Draft
2020 French Gulch Timber Harvest Plan
Within Tr’ondëk Hwëchin Traditional Territory

Date Prepared
3/5/2020

Approved by
Director Forest Management Branch

Date

Submitted by
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Date
Executive Summary

The existing French Gulch Timber Harvest Plan was approved in 2018 and encompasses a 2280 hectare area of fire killed spruce, which was burned by wildland fires; the western half of the THP burned in a 2004 fire and eastern section burned in a 2017 fire. The current draft 2020 French Gulch Timber Harvest Plan proposes a change to a seasonal harvesting restriction in the 2018 French Gulch Timber Harvest Plan.

Currently there is a seasonal restriction within the 2018 French Gulch Timber Harvest Plan where timber harvesting is closed to licencees beginning October 15th throughout winter until the following spring. The intent of the October 15th closure was to mitigate wildlife concerns during the last two weeks of moose hunting season (October 15 – 31st) by reducing traffic in the area from timber harvest licencees, and by not maintaining the French Gulch road beyond this date.

The majority of the commercial fuelwood harvesters live a subsistence lifestyle. Fall and early winter is the time period in which commercial harvesters prefer to be operating and filling their fuelwood orders.

Forest Management Branch is proposing a change to the seasonal harvesting restriction for the 2020 French Gulch Timber Harvest Planned area, where a seasonal closure to harvesting is in place during October 15 – 31st each year, and is re-opened to harvesting on November 1st. This reduced closure will mitigate pressure on moose populations while providing commercial fuelwood licencees access to a source of fire killed timber into fall and early winter.

Due to this proposed change of seasonal restriction, the Forest Management Branch is required under the Forest Resources Act (Section 18) to submit the 2020 French Gulch Timber Harvest Plan for a 30-day public review and affected First Nations review to make representations.

A new operating unit (FG-09) has also been identified since the approval of the 2018 French Gulch Timber Harvest Plan. While this new operating unit does not trigger a
legislated review of the 2018 French Gulch Timber Harvest Plan under the Forest Resources Act, the update is reflected in the current 2020 French Gulch Timber Harvest Plan.

The 2020 French Gulch Timber Harvest Plan has been prepared to meet the requirements of the Forest Resources Act (FRA), associated Forest Resources Regulation (FRR), and the Dawson Forest Resources Management Plan. The Forest Resources Act requires that commercial timber harvesting licences only be issued where a timber harvest plan is in place. The timber harvest plan provides mitigations and management of identified forest values. All applicants for timber harvesting will be required to meet the submission requirements of the Forest Resource Act, Section 17(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 (Forest Resources Act, Section 18).

In addition, a Yukon Environmental and Socio-economic Assessment may be required for any further projects under this plan prior to the issuance of permits where a project falls within the requirements of the assessable activities regulations.
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1 Introduction

1.1 Background

The 2020 French Gulch Timber Harvest Plan area (THP) is located approximately 20 km south of Dawson City within the Goldfields Landscape Unit. 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 fluvioglacial 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 between 5-8 active commercial fuel wood operators per year.

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 Planning Area Identification

The planning area is accessed by the locally known French Gulch road which runs along the ridge and through the THP (see Appendix A: Overview Map). 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 net fuelwood volume of approximately 41,716 cubic meters remaining. Nine operating units have been identified. 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 difficult to access.

Operating units 1 to 7 and 9 are within the area that was burned in 2004 (western section of THP). The majority of the accessible timber in the 2004 burn has been harvested. What merchantable timber remains or is available in the 2004 burn is a longer distance from the main ridge access and on steeper slopes between 20-35%. Operating unit 9 is a newly formed area within the THP boundary.

Operating Unit 8 encompasses areas of burned timber from the 2017 fire, and has not seen any harvesting to date. It is anticipated that with the 2017 burn being now three years old that there will be interest by both personal and commercial fuelwood timber within the 2017 burn (eastern section).

Operating units 8 and 9 will be developed into harvest blocks as operators apply for timber permits.

2.1 Landscape Issues

2.1.1 Wildlife

Barren-ground caribou: the Gold Fields Landscape Unit overlaps with the Fortymile caribou herd winter range (October to April).

Moose: Moose in the Gold Fields Landscape Unit are present and generally use the various ridge systems. There has been an increase in hunting pressure in the last ten years from licenced moose hunters within the Gold Fields due to abundant road access.
Mitigations:

To mitigate the concerns related to the increased licenced hunting pressure, timber harvesting will have a temporary seasonal shutdown from October 15 - October 31 during the last 2 weeks of the moose hunting season. By having this temporary seasonal shutdown for timber harvesting, the French Gulch ridge road will not be maintained by fuelwood harvesters during this time period making this road difficult to access.

If Fortymile caribou are encountered within the boundary of the timber harvest plan, the operators shall halt operations until caribou have moved out of the area, and report sightings to the Forest Officer.

It is expected that due to the small scale of nature of fuelwood operations, there will be approximately 3-5 commercial timber operators utilizing the timber harvest plan area throughout a season. This leads to an expectation that the various species of wildlife will not be significantly impacted by proposed harvesting activities.

All site plans and operational development within the timber harvest plan will be consistent with the approved Wildlife Features Standard and Guidelines available from the Forest Management Branch. Any road or access developed into the operating units will be gated and controlled as a forest resources roads.

2.1.2 Biodiversity

To maintain landscape level biodiversity over time, both the harvest rates and cut/leave patterns 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

2.1.4 Recreation and Visual Impact

The French Gulch area within the Gold Fields is not considered a high recreational or visitor area. The Bonanza and Grand Forks roads are the major roads in proximity to this THP, and both have minimal viewscapes of the French Gulch THP. Visual impacts of harvesting in the area are therefore 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 Disturbance Factors

The Gold Fields area has experienced significant disturbance from historical and current mining and mineral exploration activities. There are numerous placer and quartz claims overlapping the 2020 French Gulch timber harvest planning area, as well as existing access, cut lines and exploration trenches present.
2.1.6 Mining Overlap

Section 5.4 of the Dawson Forest Resources Management Plan supports the use of commercial timber on mining claims that are present within a timber harvest plan. Under the Quartz and Placer Mining Acts, a claim holder may only cut timber where timber rights have not otherwise been granted prior to the staking of a claim, and use the timber for mining-related purposes on their claim. The claim holder does not have the exclusive rights to the timber on that claim.

Prior to the Forest Management Branch issuing commercial harvesting permits or forest resources permits, the mining claim holder will be sent a notification by the Dawson mining recorder’s office of timber harvesting interests that overlap with the claims. If there is timber on site that the mining claim holder requires for mining purposes, the claim holder has to respond to the notification within the 2-week time period and give details of the volume (m$^3$) and species required prior to the Forest Management Branch issuing a commercial timber permit or forest resources permit. The Forest Management Branch will then facilitate communication between the timber permittee and the claim holder to coordinate activities on the land base.

2.1.7 Archaeological and Cultural Values

The Department of Tourism and Culture, Heritage Resources Unit has identified areas with elevated potential for heritage resources within the THP. Harvest activities that could impact the ground surface will be restricted from the areas identified as having high heritage potential. Types of harvest activities that could impact ground surface include road building, graded trail building, heavy equipment use, skidding, stream crossings, silvicultural scarification, and graded landings.

It will be incumbent upon all personal use and commercial harvest permittees to report any chance finds if discovered during harvesting to the Forest Officer. The Forest Officer will immediately contact both the Tr’ondëk Hwëch’in Heritage Department and the Government of Yukon Heritage Resources Unit.

All operators and permittees should familiarize themselves with the following Heritage Handbook and the Land Use and Land Applications Best Management Practices for
Heritage Resources before working in the operating units:
http://www.tc.gov.yk.ca/pdf/Land_Use_and_Land_Application_BMP.pdf

2.1.8 Other Users

Registered trapping concessions 57 and 53 overlap the THP area. The concession holders will be contacted and a draft 2020 French Gulch THP will be sent to them for their input.

2.1.9 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

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

<table>
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<th>Operating Unit</th>
<th>Area (ha)</th>
<th>Volume (m³)</th>
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<td>Gross</td>
<td>Net</td>
</tr>
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</tr>
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<td>FG – OU 2</td>
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<tr>
<td><strong>Totals</strong></td>
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<td><strong>2014</strong></td>
</tr>
</tbody>
</table>

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 m³/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 and 9:**

Operating Units 1 – 7 and newly identified Operating Unit 9 are located in the western portion of the planning area, where the Dawson wildfire 021 occurred in 2004. The majority of the accessible timber in the 2004 burn (western section of THP) has been
harvested. What merchantable timber remains in the 2004 burn is longer distance for main ridge access and on steeper slopes between 20-35%.

Operating unit 9 has been a newly identified source of accessible fire killed timber within the THP.

**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 has been placed at the start of the OU 8, where the existing cat guard was upgraded to a 3.9 km long forest resource road (FRR), designated as French Gulch 1. The French Gulch 1 FRR traverses the top of the ridge through the operating unit 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 requirements that arise, this is addressed in Section 4 of this document ‘Access Management’.

### 3.2 Harvest Scheduling and Season

Harvesting with ground based methods is expected to occur in the summer months from early May after spring break up conditions, until the temporary shut down period from October 15 to October 31. The area will re-open for fuelwood harvesting in November until weather and road conditions restrict access or road maintenance capabilities which is usually in mid winter. The French Gulch road and the approach to
French Gulch road are also susceptible to glaciation which also impedes access into the harvesting area in mid winter.

Commercial fuelwood cutting permits within in French Gulch will be limited to cutting permits of $< 1000m^3$.

Based on the recent harvesting statistics in similar timber harvest plans in the Dawson Forest Resource Management Planning area, the expectation is that between three to five commercial operators will be permitted within the French Gulch THP over the course of a season.

All proposed commercial harvesting operations are required to submit site plans to be approved by the Forest Management Branch, in advance of issuance of a cutting permit. The site plan will contain the operational details of harvesting as defined in the Forest Resources Regulation, Section 22. This includes soil descriptions, season of operability, slopes and special concerns (constraints), stand and site conditions, roads and landings descriptions, riparian buffers, management objectives, site prescription, and the reforestation plan.

Soil conditions indicate medium textured soil with moderate compaction, surface, and displacement hazard ratings. There is suitable potential for both dry summer and frozen winter seasons for road construction and harvesting, however this will be assessed further during site plan development.

It is estimated that the 2020 French Gulch THP will remain a viable source of fire killed timber for 5 to 10 years.

### 3.3 Silvicultural 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.

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.
After harvesting operations are complete, the harvest areas will be assessed to determine regeneration options. The Soil Conservation Standards and Guidelines 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 Strategic Plan.

4.0 Access Management

Forest Management Branch regulates the construction, maintenance and decommissioning of existing forest resource roads.

Future forest resource road construction will be limited to a maximum of 15 km of class 3-4 roads to access future operating units. Construction of new roads will require an assessment by the Yukon Environmental and Socio-Economic Assessment Board (YESAB). Low stump (skid) trails will be developed throughout the operating units, however these do not require a YESAB assessment and disturbance will be limited according to Forest Management Branch’s standards and guidelines.

The number of new access points created off of existing mining roads into the operating units will be minimized as much as possible. Forest resource roads will be built to the specifications outlined in the Forest Resources Act and associated Forest Resources Regulation, Standards and Guidelines for construction, maintenance and decommissioning. New access construction may require appropriate authorizations from Highways and Public works, and will meet the specifications as outlined by the authorizations.

All constructed forest resource roads will be gated and decommissioned following completion of harvesting activities to remove access and address any erosional concerns 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.

5.0 References

6.0 Appendix A Overview Map