ENVIRONMENTAL ASSESSMENT SCREENING REPORT

Forest Development Plan, Planning Area 2, Operating 3 in the Haines Junction District

Prepared by:
Yukon Government
Forest Management Branch
July 2005

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EXECUTIVE SUMMARY

This environmental assessment screening report has been completed for seven blocks in Planning Area 2, Operating Unit 3 in the Haines Junction District. The approximate area and volume of these blocks is 70 ha. (0.7 km^2) and 11,300 m^3 of timber, respectively. Other operating units in Planning Area 2 will be environmentally assessed in the future.

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 for forest management projects (under Section 4.1 of the *Environmental Assessment Act)*. 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

Table 1. Environmental Assessment File Information

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-Forest Development Plan, Planning Area 2, Operating Unit 3 in the Haines Junction District
Physical Work or Activity	Timber harvesting and all associated activities
Multiple Activity	No
E. A. Start Date	February 2, 2005
E. A. Finish Date	July 15, 2005
E. A. Determination	This project is not likely to cause significant adverse environmental effects (s. 16) of *EAA.*
Subject Descriptor	Forestry
Project Category Code	Point

Table 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 >1000 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

Table 3. Project Location

Region	Yukon Territory
NTS Map #s	115A11
Geographic Location Name	Haines Junction Planning Area 2, Operating Unit 3
Latitude/Longitude	Approximately 60°41', 137°21'
Watershed/Drainage Region	Alsek watershed via Dezadeash and Kathleen watersheds
Nearest Community	Haines Junction, YT
First Nation Traditional Territories	Champagne and Aishihik First Nations
Surrounding Land Status	Crown
Special Designation	None

2. BACKGROUND

The Department of Indian and Northern Development (DIAND), Forest Resources completed two resource reports for forest fire hazard reduction and timber salvage in 2001. The purpose of these resource reports was to continue wildfire hazard and risk reduction initiatives for the Haines Junction, YT area and to provide economic opportunity for local industrial demand. One of these resource reports, "*Final Resource Report: Hazard Reduction and Timber Salvage Forest Management Plan in the Vicinity of Haines Junction Planning Area*" (DIAND Forest Resources 2001) is referred to in both the project description (Government of Yukon, Energy, Mines and Resources (EMR)-Forest Management Branch 2005) and this environmental assessment screening report.

In January 2005, the Forest Development Plan (FDP) for Haines Junction Planning Area (PA) 2, Operating Unit (OU) 3 was completed. Consultation for this FDP occurred in February and March 2005. Other OUs in PA 2 are expected to be environmentally assessed in the future.

3. THE PROJECT

The *Environmental Assessment Act* (EAA; Statutes of the Yukon 2003) describes a project as:

> *(a)* "*an undertaking in relation to a physical work such as any proposed construction, operation, modification, decommissioning, abandonment or other undertaking"* or *"any proposed physical activity not relating to a physical work that is listed in the regulations to EAA."* (pg.6)
>
> or
>
> *(b)* "*any proposed physical activity not relating to a physical work that is prescribed, or is within a class of physical activities that is prescribed, pursuant to regulations made under paragraph 47 (b)."* (pg.6)

The Inclusion List Regulation *"Order-in-Council 2003/Environmental Assessment Act,"* (Yukon Territory Canada 2003) states the activities requiring an environmental assessment. Section 8 of the Inclusion List Regulation states:

> *"the cutting and removal of timber under a timber harvesting agreement entered into by the Minister in accordance with the Territorial Lands (Yukon Act or the cutting and removal of more than 1,000 m^3 of timber that requires a permit pursuant to the timber Regulation."* (pg.3)

This project consists of timber harvesting and the activities associated with timber harvesting of seven blocks (A, B, D, E, F, G, and H) located in PA 2, OU 3 (Figure 1). The proposed harvest volume associated with this project is approximately 11,300 m^3, totaling an area of approximately 70 ha. or 0.7 km^2 (Table 4).

Table 4. Blocks A, B, D, E, F, G and H in Planning Area 2, Operating Unit 3

Block	Approx. Opening Size (ha.)	Approx. Volume (m^3)/ha.	Approx. Block Volume (m^3)	Avg. DBH (cm)	Avg. Height (m)
A	3.4	130	450	19.9	13.3
B	27.5	140	3,850	17.9	12.3
D	7.1	180	1,278	23.7	13.7
E	9.0	140	1,260	21.6	13.0
F	6.0	230	1,380	25.7	15.6
G	8.4	180	1,512	22.6	15.2
H	8.8	175	1,540	28.9	15.8
Total	**70.2**		**11,270**		

Descriptions of the blocks were provided in the site and harvest plans and block maps as part of the project description consultation package (Appendix 1). The blocks range in size from 3.4 ha. (Block A) to 27.5 ha. (Block B) and the silviculture system for each of the seven blocks is natural shelterwood (overstory removal).

As described in the FDP, spruce bark beetle (*Dendroctonus rufipennis*) has attacked the majority of mature white spruce (*Picea glauca*) trees in the area. Some of these beetle affected trees (trees >17.5 cm DBH) will be salvage harvested. All deciduous and spruce trees with a DBH <17.5 cm will not be harvested.

Block reforestation will be monitored with scheduled pre-harvest assessment activities (i.e. walking through the site and visually observing the average stems per ha. (sph) or conducting a stocking survey prior to forest harvesting to determine the number of understory spruce stems and their distribution). If after forest harvesting, the number and distribution of the spruce understory <1200 stems per ha. target, then a fill plant will be required.

Regeneration establishment surveys shall be conducted five years after harvesting and performance regeneration surveys shall be performed 15 years after harvesting. During these surveys, if the performance of the stocking requirements is not considered acceptable, fill planting will be prescribed to meet target stocking sph.

a. Project Location

OU 3 is located in the central portion of PA 2, adjacent to the Haines Highway and north of Quill Creek (Figure 1). PA 2 straddles the border of the Yukon Southern Lakes and Ruby Range ecoregions of the Boreal Cordillera Ecozone.

In the Yukon Southern Lakes ecoregion, open forest communities generally consist of alpine fir (*Abies lasiocarpa*), white spruce and occasional lodgepole pine (*Pinus contorta*; Environment Canada 2005). In the Ruby Range ecoregion, white spruce, black spruce (*Picea mariana*), dwarf willow (*Salix herbacea*), birch (*Betula* sp.), ericaceous shrubs and occasional lodgepole pine form extensive forests. Black spruce, scrub willow, birch and mosses are generally found within poorly drained sites of the Ruby Range ecoregion (Environment Canada 2005).

The proposed harvest blocks within OU 3 are pure white spruce or white spruce leading (with trembling aspen; *Populus tremuloides*) stands. Understory vegetation consists of white spruce regeneration, willow (*Salix* sp.*)*, alder (*Alnus* sp.), rose (*Rosa* sp.) and twinflower (*Linnaea borealis*; Government of Yukon, Department of Energy, Mines and Resources-Forest Management Branch 2005).

Some of the characteristic wildlife species inhabiting the forested areas within proximity to the project area include: grizzly (*Ursus arctos horribilis*), caribou (*Rangifer tarandus*) moose (*Alces alces*), black bear (*U. americanus*), coyote (*Canis latrans*) beaver (*Castor canadensis*), fox (*Vulpes* sp.), wolf (*Canis* sp.), hare (*Lepus* sp.), raven (*Corvus corax*) and many birds of prey, waterfowl and migratory bird species. The southwest Yukon is a major bird migration route; some 118 species bird species have been observed nesting in the region (Alsek Renewable Resource Council et al., 2004).

All waterways flow into the Alsek watershed via the Dezadeash and Kathleen watersheds. Kokanee (*Oncorhynchus nerka*), dolly varden (*Salvelinus malma*), round whitefish (*Prosopium cylindraceum),* Arctic grayling (*Thymallus arcticus),* lake trout (*Salvelinus namaycush*) and rainbow trout (*Oncorhynchus mykiss)* have been documented in Kathleen River (Fisheries and Oceans 2001). Lake whitefish (*Coregonus clupeaformis),* dolly varden, round whitefish, lake trout, longnose sucker (*Catostomus catostomus),* burbot (*Lota lota),* northern pike (*Esox lucius)* and slimy sculpin (*Cottus cognatus*) have been documented in Dezadeash River (Fisheries and Oceans 2001).

Yukon Forest Management Branch Operations Map

Haines Junction
Area #2 - Operating Unit #3
Overview

July 2005

1 : 15 000

Meters
0 100 200 400 600 800 1,000

Yukon Albers Equal Area Projection (NAD 83)

- Highway
- 4 Wheel Drive
- Watercourse
- Contour
- No Forest Data
- White Spruce
- Trembling Aspen
- Blocks for Env. Assesment
- FN Settlement Lands
- Moose Mgmt Area
- Wildlife Corridor
- Surveyed Lots
- Wetlands
- Dry river bed:Generic/Unknown
- Sand:Underwater
- Waterbody:Intermittent/slough
- Waterbody:Other

National Topographic Data Base (NTDB) base data compiledby Government of Canada, Natural Resources Canada(NRCan), at 1:50 000 scale.

Merchantable Blocks and Quill Creek Branch determined by field Global Positioning System (GPS). All GPS data collected by Forest Management Branch.

137°23'0"W
137°22'0"W
137°21'0"W
137°20'0"W
137°19'0"W
60°42'0"N
60°41'0"N

3A
3B
3D
3E
3F
3G
3H

Quill Creek Branch Road
Quill Creek
Haines Road
Kluane
National Park
And Reserve

White
Y07
Burwash Landing
Salmon
Y08
Kluane
Y06
Alaska Highway
Haines Junction
Haines Road

4. PROJECT TRIGGERS AND RESPONSIBLE AUTHORITIES

According to *EAA*, an environmental assessment is required for a project requiring a timber permit for a volume >1,000 m^3 or if the project requires an environmental screening for any of its components. Since the project involves the timber harvesting and associated activities of seven blocks in PA 2, OU 3 in the Haines Junction District, the Government of Yukon Department of EMR Forest Management Branch is the representative of the Responsible Authority (RA), the Minister of EMR. A RA is an authority that either has proposed the project or has been asked to provide support or approval in the form of funding, land, or a permit, license or other approval specified by regulation (Statutes of the Yukon 2003). The Yukon Government, Department of EMR is the only department that has declared themselves an RA for this assessment.

5. SCOPE

Scope is defined as those components of the proposed development that are considered part of the project for the purposes of environment assessment (Government of Yukon 2003).

a. Scope of the Project

The scope of the project identifies the development activities. The scope of this project includes:

- All phases of the project, including but not limited to, the construction of new roads and the upgrade of existing roads, construction of stream crossings, decommissioning of roads and stream crossings, regeneration of the blocks and associated activities such as regeneration surveys
- The operation of equipment and machinery
- Potential accidents and malfunctions related to the project, or that may occur in connection with the project (i.e. spills, etc.)

b. Scope of the Assessment

The scope of the assessment identifies the environmental components of the environmental assessment screening. The temporal scope of this assessment includes the environmental effects of the project for 15 years (allowing for harvesting, regeneration, monitoring and regeneration surveys, deactivation and rehabilitation), plus the duration of any adverse environmental effects during that time period. After 15 years, forest recovery should be

well underway and crop trees should be at a stage where they can reasonably be expected to continue to develop without significant additional intervention.

The spatial scope of this assessment includes the environment (land, water, air) contained within the proposed project boundaries and the environment outside the project that could be potentially affected through the administration of the project.

6. FACTORS CONSIDERED IN THIS ASSESSMENT

This assessment considers the following factors from Section 12 of *EAA*:

- The environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative effects that is likely to result from the project in combination with other projects or activities that have been, or will be carried out
- The significance of the above environmental effects
- Technically and economically feasible mitigation measures, implemented to mitigate potentially significant adverse environmental effects related to the project
- Comments from the public

a. Changes in the Environment Caused by the Project

Timber harvesting in OU 3 will cause changes to the environment. Changes in the environment may include, but are not limited to: changes in seral stage, wildlife habitat and forest dependent wildlife species, fragmentation, visual quality, roads and landings, hydrology and pollution. Some of the possible environmental effects caused by forest harvesting in PA 2, OU 3 are described in Table 5.

Table 5. Possible Environmental Effects Caused by Forest Harvesting in the Operating Unit 3

Alterations	Possible Environmental Effects
Harvesting	Wildlife habitat for forest dependent species; changes in seral stage; industrial noise; fragmentation and visual quality, etc.
Reforestation	Brush competition, increased snow press damage, etc.
Roads and landings	Reduction in habitat for forest dependent species; erosion and sedimentation, increase in access, etc.
Hydrology	Stream erosion and sediment, etc.
Pollution	Oil, litter, etc.

b. Health and Socio-economic Conditions

No known health conditions will be likely caused by this project. The following socio-economic conditions have been raised:

- Economic effects on guide outfitters and other tourism-related activities
- Increased access for hunters
- Effects on visual quality and other recreational experiences

c. Physical and Cultural Heritage

Heritage assessments have not been conducted in the project area; however, according to Government of Yukon, Archaeology and Heritage Resources, archaeological sites have not been recorded. In 2001, the Champagne and Aishihik First Nations (CAFN) deferred comments during the review of the Resource Report (DIAND Forest Resources 2001). After the February 2005-March 2005 environmental review period for this project, the CAFN contacted the FMB to request additional time for reviewing. The CAFN was granted additional time (until June 2005) to review the FDP, but were unable to provide comments prior to the environmental assessment screening decision.

Although it is not anticipated that heritage sites will be uncovered during road development or harvesting operations, if heritage sites are uncovered, the cessation of all operations shall occur until the CAFN and Government of Yukon, Archaeology and Heritage Resources are notified and site inspections are performed as required.

d. Current uses of Lands and Resources for Traditional Purposes by Community Members

Some of the traditional uses of lands and resources by community members include trapping, hunting and fishing, berry picking and recreating.

e. Structures or Site that are of Historical, Palentological or Architectural Significance

In relation to this project, there was no structure or site that was considered of historical, palentological or architectural significance documented.

f. Any Change to the Project Caused by the Environment

It is difficult to determine or predict whether there will be any change to the project caused by the environment. Some examples of possible changes to the project caused by the environment include, but are not limited to:

- Unusual weather occurrences
- Insect and disease outbreak
- Forest fire

7. 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 forest harvesting and other activities that have occurred, are occurring or are forecasted to occur in the vicinity of PA 2, OU 3. Ten evaluations were conducted as part of the cumulative effects review; refer to Appendix 3 for the analysis and the associated user guide that assisted with the evaluation of cumulative effects.

a. Scope of the Cumulative Effects

The purpose of defining the scope of the cumulative effects section is to identify the environmental effects to be considered in regards to a project; identify the likely cumulative environmental effect and set appropriate geographic and temporal boundaries. The scoping of the cumulative effects section has been divided into: regional issues of concerns; appropriate regional VECCs; spatial and temporal boundaries; other actions that may affect the same VECCs and v) uncertainty.

b. Regional Issues of Concern

Forest harvesting has occurred in the Haines Junction, YT area; mainly for sawlogs, commercial and personal fuelwood; however, there is not a history of forest harvesting within PA 2. Blocks A, B, D, E, F, G and H are proposed for forest harvesting. Future forest

harvesting activities in PA 2 may include various blocks in OUs 1, 2, 4, 5, 6, and 7, which will contribute to the cumulative effects of the area.

Development projects and activities have occurred within the vicinity of PA 2, OU 3 and these activities contribute to the cumulative effects of the area. For example, the Haines Highway was completed in 1943 by the United States Army and roads and trails have been established within PA 2, OU 3 (and within other OUs within PA 2). First Nation settlement lands and dwellings have been established adjacent to Quill Creek and commercial (such as guiding, etc.) and recreational activities occur within PA 2. No known oil/gas or mineral exploration has occurred in the vicinity of PA 2, OU 3.

c. Appropriate Regional VECCs

The regional VECCs are discussed in Tables 6 and 8.

Table 6. Regional Valued Ecosystem and Cultural Components

Component Type	VECCs	Justification
ENVIRONMENTAL		
Ungulates	Moose and other ungulates	Maintain quality habitat
Carnivores	Bears and other carnivores	Maintain quality habitat
Forest Birds	Forest birds	Maintain quality habitat
Aquatic Resources	Fish and fish habitat, water quality, etc.	Maintain aquatic quality
CULTURAL		
Traditional and community lifestyle	Trapping, hunting, gatherings, berry picking	Maintain traditional and cultural lifestyles
Wilderness values	Recreation, visual quality, tourism, etc.	Maintain wilderness values of the area

d. Spatial and Temporal Boundaries

The purpose of the spatial and temporal boundaries section establishes 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.

e. Spatial and Temporal Bounds of this Project

Regarding the spatial scope of this assessment, this project is located in the central portion of PA 2, north of Quill Creek and east of the Haines Highway. This project encompasses a total area of approximately 394 ha. (3.94 km^2).

The temporal scope of this cumulative effects assessment includes the environmental effects of any past projects in OU 3 and PA 2, the environmental effects caused by the current project for 15 years (including the period for forest harvesting, regeneration, regeneration establishment and monitoring, plus the durations of any adverse environmental effects triggered during that time period) and any future projects forecasted for OU 3 and PA 2.

f. The Availability of Existing Data and Knowledge

The availability of existing data is important in assessing the cumulative effects. Current and past forest harvesting in the Haines Junction area has occurred where information has been obtained and was useful for this project (regeneration, operability, etc.).

There are knowledge gaps for the PA 2, OU 3 area. These data and knowledge gaps include: field heritage assessments, overview fisheries and wildlife inventory and habitat assessments. However by being conservative and using precautionary measures and the existing data and knowledge, there is sufficient data and knowledge of the PA 2, OU 3 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, wildlife corridors, natural shelterwood (overstory removal), retaining deciduous trees and coniferous trees <17.5 cm and a 200 m buffer to the Haines Highway. It is believed that the mitigations proposed are conservative enough to overcome these gaps.

g. 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.

h. Other Actions That May Affect The Same VECCs

Other actions that may affect the VECCs are listed below:

- Increase in noise
- Increase in road access and usage
- Increase in hunting
- Decrease in cover
- Changes to visual quality

i. Uncertainty

There will always be some uncertainty associated with any environmental assessment (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 screening report, the most up to date information and professional knowledge and judgment was used.

j. Cumulative Effects Evaluation

The likelihood and significance of the cumulative effects was determined to be low (Appendix 3, Form 10). The forms in Appendix 3 summarize the cumulative effects evaluation.

8. COMMENTS/RECOMMENDATIONS RECEIVED THROUGH CONSULTATION PROCESS

The goal of this environmental assessment is to focus on significant and potentially significant environmental effects. Stakeholder groups, identified in Table 7, were asked to review the FDP (including maps and site plans and associated Resource Report). As part of the review process, the FMB Environmental Assessment (EA) Coordinator reviewed and compiled all of the responses received by the FMB. All documentation received by the FMB is attached to this report (Appendix 2).

Table 7. Consultation/ Referral List.

Organization	Contact Person	Incoming Comments
FEDERAL GOVERNMENT		
Environment Canada/Canadian Wildlife Service	Scott Herron 393-7975 Mile 91782 Alaska Hwy Whitehorse, YT Y1A 5B7	No response
Indian and Northern Affairs Canada	Laura Spicer 667-3326 415-300 Main St. Whitehorse, YT Y1A 2B5	No response
Fisheries and Oceans Canada	Eero Karanka 393-6703 100-419 Range Road Whitehorse, YT Y1A 3V1	No response
Parks Canada	Mike Walton/Kluane National Park Wardens 634-7250 Box 5495 Haines Junction, YT Y0B 1L0	Received March 10, 2005
YUKON GOVERNMENT	**Box 2703 Whitehorse, YT Y1A 2C6**	
Community Services-Community Development Branch	Gerry Gerein 667-5707	No response
Community Services-Protective Services, Wildland Fire Management	Ken Colbert 456-3904	No response
Community Services-Land Development	Brian Ritchie 667-3093	No response
ECO-Environmental Assessment	Shane Andre 456-3803	Received March 7, 2005
Economic Development- Investment, Trade and Business Development	Rick Sudeyko 667-3430	No response
EMR- Assessment and Abandoned Mines	Marg Crombie 393-7098	No response
EMR-Agriculture Branch	David Beckman 667-5838	No response
EMR-Client Services and Inspections Branch	John Jennings 634-2256 Mile 143 Haines Road Haines Junction, YT Y0B 1L0	No response
EMR Library	Aimee Ellis 667-3108	No response
EMR-Integrated Resource, Policy and Planning	Diane Brent 667-5471	No response
EMR-Land Use	Marg White 667-3173	Received August 31, 2004

Table 7. Consultation/ Referral List cont'd.

Organization	Contact Person	Incoming Comments
EMR-Mineral Development Branch	Jesse Duke 667-3422	No response
EMR-Mineral Development Branch Yukon Geology Survey	Ken Galambos 667-5996	No response
EMR-Mineral Management Branch	Robert Holmes 667-3126	No response
EMR-Minerals Management Branch	Dave Wiebe 456-3822	No response
EMR-Oil and Gas Business Development and Pipeline Branch	Brian Love 667-3566	No response
EMR-Oil and Gas Management Branch	John Masterson 667-5026	No response
EMR-Sustainable Resources	Greg Komaromi 667-3140	No response
Environment-Deputy Minister's Office	Ken Kiemele 667-5093	Received March 9, 2005
Highways and Public Works-Lands and Granular Resources	Florian Vedress 633-7905	No response
Justice-Solicitor	Laurie Henderson 667-5391	No response
Tourism and Culture- Tourism Product Development and Research	Robert Clark 667-5632	No response
Tourism and Culture-Tourism Product Development and Research	Cathryn Paish 667-5433	No response
Tourism and Culture-Yukon Archaeology	Ruth Gotthardt 667-5983	Received March 10, 2005
Yukon College Library	Bente Sorensen 668-8870	No response
INTEREST GROUPS		
Alsek Renewable Resources Council	-	No response
Association of Yukon Renewable Resources	-	No response
Canadian Parks and Wilderness Society	Theresa Gulliver 393-8080 Box 31095 Whitehorse, YT Y1A 5P7	Received March 11, 2005
Dieter Gade	-	Received March 8, 2005
Haines Junction Chamber of Commerce	-	No response
Ken Anderson	Box 5367 Haines Junction, YT	Received March 8, 2005
Kluane Land Use Working Group	P.O. Box 2131 Haines Junction, YT Y0B 1L0	No response

Table 7. Consultation/ Referral List cont'd.

Organization	Contact Person	Incoming Comments
INTEREST GROUPS		
Quill Creek Wilderness Adventures Ltd.	Robert Perren Lot 1050 Quad 115 A11 Plan 98-156 Haines Junction, YT Y0B 1L0	Received March 1, 2005
Residents Intent on a Sustainable Kluane	P.O. Box 2044 Haines Junction, YT Y0B 1L0	No response
Tourism Industry Association	-	No response
Village of Haines Junction	-	No response
Wilderness Tourism Association	-	No response
Yukon Agricultural Association	-	No response
Yukon Chamber of Mines	-	No response
Yukon Conservation Society	Karen Baltgailis 668-5678 302 Hawkins Street Whitehorse, Y1A 1X6	Received March 11, 2005
Yukon Fish and Game Association	-	No response
Yukon Fish and Wildlife Management Board	-	No response
Yukon Land Use Planning Council	-	No response
Yukon Prospectors Association	-	No response
Yukon Outfitters Association	Terry Kennedy 4194 A 4th Avenue Whitehorse, Y1A 1J8	No response
Yukon Trappers Association	-	No response
FIRST NATIONS		
Champagne and Aishihik First Nations	Gord Alison 634-4231/Chief James Allen Box 5309 Haines Junction, YT Y0B 1L0	No response
Council of Yukon First Nations	11 Nisutlin Dr. Whitehorse, YT Y1A 3S4	No response

This assessment will examine the significant and potentially significant effects that the project will have on the environment under the authority of *EAA*, as well as determine if any mitigation is required. Table 8 describes the VECCS and the potential impact from harvesting and the significance that the proposed forest harvesting will have on the PA 2, OU 3. The mitigation, if required, is also described in Table 8.

a. Mitigation

Mitigation is the elimination, reduction, or control of a project's adverse environmental effects, including restitution for any damage to the environment caused by such effects through replacement, restoration, compensation, or any other means (Canadian Environmental Assessment Agency 1994).

b. Stakeholders and Yukon and Federal Government Agencies

Specific comments or recommendations and suggested mitigations have been identified in Table 8.

Table 8. Valued Ecosystem and Cultural Components, their Significance and Mitigation Required.

VECC	Potential Impact From Harvesting	Mitigation Required	Significant Effects
Moose Population	Sensitive harvesting areas for moose but not identified as critical seasonal ranges located east of OU #3 (wetland complex)	No harvesting in sensitive areas.	None
Aquatic Resources	The potential impact to the aquatic resources from this project is low	Mitigations have been addressed for aquatic resources. Riparian management areas will reflect suggested guidelines in THPOG (DIAND Forest Resources 1999).	None
Wilderness Values (Visual Quality, Recreation, Tourism)	Visual quality will be impacted	Buffer the Haines Hwy and all riparian areas; monitor visual quality from specific locations in Kluane National Park.	Low
Forest Birds	Destruction of bird nests	Harvesting will not occur between May 1 and July 31. Also, avoid harvesting and disturbing nest sites of hawks and owls; leave buffer $\geq$100 m diameter around (birds of prey) nests if found.	Low
Maintenance of Traditional and Community Lifestyle (Trapping, Wilderness Values, Hunting, Berry Picking, Traditional Gathering Sites)	No known cultural sites or cultural issues exist within the harvest area of the blocks	Contact Government of Yukon, Archaeology and Heritage Resources and the CAFN if any heritage sites are uncovered.	None

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures

Organization: Government of Yukon, Department of Environment		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Road beyond Block G.	The road beyond G should not be upgraded as it will pass through as important wetland area. Access plans should be developed to provide clear direction on the standard, purpose and life span for roads and trails.	In this current project, it will not be necessary to extend the existing trail into the moose management area, as blocks G and H can be accessed without having to pass through the moose management area.
Third paragraph on pg 4 regarding proposed development encroaching the wildlife corridor.	The statement on pg. 4 regarding the two blocks that encroach on the Quill Creek wildlife corridor (presumably 3F and 3H) and the anthropogenic development actually indicates a cumulative negative impact and should be reviewed as such.	The third paragraph on page 4 of the FDP ("*Two blocks in the proposed development of OU 3 encroach on this corridor, but are also within existing anthropogenic development, so negative impact on wildlife movement is not anticipated*.") shall be removed from the final FDP.
The shelterwood system appears to be the most suitable for the area and the blocks that are to be harvested.	The key will be how well the protection of the spruce understory and non-merchantable hardwoods is carried out.	Harvesting to protect the advanced regeneration is the equivalent of the removal-cut on a shelter-wood silvicultural system. A pre-harvest survey shall determine the stocking of understory spruce and deciduous trees. After harvest, a survey shall be performed to determine the stocking (to determine whether a fill plant is necessary to meet target stocking goals).
Organization: Government of Yukon, Department of Highways and Public Works		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Concerns with regards access.	Change paragraph 5 to read "All existing and proposed road junctions to the Haines Road will require applicable access and/or work in the right of way permits from Highways and Public Works, Transportation Maintenance.	The paragraph shall be changed in the final FDP as per suggested mitigation.
Land use permits	Any upgrading of existing trails or the construction of new trails will require a Land use permit from EMR.	Any upgrading of existing trails or the construction of new trails will require a Land use permit from EMR.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Organization: Government of Canada, Environment Canada and Canadian Wildlife Services		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Forest Birds	There are no references to migratory birds or their use of habitat in OU 3. This is a deficiency in the Resource report.	The absence to references to migratory birds is a deficiency of the Resource Report and the FDP. The final FDP shall include a section on forest birds. Also, see pg. 18 of this report for required mitigation measures.
Riparian Management Areas	Identify the proposed width of the riparian buffers.	The proposed width of the riparian management zones follow the THPOG (DIAND Forest Resources 1999) and are as follows: Block F (stream) 80 m riparian reserve zone (RRZ)/120 m riparian management zone (RMZ) ;Block G (wetland) = 60 m RRZ/140 m RMZ width; Block H (wetland) = 60 m RRZ /140 m RMZ. The width of the wildlife corridor is 400 m (this wildlife corridor width is not a standard for all future plans and applies to this FDP only).
Connectivity	Existing anthropogenic development must be considered in addition to the anticipated impacts already existing or expected. Canadian Wildlife Service would be willing to grant an exception to this request if it is demonstrated that the residents of the dwellings have requested the blocks to be situated as a means of fire protection.	Anthropogenic development is considered in the cumulative effects assessment and the final FDP will be updated to show this.
Piecemeal approach	Including only OU 3 out of 7 proposed OU's constitutes piecemeal development.	Subsequent harvest area developments and environmental reviews will be conducted in accordance with proper regional planning to incorporate landscape and regional values.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Organization: Government of Canada, Environment Canada and Canadian Wildlife Services cont'd…		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Access	CWS does not support upgrading and extension of the current access based on the need for fire suppression capabilities, nor does CWS support the creation of new all season access routes prior to the development of an access plan through regional planning.	The road upgrade into OU 3 is an operational requirement for this plan. Future road upgrades and/or extensions will be addressed during the planning phases for other OUs, which will be consistent with the SFMP.
Overstory in blocks >10 ha.	Blocks >10 ha. should have 10% of the overstory retained.	Block B is the only block >10 ha. Retaining 10% of the overstory for blocks >10 ha. is not a requirement.
Harvesting during breeding season.	CWS requests that harvesting does not occur between May 1-July 31	Harvesting shall not occur between May 1-July 31.
Section 3.3.6.5 of the THPOG	CWS requests that Section 3.3.6.5 of the THPOG (avoid harvesting and disturbing nest sites of hawks and owls; leave a patch of trees $\geq$100 m in diameter to conceal nest and provide perching sites; operating windows may be necessary to reduce disturbance effects on birds of prey during nesting period) be incorporated into the harvesting planning for OU 3.	Section 3.3.6.5 shall be incorporated into the final FDP.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Organization: Dieter Gade (Resident of Haines Junction Area)		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Parameters of the Strategic Forest Management Plan	The statement that the FDP meets the parameters of the SFMP is incorrect and should be deleted from the FDP.	The main objective of the Strategic Forest Management Plan (SFMP) is to provide direction for sustainable forest management in the CATT. The SFMP is a long-term planning tool that should be reviewed to accommodate any necessary revisions. The FDP complements some parameters of the SFMP (i.e. using existing roads and/or trails, contribution to the community economic stability, etc.), but does not meet all parameters of the SFMP (i.e. regional planning, etc.). The statement (referred to in the suggested mitigation section) shall be updated to reflect this.
Resource Report	The Final Resource Report for PA 2 is outdated in respect to the fire risk assessment of Haines Junction and the effectiveness of fuel abatement. Remove references to the Resource Report's statements concerning increased fire risk for Haines Junction due to beetle-killed trees. Also, remove all statements that the proposed harvest is done under the auspice of fuel abatement (hazard reduction).	Fuel abatement is only one of the parameters in this SFMP. Statements regarding that the proposed harvest is done under the auspice of fuel abatement shall be removed from the final FDP.
Piecemeal approach	Including only OU 3 out of 7 proposed OU's constitutes piecemeal development.	Subsequent harvest area developments and environmental reviews will be conducted in accordance with the SFMP to incorporate landscape and regional values.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Organization: Dieter Gade (Resident of Haines Junction Area) cont'd…		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Season of activities	All activities should be restricted to winter.	Soil conditions do not restrict forest harvesting to winter only; therefore harvesting can occur in winter or summer (given appropriate summer harvesting conditions have been met). Summer harvest conditions include ensuring that soils are dry (to minimize site degradation) and not harvesting from May 1-July 31 (bird breeding season). Also, 5 m machine free zones shall be placed around all non classified drainages within the project area and roads shall be upgraded for summer hauling. The FMB Forest Practices Forester and the Senior Natural Resource Officer in Haines Junction shall be notified prior to the commencement of harvesting activities to confirm that summer conditions have been met.
Harvest method	Remove statement that the proposed harvest method mimics the natural disturbance process.	Removing the overstory allows for the release of understory species and may resemble some of the natural processes that occur in a mature forest, but does not fully mimic natural disturbances. The final FDP shall be updated to reflect this.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Organization: Yukon Conservation Society		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Clarity about which OU are being screened in this EA	The screening report needs to clarify on the title that it only covers OU 3 and that other information is supplied in order to help review assess cumulative impacts from OU 3 and future logging that is being considered. In future, all draft documents that are sent out for review should be labelled as "DRAFT."	The screening report shall clarify on the title that it only covers OU 3 ("Forest Development Plan for Planning Area 2, Operating Unit 3 in the Haines Junction District"). The intent of the "other information" was to provide additional information to assist in the review of cumulative impacts. The final FDP shall be called "Final" in the title.
Layout of remaining OUs	Layout the remaining OUs after they have gone through the environmental assessment.	Final layout will be conducted after the Environmental Assessment has been completed for remaining OUs.
Reducing fire risk in the plan	Delete references to fire hazard reduction from the final development plan	Fire hazard reduction was one of the parameters for the FDP; however, the main objective of the FDP was to provide an economic opportunity in the Haines Junction area. The final FDP shall be updated to reflect this.
Bark Beetles	The final FDP needs to explicitly state that the proposed logging will not inhibit the spread of beetles and needs to include measures to ensure that the logging does not actually contribute to spread of beetle infestation.	The objective of this FDP is to provide a timber opportunity for the Haines Junction area, which includes timber salvaging beetle- killed or affected mature white spruce. The final FDP shall include measures to prevent logging from contributing to the spread of beetle infestation.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Organization: Yukon Conservation Society cont'd…		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Consultation	Ensure that affected trappers and citizens review plan.	The CAFN, the Alsek Renewable Resource Council and local Village of Haines Junction residents of the Haines Junction area were provided with copies of the FDP.
Moose habitat	Delete all cutblocks inside moose area, plan a buffer between moose areas and cutblocks and do not plan any logging roads through moose areas.	Block F shall be amended in the final FDP so that it lies outside of the wildlife corridor. Therefore none of the blocks in OU 3 lie wholly or partially within the wildlife corridor or moose management area. Other OUs (other than OU3), shall be environmentally assessed at a later date.
Wildlife corridor	Remove all cutblocks or parts of cutblocks from within the wildlife corridor. Buffer selection lands and private property unless the people in question request localized fuel abatement around them.	Block F shall be amended in the final FDP so that it lies outside of the wildlife corridor. Therefore none of the blocks in OU 3 will lie wholly or partially within the wildlife corridor or moose management area. In the final FDP, FN Settlement Lands and private residences shall be buffered, unless localized fuel abatement is requested.
Riparian buffers	The final FDP for OU 3 should show 400 m riparian buffers on waterbodies and rivers in OUs 6 and 7.	The final FDP for PA 2, OU 3 shall not show any blocks from other OUs as final block configuration has not been finalized. The 400 m width of the wildlife corridor is not a standard for all future plans and applies to this FDP only).
Recreation trails	The final FDP needs to clearly identify recreational trail areas and buffer them. In order to adequately mitigate concerns of recreational trail users, the Ski Club, local skiers and hikers need to be consulted before the final FDP is produced.	Recreational trails within OU 3 or within proximity to OU 3 shall be identified and buffered in the final FDP. Recreational users shall be consulted prior to any harvesting.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Yukon Conservation Society cont'd…		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Access	Defer the decision as to whether the upgraded road to access OU 3 should be permanent to the Integrated Planning Process. Do not build new roads in the northern and southern parts of the Planning Area before the Integrated Landscape Plan is complete.	This refers to future development and will be specifically address when plans developed and will be consistent with the SFMP.
Silviculture system	Maintain 10% of the overstory scattered throughout Block B and any future blocks larger than 10 ha. These can be trees that are large but not economically desirable.	Block B is the only block >10 ha. and trees <17.5 cm DBH will be left. There is no requirement to maintain 10% of the overstory scattered throughout Block B.
Mimicking natural disturbances	The proposed harvest method of clearcutting is not a substitute for the complex naturally occurring forest disturbances and renewal processes. Remove references to "mimicking" natural disturbances from the final DP.	The proposed harvest method is shelterwood or overstory removal (equivalent to a final harvest in a shelterwood silviculture system), not clearcutting. Removing the overstory allows for the release of understory species and may resemble some of the natural processes that occur in a mature forest, but does not fully mimic natural disturbances. The final FDP shall be updated to reflect this.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Yukon Conservation Society cont'd…		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Season of harvest	Winter harvesting only.	Soil conditions do not restrict forest harvesting to winter only; therefore harvesting can occur in winter or summer (given appropriate summer harvesting conditions have been met). Summer harvest conditions include ensuring that soils are dry (to minimize site degradation) and not harvesting from May 1-July 31 (bird breeding season). Also, 5 m machine free zones shall be placed around all non classified drainages within the project area and roads shall be upgraded for summer hauling. The FMB Forest Practices Forester and the Senior Natural Resource Officer in Haines Junction shall be notified prior to the commencement of harvesting activities to confirm that summer conditions have been met.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

CPAWS-Yukon Chapter		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Harvesting prior to the completion of Integrated Landscape Level Planning.	Future planned harvesting should be called an Interim Wood Supply and be complete with pre-determined parameters, before additional timber permits are issued.	This request shall be provided to the FMB for future planned harvesting.
Harvest scheduling	Timber harvesting operations should occur during winter months when creeks are adequately frozen and the snowpack is sufficient to reduce the risk of human-caused fire and unnecessary ground disturbance.	To access PA 2, OU 3, creeks will not be crossed during road upgrades, construction or harvesting activities. Soil conditions do not restrict forest harvesting to winter only; therefore harvesting can occur in winter or summer (given appropriate summer harvesting conditions have been met). Summer harvest conditions include ensuring that soils are dry (to minimize site degradation) and not harvesting from May 1-July 31 (bird breeding season). Also, 5 m machine free zones shall be placed around all non classified drainages within the project area and roads shall be upgraded for summer hauling. The FMB Forest Practices Forester and the Senior Natural Resource Officer in Haines Junction shall be notified prior to the commencement of harvesting activities to confirm that summer conditions have been met.
Wildlife corridor	Explain the rationale of its location, size and shape.	The final FDP shall explain the rationale of the location, size and shape of the wildlife corridor and wildlife habitat shall be monitored to ensure appropriate wildlife habitats are maintained (SFMP pg. 25).
Layout of cutblocks	Cutblocks should not be laid out until the Integrated Landscape Planning is complete and demand for wood has been confirmed.	Final layout will be completed after the Environmental Assessment has been completed. The reason why layout is occurring is because there is a demand for wood.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Parks Canada, Kluane National Park Representatives		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Access management	Access management could include the creation of low-quality access where applicable to discourage other human use and where possible road width should be minimized and curvilinearity increased while still ensuring safety for vehicle operators. Lower road standards should be considered as they deter use and promote lower vehicle speeds thus reducing the likelihood of collisions.	Access management guidelines (pg. 23 of THPOG; DIAND Forest Resources 1999) shall be followed. Increasing curves in access roads creates more disturbances compared to shorter, straight roads, which could increase potential for erosion and sedimentation, etc. Access roads and roads shall be constructed to the standards outlined in THPOG (DIAND Forest Resources 1999).
Sensitive habitats	Removal of all harvest blocks that are situated completely within sensitive moose habitat. Blocks that encroach upon sensitive wildlife habitat be amended.	None of the 7 blocks in OU 3 are situated completely in sensitive moose habitat. Block F shall be amended in the final FDP so that it does not encroach the wildlife corridor.
Riparian areas	Final FDP should include adequate buffers for all waterbodies and watercourses in PA 2. Ongoing monitoring of harvest operations so that if infractions occur they can be corrected as soon as possible.	Adequate riparian buffers (according to pg. 10 of THPOG; DIAND Forest Resources 1999) shall be implemented for PA 2, OU 3; the final site and harvest plans shall be updated to show appropriate riparian management areas. Once the final FDP is completed for PA 2 (not just OU 3), riparian management areas shall be implemented.

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Parks Canada, Kluane National Park Representatives		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Season of harvest	Harvesting should only occur in the winter months.	Soil conditions do not restrict forest harvesting to winter only; therefore harvesting can occur in winter or summer (given appropriate summer harvesting conditions have been met). Summer harvest conditions include ensuring that soils are dry (to minimize site degradation) and not harvesting from May 1-July 31 (bird breeding season). Also, 5 m machine free zones shall be placed around all non-classified drainages within the project area and roads shall be upgraded for summer hauling. The FMB Forest Practices Forester and the Senior Natural Resource Officer in Haines Junction shall be notified prior to the commencement of harvesting activities to confirm that summer conditions have been met.
Visual impacts	Harvest operations should be monitored with respect to visual impacts and that mitigating measures are modified as required.	Harvest operations shall be monitored with respect to visual impacts so that mitigating measures can be modified as required.
Ken Anderson (Resident of Haines Junction)		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Harvest amounts	Limit green wood harvest to 1,500 m^3. In the long-term, calculate a new AAC that reflects a true picture of the forest base with appropriated net-downs for non-timber values.	The SFMP will provide direction for future forest harvesting and harvest ceiling will be set. Refer to section 6 (Key Issues) section of the SFMP (page 33).

Table 9. Identified Concerns, Suggested Mitigation and Mitigation Measures cont'd.

Robert Perren, Quill Creek Wilderness Adventures Ltd. (Haines Junction)		
Identified Concerns	**Suggested Mitigation**	**Mitigation Measures**
Viewpoints from Kluane National Park	From many viewpoints inside Kluane National Park, clearcuts will be more than visible enough.	The proposed harvesting method is shelter wood, not clear cut. Visual quality shall be monitored from Kluane National Park.
Timber industry	Overstocked sawmills, sawmills that have closed down, piles of rotting timber and sawdust are a greater fire threat than a green forest.	The main purpose of the proposed forest harvesting is to provide economic opportunities for the Haines Junction area.

9. REASONS FOR DECISION

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 Section 4.1 of the *Environmental Assessment Act* by the Department of Energy, Mines and Resources Deputy 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 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;
(b) 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
(c) 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.

Authorization: Original Signed Original Dated
Gary W. Miltenberger, R.P.F (BC) Date
Director, Forest Management Branch

10. REFERENCES

Alsek Renewable Resource Council, Yukon Government Forest Management Branch, and Champagne and Aishihik First Nations. 2004. *Strategic Forest Management Plan Community Directions for a Sustainable Forest*. Retrieved January 15, 2005, from http://www.emr.gov.yk.ca/forestry/info/catt_final_forestplan.pdf

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