CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Sipes Creek PCT
Proposed Implementation Date:	2013
Proponent:	DNRC
Location:	Section 36, T28N, R28W; Sipes Creek
County:	Lincoln

I. TYPE AND PURPOSE OF ACTION

Precommercial thin 205 acres of 15-25 year old sapling/pole size timber to maintain tree growth and vigor.

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.

Initial reconnaissance and development of the project was started in the summer of 2012. Due to the location of the thinning units (adjacent to industrial timber land) and lack of interest shown by the public regarding precommercial thinning, no formal scoping process took place. A site visit was made by the DNRC wildlife biologist to assess potential impacts to wildlife habitat.

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.

None

3. ALTERNATIVE DEVELOPMENT:

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

1. No Action- No pre-commercial thinning would occur.

2. Action- Pre-commercial thin 205 acres.

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.

None- Compactible soils present but no impact will occur with hand tree thinning.

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.

None. There is one Class 1 stream (Sipes Creek) and other intermittent creeks and draws are found in the project area. All thinning will occur outside the riparian management zone (RMZ) of Sipes Creek.

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.

None

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.

(Y) Approximately 850 trees per acre will be cut to reduce competition and maintain growth and vigor. Approximately 220 crop trees per acre will remain after thinning. Long term effects expected from the thinning will be increased growth and vigor and reduced insect and disease damage.

No rare plants or cover types were found during reconnaissance of the area.

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.

Please refer to the Wildlife Analysis in Attachment II (pages 10-14).

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.

Please refer to the Wildlife Analysis in Attachment II (pages 10-14).

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

None

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.

None. The project is not visible from populated areas.

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.

1995: 58,000 seedlings planted
1999: 177 acres precommercially thinned. EA Checklist completed in October 1998.

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.

There is a potential increase in fire danger on the project area from thinning slash. Mitigation measures to reduce fire danger to adjacent lands will include lopping and scattering of slash within 66 feet of where the State property boundary and unit boundary coincide in Units 6,7, and 9. Refer to Project Location Map in Attachment I, page 8 for approximate locations of High Standard Slash Clean-up.

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.

None

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.

None

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.

In 1996, the Land Board approved the ROD for the SFLMP. The SFLMP provides philosophical basis, consistent policy, technical rationale, and guidance for the management of forested state trust lands. In 2003, DNRC adopted the Forest Management Rules (ARM 36.11.401 through 456). The Forest Management Rules are the specific legal resource management standards and measures under which DNRC implements the SFLMP and subsequently its forest management program.

In December 2011, the Land Board approved the ROD for the Montana DNRC Forested State Trust Lands HCP. Approval of the ROD was followed by the issuance of an Incidental Take Permit (Permit) by the USFWS. The HCP is a required component of an application for a Permit which may be issued by the USFWS to state agencies or private citizens in situations where otherwise lawful activities might result in the incidental take of federally-listed species. The HCP is the plan under which DNRC intends to conduct forest management activities on select forested state trust lands while implementing specific mitigation requirements for managing the habitats of grizzly bear, Canada lynx, and three fish species: bull trout, westslope cutthroat trout, and Columbia redband trout.

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.

Access to the project area is restricted by a year-round gate closure. There is evidence that the section is used for hunting. No impacts to these activities will occur.

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.

No immediate return to the trust. No other potential uses of the trust than current uses identified.

EA Checklist Prepared By:	**Name:**	Brent Kallander	**Date:**	2/27/2013
	Title:	Forester		

V. FINDING

25. ALTERNATIVE SELECTED:

The Montana Department of Natural Resources and Conservation has completed the environmental assessment (EA) for the proposed pre-commercial thinning on State School Trust Land as described on page 1 of this document. After reviewing the EA, Department policies, standards, and guidelines, I have made the following decisions concerning this project:

The two alternatives proposed for consideration of this EA were the No-Action and Action Alternatives. The Action Alternative would allow for the pre-commercial thinning of 205 acres and improve tree growth and stand health.

The Action Alternative has been selected for the following reasons:

- The Action Alternative meets the Purpose of Action and the specific project objectives listed on page 1 of this EA;
- The proposed use is consistent with State and local policies, laws, and regulations.

26. SIGNIFICANCE OF POTENTIAL IMPACTS

Upon review of the project and the analysis herein, I find that none of the project impacts are regarded as severe, enduring, geographically widespread, or frequent. Further, I find that the quantity and quality of the natural resources, including any that may be considered unique or fragile, will not be adversely affected to a significant degree. I find no precedent for the future actions that would cause significant impacts, and I find no conflict with local, State, or federal laws, requirements, or formal plans. In summary, I find that adverse impacts would be avoided, controlled, or mitigated by the design of the project to an extent that they are not significant.

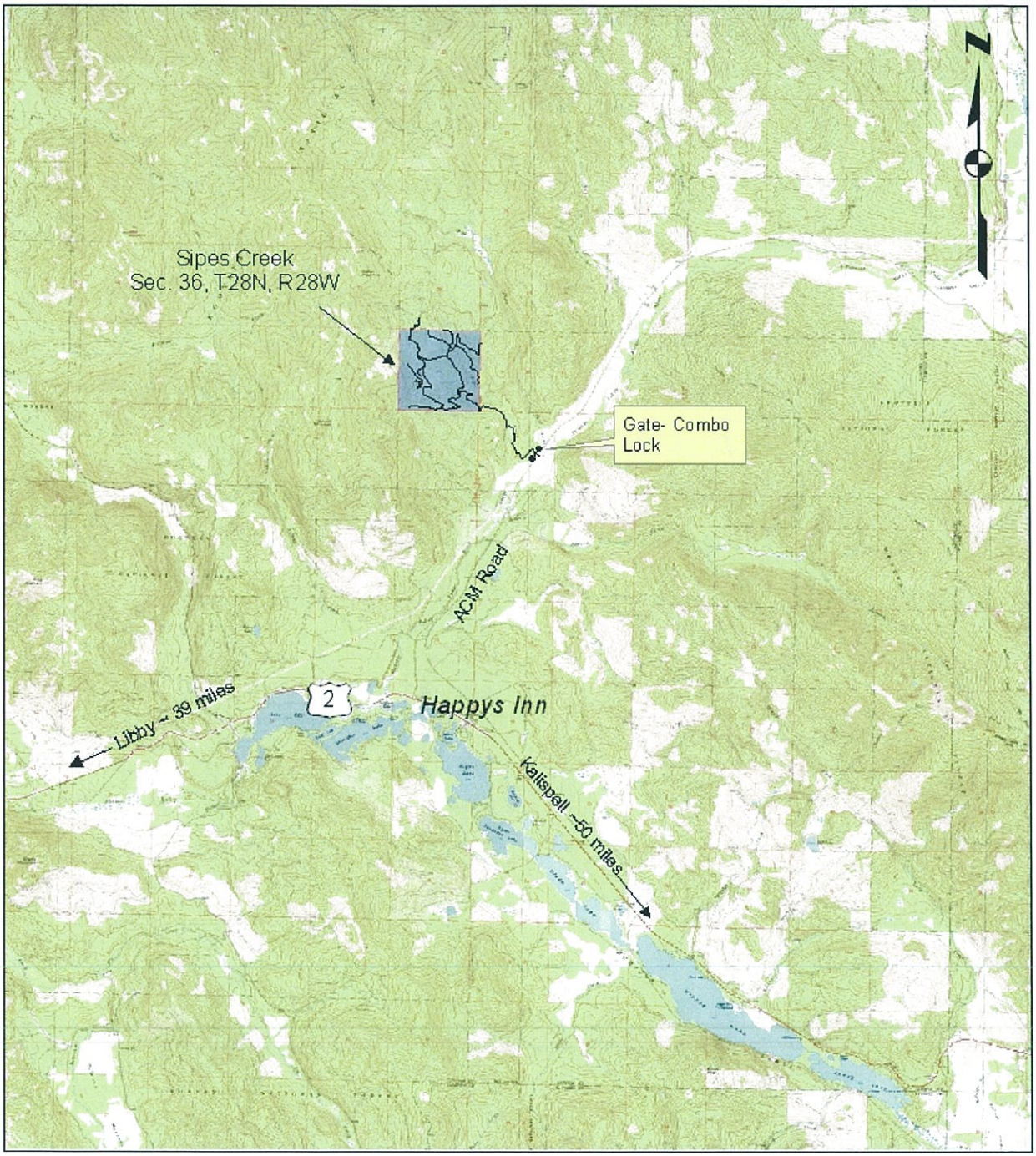
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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

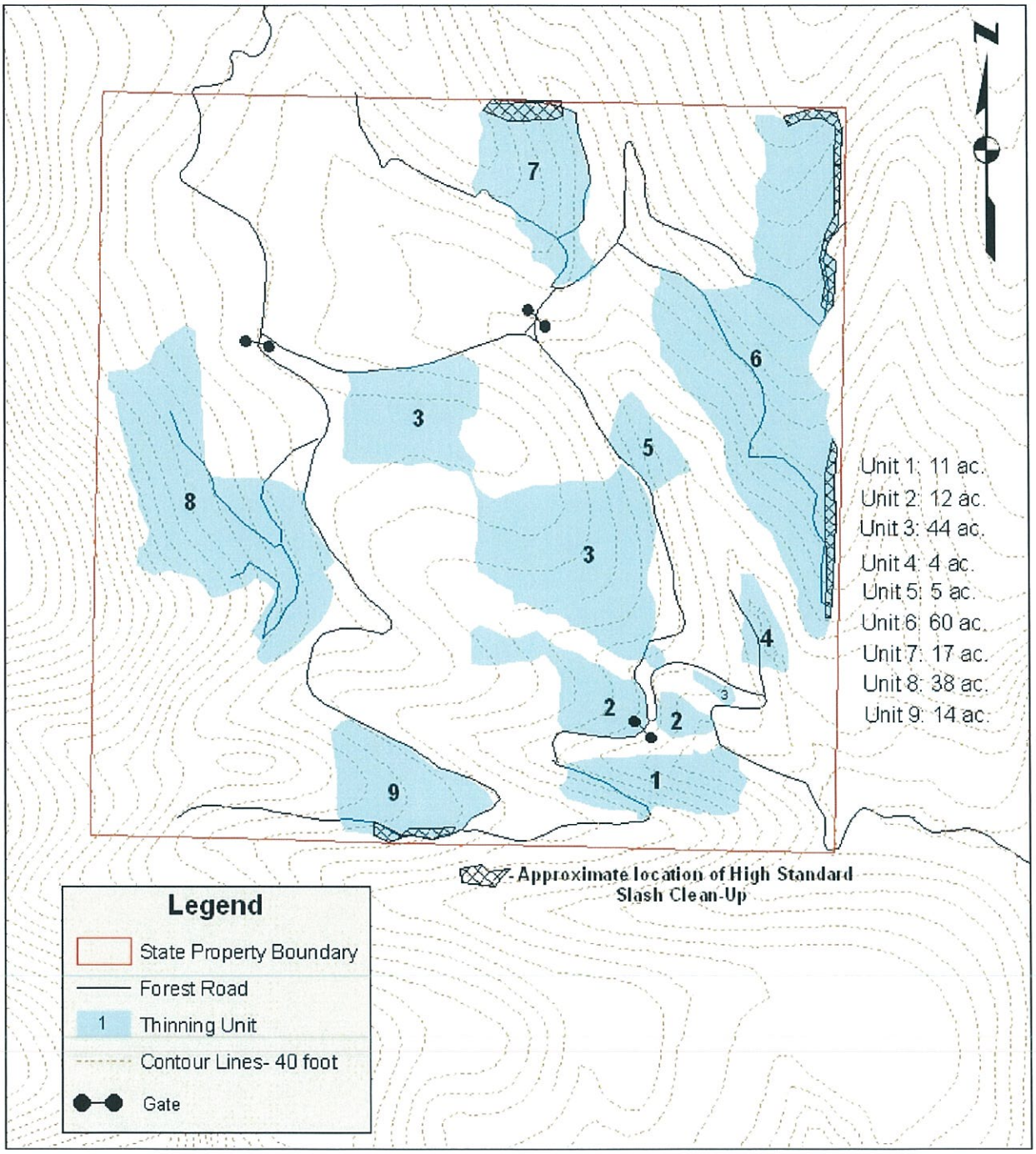
EA Checklist Approved By:	**Name:**	Rick Moore		
	Title:	Service Forester, Acting Unit Manager		
Signature:	Richard Moore		**Date:**	2/28/2013

ATTACHMENT I – MAPS

Sipes Creek Thinning
Vicinity Map
Section 36, T28N, R28W



Sipes Creek Thinning
Project Location Map
Section 36, T28N, R28W



ATTACHMENT II – Wildlife Analysis

Pages 10-14

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

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

Direct, Indirect, and Cumulative Effects of the No-Action Alternative

No appreciable changes in existing habitat would occur in the project area. Thus, no adverse direct, indirect, or cumulative effects to terrestrial, avian or aquatic species would be anticipated.

Direct, Indirect, and Cumulative Effects of the Action Alternative

The proposed project would create more open sapling stands on 205 acres of dense, 9-24' tall regenerating forest (average 15'). The quality of habitat for species that rely on dense, younger stands would be reduced, whereas, the quality of habitat for wildlife species favoring more open stands of young trees would improve. Approximately 79.7% (510 acres) of the 640-acre project area is comprised of well-stocked sapling or pole-sized stands. Connectivity or abundance of mature forest would not be altered with the proposed thinning. Sawtimber-sized trees and snags within thinning units would be retained to maintain bird foraging and nesting opportunities. Species utilizing densely stocked sapling stands could be temporarily disturbed or displaced by thinning activities. Overall, negligible changes in wildlife use would be anticipated with the proposed thinning activities due to the type of thinning treatment, equipment used, and the relative abundance of well-stocked stands within the project area.

Non-winter use of the proposed project area by deer, elk, or moose is possible. Use of the area by big game other than moose during the winter period is unlikely. Proposed thinning could alter big game habitat on approximately 205 acres (32.0% of the project area). Minor reductions in hiding cover, visual screening and browse would be expected with the removal of densely-packed regenerating trees on the 205 acres that would be treated. However, hiding cover capable of obscuring an elk or deer from view at 200 feet would be retained within the treatment areas. Big game hiding cover exists on over 75% of the larger 640-acre project area. Big game species could be temporarily (up to 5 months) disturbed or displaced by the proposed activities. Overall, negligible direct, indirect, and cumulative effects would be anticipated to big game species.

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 cumulative effects to these species and their habitat.

Direct, Indirect, and Cumulative Effects of the No-Action Alternative

No appreciable changes in existing habitats would occur in the project area. Thus, no adverse direct, indirect, or cumulative effects to threatened, endangered, or sensitive species would be anticipated.

Direct, Indirect, and Cumulative Effects of the Action Alternative

STATUS	SPECIES/HABITAT	DETERMINATION – BASIS
Threatened and Endangered Species	**Canada lynx** (*Felis lynx*) Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zones	The proposed project area contains approximately 557 acres (87.0% of project area) of potential lynx habitat. All of these acres are currently suitable for lynx, however habitat connectivity with suitable habitat outside of the project area is likely low due to recent timber harvest on surrounding private lands. Approximately 140 acres of suitable lynx habitat could be affected by the proposed project. The majority of lynx habitat within the treatment area (126 acres) is classified as "other suitable" habitat, which can serve to facilitate daily movements and provide habitat for secondary prey species, such as red squirrels. Proposed thinning activities in the treatment areas would reduce tree densities, however these acres would continue to provide "other suitable" habitat for lynx. Additionally, shade tolerant trees that do not pose a substantial competition risk to desired crop trees would be retained. However, given the existing surrounding habitat, tree species present (western larch, Douglas-fir, western white pine, and grand fir), average height (15 feet tall), and that lowest sapling branches are generally 1-4 foot off the ground, limited use of the project area by lynx would be anticipated. Collectively, negligible direct, indirect, and cumulative effects to Canada lynx would be anticipated as a result of the proposed project.

	Grizzly bear (*Ursus arctos*) Habitat: Recovery areas, security from human activity	The project area is located over 6 miles from grizzly bear non-recovery occupied habitat or recovery zone (*USFWS 1997, Wittinger 2002*). Use of the project area by grizzly bears is possible, although unlikely due to lack of suitable habitat and very low grizzly bear densities in this region. Grizzly bear programmatic commitments contained within DNRC's HCP (2010) would be applied and reduce potential impacts to bears. No new roads would be built under the proposed action and restricted roads used during project activities would remain closed to motorized public use. Although the density of stems of hiding cover would be reduced, the thinned stands of advanced regeneration would be expected to continue to provide hiding cover capable of obscuring a bear from view at 200 feet. Given the low likelihood of grizzly bear use and project area's minor expected level of disturbance associated with the proposed short-term activities, negligible direct, indirect or cumulative effects to grizzly bears would be anticipated.
Sensitive Species	**Bald eagles** (Haliaeetus leucocephalus) Habitat: Late-successional forest less than 1 mile from open water	The proposed project area is outside of any known bald eagle territories. Thus, negligible direct, indirect, or cumulative effects to bald eagles would be anticipated.
	Black-backed woodpeckers (*Picoides arcticus*) Habitat: Mature to old burned or beetle-infested forest	No recently (<5 years) burned areas occur within the project area. Thus, no direct, indirect, or cumulative effects to black-backed woodpeckers would be anticipated.
	Coeur d'Alene salamanders (*Plethodon idahoensis*) Habitat: Waterfall spray zones, talus near cascading streams	No moist talus or streamside talus habitat occurs within the project area. Thus, no direct, indirect, or cumulative effects to Coeur d'Alene salamanders would be anticipated.
	Columbian sharp-tailed grouse (Tympanuchus Phasianellus columbianus) Habitat: Grassland, shrubland, riparian, agriculture	No suitable grassland communities occur within the project area. Thus, no direct, indirect, or cumulative effects to Columbian sharp-tailed grouse would be anticipated.

	Common loons (*Gavia immer*) Habitat: Cold mountain lakes, nest in emergent vegetation	No lakes suitable for nesting loons occur inside or within 500 feet of the project area. Thus, no direct, indirect or cumulative effects to common loons would be anticipated.
	Fishers (Martes pennanti) Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian areas	The proposed project area contains potentially suitable fisher cover types, however suitable fisher habitat is not present within the proposed treatment areas. Collected field data indicate current habitat within the treatment areas do not provide the structural features (mature forest, abundant coarse woody debris) preferred by fishers. Consequently, little to no use of the treatment areas by fishers would be expected. Cover types and structures suitable for fishers could develop as the stand ages. Riparian fisher habitat would not be modified under the proposed activities. Thus, negligible direct, indirect, or cumulative effects to fishers would be expected.
	Flammulated owls (*Otus flammeolus*) Habitat: Late-successional ponderosa pine and Douglas-fir forest	The proposed project area contains potentially suitable cover types for flammulated owls; however all of these acres are young, regenerating stands and therefore not providing suitable habitat for flammulated owls. Consequently, little to no use of the project area by flammulated owls would be expected. Cover types and structures suitable for use by flammulated owls could develop as the stand ages. Thus, no direct, indirect or cumulative effects to flammulated owls would be anticipated.
	Gray wolves (*Canis lupus*) Habitat: Ample big game populations, security from human activities	The project area could be potentially used by wolves. No den sites or rendezvous areas are known to occur within the project area (Kent Laudon, MFWP, pers. comm. January 30, 2013). However, if documented in the vicinity of the project area, mechanized activities would be restricted within 1 mile of wolf dens (*ARM 33.11.430(1)(a)*) and 0.5 miles of wolf rendezvous sites (*ARM 33.11.430(1)(b)*). Proposed thinning activities would not be expected to appreciably affect big game populations. Thus, negligible direct, indirect or cumulative effects to gray wolves would be anticipated.
	Harlequin ducks (Histrionicus histrionicus) Habitat: White-water streams, boulder and cobble substrates	No suitable high-gradient stream or river habitats are present within project area. Thus, no direct, indirect or cumulative effects to harlequin ducks would be anticipated.
	Northern bog lemmings (*Synaptomys borealis*) Habitat: Sphagnum meadows, bogs, fens with thick moss mats	No suitable sphagnum bogs or fens occur within the project area. Thus, no direct, indirect, or cumulative effects to northern bog lemmings would be anticipated.

	Peregrine falcons (*Falco peregrinus*) Habitat: Cliff features near open foraging areas and/or wetlands	No cliffs potentially suitable for nesting by peregrine falcons are present within in the project area. No peregrine falcon observations have been recorded and no known peregrine falcon nests occur within 1 mile of the project area (MNHP 2013). Road use would primarily occur outside of the peregrine falcon nesting season. Thus, negligible direct, indirect, or cumulative effects to peregrine falcons would be anticipated.
	Pileated woodpeckers (*Dryocopus pileatus*) Habitat: Late-successional ponderosa pine and larch-fir forest	The proposed project area contains potentially suitable habitat for pileated woodpeckers. Pileated woodpecker habitat would not be altered by the proposed activities. Snags and coarse woody debris would not be affected by the proposed thinning, as public motorized access would remain restricted. Pileated woodpeckers are generally tolerant of human disturbance. Disturbance associated with thinning activities would be localized. Thus, negligible direct, indirect, or cumulative effects to pileated woodpeckers would be anticipated.
	Townsend's big-eared bats (*Plecotus townsendii*) Habitat: Caves, caverns, old mines	No suitable caves or mine tunnels are known to occur within the project area. Thus, no direct, indirect or cumulative effects to Townsend's big-eared bats are anticipated.
	Wolverine (*Gulo gulo*) Habitat: Alpine tundra and high-elevation boreal and mountain coniferous forests, areas that maintain deep persistent snow into late spring	No potentially suitable wolverine habitat exists within the proposed project area. The project area does not maintain deep snow into late spring and does not contain high-elevation alpine habitat. While a wolverine could pass through the project area during their extensive movements, appreciable use of the area is not expected. Wolverines have not been recorded within 15 miles of the project area in the last 50 years (MNHP 2013). Given the moderate levels of human activity in the area, large home range area (average 150+ sq. miles) wolverines occupy, and long distances wolverines typically cover during their movements, the proposed activities would not be expected to measurably affect use of the area by wolverines. Thus, negligible direct, indirect or cumulative effects to wolverines would be expected to occur under the proposed action.

ATTACHMENT III- MITIGATIONS

Mitigation measures for the Action Alternative

Vegetation

- Lop & scatter of slash within 66 feet of where the unit boundary and State property boundary coincide in Units 6, 7, & 9.

Wildlife

- If a threatened or endangered species is encountered, consult a DNRC biologist and develop additional mitigations that are consistent with the administrative rules for managing threatened and endangered species (*ARM 36.11.428* through *36.11.435*).

- Retain shade-tolerant trees that do not pose a substantial competition risk to desired crop trees in order to provide horizontal cover suitable for lynx foraging habitat (LY-HB4, *DNRC HCP FEIS Vol. II, p. 2-50*). The intent of the rule is to retain shade-tolerant trees throughout the cutting unit, rather than in one large clump so that the entire cutting unit would retain habitat characteristics suitable for lynx use. Depending upon stand structure, it may be possible to meet this objective by retaining clumps of shade-tolerant trees that are not competing with desired crop trees or to require contractors to retain all trees or a percentage of all trees below a certain height (e.g. retain all trees < 3 feet).

- Prohibit contractors and purchasers conducting contract operations from carrying firearms while on duty as per *ARM 36.11.444(2)* and GB-PR2 (*USFWS AND DNRC 2010, Vol. II p. 2-5*).

- Contractors will adhere to food storage and sanitation requirements as per GB-PR3 (*USFWS AND DNRC 2010, Vol. II p. 2-6*).

- Public access would be restricted at all times on restricted roads that are opened for thinning activities; signs will be used during active periods and a physical closure (gate, barriers, equipment, etc.) will be used during inactive periods (nights, weekends, etc.).