## Dominion Timber Harvest Plan

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

FOREST MANAGEMENT BRANCH ENERGY MINES AND RESOURCES YUKON GOVERNMENT

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Approved by

**Director Forest Management Branch** 

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Submitted by

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Date

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#### **Executive Summary**

The Dominion 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.

At the time of developing the Dominion THP, there is a shortage of accessible commercial and personal use fuelwood in the Dawson area. The Dominion THP will help address this shortage by providing accessible fire killed fuelwood in proximity to Dawson City.

The objective of this THP is to provide opportunities for personal use and commercial fuelwood harvesting that is accessible for both summer (dry) and winter (frozen) conditions.

Currently, access to the Dominion THP is seasonal, beginning in second week of March and ending late November to mid-December depending on weather and mining activity in the area. There is potential for year round access if Goldcorp begins mine development at Coffee Creek and maintains the Northern Access Route year round as early as November 2019 (anticipated). Developing year round access to fuelwood will fill a much needed gap in the local fuelwood supply for Dawson area.

The total area of the THP is approximately 3880 hectares (ha). This THP identified 6 operating units, covering approximately 668 ha with a total estimated fuelwood volume of 23,043 cubic meters (m³). As the initial operating units are harvested in a progressive manner, additional operating units could be identified within the THP boundary.

The Dominion 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 THP provides mitigations and management of identified forest values.

All applications for timber harvesting will be required to meet the submission requirements of the *Forest Resource Act* (FRA), *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 Dominion Timber Harvest Plan (THP) area is located approximately 65 km south of Dawson within the Goldfields Landscape Unit (Goldfields), and follows the recommendations as set out in the Dawson Forest Resources Management Plan. A forest fire in 2011 burned the majority of the forest stands within the THP. The Dominion THP area was chosen as the location due to the suitability of fire killed timber for fuelwood harvesting, its close proximity to Dawson and relative ease of access.

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 Laura Creek to the north, Dominion Creek to the east and south and Gold Run Creek to the west. Washington Creek runs through the center portion of THP, continues south into Dominion Creek.

Characteristic terrain features include smooth, un-glaciated, rolling plateau topography with moderate 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 540 to 750 meters.

Land use is predominately mining with some forest activities as well, tourism, hunting, and trapping values.

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 (cm) 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.

#### 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 meters for saw logs and 1500 cubic meters 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 as an economical heating alternative throughout the winter.

#### 2.0 Planning Area Identification

The planning area is accessed by either Bonanza road or Hunker Creek road then connecting to the Dominion road. The Dominion road runs along the eastern and southern boundary of the THP (see Map Appendix A).

Currently, access to the Dominion THP is seasonal access beginning in second week of March and ending late November to mid-December depending on weather and mining activity in the area. This could change as Gold Corp begins mine development and maintains the road year round as early as November 2019 (anticipated) Developing year round access to fuelwood will fill a much-needed gap in the local fuelwood supply for Dawson area.

The majority of the THP is within 2011 Dawson Fire #3. The majority of the THP consists of fire-killed dry standing spruce stands with some fire-killed dry standing Aspen and Birch leading stands (see Map Appendix A). Although there are some stands on the north boundary that were unaffected by fire, only the fire killed stands are being targeted for harvest.

#### 2.1 Landscape Issues

#### 2.1.1 Wildlife

Northern Yukon Regional Biologist, Environment Department, Yukon Government provided the following input for wildlife concerns.

**Barren-ground caribou:** The Goldfields overlap with the Fortymile caribou herd winter range (October to April).

**Moose:** Moose in the Goldfields Landscape Unit currently experience high levels of pressure on their populations due to mortality from hunting.

**Sharp-Tailed Grouse:** There are some mating leks immediately adjacent to the areas identified as operating units; the birds leave these leks and use the hillsides within a kilometer or further. Environment Yukon will prescribe guidelines that can be used to minimize impact to sharp—tailed grouse

#### Mitigations:

#### **Barren-ground caribou and Moose:**

The expected small scale of operations and previous disturbance in the Dominion THP vicinity leads to an expectation that the caribou and moose will not be significantly impacted by the proposed harvesting activities

#### Sharp-tailed grouse

To avoid disturbing and destroying sharp tailed grouse nesting sites; all Forest Resource permit holders will be subject to the following:

All timber harvest permitees will be provided with Sharp -tailed grouse nesting site

information sheet. It will be incumbent upon permit holders to familiarize themselves and their operators with the identification of sharp-tailed grouse nesting sites (leks). Sharp-tailed grouse leks found by the permittees shall be reported to the Forest Officer. The Forest Officer will immediately contact Dawson Regional Biologist.

All harvesting activities shall be avoided within 500 meters of a lek from April 1-April 20 between 5am-10am, and within 1km of leks during the peak attendance period, from April 20 - May 4 between 5am-10am.

#### **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. Leaving green patches of timber and focusing on boundaries that follow the landscape features and fire disturbance will maintain landscape level biodiversity.

#### 2.1.2 Riparian and Water Resources

The THP is bounded by Laura Creek to the north, Dominion Creek to the east and south and Gold Run Creek to the west. Washington Creek runs through the center portion of THP, continues south into Dominion Creek.

All riparian features will have protective reserves established as per the Forest Management branch (FMB) Standards and Guidelines found at:

http://www.emr.gov.yk.ca/forestry/pdf/planning standards riparian management.pdf

#### 2.1.3 Archaeological and Cultural Values

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

It will be incumbent upon all personal use and commercial harvest permitees 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 permitees should familiarize themselves with the following Heritage Handbook and Best Management Practices before working in the Operating Units: <a href="http://www.tc.gov.yk.ca/pdf/Heritage Handbook 2007.pdf">http://www.tc.gov.yk.ca/pdf/Heritage Handbook 2007.pdf</a>
<a href="http://www.tc.gov.yk.ca/pdf/Land">http://www.tc.gov.yk.ca/pdf/Land Use and Land Application BMP.pdf</a>

#### 2.1.4 Recreation and Visual Impact

The Dominion area within the Goldfields is not considered a high-use recreational or visitor area. Visual impacts of the area are low. Irregular boundaries, along with boundaries that follow the natural features such as ridges and fire boundaries will yield a harvest area that is natural in appearance. It is expected that the harvesting activities will be most visible in the first three years after harvest, after which time they will be less visible as vegetation regenerates.

#### 2.1.6 Other Disturbance Factors

The Dominion area within the Goldfields is considered a high activity area for mining; numerous placer claims and operations and extensive quartz mining claims; the landscape has been significantly altered through industrial mining activity

#### 2.1.7 Mining Overlap

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. The claim holder has the right to cut and use the timber for mining-related purposes on their claim, however mining legislation does not confer rights to surface resources such as trees. As per Forest Management Branch's Operational Policy and Procedures for Timber on Quartz and Placers Mining Claims, the claim holder does not have the exclusive rights to all of the timber on that claim, as it remains the property of the Government of Yukon.

There are several Placer and Quartz claims that overlap within the Dominion THP.

Prior to 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 (m3) and species required prior to the Forest Management Branch issuing a commercial timber permit. The Forest Management Branch will then facilitate communication between the timber permittee and the claim holder to coordinate activities on the land base.

#### 2.1.8 Other Land Users

Registered trapping concession 54 overlaps the THP area. The concession holder was notified on November 15, 2018 to make a representation. No concerns were identified by trapper.

#### 2.1.9 Forest Health

The Goldfields 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. 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

Initially this THP identifies 6 operating units, covering approximately 668 ha with a total estimated fuelwood volume of approximately 23,043 m<sup>3</sup>. The 6 operating units that have been identified are all accessed along the southern boundary (see Map Appendix A). As the initial operating unitsare harvested in a progressive manner additional operating units could be identified within the THP boundary.

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** (Refer to Map Appendix A)

Operating Unit	Area (ha)			Volume (m³)		
	<sup>1</sup> Spruce leading (ha)	<sup>2</sup> Deciduous leading (ha)	<sup>3</sup> Vegetated- non forested (VNF) <10% forest cover (ha)	Total Area (ha)	<sup>4</sup> Average Spruce Volume (m³/ha)	<sup>5</sup> Total Volume of spruce
OU 1	63	35.5	0	98.5	50	4,925
OU 2	76	6.7	10	92.7	40	3,308
OU 3	90	0	48.9	138.9	70	6,300
OU 4	11	16	17.5	44.5	30	810
OU 5	70	102	56	228	30	5,160
OU 6	63.5	0	1.3	64.8	40	2,540
Totals	373.5	160.2	133.7	667.4		23,043

<sup>&</sup>lt;sup>1</sup> Spruce leading that are have > 50% Spruce and may contain < 50% Deciduous either aspen and or birch

 $<sup>^{2}</sup>$  Deciduous leading that have > 50% Deciduous either aspen and or birch and may contain < 50% Spruce

<sup>&</sup>lt;sup>3</sup> Vegetated-non forested (VNF) contains <10% forest cover non merchantable timber

<sup>&</sup>lt;sup>4</sup>Average spruce volume  $(m^3/ha)$  across both spruce and deciduous leading areas for each operating unit.

<sup>&</sup>lt;sup>5</sup>Total Volume (m³) of spruce for operating unit calculated by multiplying average spruce volume (m3/ha) with total spruce and deciduous leading areas (ha) for each operating unit.

#### Operating Units 1 - 6:

Operating Units (OU) 1-6 are located in the southern portion of the planning area, within the 2011 Dawson Fire # 3. These OU's have been identified as the best potential for accessing merchantable spruce fire kill in the Dominion THP. All operating units have good access either by the Dominion Road (OU 2-6) or accessing Gold Run Creek road heading north of the Dominion Road (OU 1). As well there are numerous existing trails within these operating units.

#### 3.2 Harvest Scheduling and Season

The harvest scheduling, season of harvest are determined in the site plan. The site plan contains the operational details and is completed in advance of issuance of the cutting permit. The site plan will address the details of the harvesting including soils, 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.

Operating Units (OU) 1 and 3 will have site plans developed and scheduled first for harvest. Most of the harvesting will occur in the lower (540 m) to mid (670 m) to elevations of this range.

From initial reconnaissance's completed, the terrain in OU 1 is considered even with long unbroken slopes of 5-15%. Moisture regime is general dry to moderately dry with some avoidable wet spots. This area has good potential for both summer (dry) and winter (frozen) harvesting.

OU 3 begins from a gravel pit located at km 58 on Dominion road; the terrain is generally flat along the creek basin, however it is very wet and is best suited for winter (frozen) harvesting. The hillside slopes gently up along a westerly aspect at 15-25%, and could potentially be summer (dry) but further soil testing required.

OU's 2, 4, 5 and 6: Site plans and subsequent harvesting will be scheduled after OU 1 and 3 are developed.

#### 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 Strategic Plan.

#### 4.0 Access Management

Currently, access to the Dominion THP is seasonal, beginning in second week of March and ending late November to mid-December depending on weather and mining activity in the area. This has the potential to change if Goldcorp begins mine development at Coffee Creek and maintains the Northern Access Route year round as early as November 2019 (anticipated); then a short 6 km stretch of the Dominion road would need to be ploughed to provide winter access, from the junction of Sulphur and Dominion. Developing year round access to fuelwood will fill a much needed gap in the local fuelwood supply for Dawson area.

Existing access and construction of low stump trails will be utilised to access the operating units. If new roads are to be constructed, a separate submission to the Yukon Environmental and Socio-Economic Board (YESAB) would be required. The YESAB screened roads would be designated as Forest Resource Roads (FRR). FMB regulates the construction, maintenance and decommissioning of Forest Resource Roads.

Future road construction will vary by operating unit, season of harvest, constraints and road class. It is anticipated that up to 25km of temporary, all season class 3 FRR could be required; however it is possible that winter only roads requiring minimal ground disturbance will suffice in some OU's.

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 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 FRR construction will be gated and decommissioned following completion of THP activities in order to address erosional concerns and limit 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.

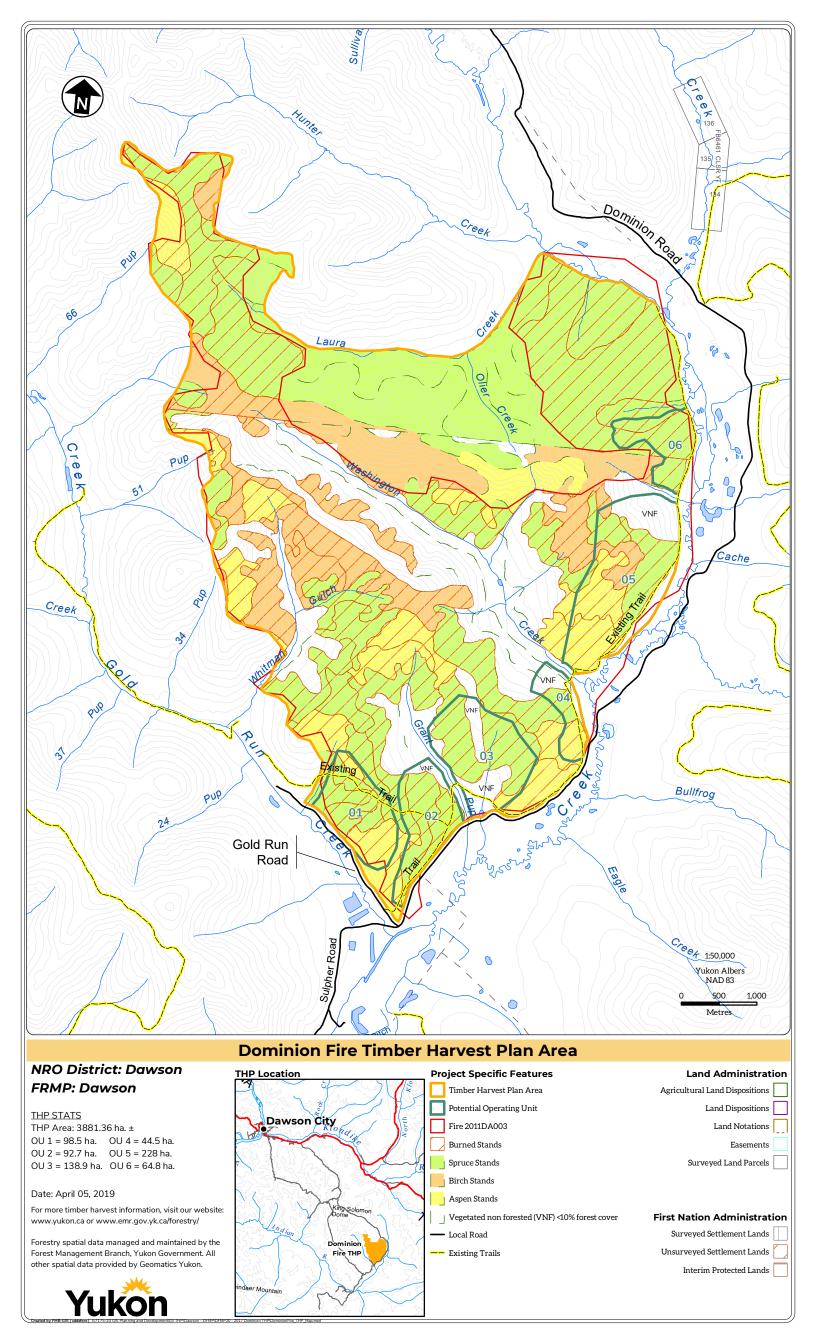
All proposed harvesting will require site plans approved by FMB, which contain standards for soil conservation and disturbance levels within the harvest block. Newly bladed trails, roads and landings used during frost free conditions (summer/fall) may require scarification to reduce compaction and aid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

References

Dawson Forest Management Planning Team. 2013. Dawson Forest Resources Management Plan. Government of Yukon, Whitehorse, Yukon, Canada. <a href="http://www.emr.gov.yk.ca/forestry/dawson frmp.html">http://www.emr.gov.yk.ca/forestry/dawson frmp.html</a>

Yukon Forest Management Branch Policy and Procedures <a href="http://www.emr.gov.yk.ca/forestry/policy\_procedures.html">http://www.emr.gov.yk.ca/forestry/policy\_procedures.html</a>

### Appendix A Overview Map



#### **Appendix B:** Representation Summary

# Dominion Timber Harvest Plan Prepared: March, 2019 Prepared by: Rob Legare Area Forester Dawson

Representations were received during the notification period on the Draft Dominion Timber harvest Plan held from January 7, 2019 to February 5, 2019.

Representations were received from:

Environment Yukon Government, Northern Regional Biologist

Tr'ondëk Hwëch'in, Land & Resources

The following table contains summary of the representations received, with mitigation

Representations received from Environment Yukon Government, Northern Regional Biologist

Bio	ologist	
Re	presentation	Mitigation
a)	rest Resource Roads  All new Forest Resource Road (FRR)  construction shall be gated, and  decommissioned following  completion of THP.	<ul> <li>a) As described in Sec 4.0 Access Management, all new FRR construction will be gated and decommissioned following completion of THP.</li> <li>b) FRRs are restricted to permitted users under the <i>Forest</i></li> </ul>
b)	Restrict access to FRR roads to timber resource license holders.	Resources Act and Regulation. FRRs are not public roads.
c)	Reclamation and/or decommissioning of roads and trails shall be progressive in nature and shall be documented annually. Reclamation and/or decommissioning of roads and trails shall occur as soon as roads and trails are no longer needed for timber harvesting activities.	c) As described in Sec 4.0 Access Management. Reclamation and decommission of roads and trails shall occurs when they are no longer used for harvesting activities.
Sha	arp –tail grouse	a) The Following Term shall be included in permits
a)	Sharp-tailed grouse leks found by the proponent shall be reported to the Dawson Regional Biologist (867-993-6461).	Sharp-tailed grouse leks found by the proponent shall be reported to the Forest Officer  Note forest officer is the main contact for permit holders.  The forest officer will immediately call the Dawson Regional Biologist
b)	Harvesting activities shall be avoided:  O Within 500m of a lek from April 1- April 20; between 5am-10am.  O Within 1km of leks during the peak attendance period	<ul> <li>b) Harvesting Activities shall be avoided: <ul> <li>Within 500m of a lek from April 1-April 20</li> <li>between 5am-10am</li> <li>Within 1km of leks during the peak attendance period, from April 20 and May 4 between 5am-10am.</li> <li>c) FMB agrees to have as information piece how to identify</li> </ul> </li> </ul>
c)	between April 20 and May 4; between 5am-10am.  To avoid disturbing and destroying sharp tailed grouse and other bird	sharp tailed grouse and leks. Northern Yukon Regional Biologist, Environment to provide FMB with identification information

nests timber harvesting should be avoided during the breeding bird

season (April-July)

Representations received from Environment Yukon Government, Northern Regional Biologist

Representation		Mitigation		
Sh	arp –tail grouse	d) The following term will be included in the cutting permits:		
d)	Timber harvesters shall retain deciduous tree species.	Permitees shall retain deciduous tree species and advanced regeneration.		
e)	Remaining coniferous species shall be clustered.	e) As described in Sec 2.1.2 Biodiversity Patches of green timber (including coniferous) will be left as leave patches.		
f)	Timber harvesters shall retain Coarse Woody Debris.	f) The following term will be included in the cutting permits:  Permitees shall lop and scatter the non-merchantable tops of harvested trees  Permitees shall leave pieces of timber > 50% rot to be retained for coarse woody debdris  Should be noted FMB has started working on standards and guidelines on acceptable levels of CWD retained at harvest block		

#### Representations received from Tr'ondëk Hwëch'in, Land & Resources

Representation	Mitigation
Heritage Resources TH asks that any heritage resources located by applicant while working within TH Traditional Territory be reported to TH Heritage Department	As described in Sec 2.1.3 Archaeological and Cultural Values. It will be incumbent upon all personal use and commercial harvest permitees 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
Trapping Respectful co-operation with Trapping and Outfitting Concession holders	As described in Sec 2.1.8 Other Land Users. The trapping concession owner was notified on Nov 15, 2018 to make representation. No concerns were identified by trapper. There are no outfitting concessions within the Dominion THP. There is a Public review of the THP where anyone including outfitter concessions can make representation

Representation	Mitigation
<u>Environmental</u>	a) Forest Management Branch has standards and
a) TH stresses the importance of adhering to environmentally sustainable logging practices giving specific consideration to minimizing impact on land and watercourses b) Proper handling and storage of fuels and waste.	a) Forest Management Branch has standards and guidelines for Soil conservation, riparian management on streams, lakes and wetlands riparian management that promote sustainable forestry and best practices.  Please visit website for all operational standards and Guidelines  http://www.emr.gov.yk.ca/forestry/operational standards.html  b) There are several Terms and Conditions in both Licence and Cutting Permit that address proper handling and storage of fuel and waste  All Fuel storage and handling shall be done in accordance with the Yukon Environment Act and its applicable regulations.  Forest officers have several tools to ensure harvesting is conducted in accordance with Licence and cutting permit through:  o Inspections (regular inspections usually twice per year)  o If non compliance:  Tickets (Summary Conviction Act) Notices of non-compliance Protection orders.  Suspension of cutting permit, forest resources permit or harvesting licence.  Termination or amendment of harvesting licence.  Termination of harvesting licence and if convicted of an offence.  Prosecution.
Wildlife  a) To help monitor wildlife health TH Fish and Wildlife Department request to report any unique animal sightings while working in area. b) Avoidance of conflict with wildlife	<ul> <li>a) The following term will be included in the cutting permits</li> <li>All caribou sightings (or other unique wildlife) shall be reported the Forest Officer in Dawson, who will also report the sitings the regional biologist and Tr'ondëk Hwëch'in Lands and Resources Department.</li> <li>b) This is addressed In Sec2.1.1 Wildlife &amp; Mitigation and Northern Regional Biologist representations. Particular emphasis on avoidance of conflict with Sharp-tail grouse</li> </ul>