CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Hesse Property Salvage Alternative Practice
Proposed Implementation Date:	Winter 2024-2025
Proponent:	Kanduch Logging Inc (Kevin Kanduch)
Location:	Sec 25 T5N R16W
County:	Granite

I. TYPE AND PURPOSE OF ACTION

Kevin Kanduch of Kanduch Logging, Inc is requesting an Alternative Practice (AP) to allow the salvage of mountain pine beetle infested lodgepole pine within properties along Ross Fork Road. This area has been significantly affected by mountain pine beetle in the lodgepole pine stands and this AP would facilitate safe removal of dead and dying trees that would help landowner objectives of reducing fire risk.

Kanduch Logging, Inc is requesting an AP to the Streamside Management Zone Law along Schoolmarm Gulch in Sections 25, T5N R16W. The lineal extent along the stream is approximately 1000 FT across three family-owned properties and the SMZ is approximately 2.5 acres. There are two requests. The first requested AP is to salvage all lodgepole pine including those that are dead/dying/windthrow-prone as well as any Douglas-fir that exhibits poor health within the 50' wide Streamside Management Zone (SMZ). This is a Class 3 stream which requires shrubs and sub-merchantable trees must be protected and retained to the fullest extent possible (SMZ Rule 5 (36.11.305)). The second requested AP is to operate a wheeled or tracked vehicle within the SMZ. This includes skidding on an existing two track road within the SMZ and crossing with the feller-buncher and skidder in several locations (SMZ Rule 4 (36.11.304)).

According to MCA 77-5-301 through 307, DNRC is authorized to administer and enforce the provisions of the SMZ Law. This Law was developed to protect the public interest of water quality and quantity within forested areas; provide for standards, oversights and penalties to ensure forest practices conserve the integrity of SMZ's; provide guidelines for wildlife management within SMZ's; and allow operators necessary flexibility to use practices appropriate to site-specific conditions in the SMZ. ARM 36.11.301 through 313 further specify the design of SMZ boundaries, allowable activities and prohibitions within the SMZ, penalties and other related provisions.

According to MCA 77-5-304 and ARM 36.11.310, DNRC may approve alternative practices that are different from practices required by the SMZ Law only if such practices would be otherwise lawful and continue to conserve or not significantly diminish the integrity and function of the SMZ. This AP would allow for the 2 requests listed above. Additional stipulations of this request would include:

1. Operate machinery within the SMZ on slopes <25% and never closer than 15 feet from the ordinary high-water mark except when crossing the stream in designated locations with temporary crossing structures. Crossing structures may include a temporary bridge, culvert, or corduroy. Any debris in the stream during skidding must be removed immediately.

2. Operations will occur only during periods when ground disturbance can be minimized under conditions of:
    a. Dry conditions (less than 20% ground moisture), or
    b. Frozen ground to a depth of six inches and/or snow depth is consistently a minimum of 12 inches. If significant soil disturbance is evident (machinery breaking through crust and/or sinking into the soil) then operations must stop immediately.

3. Protect live hardwood species and maintain all healthy Engelmann spruce, subalpine fir and Douglas-fir. Retain the minimum 10 healthy trees 8" + per 100' of stream where available. Protect sub merchantable trees and brush species to the fullest extent possible. Lodgepole pine >4" may be removed for commercial use only.

4. All skidding operations will be straight in/straight out of the SMZ, perpendicular to the stream channel except when skidding on the existing two track road. The head-end of logs must be suspended and skidded free of the ground. Apply grass seed to disturbed areas within the SMZ to reduce the risk of erosion.

5. Equipment would be allowed to cross the stream during frozen conditions but skidding across the stream is prohibited. Skidding will be conducted using the preexisting two track road on the East side of the stream.

6. If safety requires trees to be felled across the stream, all slash must be immediately removed.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

Montana DNRC. The landowner agrees to the proposed salvage.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 3A Authorization, Air Quality Major Open Burning Permit.

The proponent has been informed that a 310 permit (Natural Streambed and Land Preservation Act) *is* required from the Granite Conservation District when crossing any perennial stream with equipment or when constructing a road crossing.

3. ALTERNATIVE DEVELOPMENT:

Describe alternatives considered and, if applicable, provide a brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why.

Alternative A – No Action
This alternative would not allow operation of machinery within the SMZ or salvage of overstory below the standard SMZ Law requirements.

Alternative B - Action
This alternative would allow for the timber salvage actions outlined under *Type and Purpose of Action* above.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify direct, indirect, and cumulative effects to soils.

Alternative A – No Action

No anticipated impacts.

Alternative B – Action
A query of physical soil properties using the NRCS Web Soil Survey shows that the harvest area is primarily in the Helmville cobbly loam with a moderate risk of erosion. The soil is poorly suited for mechanical harvest; however, standard Forestry Best Management practices would likely protect the soil. The harvest would be restricted to winter conditions with frozen ground and adequate snowpack. Mitigation measures over the entire area would ensure that soil is protected regardless of classification.

Mitigation measures would include:

- Restrict operation to periods when ground disturbances can be minimized as outline in Type and Purpose of Action.
- The lead end of logs will be suspended above the ground during skidding.
- No turning of equipment in the SMZ.

Based on implementation of BMP's and the planned mitigations there is minimal risk of direct impacts and low risk of indirect or cumulative effects to soils.

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5. WATER QUALITY, QUANTITY AND DISTRIBUTION:
Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify direct, indirect, and cumulative effects to water resources.

This was identified as a Class 3 stream determined by an onsite inspection on 10/18/23. A search of the Montana Fish Wildlife and Parks website does not include information on this waterbody.

Alternative A – No Action
No equipment would be allowed to operate within the 50' SMZ. Minimum retention standards would be recognized. Any harvesting would be completed using hand felling and skidding by cable. Minimal direct, indirect, and cumulative impacts to water quality would be expected and no measurable increase to water quantity would be expected from this alternative.

Alternative B – Action
Most equipment operation in the SMZ would not be expected to introduce sediment to the stream due to mitigation measures described in section 1.

Overstory removal would reduce shade for this stream and may result in a minor increase in stream temperature. This would be mitigated by maintaining all healthy hardwood and softwood species as well as sub-merchantable trees that provide shade. The expected result of these actions would be very low direct, indirect, and cumulative impacts to water quality.

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6. AIR QUALITY:
What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.

N/A

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify direct, indirect, and cumulative effects to vegetation.

Alternative A – No Action
Under this alternative, dead and dying trees would remain to achieve the minimum retention requirements. The trees would eventually fall or be removed by the landowner.

Alternative B – Action
If the proposed action is taken, dead and dying trees (mainly lodgepole pine) would be removed. Live disease-free trees and brush species would be retained and protected. Bank edge trees and trees leaning toward the creek would be maintained unless they pose a risk to stream stability or structures. Removal of dead trees would expedite natural regeneration. Due to operating restrictions and mitigation measures, no unacceptable impacts are anticipated with the action alternative.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify direct, indirect, and cumulative effects to fish and wildlife.

The project area provides habitat for a variety of wildlife species. Deer, elk, and moose likely use the area much of the non-winter periods as do multiple avian species.

Alternative A – No action
Minimum retention standards would be adhered to within the SMZ. Wildlife use would not be expected to change. Disturbance during harvest would have a short-term impact on wildlife use although it would not be within the SMZ. Snags remaining in the SMZ would provide habitat for species of birds and small mammals that utilize that structure. Stream shading is limited by dead standing trees but would provide some level of protection during the summer.

Alternative B – Action
The removal of dead and dying trees would reduce snag habitat for birds and small mammals. Deer, elk, and moose would be expected to continue to use the site at similar levels to the No Action alternative although forage may increase for deer and elk until conifer regeneration is established. Disturbance during harvest would have a short-term impact on wildlife use.

Stream shading along channel will be reduced, although the amount shade provided by the existing snags is. minimal. Equipment operation within the SMZ would not be expected to increase sediment delivery. The mitigation measures outlined in the Type and Purpose of Action above are designed to protect the integrity of the banks and channels, reduce sediment delivery to the streams and diminish negative impacts to stream shading.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify direct, indirect, and cumulative effects to these species and their habitat.

Alternative A – No Action
No additional impacts.

Alternative B – Action
A query of the Montana Natural Heritage Program identifies eleven species (endangered, threatened, sensitive, of special concern) with possible habitat within Township 5N Range15W. For various reasons, the harvest area is not ideal habitat for many of these species. Based on implementation of the planned mitigations there is

expected to be minimal to no additional impacts to aquatic life and fisheries. Direct, indirect, and cumulative impacts are expected to be minimal and short-term.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

Although no cultural or paleontological resources are known to exist in the project APE, a systematic inventory of such resources has not occurred. Because this project is not located on state land, the DNRC has no jurisdiction to require professional level inventories to identify, or develop, treatment plans for privately owned National Register eligible parties.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify direct, indirect, and cumulative effects to aesthetics.

Alternative A – No Action
No additional impacts. The view would include dead and dying trees until they eventually fall although the area along the stream is marginally visible from public roads.

Alternative B – Action
The dead, overstory trees would be removed which would alter the short-term aesthetics for the landowner. The project has been approved by the landowner and this area is marginally visible from public roads. Any adverse impacts would begin to diminish as seedlings establish.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify direct, indirect, and cumulative effects to environmental resources.

None.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

There have been multiple SMZ alternative practices granted in the area over the last few years that are similar in proposed action. All of them have required similar operating restrictions and mitigation measures with minimal impacts.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Alternative A – No Action
The trees would not be removed for commercial use and would not meet landowner objectives for reducing wildfire risk.

Alternative B – Action
The removal of dead and dying trees would reduce fuel if a wildfire were to start.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

None.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify direct, indirect, and cumulative effects to the employment market.

The proposed project would provide employment for a small logging crew for a short period.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify direct, indirect, and cumulative effects to taxes and revenue.

Negligible effects with Action Alternative.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify direct, indirect, and cumulative effects of this and other projects on government services

None.

19. 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.

Projects under this AP would allow timber salvage in areas discussed in the Granite County Community Wildfire Protection Plan.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify direct, indirect, and cumulative effects to recreational and wilderness activities.

The project is located on private property. Thus, recreation access to the public will not be affected.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify direct, indirect, and cumulative effects to population and housing.

None.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

None.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

None.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.

None.

EA Checklist Prepared By:	**Name:** Kyle Harrington	**Date:** 2-20-24
	Title: Service Forester	

V. FINDING

25. ALTERNATIVE SELECTED: Alternative B - Action

Action alternative, with the stipulations listed in Section 1 – Type and Purpose of Action.

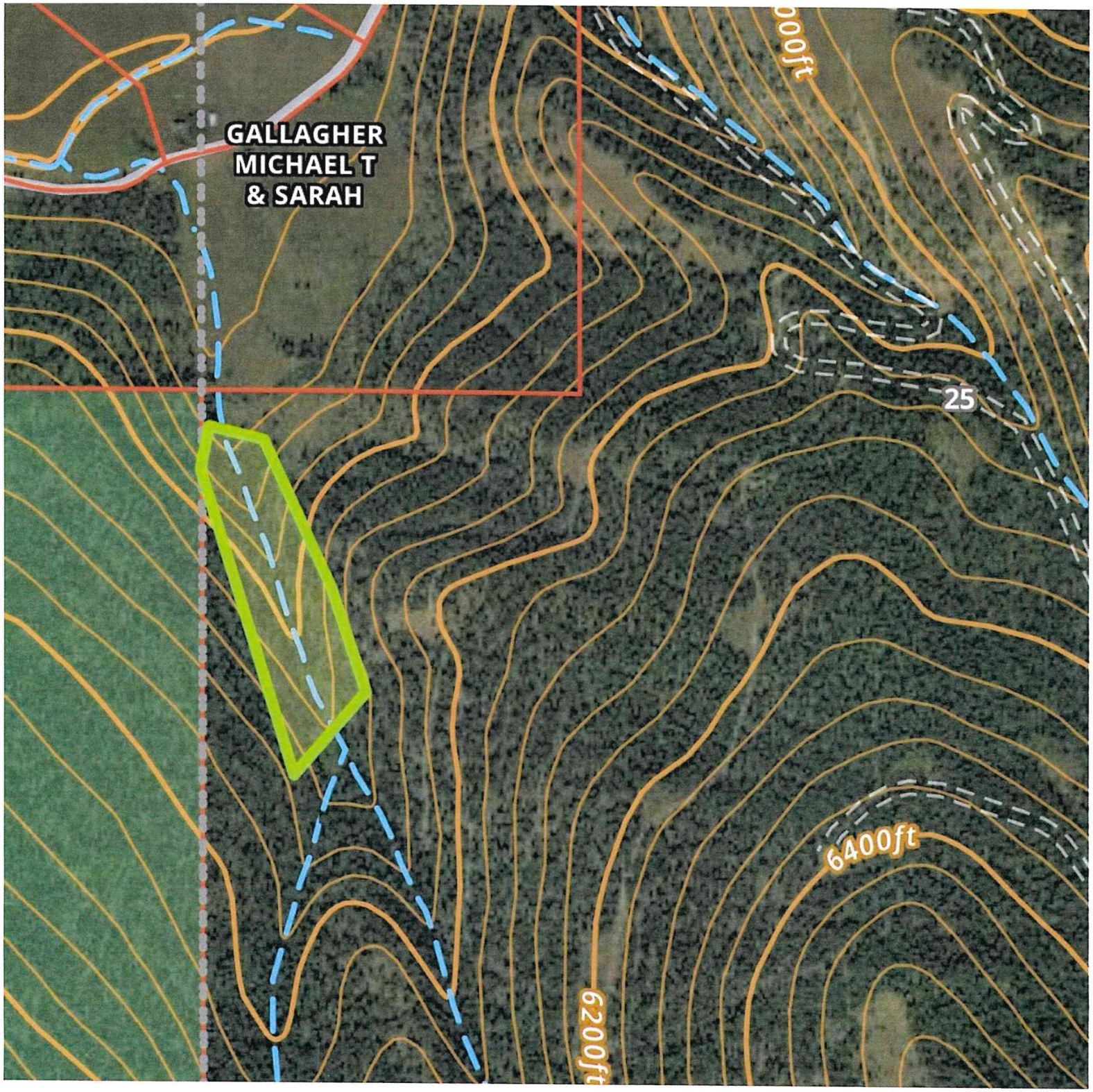
26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Potential impacts are not significant. Potential direct, indirect and cumulative impacts will be minor and temporary with incorporation of the added mitigation measures (stipulations).

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

☐ EIS ☐ More Detailed EA ☒ No Further Analysis

EA Checklist Approved By:	**Name: Craig Hansen**	
	Title: Anaconda Unit Manager	
Signature: Craig Hansen		**Date:** 2-20-24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