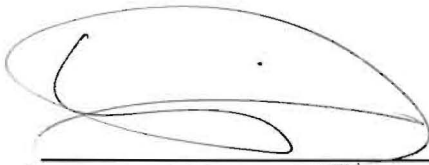


Government of Yukon – Energy, Mines and Resources
Forest Management Branch

Mackintosh East Timber Harvest Plan

Within Champagne and Aishihik Traditional
Territory

April 23, 2014



Approved by
Lyle Dinn, Director
Forest Management Branch

June 6, 2014
Date



1 Executive Summary

Prior to commercial timber harvesting or issuance of forest resources permits greater than 25 m³ (*FRA, Section 29(4)(d)(ii)*) the *Forest Resources Act (FRA)* requires that a Timber Harvest Plan (THP) be prepared and approved.

The Mackintosh East Timber Harvest Plan (THP) area was selected to develop a THP due to the directions and priorities taken from the Strategic Forest Management Plan for the Champagne and Aishihik Traditional Territory (SFMP), the Integrated Landscape Plan for the Champagne and Aishihik Traditional Territory (ILP). This THP meets the requirements of the Forest Resources Act (FRA) and regulations.

The objective of the *Mackintosh East Timber Harvest Plan* (THP) is to create commercial harvesting and personal fuelwood harvesting opportunities in the forests affected by spruce bark beetle, and wildfire within the Champagne and Aishihik Traditional Territory (CATT). This THP identifies salvage timber harvesting opportunities in the Mackintosh Creek East area; approximately 8 km north of Haines Junction. The majority of this THP is within the Fuel

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Abatement Landscape Zone as identified in the ILP, which encourages timber harvesting to consider fuel management as a priority. The area of the THP is approximately 7,100 hectares with an estimated total volume of 77,018m³ including a salvageable dead spruce volume of 61,456m³.

Forest Management Branch met with Champagne and Aishihik First Nations (CAFN), Alsek Renewable Resource Council (ARRC), Environment Yukon and the Yukon Wood Products Association (YWPA) to identify and mitigate concerns prior to developing the proposed draft Mackintosh East THP (September 17, 2013). This THP was advertised, the public and First Nations were invited to make representations. In addition to this Forest Management Branch (FMB) worked collaboratively with CAFN and ARRC to fully engage the public and concerned citizens. Based on public input a second draft was completed on March 20, 2013 which proposed alternative access routes. A summary of the public consultation, meetings and feedback is included in *Section 6* and *Appendix D*.

Input from the public review process has been considered and incorporated into this THP. Some of the changes to the approved THP include: leaving a minimum 50 m visual buffer along the Old Mackintosh Road; minimizing the use of Old Mackintosh Road by restricting commercial timber harvesting access to alternative access from the Pine Lake side and not accessing the THP area from the Bear Creek access point of the Old Mackintosh Road.

In addition to the public/first nations process involved in preparing this THP applications for harvesting licences require notification to the affected First Nation, and the public for a period of no less than 30 days (*FRA, Section 18*). Applications that trigger a Yukon Environmental and Socioeconomic Assessment Board (YESAB), require a submission to YESAB for assessment prior to issuance of a cutting permit.

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2 Purpose

The purpose of the *Forest Resources Act (FRA)* is to promote the sustainable use of forest resources for the benefit of current and future generations by ensuring that the environmental, economic, social and cultural interests of all users of the forest are considered while promoting the health of forests.

The objective of the Mackintosh East Timber Harvest Plan (THP) is to create commercial harvesting and personal fuelwood harvesting opportunities in the forests affected by spruce bark beetle, and wildfire within the Champagne and Aishihik Traditional Territory (CATT). This THP identifies salvage timber harvesting opportunities in the Mackintosh Creek East area; approximately 8 km north of Haines Junction. The majority of this THP is within the Fuel Abatement Landscape Zone as identified in the ILP, which encourages timber harvesting to consider fuel management as a priority. The area of the THP is approximately 7,100 hectares with an estimated total volume of 77,018 m³ including a salvageable dead spruce of 61,456 m³.

2.1 Introduction

2.1.1 Location/Forest resources

This THP area is approximately 8 km north of Haines Junction. It is within Forest Resource Management Zone #4 (Pine Lake) and the Fuel Abatement Landscape Zone as identified in the ILP. The proposed operating units (OUs) have a high percentage of spruce trees that have been killed by the spruce bark beetle or fire. The gross area of this THP is approximately 7,100 hectares of which 1,005 hectares are identified as proposed operating units, with an approximate total volume of 77,018 m³ including 61,456 m³ dead spruce.

The forest resources within *Mackintosh East THP* area consist primarily of spruce bark beetle affected stands. It also encompasses some younger, smaller spruce, aspen, and a portion of a 1998 wildfire. Proposed OUs have been identified based on the present demand for dead timber.

2.1.2 Strategic Forest Planning

The Champagne and Aishihik Traditional Territory (CATT) has been the centre of one of the largest spruce bark beetle outbreaks in Canadian history. The 2012 Forest Health Report states that the spruce bark beetle infestation is in its 22nd year, covers approximately 400,000 hectares and has been the most severe and longest lasting spruce bark beetle infestations ever recorded. As of 2011, the infestation has been on a decline and may now be over.

The *Mackintosh East THP* is an outcome of the forestry planning processes that have been in progress for many years by Champagne and Aishihik First Nations (CAFN), the Yukon Government (YG) and the Alsek Renewable Resource Council (ARRC). The Strategic Forest Management Plan (SFMP) was approved in 2004, and the Integrated Landscape Plan (ILP) was

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approved in 2007 for the non-overlap Traditional Territory of CAFN. The ILP identifies where timber harvesting can be planned, priorities for each management zone and guidelines for timber harvest planning.

This THP meets the strategic direction provided in both the SFMP and ILP, and meets the requirements of the *Forest Resources Act* (FRA). The SFMP encourages the development of a forest-based economy that reflects local community needs and values.

The following is a list of relevant upper level plans, related plans and agreements that provide direction for this Timber Harvest Plan:

- **Letter of Understanding (CAFN, YG, DIAND, ARRC: 1998).** An agreement to coordinate the development, adoption and implementation of a regional forest management plan.
- **Devolution Transfer Agreement (2003).** Forest Resources on Yukon Lands delegated to Yukon Government from Federal Department.
- **Strategic Forest Management Plan for the CATT (2004).** The strategic plan identifies the main management priorities, and general goals and objectives for sustainable forest management.
- **Timber Harvest Level (2006).** The harvest level determination for CATT for spruce beetle affected forests was set at 1,000,000 cubic meters effective until March 31, 2016. The selected harvest level was based on the allowable planning area and applying ILP management assumptions for net down of available volumes.
- **Integrated Landscape Plan (2007).** The ILP provides management priorities and guidelines for timber harvesting project planning for CATT.
- **Habitat Connectivity Planning Recommendations for Forest Harvest Planning in the Champagne and Aishihik Traditional Territory (2008).** The connectivity planning committee prepared recommendations and guidelines addressing riparian-based connectivity network, as well as a map with primary and secondary wildlife habitat and movement corridors. The committee consisted of representatives from CAFN, Parks Canada, Canadian Wildlife Service, YG-FMB and YG-Environment.
- **CAFN-FMB Forest Management Implementation Agreement (2012).** This agreement re-affirms the common planning and management objectives and shared principles for collaborative forest management within CATT.

2.1.3 THP Planning Context within Haines Junction Area

There are numerous THPs within the Haines Junction area, including: Quill Creek THP; Pine Canyon THP; Marshall Creek THP, Bear Creek THP, Building Logs THP (Marshall Creek), Haines Junction Community Fuel Abatement THP and Silver City THP. Each of these plans has gone through First Nations and public consultation and is available on the Forest Management Branch website at <http://www.emr.gov.yk.ca/forestry/213.html>.

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The Mackintosh East THP is within key *Planning Areas* identified as high priority for planning in the SFMP. In addition, it is within the Landscape Fuel Abatement Zone identified in the ILP, which is defined by the distance a forest fire can travel in a day in worst-case scenario. This zone surrounds communities where there are values at risk. Harvesting activities are one of the methods used to reduce the risk of wildfire.

The *Mackintosh Creek East THP* area includes Operating Unit 22 from the Pine Canyon THP, and Operating Unit FA25 from the Haines Junction Fuel Abatement THP. The direction for these OU's can be found in their respective THPs. Operating Units – A, B1, and B2 s were originally proposed during the Bear Creek THP planning process. At that time comments were received from the public, and these units were deferred until they could be included in another planning unit, east of Bear Creek. As a result the Bear Creek THP only covered units to the west of Bear Creek in 2011.

Prior to developing this THP, FMB met with CAFN, ARRC, YG Environment Department and the Yukon Wood Products Association to discuss planning in this area, identify and mitigate existing concerns where possible.

The original drafts of this THP have been subjected to a series of public consultations. Refer to *Section 6* and *Appendix D* for a summary of meetings, feedback, and consultation.

3 Contents

3.1 Ecosystems and forest resources

The Mackintosh Creek East THP is situated within the Ruby Range of the Boreal Cordillera ecozone. This region is one of the driest, as it lies in the rain shadow of the St. Elias Mountains. The elevation range of this THP area is 640 to 940 meters above sea level.

The vegetation is mainly boreal forest, with white spruce dominating the landscape below treeline (1,200 m). Black spruce, larch and pine are absent except for a few isolated trees. Trembling aspen occurs, mixed with spruce in younger stands on warmer sites, and balsam poplar occurs along streams and on moist sites.

This ecoregion is characterized by either rolling plateau or subdued mountainous topography overlain by a variety of parent materials including moraine, colluviums, and glaciofluvial materials. The soils in the major valleys near Haines Junction are commonly eutric brunisols.

Land uses reflect high recreational, tourism, and hunting values in alpine and subalpine sections. The operating units within this THP consist of relatively uniform stands of pure white spruce or white spruce with a trembling aspen component.

3.2 Land Use Coordination

This THP identifies known interests and values within the area and will mitigate concerns where feasible. The following is a list of known interests in this area:

- **Research Plots:** Long-term forest health assessment plots were established by Canadian Forest Service. Plot #11 is located within this THP and is indicated on the map, a 50 m no disturbance buffer will be retained around this plot.
- **Private Property:** Portions of this THP boundary are adjacent to private property, at this time none of the Operating Units are directly adjacent to private property. Forest Management Branch *Incorporating Land User Interests Standards and Guidelines* will be followed to ensure that forest management occurs in consideration of these values on the land base.
- **Land Dispositions:** Other land dispositions (leases) exist within this THP area, including oil and gas, trappers, and guide outfitters. Prior to harvesting these disposition holders will be notified. The Foothills Pipeline easement right-of-way passes through OUs-C,E,F, there have been no concerns with harvesting on the pipeline easement. Notification of harvesting will be conducted through the YESAB process.

3.3 Wildlife and Biological Diversity

One of the main goals of the SFMP is to maintain functioning forest ecosystems. Many landscape-level wildlife values and habitat requirements have been identified by the ILP, and through the identification of landscape level connectivity corridors. The spruce bark beetle has created a large disturbance in the region. Timber harvesting will focus on beetle affected and burned stands and will help promote regeneration of an early seral stage, healthy and vigorous forest. Several species of wildlife have been confirmed to inhabit the THP area such as moose, grizzly bears, black bears, and furbearers. This area has been identified as important moose over wintering habitat with moose coming out of the Alsek Valley and down from Paint Mountain. To contribute to the goal of a healthy and functioning ecosystem the following strategies will apply to all OUs within this THP:

- Most of this THP area is within a high wildlife use area and requires an average of 25% retention of stand structure (10-30% depending on stand characteristics). This objective will be met with retention of individual trees, small patches or reserves.
- Understory spruce and aspen will be maintained where feasible.
- Windthrow is a concern in this area and it is preferable to retain clumps of trees within the OUs as opposed to single trees scattered throughout the area to minimize windthrow impacts. Refer to *Section 3.10.4 Silviculture* for further details.
- Management guidelines from the *Habitat Connectivity Planning Recommendations for Forest Harvest Planning in the Champagne and Aishihik Traditional Territory (May 2008)* will be followed where feasible to address matters such as: protection of riparian-based connectivity reserves (see *Section 3.4 Riparian and Water Resources*), access development, and the timing and sequencing of harvesting.

3.4 Riparian and Water Resources

All site plans and operational development must be consistent with the current riparian and wetland management standards (*FRA, Riparian Management on Streams and Lakes Standards and Guidelines, Wetlands Riparian Management Standards and Guidelines*).

The main riparian corridors within this area have been identified and mapped by the *Habitat Connectivity Planning Recommendations for Forest Harvest Planning in the Champagne and Aishihik Traditional Territory (May 2008)*. These riparian areas are displayed on the maps in Appendix C. The integrity of these corridors will be maintained.

3.5 Recreation, Tourism, Viewscapes

This THP considers a broad range of recreational users and tourism related values. Harvest boundaries will be designed to minimize the impact on the viewscapes within the major highway corridor.

Some residents have a long history of using the existing Old Mackintosh Road as a multi-use trail. Public consultation indicated that several residents in the immediate area are opposed to having industrial machinery travel through the existing roadway and the upgrades and widening that may be required for larger commercial vehicles.

Many of the existing unmaintained highways (old roads and known trails) within the THP area are used extensively by local residents for skiing, ATVing, snowmobiling, dog mushing, and hunting. There is a dog mushing race on the Old Mackintosh Road loop, therefore, recreational concerns will need to be mitigated through careful planning during the YESAB process and issuance of cutting permits.

As a result of public consultation, timber harvesting related commercial traffic will be permitted access via the alternative access routes (MacA and/or MacB).

The following practices will be used to minimize timber harvesting impacts in this recreational use area:

- Before harvest, erect signs to inform, educate, and warn recreational users about harvesting activities and alert people to safety concerns.
- Monitor the work on a regular basis to identify and solve issues in a timely manner.
- Leave partially cut or uncut buffers along new roads where feasible.
- Leave a minimum 50 m visual buffer along the Old Mackintosh Road.
- Layout skid trails and roads with future recreational uses in mind, so they can be incorporated into trail systems (work with the local ski club to help design skid trails networks, where feasible).
- When harvesting activities cannot avoid peak recreational use, consider temporarily relocating recreational trails away from forest harvesting activity; reduce impact of noisy equipment by modifying working hours, shutting down idling equipment, reducing truck noise (by using lower rpm's) to and from the landing, and consider using equipment with noise-reducing features.
- Avoid skidding on recreational trails where feasible. During and after harvesting

progressively remove woody material, smooth ruts where required.

- Work with the Silver Sled Dog Mushing committee to ensure that the race route can be accommodated or modified to ensure that it is not adversely affected.
- Invite the public to tour the operations to learn more about harvesting operations.

3.6 Heritage Culture

Known or newly identified heritage sites and values deemed valuable for Champagne and Aishihik First Nations and Yukon Government will be protected as per FMB *Historic and Archaeological Resources Standards and Guidelines* and by working with CAFN Heritage Branch.

Heritage and archaeological assessments will be conducted, prior to harvesting. Heritage sites will be identified through agency referral with the Department of Tourism and Culture - Heritage Branch staff as well as by CAFN, which has developed an independent approach for identifying First Nation heritage values.

The Old Kluane Wagon Road may occur through sections of this THP area and there are known associations between this early 20th century route and older First Nations' foot trails and other First Nations' heritage resources and values. Effort will be made to ensure CAFN and Yukon Government identify any necessary mitigation prior to harvest operations occurring.

Sites identified as holding special cultural significance for CAFN may be protected or result in additional operating conditions. If new sites are discovered during harvesting or access development, the area will be excluded from operations until a detailed assessment is conducted.

3.7 Traditional Uses

This area is frequently used for a range of traditional uses, including subsistence harvesting including hunting, berry picking, gathering traditional medicines and is generally important to CAFN people due to its ease of access and close proximity to Haines Junction. No site specific exclusions are recommended at this time and these values may be generally addressed by managing the timing of harvesting or road building activities and ensuring those resources are managed in a sustainable way (CAFN personal communications; September 2013).

3.8 Trapping, Outfitting and Guiding Uses

A copy of the draft Mackintosh East THP was sent to trapping concession holders, outfitters and guides operating in this area. Feedback indicated that there were no concerns with harvesting in the area, however there was an interest in the opportunity to utilize any new access, in particular into operating unit E in the burn.

3.9 Timber harvesting locations/volume estimates

The following summary table provides an estimate of area and volume for operating units proposed within this THP.

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Table 1: Proposed Operating Unit (OU) Information:

Proposed Operating Unit Estimated Area and Volume Summary							
OU	Approx. Gross Area (ha)	Proposed Reserves (ha)	Approx. Net Area (ha)	Approx. Total Vol/ha	Approx. Total Volume (m3)	Approx. Dead Volume/ha	Approx. Total Dead Volume* (m3)
A	117	27	90	180	12,150	100	8,280
B1	120	24	96	180	12,960	100	8,832
B2	80	23	57	130	5,558	100	5,244
C	140	44	96	70	5,040	50	4,416
D	140	32	108	90	7,290	50	4,968
E	300	0	300	118	26,550	80	22,080
F	107	24	83	120	7,470	100	7,636
TOTAL	1004	174	830		77,018		61,456

* Approx. 17% of OUs in reserves. Hence total volumes reduced a further 8% to retain average of 25% stand structure

Overall this THP area has predominately gentle slopes (1-10%), and the soils are relatively fine textured (silts/clays). OU boundaries and reserves are approximate and may change based on further field verification during the site plan development phase. The following is a summary of proposed OUs.

OU A/B1/B2: These units represent the most accessible and highest quality merchantable timber noted within this THP area. The soils within these OUs are primarily loams/silt loams and silt clay loams. The timber type is a mix of relatively large dead spruce, younger green spruce and interspersed aspen. Approximately 60-70% of the spruce trees are dead (by volume). There is a significant amount of relatively good quality spruce and aspen regeneration (poles and saplings).

OU C: Overall the dead spruce timber quality is fair, and volumes are relatively low within this OU. There are patches of dead spruce scattered throughout this area interspersed with green spruce and aspen. The predominant soils in this area are silty clays, and the majority of the OU is relatively wet. This unit is bisected by a creek/wet area.

OU D: This unit has patches of merchantable dead spruce are scattered throughout.

OU E: Is located within a burned area, approximately 2.8 km from OU A. Operational requirements will determine the final new road location (refer to *Section 4 Access Management*).

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The timber type is a mix of fire killed spruce (heavily charred) with patches of unburned timber consisting of a mix of spruce bark beetle killed spruce and green spruce. This OU is quite wet, hence winter harvesting would be required.

OU F: There is scattered dead spruce throughout the area. This site is very wet, and is appropriate for winter harvesting only, with a light selective removal of large diameter spruce, while retaining a high percentage of the original stand for biodiversity.

Additional Operating Units: Additional OUs may be identified in the future within the boundary of this THP, provided it meets all the criteria in higher level plans and the requirements of this THP. In addition: site plans would be prepared; notifications issued (see *Section 3.10.1 Harvesting Applications/Notifications*) and if required a YESAB submission would be completed prior to issuing cutting authority.

3.9.1 Personal Use Fuelwood Harvesting:

There was significant public concern about retaining the opportunities to cut firewood for personal use within this area. Personal fuelwood areas will be identified within the boundary of the Mackintosh East timber harvest plan. In addition to this, as site plans are developed for commercial operators, where there is suitable dead timber for personal use, 30 metres will be retained on either side of roads to provide personal firewood cutting opportunities. In addition to this the entire northern portion of PC22 is presently identified as a designated personal use fuelwood area.

3.10 Timber Harvesting Methods/Silviculture Systems

3.10.1 Harvesting Applications/Notification

All applicants for timber harvesting are required to meet the requirements of the *Forest Resources Act*. Applications for harvesting licences require notification to the affected First Nation, and the public for a period of no less than 30 days, (*FRA, Section 18*). In addition, applications that trigger a Yukon Environmental and Socioeconomic Assessment, require a submission to YESAB for assessment prior to issuance of a cutting permit.

3.10.2 Site Plans/Schedule

Prior to issuing a cutting permit, a site plan must be prepared according to the requirements of the *Forest Resources Regulation (Sections 19-21) (FRR)*. As defined in the *FRR*, the purpose of a site plan is to identify the location, and specific methods of timber harvesting, as well as any existing or proposed access. Site plans will meet the objectives within this THP as well as all applicable FMB Standards, the *Forest Resources Act*, and will prescribe specifications regarding timber harvesting to manage, protect and conserve other values within the OU and surrounding area.

The site plan will describe harvesting activities including season of operations, harvest system, block design and other operational details. Logging operations may include, but are not limited to the use of hand falling techniques, hand bucking or mechanized processors, track or wheel loaders, and logging trucks of various configurations.

3.10.3 Soil Conservation/Harvest Season

The season of harvest for each OU will be determined primarily by the access constraints, soil characteristics, and other considerations such as wildlife concerns or recreation values. Most harvesting will occur during the winter months, due to relatively wet or fine textured soils, which are very susceptible to compaction. Limited dry season harvesting/access may be planned to maintain employment opportunities in areas that can be accessed and harvested within site-disturbance guidelines set out in the *Soil Standards*. The timing of harvest within a season will be influenced by soil conditions, site specific wildlife concerns (e.g., calving season), or other land use activities (e.g., tourism use, recreational use, cultural use). These issues will be mitigated in the development of site plans.

3.10.4 Silviculture System

A silviculture system is defined as one or more planned series of treatments to a stand of trees through at least one complete rotation (life span) including harvesting and regeneration and other treatments such as thinning. The silviculture system for each OU will be chosen based on site characteristics and stand management objectives.

The following is a list of stand level management objectives for OU's within this THP area:

- Target salvage harvest spruce bark beetle affected stands (>30% mortality).
- Natural regeneration is the preferred option to ensure a healthy stand of trees (spruce and aspen) post-harvest.
- Minimize impacts on wildlife habitat.
- Minimize soil disturbance.
- Reduce fuel loading within the stand and encourage stand conversion to deciduous or mixed forests.
- Minimize windthrow.

This THP targets salvage harvesting of dead spruce. Spruce is a shallow rooted species and is subject to windthrow. Many of the spruce in this area have been dead for many years as a result of the spruce bark beetle and wildfires, hence some of these trees have started to rot.

The stands are becoming more prone to windthrow with time, with or without harvesting. However, it is recognized that opening up the stand through harvesting activities may increase windthrow occurrence post-harvest. At the site plan stage, strategies will be employed to minimize windthrow. One of the strategies is to remove all trees (dead and green) that are prone to windthrow and design reserves to minimize windthrow. Retained trees that are left

standing are important to the ecosystem for future recruitment of coarse woody debris, large organic debris and vertical diversity. Generally windthrow will occur within the first 3 years post-harvest, hence the harvested areas will be monitored for windthrow after harvesting activities are completed.

As per the requirements of the ILP, where the wildlife values are high as identified in the ILP, *Section 3.3 Wildlife and Biological Diversity* sets the criteria for retention. Retained stems will serve to maintain vertical and horizontal structure and complexity, while maintaining aesthetics and contribute to coarse woody debris in the future. Retention of aspen, immature spruce, as well as mature green spruce will be maintained as in block variable retention. The site plan prepared pre-harvest for each block will outline how this will be achieved.

3.10.5 Reforestation

The ILP states that natural regeneration is the preferred method of reforestation. Most of the proposed OUs have white spruce understory (regeneration, saplings, poles), plus aspen and poplar which will be reserved where operationally feasible to form part of the next stand. The minimum stocking standards and preferred species will be outlined in each site plan and will be monitored post-harvest. As most of this THP is within the *Landscape Fuel Abatement Zone* mixed species forest is preferred (lower hazard fuel type). Strategies will be employed to promote the establishment of aspen in the site plan.

3.10.6 Fuel Abatement Objectives

This THP area is within the *Landscape Fuel Abatement Zone* identified in the ILP which extends beyond the *Interface Zone* and is generally defined by the distance a forest fire can travel in a day in a worst-case scenario. Potential tools for managing fuels to reduce the fire hazard around communities include timber harvesting in addition to fuel abatement and FireSmart programs. Harvesting can assist in achieving overall fuel abatement objectives by reducing fuel loads, and managing slash and debris through either burning, or cutting debris to lie flat to encourage faster decomposition and reduce the quantity of vertical fuels. The site plan will specify fuel abatement strategies.

4 Access Management

Public consultation has indicated that there are numerous concerns surrounding the originally proposed access routes into the proposed harvest operating units. *Section 6* and *Appendix D* list detailed concerns and feedback. This section describes the existing access and proposed access routes to harvesting units and proposed mitigations.

4.1 Existing Access

Within the THP area, there are approximately 28 km of existing roads (unmaintained public

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highways) and trails.

Concerns have been expressed by the public about the incompatibility of recreational use and commercial use of the existing roads in the Mackintosh East THP area, in particular the Old Mackintosh Road. Therefore, alternative access routes have been proposed in Section 4.3 *New Roads* to minimize the use of this road to reduce conflicts. Therefore, timber harvest related commercial use will be required to use the alternative access in Table 2.

The main potential existing roads within this THP are summarized below and identified in Appendix B:

1. Old Mackintosh Road (Pine Lake)

This road starts near the Pine Lake subdivision off of the Alaska Highway, approximately 5.5 km east of Haines Junction. It passes through an old gravel pit and accesses the north eastern portion of the THP area. A portion of this “unmaintained highway” is presently maintained by a private property owner living adjacent to PC22. In addition, this road has been used for many years by small commercial timber harvesters and personal fire wood cutters to access their permit areas (PC22), to date there have been very few conflicts. This road is driveable during dry conditions with a 2WD vehicle, it is relatively straight and wide. There are two wet areas which are impassable during wet conditions just west of OU-F. This road connects to the Old Mackintosh Road (Bear Creek).

2. Old Mackintosh Road (Bear Creek)

This road leaves the Alaska Highway approximately 10.5 km north of Haines Junction, just south of the Nygren subdivision. This road passes private property and climbs at a steady grade past an old gravel pit to the top of “Crocus Hill”. At this point the road passes by CAFN Settlement Land (CAFN S-4B1) and then eventually climbs another small steep (18%) hill below private property. It then continues as a one lane road to the intersection of the Old Mackintosh Road (Pine Lake). This road is driveable with a 2WD vehicle during dry summer conditions.

3. Old Fireguard

This road is a “T” junction off the Old Mackintosh Road (Bear Creek). It passes through OUA and B1. There is berm at the edge of this road that was identified as an impediment to fuelwood cutters accessing adjacent timber. This road is driveable with a 2WD during dry conditions.

4.2 Road Maintenance/Upgrades/Safety

Where existing roads require upgrading a Land Use Permit may be required, and Highways and Public Works will determine if a “work within the right-of-way” permit is necessary. The terms and conditions of the upgrades, maintenance and deactivation would be specified in the terms of these permits. Road construction or upgrading requires a submission to YESAB prior to issuance of any permits.

The cost of road upgrading and maintenance would be assigned to the commercial licence/permit holder(s).

Generally road upgrading results in improvement to the road, by clearing the right-of-way, adding pullouts and widening the road to ensure safe travel and to enable vehicles to pass each other. In advance harvesting signs would be erected to notify the public and warn recreational users about harvesting activities and alert people to safety concerns. Other practices related to recreation are included in *Section 3.5*.

Road maintenance requires ensuring that drainage is maintained and the road surface and ditch lines are graded. Measures will be used in harvesting authorities to shut down commercial road use where there is damage occurring to the road surface or where safety measures are required. The Forest Management Branch is responsible for maintaining roads that are utilized by commercial timber harvesting operations. The cost of this will be assigned to commercial licence holders, and/or it will be their responsibility. Given the multiple use of the road and its importance to local residents, the roads will be closely monitored and maintained while commercial operations are active.

4.3 Proposed New Roads

There are approximately 12 km of new roads proposed to provide temporary access into OUs. In addition to this there will be 7 km of spur (in block) roads.

- The costs of any new road construction will be assigned to the commercial licence holders.
- Any newly constructed roads will be *Forest Resource Roads (FRR)*, which are not public roads. Access on FRR will be restricted, will have a designated maintainer and will be either gated or decommissioned upon completion of operations.
- The proposed approximate locations of new roads have been identified. Final location and size of these roads may be altered to fit the operational needs of the license holder. Any alterations will be within the intent of the guidelines within this THP.
- Where feasible roads may be converted to recreational trails after commercial use.

Table 2 explains alternative access routes to avoid the use of the existing Old Mackintosh Road (Bear Creek), and minimize the use of Old Mackintosh Road (Pine Lake). The final determination on the access routes will be determined once commercial harvesting applications are made within the THP. Prior to any road upgrading or construction a YESAB submission will be required which will detail access, harvesting methods and season. Every effort will be made to ensure that timber harvesting related commercial use of the Old Mackintosh Road is kept to a minimum to avoid/reduce conflicts with recreational and other users. The final road location of the alternative access (Mac A or Mac B) will be determined through detailed field work, heritage assessments and regulatory processes (YESAB).

Mackintosh East Timber Harvest Plan

The Old Mackintosh Road is an existing unmaintained public highway. Vehicular access on this route is open to all members of the public. However, commercial timber harvesting access will be restricted through FMB cutting permits. Terms and conditions in the cutting permit document will specify that commercial use of the Old Mackintosh Road will be limited to the options listed below.

Table 2. Alternative Access Routes

The following alternative access routes are proposed approximate road locations. Further field review, heritage and fish stream assessments are required to refine the final road locations.

Road Name	Road length (km)	Description
Mac A	~2 km new road ~2 km upgrades to existing trail/road.	This proposed road starts in OUF and travel south and west towards OU C, where it would join up with an existing trail that would require upgrading. This route will likely be restricted to winter only, due to the number of wet areas, and creek crossings.
Mac B	B: ~3.3 km new road ~1.1 km upgrades	This proposed road starts off of the Old Mackintosh Road. This option crosses a stream/gully, which would require a culvert. This route has the potential to be drivable during dry season conditions. Further snow free assessments will refine the final location of this road.
Mac C	~1.4 km new road	The proposed new road crosses OU B1 and A. This road starts where it crosses the Old Mackintosh Road (Bear Creek) and ends at the deactivated cat guard.
Mac D	~2.7 km	This road starts where Mac C ends. It will provide access to OU E.

4.4 Road Deactivation/Decommissioning

- All proposed “in-block” spur roads will be temporary roads and will be decommissioned as per FMB Standards, or as stated in the cutting permits. Where feasible these may be retained as recreational trails.
- The cutting permits will specify the details regarding restoration, decommissioning and reclamation of any new roads and skid trails.

5 Research and Monitoring Results

Twenty-seven research plots were established in 2000/2002 within the Kluane area infested by spruce bark beetle by Canadian Forest Service. The objective was to document long-term changes in spruce mortality, stand dynamics, tree regeneration, surface vegetation response and surface wood fuel loads in response to spruce bark beetle. There is recent report entitled *Response of the Southwest Yukon Forests to Spruce Beetle: 2010 Plot Re-assessment* which identifies high priority plots to continue monitoring in the future. Plot #11 is within this THP (refer to map in Appendix C). These plots will not be harvested, and a 50 m no harvest buffer will be retained around them.

CAFN and FMB have established long term monitoring plots in the general HJ area. In addition to this there are KEMP (Kluane Ecological Monitoring Plots) established within the spruce bark beetle area, plus permanent sample plots. All of these research and monitoring plots will add to our understanding of forest dynamics and help to improve forest management.

6 Timber Harvest Plan Public Consultation and Approval Process

This THP has been reviewed by Champagne and Aishihik First Nations, Yukon Environment, Alsek Renewable Resource Council and Yukon Wood Products Association. Issues raised during the initial planning process were mitigated where feasible in the first draft of the THP which was then advertised for public and First Nations representations.

In addition to stakeholder and First Nations notification, public advertisements and posting on the FMB website, a public meeting was held on October 22nd, 2013 in Haines Junction to review the proposed plan and to provide an opportunity for the public to comment. There was a field trip to the Mackintosh East area on October 23, 2013. Based on the level of response and strong interest in this area and the recommendations of the ARRC, FMB postponed making a decision on this THP until there was an opportunity to engage with the ARRC and concerned residents and to work together to explore ideas and find a collective solution. In order to balance the social, economic and environmental needs related to this proposed THP and to work within the direction of the SFMP and ILP, the ARRC hosted a meeting on December 16, 2013 and invited all those who had provided feedback on the proposed THP. All the feedback was gathered, including letters, phone calls and suggestions from various parties.

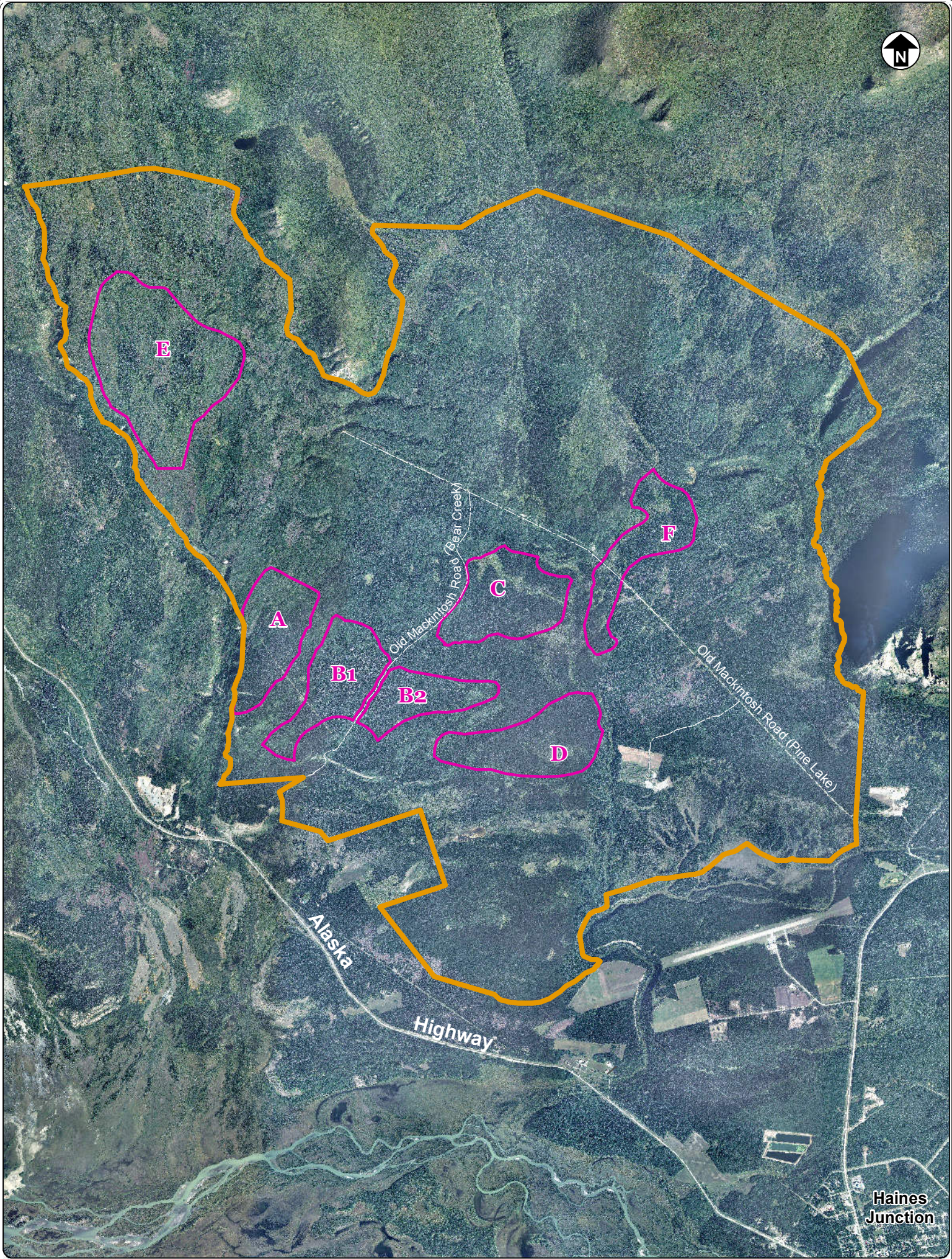
On March 20th a second draft of the THP was prepared which included various alternative access options to mitigate concerns about the use of the Old Mackintosh Road. This was shared with all those who provided feedback and/or attended the December 16, 2013 meeting.

On March 25, 2014 a field trip was conducted. Those who were invited were given until April 4, 2014 to provide additional comments. Since that date, the THP has been revised to mitigate concerns. All input has been fully considered by the Forest Management Branch in approving this final version of the THP.

As a result of all the feedback this approved THP has been modified from the previous drafts THP to mitigate as many concerns as feasible. Much of the THP has been rewritten to clarify, accommodate or offer alternatives to address public concerns. A summary of concerns, verbal and written feedback, meetings, field trip comments are included in Appendix D.

Appendix A: Overview Map with Orthophoto

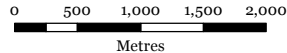
1:60,000 Mackintosh East THP Map



**Appendix A
Mackintosh East
Timber Harvest Plan
Orthophoto**

**... Kluane NRO District ...
... Champagne and Aishihik AAC Unit ...**

For more timber harvest information
Web: www.emr.gov.yk.ca/forestry
Phone: 1.867.456.3999
Date: April 22, 2014

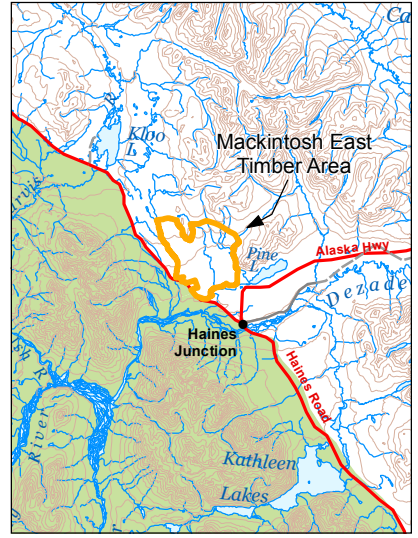


1:60,000 Yukon Albers
NAD 83

Forestry spatial data managed and maintained by the Forest Management Branch, Yukon Government. All other spatial data provided by Geomatics Yukon.

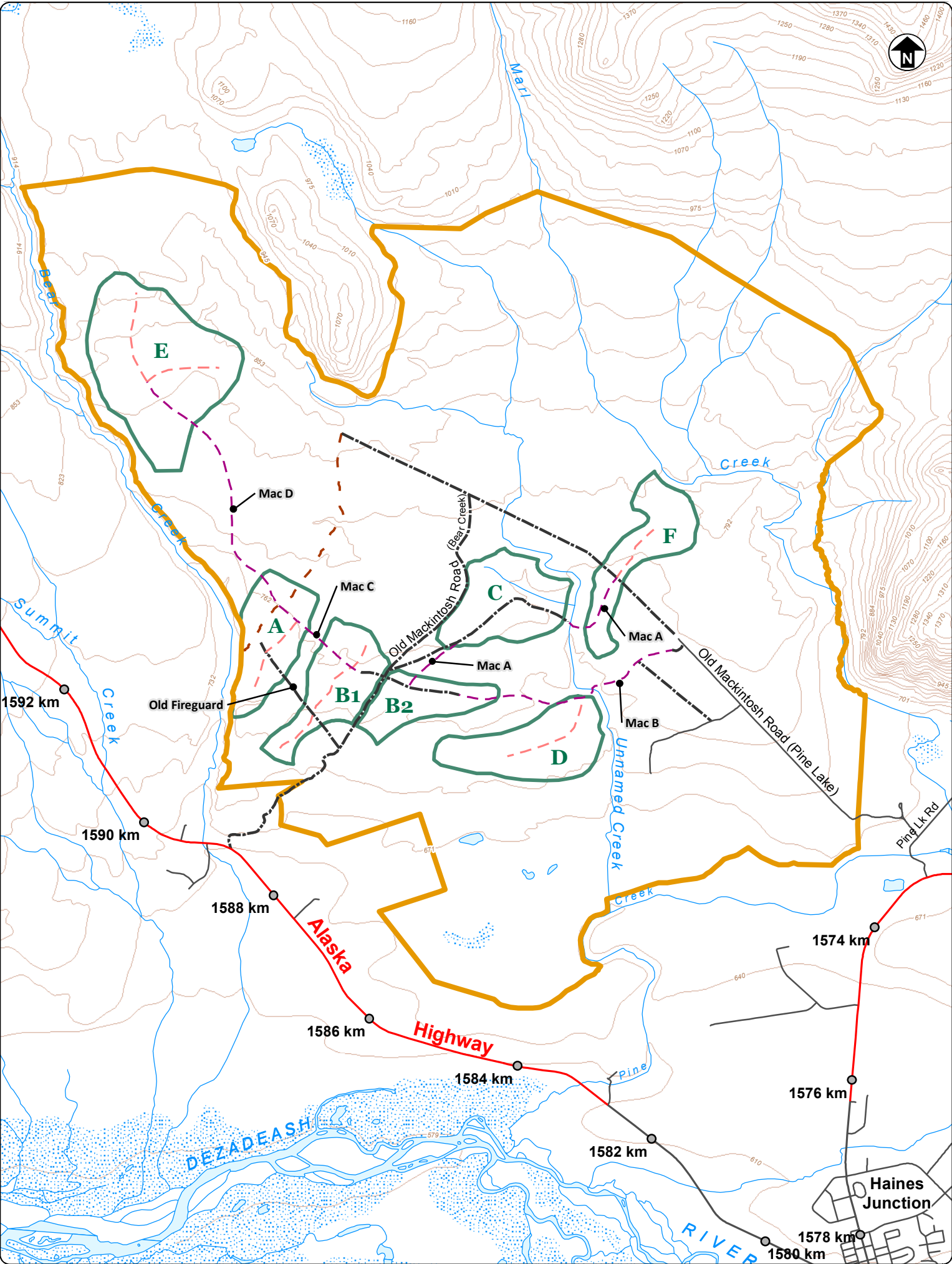


- Timber Harvest Plan Area
- Operating Units



Appendix B: Access Overview Map

1:60,000 Mackintosh East THP Map



Appendix B
Mackintosh East
Timber Harvest Plan
Access Overview Map

... Kluane NRO District ...
... Champagne and Aishihik AAC Unit ...

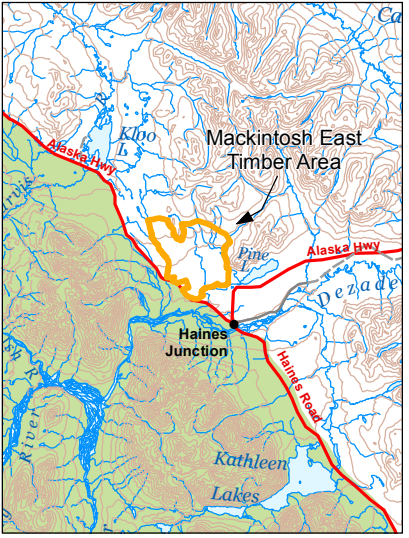
For more timber harvest information
Web: www.emr.gov.yk.ca/forestry
Phone: 1.867.456.3999
April 24, 2014

0 500 1,000 1,500 2,000
Metres

1:60,000 Yukon Albers
NAD 83

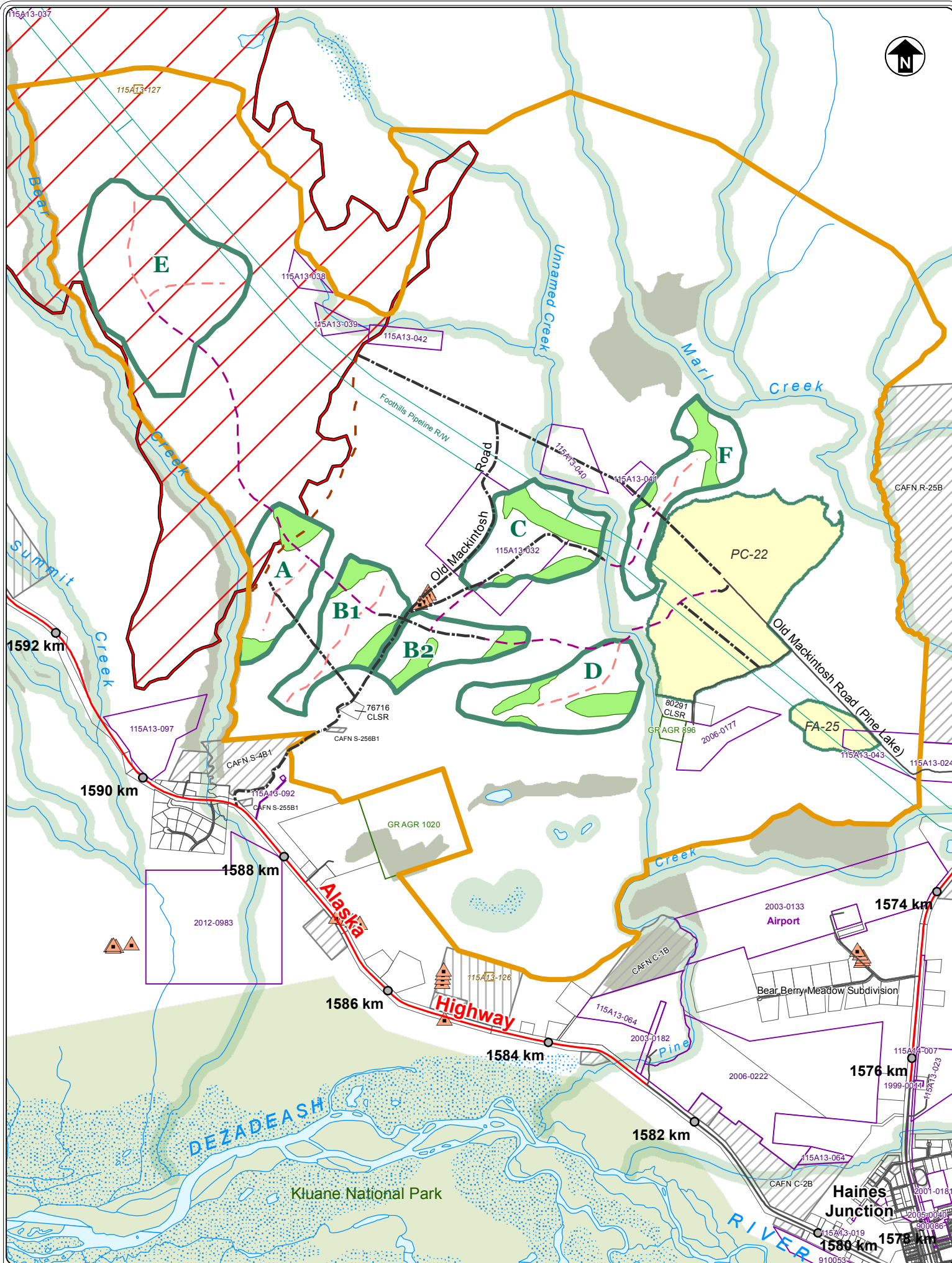
Forestry spatial data managed and maintained by the Forest Management Branch, Yukon Government. All other spatial data provided by Geomatics Yukon.

- Deactivated Cat Guard
- Existing Access
- Proposed Access
- Proposed Access within OU's
- Timber Harvest Plan Area
- Operating Units
- Highway
- Primary Roads
- Local Roads



Appendix C: Detailed Map

1:55,000 Mackintosh East THP Map

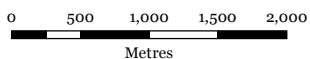


Appendix C Mackintosh East Timber Harvest Plan Detailed Map

... Kluane NRO District ...
... Champagne and Aishihik AAC Unit ...

For more timber harvest information
Web: www.emr.gov.yk.ca/forestry
Phone: 1.867.456.3999

April 24, 2014



1:55,000












Yukon Albers
NAD 83

Forestry spatial data managed and maintained by the Forest Management Branch, Yukon Government. All other spatial data provided by Geomatics Yukon.








Energy, Mines and Resources
Forest Management Branch




Project Specific Features

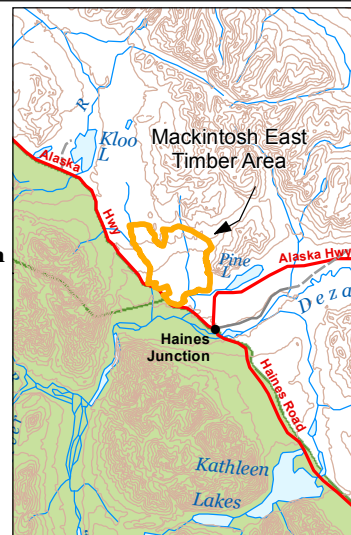
-  Existing Access
-  Proposed Access
-  Proposed Access within OU's
-  Timber Harvest Plan Area
-  CFS Research Plots
-  Mackintosh East Operating Units
-  Other Operating Units
-  Proposed Reserves
-  CSPG Riparian Connectivity Network
-  THPOG Riparian Buffer
-  1998 Fire

Land Administration

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

First Nation Administration

-  A: Surface and Subsurface Rights
 B: Surface Rights
 FS: Fee Simple
 Highway
 Primary Roads
 Local Roads
 Deactivated Cat Guard



Appendix D: Public Consultation Process and Representation Summary

The Forest Management Branch has worked collaboratively with Champagne and Ashihik First Nations and the Alsek Renewable Resource Council to engage fully with the public and concerned citizens regarding the proposed draft Mackintosh East THP. The following is a summary of the community consultation on this THP:

- The proposed draft Mackintosh East Timber Harvest Plan was prepared on September 17, 2013.
- Advertisements in the newspaper started on September 26, 2013, and notification letters were sent to government agencies, First Nations, and stakeholders in September, 2013 inviting feedback and notifying them of the public meeting.
- The THP was posted on the FMB public website on September 26, 2013.
- Information pamphlets advertising the public meeting regarding draft Mackintosh East THP was sent to all Haines Junction residents via Canada Post.
- Posters were put up at the Post Office and around the village of Haines Junction to advertise the public meeting.
- Foresters met and spoke personally with many residents about proposed harvesting in this area from August to October, 2013.
- October 22, 2013 Public Meeting/Open House in Haines Junction – attended by 75-90 people (see attached summary).
- October 23, 2013 Public Field Trip to Mackintosh East THP area – attended by 14 people (see attached summary).
- The feedback period was from September 26th – November 15th 2013, which was longer than required by the FRR to allow for ample time for comments. A total of 18 submissions were received either in writing or verbally (see attached summary).
- The decision on the THP was postponed until FMB could engage fully with the ARRC and concerned residents.
- December 16, 2013 Meeting – All those who had provided feedback were invited to discuss options to address concerns. The meeting was hosted by the ARRC, and chaired by Mike Crawshay of the Village of Haines Junction. ARRC members, and FMB staff were in attendance. The purpose of this meeting was to offer options, ideas, and or more clearly define what the concerns/needs were within the THP area. 19 people attended.
- January 9, 2014 – FMB consulted with ARRC, CAFN and Village of Haines Junction. ARRC sent an email on FMB's behalf to concerned residents to inform them that there would be no further consultation, and that a decision would be reached by March 31, 2014.

Mackintosh East Timber Harvest Plan

- As per *Section 3.10.1 Harvesting Applications/Notification*, all commercial harvesting applications require notification for a minimum of 30 days to the public and First Nations. These notifications are posted on FMB's public website.
- There will be additional opportunities for the public to comment when commercial harvesting applications are received for this area through the public notification of licence applications and/or via Yukon Socio-economic Assessment Board's (YESAB) public Yukon Online Registry (YOR), when applications propose an activity that requires an assessment.

Summary of Forestry Open House and Public Meeting

October 22, 2013 - Haines Junction, Convention Centre, Haines Junction

The main objective of the Haines Junction Open House and Public Meeting was to present information and seek feedback on three main subjects: the proposed draft Mackintosh East THP; Fuel Abatement; and the CAFN/YG Implementation Agreement. The meeting was hosted by Forest Management Branch (FMB), Champagne and Aishihik (CAFN), and the Alsek Renewable Resource Council (ARRC).

Time was organized to accommodate as many different communication styles as possible. There was an open house from 3 to 6 pm, which was attended by approximately 50 people. This was followed by dinner and presentations from 6 to 8 pm with limited time for questions which was attended by approximately 90 people. After the presentation FMB staff were available for individual questions.

Participants were encouraged to provide feedback either during the meeting, in the provided comment box, or to contact FMB or CAFN via phone, email or letter. A contact sheet of how to provide feedback was provided and timeline for when and how these could be received was communicated/provided.

A field trip was offered the following morning for those with a specific interest in the proposed Mackintosh East Timber Harvest Plan. Fourteen (14) people attended the field trip.

Following the meeting and field trip, comments on the Mackintosh East THP were accepted until November 15, 2013. A total of 19 letters/phone calls/comments were received. A summary of these comments are included in the Representation Table.

Mackintosh East Timber Harvest Plan

Summary of concerns heard during the open house regarding the draft Mackintosh East THP:

- Extensive recreational use in the area. Why can't we go further away from town for commercial timber harvesting?
- Access and safety: ATV's, logging trucks, snowmobiles, mushers all go in this area
- Wildlife corridors and how logging would impact them.
- Wind throw and how logging would affect this.
- Private property: concern about the position of Mackintosh Road (from Bear Creek side); driveway off of it at the south end.
- There were positive comments from a private woodcutter about bringing sustainable business to the community.
- Owner of private property submitted a 4 page document with his comments. He is opposed to commercial activity in this area.
- Local resident expressed concerns about the winter recreational access on the Bear Creek side.
- Woodcutter for personal use: p. 30 of the draft THP says: "where feasible and safe, 30 meter reserves" – will I still be allowed to harvest?
- There's a crux between wanting to use the timber: why is it taking so long to get to harvest the beetle kill?
- Concerns about the Foothills pipeline right of way and 30 year old notation. Will there be harvesting in the proposed corridor for the pipeline?
- Cultural surveys done for the First Nation; the Marshall Creek area is one of the "deadest" areas I've ever seen. It has no cultural value for the First Nation.
- Upgrading required on Bear Creek road – what will this look like?
- This is a salvage operation.
- A representative from Yukon Wood Products Association which represents the forest industry, expressed support for this plan.

Mackintosh East Timber Harvest Plan

Summary of Mackintosh (Bear Creek side) Field Trip October 23, 2013

There was an optional field trip to the proposed Mackintosh East Timber Harvest Plan area. The purpose was to look at the proposed access roads on the Bear Creek side, and proposed Operating Units, and discuss nearby property owners' concerns. We stopped at the top of "Crocus Hill"; the top of the 2nd hill adjacent to private property; proposed OU-B1 to look at the stand conditions.

There were a total of 14 people in attendance. The interest and discussions indicated a strong concern about specific issues related to the proposed Mackintosh East THP. The following is a summary of the discussion:

- Concerns expressed about the importance of Crocus Hill and the potential for commercial harvesting road use to damage it
- Access – how will it be upgraded?
- Noise, light pollution, along with the suggestion of having limited hours of operations
- Recreational use of the road is incompatible with commercial harvesting
- Property owners – opposed to harvesting nearby private property. He said that he was talking for both himself and his neighbours.
- Most of the people in attendance were not against the cutting of the trees; access was their main concern
- One attendee wanted to be able to commercially harvest timber on a small scale in OU B1 – necessary to have timber for small operators
- Personal fuelwood harvesting was raised as an issue. The berm on the side of the cat guard road was raised as an impediment for personal use wood cutters. There needs to be some areas set aside for personal fuelwood cutting
- The option of re-alignment of the road to avoid the second hill was raised as an option
- There was a concern about the November 15th deadline and when the decision would be made
- There was a desire to work towards a collective planned solution
- The issue was raised that already, there had been a lot of planning and time put into plans for this area. However, many residents expressed the desire and willingness to continue to work together.
- Discussed the potential for a working group to continue to work towards a solution

Mackintosh East Timber Harvest Plan

Summary of Follow-up Meeting - December 16th, 2013

FMB postponed making a decision on this THP until there was an opportunity to engage with the ARRC and concerned residents to work together to explore ideas and find a collective solution. All those that had expressed concern regarding the THP were asked to prepare for this meeting by coming with some ideas as to how their needs could effectively be addressed. In order to balance the social, economic and environmental needs related to this proposed THP, and to work within the direction of the SFMP and ILP. The ARRC hosted this meeting and invited all those who had provided feedback on the proposed THP.

The meeting was chaired by the Mayor of Haines Junction. A total of 24 people attended the meeting, including FMB staff, the ARRC, CAFN and YG Environment, plus members of the public. Once the meeting commenced, the time was organized to allow for a review of the draft THP and a summary of “what we have heard”. The concerns we heard through the course of this meeting largely focused on use of existing access, continued recreational use of the area (multiple users), safety, securing personal fuel wood areas for Haines Junction residents, and questions about why the Mackintosh East location was selected for a timber harvest plan.

We presented maps to the group and discussed proposed alternative access options including limited use of existing access (either temporary use or use of a portion of existing access) and the option of developing new roads in order to access the timber harvest plan area. In addition to what we presented as options, two other ideas were suggested. Those that were potentially viable have been included in the THP.

Summary of Field Trip - March 25th, 2014

On March 25th, 2014 a field trip was held with concerned citizens to visit recent harvesting in the Bear Creek area and to discuss concerns regarding the 2nd draft of the Mackintosh East THP. 11 members of the public attended the field trip. In general, those present supported harvesting in the area, but were very clear that they did not want the Old Mackintosh Road used for hauling commercially harvested timber. Other issues included: leaving a visual buffer along the Old Mackintosh Road; proposed alternative access route from the Pine Lake side (through OU F and C) to minimize the use of the Old Mackintosh Road; not permitting commercial timber harvesting access via the Old Mackintosh Road (Bear Creek) side.

Written feedback was received until April 4, 2014. 6 written comments were received. Many of the recommendations from this feedback have been incorporated into this THP.

Representation Table

Feedback received on the DRAFT Mackintosh East Timber Harvest Plan

The following is a summary of feedback received on the draft Mackintosh East THP, either written and/or phone calls or comments received prior to November 30th, 2013.

#	Name/ Organization	Comments <i>(paraphrased from letters/phone calls*)</i> <i>*every attempt has been made to paraphrase comment as accurately as possible.</i>	Consultation Comment Response(s)/ Mitigation Measures
1	HJ Resident	<p>Opposed to harvesting operating units B1,B2,C and D for the following reasons:</p> <p>1) logging activity/traffic impacts – this is a multi- use road shared by non- motorized and motorized users, adding commercial traffic will have impacts and will conflict with users of the road.</p> <p>2) Condition of old Mackintosh Road – this is a narrow, one lane unmaintained road with limited vehicle capacity. The mudflats and the hill on the Bear Creek side are concerns.</p> <p>3) Impact on himself and neighbours – he purchased his lot many years ago. The proposed THP will have a major impact on his property, access and lifestyle.</p>	<p><i>Section 2.1.2 Strategic Planning</i> describes the planning process, priorities for development and fuel abatement zones.</p> <p><i>Section 3.5 Recreation, Tourism, Viewscapes</i> addresses concerns around the use of Old Mackintosh Road and proposes mitigations , plus</p> <p><i>Section 4 Access Management</i> has been modified to address alternative access routes to minimize and/or avoid the use of the Old Mackintosh Road (Bear Creek)</p> <p><i>Section 3.2 Land Use Co-ordination – Private Property</i> – this section states that the Land Use Standard will guide forestry activities near private property.</p> <p><i>2.1.2 Strategic Forest Planning</i></p> <p><i>2.1.3 THP Planning Context within Haines Junction Area</i></p>
2	HJ Resident	<p>Why open more commercial firewood areas so close to HJ. Leave wood for local HJ residents. Why ruin the Mackintosh Road?</p>	<p><i>2.1.2 Strategic Forest Planning</i></p> <p><i>2.1.3 THP Planning Context within Haines Junction Area</i></p> <p><i>3.10.6 Fuel Abatement Objectives</i></p> <p>These sections explain why this area was chosen to provide both commercial and personal timber harvesting opportunities.</p> <p><i>3.9.2 Personal Fuelwood Harvesting Opportunities.</i></p> <p><i>Section 4 Access Management</i></p>
3	Yukon Resident	<p>Pleased with the detail and approach of the plan. Glad that CFS plots are being protected.</p>	<p><i>Section 3.2 Land Use Co-ordination – research plots</i></p>

Mackintosh East Timber Harvest Plan

#	Name/ Organization	Comments (<i>paraphrased from letters/phone calls*</i>) <small>*every attempt has been made to paraphrase comment as accurately as possible.</small>	Consultation Comment Response(s)/ Mitigation Measures
4	HJ Resident	Need for broader land use planning. Proposed access presently used for recreation. Does not foresee a good compromise between commercial harvesting and recreational use of roads.	The Land Use Planning Committee will determine when Land Use Planning will occur in the Kluane area. <i>Section 2.1.2 Strategic Planning</i> in the THP describes the planning processes to date, priorities for development and fuel abatement zones. <i>Section 4 Access Management</i> - numerous alternatives have been suggested to mitigate and reduce concerns
5	HJ Resident	Concerns about recreational use of the road on the Bear Creek side, costs of road upgrades and incompatibility. Asks that the access point for harvesting should be from the Pine Lake end to mitigate impacts on Bear Creek. Requests that operations in OU B1, 2, C, and D be suspended as these are in the heart of the recreational use.	<i>Section 4 Access Management</i> and <i>Section 3.5 Recreation, Tourism, Viewscapes</i> address these issues.
6	HJ Resident	Concerns about short time period to express views at public meeting. Against harvesting OU A, B1, B2, C and D. Complained about format of the meeting. Requesting a 10 mile radius around HJ for homeowners to cut personal fuel wood. Concern about the old Mackintosh road. Costs to the taxpayers to upgrade the road are not acceptable. Concerns about increased use of road, and associated problems.	<i>For further detail refer to Section 6 Timber Harvest Plan Public Consultation and Approval Process</i> <i>Appendix D Public Consultation Process and Representation Summary</i> The public consultation opportunities are reflected in these sections. Refer to #1 for further detail.
7	HJ Resident	Does not support the proposed Mackintosh East THP as proposed due to disruption to local residents. Requesting a 16 km buffer around HJ to allow for personal fuel wood harvesting only.	Refer to #2.

Mackintosh East Timber Harvest Plan

#	Name/ Organization	Comments (<i>paraphrased from letters/phone calls*</i>) <small>*every attempt has been made to paraphrase comment as accurately as possible.</small>	Consultation Comment Response(s)/ Mitigation Measures
8	HJ Resident	Harvesting does not impact him. However, the condition of the road (Pine Lake access route?) and maintaining its integrity through breakup would affect their ability to travel to and from work.	4.0 Access Management and in particular 4.2 Road Maintenance and Upgrades addresses these concerns.
9	HJ Resident	Concerned about the potential use of the Old Mackintosh Road. They plough the first 4 km of the road (from Pine Lake side) and are concerned that commercial use of the road may lead to damage. If the integrity of the road can be maintained through the seasons then there are no concern regarding this THP.	4.0 Access Management and in particular 4.2 Road Maintenance and Upgrades addresses these concerns.
10	HJ Resident	In favour of this proposed THP. Ensure that small operators are part of the plan and the allocation process. OU A, B1 and B2 need to be set aside for small operators.	The Haines Junction Allocation Strategy will apply to any commercial applications. Commercial applicants may be required to go through the YESAB process.
11	Anonymous	The public meeting was very regimented, with not enough time for comments/questions.	<i>The public consultation opportunities are reflected in these sections: Section 6 Timber Harvest Plan Public Consultation and Approval Process Appendix D Public Consultation Process and Representation Summary</i>
12	HJ Resident/Trapper	Would like to be able to use the access into OU E after harvesting for trapping and hunting. Otherwise, not opposed to the harvesting units.	The Director may issue a forest resources road permit to a person subject to terms and conditions. Once a commercial timber harvesting application is received trappers would be notified, and at which time, a term and condition in the road permit may be to ensure that the road can be travelled with an ATV post decommissioning.

Mackintosh East Timber Harvest Plan

#	Name/ Organization	Comments (<i>paraphrased from letters/phone calls</i> *) <small>*every attempt has been made to paraphrase comment as accurately as possible.</small>	Consultation Comment Response(s)/ Mitigation Measures
13	HJ Resident	FMB should consider an alternate access that would work for all users and property owners. The old Mackintosh Road is heavily used by local residents.	Refer to #1.
14	HJ Resident	Opposed to operating in OU B1,B2,C and D. New access points need to be looked at.	Refer to #13 and #1.
15	HJ Resident	Opposed to the THP for numerous reasons: local traditional (recreational) use of the Old Mackintosh road on the Bear Creek side. Access – road upgrades, changes in alignment would make the road unsafe for local users. Wants a cost/benefit analysis prior to tax dollars to be spent on this road. Other concerns include driveway, rental cabin and increased noise/traffic. There are other areas within CATT where logging could take place..	Refer to #1.
16	HJ Resident	A concerned HJ resident who has studied the Mackintosh area for decades on behalf of the Village’s recreation committee has several valid concerns regarding the proposed THP. 1 st – Tourism perspective – this area was identified as a day use multi-purpose recreation corridor tying the village, Pine Lake and Alsek Valley. 2 nd – Access crosses very close to private residences and the Nygrene Subdivision – public safety concern, and a visual concern as the commercial use would obliterate a well-used scenic pullout. 3 rd - Cultural perspective – old lake benches are important. 4 th – Timber harvesting perspective – Ad Hoc cut blocks surround our community and limits planning capacity to keep Kluane area as a prime destination for wilderness tourism.	Refer to #1.
17	Alsek Renewable Resource Council –	Recognize history of the use of Mackintosh Road as a trail for years. There are more concerns with the access than with the harvest blocks. Several residents are opposed to industrial machinery using the existing road and upgrades. Community members are willing to work on a solution. The ARRC requests and supports an extension to the draft plan to allow for residents, in conjunction with ARRC and YG, to propose alternative access to the blocks.	

Mackintosh East Timber Harvest Plan

#	Name/ Organization	Comments (<i>paraphrased from letters/phone calls*</i>) <small><i>*every attempt has been made to paraphrase comment as accurately as possible.</i></small>	Consultation Comment Response(s)/ Mitigation Measures
17	YG, Department of Environment	Environment has no specific concerns with this proposed THP.	-
18	CAFN	CAFN had reviewed the draft plan prior to meeting. There were no further comments/concerns.	-
	Additional comments from meetings/field trips not captured in the list above	<ul style="list-style-type: none">• Consider re-alignment of the Old Mackintosh(Bear Creek) road to avoid the second hill• Personal Use Fuelwood cutting – berm along the old catguard impedes access• Wildlife corridors/permafrost issues• Why does it take so long to get a permit• Foothills pipeline• Crocus Hill damage• Noise, light, air pollution, limit hours of operations	All of these points have been considered and incorporated into the text and maps of this final THP.

June 6, 2014

To whom it may concern:

RE: Director's Decision: Mackintosh East Timber Harvest Plan

After careful consideration of the information provided to me I have approved the Mackintosh East Timber Harvest Plan (THP). In making my decision I have reviewed the requirements of the *Forest Resources Act* and *Regulation* (FRA). The purpose of the FRA is to promote the sustainable use of forest resources for the benefit of current and future generations by ensuring that the environmental, economic, social and cultural interests of all users of the forest are considered while promoting the health of forests. Division 2 of the *Regulation* provides provisions regarding the THP purpose, consistency with approved plans, content requirements, First Nation and public participation.

I have determined that the purpose of the Mackintosh East THP has fulfilled Section 3 of the *Regulation*. The THP has clearly identified the forest resources, objectives for timber harvesting, locations suitable for harvesting and location of existing and proposed roads. Roads and access are discussed specifically below. The content requirements of Section 6 of Regulations are also fulfilled.

The FRA requires that I consider and ensure consistency with approved Forest Resources Management Plan (FRMP) and other approved plans when considering approval of a THP (Section 4 of Regulation). This particular area was selected to develop a THP due to the directions and priorities taken from the Strategic Forest Management Plan for the Champagne and Aishihik Traditional Territory (SFMP), which is an approved FRMP according to the FRA. In addition, the Integrated Landscape Plan for the Champagne and Aishihik Traditional Territory (ILP) provides additional direction for THP development, which I have also considered in my decision. The existing FRMP and integrated landscape plan has had extensive community and First Nation input. The Mackintosh area has seen extensive bark beetle activity and contains considerable dead timber which

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continues to degrade in quality but remains of value to local fuelwood market. I have determined the Mackintosh East THP is consistent with the FRMP and ILP.

The FRA and Regulation requires that I consider comments received during the notification period where consultation with First Nations and public are invited to make representations concerning the THP. I have reviewed consultation comments provided during this phase of development. Forest Management Branch (FMB) met with Champagne and Aishihik First Nations (CAFN), Alsek Renewable Resource Council (ARRC), Environment Yukon and the Yukon Wood Products Association (YWPA) to discuss planning, identify and mitigate concerns prior to developing the proposed draft Mackintosh East THP which was completed on September 17, 2013. The Mackintosh THP was advertised in local newspapers, FMB website and local residents in proximity to the THP were notified via letter and personal contact by FMB staff. The public and First Nations were invited to make representations. In addition, FMB worked collaboratively with CAFN and Alsek Renewable Resource Council (ARRC) to fully engage the public and concerned citizens.

During the consultation considerable concern was raised regarding road access and use of the existing "Old Mackintosh Road". Concerns were raised in regards to potential increase traffic, recreation, safety and enjoyment of private property. I am satisfied that considerable effort was put into finding local solutions to the road access issue which I believe reflects the intent of the legislation and FRMP process. There were opportunities made available for meaningful dialogue to address THP concerns with FMB staff, local residents and industry. FMB staff met with concerned citizens and industry in a collaborative manner to seek solutions to their concerns. Citizens and industry provided feedback and offered solutions. To better understand the issues I attended two meetings; December 16, 2013 in Haines Junction and March 25, 2014 field meeting to discuss and understand concerns of local citizens. Local industry was also involved in these meetings to discuss their concerns. During these meetings the community, ARRC, local forest industry and FMB collaborated to find solutions. I believe this collaborative process found a suitable solution. The chosen route was identified by citizens and industry. The selected new access route reduces conflict, increases sight lines for safety and allows management of roads by utilizing a forest resources road (FRR).

The chosen route will cost more to construct as opposed to utilizing and modifying existing access. The Old Mackintosh Road (Bear Creek) is utilized heavily for recreational pursuits and enjoyment of local citizens. It has been suggested to me the reason the Mackintosh Road was built was first alignment of Alaska Highway, never the less the road it is at least 30 years old. The Bear Creek side has not seen heavy industrial activity since the 1998

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forest fire. The upgrading of the road was a major concern of residents. To utilize the road for commercial hauling of timber would require sections of the road to be re-routed and widened. Residents were adamant the character of the road and recreation opportunities would be irreparably damaged if improvements were made. There would also be ongoing safety concerns with public use and commercial hauling of timber sharing the road. The Mackintosh Road (Pine Lake) access has history of forest use and existing commercial forest licenses. It also is straighter and has longer sight lines reducing safety concerns. Controlling access by building a forest resources road which bypasses the recreation areas and restricts public will overall reduce potential conflict and safety. The increased cost when portioned over the available volume available in THP will be modest, it is my view this modest increase in cost is offset by maintenance of community support for forestry operations and access to considerable volume of timber.

I also considered the environmental footprint of utilizing, modifying and re-routing the existing Mackintosh Road (Bear Creek), versus building a new access. Both options require considerable work building suitable access. The ILP suggests utilizing existing access and managing road density. If the existing road is upgraded and portions re-routed road density will slightly increase. While building a new forest resources road will increase road density. At the time the ILP was written the FRA did not exist and FRR options were not available. A FRR is not a public road, access is restricted, roads must be maintained and most importantly these roads are time limited. If the Old Mackintosh road was upgraded, the road would remain under the Highways Act and available for public use long into the future. The use of the upgraded section would increase, remain unmaintained and likely never deactivated. In my view the upgrading option would manage the short term road density but in the long term see larger environmental impacts and more activity. The impact of upgrading would have greater impact then building a FRR in the long term as the FRR will be deactivated access controlled. I have determined that road access be built, as proposed in the THP, and this is the best option for managing existing and future access into the Mackintosh area.

I have also considered the interest of industry, non-timber users of the forest and the health of the forest stands. The forest stands have been heavily impacted by spruce bark beetle. These stands will continue to decline in coming years reducing the value of timber for use as firewood. In fact removal of dead timber will enable and promote regrowth to establish new healthy forest stands. The high fire hazard created by the dead timber was also considered in my decision in terms of ensuring consistency with the FRMP and ILP.

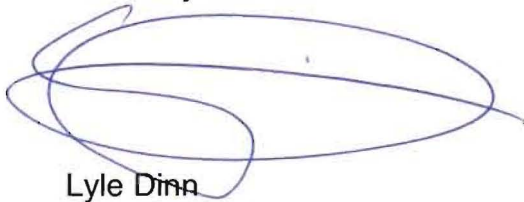
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The removal of dead timber will reduce fuel loading and reduce risk of wildfire that could impact local communities and property.

In conclusion I believe all legislative requirements have been met. This THP is consistent with existing plans and I believe is reflective of community input and purpose of the FRA. I commend the work of local citizens, the ARRC, VOHJ, CAFN and FMB staff who diligently worked on development of this THP.

Sincerely

A handwritten signature in blue ink, appearing to read "Lyle Dinn", is written over a large, light blue oval shape.

Lyle Dinn
Director,
Forest Management branch