

Temagami Crown Management Unit
2009-2019
Forest Management Plan

Social & Economic
Assessment

January 15, 2008

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1.0 Introduction

The 2004 Forest Management Planning Manual (FMPM) requires the assessment of individual management objectives associated with the Proposed Management Strategy. Each objective must be assessed in relation to the indicators and desirables levels established.

The FMPM requires that a Social & Economic (S&E) Assessment be prepared to identify the expected social and economic impacts of implementing the management direction proposed in the Forest Management Plan (FMP). The assessment will examine how the quantity of timber supplied to the wood-processing facilities, and the silvicultural investment requirements for the proposed management strategy may affect the communities identified in the Social & Economic Description.

This assessment will examine the impacts of the proposed management strategy in three areas;

- 1) Timber Volume
A comparison of the average annual planned harvest volume between the 2004 FMP and the Proposed Long-Term Management Strategy developed for the 2009 FMP,
- 2) Silvicultural Expenditures
A comparison of the average annual renewal program expenditures between the 2004 Temagami FMP and the Proposed Long-Term Management Direction developed for the 2009 FMP,
- 3) Non-timber Assessment
A qualitative assessment of the impacts that the proposed forest management strategy and the planning process may have on non-timber activities across the forest.

2.0 Background

The Temagami Crown Management Unit (CMU) is managed by the Ministry of Natural Resources. The timber industry in the North Bay District is anchored in several large, medium and small size wood processing facilities. These facilities effectively utilize all tree species on the forest, although some species such as cedar are difficult to utilize for a number of operational and economic reasons.

Each mill has obtained a Ministry Recognized Operating Level (MROL) that acknowledges an operating level based on optimum capacity and historic consumption from all sources (Crown, private, other jurisdictions, etc.) On the Temagami CMU the combined MROL exceeds the Management Unit Contribution (MUC), or the harvest volume identified through approved FMPs. This means that some local mills can only receive a portion of their maximum industrial requirements from the Temagami CMU. The MUC is determined by computer modeling and is subject to sustainability. The species group breakdown of the MUC for the 2004 Temagami

FMP and the Proposed Management Strategy for the 10-year period 2009-2019 is shown in Table 1.

Table 1: Average annual management unit contribution by species groups

	Annual Volume (000m ³)						
	Jack Pine/Spruce/Balsam Fir (SPF)	Aspen Poplar	White Birch	White & Red Pine	Tolerant Hardwoods	Cedar	Total
2004-2009 Temagami FMP SMA	98.19	43.75	46.61	46.29	14.17	11.52	260.53
2009-2019 Temagami FMP PMS	117.37	64	51	70.12	12.15	5.25	319.89
							59.36m ³
						Difference	0.0814

The most significant influencing factors for the increase in total volume between FMP's is a changes to Strategic Forest Management Model (SFMM) model inputs. In the 2004 FMP, volumes left unharvested were not accounted for in the initial modelling resulting in less volume available. For the 2009 FMP the areas reserved from harvest have been accounted for up-front rather than after the modelling was completed. This along with improvements to yield curves has also contributed to an increase in available harvest volumes.

The Temagami CMU contributes volumes of wood to several mills in the area. For a detailed background and description of the mills, wood supply commitments and licensees that have direct ties to the Temagami CMU, please refer to the Social & Economic Description (SED) document. This documentation can be found in section 3.1 of the SED.

3.0 Social & Economic Assessment

3.1 Timber Volume

The Social & Economic Assessment of timber volumes is based on a comparison of the planned harvest levels for the 2004 FMP and the Proposed Management Strategy for the 2009 FMP. This analysis will also investigate resulting employment and income levels. Table 2 details this comparison.

Table 2: Estimated impact on direct employment at the wood processing facilities supported by harvest volumes from the Temagami CMU.

	2004 Temagami FMP	2009 Temagami FMP	Difference
Total planned harvest volume (m ³)	260,530	319,890	59,360m ³
Average employment per 1000 m ³ harvested (based on ratios of the major mills receiving wood from the Temagami CMU)*	1.05	1.05	0
Total estimated annual employment per 1000 m ³ harvested (# of jobs)	274	336	62
Estimated forest industry average annual income (based on all dependant communities receiving timber from the Temagami CMU) (Source: Statistics Canada, Demographic Profile)	\$42,356	\$42,356	\$0.00
Total estimated annual employment income generated from timber harvest.	\$11,586,711.43	\$14,226,665.34	\$2,639,953.90

Information Required

1. Proposed management strategy - total yearly volumes
2. Forest industry avg. annual income
3. Avg. employment per 1000 m³ harvested

Note: Employment and income levels shown represent mill-related employment and incomes only. They do not include harvesting and Silviculture related employment and incomes. Therefore, the data underestimates the total economic benefit of the 2009 Temagami FMP.

The difference between the current planned and proposed plan harvest volume levels is 59,360m³/yr, or 8.14%. While the differential between total volumes shown in Table 2 may be negligible, some significant shifting of volumes has occurred between species groups as shown previously in Table 1. It is important to note that this Social and Economic Assessment is being written at Stage 2, a time when planned volumes have not yet been finalized. The volumes shown in Table 1 are projections from the model. When harvest blocks are selected and the associated volumes calculated, a “planned” volume by species can then be provided which is likely to be slightly lower than the projections shown in Table 1. This will be directly comparable to the “planned” volume shown for the 2004 FMP.

The FMP team was responsible for balancing the achievement of each management objective, indicator and target against the ability of the current forest to deliver a desired forest structure and composition as well as desired levels of goods & services. Reaching an equitable balance was often a matter of considering conflicting objectives and attempting to find the best compromise. This “trade-off” exercise resulted in the harvest levels shown in Table 1. As shown in Table 1, the conifer (spruce/pine/fir) has increased by 19,180m³/yr to the current planned volume of 117,370m³/yr. Conifer using mills, the workers employed by them, and the communities in which they live should benefit from a stable timber supply over the next ten years. Mills utilizing poplar will see an increase from 43,750m³/yr to 64,000 m³/yr; a difference of 20,250m³/yr. The planned white birch volume will also increase by 4,390m³/yr. Demand for birch has been increased over the past several years, however it is normally considered as a supplement for poplar. It is expected that birch will continue to be utilized by poplar mills as a

means of increasing total available fibre. The increases in volume for this FMP are primarily a result of improvements made to our (SFMM) model inputs which includes incorporation of new yield curves.

White and red pine volumes have also increased significantly from 46,290m³/yr to 70,120m³/yr. This is an increase of 23,830m³/yr and is attributed to adjustments made to model inputs that more accurately reflect volumes associated to our two cut shelterwood harvesting system that is used. Another significant cause for the increase in white and red pine volume is due to a large portion of the population that is at an age where it is succeeding into its prime rotation age. The volumes shown in Table 1 are available levels generated by the model, however, actual recovery may be held at a lower level in consideration of the social and ecological concerns previously noted. The increased utilization of these species will primarily benefit the more active licensees operating on the unit, specifically; Grant Forest Products Inc. and Goulard Lumber Ltd. It is not expected that these mills will expand capacity; rather they will use the extra volume to extend the life of their mills and provide additional stability for the existing levels of staffing.

The tolerant hardwood volume has remained close to what was planned for in the 2004 plan slightly decreasing by 2020m³/yr from 14,170m³/yr to 12,150m³/yr. This is primarily a result of the adjustments made to model inputs (specifically yield curves). Cedar volumes have also decreased, but much more drastically (by 6,270m³/yr). The volumes associated to cedar have decreased from 11,520m³/yr to 5,250m³/yr because of clearcut growing stock volumes left unharvested.

3.2 Silvicultural Expenditures

Average annual silvicultural expenditures for the 2004 FMP were \$12,820,000. The Proposed Management Strategy for the 2009 FMP projects an average annual silvicultural budget of approximately \$15,790,000. This represents an average annual increase in the silvicultural budget of approx. 8%.

The basic proportion of silvicultural operations (e.g. extensive, basic, and intensive) proposed for the 2009 FMP have remained fairly stable when compared to previous program levels. There is more overall area being renewed and more money being spent in the 10-year term 2009-2019 because there is more area being harvested. The model (SFMM) is also selecting increases in silvicultural intensity as a result of recognizing the volume gains associated to increased investment.

The proposed increase in silvicultural spending may have some job/income benefits. It is possible that more work will be available requiring a larger complement of labour. However, the increase is fairly marginal at 8% and will most likely generate more work for existing contractors at current labour levels.

3.3 Non Timber Impact Assessment

Sector (FMPM, App. IV)	Activity	Possible Impacts	Management Considerations
Recreation and tourism	Tourism outfitters	<p>Current and/or additional timber haul roads have the potential to increase access to tourism lakes.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources. In Temagami however, it is important to recognize that there are special management areas restricting public motorized access.</p>
		<p>Current access controls will be maintained. To this point in the FMP process (Stage 2), there have been no comments suggesting that MNR should review current restrictions. Additional access controls may be considered on a case-by-case basis where they are viable options for resource and/or tourism protection and where they are consistent with the Temagami Land Use Plan (TLUP).</p> <p>Timber harvest, hauling, and other mechanical forest management operations have the potential to impact visual and acoustic aesthetics, and the sense of remoteness often marketed by tourism operators.</p>	<p>The FMP will include road location prescriptions to limit the provision of access to tourism lakes.</p> <p>Where specific circumstances warrant, roads may be physically decommissioned to eliminate road access.</p>
			<p>Road closures/restrictions are a highly sensitive issue and are only utilized where necessary. Closures/restrictions must be carefully considered and justified.</p>

		<p>Specific harvest prescriptions and operational timing restrictions will continue to be employed to minimize these impacts.</p>	
		<p>Note: Many of these considerations will be addressed by Forestry Tourism Agreements signed between our harvesting contractors and affected tourism operators. Resulting prescriptions will be available for public review.</p>	
<p>Hunting</p>	<p>Road access provides opportunities for road-based hunting. New road construction will enhance existing opportunities, where access is not restricted.</p> <p>Habitat protection and/or improvement due to forest management guides implementation.</p> <p>Current road access restrictions will be maintained. Additional road access restrictions may be considered on a case-by-case basis where they are viable options for resource and/or tourism protection and where they are consistent with the TLUP.</p> <p>Timber harvest, hauling, and other mechanical forest management operations may disrupt hunting opportunities if operations coincide with hunting season.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources. In Temagami however, it is important to recognize that there are special management areas restricting public motorized access.</p> <p>Road-based hunting generally does not conflict with remote tourism operators. There has been some overlap between hunting by the public and hunts run by tourism operators, but these have yet to create serious conflicts. Some tourism operators also utilize forest road systems for their hunting clients.</p> <p>Road access will be maintained over a large portion of the forest for the 2009-19 FMP.</p> <p>Habitat protection requirements in Forest Management Guidelines (ex. Pileated Woodpecker & NDPEG) may, over time, provide enhanced opportunities for hunting by increasing the available population of game animals. However, this may be offset by more area for animals to evade and/or hide from hunters.</p>	

		<p>Slash-pile burning</p>	<p>Road access restrictions are a highly sensitive issue, especially with respect to limiting hunting opportunities for the local public. They are only utilized when necessary. Access restrictions must be carefully considered and justified.</p> <p>Any impacts are temporary. Forest management activities often draw game animals by increasing the availability of browse and creating roadbeds which facilitate travel. These activities may aid hunters by removing cover and providing access into previously remote areas.</p> <p>No slash-pile burning will occur during the first three days of the moose hunt. Burning will be undertaken on a limited basis for the remainder of the first week with specific locations determined prior to burning.</p>
	<p>Sport fish angling</p>	<p>Current and/or additional haul roads have the potential to increase access to area lakes for road-based angling.</p> <p>Current access restrictions will be maintained. Additional access restrictions may be considered on a case-by-case basis where they are viable options for resource and/or tourism protection and where they are consistent with the TLUP.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources, including sport fish angling. In Temagami however, it is important to recognize that there are special management areas restricting public motorized access.</p> <p>Where this principle conflicts with resource management objectives or tourism concerns, the FMP will include road location prescriptions or <i>Road Use Management Strategies</i> to limit the provision of access.</p>

		<p>If forestry operations encroach to the shoreline of productive water-bodies, logging activities may interfere with angling opportunities, fisheries conservation objectives, or water quality.</p>	<p>Where specific circumstances warrant, roads may be physically decommissioning to bar road access.</p> <p>Road access restrictions are a highly sensitive issue and are utilized in implementation of the TLUP. Access restrictions must be carefully considered and justified.</p> <p>Specific harvest block design and Area-of-Concern (AOC) prescriptions may be employed to minimize these impacts.</p>
Cottages		<p>Current and/or additional timber haul roads have the potential to create/increase access to cottage lakes. This may provide additional recreational opportunities for the cottagers as well as, in some circumstances, the general public.</p> <p>Timber harvest, hauling, and other mechanical forest management operations have the potential to impact visual and acoustic aesthetics, and the sense of remoteness often valued by cottagers.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources, including cottage lakes. Cottagers may utilize roads constructed for forestry purposes as a means of accessing their property, however, public access to the lake and road maintenance may then become potential issues.</p> <p>Where the creation of cottage access might conflict with resource management objectives or tourism concerns, the FMP may include road location prescriptions or road use management strategies to limit the provision of access.</p> <p>Where specific circumstances warrant, roads may be physically decommissioned to bar access.</p> <p>Specific harvest prescriptions and operational timing restrictions may be employed to minimize these impacts.</p>

	Ecotourism	<p>Current and/or additional timber haul roads have the potential to create/increase access for ecotourism. This may provide additional business and/or recreational opportunities.</p> <p>Timber harvest, hauling, and other mechanical forest management operations have the potential to impact the visual and acoustic aesthetics often valued by this client group.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources.</p> <p>Where utilization of forestry roads by ecotourism providers might conflict with resource management objectives or established tourism concerns, the FMP may include road location prescriptions or road use management strategies to limit the provision of access. The TLUP provides the majority of direction in this regard for FMP purposes.</p> <p>Where specific circumstances warrant, roads may be physically decommissioned to bar access.</p> <p>Specific harvest prescriptions and operational timing restrictions may be employed to minimize these impacts.</p>
Mining, Aggregate and Hydro Generation	Mining	<p>Current and/or additional timber haul roads have the potential to create/increase access for mineral exploration activities.</p> <p>Mineral exploration and development operators may utilize cleared harvest areas for mining sampling and mapping permitting it is allowed by the TLUP.</p> <p>Potential removal of mining survey lines and destruction of claim posts by forest harvesting activities.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources. Individuals or companies conducting exploration/development activities may apply to the MNR District Manager for authority to travel on closed roads.</p> <p>The utilization of cleared harvest areas for mineral exploration activities may conflict with the Crown's forest renewal objectives.</p> <p>The crown of or logging operators are required under the Mining Act to ensure these markers are not disturbed.</p>

	Aggregate	<p>Current and/or additional timber haul roads have the potential to create/increase access to aggregate resources.</p> <p>Aggregates discovered through forestry operations may be utilized to construct forest access roads.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources. Individuals or companies conducting aggregate resource exploration/development activities may apply to the MNR District Manager for authority to travel on roads with restricted access.</p> <p>The Aggregate Resources Act regulates this activity.</p>
Other	Traplines	<p>Current and/or additional timber haul roads have the potential to create/increase access to trapline's.</p> <p>Habitat protection and/or improvement due to FM guides implementation (potential habitat increase for some wildlife species).</p> <p>Timber harvest, hauling, and other forest management operations have the potential to impact trapline's.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources. Trappers may apply to the MNR District Manager for authority to travel on closed roads.</p> <p>Habitat protection requirements in FM guidelines (e.g. Moose, NDPEG) may, over time, provide enhanced opportunities for trapping by increasing the available population of fur-bearers.</p> <p>Short-term impacts to individual trapline's may be created by forest management activities. To the extent possible, specific harvest block design and AOC prescriptions may be employed to minimize these impacts.</p>
	Baitfish operators	<p>Current and/or additional timber haul roads have the potential to create/increase access to baitfish.</p> <p>If forestry operations encroach to the shoreline of productive water-bodies, logging activities may interfere with baitfish activities or may have a negative impact on water quality.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources. Baitfish operators may apply to the MNR District Manager for authority to travel on closed roads.</p> <p>Specific harvest block design and AOC prescriptions may be employed to minimize these impacts.</p>

	<p>BMA</p>	<p>Additional access for BMA operators is provided.</p> <p>Timber harvest, hauling, and other forest management operations have the potential to impact bear management areas and/or bear habitat.</p>	<p>As a general principle, all roads constructed on Crown land may be used by the general public to access natural resources.</p> <p>Specific harvest block design and AOC prescriptions may be employed to minimize these impacts.</p>
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