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DNRC - Trust Land Management Division

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CHECKLIST ENVIRONMENTAL ASSESSMENT (CEA)

DEC 24 2003

**LEGISLATIVE ENVIRONMENTAL**

**POLICY OFFICE**

**D.N.R.C.**

Project Name: **Red Salvage Project**

Proposed Implementation Date: **November of 2003 through August of 2004**

Proponent: **Department of Natural Resources and Conservation (DNRC)**

Type of Proposed Action: **Extensive bark beetle attacks on merchantable Douglas-fir trees have occurred on Swan River State Forest. DNRC proposes to salvage approximately 100 thousand board feet (MBF) of dead and dying timber that has been attacked by bark beetles, diseases (primarily blister rust) or damaged by wind (trees with broken tops and/or the root system is pulled out of the ground). This salvage would take place in 1 harvest unit established in Section 32, T24N-R17W. Approximately 27 acres would be affected by this proposal.**

The salvage harvest established and sold under this proposal would have 3 primary objectives:

- **Generate revenue for the Common Schools Trust Fund by recovering the value from dead timber before significant value is lost through firewood theft or wood deterioration.**
- **Reduce the risk of continued insect and disease infestations in healthy trees by removing trees infested with bark beetles or blister rust.**
- **Reduce wildfire fuels and hazard.**

Under this proposal, salvage criteria would be used to minimize environmental impacts that could occur with this permit (see Appendix D). Criteria elements include, but are not limited to:

- **New roads would not be constructed;**
- **harvesting would not occur in streamside management zones (SMZ);**
- **harvesting would not occur within classified old-growth stands, as defined by the 1992 *Green et al* definition;**
- **Swan Valley Grizzly Bear Conservation Agreement (SVGBCA) requirements would be met;**
- **An average of 2- 5 large snags (>21" dbh or the next largest size class) would be retained in the harvest unit and;**
- **Fifteen to twenty tons per acre of downed woody material larger than 3 inches in diameter shall be left scattered throughout the sale unit;**

The salvage harvest established under this proposal would not occur within existing or proposed timber sale harvest units or within areas withheld from a proposed timber sale project area for the purpose of environmental mitigations or conservation easements.

Location: **Section 32 T24N, R17W; P.M.M. (see Appendix A).**

County: **Lake**

## I. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS, OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.

Scoping letters for this project were mailed on July 1, 2003 to landowners, agency representatives, various specialists, and all interested parties, including the Tribal Historic Preservation Office, Friends of the Wild Swan and the Montana Environmental Information Center. Scoping letters were also sent to the Bigfork Eagle and the Daily Interlake. Comments were accepted until July 20, 2003; 1 response was received from the The Confederated Salish and Kootenai Tribes of the Flathead Nation.

All identified concerns are addressed in this CEA. This CEA has been sent to the organizations or individuals that provided comments or expressed interest in the proposed project.

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

None.

3. ALTERNATIVES CONSIDERED

The following alternatives were considered for this project:

- No-Action Alternative - There would be no salvage of dead and dying timber in the proposed area. No funds would be generated for the School Trusts and the risk of insect infestation to healthy trees in the project area would not be reduced. Current management activities such as road maintenance, fire suppression, and noxious weed control would continue.
- Action Alternative - DNRC would identify and sell one salvage permit within Swan River State Forest as shown under the specifications in the proposed action.

## II. IMPACTS ON THE PHYSICAL ENVIRONMENT

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactable, or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?

*Yes - negligible impacts may occur - explanation follows:*

*Soils in the harvest unit are characterized as loess influenced by volcanic ash with surface layers 7-12 inches thick. This soil and landtype are well suited to timber production and harvest using conventional ground based methods. Site productivity may be reduced due to compaction and/or displacement. The level of impacts can be reduced by (1) operating only on dry (<20% moisture at 4" depth), frozen or snow covered soils, (2) maintain skid trail spacing at least 75 feet apart, and (3) following all applicable forestry BMP's.*

5. WATER QUALITY, QUANTITY, and DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality? Are cumulative impacts likely to occur as a result of this proposed action?

*NO, impacts are not expected - explanation follows:*

*Due to the small scale of the project, the location of the harvest unit in relation to streams and the general slope of the harvest unit, it is unlikely that adverse impacts would occur from the implementation of the action alternative given that all applicable forestry BMPs are properly applied.*

6. AIR QUALITY: Will pollutants or particulate be produced? Within the project area are zones (Class 1 airshed) influenced by air quality regulations? Are cumulative impacts likely to occur as a result of this proposed action?

*YES, negligible impacts are expected - explanation follows:*

#### EXISTING ENVIRONMENT

The project area is within Montana Airshed 2 and is not within a Class I Airshed. Some road dust is generated on forest roads during dry conditions in the summer. Smoke is generated in the spring and fall by slash burning operations. Air quality within Airshed 2 is considered good.

#### IMPACTS

- No-Action Alternative - Road dust during dry summer months and smoke from spring/fall slash burning would still be generated.
- Action Alternative - The timing of salvage-related activities should result in little or no additional road-dust impacts. Slash burning could cause temporary reductions in air quality; however, conducting burning within the Montana Airshed Group guidelines and restrictions would minimize impacts to air quality.

7. VEGETATION COVER, QUANTITY, and QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present? Are cumulative impacts likely to occur as a result of this proposed action?

*Yes, negligible impacts may occur - explanation follows:*

#### EXISTING ENVIRONMENT

Threatened, endangered, or sensitive plants (T&E) or cover types have been identified within the project area (MNHP 2000). No effects to T&E plants are expected since the wetlands that contain these plants would not be entered or indirectly affected by this project. Old-growth timber, as defined by Green et al, does not exist within the project area. This

stand is losing it's potential for recruitment for old growth mainly due to the mortality of all or most of the large diameter Douglas-fir. Appendix H contains the Swan River State Forest 'Stand Sampling Protocol for Determining Old Growth Status According to Green et al'. The Douglas-fir component of this stand has been or is currently being attacked by the Douglas-fir bark beetle. The Douglas-fir attacked are usually the older and larger diameter trees. Not all of the larger Douglas-fir are successfully attacked by the bark beetle. The Douglas-fir bark beetle infestations in this stand occur in pockets and scattered trees surrounding the pockets of infestation. The size of the pockets depends on the degree of infestation. Eighty to ninety percent of the Douglas-fir in this stand has been attacked by the bark beetle. The Douglas-fir bark beetle is significantly altering stand composition. This stand has a component of older western larch, which can be, but is usually not, affected by the Douglas-fir bark beetle. Western larch is not regenerating in these stands. Grand fir is the main species regenerating successfully. The density of the stand is affected by the degree of loss of the Douglas-fir. As more of the larger/older Douglas-fir die in the stand, the stand tends to become more open.

#### IMPACTS

- No-Action Alternative - Salvage of dead and dying timber in the proposed area would not occur. No funds would be generated for the School Trusts and the risk of infestation to healthy trees in the project area would remain high. Wildfire fuel load would increase significantly as dead trees decay and fall. Current management activities would continue such as road maintenance, fire suppression, and noxious weed control.
- Action Alternative - This alternative would remove dead and dying timber from Section 32, T24N-R17W within the Swan River State Forest. Douglas-fir/western larch, ponderosa pine, and grand fir are the predominant species within the salvage area. The project area consists of mature stands of timber over 100+ years of age. Salvaging in stands of mature timber would reduce the dead and dying Douglas-fir component within the stand. The effects to stand composition, density, and stand structure would be:
  - a) The proposed project would alter stand composition by removing trees that were or are currently being affected by the bark beetle.
  - b) The proposed action would further alter stand composition by removing a portion of the existing snags and future down woody material.
  - c) The density of the stand is currently being affected by the bark beetle as openings are being created by the dead and dying trees. The development of these openings would be hastened by harvesting the trees proposed by this action.
  - d) The proposal would reduce stocking density of snags.

An overstory of dominant and codominant trees consisting primarily of western larch, Douglas-fir, and ponderosa pine with an occasional western white pine, and grand fir would be retained. There is an understory that consists primarily of grand fir.

The direct, indirect, and cumulative impacts comply with the Department's, Administrative Rules for State Forest Land Management (ARM36.11.401 through 450). The Rules implement the philosophy and standards of the State Forest Management Plan (SFLMP), which states: "Our premise is the best way to produce long-term income for the trust is to manage intensively for healthy and biologically diverse forests. Our understanding is that a diverse forest is a dynamic forest that will produce the most reliable and highest long-term revenue and primary tool for achieving biodiversity objectives". While salvaging would reduce snag density and coarse down woody material no significant impacts are expected since 15 to 20 tons per acre of down woody material, 3 inches and larger, would be left. Snag retention would meet or exceed the SFLMP per acre requirements. By following the SFLMP and the Rule standards for retention of snags and down woody material cumulative impacts should be negligible.

Requiring logging equipment to be cleaned of weed parts and mud prior to entering the site would mitigate the encroachment of noxious weeds. Disturbed roadsides and landings would be revegetated with site-adapted grasses.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds, or fish? Are cumulative impacts likely to occur as a result of this proposed alternative?

*Yes, negligible impacts may occur - explanation follows:*

#### EXISTING ENVIRONMENT

A variety of birds, and wildlife species, including grizzly bears, and big game species, inhabit or travel through the project area. Mammals and birds use this area for denning, cover, travel, nesting, and feeding. The project area consists mainly of a low-elevation, valley bottom ridge. The project area contains moist (mixed conifer, western larch/Douglas-fir, western white pine) and dry (ponderosa pine) cover types.

#### IMPACTS

- No-Action Alternative - Salvage of dead and dying timber in the proposed area would not occur. No funds would be generated for the School Trusts and the risk of infestation to healthy trees in the project area would remain. Big game travel and use would be impeded by an accumulation of down woody material. Current management activities would continue such as road maintenance, fire suppression, and noxious weed control.

- Action Alternative - Since the trees proposed for harvest are dead or will be within the year, live-tree canopy cover is not expected to decrease over what would be expected under the no action alternative. Some of the understory would be affected when the timber is skidded to a landing. Bull trout would not be affected by the proposed alternative because the alternative would have no effect on water quality and quantity within the watershed of the salvage area.

Habitat structure for some species would be affected by the removal of the proposed timber on 27 acres. Retaining at least an average of 2 to 5 large snags (>21" dbh or the next largest available) per acre and 15 to 20 tons of down woody material per acre would continue to provide some structure in these stands. Restricted roads provide security for large mammals and would remain closed to public motorized use during harvesting activities. All road barriers would be replaced at the completion of harvesting activities. No new roads would be built; existing skid trails would be used where possible.

The above-described effects would be cumulative to the Goat Squeezer Timber Sale. However, retention of snags and live large trees in this unit and in the Goat Squeezer Units along with dead and dying trees in adjacent stands and elsewhere on the Swan River State Forest, especially in old growth stands, would continue to provide dead wood structure for wildlife species.

#### BIG GAME

Montana Department of Fish, Wildlife and Parks (DFWP) delineated major winter ranges for big game species in the state. The project area has been identified as elk winter range. White-tailed deer, elk, mule deer, and moose use the area in the non-winter period. Removal of dead and dying trees are not expected to change canopy cover over what is expected under the No Action Alternative because these trees are not or will not be contributing to the canopy closure. Removal of these trees could increase access to forage and increase travel through the project area in the future by limiting downed wood accumulations. The effects to big game are expected to be negligible.

9. UNIQUE, ENDANGERED, FRAGILE, or LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Are there sensitive species or species of special concern? Are cumulative impacts likely to occur as a result of this proposed action?

*Yes, negligible impacts may occur - explanation follows:*

#### EXISTING ENVIRONMENT

Threatened, endangered, and sensitive species and habitats contained within the project area include the bald eagle, grizzly bear, wolf, and

piledated woodpecker. Threatened, endangered, and sensitive species plants are usually found in wetlands areas. See APPENDIX B for Threatened, Endangered, and Sensitive wildlife information.

#### IMPACTS

- No-Action Alternative - There would be no salvage of dead and dying timber in the proposed area. No funds would be generated for the School Trusts and the risk of insect infestation to healthy trees in the project area would not be reduced. Current management activities such as road maintenance, fire suppression, and noxious weed control would continue. Under this alternative no additional disturbance to gray wolves or grizzly bears would occur. Retention of large numbers of snags in the area would contribute to piledated woodpecker and fisher habitat.
- Action Alternative - Bald eagle, Canada lynx, gray wolf, and grizzly bear inhabit the Swan River State Forest. The proposed project is not expected to affect bald eagles or Canada lynx since no suitable habitat for these species occurs in the project area. Disturbance to grizzly bears could increase if the project occurred during the nondenning season. The project would adhere to the agreements made in the SVGBCA, thereby limiting the effects to an acceptable level. According to the SVGBCA, salvage harvests in inactive subunits from 16 June through 31 August would be restricted to two consecutive weeks or thirty days in the aggregate. Contractors would be prohibited from carrying firearms while on duty. No preferred habitat would be affected. No gray wolf dens have been identified in or near the project area, however, the potential for new dens to be developed in the project area exists. Since harvests would occur during the winter (16 November-31 March) or after 15 June, no den disturbance is expected. If a denning or rendezvous site were identified during operations, DNRC would implement mitigations to reduce the impacts to the den or rendezvous site. Salvage harvesting would not be permitted in wetlands; therefore, wetlands would not be affected by the proposed action.

Salvage harvesting would alter piledated woodpecker habitat. Removal of dead and dying trees could reduce feeding and nesting sites for this species. Retention of some snags and downed wood in the harvest units, along with those available in adjacent stands, would continue to provide feeding and nesting habitat in the area. Reduction of this structure is expected to be minor because of the small area and the retention of some snags and downed wood. The reduction of feeding structure would be cumulative to prior timber harvests and the planned Goat Squeezer Timber Sale.

10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological, or paleontological resources present?

No. DNRC Archaeologist Patrick Rennie conducted a field review of this site on October 16, 2003. No historical, archaeological, or

paleontological resources have been found in the project area, therefore no impacts are expected.

11. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light? Are cumulative impacts likely to occur as a result of this proposed action?

*No impacts are expected.*

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR, or ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Are cumulative impacts likely to occur as a result of this proposed action?

*No impacts are expected.*

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans, or projects on this tract? Are cumulative impacts likely to occur as a result of other private, state, or federal current actions within the analysis area, or from future proposed state actions that are under Montana Environmental Policy Act (MEPA) review (scoping) or permitting review by any state agency w/n the analysis area?

*Yes, negligible impacts may occur - explanation follows:*

#### GRIZZLY BEARS

Cumulative effects of timber management and road construction on Swan Valley were analyzed in the EA and Biological Opinion on the SVGBCA (USFWS, 1995a and 1995b). Timber harvesting and road use related to the proposed alternative would be conducted in accordance with the SVGBCA (USFWS and others, 1997).

Other Proposed Projects Within the Analysis Area: This proposed permit lies adjacent to the Goat Squeezer Project Area. No harvesting will be conducted within the Goat Squeezer Project Area with this proposed permit.

### III. IMPACTS ON THE HUMAN POPULATION

14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?

*No impacts are expected.*

15. INDUSTRIAL, COMMERCIAL and AGRICULTURAL ACTIVITIES, and PRODUCTION: Will the project add to or alter these activities?

*Negligible positive impacts are expected.*

*There would be minor economic impacts to local mills.*

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number. Are cumulative impacts likely to occur as a result of this proposed action?

*Negligible positive impacts are expected.*

17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue? Are cumulative impacts likely to occur as a result of this proposed action?

*Negligible positive impacts are expected.*

18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed? Are cumulative impacts likely to occur as a result of this proposed action?

*No impacts are expected.*

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, United States Forest Service (USFS), BLM, Tribal, etc., zoning or management plans in effect?

*Yes, impacts may occur - explanation follows:*

#### EXISTING ENVIRONMENT

The SVGBCA was adopted in December 1995 and revised in 1997 by the United States Fish and Wildlife Service (USFWS), Flathead National Forest (FNF), Plum Creek Timber Company, and DNRC. The SVGBCA (*USFWS and others, 1997*) identifies acceptable conditions for the activities of timber and road management.

The SFLMP was adopted by DNRC in June 1996. The Plan directs future timber and road activities on School Trust lands. Prior to implementing the plan, a programmatic environmental impact statement was completed. On March 14, 2003, DNRC adopted administrative rules tied to SFLMP. SMZ Laws and Rules were adopted on March 15, 1993 and revised in August 2002.

#### IMPACTS

- No-Action Alternative - Management activities would continue. Other salvage projects would be proposed to remove dead and dying timber from various areas within Swan River State Forest under separate EAs. Any proposed salvage projects would comply with all conditions of the SVGBCA (*USFWS and others, 1997*).
- Action Alternative - The proposed salvage permits would comply with all state and federal laws and agreements made in the SFLMP and the SVGBCA (*USFWS and others, 1997*).

20. ACCESS TO AND QUALITY of RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract? Are cumulative impacts likely to occur as a result of this proposed action?

*No impacts are expected.*

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing? Are cumulative impacts likely to occur as a result of this proposed action?

*No impacts are expected.*

22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or community's possible?

*No disruption is expected.*

23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?

*No impacts are expected.*

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES: Is there a potential for other future uses for the area other than for timber management? Is future use hypothetical? What is the estimated return to the trust? Are cumulative impacts likely to occur as a result of this proposed action?

*No impacts are expected.*



#### IV. FINDING

##### 25. ALTERNATIVE SELECTED

Two alternatives are presented and fully analyzed in the CEA:

- No Action Alternative - includes existing activities, but does not include a timber sale salvage permit.
- The Action Alternative proposes salvage harvesting approximately 100 thousand board feet (MBF) of timber from about 27 acres.

I have reviewed the correspondence from the public and information presented in the CEA. For the following reasons, I have selected the Action Alternative without additional modifications:

- The selected Action Alternative meets the 3 primary objectives listed in the checklist.
- 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-owned lands that are principally valuable for the timber that is on them (77-1-402 MCA). DNRC manages these lands according to the philosophy and standards in 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 proposal provides an important mechanism to manage intensively for healthy and biologically diverse forests in a way that harvests dead 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, policies, and standards applicable to this type of proposed action.
- The Action Alternative will not preclude analysis of future actions on State Land.
- Mitigations and specifications identified in Appendix C of the EA will be implemented as prescribed.
- The proposed activities are similar to past projects on State 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 the decisions.
- Evaluation of the potential impacts of the proposed Red 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 analysis of impacts.

EIS     more detailed EA     No Further Analysis

CEA Approved by: Dan Roberson  
Name

  
Signature

Unit Manager: Swan River State Forest  
Title

11/20/03  
Date