

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Supplemental CEA for the Westside Blowdown Salvage
Proposed Implementation Date:	June 16, 2013 to August 31, 2014
Proponent:	Montana Department of Natural Resources (DNRC), Northwestern Land Office
Location:	Swan River State Forest - Section 26, Township 23 North, Range 18 West and Sections 22, 23, 26, 28, 34, Township 24 North, Range 18 West
County:	Lake

I. TYPE AND PURPOSE OF ACTION

DNRC, as manager of Swan River State Forest, proposes an extension to finish harvesting an estimated 0.6 million board feet (MMbf) out of the initial 1.5 MMbf of salvage timber that was blown down during the June 26, 2012 wind event which impacted the west side of the state forest. The remaining gross project area encompasses approximately 3,435 acres of the original 6,425 acres (see map). Western larch, western red cedar, western white pine, Engelmann spruce, and Douglas-fir are the majority of the species being salvaged. A minor component of grand fir, subalpine fir and lodgepole pine are also selected for salvage. Harvesting these dead and dying trees as quickly as possible ensures that the most value will be captured for state trust lands. This project would produce approximately \$39,600.00 remaining out of an estimated \$99,000.00 in total revenue for the Common Schools Trust. This remaining salvage is currently under contract and would represent a loss in anticipated revenue if activities did not continue.

The original proposed salvage was located in Sections 2, 10, 16, 22, 26, 27, Township 23 North, Range 18 West and Sections 22, 23, 26, 28, 34, Township 24 North, Range 18 West over approximately 1,930 acres. The elevations range from 3,200 to 5,600 feet. The remaining proposed salvage is located in Section 26, T23N, R18W and Sections 22, 23, 26, 28, 34, Township 24 North, Range 18 West over approximately 601 actual harvest acres, 6 acres of which are in addition to the original 1,930 actual harvest acres (see map). The blown down timber occurred in and near the White Porcupine project area in (1) harvest units that had already been harvested, (2) harvest units that had not yet been harvested, and (3) some isolated patches outside, but generally adjacent to and accessible from existing harvest units or roads.

Project activities and associated disturbance would take place from June 16, 2013 to August 31, 2013. During this period operational activities would be limited to 60 days to capture value of down trees and minimize impacts to grizzly bears. Up to 6 logging contractors may operate simultaneously to complete the necessary activities as quickly as possible. If necessary, salvage activities could be conducted from November 16 to March 31 during the grizzly bear denning period as winter operating conditions allow. Activities could also occur between June 15 and August 31, 2014, but could not exceed 30 days within the entirety of the Porcupine Woodward Grizzly Bear Subunit. To complete salvage under this extension of the project window, DNRC would forgo salvage and/or commercial activities (as otherwise allowed under the Swan Agreement) in the 2013 operating season across 29,367 acres of blocked lands within the Lion Creek, Goat Creek, and South Fork Lost Soup grizzly bear subunits.

The lands involved in the proposed project are held in trust by the State of Montana for the support of specific beneficiary institutions (*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 legally required to administer these trust lands to produce the largest measure of reasonable and legitimate long-term return for the trust beneficiaries (*Montana Code Annotated [MCA], Section 77-1-202*).

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*).

This project was developed in compliance with the *State Forest Land Management Plan* (SFLMP), the *Administrative Rules for Forest Management* (Forest Management Rules; ARM 36.11.401 through 471), and conservation commitments contained in the *Montana DNRC Forested State Trust Lands Habitat Conservation Plan* (HCP), as well as other applicable state and federal laws.

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.

Ongoing involvement for this project would involve submittal of the supplemental document on the DNRC website as well as providing a link to the website to those who initially commented on the project.

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)

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.

MONTANA / IDAHO AIRSHED GROUP

DNRC is a member of the Montana/Idaho Airshed Group, which regulates slash burning through air-quality and weather monitoring for all members of the group. DNRC receives an air-quality permit for burning slash through participation in this group.

SWAN VALLEY GRIZZLY BEAR CONSERVATION AGREEMENT

The SVGBCA, a cooperative agreement between DNRC, United States Fish and Wildlife Service (USFWS), and the USFS, is currently in effect. This project will define mitigation measures for operating within the SVGBCA timber-harvesting parameters.

U.S. FISH AND WILDLIFE SERVICE

In December 2011, the USFWS issued DNRC an *Incidental Take Permit* (Permit) under Section 10 of the *Endangered Species Act*. The Permit applies to select forest-management activities affecting the habitat of grizzly bear, Canada lynx, and 3 fish species (bull trout, westslope cutthroat trout, and Columbia redband trout) on project area lands covered under the HCP. DNRC and the USFWS will coordinate monitoring of certain aspects of the conservation commitments to ensure program compliance with the HCP.

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.

The No-Action and Action alternatives are described in this section. The decision maker may select a modification or combination of these alternatives.

Alternatives Considered

• ***No-Action Alternative***

The No-Action Alternative is used as a baseline for comparing the effects that the Action Alternative would have on the environment and is considered a possible alternative for selection. Under this alternative, the proposed salvage extension would not take place and, therefore, approximately \$39,600.00 of revenue would be forgone for the Common Schools Trust. Firewood permits, recreational use, fire suppression, noxious-weed control, road and closure maintenance, and other management activities may still occur. Natural events, such as windthrow and down fuel accumulation would continue to occur.

• ***Action Alternative***

Under the Action Alternative, the proposed salvage would take place as described in this document. Approximately 0.6 MMbf of the remaining volume from the 1.5 MMbf total of dead and dying timber would be harvested. Incidental live trees would be removed as appropriate, particularly within the White Porcupine harvest units that have not been harvested in order to achieve the cutting prescription during operations. An appropriate amount of snags and down woody debris would be maintained for wildlife needs.

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 consistent with those addressed in APPENDIX B -SOILS ANALYSIS within the Westside Blowdown Salvage CEA. The minimal additional salvage area proposed and extended time periods needed to complete the harvest are not expected to create any measureable adverse direct, indirect or cumulative effects associated with these resources.

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 consistent with those addressed in *APPENDICES C & D – HYDROLOGY & FISHERIES ANALYSES* within the Westside Blowdown Salvage CEA. The minimal additional salvage area proposed and extended time periods needed to complete the harvest are not expected to create any measureable adverse direct, indirect or cumulative effects associated with these resources beyond those already described in *APPENDICES C & D – HYDROLOGY & FISHERIES ANALYSES*.

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, INDIRECT, AND CUMULATIVE 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 over another 60 days in June, July, and August, and possibly over an additional 30 days between June 15 and August 31 in 2014. Due to the relatively moderate 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/Idaho Airshed Group.

Additional smoke produced from prescribed burning on adjacent USFS, 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/Idaho Airshed Group, which regulates the amount of emissions produced cumulatively by major burners.

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 effects analysis area affected by the proposed extended activities is approximately 3,435 acres, 601 acres of which would be actual harvest acres, and is located in Section 26, Township 23 North, Range 18 West and Sections 22, 23, 26, 28, 34, Township 24 North, Range 18 West. The cumulative effects analysis area is approximately 41,700 acres, which encompasses the DNRC-managed Swan River State Forest Block.

EXISTING ENVIRONMENT

An additional 6 acres of blown down timber from the original event was recently located in Section 26, Township 23 North, Range 18 West.

The additional 6 acres consists of an isolated patch outside, but generally adjacent to and accessible from existing harvest units and roads which resulted in 6 acres of moderate volume concentrations of up to 5 Mbf/ac. The stand cover type is mixed conifer and the age class is old growth. Both stand characteristics remain unchanged despite the windthrow activity. There are currently additional fuels on the site due to the presence of downed woody debris and ladder fuels that blew down in the wind event. Sensitive plant populations have not been identified within the stand. The additional 6-acre stand has a grand fir habitat type and is in the warm and moist, low elevation habitat group. Forest productivity (growth) is rated very high. The stand contains Douglas-fir, subalpine fir, grand fir, Engelmann spruce, western larch, and western white pine. **Please see the Westside Blowdown Salvage CEA for a description of the other impacted areas.**

DIRECT AND INDIRECT EFFECTS

- ***No-Action Alternative***

Under the no action alternative, the treatment of 6 additional acres of downed trees would not occur, and existing downed trees analyzed for under the original EA would not be salvaged as proposed.

- ***Action Alternative***

Harvesting would focus on the continued removal of windblown trees that are downed or damaged from the event within the identified areas as analyzed in the original Westside Blowdown Salvage CEA, and on additional blown down trees located on 6 identified acres. Species composition that would be harvested consists primarily of western larch, western red cedar, western white pine, Engelmann spruce, and Douglas-fir. There is also a minor component of grand fir, alpine fir, and lodgepole pine. Tree size, diameter at breast height (dbh), range in size from 10 to 21+ inches with an estimated average dbh of 14 inches. Age class and cover type would not change in the additional 6-acre stand following salvage. The additional salvage 6-acre area proposed and time periods needed to complete the harvest would also not measurably influence forest stand attributes related to patch size or fragmentation. By continuing to remove the concentrations of blown down trees, opportunities would be created for the planting or natural regeneration of trees. There may be a slight increase in stand vigor due to the removal of the larger, less vigorous trees by the wind and associated salvage. There may also be a slight decrease in forest stand structure complexity due to the loss of moderate amounts of the larger trees and down material. Minimal decrease in forest crown cover would be anticipated and no changes in old growth acreage would occur. By removing windblown trees, insect and disease risk may be slightly reduced. Harvesting of the minor additional amount of downed woody material on the 6 added acres would minimally reduce the fuel loading within the project area. Noxious weed populations are not expected to change measurably beyond those addressed in the original project analysis as minimal additional acreage would be treated. **Please see the Westside Blowdown Salvage CEA for further detail regarding effects associated with vegetation and forest stand attributes within the project area.**

CUMULATIVE EFFECTS

Cumulative effects due to the additional 6-acre stand are expected to be negligible due to the small area affected and brief window of disturbance being proposed. Please see the Westside Blowdown Salvage CEA for further detail regarding effects on vegetation and forest attributes in the cumulative effects 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.

The potential impacts to water and fisheries resources in the project area are consistent with those addressed in *APPENDICES C & D – HYDROLOGY & FISHERIES ANALYSES* within the Westside Blowdown Salvage CEA. No additional harvest would occur within the Streamside Management Zone or Riparian Management Zone adjacent to any perennial, intermittent, fish-bearing, or non-fish-bearing streams. The minimal additional salvage area proposed and extended time periods needed to complete the harvest are not expected to create any measureable adverse direct, indirect or cumulative effects associated with these resources beyond those already described in *APPENDICES C & D – HYDROLOGY & FISHERIES ANALYSES*.

Additional disturbance to terrestrial wildlife species associated with 60 days of salvage logging disturbance would be expected and some additional habitat structure in the form of large downed logs would be removed from the 6 additional acres that would be treated. A more detailed assessment of impacts to terrestrial wildlife resources are addressed in *APPENDIX E – 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.

The potential impacts to aquatic species of concern are consistent with those addressed in *APPENDIX C – HYDROLOGY ANALYSIS and APPENDIX D – FISHERIES ANALYSIS* contained in the Westside Blowdown Salvage CEA. The minimal additional salvage area proposed and extended time periods needed to complete the harvest are not expected to create any measureable adverse direct, indirect or cumulative effects associated with such aquatic resources beyond those already described in *APPENDICES C & D – HYDROLOGY & FISHERIES ANALYSES*. Additional disturbance to terrestrial wildlife species associated with 60 days of salvage logging disturbance would be expected and some additional habitat structure in the form of large downed logs would be removed from the 6 additional acres that would be treated.

A more detailed assessment of impacts to terrestrial threatened and endangered species are addressed in *APPENDIX E – 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.

DNRC has no record of cultural resources within areas that would be affected by this project. 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. No adverse effects would be anticipated.

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.

Salvage of down trees in the additional 6-acre patch would have negligible direct, indirect, or cumulative effects on aesthetics and views across the Swan Valley.

Please see the Westside Blowdown Salvage CEA for further details regarding aesthetics.

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.

No additional demands on environmental resources of land, water, air or energy would be anticipated.

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.

Other environmental documents that pertain to the project area include:

- Westside Blowdown Salvage CEA
- South Woodward FEIS
- Lucky Logger, Main Wood and Low Wood 612s
- White Porcupine Multiple Timber Sale FEIS
- Scout Lake Multiple Timber Sale Final Environmental Impact Statement though not directly within the project area; it is included within the cumulative-effects area.

The potential for cumulative effects due to any of the listed projects were considered in the individual resource effects analyses.

IV. IMPACTS ON THE HUMAN POPULATION
<ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i>

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No additional effects associated with human health and safety would be anticipated.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

Approximately 0.6 MMbf of the 1.5 MMbf of sawlog timber total 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.

DIRECT, INDIRECT, AND CUMULATIVE EFFECTS

- ***No-Action Alternative***

Under this alternative the proposed extended harvesting and removal of windblown damaged trees on 6 additional acres would not occur. The affect on employment would be unchanged from that associated with the White Porcupine Multiple Timber Sale FEIS and Westside Blowdown Salvage CEA.

- ***Action Alternative***

Harvesting would focus on the removal of windblown trees that are downed or damaged from the event within the identified areas. Additional work associated with 60 additional days of activity would be created. The average employment and wage effects are found in TABLE 1 – AVERAGE EMPLOYMENT IMPACT UNDER THE ACTION ALTERNATIVE. The project is expected to create the equivalent of 6 yearlong (fulltime) jobs out of the 15 total initially analyzed for.

Table 1 – Average Employment Impact – Under the Action Alternative

	Employment	Wages
Average	10.58 jobs/MMBF	\$34,000/job
Estimated effect of Sale	6 jobs out of 15 total	\$204,000 out of \$510,000 total

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.

No measurable direct, indirect, or cumulative effects to the State tax base or tax revenues are anticipated.

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

No direct, indirect of cumulative effects to the demand for government services would be expected 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)*. DNRC would manage lands involved in this project in accordance with the Forest Management Rules. The project would adhere to the agreements made in the SVGBCA and the DNRC Forest Management HCP.

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 Westside Blowdown Salvage project area, primarily used for hiking, berry picking, hunting and snowmobiling receives recreational use throughout the year.

DIRECT, INDIRECT, AND CUMULATIVE EFFECTS

- ***No-Action Alternative***

Recreational use is not expected to change.

- ***Action Alternative***

The haul routes would include open roads: Fatty Creek, Whitetail, Main Woodward, and South Woodward roads. Short delays due to log hauling and harvesting along the open roads may inconvenience recreationists for another summer season due to the extension for salvage operations; however, recreational use in the project area is not expected to change with the implementation of this project.

Please see the Westside Blowdown Salvage CEA for further detail regarding the AESTHETICS.

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.

No direct, indirect of cumulative effects to density and distribution of population and housing would be anticipated.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No direct, indirect of cumulative effects associated with social structures and mores would be anticipated.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

No direct, indirect or cumulative effects associated with cultural uniqueness and diversity would be anticipated.

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 support a minor amount of temporary work in the private sector equivalent to one full time position for one year. Harvest would provide a monetary return to the Montana School Trust Fund.

The potential benefit to the trust can be estimated by looking at the rates in which the blowdown timber is currently under contract for. This sale is a salvage project, so expected values are lower for the same material due to damaged wood, difficult logging conditions, and dispersed material requiring greater cost for removal. The average price for this sale is \$12.00/ton. 0.6 MMBF multiplied by 5.5 tons per Mbf (conversion factor) equals 3,300 tons; 3,300 tons multiplied by \$12.00 per ton equals \$39,600.00 of timber under contract that would not be delivered to the Montana School Trust Fund.

EA Checklist Prepared By:	Name: Kristen Baker	Date: May 6, 2013
	Title: Forest Management Supervisor	

V. FINDING

25. ALTERNATIVE SELECTED:

Two alternatives are present and fully analyzed in the Supplemental CEA:

- The No-Action Alternative includes existing activities, but does not include the salvage of blown down timber.
- The Action Alternative includes removal of 0.6 MMbf of blown down sawtimber through several small salvage permits on 595 acres previously identified for salvage, and 6 additional acres not previously identified on the west side of the Swan River State Forest. The Action Alternative also proposes an extended period of 60 operating days from June 16 to August 31, 2013 across the entire 601 acres proposed for salvage harvest. Additional activities necessary to complete the project could also occur from November 16, 2013 to March 31, 2014, and/or for 30 additional days between the dates of June 15, 2014 to August 31, 2014.

I have selected the Action Alternative without additional modifications. I feel the Action Alternative best meets the purpose and need for action for the following reasons:

- The selected Action Alternative meets the goals and objectives listed in this Supplemental CEA.
- The analysis of identified issues did not reveal information to persuade me to select 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 meets all requirements of the Administrative Rules for Forest Management (ARM 36.11.401 through 450), the Montana DNRC Forested State Trust Lands Habitat Conservation Plan, and the SVGBCA, in that impacts are minimal, mitigated, and minor in scope.
- The Action Alternative 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 Action Alternative 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 Action Alternative 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.
- While the proposed salvage project exceeds operating windows allowed under the SVGBCA for the Porcupine-Woodward Subunit, the USFWS has approved DNRC's requested exception to the SVGBCA if mitigations offered within the exception are implemented.
- DNRC will not be precluded from analyzing future actions on State trust lands.
- The Action Alternative is similar to past projects on State trust lands using common practices in the industry and activities 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 Supplemental CEA adequately addressed the issues identified during project development and displayed the information needed to make decision.
- Evaluation of the potential impacts of the proposed Westside Blowdown Salvage Project indicates that no significant impacts would occur.

The ID Team provided appropriate public notification as displayed on page 2: *Public Involvement, Agencies, Groups or Individuals Contacted*. Public concerns from the origin Westside Blowdown Salvage CEA were carried forward and incorporated into this project's design and the analysis of impacts.

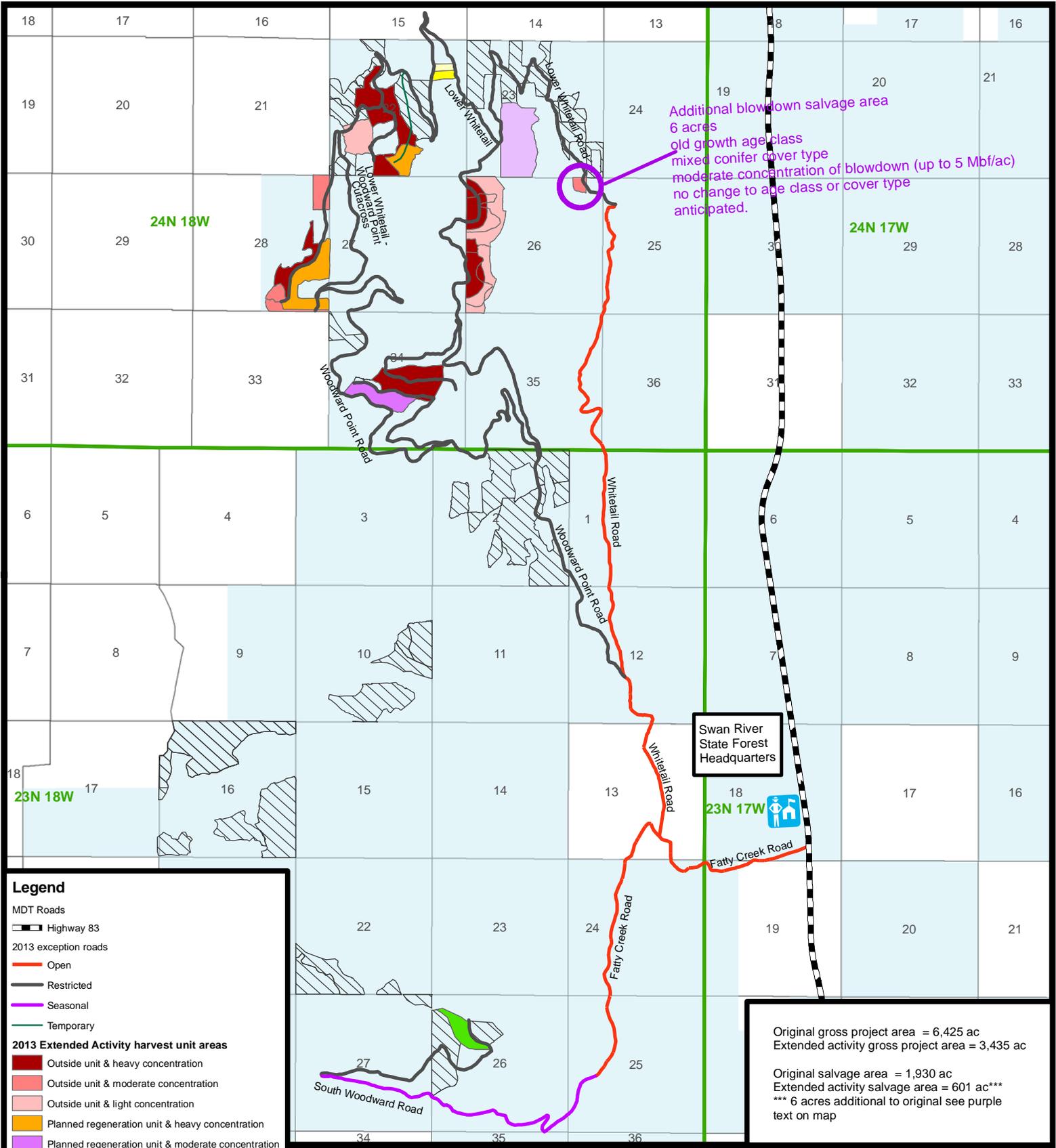
EIS

More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name: Dan Roberson Title: Swan Unit Manager
Signature: /s/ Daniel J Roberson	Date: 5/6/13

Supplemental EA for the Westside Blowdown Salvage



Additional blowdown salvage area
 6 acres
 old growth age class
 mixed conifer cover type
 moderate concentration of blowdown (up to 5 Mbf/ac)
 no change to age class or cover type
 anticipated.

Legend

MDT Roads
 Highway 83

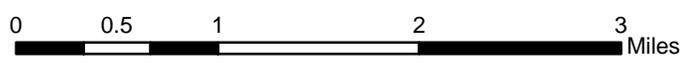
2013 exception roads
 Open
 Restricted
 Seasonal
 Temporary

2013 Extended Activity harvest unit areas

- Outside unit & heavy concentration
- Outside unit & moderate concentration
- Outside unit & light concentration
- Planned regeneration unit & heavy concentration
- Planned regeneration unit & moderate concentration
- Planned regeneration unit & light concentration
- Planned thinning unit & heavy concentration
- Planned thinning unit & moderate concentration
- Previous thinning unit & moderate concentration
- Salvage completed or omitted
- Township boundary
- Trust Land ownership

Original gross project area = 6,425 ac
 Extended activity gross project area = 3,435 ac

Original salvage area = 1,930 ac
 Extended activity salvage area = 601 ac***
 *** 6 acres additional to original see purple text on map



APPENDIX E
Supplemental EA Wildlife Analysis -- Westside Blowdown Salvage Project

Swan River State Forest
April 26, 2013

R. Baty

Description:

The project area involves state trust parcels on the west side of the SRSF (Section 26, Township 23 North, Range 18 West and Sections 22, 23, 26, 28, 34, Township 24 North, Range 18 West), and encompasses approximately 3,435 gross acres. An estimated 600 Mbf of salvageable sawlogs (approximately 3,600 tons total at 6.0 tons/ Mbf) would be harvested over a net stand polygon area within the affected parcels that encompasses approximately 601 acres (See attached map). This includes 6 additional acres of downed trees that were recently found, which were not a part of the original Westside Blowdown Salvage Project or analysis in that EA. Salvage across these acres would range from intensive harvest for removal of downed trees on some areas very heavily impacted by wind that previously possessed >40% mature overstory canopy cover (i.e., 181 acres) to lighter removal and pickup of individual scattered trees and groups of trees. Project activities are proposed to begin June 16, 2013 and continue until August 31, 2013. Within that period, the number of allowable operating days would be limited to 60. The narrowest operating window possible is being proposed to minimize impacts to grizzly bears during the critical fall period to the extent possible. Also, as much work as possible would be conducted in the months of July and August to avoid the later fall period when bears become increasingly vulnerable. Up to 6 contractors operating concurrently would be needed to accomplish proposed activities in the described operating window. Additional salvage activities could also occur opportunistically from November 16, 2013 to March 31, 2014 during the grizzly bear winter denning period as snow conditions allow, if additional salvage is necessary. Should any additional operations be required to complete the necessary activities, up to 30 additional salvage days could be used between June 15, 2014 and August 31, 2014 as allowed under the Swan Agreement. All efforts would be made to complete necessary activities in the non-denning period by August 31, 2013.

This assessment is based on visual observations made during a field review of the project area on July 18, 2012, reviews of recent 2011 aerial photography, photos taken by the project leader from a fixed-wing flight on July 16, 2012, and review of the White Porcupine Multiple Timber Sales Project Final EIS. Acreages were derived from pre and post event stand maps. Direct and indirect effects were analyzed on the 3,435-acre project area. Cumulative effects were analyzed within the 37,614-acre Porcupine Woodward Grizzly Bear Subunit.

Of the 1,930-acre total stand area affected by blowdown, 1,235 acres were associated with harvest units in the recent White Porcupine Multiple Timber Sales Project, most of which had been logged prior to the blowdown event. Habitat conditions in the 1,930-acre affected stand area range from areas of dense, mature forest with individual trees that were blown down or snapped off, to dense patches that were effectively flattened by the event (181 acres). Most of these particular sites would be very difficult for large, wide-ranging species such as elk and deer to use or move through. Of these 181 acres, approximately 37 occur in stands that were a part of the White Porcupine project.

Relationship of this Analysis to the White Porcupine Multiple Timber Sales Project Final EIS and the Westside Blowdown Salvage Project Environmental Assessment:

1,198 acres affected that were previously analyzed in the White Porcupine Multiple Timber Sales Project EIS provided habitat and cover for species such as Canada lynx, grizzly bears, fisher, pileated woodpecker, and big game. Approximately 37 acres of the total 1,235 blowdown acres in the White Porcupine Project Area were flattened and were out of prescription for planned units in that project. Given this situation, the effects on wildlife habitat regarding the "wind-affected" 1,198 acres would be the same, with the exception of the minor additional impacts that would occur associated with additional logging disturbance and removal of some snags and recruitment trees in previously logged units. That is, habitat removal and alteration for these species on the 1,198 acres of habitat affected by the wind event, remain consistent with those effects disclosed in the White Porcupine Multiple Timber Sales Project Final EIS and the Westside Blowdown Salvage Project EA (July 27, 2012). This analysis tiers to, and addresses potential for effects in addition to those disclosed in that EA.

Coarse Filter Assessment:

The majority of the project area occurs in a grizzly bear linkage zone, however, no activities would be planned in the spring period. Thus, minimal impacts to grizzly bears in spring would be anticipated. Habitat connectivity of mature forest was potentially influenced on the 181 acres of dense, mature forest that was heavily impacted and blown down by wind. Also, approximately 5 acres along 0.4 miles of perennial stream located in section 34 (T24N, R18W) was affected by the wind, which could impede travel by wildlife along the SMZ due to cover loss and high density of downed logs. Proposed salvage activities would not be expected to further reduce connectivity of mature forest habitat in the project area or cumulative effects analysis area as activities would be restricted to removal of down material only, or broken topped trees. Roads have potential to impede movements of some wildlife species and a number of open and restricted roads would be required for use to accomplish the proposed salvage activities. Use of these roads with motorized equipment would be expected to temporarily displace species otherwise using this geographic area for the duration of the project. See Table 1 below for road amounts that would be used by their type.

Old Growth Associated Species:

Within the gross project area, approximately 605 acres of old growth were present prior to the wind event on June 26, 2012. Of those acres, 319 (53%) suffered winds that blew down large trees in numbers that caused them to fall out of old growth status. These 319 acres would be additive to the 963 acres removed in the White Porcupine Timber Sales Project. Approximately 50 acres of old growth that suffered wind damage occurred in White Porcupine harvest units. 269 acres occurred outside of harvest units. The White Porcupine Timber Sales Project and wind event combined, resulted in a cumulative reduction of 1,282 acres of old growth across the Porcupine Woodward Subunit cumulative effects analysis area. This reduction in habitat and habitat attributes such as reductions in snags and coarse woody debris, would be additive to other timber sales on the Swan River State Forest that have affected acreages of old growth (eg. Goat Squeezer Timber Sale, Three Creeks Timber Sale, and the Scout Lake Timber Sale). Mechanized logging activities would likely disturb old growth associated species that may be using adjacent or nearby stands, however, activities would be short duration which would lessen additional risk. Given the scope and scale of additional acres of old growth lost due to the wind event, the short duration of the project, and the fact that no additional acres of old growth would

be removed by proposed salvage treatments, there would be a low level of adverse direct, indirect and cumulative effects to old growth associated wildlife species. See fisher and pileated woodpecker below in the fine filter analysis for additional details regarding old growth associated species.

Table 1. Road miles by type that would be used to conduct salvage activities on the Westside Blowdown Salvage Project on the Swan River State Forest.

Road Type	Miles
Open Roads	8.7
Restricted Roads	28.7
Seasonally Open Roads	2.6
Temporary Roads	0.7
Grand Total	40.7

The No Action Alternative:

Under the no action alternative, no project activities would occur in association with this proposal. No direct, indirect or cumulative impacts associated with salvage-related disturbance would occur. Concentrations of blowdown in some localized areas would make travel difficult for some species of wildlife, but would provide abundant structure and legacy material usable by species such as small mammals, snowshoe hares, and fishers for denning and foraging sites. No other habitat structures or vegetation associated with this proposal would be affected. Some blowdown removal could occur during the allowed 30 operator days per year of summer period salvage, as well as the winter period within several previously sold harvest units within the White Porcupine Timber Sales Project Area. Environmental effects associated with proposed harvest in those units were analyzed in the final EIS for that project, however, 37 additional acres of mature forested habitat were reduced by the wind event compared to those numbers in the Final EIS analysis. Effects to any species of concern are described in more detail in the fine filter analysis below.

Fine Filter Analysis:

TABLE W-1. THREATENED, ENDANGERED AND SENSITIVE SPECIES ANALYSIS FOR THE DNRC WESTSIDE BLOWDOWN SALVAGE PROJECT.

SPECIES	Assessment of Direct, Indirect, and Cumulative Effects Associated with the Proposed Action
Grizzly bear (<i>Ursus arctos</i>)	This project would require an exception and special management, which is allowed under subsection (3)(b)(iv) of the Swan Agreement. The proposed action may disturb and displace bears from habitats within the Porcupine-Woodward Subunit on SRSF that is scheduled to be Inactive during this

time. The risk of human-bear confrontations would also slightly increase due to harvest operations. No harvest activities would occur in the spring period. Project activities that would have greatest potential to affect grizzly bears would potentially run from June 16 through August 31, 2013. Up to 6 operators working concurrently would be needed to expedite the removal of down material in this primary operating window, which would create considerable noise disturbance throughout much of the Porcupine Woodward Subunit. Current Open and Total Road Densities in the Porcupine Woodward Subunit are 28% (>1mi/sq.mi.) and 72% (>2mi/sq.mi.) respectively. With the additional activity associated with the requested exception that would occur during the 2013 non-denning season, Open Road Density would temporarily increase from 28% to 42% (14% increase) for the duration of the activities (Figure 1.). As no additional restricted roads would be constructed with this exception, Total Road Density would remain at its current level of approximately 72%. Grizzly bears would likely be displaced from portions of this subunit during active operations. Some nighttime use by bears of this affected subunit would be possible. Hauling and other motorized activities would be required on the existing road system in the amounts shown in Table 1 above and no new open or restricted roads would be constructed as a part of the project. No additional patches of standing forest that provide hiding cover would be removed. However, the wind resulted in the loss of an additional 181 acres of mature forest cover that would be additive to the 1,614 acres of cover removed in the White Porcupine Timber Sales Project Area. At the scale of the cumulative effects analysis area, the combined result in the reduction of cover would total 1,795 acres representing 4.8% of the area. As a part of the exception and special management plan with the USFWS for mitigation, DNRC would restrict commercial activities and salvage harvest on 8,530 acres of the Goat Creek Subunit (Active); 3,241 acres in the Lion Creek Subunit; and 17,596 acres of the South Fork Lost Soup Subunit for the 2013 operating season (not including winter period). This mitigation would be required to help ensure that ample quiet areas would be present nearby that bears could move to, should the proposed action be implemented. The total mitigation area established through special management to minimize adverse impacts associated with this project would be 29,367 acres, which is approximately 8 times the size of the 3,435-gross salvage/disturbance area that would be affected. Activities proposed in this salvage project would create disturbance that would be additive to recent disturbance in the White Porcupine Timber Sales Project Area, and the active Scout Lake Timber Sale on the east side of the Swan Valley. Given the timing, the scope, limited duration, and proposed project mitigations, minor adverse direct, indirect, and cumulative effects to grizzly bears would be anticipated as a result of project activities and associated disturbance.

<p>Canada lynx Lynx (<i>Felis lynx</i>)</p>	<p>The proposed action may disturb and displace lynx from habitats within the project area and nearby lands within the Porcupine-Woodward Subunit on the SRSF. Hauling and other motorized activities would be required on the existing road system in the amounts shown in Table 1 above and no new open or restricted roads would be constructed as a part of the project. No additional patches of standing forest that currently provide lynx habitat would be removed. However, the wind resulted in the loss of an additional 181 acres of habitat that would be additive to the 1,235 acres of lynx suitable habitat removed in the White Porcupine Timber Sales Project Area. This would result in the combined reduction of 1,416 acres during the last 4 years in the cumulative effects analysis area. Of the 181 acres affected, 77 acres were "other" travel habitat, 45 acres were winter foraging habitat, and 59 acres were denning habitat. Approximately 145 of the 181 acres were in other stands not treated in the White Porcupine project. Under the Forest Management HCP, 1% of the identifiable "jack-strawed area" would be required to be retained, preferably in a location adjacent to stands of standing suitable lynx habitat. Four acres of flattened trees were identified to leave as material to serve as potential den sites over time, which exceeded the 1% HCP retention requirement. Many additional large snags and downed logs would be present across the project area as well following treatments. Following implementation of Alternative B in the White Porcupine Timber Sales Project, approximately 8,154 acres of suitable lynx habitat remain. The additional loss of 181 acres of potentially suitable habitat resulted in an additional 2.2% reduction on DNRC lands in the cumulative effects analysis area. Activities proposed in this salvage project would create disturbance that would be additive to recent disturbance in the Westside Blowdown Project Area, White Porcupine Timber Sales Project Area, and the active Scout Lake Timber Sale on the east side of the Swan Valley. Given the timing, the scope, limited duration, and proposed project mitigations for the project, minor adverse direct, indirect, and cumulative effects to Canada lynx would be anticipated as a result of project activities and associated disturbance.</p>
<p>Gray wolf (<i>Canis lupus</i>)</p>	<p>Wolves are present in the Swan Valley and may be present in portions of the project area at any time. Activities would occur outside of more sensitive denning periods in spring, and would pose minor risk to wolves. Wolves could be displaced by mechanical disturbance associated with proposed salvage activities, and if a rendezvous or den site were encountered during operations, activities would cease until appropriate site-specific mitigations could be developed and implemented. Minor associated adverse effects would be anticipated for local elk and deer herds that may use the project area and adjacent lands (See big game analysis below). Minor direct, indirect and cumulative effects to gray wolves would be anticipated as a result of the proposed activities.</p>

<p>Bald eagle (<i>Haliaeetus leucocephalus</i>)</p>	<p>The project area is over 4 miles northwest of the nearest known bald eagle nest at Van Lake, over 4.5 miles from a nest on Station Creek near Flathead Lake, and over 5 miles from a nest near Swan Lake. No large water bodies suitable for nesting are within 1 mile of the project area. Additionally, the project area is separated from the local nests by areas of unsuitable habitat. Thus, no direct, indirect, or cumulative effects to bald eagles would be expected to occur as a result of any alternative.</p>
<p>Black-backed woodpecker (<i>Picoides arcticus</i>)</p>	<p>No recently (less than 5 years) burned areas or widespread heavy insect infestations occur in the project area. Thus, no direct, indirect or cumulative effects to black-backed woodpeckers would be expected to occur as a result of any alternative.</p>
<p>Coeur d'Alene salamander (<i>Plethodon idahoensis</i>)</p>	<p>No moist talus or streamside talus habitat occurs in the project area. Thus, no direct, indirect or cumulative effects to Coeur d'Alene salamanders would be expected to occur as a result of any alternative.</p>
<p>Columbian sharp-tailed grouse (<i>Tympanuchus phasianellus columbianus</i>)</p>	<p>No suitable grassland communities occur in the project area. Thus, no direct, indirect or cumulative effects to Columbian sharp-tailed grouse would be expected to occur as a result of any alternative.</p>
<p>Common loon (<i>Gavia immer</i>)</p>	<p>Common loons have nested on Swan, Vann, and Flathead lakes in the past. None of these nests exist within 4.5 miles of the project area. No large lakes that could support loons exist within the project area. Thus, no direct, indirect or cumulative effects to common loons would be expected to occur as a result of any alternative.</p>
<p>Fisher (<i>Martes pennanti</i>)</p>	<p>Potential fisher habitat occurs in the project area. Large downed logs would be removed from an additional 6 acres that was recently identified in the original Westside Blowdown Salvage Project Area. No additional existing fisher habitat patches would be altered as a part of this project proposal and no new restricted or open roads would be constructed (Table 1). However, 181 acres of dense forest flattened by the wind event was potentially suitable upland fisher habitat, which is no longer present. This represents an additional reduction in habitat from the 1,067 acres removed in the White Porcupine Project Area and some affected adjacent lands to 1,248 acres, which have been altered in a 4 year period. The wind event reduced estimated amount of fisher habitat in the White Porcupine Project Area by 2.8% (64 acres of 2,326 acres), which is a reasonable approximation for much of the west side of the Forest and the Porcupine Woodward Subunit. An additional 5.1 acres of riparian fisher habitat was affected by the wind event in section 34, (T24N, R18W). The wind event created numerous large, broken topped snags of many tree species, across a very large area on the west side of the Swan Valley. Thus, large trees and downed logs suitable for denning and foraging are not likely to be limiting for fishers this general area for several decades to come, even if proposed treatments were completed. Many individual trees or groups of trees went down in areas that are inaccessible and would remain outside of the areas proposed for salvage. Various combinations of 4 large (>21in. dbh) downed logs, snags, and or live recruitment trees per acre would also be required</p>

	for retention to maintain large woody legacy material on site in each salvage unit to help maintain habitat attributes and structure in future forests. Minor adverse direct, indirect and cumulative effects to fishers would be anticipated, primarily related to motorized disturbance associated with short-term logging activities required to pick up downed logs and removal of accessible large, downed material across portions of the 601-acre area proposed for treatments.
Flammulated owl (<i>Otus flammeolus</i>)	No suitable dry ponderosa pine and Douglas-fir habitats occur within the project area. No direct, indirect or cumulative effects to flammulated owls would be expected to occur as a result of any alternative.
Harlequin duck (<i>Histrionicus histrionicus</i>)	No suitable high-gradient stream or river habitats occur in the project area. No direct, indirect or cumulative effects to harlequin ducks would be expected to occur as a result of any alternative.
Northern bog lemming (<i>Synaptomys borealis</i>)	No suitable sphagnum bogs or fens occur in the project area. Thus, no direct, indirect or cumulative effects to northern bog lemmings would be expected to occur as a result of any alternative.
Peregrine falcon (<i>Falco peregrinus</i>)	No suitable cliffs/rock outcrops occur within the project area or within 1 mile of the project area. Thus, no direct, indirect or cumulative effects to peregrine falcons would be anticipated as a result of any alternative.
Pileated woodpecker (<i>Dryocopus pileatus</i>)	Western larch/Douglas-fir stands occur in the project area that could provide habitat for pileated woodpeckers. No additional pileated woodpecker habitat would be altered as a part of this project proposal. However, 181 acres of dense forest that was flattened by the wind event was pileated woodpecker habitat, which is no longer present. This represents an additional reduction in habitat from the 1,046 acres removed in the White Porcupine Project Area and some affected adjacent lands to 1,227 acres, which have been altered in a 4 year period. The wind event reduced estimated amount of pileated woodpecker habitat in the White Porcupine Project Area by 2.7% (64 acres of 2,389 acres), which is a reasonable approximation for much of the west side of the Forest and Porcupine Woodward Subunit. The wind event created numerous large, broken topped snags of many tree species, across a very large area on the west side of the Swan Valley. Thus, large nesting trees and large, downed logs used for nesting and foraging sites are not likely to be limiting for pileated woodpeckers in this area for several decades to come. Various combinations of 4 large (>21in. dbh) downed logs, snags, and or live recruitment trees per acre would be required for retention to maintain large woody legacy material on site to help maintain habitat attributes and structure in future forests. Minor adverse direct, indirect and cumulative effects to pileated woodpeckers would be anticipated, primarily related to motorized disturbance associated with short term logging activities required to pick up downed logs.
Townsend's big-eared bat (<i>Plecotus townsendii</i>)	No suitable caves or mine tunnels are known to occur in the project area. Thus, no direct, indirect or cumulative effects to Townsend's big-eared bats would be anticipated as a result of any alternative.

<p>Big Game Elk (<i>Cervus elaphus</i>) Mule deer (<i>Odocoileus hemionus</i>) White-tailed deer (<i>Odocoileus virginianus</i>)</p>	<p>No MTFWP-identified winter range occurs within the project for any of these three species. Some individual animals may be disturbed and displaced by logging disturbance during the summer and winter periods. Appreciable additional effects on elk security would not be anticipated as no additional open or restricted roads would be constructed. Disturbance associated with blowdown removal across the 601 affected acres would be additive to that anticipated in the Westside Blowdown Salvage Project, and White Porcupine Timber Sales project. Project activities would occur seasonally, would be short term and would be fully completed by August 31, 2014. The majority of additional impacts in the project area can be attributed to the wind event, which caused minor loss of overhead cover on approximately 181 acres. Overall, minor adverse direct, indirect and cumulative effects would be expected due to proposed logging disturbance. However, some minor offsetting benefits would be expected from removing concentrations of down trees, which would facilitate travel of big game animals in areas heavily impacted by wind.</p>
--	---

Figure 1.

