

DEPARTMENT OF NATURAL RESOURCES AND ENERGY DEVELOPMENT

# **Crown Timber Royalty Rates Setting Manual**

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# Table of Contents

Introduction.....	1
Definitions .....	2
Guiding Principles.....	3
Private Woodlot Stumpage Markets .....	3
Fair Market Value.....	4
Primary Forest Product Specifications .....	4
New Brunswick Forest Products Commission Private Woodlot Stumpage Study .....	5
Methodology – Setting Fair Market Value (FMV).....	5
Methodology - Royalty Adjustment Calculation.....	6
Methodology – Setting Crown Timber Royalty Rates.....	6
Scale Administration and Royalty Rate Application.....	6
Conclusion .....	7

# Introduction

The Department of Natural Resources and Energy Development (DNRED) has a legal obligation under section 58 of the *Crown Lands and Forests Act* (CLFA) to prescribe, by regulation, royalty rates for timber harvested on Crown lands.

The CLFA defines royalty as the sum of the fair market value of standing timber of a species and class as prescribed by regulation and the royalty adjustment described in section 5 of the *Private Woodlot Sustainability Act* (PWSA).

DNRED recognizes private land stumpage transactions as being the fair market value of New Brunswick standing timber.

The purpose of this document is to describe the annual process used by DNRED for establishing Crown timber royalty rates. It is intended to be used as a reference document and procedure manual to ensure transparency, consistency, verifiability, and adherence to applicable legislation.

## Definitions

Timber – means all trees of any species or size.

Primary Forest Product – any unmanufactured product of the forest coming from trees of hardwood and softwood species.

Class of Timber – primary forest products generated from the harvest of trees (i.e., sawlogs, studwood, pulpwood etc.).

Stumpage Value – the value for each class of timber that is paid to a landowner by a contractor, buyer, broker, or mill for the right to harvest and sell the primary forest products produced from standing trees from lands owned by the landowner. This value is reported in cubic metres.

Fair Market Value (FMV) – the stumpage price agreed to by a willing buyer and seller from New Brunswick private woodlots.

Royalty Adjustment – the upward adjustment that is calculated for each class of timber, which is based on the pricing performance in the appropriate forest products market. This value is reported in cubic metres and is prescribed by the *Timber Royalty Adjustment Regulation - Private Woodlot Sustainability Act* (NB Regulation 2023-38).

Royalty – royalty (as defined in subsection 59(1) of the *Crown Lands and Forests Act*) equals the sum of FMV and the Royalty Adjustment prescribed by regulation under the *Private Woodlot Sustainability Act*. This value is reported in cubic metres.

## Guiding Principles

DNRED has established a set of guiding principles for the annual setting of Crown timber royalties. These principles are consistent with requirements of pertinent legislation and are to provide clarity for all stakeholders and the public in understanding the process and rationale for determining royalties.

- The process for determining Crown timber royalty rates is to be transparent, replicable, and consistent in application.
- The New Brunswick Forest Product Commission (NBFPC) annual private woodlot stumpage study determines the fair market value of private stumpage transactions and will be used to set Crown Fair Market Value (FMV) rates reported in Schedule A of Timber Regulation 86-160 of the *Crown Lands and Forests Act*.
- Royalty adjustments will be applied consistent with the *Private Woodlot Sustainability Act* (PWSA) and associated Timber Royalty Adjustment Regulation.
- Crown timber royalty rates are a provincial average rate for each class of timber.
- All FMV, royalty adjustments, and Crown royalty rates are to be reported in cubic metres. DNRED does not recognize any other measures of scale.
- Product definitions/specifications for each class of timber will reflect the minimum product specifications reported by New Brunswick (NB) mills. This approach is intended to promote the maximum utilization of Crown timber and to maximize the value to the Crown and private woodlot owners. It is understood that minimum product specifications for Crown may not align with all mills in the province.
- The Crown timber royalty rate for each class of timber will always be greater than the FMV determined from the NBFPC stumpage study.
- It is DNRED's objective to continually improve the process of royalty determination, and as procedures change to improve the overall process, this document will be updated.

## Private Woodlot Stumpage Markets

The NB private woodlot stumpage market is a competitive market where harvest contractors and mills directly compete to purchase standing trees from private woodlot owners.

The stumpage prices that are negotiated reflect what the buyer is willing to pay, and the seller is willing to accept for their trees.

While stumpage markets are related to primary forest product markets, they do act independently of each other. Negotiated stumpage prices consider a number of other variables including but not limited to size of block, wood

size, distribution of primary forest products, harvest prescription, operating conditions, products to market, amount of road construction, profit, overhead costs, etc.

Primary forest product markets are formed by the collective demand for products by mills. Demand for primary forest products drives the “gate price” as set by mills. Gate prices represent the price that a mill agrees to pay for a primary forest product. These prices can vary throughout the year based on demand and can change quickly. Gate prices can be negotiated directly between a harvest contractor and a mill or between a Forest Product Marketing Board and a mill. These negotiated gate prices may be influenced by the volume of wood available to purchase.

Stumpage prices that are negotiated between harvest contractors and the landowner do not necessarily move in relation to changes in primary forest product markets. Stumpage prices are strongly influenced by demand from harvest contractors and also from the want/need of private woodlot owners to sell.

## **Fair Market Value**

In the context of stumpage markets, FMV represents the stumpage price agreed to by a willing buyer and seller of timber.

The portion of Crown timber royalty related to paragraph 59(1)(a) of the CLFA is to be based on FMV.

## **Primary Forest Product Specifications**

Mills define primary forest products based on the wood they require to operate their facilities. These mills purchase primary forest products from harvest contractors or directly from private woodlot owners who choose to harvest their own wood. Harvest contractors recognize mill primary forest product specifications. Contractors produce primary forest products to the mill specifications in order to sell their wood.

Primary forest product specifications include species, minimum top size, length, and quality. Mills across the province may have different definitions for the same product, such as studwood. Variations in minimum top size is prevalent in the forest sector.

DNRED annually identifies primary forest products or classes of timber produced on Crown land and sets minimum specifications for each of the species and product combinations. These minimum specifications are formally described and communicated through the Crown Timber Utilization Standards document, which is attached as an appendix to the annual operating plan approval letter.

It is important for DNRED to define primary forest products consistently for the purpose of determining wood supply, allocating timber, ensuring sustainability, and valuing Crown and private wood. These specifications become the common link between all of the above.

Minimum product specifications for each class of timber includes a description of product top size, diameter, length, and quality.

# **New Brunswick Forest Products Commission Private Woodlot Stumpage Study**

The NBFPC is mandated to collect private woodlot stumpage transaction data on an ongoing basis. Each year, the NBFPC publishes an annual report that contains provincial average stumpage values for primary forest products that are commonly applied in a stumpage agreement between a woodlot owner and the person purchasing an owner's trees. The average stumpage value for a primary forest product represents a range of mill specifications for that specific product.

The stumpage study period is from January through to December (i.e., the calendar year).

The NBFPC considers the average private woodlot stumpage values as the FMV of standing timber in NB. DNRED recognizes the provincial average private stumpage values to represent FMV for the purposes of setting Crown timber royalty rates.

New Brunswick Private Woodlot Stumpage Value reports are published on the NBFPC website ([Home \(nbfpc-cpfnb.ca\)](http://Home(nbfpc-cpfnb.ca))). A full description of the methodology and verification process is included in the reports.

## **Methodology – Setting Fair Market Value (FMV)**

Following receipt of the NBFPC annual New Brunswick Private Woodlot Stumpage Value report, DNRED proceeds through the legislative process to update the FMV values for each class of timber contained in Schedule A of the [Timber Regulation - CLFA](#) (NB Regulation [86-160](#)).

FMV rates for each class of Crown timber are set as per the most recent NBFPC provincial average stumpage rates. DNRED applies the NBFPC directly to each class of timber reported in Schedule A of the Timber Regulation.

When assessing private stumpage values and applying FMV to Crown timber, it is assumed that the products from which the stumpage transaction values that were obtained were purchased and/or sold consistent with the minimum product specifications as described in the Crown Timber Utilization Standard.

DNRED may be required to employ other methodologies to determine the fair market value of classes of timber that are not captured in the survey or that have limited stumpage value transactions. In the latter case, DNRED and NBFPC agreed to use a three-year average stumpage price to represent the stumpage for that year. For classes of timber not captured in the survey, DNRED may combine other classes of timber represented in the survey to determine their value. Tree-length softwood is an example. This primary forest product is a combination of sawlog, studwood, and pulpwood. Product percentages are applied to each category based on empirical data collected by DNRED over time to calculate a value for this product.

## Methodology - Royalty Adjustment Calculation

Most of the timber harvested from NB Crown forests is converted to commodities that trade in various wood product markets. The magnitude of the royalty adjustment defined under the PWSA is driven by the performance of these commodity markets.

The magnitude of royalty adjustments is determined by a formula prescribed in the [Timber Royalty Adjustment Regulation – PWSA](#) (NB Regulation 2023-38) and increases from \$0.75/cubic metre in months with underperforming commodity markets up to a maximum of 100 per cent (%) of the FMV in months with the best markets. Underperforming commodity markets are defined as periods of time when the commodity is trading below the median of the monthly commodity price (adjusted for inflation) calculated from a time series specified in regulation. This in effect classifies the 50% of months with the lowest prices for the selected time period. The best market conditions in this context are defined as times when the commodity price is greater than or equal to the 90<sup>th</sup> percentile monthly commodity price (i.e., 10% of months with highest commodity prices) over the time period defined in regulation.

A fixed royalty adjustment is set in regulation for those classes and species of timber that trade in local markets rather than in commodity markets. There are also several classes of timber for which no royalty adjustment will be collected. These products are generally harvested through Crown timber permits (firewood, weir brush, wreath tips), are not scaled (i.e., the volume of timber is unquantified) and/or are not used to produce commodities.

As noted above, the royalty adjustment applied per cubic metre of delivered timber for most Crown timber will be based on the performance of commodity markets. To capture within-year changes in market performance, royalty adjustments are calculated each month. To facilitate invoicing and collection of royalties, the royalty adjustment applied within a month is based on the average market prices in the month preceding it.

## Methodology – Setting Crown Timber Royalty Rates

Subsection 59(1) of the CLFA defines Crown timber royalty as the sum of FMV and a royalty adjustment for each class of timber. Royalty rates are calculated monthly to align with the royalty adjustment setting process. FMV does not change monthly. It is set at the beginning of the fiscal year (April 1<sup>st</sup>) and remains in effect until March 31<sup>st</sup>.

The Department calculates monthly royalty rates and advises both industry and permit holders of the change in the rates.

## Scale Administration and Royalty Rate Application

Crown timber is tracked and scaled at the individual truck load level. Each truck load of Crown timber has an accompanying Transportation Certificate as per the *Transportation of Primary Forest Products Act* (TPFPA) and is scaled in accordance to DNRED approved scaling arrangements.



Crown timber scale is reported to DNRED's electronic scale database system and has a record for each load with the associated transportation certificate number, destination, scale bill number, Crown allocation, harvest block number, species, class of timber, and volume.

Royalty rates are applied in the scale system based on the species and class of timber reported. The royalty rates (FMV + royalty adjustment) that are applied are directly based on FMV as posted in Schedule A of the CLFA - Timber Regulation and the royalty adjustment as identified in the PWSA - Timber Royalty Adjustment Regulation.

The royalty value for each load of Crown timber is calculated as the scaled volume of the load multiplied by the associated royalty rate.

DNRED has several mechanisms to ensure accurate scaling of timber, reporting of harvested and delivered roundwood, and appropriate application of royalty rates. These include roadside compliance checks for adherence to the TPFPA and quarterly wood tracking and scale audits to ensure Crown timber is reported properly.

## **Conclusion**

In Chapter 4 of the 2020 Report of the Auditor General, the observation was made that no comprehensive manual existed to describe the process for setting Crown timber royalties. As a result, the Auditor General recommended that DNRED develop such a manual to ensure the process is clearly understood, consistently applied, and can be monitored for conformance. This document is a first attempt at addressing this recommendation.

Ultimately, a stated goal of management of the province's Crown forest is to ensure trees harvested will be used to provide maximum benefit to the people of NB. It is DNRED's hope that this manual clarifies the processes in place to ensure the economic benefit realized through royalty revenues is captured, as well as demonstrating DNRED's commitment to employing transparent, replicable, and consistent methods to set royalty rates.