

**Environmental Assessment Screening Report-
Fire Salvage Project for Barney Lake Fire 2004**

Prepared by:

**Government of Yukon
Forest Management Branch
July 2005**

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EXECUTIVE SUMMARY

This environmental assessment screening report has been completed for the proposed forest salvage in the Barney Lake area that was burned in 2004. The area for the Barney Lake fire was approximately 51,900 ha. (exceeding a volume of 5,190,000 m³); although an estimated 1,043 ha. or 2% of the area has the potential for operational timber harvesting planning. The total gross volume within the potential operating units was estimated at 71,000 m³ (with a volume of 16,000 m³ in stands exceeding 17 m in height).

The Director of the Yukon Forest Management Branch is delegated as the representative of the Responsible Authority (the Minister) for purposes of carrying out environmental assessments under Section 4.1 of the *Environmental Assessment Act* for forest management projects. Given the mitigations provided in this screening report, the Responsible Authority is satisfied that this project is not likely to cause significant adverse environmental effects. Accordingly, the *Environmental Assessment Act* determination is that, subject to the mitigation requirements contained in this screening report, this project is hereby authorized and may proceed.

1. TOMBSTONE DATA

| | |
|----------------------------------|--|
| Proponent Name | Yukon Government Forest Management Branch |
| Contact Information | Gary Miltenberger, Director, Forest Management Branch Box 2703 (K-918); Whitehorse, YT Y1A 2C6 Phone: (867) 456-3838 Fax: (867) 667-3138 |
| Project Title | Environmental Assessment Screening Report-Fire Salvage Project for Barney Lake Fire-2004 |
| Physical Work or Activity | Timber harvesting and all associated activities |
| Multiple Activity | No |
| E. A. Start Date | May 9, 2005 |
| E. A. Finish Date | July 12, 2005 |
| E. A. Determination | This project is not likely to cause significant adverse environmental effects (s. 16) of <i>EAA</i> . |
| Subject Descriptor | Forestry |
| Project Category Code | Point |

2. RESPONSIBLE AUTHORITY IDENTIFICATION

| | |
|--|--|
| Lead Responsible Authority | Department of Energy, Mines and Resources |
| Responsible Authority Contact Information | c/o Gary Miltenberger, Director, Forest Management Branch Box 2703 (K-918) Whitehorse, YT Y1A 2C6 Ph: (867) 456-3838 Fax: (867) 667-3138 |
| Other Responsible Authority | None identified |
| Date EAA Coordination Regulations Triggered | Not applicable |
| Project Trigger | (s. 8) Inclusion List Regulations; timber volume >1,000 m ³ |
| Lead Type of Approval | Commercial Timber Permits |
| Status of Approval | Ongoing |
| Integrated Screening | No |
| Other Triggers | None |
| Other Types of Approval | None |
| Project File Location | Forest Management Branch, Whitehorse, YT |

3. PROJECT LOCATION

| | |
|---|---|
| Region | Watson Lake |
| NTS Map #s | 105A11 |
| Geographic Location Name | Barney Lake |
| Latitude/Longitude | Approximately 60° N./127°25' W. |
| Watershed/Drainage Region | Liard Watershed |
| Nearest Community | Lower Post, BC and Watson Lake, YT |
| First Nation Traditional Territories | Kaska Dene, Liard First Nation, Daylu Dena, Ross River Dene, Kaska Tribal Council |
| Surrounding Land Status | Crown |
| Special Designation | None |

4. PROJECT DESCRIPTION

In 2004, 44 fires within the Kaska Traditional Territory (KTT) burned an estimated 390,000 ha. One of these fires was located north of Barney Lake, a transboundary British Columbia/Yukon lake, and is located approximately 80 km east of Watson Lake, YT (approximately 60°N./127°25'W.). The estimated area of the Barney Lake fire was 51,900 ha. (519 km²) with an estimated 1,043 ha. or approximately 2% having the potential for operational timber harvesting planning.

A Fire Salvage Technical Working Group was formed in 2005 to plan potential salvage forest harvesting in the KTT. The Barney Lake fire was one of two fires in the KTT that was chosen as a potential salvage forest harvesting and development planning. The steps (initial reconnaissance, development planning and operational planning) involved in the timber salvage planning process are outlined in section 3.0 (pg. 3) of the *Fire Salvage Project for Barney Lake Fire of 2004* (Appendix 1; Fire Salvage Technical Working Group 2005).

In the initial stage of the development planning process, project objectives and criteria were proposed. These objectives included:

- Identifying an economic wood supply and opportunity while ensuring that the social and environmental values of the area are respected. The planning objective would be met if the options were economically viable socially accepted and environmentally sound.
- Consider fire and the landscape surrounding it. This is important to ensure habitats, key features and linkages are maintained in terms of the environmental and future economics of burned forest and adjacent unburned forest.
- Identify areas for Operational Planning (site plans).
- Complete Environmental Assessment of Forest Development Plan (FDP).

The criteria included:

- Best growing sites first
- Prompt regeneration strategies
- Soil conservation strategies
- Protection of wetlands and riparian areas
- Avoidance of sensitive terrain (complex and steep areas)
- Operable land base identification
- Minimize roads
- Winter logging preferred season of operations

The following general principles were considered during the planning process:

- Forest fuels burn at differing rates and intensities producing a complex mosaic. On large fires, the mosaic provides opportunities to maintain natural areas and some of the original fire attributes while identifying potential areas for salvage.
- Fire is a natural disturbance event that has to be considered along with the proposed harvesting which is an additive human caused disturbance.

- Fire Skips are not the only key habitat features in a fire - but they are perhaps the most easily identified. All areas of the fire will likely be valued habitat as successional processes occur.
- Residual trees can be isolated in a patch or scattered over an area as a matrix.
- Connectivity Corridor, the operating areas as well as the adjacent remaining forested and non-forested areas should positively interact for forest ecosystems to exist and function. The connectivity corridor is designed to help strengthen this relationship.
- Generally, the salvage opportunity for lumber will decrease over a 3 year period. If the interest is fiber for uses other than lumber, the loss of value is much more gradual and therefore fiber harvest can occur over much longer time frames.
- Access planning requires a vision or considerations beyond the time span required for fire salvage. An initial access into the area will have implications on forest harvesting in the adjacent forested areas as well as potential impacts on other values.
- The land base has been used by other people and care must be taken to protect past values and integrate present and future uses. An archeological potential assessment was undertaken to identify potential heritage sites.

5. DESCRIPTION OF ENVIRONMENT

The project area is in Liard basin, an ecoregion that spans the British Columbia/Yukon border to incorporate the Liard Plain, a broad, rolling, low-lying area mantled with glacial drift and outwash deposits in which the Liard River is entrenched (National Ecological Framework for Canada 2005).

The ecoregion is characterized by extensive stands of boreal forest composed of lodgepole pine (*Pinus contorta*), white spruce (*Picea glauca*), black spruce (*Picea mariana*) and trembling aspen (*Populus tremuloides*). Dry sites support lodgepole pine; moist sites have black spruce and larch (*Larix* spp.) with Labrador tea (*Ledum groenlandicum*), horsetail (*Equisetum* spp.) (National Ecological Framework for Canada 2005). The forest associated with the Barney Lake fire include a variable species mixture of lodgepole pine, white spruce, black spruce, alpine fir (*Abies amabilis*) and balsam poplar (*Populus balsamifera*) with either a poor (10-14 m) to moderate (15-19 m) site class.

The southern boundary of the fire borders Barney Lake, a transboundary British Columbia/Yukon lake (Appendix 3). A lake study was completed in by the BC Ministry of Environment in 1983 and lake chub (*Couesius plumbeus*) and white suckers (*Catostomus commersonii*) were documented (Karanka 2005 pers. comm.). Slimy sculpin (*Cottus cognatus*) was documented in 1982 (BC Ministry of Sustainable Resource Management 2005).

Characteristic wildlife in the greater Liard Basin includes moose: (*Alces alces*), black bear (*Ursus americanus*), wood bison (*Bison bison*), caribou (*Rangifer tarandus*), marten (*Martes americana*), beaver (*Castor Canadensis*), muskrat (*Ondatra zibethica*), Snowshoe hare (*Lepus Americanus*), ruffed grouse (*Bonasa umbellus*) and various owl, raptor, passerine and waterfowl species.

6. PROJECT CONSULTATION/REFERRAL OF PROJECT DESCRIPTION

An email was sent to various interest groups, stakeholders and First Nations on May 6, 2005. The purpose of this email was to make the groups aware of the upcoming environmental assessment for the Barney Lake fire area and to ask the groups whether they would like to review the project description.

The Forest Management Branch received ten requests to obtain the project description. Although the Watson Lake District Office, the Council of Yukon First Nations the First Nations whose Traditional Territories lie within proximity to the project area did not request to review the project description, they received one in the mail.

The review period was from May 9-June 9, 2005 and comments were provided to the Forest Management Branch by Government of Yukon-Archaeology/Heritage Resources, Canadian Wildlife Service, Canadian Parks and Wilderness Society-Yukon Chapter, Southeast Proper Land Use Society, Yukon Conservation Society and Yukon Forestry Association (section 7 and 8; Appendix 2).

7. DISTRIBUTION LIST

| Organization | Contact Person | Incoming Comments |
|--|------------------------------------|--------------------------|
| FEDERAL GOVERNMENT | | |
| Environment Canada/Canadian Wildlife Service | Scott Herron | Received June 13, 2005. |
| YUKON GOVERNMENT | | |
| EMR-Client Services and Inspections | Richard Potvin | No response. |
| EMR-Land Use | Marg White | No response. |
| Community Services | Ken Colbert | No response. |
| Economic Development | Lise Farynowski | No response. |
| Environment-Environmental Affairs Section | Ken Kiemele | No response. |
| Tourism and Culture-Yukon Archaeology | Ruth Gotthardt | No response. |
| INTEREST GROUPS | | |
| Terry Wilkinson | Box 228 Watson Lake, YT Y0A 1C0 | No response. |
| Yukon Trappers Association | Carmen Nantel | No response. |
| Canadian Parks and Wilderness Society | Theresa Gulliver | Received June 9, 2005. |
| Yukon Conservation Society | Karen Baltgailis | Received June 10, 2005. |
| Yukon Forestry Association | Jean Francois Nantel | Received June 6, 2005. |
| FIRST NATIONS | | |
| Daylu Dene | Lower Post, BC | No response. |
| Liard First Nation | Watson Lake, YT | No response. |
| Council of Yukon First Nations | Whitehorse, YT | No response. |
| Kaska Dene Council | Watson Lake, YT | No response. |
| Kaska Tribal Council | Watson Lake, YT | No response. |
| Ross River Dene Council | Ross River, YT | No response. |

8. STAKEHOLDER COMMENTS RECEIVED BY THE FOREST MANAGEMENT BRANCH

| GROUP | COMMENTS ON PROJECT DESCRIPTION | RESPONSE TO COMMENTS BY FOREST MANAGEMENT BRANCH |
|---|---|--|
| Yukon Government, Archeology and Heritage Resources | An archaeological impact assessment is required if any ground disturbance is planned in areas of high archeological potential. | An archaeological impact assessment shall be conducted if any ground disturbance is planned in areas of high archeological potential. |
| Canadian Parks and Wilderness Society-Yukon Chapter | Revise the way retention ranges are chosen. Rather than basing retention ranges on unmerchantable wood that cannot limit potential salvage operations, develop an ecological rationale for retention design. Percentage of reserves should not be < 25% as per FSC certification. | Retention ranges from 10-50% in Units 1 & 3, while the retention ranges from 10-30% in Unit 2. Once site plans have been developed, retention specifications will be discussed in more detail. The entire fire disturbance area is considered the project boundary; therefore, the blocks within the OUs that will actually be salvaged is approximately 2% of the fire area. |
| Canadian Parks and Wilderness Society-Yukon Chapter | Apply specific, appropriate-sized buffers (including reserve and management zones) around all watercourses and bodies and wetlands within the entire burn areas and ensure OUs are orientated around all buffers. | According to THPOG (DIAND 1999), the riparian management area consists of a riparian reserve zone and a riparian management zone. The riparian reserve zone is a zone where no logging shall be permitted, while logging may occur in the riparian management zone as long as the integrity of the reserve is protected; windthrow in the reserve zone is protected; wildlife attributes are identified and protected and visual screening for wildlife is maintained. |
| Canadian Parks and Wilderness Society-Yukon Chapter | Survey potential OUs on the ground during the summer months or by aerial photos, with qualified biologists and hydrologists to accurately determine stream, RRZ and RMZ locations based on ecological considerations. Do not allow any logging within the RMZ or RRZ. | Stream reaches within or adjacent to the blocks shall be classified. The riparian management area consists of a riparian reserve zone and a riparian management zone and the riparian reserve zone is a zone where no logging shall be permitted, while logging may occur in the riparian management zone as long as the integrity of the reserve is protected; windthrow in the reserve zone is protected; wildlife attributes are identified and protected and visual screening for wildlife is maintained (DIAND 1999). |

8. STAKEHOLDER COMMENTS RECEIVED BY THE FOREST MANAGEMENT BRANCH

| GROUP | COMMENTS ON PROJECT DESCRIPTION | RESPONSE TO COMMENTS BY FOREST MANAGEMENT BRANCH |
|---|---|--|
| Canadian Parks and Wilderness Society-Yukon Chapter | Ensure that Unit 3 is >200 m from the pending Coal River SMA boundary or remove Unit 3 entirely from the development and operational planning considering its proximity to the pending lower Coal River SMA and contribution to increasingly high road density. | Currently there is no final agreement between the Kaska and Yukon Government and firm boundaries for the pending SMA have not been established. The Kaska Forest Resource Stewardship Committee and the Fire Salvage Technical Working Group have approved this FDP. Unit 3 shall not be removed from the plan. |
| Canadian Parks and Wilderness Society-Yukon Chapter | Remove Unit 1 from planning due to its lack of stands >17 m height. | In Unit 1, there was no area identified as >17 m in height. In section 6.1 of the General Development Plan Guidelines, it states that stands within the units identified as having height >17 m will be targeted first for operational planning. Those (like Unit 1) that are identified as not having trees >17 m may contain additional harvestable volume within the smaller stands. A field assessment would be necessary to identify the location and quantity of volume prior to any harvesting. |
| Canadian Parks and Wilderness Society-Yukon Chapter | Reduce the road density of the operating units so proposed mainline and spur roads combined do not exceed a density of 0.45 km/km ² . | References to 0.45 km/km ² have been identified as associated to special management areas in other jurisdictions and national parks. It would be very unlikely that 0.45 km/km ² as a road density could be applied for a fire salvage project; however, access shall be minimized as much as possible, with <5% of the operating unit area for the 3 units containing roads or landings. |
| Southeast Yukon Proper Land Use Society | No logging in riparian management zones. | According to THPOG (DIAND 1999), the riparian management area consists of a riparian reserve zone and a riparian management zone. The riparian reserve zone is a zone where no logging shall be permitted, while logging may occur in the riparian management zone as long as the integrity of the reserve is protected; windthrow in the reserve zone is protected; wildlife attributes are identified and protected and visual screening for wildlife is maintained. |

8. STAKEHOLDER COMMENTS RECEIVED BY THE FOREST MANAGEMENT BRANCH

| GROUP | COMMENTS ON PROJECT DESCRIPTION | RESPONSE TO COMMENTS BY FOREST MANAGEMENT BRANCH |
|---|--|---|
| Southeast Yukon Proper Land Use Society | No reference of the Coal River Special Management Agreement, nor is it present on the map. The map needs to be updated to mark an acceptable buffer between the SMA and the Barney Lake Units. | Currently there is no final agreement between the Kaska and Yukon Government. Firm boundaries for the SMA have not been established and maps shall not be updated to show the location of the proposed Coal River SMA. |
| Southeast Yukon Proper Land Use Society | All salvage logging should be done in the winter season to minimize damage to the forest environment. | The site plan will determine the season of harvest based upon soils, access constraints, etc. |
| Southeast Yukon Proper Land Use Society | Remove Area 1 in the Barney Lake proposal as there are no stands with an average tree height of 17 m. | In Unit 1, 0 ha. was identified as >17 m in height. In section 6.1 it states that stands within the operating units identified as having height >17 m will be targeted first for operational planning. Those (like Unit 1) that are identified as not having trees >17 m may contain additional harvestable volume may be found within the smaller stands. A field assessment would be necessary to identify the location and quantity of volume prior to any harvesting. |
| Southeast Yukon Proper Land Use Society | 25% retention and the retention must be representative of size, species and condition (burned; unburned) of the trees in the stand. | Once site plans have been developed, retention specifications will be discussed in more detail. Since the entire fire disturbance area is considered the project boundary, the blocks within the units that will actually be salvaged is 2%. |
| Yukon Conservation Society | The environmental assessment of the Barney Lake fire salvage should be postponed until there is sufficient information to constitute a FDP to allow meaningful assessment by reviewers. | The Fire Salvage Project for the Barney Lake Fire-2004 was distributed for review prior as part of the environmental assessment. Once operational planning has been completed, it is recommended that the Fire Salvage Technical Working Group review the site plans to ensure that the objectives and criteria of the fire salvage project has been met. |

8. COMMENTS RECEIVED BY THE FOREST MANAGEMENT BRANCH

| GROUP | COMMENTS ON PROJECT DESCRIPTION | RESPONSE TO COMMENTS BY FOREST MANAGEMENT BRANCH |
|----------------------------|---|--|
| Yukon Conservation Society | Delete Units 1 and 3 due to low wood volumes and insufficient timber over 17 m. in height. | In Unit 1, 0 ha. was identified as >17 m in height. In section 6.1, it states that stands within the operating units identified as having height >17 m will be targeted first for operational planning. Those (like Unit 1) that are identified as not having trees >17 m may contain additional harvestable volume may be found within the smaller stands. A field assessment would be necessary to identify the location and quantity of volume prior to any harvesting. |
| Yukon Conservation Society | Each harvest block should have a minimum of 25% retention that is representative of the species, size and condition of the pre-logged/post-fire stand. | Once site plans have been developed, retention specifications will be discussed in more detail. Since the entire fire disturbance area is considered the project boundary, the blocks within the units that will actually be salvaged is 2%. |
| Yukon Conservation Society | All harvesting operations including hauling should occur during the winter when there is sufficient frost in the ground. Layout should occur in the snow free zone so small and intermittent stream channels can be seen. | The site plan will determine the season of harvest based upon soils, access constraints, etc. |
| Yukon Conservation Society | Clarify who will make the determinations of whether the tree will live at least another 10 years and remain wind firm. Clarify how this determination will be made and how you will account for the fact that harvesting trees in a stand will affect the wind firmness of the remaining trees? | Field truthing by FMB and Client Services and Inspections staff will be conducted to determine whether trees are considered windfirm or not. It is recommended that FMB and Client Services and Inspections staff are referred to wildlife tree classification manuals such as Wildlife/Danger Tree Assessor's Course Workbook: Forest Harvesting and Silviculture Manual (Wildlife Tree Committee 2001), Forest Practices Code Biodiversity Guidebook (British Columbia Ministry of Forests 1995), etc. |
| Yukon Conservation Society | Update the maps with the location of the proposed Coal River SMA. Allow for a minimum of 200 m buffer between the SMA and the Barney Lake operating units. | Currently there is no final agreement between the Kaska and Yukon Government. Firm boundaries for the SMA have not been established and maps shall not be updated to show the location of the proposed Coal River SMA. |

8. STAKEHOLDER COMMENTS RECEIVED BY THE FOREST MANAGEMENT BRANCH

| GROUP | COMMENTS ON PROJECT DESCRIPTION | RESPONSE TO COMMENTS BY FOREST MANAGEMENT BRANCH |
|--|--|--|
| Yukon Forestry Association | Members are not in favour of being forced to a fire-killed salvage area when applying for green saw logs. Let the operator decide whether he requires green wood or salvage wood and to make sure that salvage wood is available. | Whether operators are told to go to a fire-killed salvage area or a green wood area is not an environmental assessment issue. This comment has been passed onto the Manager of Forest Operations. |
| Yukon Forestry Association | Stumpage and reforestation recommendations. | Stumpage and reforestation fee policies are not environmental assessment issues; these comments have been passed onto the Director of the Forest Management Branch. |
| Environment Canada-Canadian Wildlife Service | Provide clarification as to the relation between the Interim Wood Supply AAC and the proposed volumes contained in the 2 salvage logging proposals. | The Interim Wood Supply Plan is $\leq 128,000 \text{ m}^3/\text{yr}$ of green wood for 3 years. The SE Yukon Forest Management Committee shall decide the best blend of green and fire salvage wood based on that volume/yr until a regional plan is completed. Potentially $300,000 \text{ m}^3$ of green wood and potentially $300,000 \text{ m}^3$ in fire salvage wood could be available and implemented by the SE Yukon Forest Management Committee. |
| Environment Canada-Canadian Wildlife Service | How does the environmental assessment of the projects address conservation of and impacts on biodiversity and species at risk? This EA should include a discussion of how the proposed salvage logging projects exist within the Canadian Biodiversity Strategy. | According to the Canadian Biodiversity Strategy (CBS), "biodiversity refers to the variety of species and ecosystems on earth and the ecological processes of which they are part." Within the Fire Salvage Project for Barney Lake Fire-2004, several sections are within the CBS (such as stakeholder participation and agreements between government and indigenous communities or wholly), etc. |
| Environment Canada-Canadian Wildlife Service | No planned harvesting should be allowed to occur during May 1-July 31. | No harvesting shall be allowed to occur from May 1-July 31. |
| Environment Canada-Canadian Wildlife Service | Clarify the term "unreasonable" or switch terminology contained in the applicable environmental legislation in section 1.0-Introduction. | The word significant shall replace the word unreasonable. The sentence shall read "Harvesting from fires requires planning to ensure that the products can be economically extracted without significant environmental or social impacts." |

8. STAKEHOLDER COMMENTS RECEIVED BY THE FOREST MANAGEMENT BRANCH

| GROUP | COMMENTS ON PROJECT DESCRIPTION | RESPONSE TO COMMENTS BY FOREST MANAGEMENT BRANCH |
|--|--|---|
| Environment Canada-Canadian Wildlife Service | Environment Canada requests that all stream riparian areas, with the exception of ephemeral draws, received a minimum riparian management area width of 100 m, including a reserve zone width of 40 m based upon concerns for impacts from sediment on stream quality and to maintain the regeneration capacity of stream riparian areas for creation of successional habitat for migratory birds which exhibit mixed or neutral responses to burns and are anticipated to recolonize the areas. | According to THPOG (DIAND 1999), the riparian management area consists of a riparian reserve zone and a riparian management zone. The riparian reserve zone is a zone where no logging shall be permitted, while logging may occur in the riparian management zone as long as the integrity of the reserve is protected; windthrow in the reserve zone is protected; wildlife attributes are identified and protected and visual screening for wildlife is maintained. The riparian reserve and riparian management widths shall be determined according to the THPOG (DIAND 1999). |
| Environment Canada-Canadian Wildlife Service | Environment Canada requests that riparian areas of all wetlands within the project areas are managed as the THPOG (DIAND 1999), regardless of stand and site conditions. | Riparian reserve zone width and riparian management zone widths for wetlands shall be determined according to the THPOG (DIAND 1999). |
| Environment Canada-Canadian Wildlife Service | Leave $\geq 50\%$ of standing dead trees in each diameter class; leave all trees > 20 inches DBH or older than 150 years; and generally leave all live trees. | The fire boundary is considered the opening area and the gross areas for the salvage operations is approximately 2% of the burn; therefore $> 50\%$ of the standing dead trees in each diameter class will be retained. Generally all live trees will be retained. Since 20 inches is approximately 50 cm, which is $>$ than the average DBH associated with this project, this issue is adequately addressed. |
| Environment Canada-Canadian Wildlife Service | Environment Canada wishes to ensure that the EAs of the 2 projects reflects the important ecological roles that medium and large size snags have in relation to Black-backed and Three-toed woodpecker, olive sided flycatcher; aquatic and riparian systems and post-fire recovery. | Medium and large snags have important ecological roles for Black-backed and three-toed woodpeckers, olive-sided flycatchers and riparian systems and post-fire recovery. Since only 2% of the Barney Lake fire is considered operational, 98% of the entire fire area will not be salvaged at this time. |

9. POTENTIAL ADVERSE ENVIRONMENTAL EFFECTS OF THE PROJECT

The project, fire salvage harvesting in the Barney Lake area, will cause changes to the environment. Changes to the environment may include, but are not limited to: changes in wildlife habitat and use, post-fire stand structure, as well as an increase in roads, soil disturbance, erosion, drainage disruption, public access to the area, etc.

10. CUMULATIVE EFFECTS

A cumulative environmental effect is defined as the effects on the environment (i.e. Valued Ecosystem and Cultural Components; VECC) which result from effects of a project when combined with those of other past, existing and imminent projects and activities, occurring over a certain period of time and space (Government of Canada 1994). The cumulative effects evaluation considers past and proposed activities that have occurred, are occurring or are forecasted to occur in relation to the fire salvage. For this project, valued ecosystem and cultural components include: wilderness values (e.g. recreation, visual quality, tourism, etc.); maintenance of traditional and community lifestyle and uses; forest bird populations; ungulate populations; furbearer populations and carnivores.

a. Scope

The purpose of defining the scope of the cumulative effects section is to identify the environmental effects considered in regards to a project and identify the likely cumulative environmental effects and set appropriate geographic and temporal boundaries. The scoping of the cumulative effects section has been divided into: spatial and temporal boundaries; availability of existing data and knowledge; relevant ecological boundaries; other actions that may affect the same VECCs and uncertainty.

b. Spatial and Temporal Boundaries

The purpose of the spatial and temporal boundaries section is to establish a frame of reference for assessing cumulative environmental effects and facilitates their identification (CEAA 2003). This section will discuss the spatial and temporal bounds of this project, the availability of existing data and knowledge and the relevant ecological boundaries.

Regarding the spatial scope of this assessment, the project area is located north of Barney Lake, a transboundary British Columbia/Yukon lake. This project encompasses approximately 519 km².

The temporal scope of this cumulative effects assessment includes the environmental effects of any past projects within the Barney Lake area, the environmental effects caused by the current project for up to 10 years and any future projects forecasted for the Barney Lake area.

c. Availability of Existing Data and Knowledge

The availability of existing data is important in assessing the cumulative effects. There are knowledge gaps for the Barney Lake area. These data and knowledge gaps include: field assessments, overview fisheries and wildlife inventory and habitat assessments. An office-based archeological assessment was carried out in March 2005 (Thomas Heritage Consulting 2005). At the operational level, the level of field assessments will be determined.

However by being conservative and using precautionary measures and the existing data and knowledge, there is sufficient data and knowledge of the Barney Lake area to effectively assess the cumulative effects of this project. The precautionary approach has been taken in relation to mitigative measures prescribed. These measures include: riparian management areas, retention, etc. It is believed that the mitigations proposed are conservative enough to overcome these gaps.

d. Relevant Ecological Boundaries

Currently there are no known ecological boundaries (such as physiographic, vegetation, land use, habitat, soil and surface materials) that are limiting to this project. The Rancheria Caribou Herd's range is not within the bounds of this project.

e. Other Actions That May Affect the VECCs

Other actions that may affect the VECCs are listed below:

- Ungulate populations- increase in noise, increase in road access, increase in hunting
- Forest bird populations increase in noise- decrease in cover and habitat
- Old forest species (marten)- increase in noise, access, decrease in cover and habitat
- Maintenance of traditional and community lifestyle and uses- increase of access may cause an increase of usage
- Wilderness values (e.g. recreation, visual quality, tourism)- increase of usage, affect to visual quality

f. Uncertainty

Some uncertainty will be always associated with environmental assessments (CEAA 2003). According to CEAA (2003), uncertainty can be related to scientific methodology, data availability and accuracy, new or unproven technology, new or unfamiliar environmental setting, or the uncertainty of future projects. In the preparation of this environmental assessment screening report, the most up to date information and professional knowledge and judgment was used.

11. SCREENING REPORT AND/OR DECISION REPORT

Upon the finalization of this environmental assessment screening report, an email announcing the completion of this environmental assessment will be sent to all of the groups that provided comments on this assessment. Copies of this environmental assessment screening report will be available for viewing at the Energy, Mines and Resources Library (300 Main Street) and the Forest Management Branch (918 Alaska Highway) in Whitehorse and the Client Services and Inspections office in Watson Lake (KM 1007 Alaska Highway). Also, all finalized environmental assessment screening reports will be available for downloading and viewing on

the Government of Yukon, Department of Energy, Mines and Resources website
<http://www.emr.gov.yk.ca/forestry/info/publications.html#ea>.

12. AUTHORIZATION

On April 1, 2003, the Director of the Yukon Government Forest Management Branch (Director FMB) was delegated as representative of the RA (the Minister) for purposes of carrying out environmental assessments under the Section 4.1 of *Environmental Assessment Act* by the Department of Energy, Mines and Resources Minister (for matters relating to forest management for the Yukon Territory). Accordingly, it is the responsibility of the Director FMB to render a decision on this environmental assessment.

a. Decision Options

Section 16.1 (pg. 18) of the *Environmental Assessment Act* requires that:

“The responsible authority shall take one of the following courses of action in respect of a project after taking into consideration the screening report and any comments filed pursuant to subsection 14(3): a) subject to subparagraph (c)(iii), where taking into account the measures that the responsible authority considers appropriate, the project is not likely to cause significant adverse environmental effects, the responsible authority may exercise any power or perform any duty or function that would permit the project to be carried out and shall ensure that any mitigation measures that the responsible authority considers appropriate are implemented;

*(a) where, taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, the project is likely to cause significant adverse environmental effects that cannot be justified in the circumstances, the responsible authority shall not exercise any power or perform any duty or function conferred on it by any other Act that would permit the project to be carried out in whole or in part; or
 where:*

- the project, taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, is likely to cause significant adverse environmental effects and paragraph (b) does not apply, or*
- public concerns warrant a reference to a mediator or review panel, the responsible authority shall refer the project to the Minister for a referral to a mediator or a review panel in accordance with Section 25.*

b. Screening Decision

Having reviewed and considered the likely environmental effects of this project, the issues raised in the referral responses by individuals and agencies and after due consideration, the RA has concluded that the final screening report for this project accurately and appropriately addresses the significant and/or potentially significant environmental effects that have been identified.

Given the mitigations provided in the screening report, combined with the analysis and mitigations provided above, the RA is satisfied that this project is not likely to cause significant adverse environmental effects. Accordingly, the *Environmental Assessment Act* determination is that, subject to the mitigation requirements contained in the screening report and in the Reasons for Decision as per above, this project is hereby authorized.

Site plans and timber permits must be consistent with the intent of the *Fire Salvage Project for the Barney Lake Fire- 2004*. A final review of the site plans and timber permits will be conducted by the Responsible Authority to ensure that the intent of the project has been captured. The final review will be posted with this document once completed.

Authorization:

original signed
Gary W. Miltenberger, R.P.F (BC)
Director, Forest Management Branch

July 12/05
Date

13. REFERENCES

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