


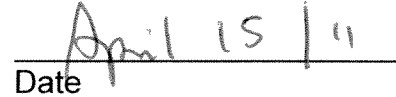
***Bruin Creek  
Timber Harvest Plan  
within the  
Dawson Annual Allowable Cut Area***

**FOREST MANAGEMENT BRANCH  
ENERGY MINES AND RESOURCES  
YUKON GOVERNMENT**

***Prepared: April 2011***



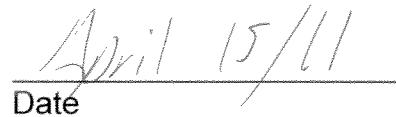
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Approved by  
Director Forest Management Branch



\_\_\_\_\_  
Date



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Submitted by  
Greg Thompson, Forest Practices Forester



\_\_\_\_\_  
Date

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## **Executive Summary**

The Bruin Creek Highway Timber Harvest Plan (THP) is designed to meet the needs of the Dawson fuel wood industry. Under the Forest Resources Act, all commercial harvesting must be conducted under an approved THP. This is a traditional harvest area for Dawson's fuel wood and thus, was selected for the creation of a THP. This THP proposes the harvesting of 65 hectares and an estimated 4,200 m<sup>3</sup> of fuel wood. This THP is consistent with both the Draft Dawson Forest Resource Management Plan<sup>1</sup> (October, 2009) and direction provided in the Forest Resources Regulation.

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<sup>1</sup> The Draft Dawson FRMP is subject to review and final approval.

## **1.0 Introduction**

### **1.1 Background**

The Bruin Creek Area has been a traditional harvest area for several years. This Timber Harvest Plan (THP) is designed to help meet the social and economic forest product demands of Dawson City, while ensuring that environmental and other values are protected. The majority of the THP area was burned in a 1991 fire. The Bruin Creek area was chosen as the location for this THP due to its fuel wood suitability, history as a fuel wood area, medium priority for planning rating and short term recommended time frame (Draft FRMP 2009).

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

The THP is located within the Boreal Cordillera Eco-zone and located in the Klondike Plateau Eco-region. Characteristic terrain features include smooth, unglaciated, rolling plateau topography with moderate to deeply incised valleys and large structural basins composed of level to undulating glaciated terrain. The area ranges from 10 to 30% slope at an average grade of 20% and is west facing. Leading species within the region consist of black spruce, white spruce, trembling aspen and white birch. Understory species are generally comprised of suckering species such as willow and there is a minor component of deciduous (aspen) regeneration.

### **1.3 Socio-economic Values**

Dawson City is home to approximately 1,300 people. The major economic drivers in the region are tourism and gold mining. The current annual demand in Dawson is approximately 3500m<sup>3</sup> for sawlog and 1500m<sup>3</sup> for fuel wood. The industry consists primarily of one sawmill and numerous fuel wood operators. The forests in the Dawson region provide significant ecological and aesthetic values, cultural and heritage values, recreational values, and other non-timber values. Dawson's forests can sustain a vibrant, small-scale forest industry that provides timber for local markets, energy, economic opportunity, and employment for the region's residents (Draft SFMP 2009). Many of the residents of Dawson rely on fuel wood harvesting as an economical heating alternative throughout the winter.

## 2.0 Planning Area Identification

The total identified area is 65 hectares with a total estimated volume of 4200m<sup>3</sup> (see table below)

**TABLE 1: Area and Volume Summary**

Harvest Area	Volume/ Hectare (m <sup>3</sup> /ha)	Slope (%)	Aspect	Block Size (ha)	Total Estimated Volume (m <sup>3</sup> )	Species Composition	Average Stem Height (m)
1	65	10-30	West	65	4200	Black/White Spruce 90%  White Birch/Aspen 10%	15

### 2.1 Wildlife

All site plans and operational development must be consistent with the most current wildlife standards<sup>2</sup> available from the Forest Management Branch (FMB). These standards have been developed to ensure well thought out and balanced planning with respect to wildlife and forest resources. The THP area overlaps the Forty Mile Caribou Herd winter (October to April) Wildlife Key Area. In addition Caribou have been seen in and around the harvest area. However, much of the Lichen on site was likely burned in the 1991 fire decreasing the value of the site for Caribou in the area. It is expected that as time passes and the Lichen on site improves this the site will restore itself as a valuable source of Caribou forage. To help monitor wildlife health, the Tr'ondëk Hwëch'in Fish and Wildlife Department requests that the timber harvester report any unique animal sightings while working in the area.

### 2.2 Riparian and Water Resources

All riparian management must follow the most current FMB riparian management standards<sup>2</sup>. No streams are located within the proposed area. One stream is located across the road from the block, a stream assessment will be conducted in the spring of 2011 to ensure that riparian management standards are being followed.

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<sup>2</sup> The FMB standards are located in the Timber Harvesting Planning and Operating Guidebook 1999 while new standards are currently under development and expected to be completed by the spring of 2011.

## **2.3 Heritage and Archaeological Sites**

If the proponent encounters surface historic features they area asked to leave them in place and report them to Heritage Resources Unit, Department of Tourism and Culture, Government of Yukon. In addition Tr'ondëk Hwëch'in requests that any heritage resources located by the timber harvester while working in the area be reported to the Tr'ondëk Hwëch'in Heritage Department.

## **2.4 Soils Conservation**

All harvesting operations must follow the current Forest Management Branch soil conservation standards<sup>2</sup>. These standards will ensure that the integrity of soils is maintained across all sites. Harvesting will only be permitted during dry summer or winter conditions in order to mitigate any risks to soil. Skid trails should utilize benches and avoid steeper slopes in order to reduce the risk of erosion.

## **2.5 Traditional Land Users**

The Bruin Creek area is a traditional fuel wood harvest zone. This area is known as a traditional hunting area and there is an active trapline in the region. These activities have been considered throughout the planning process and are considered compatible with the THP. The Tr'ondëk Hwëch'in have the right to harvest as set out in chapter 17 of the their Final Agreement.

## **3.0 Harvesting Section**

### **3.1 Harvesting**

10% dispersed in-block retention is required; made up of merchantable mature trees and snags. A moderate component of the stand's mature stems are unmerchantable and will also be retained. Harvesting that has taken place previously on this site lines up very well with the harvest prescription in the THP. This retention will provide structure as standing snags and in the future as coarse woody debris. Harvesting operations shall minimize unnecessary damage to any regeneration. Harvesting the majority of the merchantable stems is necessary to increase the economic viability of the harvesting and decrease the number of areas needed to be accessed. The harvest area may be split up into several blocks in order to accommodate the fuel wood industry.

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<sup>2</sup> The FMB standards are located in the Timber Harvesting Planning and Operating Guidebook 1999 while new standards are currently under development and expected to be completed by the spring of 2011.

Harvesting methods include both hand and mechanical falling. Harvesting activities are eligible to begin in dry weather conditions and last until break up in the spring of the following year. Harvesting is expected to continue in the area within the seasonal restrictions until harvesting is completed. The estimated completion date is 2025.

### **3.2 Reforestation**

The schedule for a post-harvest establishment survey(s) will be outlined as part of the site plan for each harvest block. The results of this survey(s), the Forest Resources Regulation and the silviculture standards will guide the decision-making towards regenerating these harvest blocks. Natural regeneration is the preferred option with artificial regeneration being used to supplement natural regeneration when necessary.

### **4.0 Access Management Considerations**

Existing access will be utilized and no new roads will be created. Appendix 1 shows the existing access into the Bruin Creek THP. The area will continue to utilize dry weather and winter access as it has in the past.

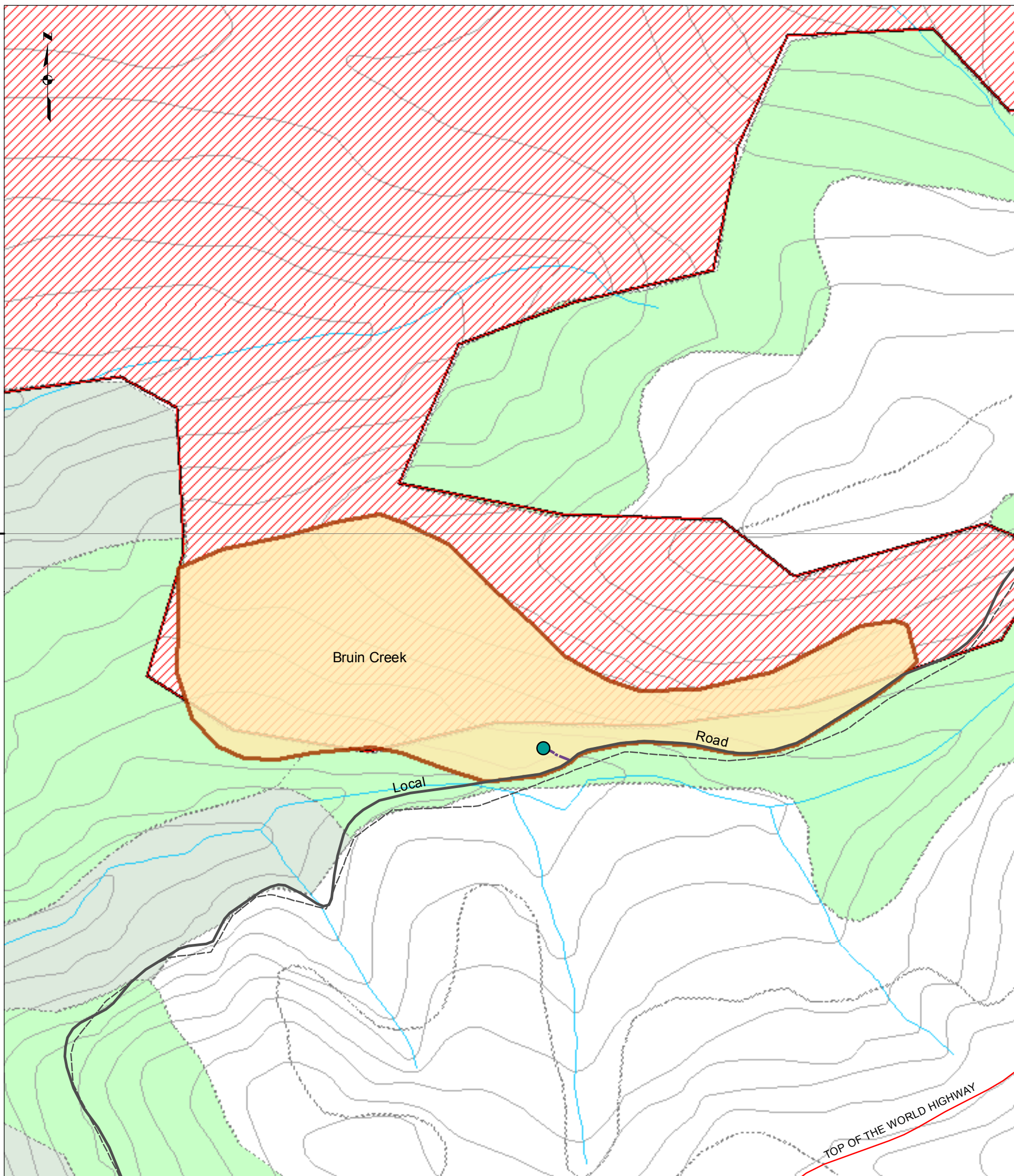
### **5.0 References**

Dawson Forest Management Planning Team “*Dawson Forest Resources Draft Management Plan.*” October, 2009.

### **6.0 Appendices**

**Appendix 1: Dawson Fuelwood Area**

**Appendix 2: Dawson Area Map**



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- Project Specific Features**
- Primary Roads
  - - - Existing Access Route
  - - - Proposed Access Route
  - Bruin Landing
  - Harvest Block
  - ▨ 1991 Fire
- Administrative Features**
- First Nation Settlement Lands
  - ▨ Category A
  - ▨ Category B
  - ▨ Fee Simple
  - Surveied Parcel
  - Agriculture Tenure
  - Land Disposition
- Forest Cover**
- Non Forested Polygons
  - White Spruce
  - Lodgepole Pine
  - Alpine Fir
  - Black Spruce
  - Balsam Poplar
  - Trembling Aspen
  - White Birch
  - Larch

Date: January 06, 2011  
 Projection: NAD 1983 UTM Zone 7

Digital Data Sources

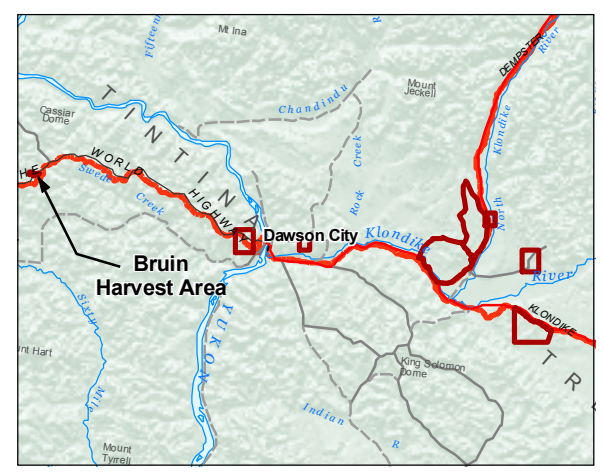
1:50,000 Canvec features downloaded from spatial data warehouse - [www.geogratis.gc.ca](http://www.geogratis.gc.ca). Her Majesty the Queen in Right of Canada, Department of Natural Resources. All rights reserved.

Project specific features such as Existing and Proposed Access Routes and Proposed Harvest Areas were derived/digitized by EDI Environmental Dynamics Inc. Fall 2009.

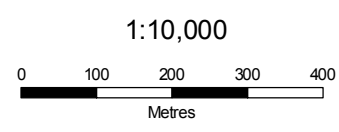
Digital Elevation Models (30 metre and 90 metre) provided by Yukon Government Geomatics spatial data warehouse - [www.geomatics.yukon.ca](http://www.geomatics.yukon.ca).

**Appendix 1  
 Timber Harvest Plan Area  
 Dawson City / Klondike Region**

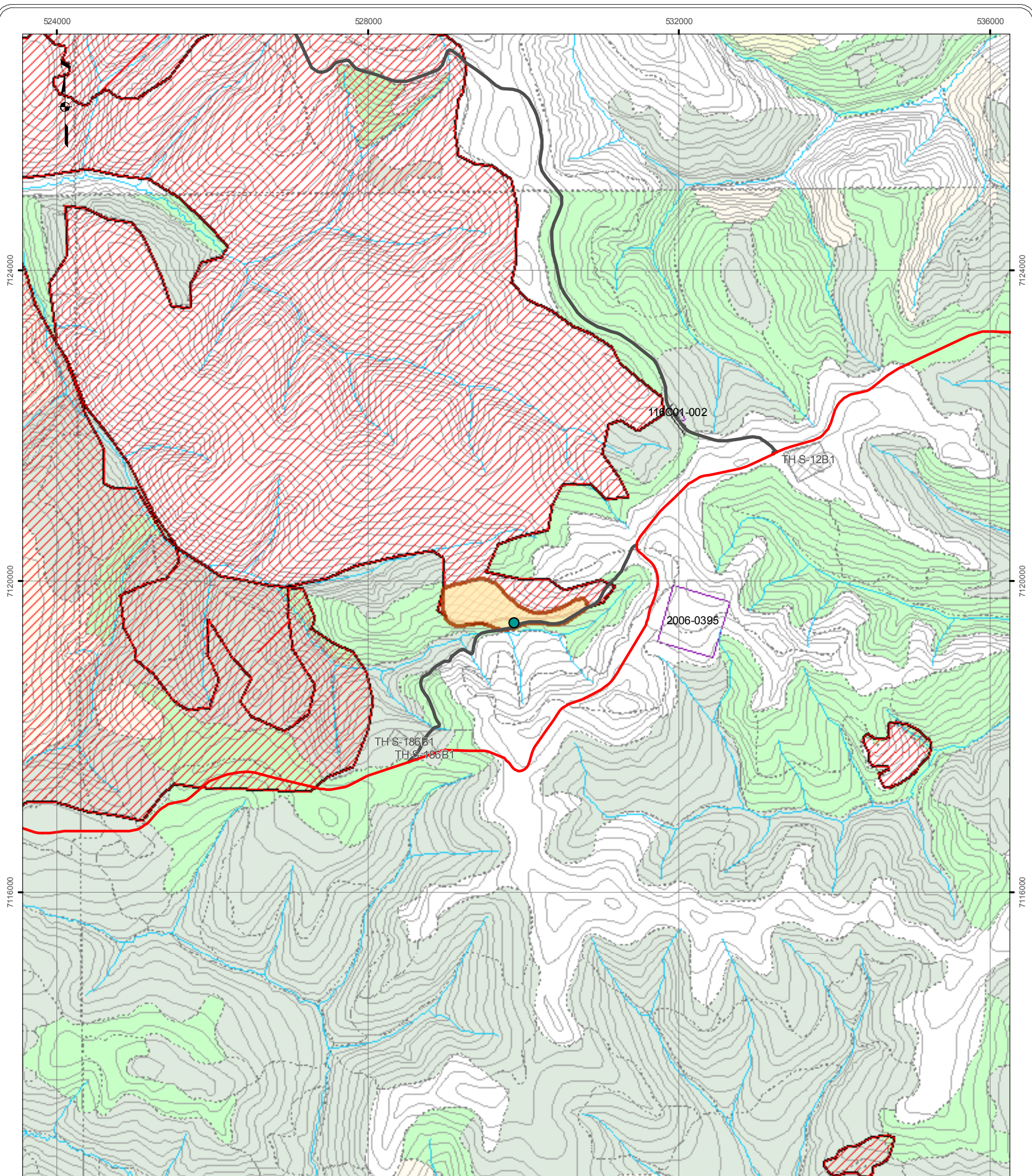
**Bruin Creek Fuelwood Area**



**Forest Management Branch  
 Yukon Territory**







- Project Specific Features**
- Highway
  - Primary Roads
  - Local Roads
  - Resource / Recreation
  - Alley / Service Lane
  - Winter
  - 1991 Fire
  - Brum\_Landing
  - Existing Access
  - Proposed Access
- Administrative Features**
- ...Surveyed Parcel
  - ▨ ...Category A
  - ▨ ...Category B
  - ▨ ...Fee Simple
  - ...Agriculture Tenure
  - ...Land Disposition
- Forest Cover**
- Non Forested Polygons
  - White Spruce
  - Lodgepole Pine
  - Alpine Fir
  - Black Spruce
  - Balsam Poplar
  - Trembling Aspen
  - White Birch
  - Larch

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Digital Data Sources

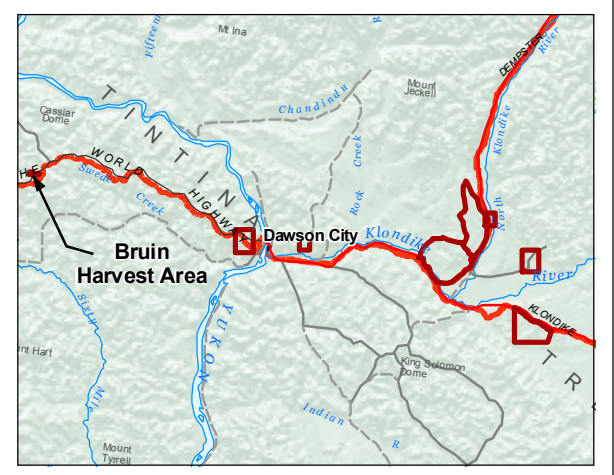
1:50,000 Canvec features downloaded from spatial data warehouse - [www.geogratis.gc.ca](http://www.geogratis.gc.ca). Her Majesty the Queen in Right of Canada, Department of Natural Resources. All rights reserved.

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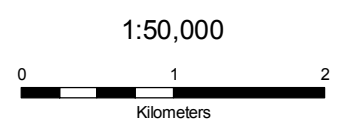
Digital Elevation Models (30 metre and 90 metre) provided by Yukon Government Geomatics spatial data warehouse - [www.geomatics.yukon.ca](http://www.geomatics.yukon.ca).

**Appendix 2  
 Timber Harvest Plan Area  
 Dawson City / Klondike Region**

**Bruin Creek Fuelwood Area Overview**



**Forest  
 Management  
 Branch  
 Yukon Territory**



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### **Appendix 3: Representation Summary**

A total of 2 comments were received during the notification period on the Draft Bruin Creek Timber Harvest Plan

Comments were received from:

- Trondek Hwech'in (confirming no comment)
- Government of Yukon – Environment

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

Topic <List Table of Content Sections>	Name/ Organization	Comment	Consultation Comment Response	How comment/s have been addressed.
General	Yukon ENV	Consistency with Draft FRMP and ensuring that everyone realizes that the FRMP is not finalized.	Mitigation: The wording in footer of the Executive summary was changed to ensure it was clear that although the plan is consistent with the Draft FRMP that it is a draft and subject final review and approval. No final date is set for the approval but the earliest expected date would be late 2011.	Additional wording to address comment was developed.
	Yukon ENV	The THP references site plans and operational development some questions asked when this will be publicly available.	The Forestry regime was developed with the principle of First Nations and public input during the strategic level that is at the FRMP level. There are also notification/input provisions at the THP level, with additional provisions for First Nations if there is no FRMP. As well the site plan has to be consistent with the THP and the THP with the FRMP (if there is one). The site plan will also have to be consistent with the operational standards and guidelines as outlined in the Forest Resource	

			<p>Regulations.</p> <p>That being said, just because there are no specific obligations established within the Act or regulation to notify at the site plan level, there may be other obligations:</p> <p>a) Common Law: There may be an obligation to consult with a First Nation as a result of proposed harvesting;</p> <p>b) YESAA: There may be an obligation to enter the YESAA process on an individual cutting permit/site plan; or</p> <p>c) In some cases it may make sense to combine the Harvesting License/Cutting Permit/Site Plan all in one and provide this document for information at the Harvest License application notification stage.</p> <p>Also, there is an obligation to notify First Nations and the public on any Harvesting Licence application under the THP.</p>	
	Yukon ENV	Maps showing the general areas	Areas that were identified such	

		of interest for proposed harvest blocks are provided, but these don't show specific features within blocks – where the features have been identified through ground reconnaissance	as streams were removed from the blocks. This is not always possible but these blocks were designed to avoid sensitive areas. If a sensitive area is found within a Block or an area becomes sensitive (ie Bear Den) the area would be mapped and dealt with according to the Forest Management Branch Standards concerning for example Riparian Habitat or Wildlife	
Executive Summary				
1.0 Introduction				
1.1 Background				
1.2 Eco-region and Drainages				
1.3 Socio-Economic Values				
2.0 Planning Area Identification				
2.1 Wildlife	Trondek	Please add to Wildlife Section “To help monitor wildlife health, the Tr’ondëk Hwëch’in Fish and Wildlife Department requests that the timber harvester report any unique animal sightings while working in the area.”		Added
	Yukon ENV	Wildlife description generic and lacking detail, particularly for 40 Mile Caribou herd THP does not provide an		Added information about 40mile Caribou heard

		adequate overview of caribou and lichen habitat values, nor reference to the FMCH Working Group report and strategy to prevent impacts to lichen.		
2.2 Riparian and Water Resources				
2.3 Heritage and Archaeological Sites	Trondek	Pleas Add "Tr'ondëk Hwëch'in requests that any heritage resources located by the timber harvester while working in the area be reported to the Tr'ondëk Hwëch'in Heritage Department."		Added
2.4 Soils Conservation	Yukon ENV	The THP should clarify how erosion of steep slope areas will be avoided (e.g. avoid harvest of trees where slope % exceeds <x>, avoid construction of skid trails in steep areas, etc.)		Some wording added to reflect where skid trails should be built
2.5 Traditional Land Users	Yukon ENV	Section 2.5 of THPs indicates that traditional land use activities have been considered throughout the planning process. Might consider expanding this description to clarify how other land users activities and interests were considered and incorporated into the THP planning (e.g. who was consulted, etc.)	People consulted:  Several Government Departments Trondek FN Trapper Wood Cutters Local RRC Public Notification in Paper as well as on internet	

			Also any other interested party that comes to light throughout the planning process	
	Trondek	Please add, "The Tr'ondëk Hwëch'in have the right to harvest for subsistence purposes in all seasons, throughout their Traditional Territory."	Reworded it to refer to Chapter 17 and not paraphrase it, and it discussed with Trondek.	
3.0 Harvesting Section				
3.1 Harvesting	Yukon ENV	<p>Section 3.1 indicates that 10% in block retention is required. Section should clarify how this % was reached, and what re-gen (e.g. willow growth) is expected post harvest</p> <p>As historical harvesting has occurred in both areas, a bit of description regarding historical retention and post-harvest re-generation (e.g. have willows/deciduous trees come back) might be useful.</p>		Wording added to Harvesting Section as a brief description of the harvesting that has already occurred on the blocks
3.2 Reforestation				
4.0 Access Management Considerations				
Other				