CHECKLIST ENVIRONMENTAL ASSESSMENT (CEA)

Project Name:	Main Lodge Salvage Proposal
Proposed Implementation Date:	December 12, 2011
Proponent:	Montana Department of Natural Resources and Conservation (DNRC)
Location:	Swan River State Forest – Section 16, T23N, R18W
County:	Lake

I. TYPE AND PURPOSE OF ACTION

DNRC, as manager of Swan River State Forest, is proposing to harvest trees that have been killed by bark beetles, are undergoing bark beetle infestation, have been damaged and/or killed by other various disease organisms, display signs of suppression such as poor crowns, or have blown down on 57 acres of non-old-growth stands located in Section 16, T23N, R18W. An estimated 100 Mbf of green/non-infested sawlogs (approximately 600 tons at 6.0 tons/Mbf) as well as, approximately 2,700 tons of dead, infested and dying salvage (2,400 tons of sawlogs and 300 tons of pulp) could be harvested. Western larch, Douglas-fir, Engelmann spruce, lodgepole pine, and subalpine fir comprise the makeup of the stand. Harvesting the lodgepole pine trees before the mountain pine beetles mature and depart the tree removes the beetles from the stand, thus, reducing the chances of beetles infesting nearby trees. Harvesting green lodgepole pine could help prevent the spread of the mountain pine beetle and reduce the number of entries into the stand. Salvaging lodgepole pine trees before they dry out or develop blue stain ensures a greater return to the state trust as does harvesting trees before they are infested by the mountain pine beetle. Selectively thinning through the remaining species by removing the least healthy trees would improve overall forest health and ensure a greater return to the state trust. Salvaging the dying, dead and/or blown down trees of mixed species before they decay further ensures a greater return to the state trust as well.

Harvesting all or most of the green, dead, and/or dying lodgepole pine as well as areas of subalpine fir mortality with a dbh greater than 5 inches would result in scattered and grouped trees being removed from the mixed-conifer stand either singly or in groups that could create up to 1/4- to 1/2-acre sized openings. Selectively thinning through the remaining species would result in no more than 40- to 50- foot final spacing and 40 percent or greater crown cover. Scarification during harvesting or in post-harvest activities may encourage early seral species development. The stand would retain the characteristics of a mixed-conifer stand.

The lands involved in the proposed project are held by the State of Montana in trust for the support of specific beneficiary institutions. These include public schools, State colleges and universities, and other specific State institutions, such as the School for the Deaf and Blind (*Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11*). The Montana State Board of Land Commissioners (Land Board) and 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 these beneficiary institutions (*Section 77-1-202, Montana Codes Annotated [MCA]*).

The State is required by law to establish a salvage timber program that provides for the timely harvesting of dead and dying timber that has been threatened by insects, diseases, wildfires, or wind on State forests. Under this requirement, DNRC shall, to the extent practicable, harvest dead and dying timber before there is substantial wood decay and value loss (*Section 77-5-207, MCA*).

On March 12, 2003, DNRC adopted Administrative Rules for Forest Management (Administrative Rules of Montana [*ARM*] *36.11.401 through 450*). DNRC will manage the lands involved in this project in accordance with these Forest Management Rules.

II. PROJECT DEVELOPMENT

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

The initial scoping included the project information sheet and cover letter signed by Kristen Baker, Forest Management Supervisor. The packet was mailed August 11, 2011. *APPENDIX A – SCOPING DOCUMENTATION* – has a complete listing of all recipients of the scoping proposal. From this scoping, 2 comments were received: E.T. "Bud Moran, CSKT Council Chairman; and Larry Dunham, private landowner. One comment was in favor of the project and 1 comment expressed minor concerns relating to the project regarding the potential removal of Culturally Modified Trees. This document will address that concern.

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.

Montana Department of Fish, Wildlife and Parks (DFWP) has jurisdiction over the management of fisheries and wildlife populations in the project area. DFWP is on the mailing list and was sent the scoping letter.

DNRC is a member of the Montana Airshed Group, which regulates slash burning through air-quality and weather monitoring on State trust lands. DNRC receives an air-quality permit for burning slash through participation in this group. Air quality is the only permit needed for this salvage project.

The Swan Valley Grizzly Bear Conservation Agreement (SVGBCA), a cooperative agreement between DNRC, Plum Creek Timber Company, Inc. (PCTC), United States Fish and Wildlife Service (USFWS), and the U.S. Forest Service (USFS), is currently in effect. The Nature Conservancy (TNC) has acquired ownership of PCTC within SRSF and TNC has agreed to follow the intent of the SVGBCA. This project will define mitigation measures for operating within the SVGBCA timber-harvesting parameters.

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.

- ***No-Action Alternative***

  The proposed salvage project would not occur. The affected stands would continue to be subject to outbreaks of mountain pine beetle (*Dendroctonus ponderosae*). Most, if not all, of the

lodgepole pine 5 inches and greater dbh in the stand could be attacked and killed by the mountain pine beetle. No harvesting of other species, damaged, dying or dead, would occur.

- ***Action Alternative***

The Action Alternative is described under **SECTION I. TYPE AND PURPOSE OF ACTION.**

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.

The potential impacts to geology and soil quality in the project area are addressed in *APPENDIX B - HYDROLOGICAL ANALYSIS* at the end of the document.

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.

The potential impacts to water and fisheries resources in the project area are addressed in *APPENDIX B - HYDROLOGICAL ANALYSIS* at the end of the document.

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.

BACKGROUND

The project is within Montana Airshed 2 and is not within a Class 1 Airshed. Air quality within this airshed is considered good. Temporary, local restrictions in air quality currently occur from wildfires, prescribed broadcast burning, slash burning, and road dust.

DIRECT AND INDIRECT EFFECTS

- ***NO-ACTION ALTERNATIVE***

The existing condition would not change.

➢ ***ACTION ALTERNATIVE***

Post-harvest burning would produce smoke emissions; log hauling and other project-related traffic on dirt roads during dry periods would temporarily increase road dust. Due to the relatively small size of the project, no increases are expected to exceed standards or impact local population centers if burning is completed within the requirements imposed by the Montana Airshed Group.

CUMULATIVE EFFECTS

➢ ***NO-ACTION ALTERNATIVE***

The existing condition would not change.

➢ ***ACTION ALTERNATIVE***

Additional smoke produced from prescribed burning on adjacent USFS, TNC, private, and State trust forestland would remain within the standards for air quality, but cumulative effects during peak burning periods could affect individuals at local population centers with respiratory illnesses for short durations. All known major burners operate under the requirements of the Montana Airshed Group, which regulates the amount of emissions produced cumulatively by major burners.

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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.

The direct and indirect analysis area is approximately 57 acres in size and consists of: Section 16, T23N, R18W.

The following analysis provides a detailed description of the present conditions of the forest and addresses the potential effects of the proposed alternatives related to the following issues:

- The ongoing mountain pine beetle would likely cause significant additional tree mortality if harvesting does not remove active brood trees. Trees would be targeted for removal this summer. Harvesting operations could occur until March 31, 2012.
- The risk of catastrophic fires may increase on Swan River State Forest and adjacent timberlands if standing dead or dying and/or down trees are not removed. The amount of fuel would be reduced in the affected areas.
- Harvesting would remove suppressed, infected or damaged trees and allow the remaining healthy trees to continue to mature in the stand. By removing the affected tree species, the overall health and vigor of the stand should improve, which may reduce the potential for future attacks. Healthy trees of preferred species would remain in the stands rather than natural succession, which would allow non-preferred species, such as subalpine fir, to dominate.

BACKGROUND

As a whole, the forest has an ongoing and severe insect infestation problem. Douglas-fir bark beetles, mountain pine beetles, fir engravers, and Spruce budworm are currently attacking trees on Swan River State Forest. Mountain pine beetles are causing significant tree mortality within the project area. Spruce budworm attacks have become more prevalent, causing suppression and occasionally mortality in Engelmann spruce, Douglas-fir, grand fir, and subalpine fir. Douglas-fir bark beetles and fir engravers seem to be declining but are still prevalent on the Swan River State Forest.

DNRC is required by law to establish a timber program that provides for the timely salvage of dead and dying timber that is threatened by insects, diseases, wildfires, or windthrow on State forests. Under this requirement, DNRC shall, to the extent practicable, harvest dead and dying timber before wood decay and value loss are substantial (*Section 77-5-207, Montana Codes Annotated [MCA]).*

EXISTING ENVIRONMENT

This stand consists of a mature, dominant overstory of western larch, Douglas-fir, Engelmann spruce, lodgepole pine, and subalpine fir. Conifer regeneration within the understory is limited to a few lodgepole pine and subalpine fir as a result of an excess of mock azalea (*Menziesia ferruginea*) and red alder (*Alnus rubra*) which typically outcompetes other vegetation in openings within moist, low elevation subalpine forest habitat-type groups such as these. The lodgepole pine in these stands are experiencing attacks by the mountain pine beetle causing them to die. The Engelmann spruce and Douglas-fir, to a more limited extent, are experiencing attacks by the Spruce budworm. There is significant decline and mortality within the subalpine fir. Trees of every species also exhibit poor crowns due to suppression and competition within more tightly-spaced clumps.

CURRENT HABITAT TYPES AND FOREST PRODUCTIVITY WITHIN THE PROJECT AREA

The majority of stands surrounding the project area are a subalpine fir habitat type and in the moist, low elevation habitat group. Forest productivity (growth) is rated as moderate to high. These stands typically contain varying populations of subalpine fir, Engelmann spruce, and western larch with incidental populations of Douglas-fir. Site preparation is considered essential due to the prevalence of shade-tolerant undergrowth such as mock azalea.

DIRECT AND INDIRECT EFFECTS

- ***No-Action Alternative***

  The project area has light to severe damage and mortality is scattered throughout. If the proposed salvage and post-harvest site preparation does not occur in these stands, the shade-tolerant, deciduous shrubs would continue to regenerate, changing the dominant vegetation from a mature stand to a brush field. The long-term cover type would change from a lodgepole or mixed conifer type to an overstory dominated principally by shrubs and possibly

subalpine fir. Age class for the stand would continue to decrease as the older trees die from the effects of insect and disease attacks.

- ***Action Alternative***

  Harvesting would focus on green, dead, and dying lodgepole pine and subalpine fir as well as thinning through the damaged and suppressed other tree species. Harvesting all or most of the green, dead, and/or dying lodgepole pine as well as areas of subalpine fir mortality with a dbh greater than 5 inches would result in scattered and grouped trees being removed from the mixed-conifer stand either singly or in groups that could create up to 1/4- to 1/2-acre sized openings. Selectively thinning through the remaining species would result in no more than 40- to 50- foot final spacing and 40 percent or greater crown cover. The stand would retain the characteristics of a mixed-conifer stand. Scarification during harvesting or in post-harvest activities may encourage early seral species development which may slightly decrease the overall age class. The stand cover type is expected to become a mixed conifer type upon harvest and remain so if regeneration occurs.

Cumulative Effects

- ***No-Action Alternative***

  The brood trees for the mountain pine beetle would not be removed. Cover types would continue to change as lodgepole pine in the overstory die from continued bark beetle attacks and the canopy becomes occupied with other shade-tolerant species, primarily grand fir. In the short term, the canopy may have openings created by mortality or windfall. For the long term, these openings would close as the shade-tolerant species grow and develop.

  As insect and disease infected trees die and the younger shade-tolerant trees begin to move into the dominant class, the age class of the overall stand may change to that of a younger stand.

- ***Action Alternative***

  Because mountain pine beetles in the project area are attacking lodgepole pine, a co-dominant overstory species, the stand composition would change. Some portions of the project area could become predominantly grand fir; other portions would regenerate to seral species that may take advantage of the small openings created during salvaging operations. These openings would be created sooner and be relatively larger than if they were generated naturally. Combined with soil disturbance and the removal of a majority of the large woody debris, the openings would increase opportunities for seral species to regenerate.

  The stand's age class may change to that of a younger stand as beetle-infested trees die and the current understory of younger shade-tolerant trees begin to move into the dominant class. The natural regeneration of the salvaged areas would also reduce the stand's age class. The removal of brood trees, however, would allow more of the unaffected lodgepole and ponderosa pine trees in the surrounding area to potentially survive and moderate the change in age classification overall.

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.

Impacts to fisheries resources are addressed in *APPENDIX B - HYDROLOGICAL ANALYSIS* at the end of the document.

Impacts to terrestrial wildlife resources are addressed in *APPENDIX C – TERRESTRIAL WILDLIFE RESOURCES* at the end of the document.

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.

Potential impacts to aquatic species of concern (westslope cutthroat trout) are addressed in *APPENDIX B - HYDROLOGICAL ANALYSIS* at the end of the document

Impacts to terrestrial threatened and endangered species are addressed in *APPENDIX C – TERRESTRIAL WILDLIFE RESOURCES* at the end of the document.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

The DNRC has no record of cultural resources within the project's area of potential effect. However, a professional inventory of cultural resources has not been conducted. 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.

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.

EXISTING CONDITIONS

Generally, foreground views are those associated with and connected to open roads. The project area is not bordered by an open road, therefore these types of views are limited within the project area. Middleground views usually consist of hillsides or drainages. The area contains mid-elevation rolling ridges with both natural and man-made openings dispersed throughout. Due to topography and existing vegetation, these types of views are limited within the project area. Background views consist of a collection of drainages and ridges that make up a portion of the central Swan and Mission mountain ranges. The most prominent viewshed is the background view since most views within the project area are from this vantage point, typically from Highway 83.

DIRECT AND INDIRECT EFFECTS

➢ ***No-Action Alternative***

Current conditions would not change.

➢ ***Action Alternative***

Views of the stands in Section 16, T23N, R18W would be seen from Highway 83. Due to the distance from the site as well as vegetation screens for grizzly bear hiding cover along open roads (including the highway) in place as stipulated by the SVGBCA, effects to aesthetics would be minimal to moderate. All to portions of the area proposed for salvage operations would be visible in the background. However, limited portions of the foreground or middleground viewsheds would be visible due to topography, additional vegetation outside the project area, and the location of the project area.

CUMULATIVE EFFECTS

Natural processes on the landscape, such as wildfires, windthrow, insect infestations, and disease infections, would continue to alter the view over time. Current salvage and proposed timber sale harvesting projects on all ownerships would alter the aesthetics of all viewsheds.

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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.

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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.

The proposed Scout Lake Multiple Timber Sale Environmental Impact Statement (EIS).

The Final Environmental Impact Statement for the White Porcupine Multiple Timber Sale Project. This project is immediately adjacent to the proposed salvage.

In relation to grizzly bears, cumulative effects of timber management and road construction were analyzed in the Environmental Assessment (IA) and Biological Opinion for the SVGBCA *(USFWS, 1995a and 1995b)*. Timber harvesting and road use related to the proposed alternative would be conducted in accordance with this agreement *(USFWS et al, 1997)*.

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.

None.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Approximately 500 Mbf of sawlog timber and 300 tons of nonsawlog material would be made available to the wood products industry.

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.

Due to the relatively small size of this project, the proposed action would result in minor changes to local employment and would provide approximately 10 people with approximately 15 to 30 days of employment.

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.

Due to the relatively small size of this thinning project, the proposed action would result in no measurable cumulative impact on tax revenues.

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

The demand for government services would not be cumulatively impacted as a result of this proposal.

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 March 2003, DNRC adopted Administrative Rules for Forest Management (*ARM 36.11.401* through *450*). The DNRC would manage lands involved in this project in accordance with the Rules.

The project would adhere to the agreements made in the SVGBCA.

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.

EXISTING CONDITIONS

The Main Lodge Salvage project area, primarily used for hunting and snowmobiling, receives light recreational use throughout the year.

DIRECT AND INDIRECT EFFECTS

- ***No-Action Alternative***

Recreational uses would not likely change.

- ***Action Alternative***

The haul routes would include open and restricted portions of Main Woodward and South Woodward roads. Short delays due to log hauling and snowplowing may inconvenience recreationists; however, recreational use in the project area is not expected to change with the implementation of this project. Only traffic related to logging and administrative use would be allowed on the restricted access roads during the period of harvest operations.

The status of the closed roads used to access this project would not change with project implementation.

CUMULATIVE EFFECTS

- ***No-Action Alternative***

Recreational use is not expected to change.

- ***Action Alternative***

The harvesting and log-hauling activities of this project and projects associated with the White Porcupine analysis would utilize portions of Fatty Creek and Whitetail roads for hauling, which may displace recreational use to adjacent areas. Harvesting activities may occur on adjacent ownerships as well, exact details are not known at this time. All levels of existing recreational use on Swan River State Forest and adjacent ownerships are expected to continue.

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.

Due to the relatively small size of this project and the fact that people are already employed in the region, no measurable cumulative impacts related to population and housing would be expected.

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.

The proposed salvage project would create jobs in the private sector. Harvest would provide a monetary return to the Montana School Trust Fund.

EA Checklist Prepared By:	**Name:**	Kristen Baker	**Date:** 12/12/11
	Title:	Forest Management Supervisor	

V. FINDING

25. ALTERNATIVE SELECTED:

Two alternatives are present and fully analyzed in the CEA:

- The No-Action Alternative includes existing activities, but does not include a 500 Mbf sawlog and 300 ton nonsawlog salvage sale permit.
- In addition to existing activities, the Action Alternative proposes attaching a total of 500 Mbf of green and salvage sawlog timber and 300 tons of nonsawlog material from approximately 57 acres to the existing White Porcupine 4 (White Cliffs) timber sale contract through an amendment.

I have reviewed the correspondence from the public and information presented in the CEA. I have selected the Action Alternative without additional modifications. I feel the Action Alternative best meets the purpose and need for action based on the following reasons:

- The selected Action Alternative meets the goals and objectives listed in this CEA.
- The analysis of identified issues did not reveal information to persuade DNRC or myself to choose the No-Action Alternative.
- The project area is located on State-managed lands that are principally valuable for the timber that is on them (*77-1-402 MCA*). DNRC manages these lands according to the standards adopted by the Administrative Rules for Forest Management (*ARM 36.11.401* through *450*) and the philosophy within the SFLMP, which states:

  Our premise is that the best way to produce long-term income for the trust is to manage intensively for healthy and biologically diverse forests...in the future; timber management will continue to be our primary source of revenue and our primary tool for achieving biodiversity objectives.

- The Action Alternative for this project meets all requirements of the Administrative Rules for Forest Management (*ARM 36.11.401* through *450*) and the SVGBCA, in that impacts are minimal and minor in scope.
- The proposal provides an important mechanism to manage intensively for a healthy and biologically diverse forest in a way that harvests dead, dying, or damaged timber before a substantial value loss occurs, while limiting environmental impacts.
- As mandated by State statute (*77-5-222 MCA*), the proposed sale will contribute to DNRC's sustained yield.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I find that the Action Alternative will not have significant impacts on the human environment for

the following reasons:

- The proposed salvage project conforms to the management philosophies of DNRC and is in compliance with existing laws, rules, policies, and standards applicable to this type of proposed action.
- The Action Alternative will not preclude analysis of future actions on State trust lands.
- The proposed activities are similar to past projects on State trust lands using common practices in the industry and are not being conducted on unique or fragile sites.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

Based on the following, I find that a more detailed EA or an EIS does not need to be prepared:

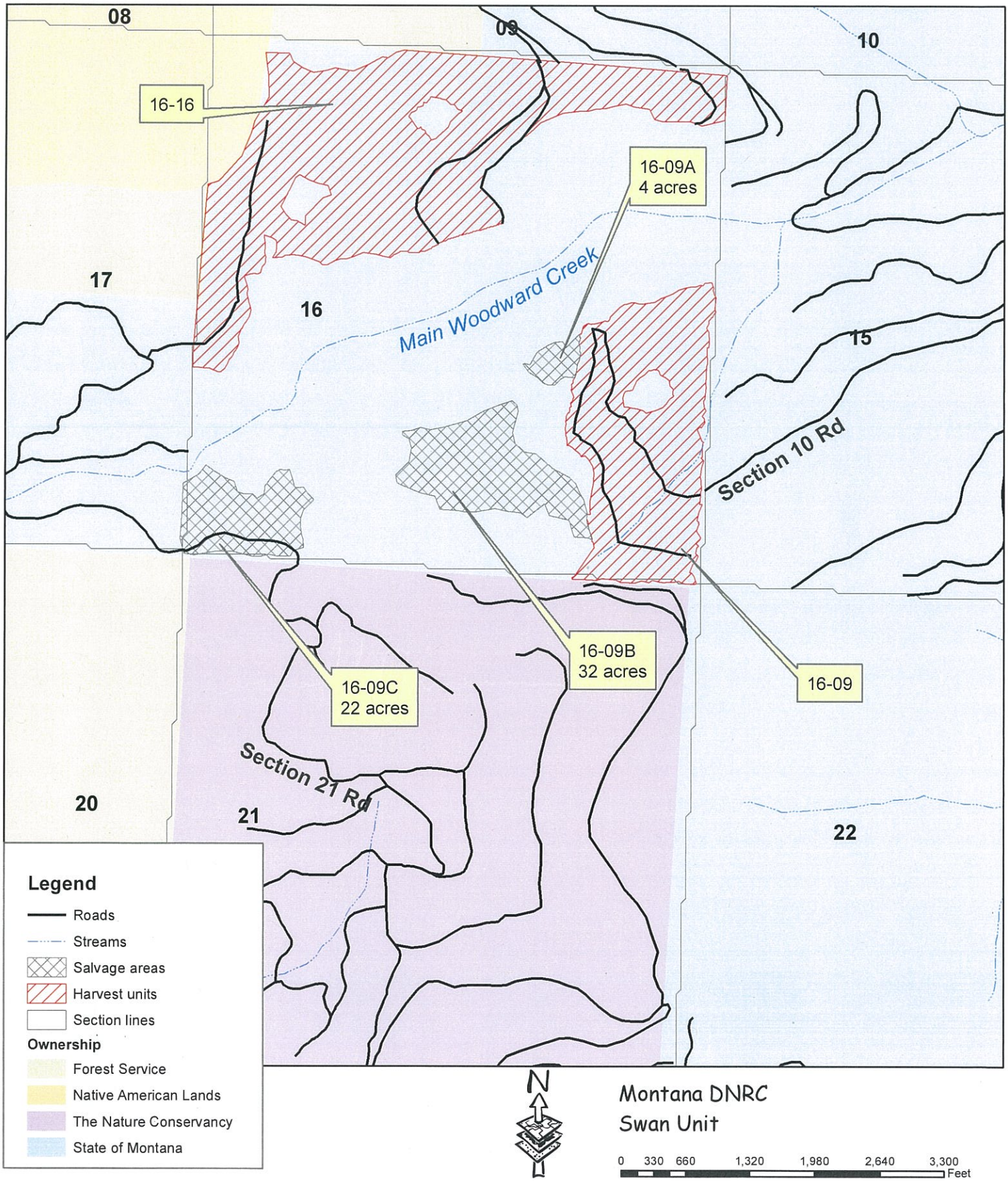
- The CEA adequately addressed the issues identified during project development and displayed the information needed to make decisions.
- Evaluation of the potential impacts of the proposed Main Lodge salvage indicates that no significant impacts would occur.
- The ID Team provided adequate opportunities for public review and comment. Public concerns were incorporated into the project design and the analysis of impacts as displayed in *APPENDIX A – SCOPING DOCUMENTATION*.

☐ EIS ☐ More Detailed EA ☒ No Further Analysis

EA Checklist Approved By:	**Name:** Dan Roberson	
	Title: Swan Unit Manager	
Signature: Daniel J Roberson		**Date:** 12/12/11

Whie Porcupine Sale 4 (White Cliffs)

Area Map
Attachment A2
Section 16, T23N, R18W



APPENDIX A- SCOPING DOCUMENTATION

INITIAL SCOPING

The following is a list of landowners, Agency representatives, various specialists, and all interested parties that were sent an initial scoping letter on August 11, 2011.

-Alliance for the Wild Rockies
-Julia Altemus
MT Wood Products Association
-Francis Auld
Tribal Preservation Department,
Confederated Salish and Kootenai
Tribes (CKST)
-Bill Barron,
Lake County Commissioner
-Ross Baty
Forest Management Bureau (FMB)
Wildlife Biologist, DNRC
-Bigfork Eagle
-Harold Blattie
Montana Association of Counties
-Jim Bower
FMB Fisheries Biologist, DNRC
-Allen Branine
Swan Unit Fire Supervisor, DNRC
-Ann Brower
Lake County Commissioner
-Kevin Chappell
Ag & Grazing Mgmt Bureau, DNRC
-Mike Collins
NWLO Trust Lands Program Manager,
DNRC
-Ann Dahl
Swan Ecosystem Center
-Larry Dunham
-Janel Favero
Centralized Services, DNRC
-David Gaillard
Defenders of Wildlife
-Sonya Germann
FMB Forest Management Planner,
DNRC
-John Grassy
Centralized Services, DNRC
-Paula Holle
Lake County Clerk & Recorder
-Jeanne Holmgren
Real Estate Bureau, DNRC
-Rich Kehr
Swan Lake Ranger District
-Dale Kerkvliet
Rocky Mountain Elk Foundation
-Jim Krantz
Plum Creek Timber Company
-Jordan Larson
FMB Economist, DNRC
-Rose Leach
CSKT
-Stuart Lewin
-Luckow Logging Inc.
-Sarah Lyngholm
FMB, DNRC
-Jim Mann
Daily Interlake
-Roger Marshall
Professional Forester
-Stephen McDonald
CSKT
-Paul McKenzie
Lands and Resource Manger, F.H.
Stoltze Land and Lumber
-Neil Meyer
Swan Valley Ad Hoc Committee
-Arlene Montgomery
Friends of the Wild Swan
-John Murray
THPO, Blackfeet Tribe
-Cameron Naficy
Staff Ecologist, Wildwest Institute

-Tony Nelson
NWLO Hydrologist, DNRC
-Mike Palladini
Swan Ecosystem Center
-Patrick Rennie
Archeologist, DNRC
-Lucy Richards
Centralized Services, DNRC
-Joe Rivera
Blackfeet Tribe
-Leo Rosenthal
Fisheries Biologist, MT-FWP
-Jeff Schmalenberg
FMB Soil Scientist, DNRC
-Seeley-Swan Pathfinder

-Tim Spoelma
FMB Silviculturalist, DNRC
-Joyce Spoonhunter
Blackfeet Tribe
-Sue Tebay
Swan Lake Ranger District
-Tribal Historic Preservation Office
CSKT
-Paddy Trusler
Lake County Commissioner
-John Vore
Wildlife Biologist, MT-FWP
-Tom Weaver
Department of Fish, Wildlife & Parks

Indicates contacted via email on
08/11/11

RESPONDENTS

The following list contains individuals that responded with comments and concerns about the proposed project.

ISSUES IDENTIFIED DURING SCOPING The issues stated here are paraphrased to aid in summarizing alike concerns from several separate letters.		
CONCERNED ENTITY	**ISSUE**	**WHERE ADDRESSED IN THE CEA**
E.T. "Bud Moran, CSKT Council Chairman for Francis Auld CSKT – Tribal Preservation Department	CSKT would like the Swan River State Forest to ensure that the trees to be removed are not Culturally Modified Trees (CMTs).	A response from Patrick Rennie, DNRC Archeologist, is located within the CEA under **III. IMPACTS ON THE PHYSICAL ENVIRONMENT, 10. HISTORCIAL AND ARCHAEOLOGICAL SITES:**
Larry Dunham	I support this project.	Thank you for your comment.

APPENDIX B – HYDROLOGICAL ANALYSIS

AUTHOR – Tony Nelson

DATE – 11/09/11

The proposed salvage of trees that have been killed by bark beetles, are undergoing bark beetle infestation, have been damaged and/or killed by other various disease organisms, display signs of suppression such as poor crowns, or have blown down on the Swan Unit would occur in Section 16, T23N, R18W. The total area of harvest is approximately 57 acres and would yield an estimated 500 Mbf of sawlogs (600 tons green/non-infested, 2,400 tons dead or infested) plus an additional 300 tons of pulp. All work would be completed under dry, frozen and/or snow covered ground conditions.

The following table evaluates the potential impacts to soil, water and fisheries resources in the project area.

Issue	Assessment
High erosion risk soils?	The inventoried landtypes in the project area are listed as 21-8, 23-9 and 7s by *Flathead National Forest Area, Montana (MT619)*. This is not considered as a highly erosive soil. Frozen or dry conditions will limit the risk of compaction.
Federally listed threatened and endangered *aquatic* species or critical habitat for threatened and endangered *aquatic* species as designated by the USFWS?	The project is on a dry slope above the headwaters of Woodward Creek near Condon, Montana. None of the proposed harvesting is located within 300 feet of any stream channel or surface water. Because the salvage harvest units are located away from any surface water and the scale of the project is small, only a very low risk of impacts would exist.
Within a municipal watershed?	No municipal water supply is found within 3 miles of the project.
SMZ of fish bearing streams or lakes?	Identified harvest areas are located well away from streams. The designated haul route from the harvest units to MT Highway 83 uses established moderate-standard forest roads.
Cumulative effects?	Per ARM 36.11.423 (1) (a-b), DNRC has completed a coarse filter screening for cumulative effects, which is located in the project file. Due to the small scale of this project in relation to the watershed size, the risk of additional cumulative impacts would be very low and likely immeasurable. Therefore, cumulative impacts would remain acceptable for this watershed.

CONCLUSION:

Due to the small scope of the project, distance from surface water bodies, limited proposed harvest of live timber and the majority of harvest including dead or dying trees, and the gentle to level topography, impacts to watershed, soils and fisheries are not expected to be measurable. Impacts to soil physical properties (compaction, displacement) are expected to be less than 15 percent of the harvested area provided soils are dry, frozen or snow-covered and skid trails are spaced such that 20 percent or less of the area is trafficked by equipment. New road construction in the proposed project area would reduce the productivity of soils within the prism. Erosion control BMPs on all haul roads would minimize the risk of erosion and sediment delivery off of roads. No streams or draws are found within the proposed project area, so sediment delivery is not an issue with this project.

APPENDIX C – TERRESTRIAL WILDLIFE RESOURCES

Author – Ross Baty

Date – 12/08/11

INTRODUCTION

A field review of the project area was conducted on September 14, 2011 to assess the extent of insect activity and evaluate potential impacts to wildlife that would be associated with the proposed action. Several patches of killed lodgepole pine were noted, which were providing no appreciable horizontal or overhead cover values. Most dead trees were lodgepole pine, which tend to provide low quality snag habitat.

This analysis tiers to the White Porcupine Multiple Timber Sale Project Final EIS as the section involved in this project also was reviewed and included in this recent environmental document. Impacts associated with this proposed action would be consistent with, and within the range of impacts addressed in the earlier EIS. This analysis, however, provides additional details regarding potential for site-specific direct and indirect effects and cumulative effects that could be associated with this proposed salvage project.

PROJECT DESCRIPTION

The project would harvest approximately 57 acres of mature forest where appreciable amounts are dead and/or dying. No more than 100 Mbf volume of green trees would be removed and up to 400 Mbf volume of dead and dying trees would be removed. In all areas that have not sustained near 100 percent lethal mortality caused by insects, at least 40 percent overstory canopy cover would be retained. Maximum spacing where thinning would occur would be 50 feet. A minimum of 2 of the largest snags available per acre would be retained. Components of subalpine fir and Engelmann spruce would be retained to maintain habitat for snowshoe hares, and in each unit and most

lodgepole pine would be removed. To ensure compliance with the Swan Valley Grizzly Bear Conservation Agreement, all harvest activities would be conducted within the period of November 15 to March 31 to minimize risk to grizzly bears. No additional road construction or reconstruction would be required.

ANALYSIS METHODS

The primary basis for this analysis included information obtained through visual observations made during the field review, study of the White Porcupine Multiply Timber Sale Project Final EIS wildlife analysis, and review of current maps and photos depicting relevant aspects of the project area and cumulative effects analysis area.

ANALYIS AREAS

Direct and indirect effects were analyzed at the scale of the 640-acre project area. Cumulative effects were considered across the 37,614-acre Porcupine Woodward Grizzly Bear Subunit.

DIRECT, INDIRECT AND CUMULATIVE EFFECTS ASSOCIATED WITH THE NO-ACTION ALTERNATIVE (Includes All Terrestrial Resources Considered) -- Under the no-action alternative no salvage of dead or removal of green trees would occur on the 57 acres identified. Thus, measurable direct, indirect or cumulative effects would be anticipated for any species associated with the Coarse or Fine Filter resource categories analyzed below.

COARSE FILTER ASSESSMENT FOR THE ACTION ALTERNATIVE

DIRECT, INDIRECT AND CUMULATIVE EFFECTS TO WILDLIFE SENSITIVE TO CHANGES IN FOREST COVER TYPES -- No appreciable changes in cover type would be anticipated on the acres treated beyond what has occurred naturally in dead lodgepole pine inclusions that would be removed. Thus, minimal potential for adverse direct, indirect and cumulative effects to wildlife species sensitive to changes in forest cover types and species composition would be anticipated.

DIRECT, INDIRECT AND CUMULATIVE EFFECTS TO WILDLIFE ASSOCIATED WITH WOLD GROWTH FOREST AND SENSITIVE TO CHANGES IN STAND AGE CLASS -- No appreciable changes in age class would be expected on the acres treated beyond what has occurred naturally in dead lodgepole pine inclusions that would be removed. In such areas small patches of conifer regeneration would be expected to establish and grow during the next 2 decades. No old growth would be entered under the proposed action. Thus, minimal potential for adverse direct, indirect and cumulative effects to wildlife species sensitive to changes in forest age classes or alteration of old growth forest would be anticipated.

DIRECT, INDIRECT AND CUMULATIVE EFFECTS TO WILDLIFE SENSITIVE TO CHANGES IN CONNECTIVITY OF MATURE FOREST HABITAT, HABITAT FRAGMENTATION, AND HABITAT LINKAGE-- No appreciable changes in connectivity of mature forest cover would be expected on the acres treated, beyond what has occurred naturally in dead lodgepole pine inclusions that would be removed. Minor amounts of additional edge would be created in association with small patches of lodgepole

pine that would be removed. However, at least 40 percent overstory cover would be retained wherever possible, and no dense cover patches near riparian areas or streams would be entered. The project area is also outside of any grizzly bear linkage zone, and activities would be restricted to occur only during the denning season. Thus, minimal potential for adverse direct, indirect and cumulative effects to wildlife species sensitive changes in habitat connectivity, fragmentation effects, and habitat linkage would be anticipated.

DIRECT, INDIRECT AND CUMULATIVE EFFECTS TO WILDLIFE ASSOCIATED WITH SNAGES AND COARSE WOODY DEBRIS -- No appreciable changes in snag and coarse woody debris abundance would be expected on the acres treated. However, most existing snags would be removed in areas comprised primarily of dead lodgepole pine, however, ample high quality snags and snag recruitment trees would be retained in the portions of treated stands with greater representation of other tree species, and on adjacent un-entered areas. Coarse woody debris amounts would be expected to be retained at existing, or greater levels, following logging. Thus, minimal potential for adverse direct, indirect and cumulative effects to wildlife species sensitive to changes in forest age classes or alteration of old growth forest would be anticipated.

FINE FILTER ASSESSMENT FOR THE ACTION ALTERNATIVE

In the fine-filter analysis, individual species of concern are evaluated. These species include wildlife species listed as threatened or endangered under the Endangered Species Act of 1973, species listed as sensitive by DNRC, and species managed as big game by DFWP.

Threatened and Endangered Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
Lynx (*Felis lynx*) Habitat: subalpine fir habitat types, dense sapling, old forest, deep snow zone	[Y] Approximately 300 acres of lynx habitat occurs in the project area. Of the acres that would be treated, approximately 22 acres currently exist as temporary non-habitat which is beetle-killed lodgepole pine inclusions. 19 acres of existing mature foraging habitat would be treated and about 12 acres of "other" suitable habitat would be treated. About 4 acres of denning habitat would be treated. Virtually all treated acres other than those comprised of pure lodgepole would remain as "other" suitable habitat following harvest. Following proposed treatment, habitat amounts within the Porcupine Woodward cumulative effects analysis area would remain in compliance with habitat levels for lynx required under forest management ARMs. Given the minimal amount of treatment and considerable acreage of habitat available within the cumulative

	effects analysis area, minor adverse direct, indirect and cumulative effects to lynx would be anticipated.
Grizzly Bear (*Ursus arctos*) Habitat: recovery areas, security from human activity	[N] Under the proposed action, all activities would occur during the grizzly bear denning period and no new roads would be constructed. Ample cover would remain in or adjacent to proposed harvest units following treatment. Thus, minimal direct, indirect, or cumulative effects to grizzly bears would be anticipated.

DNRC Sensitive Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
Bald Eagle (*Haliaeetus leucocephalus*) Habitat: late-successional forest less than 1 mile from open water	[N] The project area lies greater than 1 mile from potentially suitable habitat along the Swan River. Thus, no direct, indirect or cumulative effects to bald eagles would be anticipated.
Gray Wolf (*Canis lupus*) Habitat: ample big game populations, security from human activity	[Y] Gray wolves are present in the Swan Valley and could be displaced by proposed logging activities. Activities would be of short duration and would occur outside of the sensitive denning period for wolves. The proposed area that would be affected would not measurably influence use of the project area or cumulative effects analysis area by big game prey species. Thus, minor adverse direct, indirect and cumulative effects to gray wolves would be anticipated.
Black-Backed Woodpecker (*Picoides arcticus*) Habitat: mature to old burned or beetle-infested forest	[N] No fire killed dead trees or stands would be influenced by the proposed action. Thus, no direct, indirect or cumulative effects to black-backed woodpeckers would be anticipated.
Coeur d' Alene Salamander (*Plethodon idahoensis*) Habitat: waterfall spray zones, talus near cascading streams	[N] No moist talus or streamside talus habitat occurs in the project area. Thus, no direct, indirect, or cumulative effects would be expected.
Columbian Sharp-Tailed Grouse (*Tympanuchus Phasianellus columbianus*) Habitat: grassland, shrubland, riparian, agriculture	[N] No suitable grassland communities occur in the project area. Thus, no direct, indirect, or cumulative effects would be expected.

Common Loon (*Gavia immer*) Habitat: cold mountain lakes, nest in emergent vegetation	[N] No lakes suitable for nesting loons occur on or near the project area. Thus, no direct, indirect, or cumulative effects would be expected.
Fisher (*Martes pennanti*) Habitat: dense mature to old forest less than 6,000 feet I elevation and riparian	[Y] Up to 57 acres of fisher habitat could be altered by the proposed action. However, none of the harvest would occur in important riparian habitat areas and appreciable amounts of habitat would remain in the project area and cumulative effects analysis area. No new road would be constructed that could fragment habitat or increase access for trapping. Thus, minor adverse direct, indirect and cumulative effects to fishers would be anticipated.
Flammulated Owl (*Otus flammeolus*) Habitat: late-successional ponderosa pine and Douglas-fir forest	[N] Habitat preferred by flammulated owls is not present in the project area and would not be altered by the proposed action. Thus, no direct, indirect or cumulative effects would be anticipated.
Harlequin Duck (*Histrionicus histrionicus*) Habitat: white-water streams, boulder and cobble substrates	[N] Habitat preferred by harlequin ducks is not present in the project area and would not be altered by the proposed action. Thus, no direct, indirect or cumulative effects would be anticipated.
Northern Bog Lemming (*Synaptomys borealis*) Habitat: sphagnum meadows, bogs, fens with thick moss mats	[N] Habitat preferred by northern bog lemmings does not occur in the proposed treatment areas and would not be altered by the proposed action. Thus, no direct, indirect or cumulative effects would be anticipated.
Peregrine Falcon (*Falco peregrinus*) Habitat: cliff features near open foraging areas and/or wetlands	[N] Habitat preferred by peregrine falcons for nesting is not present in the project area or within 1 mile of the project area. Thus, no direct, indirect or cumulative effects would be anticipated.
Pileated Woodpecker (*Dryocopus pileatus*) Habitat: late-successional ponderosa pine and western larch- Douglas-fir forest	[Y] Up to 57 acres of pileated woodpecker habitat could be altered by the proposed action. However, appreciable amounts of habitat would remain in the project area and cumulative effects analysis area and threshold levels of snags and coarse woody debris would be retained. Thus, minor adverse direct, indirect and cumulative effects to fishers would be anticipated.
Townsend's Big-Eared Bat (*Plecotus townsendii*) Habitat: caves, caverns, old mines	[N] Habitat preferred by Townsend's big-eared bats is not present in the project area or within 1 mile of the project area. Thus, no direct, indirect or cumulative effects would be anticipated.

Big Game Winter Range (Elk, Mule Deer and White-tailed Deer)	[N] Habitat and cover seasonally important for elk and white-tailed deer occurs on the project area, of which 57 acres would be affected. However, the project area lies outside of identified elk, mule deer and white-tailed deer winter range areas (DFWP 2008). Thus, no direct, indirect or cumulative effects to wintering big game animals would be anticipated.

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