



**BEARFEED CREEK  
TIMBER HARVESTING  
PLAN**

A handwritten signature in black ink, appearing to read "Greg Cowman". The signature is written in a cursive style with a long, sweeping underline.

Submitted by  
Greg Cowman, Area Forester  
Forest Management Branch

A handwritten date "June 13/11" in black ink, written in a cursive style. The date is written above a horizontal line.

Date

Handwritten initials "CP" in black ink, written in a cursive style. The initials are written above a horizontal line.

Approved by  
Patrick MacDonell, A/Director  
Forest Management Branch

A handwritten date "June 14/11" in black ink, written in a cursive style. The date is written above a horizontal line.

Date

# TABLE OF CONTENTS

## Executive Summary

- 1.0 Introduction
  - 1.1 Background
  - 1.2 Eco-region and Drainages
  - 1.3 Socio-economic Considerations
- 2.0 Planning Area Identification
  - 2.1 Ecosystem and Stand Composition
  - 2.2 Wildlife
  - 2.3 Biodiversity
  - 2.4 Riparian and Water Resources
  - 2.5 Recreation and Visual Impact
  - 2.6 Cultural Heritage and Archeological Sites
  - 2.7 Traditional Land Users
  - 2.8 Other
- 3.0 Harvesting Section
  - 3.1 Area and Volume Summary
  - 3.2 Harvest Scheduling and Season
- 4.0 Access Management
- 5.0 Monitoring Plan
- 6.0 References and Acronyms

## APPENDICES

- Appendix A: Overview Location Map
- Appendix B: 1:10,000 Bearfeed Creek THP Map
- Appendix C: Representations on THP Notification

## **Executive Summary**

This Timber Harvesting Plan (THP) has been prepared to meet the requirements of the new Forest Resources Act (FRA) and implementation of the legislation on January 31, 2011.

Under the new legislation a THP is required prior to the issuance of any timber harvesting licence or forest resources permit > 25 m<sup>3</sup>. (FRA, Section 29(4)(ii).)

The Bearfeed Creek THP identifies a fuelwood harvesting opportunity for an operator who supplies fuelwood to the Little Salmon Lake and Drury Creek Campgrounds.

The operator has made application for a licence for 75 m<sup>3</sup> of fuelwood per year over a three year period for a total harvest of 225 m<sup>3</sup> over the term of the licence. The operator held a commercial fuelwood permit in the same area previously, and has requested that he be able to continue harvesting in the area in order fulfill his contract with Parks.

The THP identifies roughly 50 hectares of operable ground with an estimated salvageable volume of at least 250 m<sup>3</sup>.

## **1.0 Introduction**

### **1.1 Background**

The Timber Harvest Plan area was identified by a fuelwood cutter in the summer of 2010. The area was needed to supply Little Salmon Lake and Drury Creek campgrounds with commercial firewood during the summer camping season.

The applicant was provided an annual permit to harvest fuelwood in the area during the summer of 2010 under the previous *Timber Regulations* of the *Lands “Yukon” Act*. Under the new *Forest Resources Act*, which came into force on January 31, 2011, a Timber Harvest Plan is required prior to the issuance of timber harvesting authority in excess of 25 m<sup>3</sup>.

The area proved suitable and this THP is being prepared solely for the purpose of meeting this need under the new legislation.

### **1.2 Eco-region and Drainages**

The area lies within the Yukon Central Plateau eco-region of the Boreal Cordillera eco-zone.

This eco-region extends northward from Lake Laberge to the lower Stewart River in the central Yukon. The Yukon Plateau-Central eco-region is composed of several groups of rolling hills and plateaus separated by deeply cut, broad valleys. The climate is cold and semiarid. The mean annual temperature for the area is approximately -3.5°C with a summer mean of 12°C and a winter mean of -19°C. Mean annual precipitation varies from 250 mm in the southern areas near Carmacks to 400 mm at higher elevations in the north and east.

White and black spruce form the most common forest types. Black spruce is usually dominant in wetter areas. Lodgepole pine frequently invades burnt-over areas and very dry sites. Alpine fir occasionally forms the treeline but is sparse and is usually associated with white spruce and occasionally with paper birch. Sedge tussocks and/or sphagnum are common in wetlands. Scrub birch and willow occur in subalpine sections that extend up to the treeline. A significant vegetative feature of this eco-region is the presence of extensive grasslands on all low-elevation, south-facing slopes. The forests suffer frequently from recurring natural fires such that seral communities are most common.

Soils consist of loamy morainal and sandy fluvio-glacial materials which are dominant in the eco-region. Much of the eco-region is covered by a veneer of recent volcanic ash 10–30 cm thick. Permafrost is discontinuous to sporadic with high ice content associated with fine-textured valley deposits.

### **1.3 Socio-Economic Considerations**

The operator has requested this operating area, as it provides economically accessible timber for his needs in close proximity to the park campgrounds which he serves.

Harvesting in this area will reduce the travel cycle time by 2 hours (return trip), in delivering firewood to the campgrounds from other harvest areas. This will result in a saving of approximately 27 liters of fossil fuels for each return trip to the parks, or potentially 2100 liters per year.

This provides a significant economic advantage to the operator, not to mention the savings of green-house gases created during operations.

## **2.0 Planning Area Identification**

The Bearfeed Creek THP is located on the north side of the Robert Campbell Highway, approximately 60 km east of Carmacks.

The targeted area within the THP is about 50 ha with salvageable volume estimated at least 250 m<sup>3</sup>.

Refer to Appendix A and B for location details.

### **2.1 Ecosystem and Stand Composition**

The existing stand is residual pine that survived a fire, likely 60-80 years ago. The pine that survived the fire are now starting to die out and have been replaced by a younger thrifty stand of mixed pine and spruce that has regenerated since the fire.

The topography is generally even on a gentle slope of <5% and south-westerly aspect.

Soils consist of fine textured glacio-fluvial silty-sand capping coarser gravels at increasing depth. Moisture regime is generally mesic to dry on this upland site.

### **2.2 Wildlife**

No Wildlife Key Areas were identified in the vicinity of the proposed harvest block. Moose and bear sign were noted and the area is an active trapping area.

### **2.3 Biodiversity**

The timber harvesting will target dead, dying and wind thrown pine and the occasional spruce.

Tops and branches of harvested stems will be lopped and scattered on site as coarse woody debris.

The salvage of dead material with a very light disturbance footprint is not likely to impact natural process or biodiversity in the area.

#### **2.4 Riparian and Water Resources**

Bearfeed Creek, on the eastern border of the THP, is considered a Class 2, fish bearing stream. Classification is taken from the Timber Harvest Planning and Operating Guidebook (THPOG).

Bearfeed Creek has been buffered accordingly with a reserve zone that begins at the edge of the topographic break that leads down to the creek. This natural boundary ranges in width between 60 and 100 meters.

The light harvesting foot print and lack of soil disturbance in the harvesting area and identified reserve zone will not lead to adverse effects on water quality or fish habitat.

#### **2.5 Recreation and Visual Impact**

The harvest area is located on a bench above the Robert Campbell Highway and is not visible from the travel corridor. This in conjunction with the light harvest foot print based on removal of dead and down material only will not have a negative impact on the visual landscape.

#### **2.6 Cultural Heritage and Archeological Sites**

No known archeological sites exist within the THP.

#### **2.7 Traditional Land Users**

The THP is located within Trapping Concession Holder #165. There is an old cabin located on LSC S-9B1, near the south-west corner of the harvest area. The concession holder requested the THP be limited to the east side of the trail to avoid trapping trails on the west side.

#### **2.8 Other**

There are no higher level land use plans in the THP area and no other issues of concern related to forest resources use have been identified.

### **3.0 Harvesting Section**

Harvesting is limited to the salvage of dead and down material within the THP boundary. It is anticipated that a few green trees may be harvested as incidental take during operations to accommodate trails within the harvest area.

Silviculturally, 100% retention of the green timber, including understory protection is required during harvesting (for the exception of incidental take). This will provide for a fully stocked spruce and pine stand when harvesting is completed and post harvest treatments are not anticipated.

#### **3.1 Area and Volume Summary**

The mapped THP area is approximately 50 hectares. It is estimated that there is 5 to 10 m<sup>3</sup>/ha of dead and dying timber within the area providing more than enough salvage to meet the three year harvest level of 225 m<sup>3</sup>.

#### **3.2 Harvest Scheduling and Season**

Harvest scheduling is not constrained by wet ground conditions and will be conducted during the summer season, to maintain a supply of firewood to the campgrounds at Little Salmon Lake and Drury Creek.

Winter harvesting is not anticipated, which will reduce conflicts with the trapping concession holder.

### **4.0 Access Management**

No new road construction is anticipated (stumping and grubbing). The woodcutter will low stump trails into the harvest area, providing 4X4 access, with falling and bucking to length and loading onto a pick-up occurring at the stump (where the tree was felled). No decommissioning of trails will be necessary.

The access into the harvest area is an existing 4X4 road, which follows the western boundary of the permit area and which does not need upgrading at this time.

### **5.0 Monitoring Plan**

After the target harvest level of 225 m<sup>3</sup> has been completed, the area will be assessed for further timber harvesting opportunities.

## **Appendix A**

### **Bearfeed Creek THP Overview Location Map**

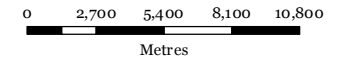


# Overview: Bearfeed Creek Timber Harvest Plan Area

## Northern Tutchone District Carmacks

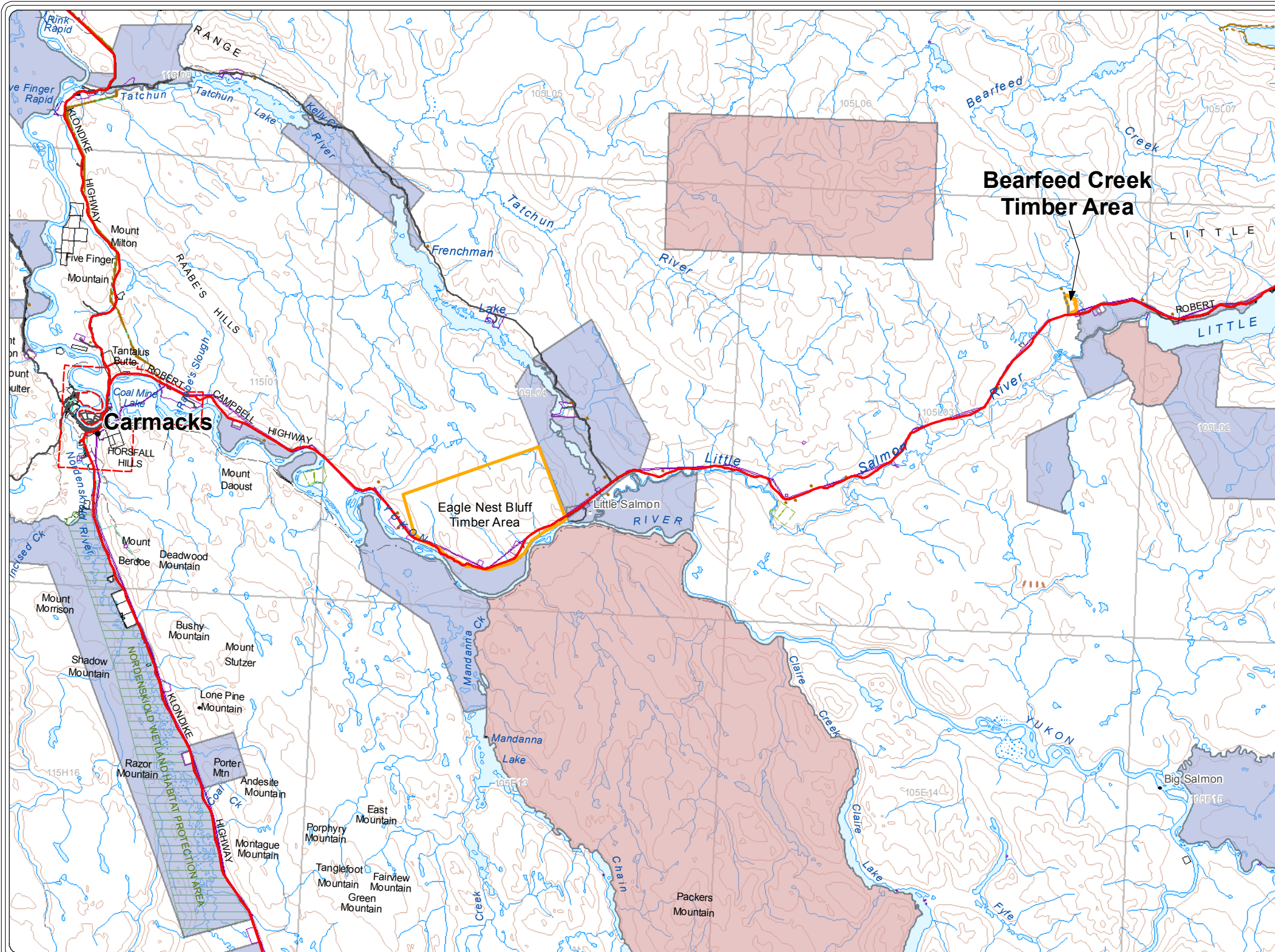
For more timber harvest information  
 Web: [www.emr.gov.yk.ca/forestry](http://www.emr.gov.yk.ca/forestry)  
 Phone: 1.867.456.3999

Date: May 11, 2011



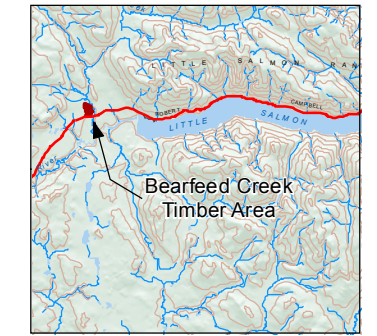
1:300,000 Yukon Albers NAD 83

Forestry spatial data managed and maintained by the Forest Management Branch, Yukon Government. All other spatial data provided by Geomatics Yukon.



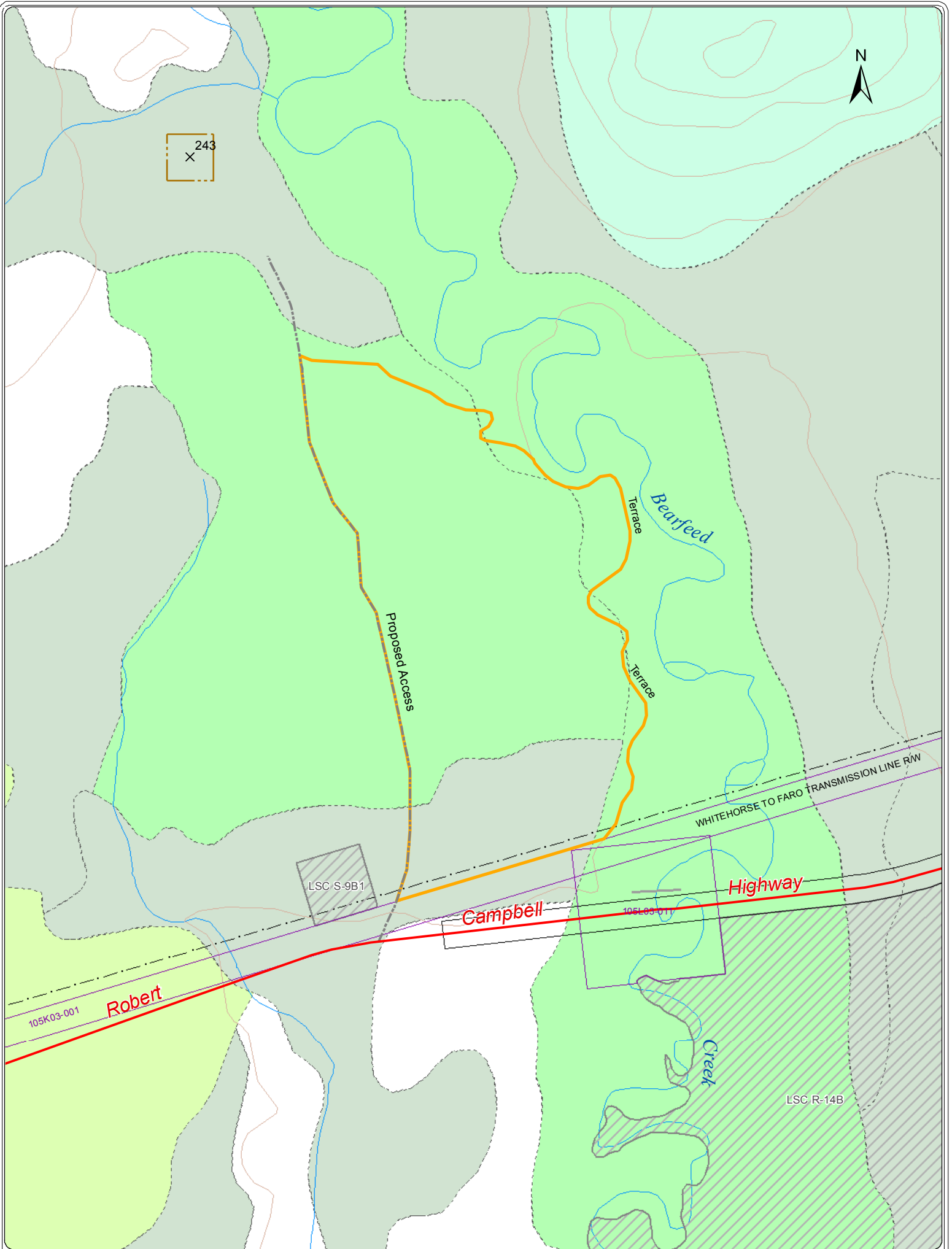
- Forest Resource Roads
- Harvest Blocks
- Operating Units
- Timber Harvest Area
- Highway
- Primary Roads
- Local Roads
- Resource/Recreation
- Alley/Service Lane
- Winter
- Agricultural Land Applications
- Agricultural Land Dispositions
- Land Applications - Active
- Land Dispositions
- Land Licenses
- Notations
- Development Hold Areas
- Surveyed Easements
- Surveyed Land Parcels
- Municipal/Community Bdry
- YESAA Community Bdry
- Surveyed Protected Areas

- First Nation Settlement
- A - Surface and Subsurface Rights
  - B - Subsurface Rights
  - FS - Fee Simple



# **Appendix B**

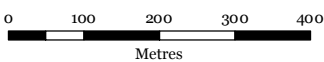
**1:10,000 Bearfeed Creek THP Map**



**Bearfeed Creek  
Timber Harvest Plan Area**  
Northern Tutchone District  
Carmacks

For more timber harvest information  
Web: [www.emr.gov.yk.ca/forestry](http://www.emr.gov.yk.ca/forestry)  
Phone: 1.867.456.3999

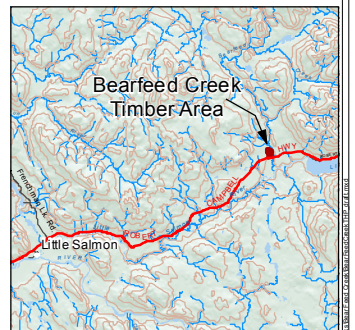
Date: May 11, 2011



1:10,000 Yukon Albers  
NAD 83

Forestry spatial data managed and maintained by the Forest Management Branch, Yukon Government. All other spatial data provided by Geomatics Yukon.

- ✕ Permanent Sample Plot
- - - Proposed Access
- ▭ Harvest Blocks
- ▭ Operating Units
- ▭ Timber Harvest Plan Areas
- ▭ Fire History
- - - Non Forested Polygons
- ▭ White Spruce
- ▭ Lodgepole Pine
- ▭ Alpine Fir
- ▭ Black Spruce
- ▭ Balsam Poplar
- ▭ Trembling Aspen
- ▭ White Birch
- ▭ Larch
- ▭ Agricultural Land Applications
- ▭ Agricultural Land Dispositions
- ▭ Land Applications - Active
- ▭ Land Dispositions
- ▭ Land Licenses
- ▭ Notations
- ▭ Development Hold Areas
- ▭ Surveyed Easements
- ▭ Surveyed Land Parcels
- ▭ Municipal/Community Bdry
- ▭ YESAA Community Bdry
- ▭ A: Surface and Subsurface Rights
- ▭ B: Surface Rights
- ▭ FS: Fee Simple
- ▭ Unsurveyed Interim Protected



- Highway
- Primary Roads
- Local Roads
- Resource/Recreation
- Alley/Service Lane
- Winter

**Appendix C:**  
**Representation Summary**

Name of Plan	Bearfeed Creek Timber Harvest Plan
Prepared Date	April, 2011
Prepared by	Greg Cowman, Area Forester
Review Period	May 13 to June 13, 2011

Comments were received from:

- Little Salmon Carmacks First Nation
- YG, Department of Environment

The following table contains a summary of the comments received, with responses to the comment and how the comment has been addressed.

# **Bearfeed Creek Timber Harvest Plan**

April 2011

<b>Topic</b>	<b>Name/ Organization</b>	<b>Comment</b>	<b>Consultation Comment Response</b>	<b>How comment/s have been addressed.</b>
General				
Site Photo addition	Dept of Environment	If there are any photos of the proposed block showing the old growth pine stand, etc. these would make a nice addition to the plan.	Agree, although pictures add significantly to size of electronic files, which can limit or hinder transferability. FMB prefers to limit photo content in plans to minimize file size.	No, pictures added.
Location	Little Salmon Carmacks First Nation	Initially preferred location further away from LSC S-9B1. After discussion FN requested all harvesting be kept on east side of trail.	Discussed during review period and agreement was reached on harvest location.	All harvesting on east side of access trail.
Specific				
Section 2.4 Riparian and Water Resources	Dept of Environment	The Appendix B map shows the general area of interest for the proposed harvest block, but does not show specific features within blocks – where the features have been identified through ground reconnaissance or otherwise identified (e.g. airphoto interpretation)	Ground reconnaissance did not find any distinguishing features within this old fire origin stand. It has a very homogeneous stand structure on an elevated slightly rolling dry upland site.	No change required.
Section 4.0 – Access Management	Dept of Environment	Section 3 indicates that some new trail construction might be accommodated, which is somewhat confusing because Section 4 indicates that no new access is anticipated.	Agree, some confusion in wording. No construction (grubbing and stumping) is anticipated, but woodcutter will access timber by driving 4X4 into block for loading and extraction of timber.	Wording changed in Section 4 to clarify intent.
Section 2.4 Riparian and Water Resources	Dept of Environment	Bearfeed Creek is a salmon bearing stream (Mark O'Donoghue, pers. comm.). Could add this to the description. The proposed riparian reserve zone width is appropriate.	Creek is identified as fish bearing, which includes salmon.	No change required to riparian management zone.
Section 2.2 Wildlife	Dept of Environment	Suggest providing a list of common species of wildlife expected to be in the harvest area. This section could include the following statement “No Wildlife Key Areas were identified in the vicinity of the proposed harvest block.”	A list of common wildlife does not necessarily mean they exist in the area. Where sign or information is available it will be included.	Wording in Section 2.2 amended to reflect comment.