

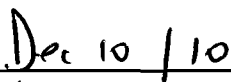
# ***Flat Creek Timber Harvest Plan***

***within***  
***Tr'ondëk Hwëch'in Traditional Territory***

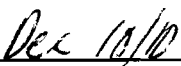
**FOREST MANAGEMENT BRANCH  
ENERGY MINES AND RESOURCES  
YUKON GOVERNMENT**

***Prepared: August 2010***

  
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Approved by  
Acting Director Forest Management Branch  
Pat MacDonell

  
\_\_\_\_\_  
Date

  
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Submitted by  
Greg Thompson, Forest Practices Forester

  
\_\_\_\_\_  
Date

## **Executive Summary**

The objective of the Flat Creek Timber Harvest Plan (THP) is to provide Dawson City with a sustainable supply of economical fuel wood in an integrated and balanced approach to forest management. Under the new *Forest Resources Act*, all commercial harvesting must be conducted under an approved THP. Flat Creek has been a traditional harvest area for Dawson's fuel wood since a 2004 wildfire in the area. This THP proposes the harvesting of five blocks for a total of 343ha and an estimated 16250m<sup>3</sup> of fuel wood. This THP is consistent with both the draft Dawson Forest Resources Management Plan<sup>1</sup> (October, 2009) and direction provided in the draft Planning Regulation of the *Forest Resources Act*.

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<sup>1</sup> The Draft Dawson FRMP was released in the summer of 2010 and is subject to final review and approval.

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## **1.0 Introduction**

### **1.1 Background**

Flat Creek is located approximately 60 km southeast of Dawson. The region was almost entirely burned by a 2004 wildfire. All proposed blocks are located within fire-killed areas. The selection of areas appropriate for fuel wood harvesting used the following approach (EDI 2009):

- Stage 1 Investigate current harvest sites and identify potential fuel wood harvest blocks through aerial photo interpretation.
- Stage 2 Conduct field reconnaissance and verification of potential fuel wood harvest areas. This project component also included identification of non-timber values and preliminary road locations.
- Stage 3 Finalize proposed fuel wood harvest blocks and preliminary access strategies.

Flat Creek was chosen as the location for this THP due to its fuel wood suitability, history as a fuel wood area, medium priority planning rating and its recommended short term development time frame (Draft FRMP 2009).

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

This THP is located within the Boreal Cordillera Eco-zone, Klondike Plateau Eco-region and Klondike River Landscape Unit. 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 harvest blocks are heavily dominated by Black Spruce with a larger component of White Spruce in blocks FC-2C and FC-2D (see section 2.0 for block details).

### **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 several 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 across four blocks is 343ha with a total estimated volume of 16250m<sup>3</sup> available to harvest (see Table 1).

**TABLE 1: Attributes of Flat Creek THP Blocks**

Proposed Blocks	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)
FC-1A	50	2	West	25	1250	90% Black Spruce 10% Aspen	8
FC-2A	28	2	South	175	4,900	90% Black Spruce 10% Aspen	10
FC-2B	30	6	Southwest	189	5,670	90% Black Spruce 10% Aspen	7.5
FC-2C	82	15	South	15	1,230	50% White Spruce 40% Black Spruce 10% Aspen	12
FC-2D	82	15	Southwest	39	3,198	50% White Spruce 40% Black Spruce 10% Aspen	12
Totals				343	16250		

## 2.1 Wildlife

All site plans and operational development must be consistent with current wildlife standards<sup>2</sup> available from Forest Management Branch (FMB). These standards have been developed to ensure well thought-out and balanced planning occurs with respect to wildlife and forest resources. Throughout the preliminary reconnaissance and consultation, no significant wildlife concerns were noted. This area does not conflict with any fish or wildlife management plans.

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<sup>2</sup> The FMB standards are located in the Timber Harvesting Planning and Operating Guidebook 1999 with new standards being developed and expected to be completed by the winter of 2010.

## **2.2 Riparian and Water Resources**

All riparian management must follow the most current FMB riparian management standards<sup>2</sup>. Blocks FC-2A, and FC-2D have ephemeral draws located in the block. The draws will require a 5 m machine-free zone, directional falling, and limited skid crossings. The machine-free zone may be decreased during frozen ground conditions.

## **2.3 Heritage and Archaeological Sites**

The Yukon Archaeological Sites Inventory and the Yukon Historic Sites Inventory did not identify any known historic or archaeological sites in the Flat Creek area. The Flat Creek blocks have been impacted by forest fires; which suggests a low potential for aboveground historical artifacts and structures. However, portions of blocks FC-2B, FC-2C, and FC-2D are located near enough to water to indicate there is elevated potential for the presence of buried archaeological remains. As per the Heritage Resource Assessment recommendations, the following mitigations will be implemented for the Flat Creek Harvest Area:

- New all weather road construction will buffer any archaeological sites found by a minimum of 30 meters;
- No mechanical scarification will be permitted within 30 metres of an archaeological site.

*(Historic Resources Overview Assessment: Six Proposed Harvest Area in the Dawson Region, February, 2010).*

## **2.4 Soils Conservation**

All harvesting operations must follow current FMB 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. Utilizing existing access in the area will help minimize any soil compaction in the harvest areas. All new roads and landings should be situated to minimize the risk of compaction, erosion, and rutting.

## **2.5 Traditional Land Users**

Flat Creek is a traditional fuel wood harvest zone. This area is also known as a traditional hunting and berry picking area. There is also an active trapline in Flat Creek. These activities have been considered throughout the planning process and are considered compatible with the THP.

# **3.0 Silviculture System**

## **3.1 Harvesting**

10% in-block retention is required; made up of merchantable mature trees and snags. A large component of the stands mature stems are unmerchantable and will also be retained. 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.

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, however this is dependant on industry demands, other sources of fuelwood, wood decay and succession of the burn and may be extended if harvesting opportunities still exist.

### **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 Silviculture Regulation and the silviculture standards<sup>2</sup> will guide decision-making with respect to 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**

The primary objective of access management for the area is to minimize the creation of long-term access. Where possible, existing access will be utilized and integrated with other land users. The map in Appendix B illustrates the proposed access into the Flat Creek blocks. Harvesting will occur in dry weather and winter only. The access is expected continue to have an extremely light footprint with the large majority of access consisting of low stumping for pickup truck trails and small skidoo and quad trails.

## **5.0 References**

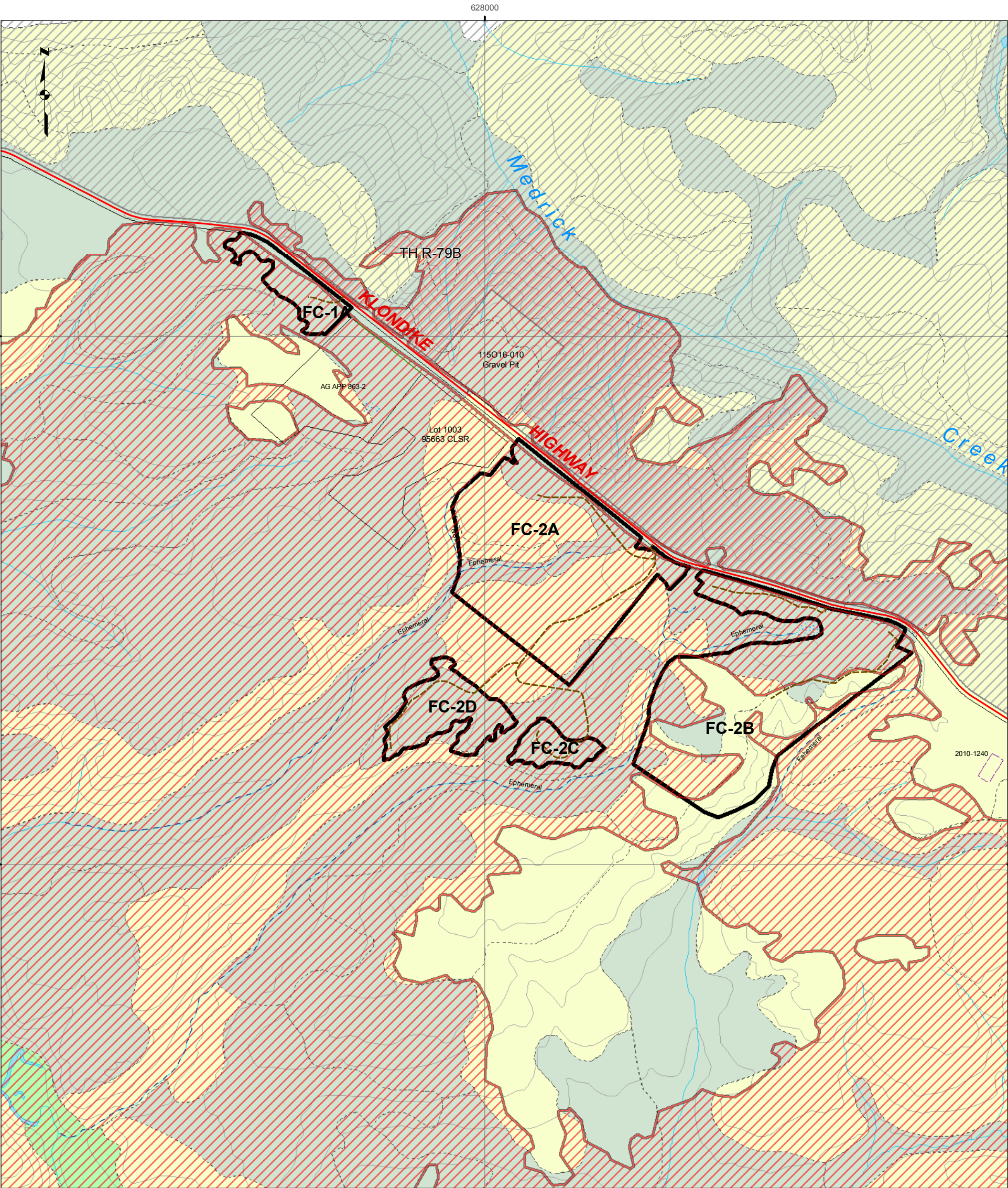
Environmental Dynamics Inc. Report “*Phase 1 Reconnaissance of Fuelwood Areas the Dawson City/Klondike Region*”. December, 2009.

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

## **6.0 Appendices**

- Appendix 1: Overview Map
- Appendix 2: Flat Creek Timber Harvest Plan Map
- Appendix 3: Flat Creek Representation Summary





- Project Specific Features**

  - Existing Access Route
  - Proposed Access Route
  - Ephemeral Drainage
  - 2004 Fire
  - Harvest Blocks
- Administrative Features**

First Nation Settlement Lands

  - Category A
  - Category B
  - Fee Simple
  - Surveyed 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: September 01, 2010  
Projection: NAD 1983 UTM Zone 7

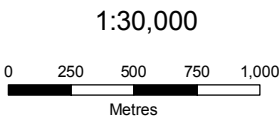
Digital Data Sources

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.

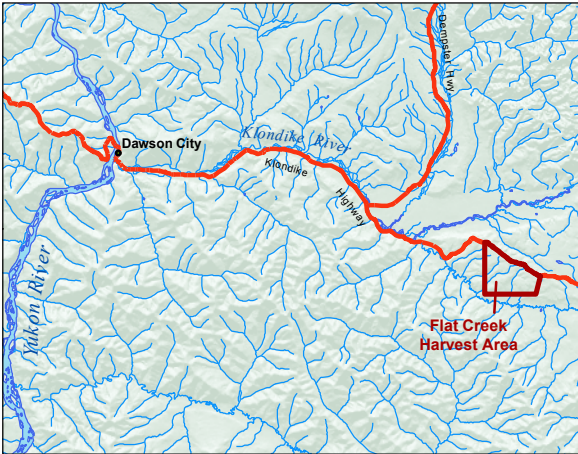
Digital Elevation Models (30 metre and 90 metre) provided by Yukon Government Geomatics spatial data warehouse - [www.geomaticsyukon.ca](http://www.geomaticsyukon.ca).

Map scale 1:20,000 when printing on 11"x17" paper.

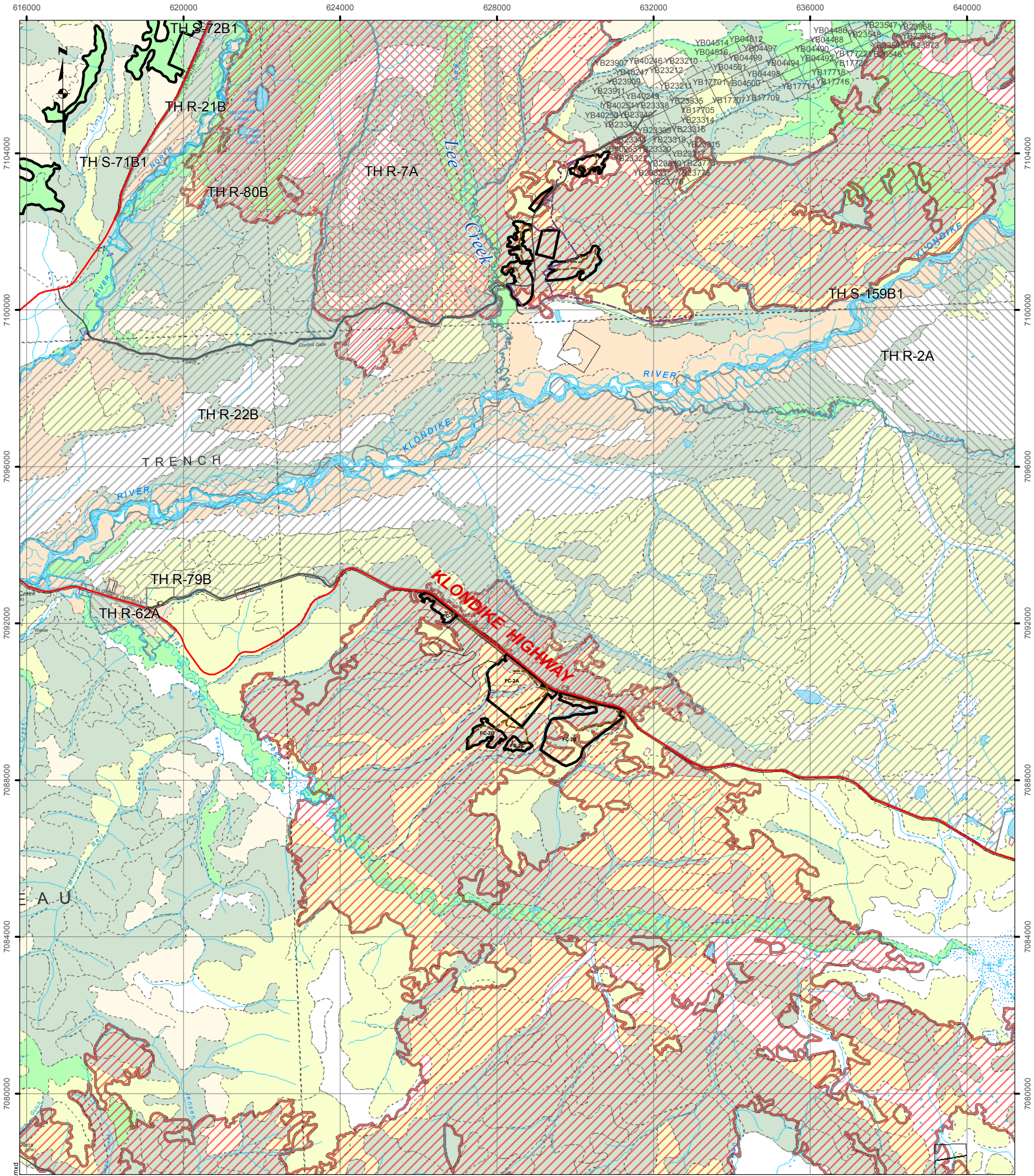


**Appendix 1  
Timber Harvest Plan Area  
Dawson City / Klondike Region**

**Flat Creek Fuelwood Area**







Project Specific Features

- Existing Access Route
- Proposed Access Route
- Harvest Blocks
- Ephemeral Drainage
- 2004 Fire

Administrative Features

- First Nation Settlement Lands
- Category A
- Category B
- Fee Simple
- Surveyed Parcel
- Agriculture Tenure
- Land Disposition

Forest Cover

- Non Forested Polygons
- White Spruce
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- Larch

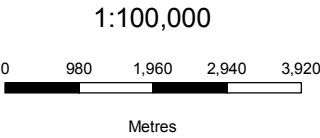
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Digital Data Sources

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.

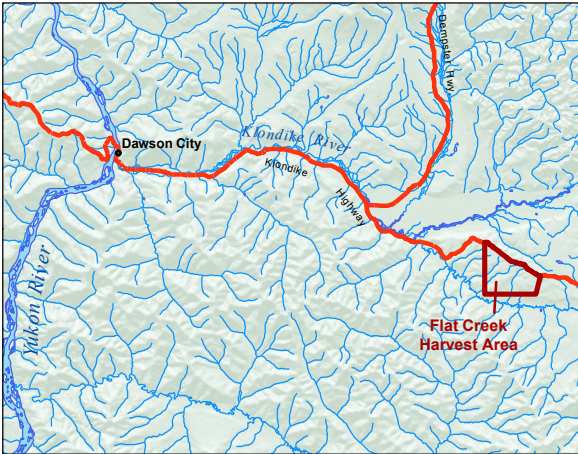
Project specific features such as Existing and Proposed Access Routes and Proposed Harvest Areas were derived/digitized by EDI Environmental Dynamics Inc. Fall 2009.

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 2  
Timber Harvest Plan Area  
Dawson City / Klondike Region

Flat Creek Fuelwood Area





**Appendix 3: Representation Summary**

***Draft Flat Creek Timber Harvest Plan***

***Prepared: August 2010***

***Prepared by: Greg Thompson***

A total of 4 comments were received during the notification period on the Draft Flat Creek Timber Harvest Plan within the Tr'ondek Hwech'in Traditional Territory held from September 08 2010 to October 21 2010.

Comments were received from:

- Trondek Hwech'in (confirming no comment)
- Government of Yukon – Environment
- Yukon Conservation Society
- Wayne Gaven

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

# ***Draft Flat Creek Timber Harvest Plan***

**August 2010**

<b>Topic &lt;List Table of Content Sections&gt;</b>	<b>Name/ Organization</b>	<b>Comment</b>	<b>Consultation Comment Response</b>	<b>How comment/s have been addressed.</b>
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 the fall of 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 Regulations.	

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**August 2010**

			<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>	
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# ***Draft Flat Creek Timber Harvest Plan***

**August 2010**

	Yukon Conservation Society	Some comments indicated concern about that size of the THP's and the amount of volume within them.	The THP's are much larger than the current demand for fuel wood because these plans cover areas that local operators have been traditionally harvesting in. In the past because of the large amount of burned area around Dawson many operators have had quite large areas assigned to them. During the planning phase it was decided that since these areas have been accessed by the wood cutters for several years, the areas would where possible be left to accommodate the harvesting that has been occurring. Some new areas have been added to ensure that new operators would have opportunity in the area as well.	
	Yukon Conservation Society	More information has been requested to be included in the THP	Information in the Act/Regulations and Standards is applicable to the THP whether it is stated in it or not. Mitigation: Will add some more site information such as the proposed LU from the DFRMP and topography of the site.	Additional wording to address comment was developed.
Executive Summary				
1.0 Introduction				



# Draft Flat Creek Timber Harvest Plan

August 2010

1.1 Background				
1.2 Eco-region and Drainages				
1.3 Socio-Economic Values				
2.0 Planning Area Identification				
2.1 Wildlife				
2.2 Riparian and Water Resources				
2.3 Heritage and Archaeological Sites				
2.4 Soils Conservation	Yukon ENV	Section 2.4 of the THP's references that the operations will follow soil conservation standards. The comment was that the plan should also reference that plans will follow road construction, maintenance, and deactivation standards	Although not referenced it is an obligation of the Forest Resource Regulation. Thus, whether a particular standard is mentioned or not is must be followed. Applicable section of Forest Resources Regulation provided below.  69(1) The Director must establish guidelines or standards for the construction, maintenance, modification and decommissioning of forest resources roads, including the design and installation of bridges, culverts and other structures. (2)Construction, maintenance, modification and decommissioning of a forest resources road <b>must</b> be	

# ***Draft Flat Creek Timber Harvest Plan***

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			conducted in accordance with guidelines or standards established by the Director under subsection (1).	
	Yukon Conservation Society	Indicate where the soil conservation standards will be applied in the THP	Soil conservation standards will be applied across the entire THP.	
2.5 Traditional Land Users				
3.0 Harvesting Section				
3.1 Harvesting				
	Yukon Conservation Society	What will be the estimated percentage of trees retained including the mature and unmerchantable stems?	Including the unmerchantable trees an estimate of 70-80% retention on the site is expected. This is due to the high percentage of trees that are undersized for firewood.	
	Wayne Gaven	Harvesting should be allowed later than April 1 <sup>st</sup>	Harvest permits in Dawson are currently till April 30 <sup>th</sup> and the THP is based on if its frozen so the season may be extended with the weather permitting	
3.2 Reforestation				
4.0 Access Management Considerations	Yukon ENV	Some comments about including more information in this section incase of new road construction.	No new access is expected to be built although proposed access is identified in the THP's. If the access is to move forward we will have to follow all applicable operational standards. The project would also have to go through the YESAA process.	

# ***Draft Flat Creek Timber Harvest Plan***

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Other	Yukon Conservation Society	Comments were directed at the colour scheme on the map.	They have been noted and new THP's will try to reflect some of these concerns in the future maps.	