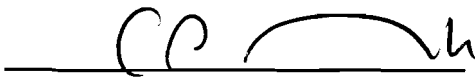


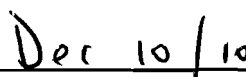
***Dempster Highway
Timber Harvest Plan
within
Tr'ondëk Hwëch'in Traditional Territory***

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

Prepared: August 2010



Approved by
Acting Director Forest Management Branch
Pat MacDonell



Date



Submitted by
Greg Thompson, Forest Practices Forester



Date

Executive Summary

The Dempster Highway Timber Harvest Plan (THP) is designed to meet the needs of the Dawson fuel wood industry. Under the Forest Resources Act, all harvesting over 25 m³ must be conducted under an approved THP. The Dempster highway 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 98 hectares and an estimated 7,350 m³ of fuel wood. This THP is consistent with both the Draft Dawson Forest Resource Management Plan¹ (October, 2009) and direction provided in the Planning Regulation of the Forest Resources Act (FRA).

¹ 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

The Dempster Highway Area has been a traditional harvest area for Dawson City residents since the 2004 fire in the area. The Dempster Highway 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 selection of areas appropriate for fuel wood harvesting used the following approach:

- Stage 1 Investigate current harvest sites and identify potential fuel wood harvest blocks through aerial photo interpretation.
- Stage 2 Conduct field reconnaissance and verify 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.

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

1.2 Eco-region and Drainages

The THP is located within the Boreal Cordillera Eco-zone, the Klondike Plateau Eco-region and the Klondike River Landscape Unit (Draft DFRMP 2009). 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 slopes gently to the east at an average grade of 5%. The slope tends to increase closer to the Klondike River embankment to the east. 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 3500m³ for sawlog and 1500m³ 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 is 98 hectares with a total estimated volume of 7,350m³ (see table below)

TABLE 1: Area and Volume Summary

Harvest Area	Volume/ Hectare (m ³ /ha)	Slope (%)	Aspect	Block Size (ha)	Total Estimated Volume (m ³)	Species Composition	Average Stem Height (m)
Dem-1	75	5	East	98	7350	Black Spruce/White Spruce 95% White Birch 5%	14

Refer to Appendix 1 - Dempster Highway Fuelwood Area

2.1 Wildlife

All site plans and operational development must be consistent with the most current wildlife standards² 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. Throughout the preliminary reconnaissance and consultation, no significant wildlife concerns were noted. There are no conflicts with wildlife values identified in fish and wildlife planning for this area.

2.2 Riparian and Water Resources

All riparian management must follow the most current FMB riparian management standards². The North Klondike River is located to the east of the proposed harvest block and is buffered by a reserve zone width of 100m. Extending from the edge of the reserve zone is a 120m riparian management area, the riparian management area will have the same prescription as the rest of the block. One small ephemeral drainage runs through the centre of the block. The draw 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

Yukon Archaeological Sites Inventory and the Yukon Historic Sites Inventory did not identify any known historic or archaeological sites in the Dempster Highway THP. The area has been impacted by forest fires, which suggests a low potential for historic era

² 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 winter of 2010.

artifacts and structures.

However, as per the Heritage Resource Assessment recommendations, the following mitigations will be implemented for the Dempster Highway block:

- There will be no harvesting within 100 meters of the North Klondike River;
- 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 meters 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 the current Forest Management Branch soil conservation standards². 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. All roads and landings should be situated to minimize the risk of compaction, erosion, and rutting.

2.5 Traditional Land Users

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

3.0 Harvesting Section

3.1 Harvesting

10% in-block retention is required; made up of merchantable mature trees and snags. The large majority of trees in the THP are dead and thus green timber will be retained to as great an extent as is operationally feasible. 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. The harvest area may be split up into several blocks in order to accommodate the fuel wood industry.

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

² The current 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 winter of 2010.

restrictions until harvesting is completed. The estimated completion date is 2020.

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 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 are proposed at this time. Should new access be required it will be assessed through the YESAA process. Appendix 1 shows the existing access into the Dempster highway blocks. The area will continue to utilize dry weather and winter access as it has in the past. The southern boundary of the harvest area borders undeveloped Tr'ondëk Hwëch'in Settlement Land. In the event that access for commercial or non-commercial purposes is required, and the route taken will incur alteration, Tr'ondëk Hwëch'in must be contacted.

5.0 References

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

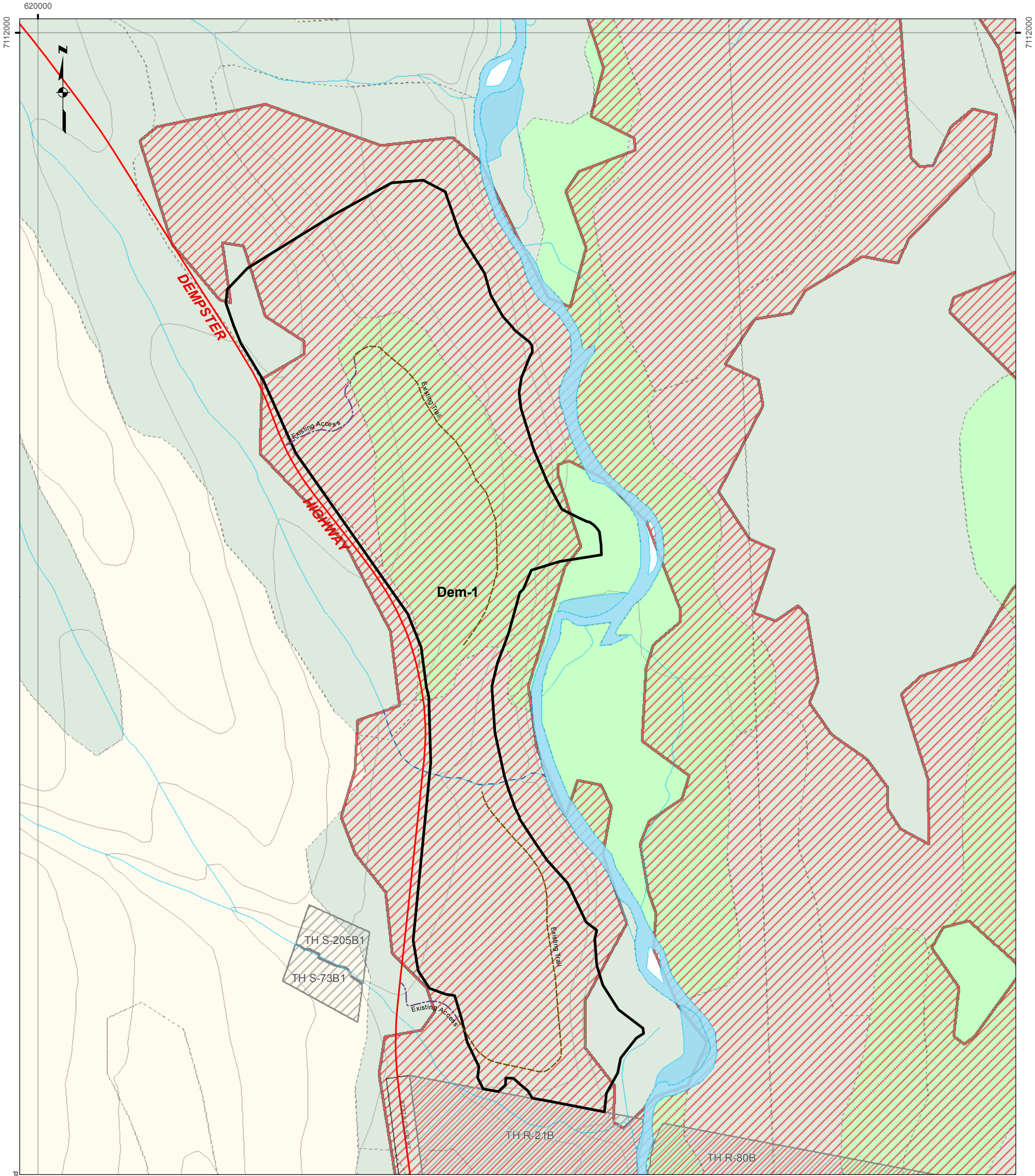
Dawson Forest Management Planning Team "*Dawson Forest Resources Draft Management Plan.*" October, 2009.

6.0 Appendices

Appendix 1: Dempster Highway Fuelwood Area

Appendix 2: Dawson Area Overview Map

Appendix 3: Dempster Representation Summary



J:\Operations\Forest_Practices\Timber_Harvest_Project\Dawson\MD\Demster_Harvest_Area_20100823.mxd

Project Specific Features

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

Administrative Features

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

Forest Cover

- Non Forested Polygons
- Alpine Fir
- Trembling Aspen
- White Spruce
- Black Spruce
- White Birch
- Lodgepole Pine
- Balsam Poplar
- Larch

Date: September 01, 2010
Projection: NAD 1983 UTM Zone 7

Digital Data Sources

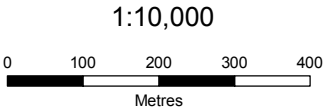
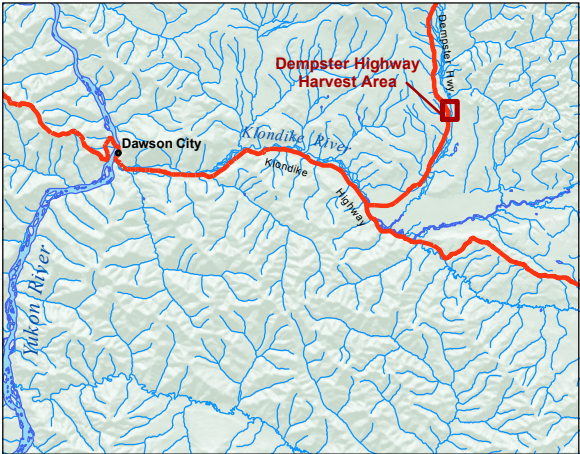
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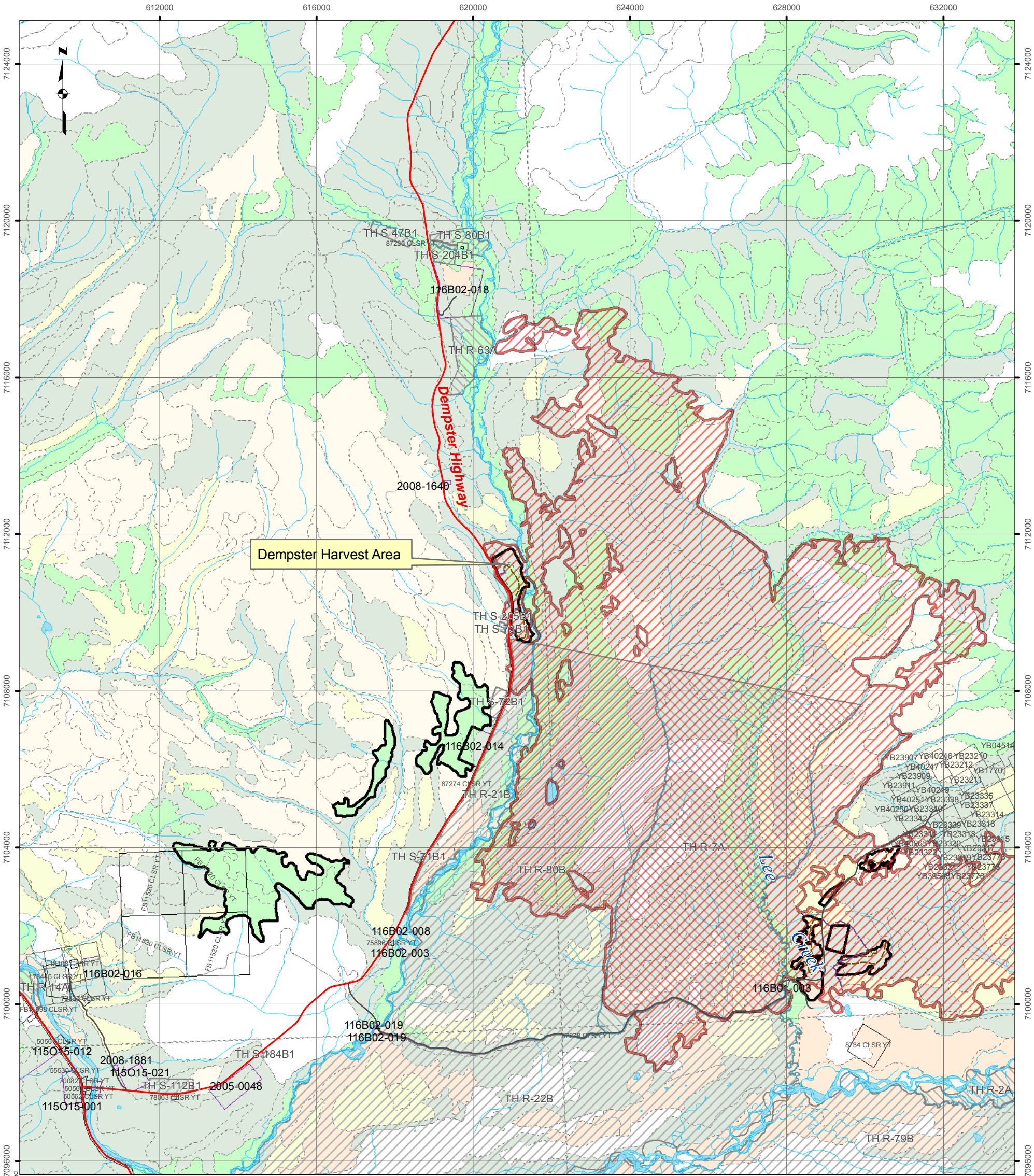
Project specific features such as Existing and Proposed Access Routes and Proposed Harvest Areas were derived/digitized by EDI Environmental Dynamics Inc. Fall 2009.

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

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

Dempster Highway Fuelwood Area





Project Specific Features

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

Administrative Features

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

Forest Cover

- Non Forested Polygons
- Alpine Fir
- Trembling Aspen
- White Spruce
- Black Spruce
- White Birch
- Lodgepole Pine
- Balsam Poplar
- Larch

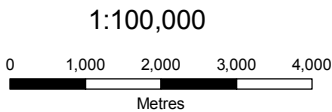
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Digital Data Sources

1:50,000 Canvec features downloaded from spatial data warehouse - www.geogratis.gc.ca. Her majesty the Queen in Right of Canada, Department of Natural Resources. All rights reserved.

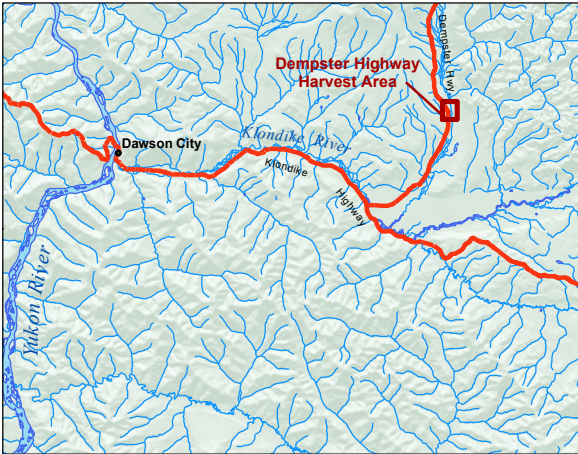
Project specific features such as Existing and Proposed Access Routes and Proposed Harvest Areas were derived/digitized by EDI Environmental Dynamics Inc. Fall 2009.

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



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

Dempster Highway Fuelwood Area



Appendix 3: Representation Summary

Draft Dempster Highway Timber Harvest Plan

Prepared: August 2010

Prepared by: Greg Thompson

A total of 5 comments were received during the notification period on the Draft Dempster Highway 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
- Derrick and Katie Hasting
- 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 Dempster Highway Timber Harvest Plan

August 2010

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 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.	

Draft Dempster Highway Timber Harvest Plan

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			<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 Dempster Highway 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 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 Dempster Highway 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	Yukon Conservation Society	Add 120m Riparian Management zone	Mitigation: Prescription for the Riparian Management Area will be the same as the rest of the block. However, a sentence will be added to relay this in the Riparian section. The RMA will not be shown on the map as there is no change in prescription.	Additional wording to address comment was developed.
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	

Draft Dempster Highway Timber Harvest Plan

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			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 must be 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 Dempster Highway 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 species are planned for harvest?	Will clarify that this THP is for Dead wood only.	Additional wording to address comment was developed
	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 65-75% 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 st	Harvest permits in Dawson are currently till April 30 th and the THP is based on if its frozen so the season	

Draft Dempster Highway Timber Harvest Plan

August 2010

			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.	
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.	