

***French Gulch  
Timber Harvest Plan  
within  
Tr'ondëk Hwëch'in Traditional Territory***

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

***Prepared: May 2018***

  
\_\_\_\_\_  
Approved by  
Director Forest Management Branch

June 8, 2018  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Submitted by  
Rob Legare, Area Forester

June 8, 2018  
\_\_\_\_\_  
Date

## TABLE OF CONTENTS

Executive Summary .....	3
<b>1.0</b> Introduction .....	3
<b>1.1</b> Background .....	3
<b>1.2</b> Eco-region and Drainages .....	3
<b>1.3</b> Socio-Economic Considerations .....	5
<b>2.0</b> Planning Area Identification.....	6
<b>2.1</b> Landscape Issues .....	6
<b>2.1.1</b> Wildlife .....	6
<b>2.1.2</b> Biodiversity .....	7
<b>2.1.3</b> Riparian and Water Resources .....	7
<b>2.1.4</b> Recreation and Visual Impact .....	7
<b>2.1.5</b> Archeological and Cultural Values .....	7
<b>2.1.6</b> Registered Trapping Concessions .....	8
<b>2.1.7</b> Forest Health .....	8
<b>3.0</b> Harvesting Section .....	8
<b>3.1</b> Operating Unit Areas and Volume Summaries .....	8
<b>3.2</b> Harvest Scheduling and Season .....	9
<b>3.3</b> Silviculture System and Reforestation .....	10
<b>4.0</b> Access Management .....	10

## LIST OF TABLES

Table 1 – Area and Volume Summary for Operating Units.....	8
--	---

## APPENDICES

Appendix A: Overview Map

Appendix B: Representation Summary

## Executive Summary

The French Gulch Timber Harvesting Plan (THP) has been identified as a fuelwood resource of fire killed timber for both commercial and personal use in Dawson City and area.

Over the last few years there has been a shortage of accessible commercial and personal use fuelwood in the Dawson area.

This THP identifies 8 operating units, covering approximately 2280 hectares (ha) with a total gross fuelwood volume of approximately 75,000 cubic meters (m<sup>3</sup>).

The THP sets operational goals and objectives for the issuance of harvesting rights within the planning area.

The *Forest Resources Act* (FRA) requires that commercial timber harvesting licences may only be issued where a THP is in place. The objective of this THP is to provide opportunities for small scale commercial harvesting which assist in satisfying local demand and provides mitigation to protect identified values (see section 2).

All applicants for timber harvesting will be required to meet the submission requirements of the *Forest Resource Act* (FRA), Section 19(1). The pending harvesting licences require notification to the affected First Nation and public in the area of the application. The First Nation and public may make representations to the Forest Management branch Director on the application for a period of no less than 30 days (FRA, Section 18).

In addition, a Yukon Environmental and Socio-economic Assessment may be required prior to issuance of permits where a project falls within the requirements of the assessable activities regulations.

## **1.0 Introduction**

### **1.1 Background**

The French Gulch Timber Harvest Plan area (THP) is located approximately 20 km south of Dawson within the goldfields. Forest fires have burned the majority of the forest stands within the THP.

The French Gulch area was chosen as the location for this THP due to the suitability of fire killed timber for fuelwood harvesting, its close proximity to Dawson and relative ease of access.

This plan follows the recommendations of the Dawson Forest Resource Management Plan (DFRMP).

Opportunities to develop harvest areas close to Dawson City and surrounding residential areas are limited due to historical use, natural disturbance patterns and other land use objectives. This THP will provide a fuel wood supply of fire killed close to Dawson City and surrounding residential areas.

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

This THP lies in the Boreal Cordillera eco-zone within the Klondike Plateau eco-region. It is bound by French Gulch Creek to the north, Eldorado Creek to the east and Ensley Creek to the west. Nine Mile Creek runs through the center portion of THP, continues south to the Indian River and runs into the Yukon River.

Characteristic terrain features include smooth, un-glaciated, rolling plateau topography with moderate to deeply incised valleys and large structural basins composed of level to undulating glaciated terrain.

The most common natural disturbance is fire, with a return interval of approximately 170 years; therefore early seral communities are most common. Elevations range from 600 to 1100 metres. Most of the harvesting will occur in the mid to higher elevations of this range.

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 aspen regeneration.

Loamy moraine and sandy fluvio-glacial material is dominant in the ecoregion. Much of the ecoregion is covered by a veneer of volcanic ash 2 to 15 centimetres thick. Permafrost is discontinuous to sporadic with high ice content associated with fine-textured valley deposits. Characteristic wildlife includes barren ground caribou, grizzly and black bear, moose, beaver, red fox, grey wolf, snowshoe hare, raven, rock and willow ptarmigan, and golden eagle. Land uses reflect recreational,

tourism, hunting and trapping values as well as some forestry activities and mining.

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

Dawson City is home to approximately 1,300 people. The major economic drivers in the region are tourism and gold mining. The current annual timber demand in Dawson City is approximately 3500 cubic metres for saw log and 1500 cubic metres for fuel wood. The industry consists primarily of one sawmill and numerous commercial fuel wood operators.

The forests in the Dawson City region provide significant ecological and aesthetic values, cultural and heritage values, recreational values and other non-timber forest resources values. Dawson City'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 (Dawson Forest Management Planning Team, 2013). Many of the residents of Dawson City rely on fuel wood harvesting as an economical heating alternative throughout the winter.

## **2.0 Planning Area Identification**

The planning area is accessed by the French Gulch Road which runs along the ridge and through the THP (see Appendix A). The THP area is within two major fires; the western half of the THP burned in a 2004 fire and eastern section burned in a 2017 fire. The majority of the THP consists of fire-killed dry standing and downed white and black spruce stems. Although there are patches of timber that were unaffected by these fires, only the fire killed stems are being targeted for harvest. Slopes in this THP area range from 0 to 40 percent on ridges and mid-slopes to 30 to 50 percent near valley bottoms.

The total area identified is approximately 2280 hectares with a gross fuelwood volume of approximately 75,000 cubic meters based on an average volume of 35 to 40 cubic metres per hectare.

Eight operating units have been identified for development. Operating units have been identified in areas with a slope of less than 30 percent.

The majority of the timber is small in diameter and height. Average heights are 12 to 15 meters with 10 to 15 centimetre diameter at breast height. There are patches of larger timber within operating units (that is with heights greater than 18 metres and greater than 20 centimetres diameter at breast height however terrain (slope) make this timber hard to access. Operating unit 1 to 7 are within the area that was burned in 2004 where some of the timber has been harvested in previous years. Operating unit 8 is within the area that burned in 2017. Operating units will be developed into harvest blocks as operators apply for timber permits.

## 2.1 Landscape Issues

### 2.1.1 Wildlife

**Barren-ground caribou:** The THP area overlaps the Fortymile caribou herd winter (October to April) range. This area can be important for caribou and is one of the few areas that the Fortymile caribou herd is seen on an annual basis.

When the caribou start migrating in winter, the herd uses the ridge system to access habitats throughout the goldfields.

**Moose:** This ridge system within the goldfields is a popular post-rut aggregation area for moose. There are two issues. One is maintaining an open access route late into the fall could potentially result in increased traffic and timber harvest, and the second is disturbing moose from these grounds at a time of an energetic low. Currently moose in the Goldfields are at the top end of what is considered being allowable human caused mortality.

#### **Mitigations:**

To mitigate these concerns of high ungulate winter range habitat, timber harvest will be limited to summer and early fall months. This area will be closed for timber harvesting starting October 15<sup>th</sup> and winter access is very limited as roads are not maintained during winter months.

The expected small scale of operations and previous disturbance leads to an expectation that the various species of wildlife will not be significantly impacted by proposed harvesting activity.

Cavity nests were identified as a potential concern and where identified within harvest areas, operators will be required to meet the FMB wildlife standards and shall reserve snags and trees with indications of cavity nesting, when operationally safe to do so.

### 2.1.2 Biodiversity

To maintain landscape level biodiversity over time, both the harvest rate and cut/leave pattern must be considered. Forest harvesting should attempt to emulate the Natural Disturbance Zone (NDZ) regime, as described Dawson Forest Resource Management Plan (FRMP). This area experiences frequent stand replacing events from fire, the return interval of these events averages 170 years, and greater than 100 hectares in size. Operational concerns and the demand for timber will limit the size of harvest openings. Planned retention and reserve areas within patch cuts will best emulate this fire disturbance pattern and conserve biodiversity across the landscape.

The Department of Environment has identified two rare plants that might occur in the area; Twin-flowered Violet (*Viola biflora*) and Yukon Woodroot (*Posistera*

*yukonensis*). Woodroot may occur on or below rock outcrops in the area. It would not be directly affected by wood-cutting unless activities such as road building occur. Field crews and operators will be made aware of these rare plants and instructed to stop operations and consult with Forest Management Branch if encountered.

### **2.1.3 Riparian and Water Resources**

The THP is bounded by French Gulch Creek to the north, Eldorado Creek to the east and Ensley Creek to the west. Nine Mile creek runs through the center portion of THP which flows south to the Indian River and then into the Yukon River. The operating units are above all these major riparian features. All riparian features will have protective reserves established as per the Forest Management branch Standards and Guidelines found at [http://www.emr.gov.yk.ca/forestry/pdf/planning\\_standards\\_riparian\\_management.pdf](http://www.emr.gov.yk.ca/forestry/pdf/planning_standards_riparian_management.pdf)

### **2.1.4 Recreation and Visual Impact**

The French Gulch area within the Goldfields is not considered a high recreational or visitor area. The Bonanza Road is the major road in proximity to this THP. Bonanza Road has minimal views of the French Gulch THP, and therefore visual impacts of the area are expected to be low. Irregular boundaries, along with boundaries that follow the natural lines of force and existing disturbance will yield a harvest area that is natural in appearance. It is expected that the harvesting activities will be most visible in the first 3 years, after which time they will much less visible.

### **2.1.5 Archaeological and Cultural Values**

The Archaeology Branch of the Department of Tourism and Culture has worked with the Tr'ondëk Hwëch'in Heritage Department to identify areas of archaeological or heritage potential. Areas have been identified.

Harvest activities that could impact the ground surface will be restricted from areas identified with high archaeological or heritage potential. Types of harvest activities that could impact ground surface include road building, graded trail building, scarification, and graded landings.

It will be incumbent upon all personal use and commercial harvest permittees to report archaeological sites, and heritage resource if discovered during forest harvesting to the Forest Officer. The Forest Officer will immediately contact both the Tr'ondëk Hwëch'in Heritage Department and the Archaeology Branch of the Department of Tourism and Culture.



### 2.1.6 Registered Trapping Concessions

Registered trapping concessions 57 & 53 overlap the THP area. The concession holders were contacted on November 6, 2017. One of the trapping concession holders raised concerns that harvesting in winter would disrupt his trapping of wolf on the ridge tops. To mitigate for trapping as well as caribou concerns, timber harvesting will be restricted to summer and early fall closing timber harvesting in October.

### 2.1.7 Forest Health

The French Gulch THP is a mosaic of recent burns with a healthy understory and presently shows no major forest health concerns. Natural populations of forest insects and diseases exist within the planning area, and play an important role in the function of a healthy ecosystem. For a more complete list of common pests and diseases that are present in the area, refer to the 2015 Forest Health Report for zone 3, which includes the Dawson FRMP area. Both systematic and general observations and reporting of insect and/or disease continue throughout the region on a regular basis.

## 3.0 Harvesting Section

### 3.1 Operating Unit Areas and Volume Summaries

Table 1 provides a summary of areas and estimated fire killed timber volumes in the operating unit identified.

**Table 1 – Area and Volume Summary for Operating Units**

Operating Unit	Area (ha) <sup>1</sup>		Volume (m <sup>3</sup> ) <sup>2</sup>		
	Gross	Net	Average m <sup>3</sup> /ha	Gross	Net
FG – OU 1	185	166	40	6,640	5,312
FG – OU 2	169	149	40	5,960	4,768
FG – OU 3	281	242	40	9,680	7,744
FG – OU 4	97	87	40	3,480	2,784
FG – OU 5	106	95	40	3,800	3,040
FG – OU 6	133	120	40	4,800	3,840
FG – OU 7	123	99	40	3,960	3,168
FG – OU 8	1189	1056	35	36,960	29,568
Totals	2283	2014	39	75,280	60,224

*1 Net area estimated from removal of riparian, low volume or isolated stands in OU (\*removed riparian & heritage + another 10% for low productivity stands, inoperable slopes, roads and trails from each OU)*

*2 Gross volumes identified are based on an average volume estimate of m<sup>3</sup>/ha, multiplied by the net area. Net volume is averaged at 20% reduction of the gross volume due to defect, rot and retention.*

## **Operating Units 1 - 7:**

Operating Units 1 - 7 are located in the western portion of the planning area, where the Dawson wildfire 021 occurred in 2004. These OU's have been identified and there is an existing network of mining roads that will provide access during the summer and early fall. Harvest development in these areas will proceed according to demand from commercial licensees and personal use. Dis-continuous timber types characterize the THP area, with an abundance of variable timber profiles. Areas that would be suitable for development in the future will be areas that meet product profile of the permittee and are on slopes less than 35%, outside of any riparian management zones, and other reserves. This historically has been dry standing spruce greater than 12 cm in diameter. A separate YESAB submission may be required at that time if appropriate triggers are met. New access from the existing mining roads will be required to develop these areas. This is addressed in Section 4.

## **Operating Unit 8**

Operating Unit 8 is located in the eastern portion of the planning area, where Dawson wildfire 006 occurred in 2017. This area will be initially opened for commercial use fuelwood opportunities; however, personal use fuelwood opportunities could be made available in future. This unit will be accessed from the French Gulch Road. The French Gulch road connects to an old trail that was widened as a cat guard for Dawson wildfire 006. A gate will be placed at the start of the OU 8, where the existing cat guard which has been upgraded to a 3.9 km long 'Forest Resource Road (FRR)'. The FRR designation will be French Gulch 1 .The French Gulch 1 FRR traverses the top of the ridge through the OU and will have another gate placed at the end. The cat guard continues beyond the end gate east of the FRR, down slope to the valley bottom. This portion of the cat guard will not be used as it is very steep, prone to rutting and erosion, and there is little merchantable timber.

The FRR is on gentle ground of slopes less than 35% and has one adverse grade of up to 25%. An initial reconnaissance of the area has shown minimal natural erosional events. Forest Management branch will be responsible for any maintenance issues that arise, this is addressed in Section 4 of this document; 'Access Management'.

## **3.2 Harvest Scheduling and Season**

Harvesting with ground based methods should start in the summer of 2018, and is expected to occur in the summer months from early May after spring break up conditions, until October 15<sup>th</sup>.

It is estimated that the THP will remain a viable source of fire killed timber for 4 to 10 years. Ground conditions indicate medium textured soils (> 50% silts) which will enable harvesting during dry soil summer conditions. The site plan that will be developed for each block will adhere to the approved FMB soil standards.

## **Potential Winter Harvesting in Future**

Harvesting is currently planned to occur only during the summer and early fall months, to minimize disturbance to caribou and moose populations and as access is limited during the winter months.

Harvesting within Operating Unit 8 may be considered in future. If winter harvesting is pursued then a separate YESAB submission may be required at that time if appropriate triggers are met for road maintenance. Both the Department of Environment and Tr'ondëk Hwëch'in and the Trappers will be contacted for their input before this activity is approved.

## **3.3 Silviculture Systems and Reforestation**

Natural regeneration is the preferred method of regeneration for all operating units. During site plan development, advanced regeneration will be assessed to guide harvest operations to protect advanced regeneration. After harvest is complete, the harvest areas will be assessed to determine regeneration options. The Soils Standards limit the amount of on block disturbance, and are designed to promote the establishment of early successional forest and vegetation. Silviculture activities will be guided by the Silviculture Strategy.

## **4.0 Access Management**

FMB regulates the construction, maintenance and decommissioning of existing Forest Resource Roads.

Future road construction will be limited to a maximum of 15km of Class 3 FRR's to access future operating units. The number of new access points created off of existing mining roads into the operating units will be minimized as much as possible. FRR's will be built to the specifications outlined in the Forest Resource Act Standards and guidelines of FRR's for construction, maintenance and decommissioning. New access construction will require an Access to Highways permit from Highways and Public works, and will meet the specifications as outlined by the authorizations.

All new Forest Resource Road construction will be gated, and decommissioned following completion of THP activities to address erosional concerns and access following completion, unless otherwise stated. Access along newly developed roads may be restricted to timber resource licence holders to reduce negative environmental impacts, for reasons of safety or other considerations.

All proposed harvesting will require site plans approved by FMB, which contain standards for soil conservation and disturbance levels within the harvest block. Newly bladed trails, roads and landings used during frost free conditions (summer/fall) may require scarification to reduce compaction and aid in the re-

establishment of vegetation within the harvest area following harvesting.

See the THP map and harvesting section above for the description of access into each operating unit.

## References

Dawson Forest Management Planning Team. 2013. Dawson Forest Resources Management Plan. Government of Yukon, Whitehorse, Yukon, Canada.

## **Appendix A**

### **Overview Map**

# French Gulch Timber Harvest Plan

**NRO District: Dawson**  
**FRMP: Dawson**

**THP STATS**  
THP Area: 9002 ha.±  
OU Total Area: 2282 ha.±  
Date: June 05, 2018

**Project Specific Features**

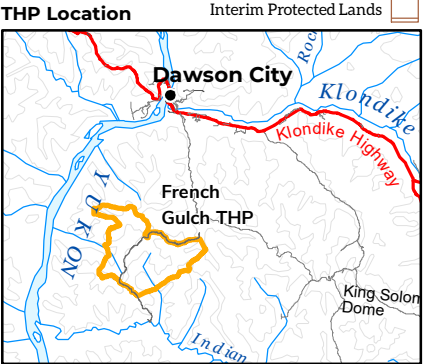
- French Gulch THP
- Operating Units
- Riparian Buffer (15-30m)
- French Gulch Road (Class 3)
- Resource Road Access (FG1FRR)
- Gate Locations

**Land Administration**

- Agricultural Land Dispositions
- Land Dispositions
- Land Notations
- Easements
- Surveyed Land Parcels

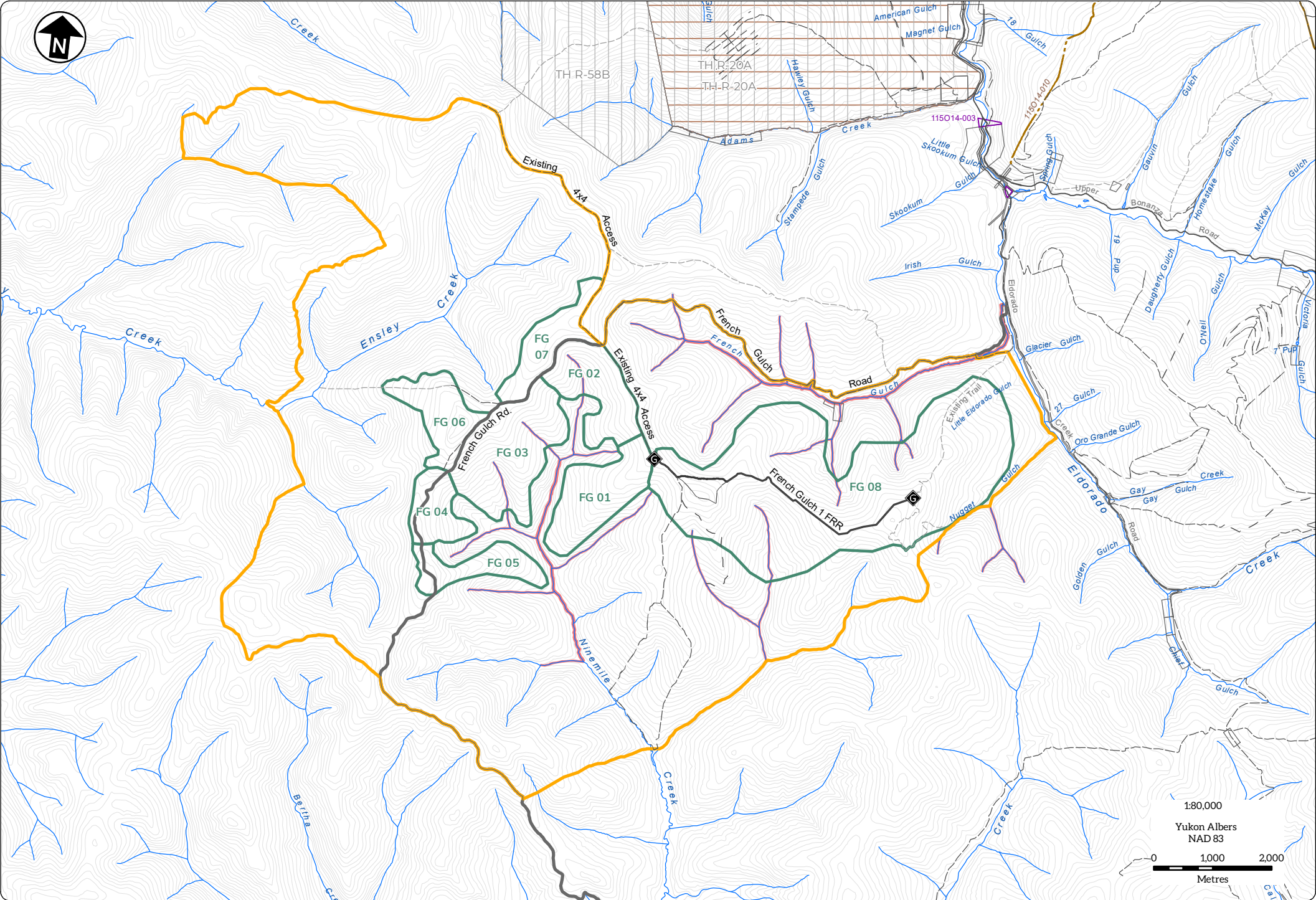
**First Nation Administration**

- Surveyed Settlement Lands
- Unsurveyed Settlement Lands
- Interim Protected Lands



For more timber harvest information, visit our website:  
[www.yukon.ca](http://www.yukon.ca) or [www.emr.gov.yk.ca/forestry/](http://www.emr.gov.yk.ca/forestry/)

Forestry spatial data managed and maintained by the  
Forest Management Branch, Yukon Government. All  
other spatial data provided by Geomatics Yukon.  
Map produced by FMB-GIS.



1:80,000

Yukon Albers  
NAD 83

0 1,000 2,000  
Metres

## **Appendix B: Representation Summary**

### ***French Gulch Timber Harvest Plan***

***Prepared: June 4, 2018***

***Prepared by: Rob Legare Area Forester Dawson***

A total of 1 comment(s) were received during the notification period on the Draft French Gulch Timber harvest Plan held from April 23,2018 to May 22,2018.

Comments were received from:

Ren Causer (Small Family Mining Operation)

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



Topic	Name/ Organization	Comment	Consultation Comment Response	How comment/s have been addressed.
4.0 Access Management	Ren Causer (Small Family Mining Operation)	<p>Ren Causer has been mining on the lower Indian River for 25 years, and our only access is via the French Gulch road. We have maintained this road at our cost with annual grading and occasional excavator work for ditching and water cut-outs., and can take from one to three days.</p> <p>One other mine has used this road for the last 6 years, and has contributed to the upkeep, as has an exploration company. A former woodlot owner also made a contribution one year.</p> <p>Our concern is that with the opening of the area to timber harvesting, there will be greatly increased usage of the French Gulch road, especially by heavily loaded vehicles, with a corresponding deterioration of the road surface</p> <p>We think some thought should be directed towards who should contribute to the upkeep of the road, and how this can be managed</p>	Forest Management Branch or the Licensees will contribute to the upkeep of the French Gulch Road	Area Forester has spoken with Ren Causer and ensured the Mining operation that FMB will contribute to the upkeep of the French Gulch Road if there are licencees are using the road.