" EA should be conducted to provide additional public comment periods.	The level of environmental review for a project is determined based on the size and scope of the project following identification of internal and external projects issues during public scoping and the internal ID Team process. A Checklist Environmental Assessment (EA) was deemed appropriate for the proposed project. The MEPA Model Rules require agencies to provide opportunities for public involvement and give agencies discretion as to how to best conduct opportunities for public involvement. The DNRC consistently provides opportunity for public comment during the scoping period, which occurs at the start of the planning process for a timber sale project. The project's scoping phase allows the DNRC to identify project issues based on questions and concerns brought up by the public. Project issues identified during scoping are either analyzed in the environmental assessment document or dismissed from analysis if the issue is outside the scope of the proposed project. Following the public comment period during the scoping of the proposed Taylor to Swift Timber Sale, no additional public comment periods were deemed unnecessary based on the size and scope of the proposed project and issues identified.
• Will there be public meetings?	The MEPA Model Rules provide agencies with discretion when providing opportunity for public involvement in the form of public meetings. No public meetings were held for the proposed project as it was deemed unwarranted for the size and scope of the proposed project and the issues identified.
• The maps provided to the public with the announcement of this proposal timber sale do not contain any documentation with respect to individual harvest units and the proposed associated treatments. This information is critical in order that concerned citizens can best understand what different silvicultural treatments will be applied. • Additional details should be presented to the public for review and public comment when harvest units and specific prescriptions are identified, especially due to the inclusion of old-growth trees. How will this occur? What details will be provided and what additional public comment opportunities will be provided? • We are eager to see additional project specifics including harvest units, harvest prescriptions, and location of temporary roads – with an opportunity to provide further comment.	Typically, when DNRC scopes a forest management project, the project is still in its early stages of development and specific treatments and harvest units have not yet been identified as project reconnaissance has not yet begun. Specific treatment units and/or prescriptions are developed based on data collected during reconnaissance as well as based on concerns identified both internally and externally during the scoping period. Detailed harvest units, silvicultural prescriptions and road locations are available to view in the Silvicultural Prescription Table on pages 53-55 and Maps on pages 48, 50, and 51. Additional public comment periods were deemed unnecessary based on the size and scope of the proposed project and issues identified.
• This immediate area has a history of devastating blowdowns that suggests that logging is likely to have unintended mortality to the trees that were supposed to be retained.	Large scale natural weather events are out of the control of the DNRC and do not directly apply to the scope of this project and, thus, this issue was eliminated from further analysis. Wind events occasionally remove large stands of timber, leaving openings behind. Secondary potential effects of wind are commonly discussed by DNRC ID teams when developing timber stand prescriptions. In cases where extreme wind events or other natural disturbance events occur in previously logged stands, appropriate follow-up

	environmental reviews are conducted, and subsequent salvages are proposed and designed to comply with DNRC's Forest Management HCP and ARMs.
• Other significant issues are impacts to the native plant understory	DNRC has not observed and does not expect long-term adverse impacts to native understory vegetation from forest management activities. In general, understory plant communities recover quickly following disturbance. DNRC has observed that ground disturbance associated with harvesting may produce a temporary reduction in understory plant cover and altered species occurrence and distribution that generally recovers within 3 to 5 years following disturbance.
• Other significant issues are impacts to … biodiversity • How does the State show the Sale promotes biodiversity? Biodiversity is worth protecting and may conflict with timber values. • How does the State show that its interest to meet yield goals is not in conflict with conserving biodiversity? What aspect of the environmental analysis analyzes biodiversity…?	As described in the State Forest Land Management Plan (SFLMP, Record of Decision (ROD), 1996), DNRC manages for healthy and biologically diverse forests as the primary means of fulfilling its fiduciary obligation as the manager of forested Trust Lands. DNRC accomplishes this by implementing a coarse-filter approach to maintain biodiversity on forested State Trust lands. The coarse-filter approach "assumes that if natural patterns and processes are maintained, then the full complement of species would persist, and biodiversity would be maintained." The SFLMP includes a comprehensive set of resource management standards to achieve biodiversity objectives. Specific measures and requirements were codified in ARMs in 2003 and have since been revised as recently as December 2020. The ARMs pertaining to biodiversity (36.11.404 through 36.11.419) address important coarse filter considerations and ecological attributes such as, land types, disturbance regimes, forest cover type, age class, fragmentation, patch size, patch shape, patch connectivity, linkage, stand structure, and old-growth amounts, which are applied as appropriate to each local project and area. These ARMs also contain important measures that are applied to ensure that attributes such as large snags and coarse woody debris are retained on all lands managed by DNRC, these support habitat needs of numerous species of wildlife. Because DNRC cannot assure that a coarse-filter would adequately address the full range of biodiversity, it also employs a fine-filter approach for threatened, endangered, and sensitive species that focus on habitat requirements of individual species. The ARMs require DNRC to address the needs of listed threatened, endangered, and sensitive plant and animal species under a fine filter management approach (ARM 36.11.406; ARM 36.11.428, ARM 36.11.436). The Forest Management HCP adopted in 2012, provides further assurances that DNRC will continue to meet federal legal requirements under the Endangered Species Act for listed terrestrial and aquatic threatened and endangered fine filter species. The Forest Management ARMs pertaining to road management (ARM 36.11.421), wetland management (ARM 36.11.425), livestock grazing (ARM 36.11.444), and weed control (ARM 36.11.445), were designed and are implemented where applicable with resource protection and support for maintaining biodiversity in mind. The Taylor to Swift Timber Sale was designed to comply with all measures that support biodiversity as required by the SFLMP, Forest Management ARMs, and DNRC's Forest Management HCP. Related to sustainable yield goals, the requirements of the SFLMP and associated resource management standards and administrative rules were incorporated as specific constraints or in the design of management actions available for selection in the planning model used to determine sustainable yield. This ensures that the calculated sustainable yield accounts for biodiversity objectives and provides an appropriate balance between biodiversity and fiduciary objectives.

• Other significant issues are … climate impacts … from logging, rapidly increasing population and recreational use. • Climate change imposes management challenges. The long term effects of climate change must be addressed during the scoping process. • How will climate impacts … be presented in the environmental analysis? What is the State's position on climate impacts … associated with timber harvests.	Evidence of widespread climate change has been well documented and reported and is an important consideration today (Intergovernmental Panel on Climate Change (IPCC) 2014, 2021, and 2022). In Montana, effects of climate change will be related to changes in temperature and moisture availability, and the response of individual tree species, forests and habitats will be complex and variable, depending local site and stand conditions. Changes in temperature and moisture availability may affect the ability of some tree species to establish and regenerate on some sites. Forest productivity may increase in some areas due to longer growing seasons associated with increased temperature where moisture is not limited but may decrease in other areas where increasing temperature results in decreased water availability (Wade et al. 2017). Drought severity is expected to increase, leading to increases in forest and tree mortality. Changing climate may also lead to changes in the range of some species, resulting in changes in forest composition and distribution (Wade et al. 2017). Given possible changes in the amounts and types of trees and other plants observed in forests, unique vegetation community associations and new climax community types may also begin to appear in the future (Fox 2007). Changing climate is also expected to alter natural disturbance regimes, such as fire and insects, with the resulting effects expected to have greater impact on Montana's forests than changes in temperature and moisture availability that directly affect individual trees and species (Wade et al. 2017). Understanding changes in tree species composition in forests, and the ability of various tree species to thrive under changing climate conditions, may take decades. Predicting possible effects of climate change in forests at local levels is also difficult due to large-scale variables at play, such as possible increases in global evaporation rates, and possible changes in global ocean currents and jet stream. Such outcomes could influence locally observed precipitation amounts and possible influences on natural disturbance regimes (such as changing the average intensity, frequency, and scale of fire events). Normal year to year variation in weather also confounds the ability to identify, understand, predict, and respond to influences of climate change. Given the many variables and difficulty in understanding the ramifications of changing climate, detailed assessment of possible direct, indirect, or cumulative effects of climate change in association with project activities described in this EA is beyond the scope of this analysis. In the face of current uncertainty associated with climate change, DNRC is continuing to manage for biodiversity as guided under the SFLMP. Under the management philosophy of the SFLMP, DNRC will continue to manage for biodiversity using a coarse filter approach that favors an appropriate mix of stand structures and compositions on state lands as described by ARM 36.11.404, while also working to understand relevant ecosystem changes as research findings and changes in climate evolve.
• Other significant issues are … carbon emissions … from logging • How will … carbon emissions be presented in the environmental analysis? What is the State's position on … carbon emissions associated with timber harvests.	The proposed project would mechanically harvest approximately 3-4 MMBF, which would produce approximately 5-7% of the cumulative annual carbon emissions from commercial timber projects on DNRC Trust Lands. Additional carbon emissions from road construction and road maintenance activities would produce approximately 24.9% and 17.7%, respectively, of the cumulative annual carbon emissions from forest road activities on DNRC Trust Lands. Although carbon emissions would temporarily increase during project implementation, direct project-related carbon emissions would cease following implementation. Due to temporary effects of project activities on carbon emissions, this issue is dismissed from further analysis.

• With wildfire season becoming longer and more intense, debate of how best to mitigate fires continues. Does the State believe forest-harvest projects are the answer? What data do you rely on to prove the measures proposed mitigate fires?	DNRC believes that forest management activities can effectively mitigate potential adverse impacts associated with wildfire. Several studies have demonstrated that forest management activities can reduce fuel and fire hazard, including Fiedler *et al*. (2004) who evaluated a comprehensive treatment approach that addressed density, structure, and species composition in high hazard forests and found that it effectively reduced fire hazard in both the near- and long-term while promoting the development of sustainable forest structures that are more like those created under historic natural disturbance regimes. DNRC implements similar treatments on many of its forest management projects, which is consistent with its philosophy of emulating historical natural disturbance regimes and producing historically-occurring patterns, processes, structures and species compositions through its management. Re*ference: Fiedler, Carl E.; Keegan, Charles E., III; Woodall, Christopher W.; Morgan,Todd A. 2004. A strategic assessment of crown fire hazard in Montana: potential effectiveness and costs of hazard reduction treatments. Gen. Tech. Rep. PNW-GTR-622. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 48 p.*
• We ask that you expand the primary objectives of the proposed project to include proposed recreation development included in the City of Whitefish's Smith Lake – Swift Creek Public Recreation Use Easement (PRUE). • How will the Sale plan accommodate the current City proposal for recreation development, public access, and the removal of development rights? • Does the City's proposal have priority since it was proposed in 2017 and continues to be considered by the State - and the possibility of generating $4-7M in addition to retaining timber rights?	The City of Whitefish's Smith Lake – Swift Creek PRUE proposal with the DNRC is outside of the scope of this project and thus will not be analyzed in further detail in this EA. The objectives of the Taylor to Swift Forest Management Project are stated in the EA on page 1. Additionally, the project area occurs on State Trust Lands, which are lands with the express purpose of generating revenue for schools and other endowed institutions. The DNRC is mandated by state law to sell timber to meet the annual sustained yield. These lands are classified as "Forested Trust Lands" and their primary purpose is to generate revenue over the long-term, primarily through the sale of forest products. Revenue generation from non-forest management-related activities, such as the proposed PRUE, on these lands is additional and secondary in land use allocation for revenue generation.
• Timber Sale will generate revenue for school trusts. How is information presented to show the public the costs associated with the sale, value of timber harvested, and revenue passed on to the school trusts? When is this information available and how is it shared?	Each sale undergoes an appraisal process utilizing DNRC's Forest Management Program Appraisal Tool, which provides an estimated minimum bid price per ton of timber and an estimated total revenue generated from the sale. This information is presented to the Land Board (also known as the Board of Land Commissioners) in the form of a summarized "agenda item", which is available to the public prior to the monthly Land Board meeting on the DNRC website (https://dnrc.mt.gov/TrustLand/About/land-board). Upon the approval of the timber sale by the Land Board council, the project is advertised for sale using a closed bid process. The timber sale advertisement with minimum bid price per ton is available on the DNRC website (https://dnrc.mt.gov/Forestry/Forest-Products/timber-sales).The highest bidder and final price per ton that the project sold for is available on the DNRC website following the bid opening (https://dnrc.mt.gov/Forestry/Forest-Products/Bid-Results-FY2026). Itemized cost accounting associated with a timber sale involves many unknown variables and is conducted at the programmatic level, rather than on a project-by-project basis. A more detailed review of programmatic costs is available in the DNRC Trust Land Management Division Fiscal Year 2024 Annual Report in the Return on Assets section.

• The Initial Proposal for this sale estimates 2-3 million board feet-33% swing is a big range. Can you quantify this into forest impacts per acre?	DNRC does not quantify forest impacts on per acre basis due to ecological variability across the landscape and variability in silvicultural treatments proposed for a particular area. Project impacts are analyzed at the project area level and cumulative effects area level. The project is proposing to treat 573 acres which equates to a timber volume removal of 3.5 to 5.2 thousand board feet (MBF) per acre harvested. Potential impacts to specific resources are described in the EA below.
• DNRC website shows 2025 timber sales planned totaling ~ 14 MMBF in timber sales in the Stillwater Unit. Does the Stillwater Unit usually generate 23% of the State's goal? 14 MMBF equates to ~2800 truckloads; 2-3 MMBF = 600 truckloads. Do all these trucks pass through Whitefish? How does the environmental analysis determine if this impact is reasonable, and how does this compare to other years?	DNRC's sustainable yield calculation determines the statewide annual sale volume target (MCA 77-5-223), which is currently 60.0 MMBF annually. Annual sale planning targets for each unit vary from year-to-year depending on the timing and volume of upcoming timber sales from each unit within a Land Office. The DNRC's Northwestern Land Office accounts for approximately 65% of the annual statewide sale volume target, of which the Stillwater Unit usually provides 33-37% (21-23% of the statewide total). The Stillwater Unit has been harvesting between 12-14 million board feet since 2011. Most log trucks from the Stillwater Unit pass through Whitefish as the mill infrastructure is located east and southeast of Whitefish. DNRC does not study the impacts of increased traffic to road systems outside of the project area, as this is outside the scope of the project analysis.
• There is an important balance to be accomplished to ensure forest health and economic health. Will 2-3 million board feet of harvest promise to support the economic health of our local timber industry? How will this be addressed in your analysis?	DNRC's Trust Lands Forest Management Program is one entity contributing to Montana's wood products industry; other entities or variables may impact the local timber industry that are unknown and/or unpredictable at the time of this project's environmental review process. Analysis of the effects of DNRC's timber sales on the local and statewide timber industry is outside the scope of this project and will not be analyzed in further detail.
• Detailed harvest units are shown in the Stillwater's 2025PreNotice_ Upcoming Sales report found online but are not shown here. Why? How does the timing of this Initial Proposal Notice fit with the Pre-Notice and Sale planning and how is this information included in the environmental analysis?	The inclusion of information on harvest units in the pre-notice document, which was published on the DNRC website following the initial proposal, was an error in process. Details on harvest units are not yet refined at this point in the planning process and may be subject to change following the completion of field work by DNRC specialists. This error was a result of insufficient training of staff in proper project management and planning process implementation. All proposed activities for the Taylor to Swift Environmental Assessment were scoped in the initial proposal and are analyzed in this document.

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

Interdisciplinary Team (ID):

- Josh Harris (*Hydrologist, Soils*)
- Justin Cooper (*Wildlife Biologist*)
- Mike Anderson (*Fisheries Biologist*)
- Dave Ring (*Decision Maker)*
- Patrick Rennie (*Archeologist*)
- Les Thomas (*Forester, Project Lead*)

Project Development:

Stand Prioritization
The following types of forest conditions led foresters to consider treatments to improve stand health and prevent unauthorized use. These include:

- Stands with dead and dying trees from insects/disease/health issues (bark beetles/root rots/weather damage).
- Stands that are currently a forest type that is not considered the Desired Future Condition (DFC) and/or stands that are in DFC but are moving away from them due to increasing presence of shade-tolerant species in the understory.

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:
  - Class 3 crossing for forest management equipment.
  - Installation of temporary crossing on class 1 perennial.
  - New road construction within class 3 SMZ boundary.

ALTERNATIVES CONSIDERED:

No-Action Alternative: Under this alternative, no timber would be harvested. Therefore, no revenue would be generated from the project area for the Montana Tech (SM), MSU 2nd Grant (ACB), Eastern College-MSU/Western College-U of M (SNS), School for the Deaf and Blind (DB) and MSU Morrill (ACI) Trusts at this time. Salvage logging, firewood gathering, recreational use, fire suppression, noxious weed control, additional requests for permits and easements, and ongoing management projects 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/or wildfires may continue to occur. Insect and disease are affecting much of the proposed treatment area, and without treatment, stands would continue to move away from Desired Future Conditions (DFCs) such as western larch/Douglas-fir, ponderosa pine, and western white pine, while trending towards more shade tolerant categories such as Mixed Conifer. Age classes would also change slightly, with some stands already recently falling out of old growth classification, and more stands likely to within the next several years.

Action Alternative: Commercial timber harvest would remove 3-4 MMBF of timber using ground-based and cable methods on 573 acres. Specific harvest unit data is provided in *Attachments A-1* State Trust Lands Vicinity Map. *A-2* Taylor to Swift Forest Management Project Map*, and Attachment B* -Taylor to Swift Timber Sale Project Prescription Table.

Silvicultural prescriptions applied under this alternative are as follows:

- Shelterwood (427 acres) and seed tree (19 acres) – regenerate new stands of vigorous, healthy trees of desirable species (Douglas-fir, western larch, western white pine), especially targeting dead and dying Douglas-fir and whitewoods including subalpine fir, grand fir, lodgepole pine and Engelmann spruce on 446 acres.
- Shaded fuel break (107 acres) – 100-foot area on either side of the Lower Whitefish Road to increase tree spacing, remove ladder fuels to aid wildland firefighting efforts, reduce fuel along high traffic roads and to provide for firefighter access and safety.
- Salvage (16 acres) - Lessen the spread of insect and disease outbreak by targeting small areas of larger stands with old growth characteristics near the Whitefish Trail, removing dead and dying Douglas-fir and whitewoods susceptible to blowdown.
- Old Growth Maintenance (4 acres) - maintain old growth attributes in stands that meet Green et al by removing individual trees and small areas with insects and disease and targeting dying whitewoods 26 acres of old growth would be maintained under the salvage treatment (16 acres) and 10 acres of shelterwood prescription.

Post-harvest treatments applied under this alternative would aim to ensure successful regeneration of units as well as high hazard fuel reduction within the WUI and along open roads and would include:

- Mechanical piling and scarification would occur on up to 426 acres to provide sites for natural and planted trees to regenerate, and to reduce fuels in the WUI and along open roads.
- Post-harvest tree planting would occur up to 241 acres to ensure areas that lack natural regeneration are fully stocked and keep stands in or move stands toward DFC.
- Road maintenance and BMP improvements would be performed on approximately 28.9 miles of existing roads. There would be 1.4 miles of new Permanent Road constructed, and 3.7 miles of Temporary Road constructed.

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:

Portions of the project area have been logged at various times beginning in the late 1940's and early 1950's, following construction of the Lower Whitefish Road in the mid 1930's. Early harvesting tended to remove large diameter western larch and Douglas-fir for railroad ties. Fire has largely been excluded from the project area in the last century except for a small portion that burned in the Werner Peak Fire of 2001. The absence of fire combined with past timber harvest techniques has left an abundance of shade tolerant species, particularly grand fir and subalpine fir, in the project area. More recent harvests from the 1990's and early to mid-2000's have concentrated on moving stands towards more seral species composition such as western larch, ponderosa pine and western white pine, as well as creating a patchwork of age classes.

The stands proposed to be harvested are mostly Douglas-fir with some western larch, and varying amounts of whitewoods including Engelmann spruce, lodgepole pine, grand fir, subalpine fir. A few isolated areas also have small amounts of ponderosa pine (unit 1) or western white pine (units 7a, 7b, 8 for example). Deciduous trees occur in wetter areas and draws throughout the area, including black cottonwood, quaking aspen, and paper birch. Most of the project area is west or southwest aspect, and warm and dry, with moderate and variable amounts of down woody material, although there are areas of heavy down woody concentration throughout the treatment area. The flat or shallow-sloped aspects in the treatment area, and the small amount of east or north aspects are cooler and wetter, with low to mixed fire regimes where stand replacing fires are possible but rare.

Harvest Unit	Habitat Group	Fire Regime	Current Cover Type	Age Class (years)	DFC	RX	Acres
1	Moderately warm and dry (westside)	Low-to-mixed	Western Larch/Douglas Fir	100-149	Ponderosa Pine	Shelterwood Harvest	98
2	Cold and moderately dry (westside)	Low-to-mixed	Douglas Fir	Old Growth	Western White Pine	Old Growth Management	4
3	Warm and moist (westside)	Low-to-mixed	Western Larch/Douglas Fir	100-149	Ponderosa Pine	Shelterwood Harvest	13

4	Warm and moist (westside)	Low-to-mixed	Western Larch/Douglas Fir	Old Growth	Western Larch/Douglas Fir	Other Salvage	16
5	Moderately cool and moist (westside)	Low-to-mixed	Western Larch/Douglas Fir	100-149	Western Larch/Douglas Fir	Seed Tree	4
6	Warm and moist (westside)	Low-to-mixed	Douglas Fir	100-149	Western Larch/Douglas Fir	Shelterwood Harvest	23
7a	Cold and moderately dry (westside)	Low-to-mixed	Western Larch/Douglas Fir	Old Growth	Western White Pine	Shelterwood Harvest	65
7b	Moderately warm and dry (westside)	Mixed-to-Stand Replacing	Western Larch/Douglas Fir	Old Growth	Western Larch/Douglas Fir	Shelterwood Harvest	99
8	Moderately cool and moist (westside)	Low-to-mixed	Western Larch/Douglas Fir	100-149	Western Larch/Douglas Fir	Shelterwood Harvest	99
9	Cold and moderately dry (westside)	Low-to-mixed	Subalpine Fir	100-149	Western White Pine	Shelterwood Harvest	12
10	Warm and moist (westside)	Mixed	Douglas Fir	100-149	Western White Pine	Shelterwood Harvest	18
11	Warm and moist (westside)	Mixed	Mixed Conifer	100-149	Western White Pine	Seed Tree	14
SFB1	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	107

Current Cover-Type/DFCs: The predominant cover type in the proposed units is western larch/Douglas-fir (412 acres), with lesser amounts of Douglas-fir (45 acres), and a few acres of Mixed Conifer (14 acres) and Subalpine fir (12 acres). DFCs identified for the proposed harvest units are mostly western larch/Douglas-fir (142 acres), along with western white pine (113 acres) and ponderosa pine (111 acres). The 107-acre area of proposed shaded fuel break has various cover types and DFCs. Cover types are moving away from DFCs, due to encroachment of more shade-tolerant tree species and insect and disease. Current Cover Types and DFCs are discussed in more detail in Comment V-1.

Age Class: All proposed units have an average age class of 100-149 years or old growth, except the shaded fuel break area (SFB-1), which is composed of small portions of many stands, and has varying age classes.

Old Growth:. DNRC uses the minimum criteria for number and age of large, live trees and stand basal area as described by Green et al. (1992) to identify old growth stands on State trust lands. Utilizing Stand Level Inventory (SLI) data, there are 456 acres of old growth within the project area. As of July 8, 2025, there are 14,050 acres of old growth on the Stillwater Unit, representing 11%% of the forests under management by the Stillwater Unit. Old Growth is discussed in more detail in vegetation comment V-2.

Fire Hazard/Fuels: Portions of the project area are located within the WUI, and currently have mixed levels of fuel loading. Stands located on south or west aspects are generally more open with sporadic understory regeneration, grasses, brush and other ladder fuels, though there are areas of higher concentrations of brush and down woody debris. Eastern and northern aspects see a marked increase in stand density, brush, regeneration, blowdown, ladder fuels and fuel continuity in general. Fire/Fuels are discussed further in comment V-3.

Fire Group types that occur in the project area include mostly Fire Groups 6, 8, 9, and 11. Fire Group 6 sites are warm and moist to dry Douglas-fir stands with fires of frequent low to moderate intensity, or infrequent high intensity. Fire Group 8 includes dry lower sub-alpine fir types with mixed to severe fires with a frequency of 70-100 years. Fire Group 9 consists of moist lower subalpine types, which typically burn at infrequent but severe levels. Fire Group 11 includes moist grand fir, western redcedar and western hemlock habitat types, in which fires are also infrequent but often severe. In Montana these occur exclusively west of the continental divide.

Insects and Diseases: Bark beetles, wood borers, stem rots and root rots are present throughout the potential harvest area in varying levels of severity. Insects observed within harvest units include Douglas-fir beetle (*Dendroctonus pseudotsugae*) and fir engraver (*Scolytus ventralis*), flatheaded wood borers (*Caleoptera; family Buprestidae*), and roundheaded wood borers (*Caleoptera; family Cerabydicae*). Indian paint fungus (*Echinodontium tinctorium*), stem and root rots such as Pini rot (*Phellinus pini*) and Armillaria root disease (*Armillaria ostoye*), and white pine blister rust (*Cronartium ribicola*) have also been observed in the area. Vegetation comment V-4 discusses insects and diseases further.

Noxious Weeds: The primary noxious weeds identified in the project area occur mostly along roads and include orange and yellow hawkweed (*Hieracium aurantiacum L.* (*Asteraceae*)), St. Johnswort (*Hepericum scouleri ssp. Scouleri*), oxeye daisy (*Leucanthemum vulgare*), and Canada thistle (*Cirsium arvense*).

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					

Vegetation	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Noxious Weeds	**X**				**X**				**X**					
Action														
Current Cover/DFCs		**X**				**X**				**X**			**Y**	**V-1**
Age Class		**X**				**X**				**X**			**Y**	**V-1**
Old Growth		**X**				**X**				**X**			**Y**	**V-2**
Fire/Fuels		**X**				**X**				**X**			**Y**	**V-3**
Insects/Disease		**X**				**X**				**X**			**Y**	**V-4**
Rare Plants	**X**				**X**				**X**					**V-5**
Noxious Weeds		**X**				**X**				**X**			**Y**	**V-6**

Comments:

V-1: VEGETATIVE COMMUNITY - The Action Alternative would harvest 3.0 – 4.0 Mmbf over 573 acres of sawtimber (see *Attachment ~~B~~ – Prescription Table*). The proposed silvicultural prescriptions would maintain or transition current cover types to the desired future conditions (DFCs) (*ARM 36.11.405*) by reducing the component of subalpine fir, lodgepole pine, Engelmann spruce and grand fir in stands, and include:

- 446 acres would be regenerated with shelterwood (427 acres) and seed tree (19 acres) harvest prescriptions. The shelterwood and seedtree prescriptions are designed to keep some mature tree canopy, while providing shade for natural regeneration, especially on warm, dry south and west aspects.
- 16 acres would be insect and disease salvage harvested (Unit 4). The salvage treatment is an effort to stop the spread of insect and disease and to maintain old growth characteristics within the larger stands. These stands surround sections of the Swift Creek portion of the Whitefish Trail, a major recreation area.
- 107 acres adjacent to the Lower Whitefish Road would be treated with a shaded fuel break prescription, with ladder fuels removed from under drip lines of overstory leave trees.
- Mechanical scarification would occur on up to 426 acres. This would create seedbeds receptive to natural or manual regeneration.
- Planting would occur on up to 241 acres.
- SMZ harvest would occur on up to 12.3 acres on Class 2 and 3 streams. RMZ harvest would also occur on up to 5.2 acres. Riparian harvest allowance will be invoked to treat 2 acres in Unit 5 to in accordance with the HCP (DNRC 2010). Approximately 19 acres would be converted to the 0-39-year age class through implementation of seed tree treatments. The harvested stands would be dominated by vigorous saplings and seedlings. Any areas that do not regenerate naturally would be planted with a mix of site-specific seral species, such as western larch, Douglas-fir and/or western white pine. Other stands that would change age class due to treatment are the old growth stands (portions of units 7a, 7b, and 8) that will no longer meet old growth standards within a few years and would be shelterwood harvested: these stands would retain their average age but would no longer retain their old growth age class designation.

The proposed treatments would result in most stands retaining their age classes after treatment. However, changes that would result include:

- 19 acres of seedtree treatments (units 5 and 11) would move to the 0-49-year age class.
- 127 acres (in units 7a, 7b, 8) of formerly old growth would retain the same average age as before but would not retain the old growth age class designation (example Unit 7a which would move from old growth age class to 49-99 post-harvest).

V-2: OLD GROWTH – As of July 8, 2025, there are 14,050 acres of old-growth on the Stillwater Unit and following this and other planned harvest activities on the Unit, there would be an estimated 14,021 acres of old-growth, representing 11% of the area under jurisdiction of the Stillwater Unit. An approximately 7-acre stand was field verified as meeting Green et al old growth requirements that had previously not been identified as old growth. No harvest treatment is currently necessary for this stand. Of the 456 acres previously classified as old growth, 83 acres have recently been field verified to no longer meet old growth standards. In total, 127 acres would be removed from old growth status following the proposed treatments, and 7 acres of old growth would be added, for a net reduction of 120 acres. 336 acres of old growth would be left in the project area, representing 9% of the project area or 2.4% of the Stillwater Units old growth acreage.

Old growth removal: 127 acres of classified old growth would be harvested through a shelterwood prescription. These 127 acres are starting to fall out of old growth due to Basal Area (BA)/Canopy issues and would not meet old growth classification standards in approximately three years.

Old growth maintenance: 30 acres classified as old growth (4 acres in Unit 2, 15 acres in the shaded fuel break areas, 11 acres of Unit 4) would be maintained as old growth. Old growth characteristics including at least the minimum number of large, live trees required by DNRC's old growth definition, basal area >80 $ft.^2$/acre, and multiple canopy layers and tree and shrub species would be retained in those stands. The 11 acres classified as old growth maintenance in unit 4 are also calculated as part of the salvage treatment and would remove old growth characteristics in small portions of the stands yet maintain old growth minimum requirements in the larger stand.

V-3: FIRE/FUELS - 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. These treatments would allow fire suppression efforts to be more successful by moderating fire rate of spread and fire intensity. This project also would reduce fuel loading near the WUI and along open roads through high hazard fuel reduction piling post-harvest, and the implementation of shaded fuel breaks along Lower Whitefish Road.

V-4: INSECT/DISEASES - Areas of insect and disease outbreak have been identified (specifically units 4, 5, 7a, 7b, 8, 11) and are targeted for shelterwood or seedtree treatments. Unit 4 (16 acres) consists of small areas of insect and disease outbreaks within larger old

growth stands, and the salvage treatment is designed to maintain the old growth characteristics of the larger stands while lessening the spread of insects and diseases. Treatment of the stands will prevent further loss of value and improve overall forest health by slowing the spread of insects and disease.

V-5: RARE PLANTS - Through utilization of Montana's Natural Heritage Program Database, no species of concern were identified to exist within or adjacent to the project area. No species of concern were identified during initial field reconnaissance within any proposed harvest units. If listed rare/sensitive plants are found during this project period, then harvesting operations would be diverted from the plants and further reviewed by DNRC and plant specialists

V-6: NOXIOUS WEEDS - 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 although with implementation of vegetation mitigations listed below the increase in populations and location would be lessened.

Vegetation Mitigations:

- Mitigation measures for noxious weed control include requiring all tracked or wheeled equipment to be cleaned of noxious weeds prior to entering the project area, controlling the spread of noxious weeds with pre– and post- emergent herbicide treatments on established weed populations, and requiring prompt vegetation seeding of all disturbed roadside sites. Roads used and closed as part of this proposal would also be reseeded.
- Implement High Standard Hazard Reduction practices for 100' inside unit boundaries on harvest units within 1,000 feet of structures or adjacent to open roads.

SOIL DISTURBANCE AND PRODUCTIVITY:

Soil Disturbance and Productivity Existing Conditions:

The eastern segment of the project area is located on glaciated mountain slopes with deep, well-weathered soils derived from Proterozoic metasedimentary rocks of the Belt Supergroup formation. The primary rock types are quartzite, siltite, argillite, and dolomite. The western portion of the project area is on glacial outwash terraces with deep, moderately well-drained soils from till, glacial outwash, and lacustrine deposits. Forest soils are moderately to highly productive, deep, and well-drained, with fine-loamy to skeletal-loamy textures. According to the Soil Survey of Flathead National Forest Area, Montana (USDA, 1998), soils in the area are considered to have low surface erodibility and low landslide potential. Some isolated sloughing of road fill slopes was identified during a field reconnaissance along an existing road proposed for use in the area. The risks of measurable direct, indirect, or cumulative impacts to compaction, displacement, and erosion are expected to be low with the use of forestry Best Management Practices (BMPs).

Ground slopes vary throughout the project area, from gentle zones of tractor ground (less than 40% slope) to bands of line ground (more than 45% slope) that bisect the area. Harvest methods will combine both ground-based and line-based equipment, depending on the localized topography. Impacts are expected to be low with the use of BMPs.

Existing concentrations of coarse woody debris (CWD) on the forest floor varied by stand. The Douglas-fir and Subalpine Fir Series (S20, S21, S22, S23, S24) are more productive, moisture-rich forest types that naturally carry higher loads of down wood. A target of 15 to 25 tons per acre supports a wide range of species, from fungi to small mammals. However, the cooler, drier Douglas-fir sites (S20) often have a slightly lower range of 10 to 20 tons per acre. In contrast, the Ponderosa Pine Series (S40), which is adapted to frequent, low-intensity fires, is managed for a more open structure and, therefore, has less down wood. Their recommended CWD level of 5 to 15 tons per acre balances ecosystem needs with the critical goal of reducing excessive fuel loads, often emphasizing the retention of larger-diameter, decay-resistant logs.

Previous timber harvest in the area spans nearly two decades and includes several significant timber sales. The earliest major entry was the Taylor South Timber sale, followed by the King Bear sale, Beaver Smith, NE Smith sale, Lazy Swift #2 sale, and King Hemlock sale. Harvest methods were typically ground-based and targeted slopes below 45 percent. Impacts from skid trails and landings are easily recognized in section 20, where multiple excavated skid trails were constructed during past harvest operations. Most of the trails are vegetated with grasses, forbs, and stunted regeneration, with very little evidence of erosion. However, some cut banks on excavated skid trails continue to erode. No evidence of sediment delivery from these locations was identified during a field reconnaissance. It is estimated that past harvest impacts are present on up to five percent of the proposed harvest areas in section 20 and on less than one percent in the rest of the project area.

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

Comments:

S-1: Physical disturbance from compaction and displacement would be expected on skid trails, skyline corridors and landings. Past monitoring on DNRC timber sales from 1988 to 2010 has shown a range of impacts based upon harvest prescription, harvest method, soil texture and forest vegetation. After reviewing the proposed harvest, DNRC would expect moderate or higher impacts to cover up to 11.9 percent of each harvest unit. In total, approximately 68.2 acres would have moderate or higher impacts. Detrimental soil effects are expected to be less than 20% within the harvest units and soil productivity will be maintained.

S-2: Erosion associated with timber harvest (not including roads) would be expected to have a moderate risk of low impacts occurring because of soil types present and the implementation of appropriate Forestry Best Management Practices. The moderate risk means there would be an equal chance of erosion occurring vs. not occurring, but the impacts would not be expected to have adverse impacts on productivity.

S-3: Coarse and fine woody debris provide a crucial component in forested environments through nutrient cycling, microbial habitat, moisture retention and protection from mineral soil erosion (Harmon et al., 1986). As required in the DNRC Timber Sale Contract, both fine and coarse woody debris would be retained to reduce potential impacts to forest productivity. Although fine woody debris would be left on site for nutrient retention, a reduction in annual fine material contribution would result from this alternative. Maintaining coarse woody debris, adhering to soil moisture restrictions and following skid trail/corridor spacing recommendations would reduce the risk of cumulative adverse soil productivity impacts.

S-4: Due to the steep slopes skyline yarding or excaliner equipment may be required. Forest roads would need to have a 16-foot travel way for skyline equipment, however smaller line equipment can operate from excavated skid trails. While the land types are not prone to landslides, cut slopes tend to ravel and slough until stabilized with vegetation or rock.

Soil Mitigations:

1. 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.

2. 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.

3. Skid trails will be kept to 20 percent or less of the harvest unit acreage, have adequate drainage concurrently with operations, and will be limited to slopes of less than 45 percent unless the operation can be completed without causing excessive displacement or erosion.

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

5. Based on the dominant habitat types within the project area, the optimal coarse woody debris range is between 10 and 20 tons per acre (Graham et al., 1994). This takes into account the varied stand conditions within the harvest units.

References:

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WATER QUALITY AND QUANTITY:

The project's hydrological assessment focuses on four distinct watersheds, which are identified at the 6th-level hydrologic unit scale (refer to Table H-1: Assessment Areas Used to Evaluate Potential Impacts to Hydrologic Resources).

Table H-1: Assessment Areas Used to Evaluate Potential Impacts to Hydrologic Resources.

Assessment Area (6th level)	Hydrologic Code	Watershed % Project Area	Acres Proposed Harvest	Watershed % Harvest
Hemlock Creek-Swift Creek	170102100505	73.48	404.86	2.2
Whitefish Lake	170102100506	12.69	127.32	0.7
Lazy Creek	170102100504	13.8	0.0	0.0
Lower Stillwater Lake-Stillwater River	170102100401	0.0	0.0	0.0

Note: The Lower Stillwater Lake-Stillwater River watershed does not include any harvest but is along the haul route.

Water Quality and Quantity Existing Conditions:

Swift Creek is the primary drainage of a 49,244-acre watershed that flows into Whitefish Lake. The watershed's elevation ranges from 3,000 feet at the creek's mouth to approximately 7,420 feet at its divide, and annual precipitation varies from 20 to 70 inches, with an average of 48 inches. The Swift Creek-Hemlock Creek watershed, an 18,248-acre subsection of the larger Swift Creek watershed and contains about 73% of the project area. This watershed includes several named tributaries such as King, Bear, Anchor, Trail, Hemlock, Taylor, and Gill creeks, in addition to multiple unnamed tributaries. Landownership is divided as follows: 55% State Trust Lands (DNRC), 21% Federal Lands (USFS), 22% Industrial Timber Land, and 1% Private Non-Industrial Ownership. The watershed is a designated A-1 water quality region, meaning its water should be suitable for drinking, recreation, supporting aquatic life, and agricultural or industrial use after conventional treatment. Swift Creek was removed from the list of impaired waterways for sedimentation and siltation in 2009.

The southern part of the project lies within the 17,109-acre Whitefish Lake watershed. This area includes Smith Lake, Smith Creek, and Brush Creek. Land ownership is primarily 75% private non-industrial, with the remaining ownership split between State Trust Lands (5%), Federal Lands (16%), and industrial timber lands (4%). Smith Creek is a Class 1 fish-bearing stream that flows both into and out of Smith Lake.

The proposed harvest will affect less than 3% of the forested acres, with all harvesting located in a 30- to 40-inch precipitation zone. To protect waterways, no harvesting is planned within 50 feet of any Class 1 stream. The project proposes two haul routes. The first option uses 14.2 miles of the Lower and Upper Whitefish Road system and would travel the Lower Stillwater Lake-Stillwater River watershed. The second route, utilizing East Lakeshore Drive (a paved county road), is expected to have a low impact on water quality. In total, the project will use 29 miles of existing roads, require 3.7 miles of new temporary road construction, and 1.38 miles of new permanent road construction. A temporary bridge will be used across Bear Creek to access unit 2.

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**		**N**	**W1**
Water Quantity	**X**				**X**				**X**					

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		
Action														
Water Quality		**X**				**X**					**X**		**Yes**	**W-1**
Water Quantity		**X**				**X**				**X**			**Yes**	**W-2**

Comments:

W-1: Eleven perennial stream crossings along the primary haul route have been identified as having active sediment delivery, with risk levels ranging from low to high. While a separate project has been tasked with addressing these issues and bringing them up to Best Management Practices, it has not been completed at the time of this document. The project will include 16 sediment repairs to existing crossing structures within the project area to meet BMP standards. Overall, the risk of direct and secondary impacts on water quality is low, but the risk of cumulative effects is moderate.

W-2: There is a low risk of any proposed activity leading to an increase in water quantity sufficient to destabilize any streams within the project area. 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 to downstream receiving waters.

Water Quality & Quantity Mitigations:

1. Best Management Practices for Forestry would be implemented and monitored for effectiveness concurrent with all forest management activities.

2. Implementation of Montana Administrative Rules for Forest Management and Streamside Management Zones.

3. The project will implement a 100-foot Riparian Management Zone on all perennial class 1 stream. The first 50 feet will be no harvest, and the remaining area will be 50% retention.

References:

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FISHERIES:

Fisheries Existing Conditions:

The following analysis details the Fisheries Resources existing condition and potential effects of the proposed activities in the Taylor to Swift Project Area. Proposed activities are found in the Type and Purpose of Action. Assessment Areas were selected based on the proposed activities and the potential for those activities to impact fisheries resources in the project area. For the purposes of this analysis, potential effects to fisheries resources are evaluated on the subwatershed level (HUC12).

Assessment areas included in this analysis are;

1. Hemlock-Swift Creek: 170102100505
2. Whitefish Lake: 170102100506

3. Lazy Creek: 170102100504
4. Lower Stillwater Lake-Stillwater River: 170102100401

Proposed activities potentially impacting fisheries resources include;
1. Upland and riparian timber harvest;
2. Road construction, maintenance, and use during timber management and hauling;
3. Stream crossing installation on perennial streams

All proposed activities would occur in the Hemlock-Swift Creek and Whitefish Lake Assessment Areas. Lazy Creek and Lower Stillwater Lake-Stillwater River Assessment Areas would be subject to timber hauling along open roads, as such impacts to fisheries resources in those areas would be limited to sediment delivery at stream crossings.

Fisheries Existing Conditions: Fisheries assemblages and distribution in the assessment areas are found in Table F-1. Significant overlap between native and introduced species occurs in all Assessment Areas. Hybridization between Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisii*) and Rainbow Trout (*O. mykiss*) have been documented in multiple Assessment Areas, and while Bull Trout (*Salvelinus confluentus*) hybridization with Eastern Brook Trout (*S. fontinalis*) has not been documented, continued sympatry is likely to result in some level of introgression over time (Kanda et al. 2002). Bull Trout critical habitat is present in both the Hemlock-Swift Creek and Whitefish Lake assessment areas, Whitefish Lake and Swift Creek are both designated as Foraging, Migration, and Overwintering habitat (USFWS 2010). Known spawning reaches in Swift Creek and tributaries to Swift Creek are upstream from any proposed activities under consideration in this project.

Table F-1: Fisheries populations present in the Taylor to Swift project area.

Assessment Area	Origin	Species	Stream Miles Occupied	
			Watershed	BT Crit. Habitat
Hemlock Creek-Swift Creek	Native	Bull Trout	13.3	7.8
		Westslope Cutthroat Trout	27.6	-
	Introduced	Rainbow Trout	13.3	-
		Eastern Brook Trout	13.3	-
Whitefish Lake	Native	Bull Trout	0.3	7.8
		Westslope Cutthroat Trout	9.4	-
	Introduced	Rainbow Trout	0.3	-
		Eastern Brook Trout	4.1	-
		Lake Trout	0.4	-
Lower Stillwater Lake-Stillwater River	Native	Bull Trout	9.1	3.1
		Westslope Cutthroat Trout	10.6	-
	Introduced	Rainbow Trout	10.6	-
		Eastern Brook Trout	12.9	-
		Lake Trout	10.6	-
Lazy Creek	Native	None	-	-
	Introduced	Eastern Brook Trout	13.7	-

Road infrastructure in the project area is found in Table F-2. Roads within 300 feet of classified streams, and the presence of stream crossings that are currently delivering or are at risk of delivery of sediment to fish bearing has elevated the existing condition of fisheries habitat to low direct, indirect, and cumulative impacts on fisheries habitat. Fish growth, survival, and reproduction are unlikely to be impacted at this level.
Table F-2: Forest road infrastructure in the Taylor to Swift project area.

		Assessment Area			
		Hemlock-Swift Cr.	Whitefish Lake	Lazy Creek	Lower Stillwater Lake-Stillwater River
Watershed Roads	Open	30.4	69.6	3.9	46.5
	Restricted	59.5	17.2	58.0	49.4
	Within 300 feet Classified Stream	27.4	16.6	23.8	20.0
	Within 300 feet Bull trout CH	0.7	6.1	0.0	0.0
	Perennial crossings	79	3	4	8
	Intermittent crossings	34	1	3	24
	Fish passage barriers	11	0	0	0
Haul Route Roads	Open	15.6	0.9	0.9	4.0
	Restricted	3.4	0.2	0.2	0.7
	Within 300 feet Classified Stream	9.7	1.5	0.0	1.4
	Within 300 feet Bull trout CH	0.0	0.3	0.0	0.0
	Perennial crossings	28	2	0	2
	Intermittent crossings	4	0	0	2
	Crossings on Bull trout CH	1	0	0	0
	Fish passage barriers	11	0	0	0
	New Perennial crossings	0	0	0	0
	New Intermittent crossings	2	0	0	0

Riparian buffers in the project area are well-stocked, with little riparian timber harvest occurring over the previous 25 years (Table F-3). Less than one percent of the RMZ buffers in the project area have been managed since 2009. Large woody debris is present at adequate levels that are currently providing fisheries habitat stability and providing instream cover for fish. Stream temperatures in the project area are largely driven by groundwater thermal regimes, which in combination with the lack of riparian harvest and existing native fish populations, suggests that temperatures are within the natural range of variability in the project area.

Table F-3: Timber stand characteristics in riparian buffers in the Taylor to Swift project area.

			SMZ Acres		RMZ Acres					
Assessment Area	Watershed Area	Proposed Percent Watershed Harvested	Watershed	Acres Currently in NS/SS	Watershed	Proposed Harvest	Acres Currently in NS/SS	Acres Converted to NS/SS	Post-project acres NS/SS	Post-project Percent NS/SS
Hemlock-Swift Creek	18,256	2.4	1,750	58.1	1,053	5.2	54.1	4.0	58.1	0.3
Whitefish Lake	17,119	0.0	811	10.8	563	0.0	13.1	0.0	13.1	0.1
Lazy Creek	10,437	0.0	690	114.9	360	0.0	85.2	0.0	85.2	0.8
Lower Stillwater Lake-Stillwater River	17,520	0.8	1,517	142.0	715	0.0	74.1	0.0	74.1	0.4

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		N	W-1, F-1
Flow Regimes	X				X				X					
Woody Debris	X				X				X					
Stream Shading	X				X				X					
Stream Temperature	X				X				X					
Connectivity				X				X				X	Y	F-2
Populations				X				X				X	N	F-3
Action														
Sediment		X				X					X		Y	W-1, F-4
Flow Regimes		X				X				X			Y	W-2, F-5
Woody Debris		X				X				X			Y	F-6
Stream Shading		X				X				X			Y	F-6
Stream Temperature	X					X				X			Y	F-6
Connectivity	X				X							X	N	F-7
Populations				X				X				X	N	F-3

Comments:

F-1: Multiple stream crossings and road surfaces along portions of the proposed haul route currently deliver or are at risk of delivering sediment to intermittent and perennial waters in the project area. Sediment delivery sites will be addressed on timelines identified in DNRCs HCP (DNRC 2010). Until corrective actions are applied, structures would not meet Forestry BMPs and may contribute low levels of sediment to perennial fish bearing waters. Delivery is not expected to exceed levels where fish growth, survival or reproduction are impacted.

F-2: Eleven existing fish passage barriers are present in the project area, all of which are in the Hemlock-Swift Creek Assessment Area. This represents high direct, indirect, and cumulative impacts on native fish populations in the project area. Improvement of fish passage will be implemented on corrective action timelines identified in DNRCs Habitat Conservation Plan (DNRC 2010). Continued reduction in available habitat (Duda et al. 2021), genetic exchange (Feuerstein et al. 2024), and population demographics (Harvey and Railsback 2011) can ultimately impact population persistence (Letcher et al. 2007).

F-3: Historical introduction of non-native game fish in the project area has a high existing adverse impact on native fish populations in all Assessment Areas. No introduction, removal, or suppression of introduced species would occur as a part of the proposed Action Alternative. Hybridization between Bull and Eastern brook trout and Westslope cutthroat trout and Rainbow trout will likely occur in connected habitat where introduced species are present, or will move into as physical and thermal conditions become appropriate. Competition for food and habitat will continue to occur, which in combination with physical displacement will likely result in reduced range, abundance, and resilience in native fish populations.

F-4: Implementation of Forestry BMPs on all road maintenance, permanent and temporary road construction is expected to minimize potential sediment delivery during and following proposed project activities.

F-5: Based on the water resources assessment, there is low likelihood of changes to the flow regime. Any changes to the timing, magnitude, and duration of changes are unlikely to have a measurable effect on fisheries habitat or migration timing in the project area.

F-6: Proposed riparian management zone timber harvest poses an additional low likelihood of low direct, indirect, and cumulative impacts to large woody debris, stream shade, and stream temperature. No riparian timber harvest is proposed adjacent to any Bull Trout occupied or critical habitat. Implementation of standard riparian buffers as outlined in DNRCs HCP (DNRC 2012) would be expected to maintain a low risk of low direct, indirect and cumulative impacts to large woody debris, stream shade, and stream temperature in the project area. Anticipated impacts to stream temperature may be detectable, but are unlikely to elevate instream temperatures to levels impacting either short-term growth or survival of either Bull trout or Westslope cutthroat trout.

F-7: No new stream crossings are proposed as a part of this project. As such there would be no additional risk of direct or indirect impact to fisheries connectivity. Cumulative impacts within the Hemlock-Swift Creek Assessment Area would continue to occur as described in the No Action Alternative. No fish passage barriers are present in Bull Trout occupied stream habitat.

Fisheries Mitigations:

1. Implement all Forestry Best Management Practices concurrent with all timber management activities.
2. Implement Montana Administrative Rule for Forest Management and Streamside Management Zones.

DNRC, 1996. Forestry Best Management Practices: State Forest Management Plan. Montana DNRC, Forest management Bureau. Missoula, MT.

Department of Natural Resources and Conservation. 2010. Montana Department of Natural Resources and Conservation Forested State Trust Lands Habitat Conservation Plan. 801 pp.Montana DNRC, Forest Management Bureau, Missoula, Montana.

Duda, J. J., C. E. Torgersen, S. J. Brenkman, R. J. Peters, K. T. Sutton, H. A. Connor, P. Kennedy, S. C. Corbett, E. Z. Welty, A. Geffre, J. Geffre, P. Crain, D, Shreffler, J. R. McMillan, M. McHenry, G. R. Press. 2021. Reconnecting the Elwha River: Spatial patterns of fish response to dam removal. Frontiers in Ecology and Evolution. 9: 765488.

Feuerstein, C. A., R. A. Kovach, C.G. Kruse, M. E. Jaeger, D. A. Bell, Z. L. Robinson, A. R. Whitely. 2024. Genetic variation and hybridization determine the outcomes of conservation reintroductions. Conservation Letters. DOI: 10.1111/conl.13049

Harvey, B. C. and S. F. Railsback. 2012. Effects of passage barriers on demographics and stability properties of a virtual trout population. River Research and Applications. 28: 479–489.

Kanda, N. R. F. Leary, F. W. Allendorf. 2002. Evidence of introgressive hybridization between Bull Trout and Brook Trout. Transactions of the American Fisheries Society. 131(4): 772–782.

Letcher, B.H., K. H. Nislow, J. A. Coombs, M. J. O'Donnell, T. L. Dubreuil. 2007. Population response to habitat fragmentation in a stream-dwelling brook trout population. PlosOne 2: 1–11.

WILDLIFE:

Wildlife Existing Conditions:

The Project Area is 3,709 acres, of which 2,903 acres are included in DNRC's Habitat Conservation Plant (*USFWS and DNRC 2010*). The Project Area is situated within the Swift Creek-Hemlock Creek and Whitefish Lake watersheds at the base of southwest facing slopes in the Whitefish Range. The existing habitat ranges from low-elevation riparian forests along Swift Creek at roughly 3,100 feet, to upland habitats reaching about 4,400 feet. Mature forest stands are primarily concentrated in two areas: a single large upland patch between Anchor Creek, Bear Creek, and King Creek and dense continuous forest surrounding Swift Creek. Approximately 48.9% of the Project Area consists of mature stands (>9 inches dbh and ≥40% canopy cover), 0.6% of the Project Area consists of non-forested areas including small lakes, gravel pits, and trailhead parking areas, and the remaining acres (50.6%) consist of pole and sapling stands. Approximately 37.9% of the Project Area consists of recently harvested stands (<25 years) with limited tree cover. The project area currently experiences moderate to high levels of disturbance to wildlife in the form of hiking, fishing, biking, firewood gathering, snowmobiling, dog sledding, hunting, and off-highway vehicle traffic. The Whitefish Lake gravel pit is the site of the Swift Creek trailhead and currently serves as a winter trailhead for snowmobilers and dog sledders. Additionally, many residences are located along the north shore of Whitefish Lake and the surrounding area. The project area receives elevated levels of traffic due to the proximity of the area to the city of Whitefish, and access to the area is facilitated by East Lakeshore Drive and Lower Whitefish Road. The presence of existing open and restricted roads within the Project Area reduces connectivity for wildlife, with the Lower Whitefish Road presenting a major barrier for some species. Open road density in the project area is 2.6 mi/mi^2 and the total road density of open and restricted roads combined is 4.8 mi/mi^2.

Cumulative effects analysis areas (CEAA) include lands near the Project Area and include the 13,245-acre Small CEAA for animals with smaller home ranges like pileated woodpeckers and flammulated owls, a 36,821-acre Lynx Management Area (Stillwater State Forest East LMA), and a 57,698-acre Large CEAA for animals that travel across larger areas such as grizzly bears and big game. Ownership in the Large CEAA consists of 50.9% DNRC, 40.0% USDA Forest Service, 3.3% Southern Pines Plantation, 0.8% Stoltze Lumber, and 5.0% private land. Primary land uses in the CEAAs are commercial timber harvest and outdoor recreation.

Recent and ongoing forest management projects in the CEAA include the Antice Flats Forest Management Project (*DNRC 2025*), McStryker Timber Sale (DNRC 2022), Lupfer Loop Timber Sale (DNRC 2024a), North Lake Timber Sale (DNRC 2024b), Antice Point North Timber Sale (*DNRC 2016*), USFS Taylor Hellroaring Project (USFS 2019), Upper Swede Timber Sale (*DNRC 2019*), and HB-883 Precommercial Thinning Projects (*DNRC 2023a*). Proposed DNRC forest management projects in the CEAA include the Swift Stryke Timber Sale (*DNRC 2023b*). Impacts associated with habitat alterations due to these proposed projects have not been accounted for in the quantitative portion of the following analysis.

Additional information on cumulative effects analysis areas and analysis methods is available upon request. Overall, the Project Area contains a variety of habitat conditions for native wildlife species.

No-Action: None of the proposed activities would occur. In the short-term, forest insects and disease will likely continue to kill some mature trees, potentially adding to larger patches of dead and dying trees within the Project Area. Damage from large-scale insect and disease issues may remove enough mature trees in existing old-growth stands to the point where they no longer meet old-growth standards (*Green et al. 1992*). Additionally, occasional disturbance from small scale firewood collection would be anticipated. Overall, a slight decrease in habitat availability for species preferring mature connected forests would likely occur over time as other stands succumb to insect and disease damage, while habitat availability would increase for species preferring open forest habitat. In the long term, habitat suitability for mature forest-associated species would remain similar or slightly increase compared to current conditions as younger, previously harvested stands continue to grow and connect mature forest over the next 60-80 years. An increase in stand-replacement wildfire risk would also be anticipated.

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**			**Y**	**WI-1**
Lynx (*Felis lynx*) Habitat: SF hab.types, dense sapling, old forest, deep snow zone		**X**				**X**				**X**			**Y**	**WI-2**
Yellow-billed cuckoo (*Coccyzus americanus*) Habitat: open cottonwood riparian forest with dense brush understories (Lake and Flathead counties)	**X**				**X**				**X**					**WI-3**
Wolverine (*Gulo gulo*) Habitat: high elevation areas that retain high snow levels in late spring	**X**					**X**				**X**			**Y**	**WI-4**
Sensitive Species														
Bald eagle	**X**				**X**				**X**					**WI-5**

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
(Haliaeetus leucocephalus) Habitat: Late-successional forest within 1 mile of open water														
Black-backed woodpecker *(Picoides arcticus)* Habitat: Mature to old burned or beetle-infested forest	**X**				**X**				**X**					**WI-3**
Common loon *(Gavia immer)* Habitat: Cold mountain lakes, nest in emergent vegetation	**X**				**X**				**X**					**WI-3**
Fisher *(Martes pennanti)* Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian		**X**				**X**				**X**			**Y**	**WI-6**
Flammulated owl *(Otus flammeolus)* Habitat: Late-successional ponderosa pine and Douglas-fir forest		**X**				**X**				**X**			**Y**	**WI-7**
Peregrine falcon *(Falco peregrinus)* Habitat: Cliff features near open foraging areas and/or wetlands	**X**				**X**				**X**					**WI-3**
Pileated woodpecker *(Dryocopus pileatus)* Habitat: Late-successional ponderosa pine and larch-fir forest			**X**				**X**			**X**			**Y**	**WI-8**
Fringed myotis (*Myotis thysanodes*)	**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		
Habitat: low elevation ponderosa pine, Douglas-fir and riparian forest with diverse roost sites including outcrops, caves, mines														
Hoary bat (*Lasiurus cinereus*) 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 *(Plecotus townsendii)* Habitat: Caves, caverns, old mines	**X**				**X**				**X**					**WI-3**
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**			**WI-11**
Old Growth			**X**				**X**				**X**		**Y**	**WI-11**
Osprey	**X**					**X**				**X**			**Y**	**WI-12**
Northern Goshawk			**X**				**X**			**X**			**Y**	**WI-13**

Comments:

WI-1 Grizzly bear – The Project Area includes 776 acres in grizzly bear non-recovery occupied habitat and 2,933 acres in grizzly bear recovery zone within the Northern Continental Divide Ecosystem (*USFWS 1993, Wittinger 2002*). The proposed activities would impact 144 acres (18.6%) of grizzly bear non-recovery occupied habitat and 429 acres (14.6%) of grizzly bear recovery zone habitat within the Project Area. Approximately 545 acres of hiding cover would be affected by the proposed activities (20.2% of existing habitat in the Project Area; 1.2% of the Large CEAA). All these acres would be treated with salvage, seed tree, shelterwood, and fuel reduction treatments and would likely not provide hiding cover post-harvest. Proposed salvage treatments would open small 3 to 7-acre patches but maintain short distances to cover. Other treatment types in the Action alternative would greatly increase sight distances within proposed harvest units; however, these units would be designed to retain patches of regenerating conifers and mature forest in combination with topographic breaks to ensure that no point within the Project Area would be greater than 600 feet to screening cover. After harvest, 57.9% of the

Project Area and 80.3% of the Large CEAA would continue providing hiding cover for bears. Visual screening would also be retained between open roads and most harvest units retaining <25 trees per acre to reduce the potential of human-bear conflicts and displacement of bears from important habitat. An allowance for visual screening may be invoked for unit 8, where leaving vegetation along the open road will not be practicable with proposed harvest methods. Within unit 8 and adjacent to the Lower Whitefish Road, openings that remove visual screening shall not exceed 40 feet in width and will retain at least 200 feet of visual screening between openings. Approximately 3.4 miles of new temporary road and 1.4 miles of new permanent restricted road would be constructed and would be reclaimed or closed to public motorized access post-harvest. Open road density would not change after the proposed activities are completed; however, total road density within the Project Area would increase from 4.5 mi/mi^2 to 4.6 mi/mi^2. Proposed harvesting would temporarily increase traffic (4-5 years) on these new temporary roads and permanent restricted roads as well as approximately 6.0 miles of currently restricted roads; however, access by the public would remain restricted along any restricted roads during and after project activities. Multiple grizzly bears have been documented within the Project Area as recently as 2018 (MNHP 2025); thus, occasional use of the Project Area is possible. If present in the vicinity of the Project Area, grizzly bears could be displaced from portions of the Project Area by forest management activities for up to 5 years. Timing restrictions would be applied from April 1 – June 15 in all harvest units to provide security for grizzly bears in the spring. Connectivity would be maintained between lower elevation riparian habitat and upper elevation habitat via riparian corridors approximately 300 feet in width.

WI-2 Canada lynx – Approximately 390 acres of suitable lynx habitat (17.2% of existing habitat in the Project Area; 1.4% of existing habitat in the East LMA) would be impacted by the proposed timber sale. All these acres would not retain sufficient conifer cover to continue providing suitable habitat for lynx post-harvest. Depending upon sapling growth rate, these harvest units could become suitable lynx habitat in 10-15 years. Approximately 50.8% of the Project Area and 76.8% of the East LMA would be suitable for lynx use post-harvest. Lynx habitat connectivity would be reduced within the East LMA due to the transition of 390 acres of suitable lynx habitat to temporary non-suitable habitat. However, suitable lynx habitat would remain continuous due to the retention of 300-foot-wide corridors along primary drainages, facilitating travel from the Whitefish Range to Swift Creek. Multiple Canada lynx have been documented within the Project Area as recently as 2016 (MNHP 2025); thus, occasional use of the Project Area is possible. To mitigate adverse impacts on lynx, habitat characteristics important to lynx and snowshoe hares would be retained. Dense patches of advanced regeneration would be retained within lynx winter forage habitat. Additionally, 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.

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. Wolverine – Approximately 32 acres of the Project Area (0.9% of the Project Area) retains persistent spring snowpack (*Copeland et al. 2010*) and is considered to be wolverine habitat. None of the proposed treatment units coincide with areas that contain persistent snow cover (*Copeland et al. 2010*); however, proposed activities are adjacent to these areas. Minor short-term displacement associated with logging disturbance could occur if wolverines are in the area. Logging is not likely to occur during the wolverine denning season (February – May) given the difficulty of accessing the area and that grizzly bear timing restrictions begin in April and extend through June 15th. Wolverines have been observed within the Large CEAA as recently as 2012 (MNHP 2025) and occasional use of the Project Area is possible. While a wolverine

could pass through the Project Area during its extensive movements, appreciable use of the Project Area is not expected. Given the large home range area wolverines occupy (average 150 square miles; *Hornocker and Hash 1981*) and the long distances wolverines typically cover during their movements, the proposed activities are not expected to measurably affect use of the area by wolverines. Due to the existing levels of year-round motorized recreation within the Project Area and the lack of quality persistent snowpack at these lower elevations, the likelihood of appreciable use by wolverines is low. Existing restricted roads used for harvesting would remain restricted during and after the project. With proposed treatment units adjacent to open roads, accessibility of the area will likely increase for snowmobiling, potentially causing some displacement of wolverines in the winter for 15 to 25 years until trees grow to a height that reduces snowmobile access. Should any wolverines be present within the Large CEAA, habitat alteration and potential disturbance would be additive to recent, ongoing, and proposed forest management projects and recreational use in the CEAA (*see existing conditions section*).

WI-5. Bald Eagle – Proposed harvest is less than 1 mile from the last known nest location for the Whitefish Lake - Swift Creek bald eagle pair (MNHP 2025, DNRC unpublished data). Approximately 22 acres of the Project Area is within the primary use area associated with the most recent nest site (ARM 36.11.436(7)). None of these acres would be impacted by the proposed activities. Use of this nest site by breeding bald eagles has not been documented since 2020; however, historic observations have been periodically recorded since 1982 at this nest site (MNHP 2025, DNRC unpublished data). Thus, active use of this nest site and territory by a breeding pair of bald eagles is likely. Eagles using the Whitefish Lake territory are likely habituated to a great deal of disturbance, as the nest is within 400 feet of an occupied home and 0.2 miles of an open road. In addition, the nest site is within 0.2 miles of Whitefish Lake, which receives high amounts of recreational activity and motorized disturbance. Ample vegetative cover shall remain in place between the nest site and the open road to avoid disturbance from normal activities. Thus, negligible direct, indirect, or cumulative effects to bald eagles would be expected to occur as a result of the action alternative.

WI-6 Fisher - Approximately 200 acres of suitable fisher habitat would be affected by the proposed activities (16.1% of fisher habitat available in the Project Area). All these acres would be treated with seed tree, shelterwood, fuel break, or salvage treatments and would not be suitable fisher habitat post-harvest due to low amounts of mature conifer cover. Additionally, the proposed activities would affect 30 acres of preferred fisher covertypes that do not currently have the stand structure needed to be considered suitable fisher habitat; thus, prolonging the time until these stands become suitable habitat again. Habitat connectivity would decrease following logging but connectivity to suitable habitat would remain across the Project Area within corridors of mature forest along primary drainages (33.3 % of the Project Area post-harvest). Approximately 3.4 miles of temporary road and 1.4 miles of permanent restricted road would be constructed. These roads would be reclaimed or closed post-harvest and open road density would not change; however, total road density within the Project Area would increase from 4.5 mi/mi^2 to 4.6 mil/mi^2. Several proposed treatment units are adjacent to open roads. Due to the locations of the proposed harvest activities, an increase in access to trappers and associated mortality risk to any fisher that might be using this area. The retention of visual screening within 100 feet of these roads would help to deter access from open roads. Existing restricted and newly built roads would be restricted by gates or berms during and after harvest. 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 and large trees are important habitat features that provide resting and denning sites for fishers (*Olson 2014*). Approximately 4.4% of suitable fisher habitat in the Small CEAA would be affected, but abundance would remain moderate (5,097 acres, 38.5% of Small CEAA) after the proposed

activities. However, the likelihood of fishers using the Project Area or Small CEAA is low given that no fisher has been observed in the Small CEAA within the last 20 years (*MNHP 2025*). Should any fishers be present within the Small CEAA, habitat alteration and potential disturbance would be additive to recent, ongoing, and proposed forest management projects in the CEAA (*see existing conditions section*).

WI-7 Flammulated owl – The proposed timber harvest would affect approximately 26 acres (0.7% of habitat in the Project Area; 0.2% of habitat in the Small CEAA) of preferred flammulated owl cover types consisting of dry Douglas-fir forest type with varying amounts of canopy cover. These acres would be treated primarily with shelterwood treatments, benefiting flammulated owls which prefer a more open stand structure. Patches of advanced regeneration would also be retained, providing vegetation for insect hawking and gleaning. To reduce potential adverse effects on flammulated owls, at least 2 large snags and 2 large snag recruitment trees per acre (>21 inches dbh) would be retained (*ARM 36.11.411*). However, fewer snags would be standing post-harvest considering that some would likely be knocked down by equipment and many removed for insect and disease purposes. Overall, the Action Alternative is anticipated to benefit flammulated owls by creating a more favorable stand structure.

WI-8 Pileated woodpeckers – The proposed activities would affect 353 acres of suitable pileated woodpecker habitat (26.6% of habitat available in the Project Area; 11.1% of habitat in the Small CEAA). All these acres would be treated with seed tree, shelterwood, salvage, and fuels reduction treatments and these stands would not provide suitable habitat post-harvest. The proposed activities would remove large patches of existing suitable pileated woodpecker habitat. Post-harvest, the remaining habitat would exist in scattered patches across the Project Area. These impacts would be additive to cumulative effects further reducing habitat availability and connectivity for pileated woodpeckers in the Small CEAA. Approximately 26.2% of the Project Area and 21.5% of the CEAA would be suitable for pileated woodpecker use post-harvest. Availability of suitable habitat is expected to increase as stands in the Project Area continue to age. To reduce potential adverse effects on pileated woodpeckers, at least 2 large snags and 2 large snag recruitment trees per acre (>21 inches dbh) would be retained and all snags cut for safety reasons would be left in the harvest unit (*ARM 36.11.411*).

WI-9. Hoary bat – The proposed activities would affect approximately 486 acres of potential hoary bat habitat (26.9% of potential habitat available). 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 (*ARM 36.11.411*).

WI-10 Big game – The project area is situated along the southwest facing slopes of the Whitefish Range, containing low elevation habitat below 3,800 feet transitioning to upland habitat at higher elevations. The Project Area consists of a mix of moderate-to-well stocked mature stands of trees ≥ 9 inches dbh (48.8% of the Project Area) and pole and sapling sized stands (50.6% of the Project Area). Due to the availability of canopy cover and low elevation, the area likely provides suitable habitat for wintering big game. The proposed activities would reduce thermal cover and hiding cover on potential mule deer, white-tailed deer, moose, and elk winter range (*DFWP 2008).* The proposed shelterwood and seed tree treatments will likely improve forage production, especially for moose, by resetting forest succession and promoting

shrub development; however, the benefits may not be realized for up to 10 years post-harvest (Harris et al. 2024).

The Project Area contains 2,080 acres (56.1% of the Project Area) that provide at least a marginal degree thermal cover and snow intercept (≥40% canopy closure). Timber harvesting would affect 282 acres of high-quality thermal cover and snow intercept (≥60% canopy closure; 24.5% of available high-quality thermal cover in the Project Area), and an additional 245 acres of marginal thermal cover (40%-60% canopy closure; 6.6% of available marginal thermal cover in the Project Area) would be affected by the proposed activities. All these acres of thermal cover and snow intercept would be treated with harvest prescriptions that would reduce mature canopy cover below 40%; thus, reducing the capacity of these stands to provide thermal cover and snow intercept during more severe winter conditions. Approximately 894 acres of high-quality thermal cover (24.1% of the Project Area) would remain within the Project Area post-harvest. An additional 658 acres of marginal thermal cover (17.8% of the Project Area) would provide connectivity between scattered thermal cover areas in the Project Area post-harvest. Overall, an estimated 527 acres of total thermal cover (25.3% of currently available thermal cover) would be removed by the proposed activities. High-quality and marginal thermal cover would remain on approximately 15.4% and 23.9% of the Large CEAA respectively. Alterations to thermal cover due to the proposed action would be additive to recent, ongoing, and proposed forest management projects in the CEAA (*see existing conditions section*).

Connectivity is currently moderate within the Project Area. Big game must traverse between the low-elevation Swift Creek riparian corridor and the high-elevation Whitefish Divide throughout the year. Connectivity from previous timber projects has been reduced recently via the King Hemlock and Hellroaring timber sales between these two landscape features. Connectivity has been maintained in steep draws along the primary drainages contributing to Swift Creek within the Project Area. The proposed activities would further reduce connectivity within this area, limiting connectivity to primarily draws via 300-foot riparian corridors. Two large mature upland areas would be retained adjacent to the Bear Creek corridor and a series of smaller connective upland corridors between Hemlock, Trail, and Anchor Creeks would also be retained to preserve some upland habitat and connectivity at low-to-mid elevations for wintering big game to move through the Project Area. At lower elevations, proximate stands of dense canopy forest will be maintained to provide an optimal mix of forage, security, and thermal relief during seasonally warm periods.

The total road density is currently 4.5 mi/mi^2 within the Project Area. Open road density is 1.8 mi/mi^2. Approximately 3.4 miles of temporary road and 1.4 miles of permanent restricted road would be constructed. These roads would be closed post-harvest and open road density would not change; however, road density within the Project Area would increase from 4.5 mi/mi^2 to 4.6 mi/mi^2 after the proposed activities. Motorized use of open and restricted roads within the Project Area would increase to 3.6 mi/mi^2 during project implementation. Existing restricted roads would remain restricted during harvest, and these roads would be closed with gates or berms. Logging could displace big game species for up to 5 years during harvest activities, and during this time harvest activities will likely occur during the winter months, which could displace wintering big game species or make access to wintering ground difficult. Spring timing restrictions would apply from April 1 to June 15 in harvest units.

Hiding cover would be removed by the proposed activities on 545 acres (20.2% of hiding cover in the Project Area). Sufficient vegetation would remain on approximately 2,149 acres (57.9%) that provides hiding cover for big game post-harvest within the Project Area. The proposed Action entails the establishment of a shaded fuel break extending approximately six linear miles along Lower Whitefish Road. Implementation would necessitate the mechanical and/or manual

reduction of forest vegetation within a treatment zone extending up to 100 feet from the road corridor on either side. Vegetation management activities would prioritize the removal or thinning of ladder fuels and understory components as well as maintaining overstory tree crown spacing to reduce vertical and horizontal fuel continuity. Visual screening along open roads will be greatly reduced but maintained within at least 100 feet of roads, likely behind the shaded fuel break, to provide security in areas where tree density will become too low to provide cover. An allowance for visual screening may be invoked for unit 8, where leaving vegetation along the open road will not be practicable with proposed harvest methods. Within unit 8 and adjacent to the Lower Whitefish Road, any openings that remove visual screening shall not exceed 40 feet in width and will retain at least 200 feet of visual screening between openings. Retention of some small patches of regenerating conifers and submerchantable trees within the harvest units would decrease site distances and maintain some cover. The reduction in hiding cover could result in increased mortality risk to big game species due to hunting, particularly along open roads where treatments would serve as fuel breaks, increasing distance to cover. Hiding cover would remain on approximately 80.3% of the Large CEAA post-harvest. Habitat alterations due to the proposed action would be additive to recent, ongoing, and proposed forest management projects in the CEAA (*see existing conditions section*).

WI-11. Mature Forest / Old-growth – The proposed action would alter approximately 486 acres of mature forest (26.9% of mature forest within the Project Area; 9.6% of mature forest within the Small CEAA) with a reasonably closed canopy (≥40% canopy closure of trees greater than 65 feet in height). Harvest prescriptions on all of these acres would reduce mature live tree densities with post-harvest canopy closure of <40% and would no longer be considered suitable for species that prefer dense mature forests. These acres would also be additive to the 1,406 acres (37.9%) recently harvested (<25 years) within the Project Area and the 4,333 acres (32.7%) recently harvested within the Small CEAA. However, habitat suitability for species utilizing younger stands and open forest with widely scattered mature trees would increase. Of these acres, harvest prescriptions would impact 157 acres of potential old growth (31.8% of the potential old growth in the Project Area) in three separate areas approximately 11 - 108 acres in size. Approximately 30 acres of old growth stands would be treated with an old growth maintenance treatment or salvage treatment in which large live trees >21 inches dbh would be retained and canopy cover would be reduced. Within these 30 acres, old-growth structural attributes would be maintained within the larger stand and would continue to provide marginal habitat for old-growth associated wildlife species; however, habitat quality would be reduced for wildlife species that prefer dense old-growth stands. Approximately 127 acres (25.8%) of old-growth stands within the Project Area would be treated with shelterwood or fuel break treatments and would not meet old-growth standards post-harvest on these acres (*Green et al. 1992*). One large patch of upland old-growth, approximately 108 acres, would be removed and no longer provide quality habitat for wildlife species that prefer a larger patch size (*Harger 1978*). Post-harvest, approximately 9.9% of the Project Area would be considered old-growth. The largest patch of old-growth would be approximately 274 acres post-harvest. Another 4 smaller, scattered old-growth patches, ranging from 8 to 31 acres, would also remain in the Project Area post-harvest. Connectivity within the Project Area would become limited with larger patches of mature forest connected via riparian habitat and steep terrain. To facilitate the movement of wildlife through the Project Area and to adjacent lands, a network of mature forested corridors, at least 300 feet wide, would be maintained along all primary drainages. Several areas of mature upland forest would remain connected to lower elevation riparian habitat via these corridors as well. To reduce adverse impacts on wildlife associated with old-growth at least 2 large snags and 2 large snag recruitment trees per acre (>21 inches dbh) would be retained and all snags cut for safety reasons would be left in the harvest unit (*ARM 36.11.411*).

WI-12 Osprey – An osprey nest was discovered within the Project Area, but it was not active during the 2025 breeding season. The nest was located west of the Lower Whitefish Road along a small ridge near the Swift Creek Trail system. The nest was not within a proposed harvest unit. No harvesting would occur within 100 feet of the nest trees and timing restrictions on motorized harvesting activities within ¼ mile of the nest site would be in place from April 1 to August 31 (if the nest is found to be active). Occupancy status and nest location would be surveyed each breeding season for the duration of the project to ensure that the correct area is protected with timing restrictions. With these mitigations, the risk of disturbance to breeding ospreys would be low. Habitat changes due to timber harvesting would not be anticipated to affect ospreys, as no harvesting would occur around the nest site and these raptors display great flexibility in their nest site habitat characteristics. Disturbance due to the proposed action would be additive to recent, ongoing, and proposed forest management projects in the CEAA (*see existing conditions section*).

WI-13. Northern Goshawk – An active goshawk nest was discovered within a proposed harvest unit in 2025. Harvest operations would be prohibited within ¼ mile of the nest site from April 1 to August 15 (if the nest is found to be active each breeding season). Hauling would still be allowed along the open Lower Whitefish Road during this time. The nest tree and all mature trees (≥9 inches dbh) within 100 feet of the nest tree would be retained except for where a temporary road location would intersect this area. If it is deemed necessary to remove the nest tree because of the temporary road location, removal would only be allowed after nesting season and after consulting with a DNRC wildlife biologist. Occupancy status and nest location would be surveyed in the spring to ensure that the correct area is protected with timing restrictions. Proposed harvest adjacent to the nest would likely displace nesting goshawks to stands with a greater density of mature trees post-harvest. Thus, considering that timing restrictions would be implemented to reduce potential for disturbance and that displacement is likely, moderate adverse direct and secondary impacts and minor cumulative effects to northern goshawks would be anticipated as a result of the Action Alternative.

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.
- Close roads and trails to the extent possible after logging is complete to reduce illegal entry into the Project Area.
- Restrict public access at all times on restricted roads that are opened for harvesting activities; signs should be used during active periods and a physical closure must be used during inactive periods (nights, weekends, etc.).
- Retain visual screening between open roads and all harvest units retaining <25 TPA (applies to EA Units 8, 9, 11, and SFB1). An allowance for visual screening may be invoked for EA Unit 8, where leaving vegetation along the open road will not be practicable with proposed harvest methods. Within EA Unit 8 and adjacent to the Lower Whitefish Road, openings in visual screening shall not exceed 40 feet in width and will retain at least 200 feet of visual screening between openings. The Forest Officer must approve openings along Lower Whiteish Road within Unit 8 before harvest operations.

- Prohibit commercial forest management activities from April 1- June 15 in all harvest units to protect grizzly bears during the spring. However, note that logging is allowed in the spring period within 100 feet of any open road.
- Within commercial harvest units, retain patches of advanced regeneration of shade-tolerant trees as per LY-HB4 (*USFWS and DNRC 2010*).
- No point in a unit with <25 TPA can be more than 600 feet to hiding cover or a topographic break, GB-NR4 (*USFWS and DNRC 2010*).
- 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 10-20 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 LY-HB2 (*USFWS and DNRC 2010*). High-hazard clean up areas are exempt from standard coarse-woody debris retention guidelines.
- Retain all trees within 100 feet of the goshawk nest and osprey nest, except for portions of these areas where temporary road construction is necessary. Protect all raptor nest trees and their nests.
- Avoid prolonged administrative motorized activities within sight of any nest tree.
- Prohibit motorized forest management activities (including road maintenance, timber hauling, and site preparation) that utilize existing roads within the designated buffers surrounding the nest locations between April 1 and August 15 for any active northern goshawk nests and between April 1 and August 31 for any active osprey nests. Nesting activity will be checked annually by a DNRC biologist and timing restrictions will be relaxed if the nest site is not active or the nest is damaged/destroyed by natural causes.

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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**	**A-1**
Dust		**X**				**X**				**X**			**Y**	**A-1**

Comments:
A-1: The project area is in Airshed 2 as defined by the Montana/Idaho Airshed Group. The Kalispell, Montana Impact Zone is approximately one mile southeast of 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 or chipped for bio-fuel 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 this group, would only burn on approved days.

Air Quality Mitigations:

- Only burn on approved days by the Montana/Idaho Airshed Group and DEQ.
- Conduct test burn to verify good smoke dispersion.
- Dust abatement strategies such as time of haul or other dust abatement applications such as magnesium chloride may be applied on some road segments. Application would depend on seasonal conditions, proximity to private residences and level of public traffic, as determined 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**					**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 much of the sale area has been previously inventoried to Class III standards. It also indicated that only two cultural resources have been identified in the areas of potential effect (APE). Site 24FH425 is a segment of the former Somers Railroad grade. Site 24FH426 is the remnants of a timber camp associated with

the Somers Railroad grade. In-house records also indicate that much of the APE has been intermittently logged from 1929 until, in some areas, the mid 2000s.

Sites 24FH425 and 24FH426 can be avoided with no project related impacts. Further, the topographic setting and geology suggest a low to moderate likelihood of the presence of cultural or paleontologic resources. Because of this, 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.

Archeology 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.

Aest-1: Some of the proposed harvest units are adjacent to or visible from the Lower Whitefish Road. Some portions of Unit 4 are adjacent to--and would be visible from--portions of the Swift Creek Trail section of the Whitefish Trail. Portions of Unit 1 and Unit 3 would be visible from East Lakeshore Drive in Whitefish, MT. Unit 3 would also be visible from West Smith Lake Road.

- Blend unit edges and incorporate natural, irregular shaped boundaries to mimic natural disturbance events.
- Utilize heavier tree retention and visual screening along open roadways (when outside shaded fuel break areas).

OTHER PROJECTS AND ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

- Projects: Swift Smith Blowdown Timber Project EA (2020), King Hemlock (2014), Lazy Swift 2 Timber Sale Project EA (2013) Taylor South (2001), Beaver Smith (2009), and King Bear (2006). Whitefish Disc Golf EAC (2017), Whitefish Trail Phase III: Swift Creek EAC (2012), Trail Runs Through It EA (2007)

Impacts on the Human Population

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

RECREATION

Recreation Existing Conditions:

The project area receives a high amount of public use due to its proximity to the City of Whitefish, Whitefish Mountain Resort and the Flathead National Forest. The project area is

frequented for hunting, fishing, hiking, biking, berry picking, camping and other recreational pursuits.

The Whitefish Trail system has two trailheads, Swift Creek Trailhead off Delray Road, and the Smith Lake Trailhead, located off the West Smith Lake Road. Unit 4 and the shaded fuel break unit (SFB-1) are adjacent to the trail in places. Unit 4 has approximately 275 feet of trail going through it. See Taylor to Swift Map 2 Map, Page 50.

Along with general dispersed recreational use, the DNRC also grants Land Use Licenses (LULs) and Special Recreational Use Licenses (SRULs) on state trust land. LULs are term licenses which are non-exclusive and may consist of some minor development such as trails, etc. Three examples of LULS are the Swift Creek and associated trails, the new dock and trail near Smith Lake Dam and the 27-hole Disk Golf course held by Flathead Valley Disc Golf, located southwest of Smith Lake.

SRULs are issued for short-term concentrated use such as product demo days, races, tours and special events. In the past, SRULs have been issued in this area for race events such as Glacier Challenge, a multisport event along with SRULs for hiking the Whitefish Trails to Odyssey Limited. Recent SRULs include Bicycle Adventures on open roads for those riders on the Continental Divide Bike Ride and the Last Best Ride which is a one-day gravel bike race in late July.

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**					

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		
Action														
Health and Human Safety		**X**				**X**				**X**			**Y**	**Safety-1**
Industrial, Commercial and Agricultural Activities and Production		**X**				**X**				**X**				**Hum-1**
Quantity and Distribution of Employment		**X**				**X**				**X**				**Hum-2**
Local Tax Base and Tax Revenues		**X**				**X**				**X**				**Hum-2**
Demand for Government Services	**X**				**X**				**X**					
Access To and Quality of Recreational and Wilderness Activities			**X**				**X**			**X**			**Y**	**Rec-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:
Safety-1: Mitigations have been developed for log hauling to allow for safe travel and shared use of forested road (see Mitigations below).

Mitigations:

- Restrict log hauling activities to Monday through Friday. Prior approval for holiday or weekend hauling could be granted by the Forest Officer on a case-by-case basis while coordinating with recreation license holders in the sale area.
- Log hauling on the East Lakeshore Drive will not be allowed during snowy and/or icy conditions. Only Units 1, 3, and 4 will be allowed to haul on East Lake Shore Drive due to being adjacent to paved roads. The remaining 7 harvest units would be hauled up the Lower Whitefish Road and down the Upper Whitefish Road to Highway 93 at Olney, Montana. This adds approximately 35 miles to the haul and cost to the timber sale but minimizes the amount of heavy log truck traffic, thus improving safety on East Lake Shore Drive.
- During logging operations in Unit 8, the Lower Whitefish Road will be closed. Signs will be posted at the gate near the junction of Lower Whitefish Road and East Lakeshore Drive, and at the Lower Whitefish Road and Upper Whitefish Road intersection.

- When plowing snow on the Lower and Upper Whitefish Roads, breaks in snow berms will be added as directed by the Forest Officer to maintain road surface drainage.
- Snowplowing will be done in accordance with Forest Officer and Special Uses Manager to facilitate winter recreation and safe log hauling, including snowmobile use on the Upper and Lower Whitefish Roads.

Hum-1: A consistent flow of timber contributes towards meeting the current and future demand for raw material resources to operate value-added timber products manufacturing facilities.

Hum-2: Employment in the logging industry is common in the area, and this project would, in a small part, contribute to local employment and the status quo of logging community.

Rec-1: General recreation in the project area would continue to be accessible by the public on open, unrestricted roads, except when logging operations would make public access unsafe. Temporary road, trail and trailhead closures would be implemented as noted below. Impacts would be expected to be moderate, but of short duration. Mitigations to minimize impacts to trail users are listed below.

Mitigations:

- The Forest Officer, Stillwater Special Uses Manager and a City of Whitefish Representative(s) will set up a communication plan prior to start of logging operations. The scheduling of site visits before and during operations can be arranged as needed.
- Harvest units adjacent to the Whitefish Trail will leave a visual screen buffer of submerchantable trees and leave as many trees as possible to limit visual impact of the treatment along the trail.
- During logging operations, the Smith Lake Trail and access road (Unit 3) and the Swift Creek Trailhead and trail system (Unit 4) will be closed to ensure the Public's safety. This will likely impact Units 1, 3 & 4 only. Other trails in the area will remain open and will offer alternative recreation activities.
- Some harvest areas in Unit 4 will be visible from the Swift Creek portion of the Whitefish Trail. Any impacts to trail are expected to be low, and of short duration.

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.*

- Whitefish Trail and Spencer Trails, Department of Natural Resources and Conservation Management and Operations Plan (2024-2025), Close the Loop Trail and Recreation Use Easements ES (2019), , Whitefish School Trust Lands Neighborhood Plan(2004), Swift Creek Sub-Unit (WTLAC 2004), Smith Lake Dam Emergency Action Plan (updated annually), Whitefish Community Wildfire Protection Plan (Whitefish, 2009).

Other Appropriate Social and Economic Circumstances:

Costs, revenues and estimates of return are estimates intended for relative comparison of alternatives, and 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 MSU 2nd Grant, MSU Morrill, Eastern College—MSU/Western College-U of M, Montana Tech, and The School for the Deaf and Blind Trusts at this time.

Action: The timber harvest would generate additional revenue for the MSU 2nd Grant, MSU Morrill, Eastern College—MSU/Western College-U of M, Montana Tech, and School for the Deaf and Blind Trust. The estimated return to the trust for the proposed harvest is $522,286.85 based on an estimated harvest of 3,803 board feet (24,982 tons) and an overall stumpage value of $20.91 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

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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: Les Thomas
Title: Management Forester
Date: November 25, 2025

Finding

Alternative Selected

Upon Review of the Checklist EA, and attachments, we 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 eight public comments during the 32-day scoping period and were addressed in **Project Development**.

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). Approximately $522,286.85 will be generated to benefit MSU 2nd Grant, MSU Morrill, Eastern College—MSU/Western College-U of M, Montana Tech, and The School for the Deaf and Blind Trusts based on the economic analysis in this document.

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 we 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, we find that all the identified resource management concerns have been fully addressed in this Environmental Assessment 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. Assessed individually and cumulatively, the proposed activities are common practices, and no project activities are being conducted on important, unique or fragile sites.

We find there will be no significant impacts to the human environment because of implementing the Action Alternative. In summary, we 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

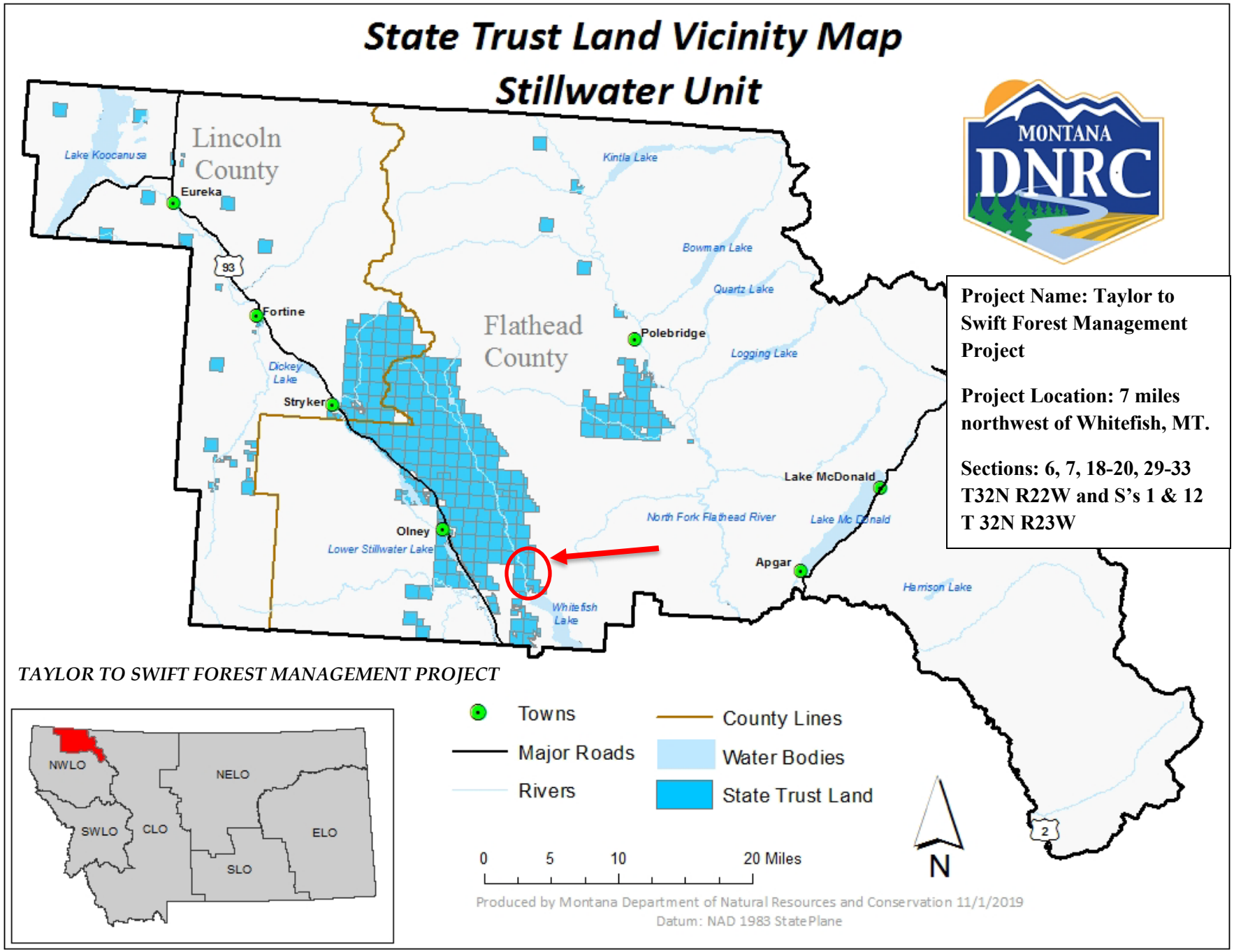
[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

Environmental Assessment Checklist Approved By:

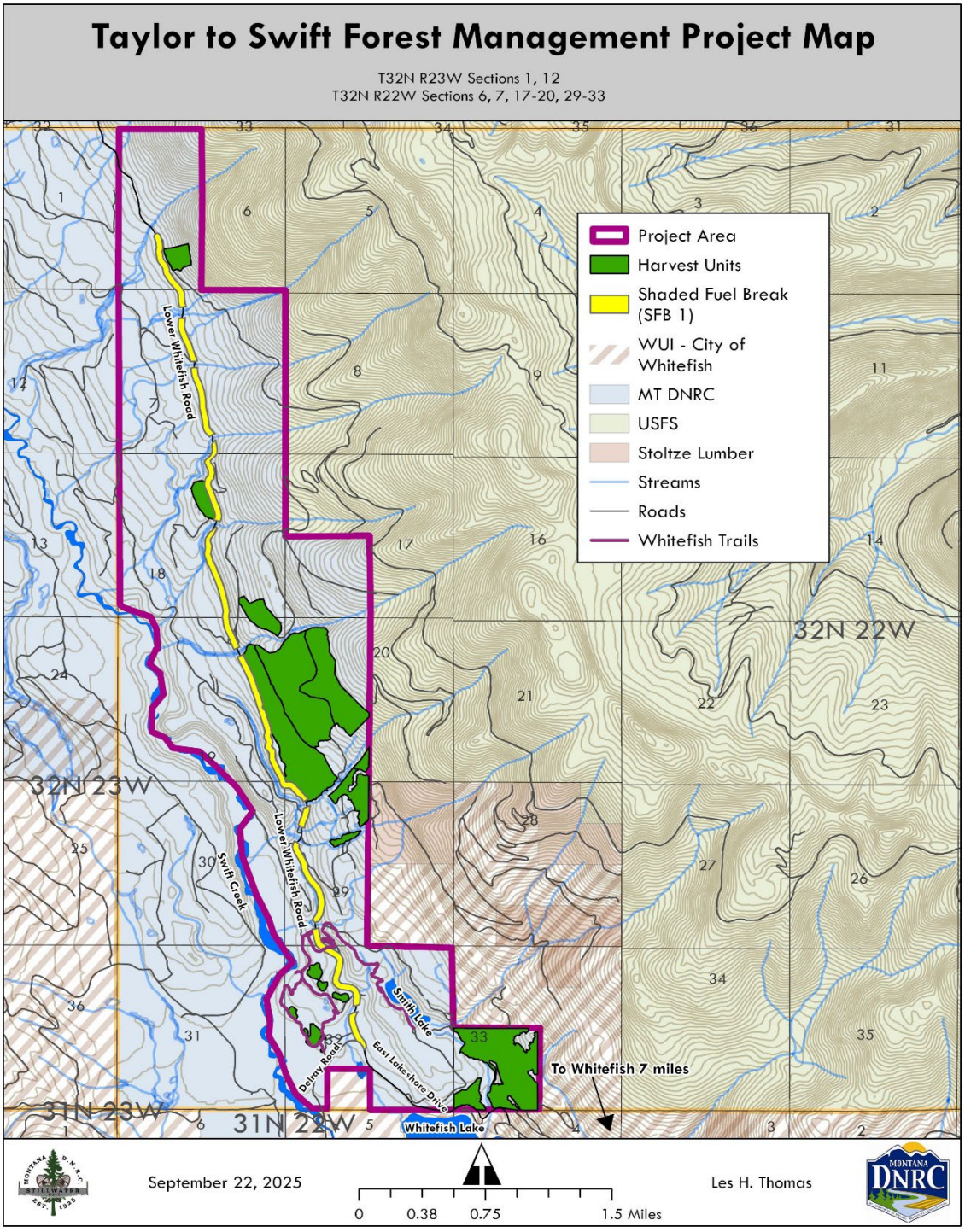
Name: Dave Ring
Title: Stillwater Unit Manager
Date: December 12, 2025
Signature: /s/ David A. Ring

Attachment A - Maps

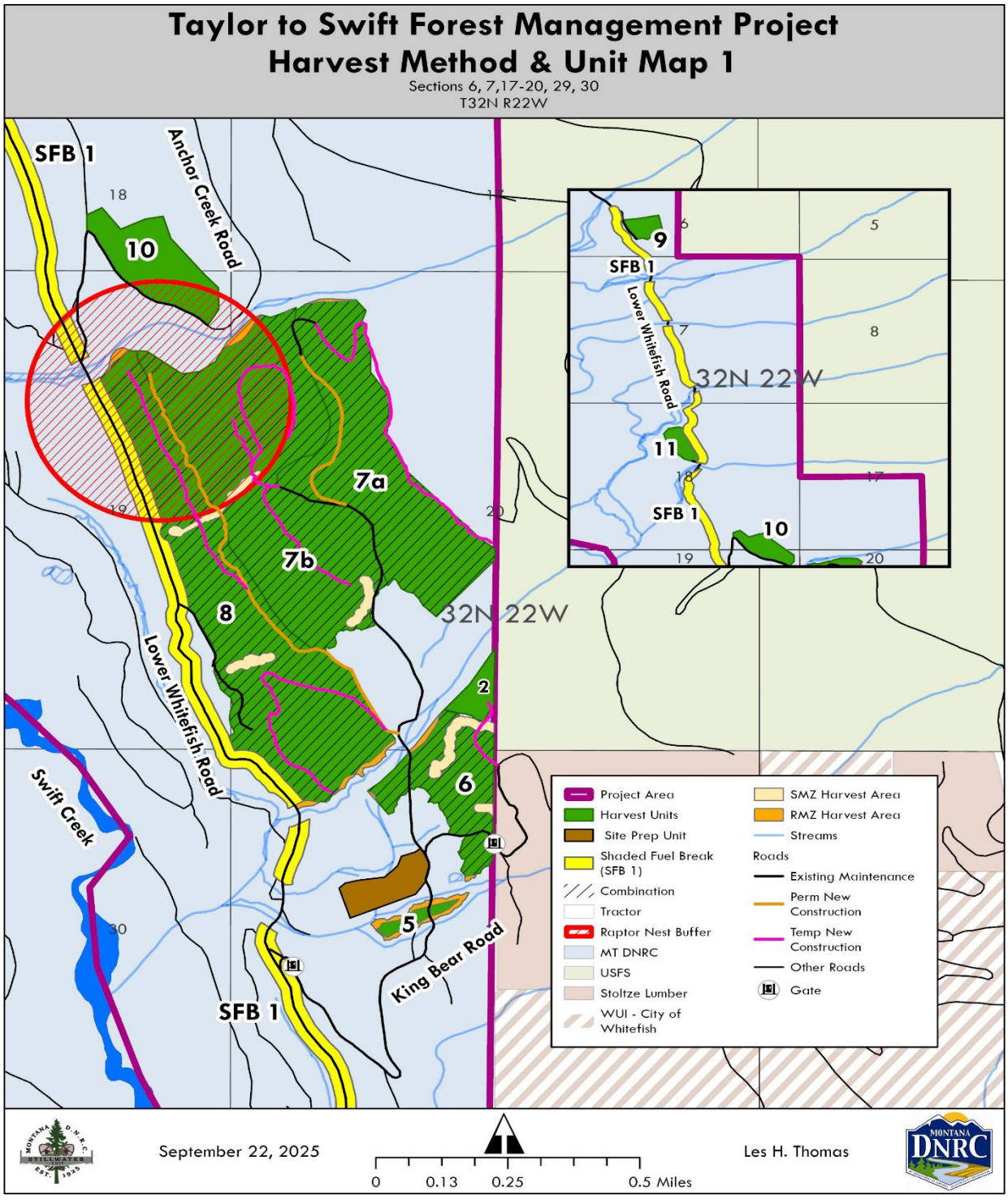
A-1: Timber Sale Vicinity Map



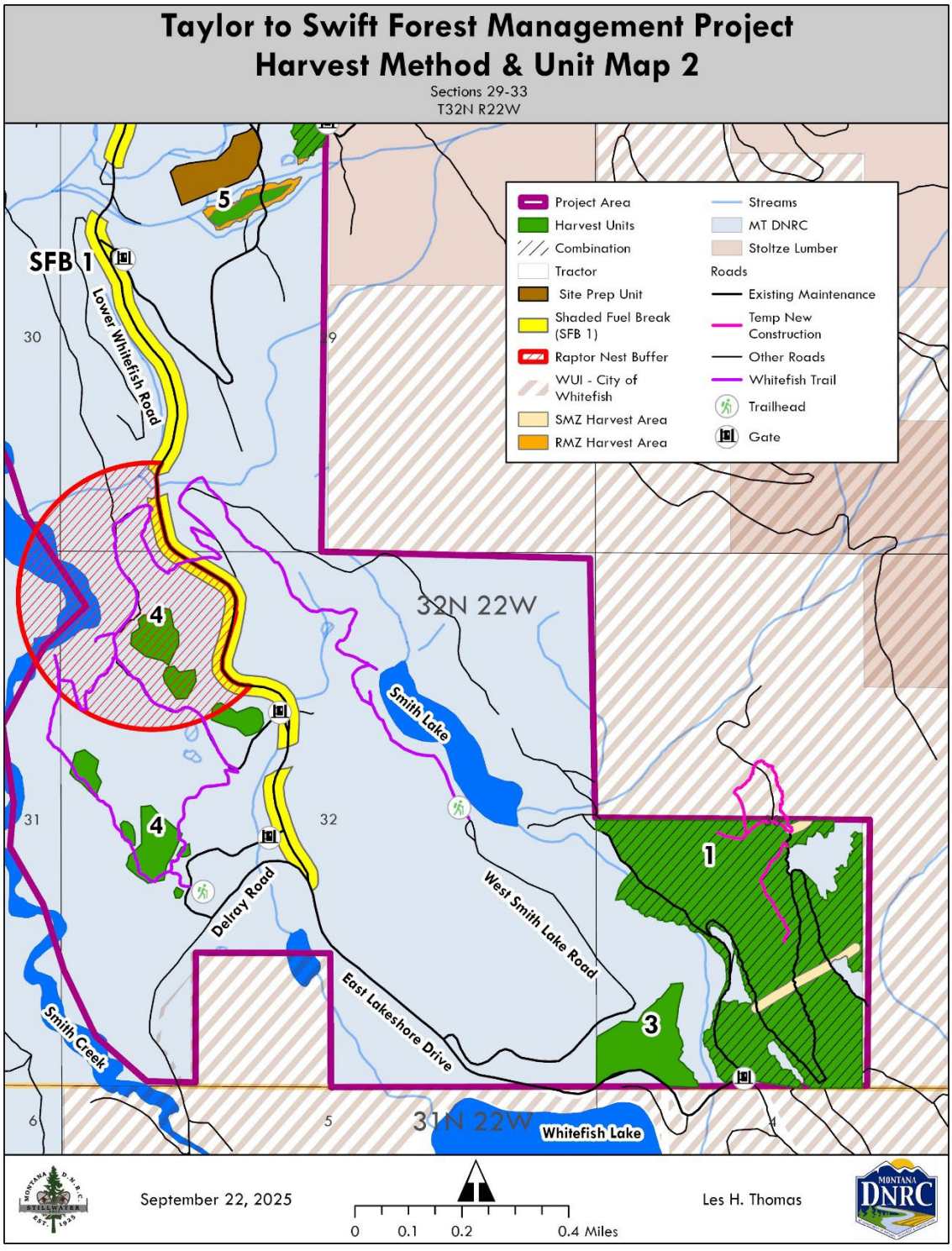
A-2: Project Map



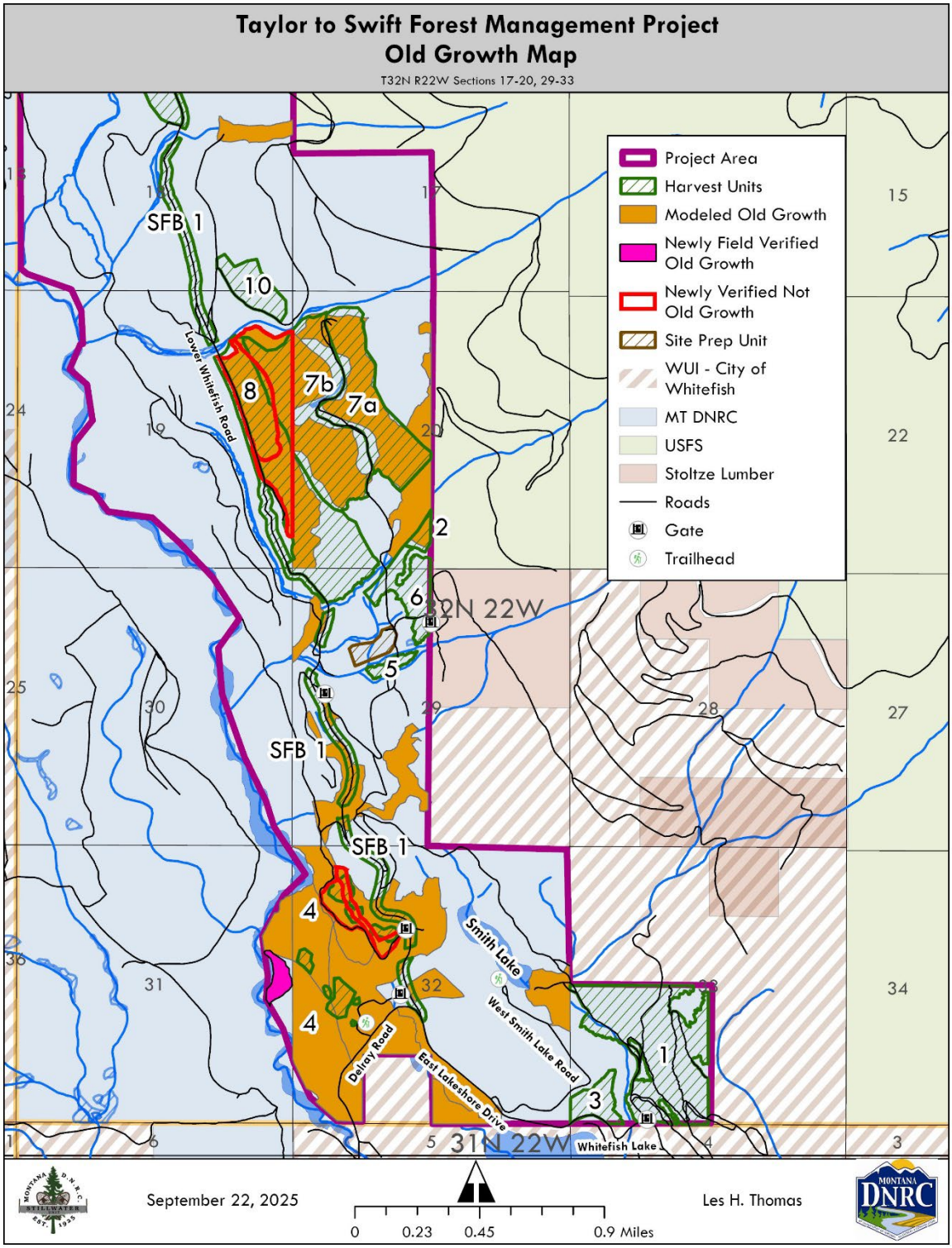
A-3: Harvest Method & Unit Map 1



A-4: Harvest Method & Unit Map 2



A-5: Old Growth Map



Attachment B – Prescription Table

B-1 Prescription Table

Unit #	Acres	Prescription	Unit Details
1	98 acres	Shelterwood	○ Combination harvest unit (Cable/Shovel/Tractor). ○ Leave WL, then Df when necessary 40’ spacing (22 TPA), including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Excavator pile and scarify post-harvest. ○ Natural regeneration. Plant seedlings (WL, PP) in areas that can’t be mechanically scarified.
2	4 acres	Old Growth Maintenance	○ Tractor harvest unit. ○ Insect/Disease including bark beetles and root rot pockets throughout Unit. ○ Leave WL, then Df when necessary. 80-100 BA, 25-30 TPA, approximately 40’ spacing, including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Hand-felling and winch yarding on steep pitches may be necessary. ○ Natural regeneration.
3	13 acres	Shelterwood	○ Tractor harvest unit. ○ Leave all WL, then Df when necessary 45’ spacing (27 TPA), including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Remove whitewoods (ES, LPP, GF, SAF) that are declining or susceptible to blowdown (leave clumps). ○ Excavator pile and scarify post-harvest. ○ Natural regeneration. Evaluate for planting 3 years after site prep.
5	4 acres	Seedtree	○ Tractor harvest unit. ○ Dead/dying Df prevalent; Insect/Disease including bark beetles and root rot pockets throughout Unit. ○ Leave WL, then Df when necessary 65-85’ spacing (6-10 TPA), including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Dispersed skid/scarify during harvest. ○ Natural regeneration. Evaluate for planting 3 years post-harvest.

6	23 acres	Shelterwood	○ Combination harvest unit (Cable/Shovel/Tractor). ○ Leave WL, then Df when necessary 40-47' spacing (20-27 TPA), including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Excavator pile and scarify post-harvest. ○ Natural regeneration. Plant seedlings (wl, pp) in areas that can't be mechanically scarified. Evaluate for interplanting 3 years after site prep.
7a	65 acres	Shelterwood	○ Combination harvest unit (Cable/Shovel/Tractor). ○ Insect/Disease patches, including bark beetles and root rot pockets throughout Unit. These pockets will resemble seedtree or clearcuts, with removal of dead/dying Df and whitewoods. ○ Leave WL, then Df when necessary 40-47' spacing (20-27 TPA), including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Excavator pile and scarify post-harvest where possible, Prescribed fire for majority of unit. ○ Natural regeneration. Evaluate for planting after 3 years (wl, pp).
8	99 acres	Shelterwood	○ Combination harvest unit (Cable/Shovel/Tractor). ○ Insect/Disease patches, including bark beetles and root rot pockets throughout Unit. These pockets will resemble seedtree or clearcuts, with removal of dead/dying Df and whitewoods. ○ Leave all WWP and PP. Leave WL, then Df when necessary 40-47' spacing (20-27 TPA), including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Excavator pile and scarify post-harvest. ○ Plant seedlings (WL, PP, WWP).
9	12 acres	Shelterwood	○ Combination harvest unit (Cable/Shovel/Tractor). ○ Leave all WWP and PP. Leave WL, then Df when necessary 40-47' spacing (20-27 TPA), including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Dispersed skid/scarify. ○ Evaluate for planting 3 years post-harvest.

10	18 acres	Shelterwood	○ Tractor harvest unit. ○ Dead/dying Df prevalent; Insect/Disease including bark beetles and root rot pockets throughout Unit. ○ Leave WL, then Df when necessary 65-85’ spacing (6-10 TPA), including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Excavator pile and scarify post-harvest. ○ Natural regeneration. Evaluate for planting 3 years post-site prep.
11	14 acres	Seedtree	○ Tractor harvest unit. ○ Insect/Disease prevalent in WH, GF, including bark beetles and root and stem rots throughout unit. ○ Remove whitewoods, including all WH, GF, SAF. Leave WL, WRC, Df as necessary 65-85’ spacing (6-10 TPA) including 2 snags, 2 snag recruits >21" DBH where possible, otherwise largest Dia class. ○ Dispersed skid/scarify during harvest. ○ Plant WWP, WL, DF 14x14 spacing.
SFB1	107 acres	ITS/Shaded Fuel Break	○ Tractor harvest unit ○ Leave WL, then Df when necessary, with 15’ crown spacing, 45’ bole spacing (27 TPA). ○ Dispersed skid/scarify. ○ Evaluate for planting 3 years post-harvest.

DBH = Diameter at Breast Height
DIA = diameter
Df = Douglas=fir
GF = grand fir
SAF = subalpine fir
WWP = western white pine
ERZ = Equipment Restriction Zone
WMZ = Wetland Management Zone
ES = Engelmann spruce
PP = ponderosa pine
WL = western larch
whitewoods: species including SAF, GF, ES, LPP