BRITISH COLUMBIA | Ministry of Forests

BRIEFING NOTE FOR DECISION

DATE: January 11, 2023

PREPARED FOR: Rick Manwaring, Deputy Minister, Ministry of Forests

ISSUE: Lags in the Stumpage System

RECOMMENDED OPTION:

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BACKGROUND:

- The BC government sells its timber assets by issuing forest tenure contracts to individuals or companies.
- Stumpage is the fee paid by individuals or companies for the timber harvested under forest tenure contracts.
- The Market Pricing System (MPS) is the system used to determine the value of Crown timber harvested. BC Timber Sales auctions and market indicators are the foundation of this system.
- The *Forest Act* provides the legislative authority for the Coast Appraisal Manual (CAM) and the Interior Appraisal Manual which contain the policy and procedures used to determine stumpage in BC.
- Woodlots, Community Forests and other small scale and salvage cutting authorities stumpage rates are currently adjusted semi-annually on May 1 and November 1 of each year.
- Fully appraised cutting authorities (excluding BC auction sales) stumpage rates are currently adjusted quarterly on January 1, April 1, July 1 and October 1 of each year. This schedule has not changed in more than 35 years.
- Stumpage rate adjustments are based on recent market pricing parameters (the monthly 'parameters'). The parameters are market indicators such as lumber values, inflation, US dollar exchange rates, housing starts, recent BC timber sales and cut levels (harvest availability).
- The Director of Timber Pricing Branch (TPB) approves the parameters. Each month, three months of market data is used with a two-month administrative 'lag' to allow for the data to be collected, summarised, approved and published.

DISCUSSION:

Market Pricing

The MPS and the Estimated Winning Bid (EWB) regression equations are updated annually for the Coast and Interior. The regression analysis is based on a dataset of auctioned timber going back 15+ years. There are two types of variables in the EWB – market variable and stand characteristic variables. Market variables describe the market influences at the time of the auction. Stand characteristic variables describe the timber (species, quality, volume, etc.), harvest conditions, distance from support centres and other 'local' conditions of the sale.

Market Volatility
Traditionally, lumber sale prices have ranged between US $280/mfbm to $500/mfbm with very little volatility on a quarterly or even annual basis. In 2018, lumber (#2 grade and better, 2X4 Spruce-Pine-Fir) broke $500/mfbm for the first time. Since then, lumber sale prices have been very volatile; prices have reached as high as $1600/mfbm; and have fallen as low as $300/mfbm. The designers of MPS did not envision this level of market volatility.

Stumpage System Lags
Lags in the stumpage system can be administrative or policy driven. They are necessary in some cases to allow time for data to be collected (administrative). In other cases, they are deemed necessary to stabilise the stumpage system (policy). In the end, lags create a level of predictability/stability in the stumpage system for both government and its tenure holders.

Examples of administrative lags

1. Market parameters, including lumber sales information from interior sawmills are collected and verified each month by TPB. There is a minimum two-month lag time required to submit, collect, summarise, verify, approve and publish this data.
2. Auction information from BCTS is collected and verified each month by TPB but the EWB equations are updated annually (with a monthly adjustment for the interior).
3. Industry and BCTS tenure obligation cost data is collected and verified annually. There is a minimum one-year lag time required to submit, collect, summarise, verify and use this data.

Examples of policy lags

4. Market parameters are published each month but are only used quarterly to adjust existing fully appraised cutting authority stumpage rates.
5. Market parameters include three-months of data. With two months of administrative lag (#1 above), the total lag is up to five months.

For the purpose of this Decision Note and the options put forward, Timber Pricing Branch recommends changes to # 4 (monthly vs quarterly stumpage rate adjustment) and # 5 (two-months of market data vs. three-months). These proposed changes are discussed below.

Monthly stumpage adjustments
Increased predictability from a quarterly adjustment schedule has consequences. When markets peak, stumpage is lower and licensee's benefit. When the market is at the bottom, stumpage is high causing potential losses or incentivising licensees to shut down or curtail their harvest and manufacturing operations. Market lows are particularly hard on smaller licensees that may not typically harvest across the entire business cycle, such as smaller tenure holders and many First Nations.

Moving to monthly stumpage adjustments will mitigate the issue listed above and can be implemented immediately through amendments to the appraisal manuals.

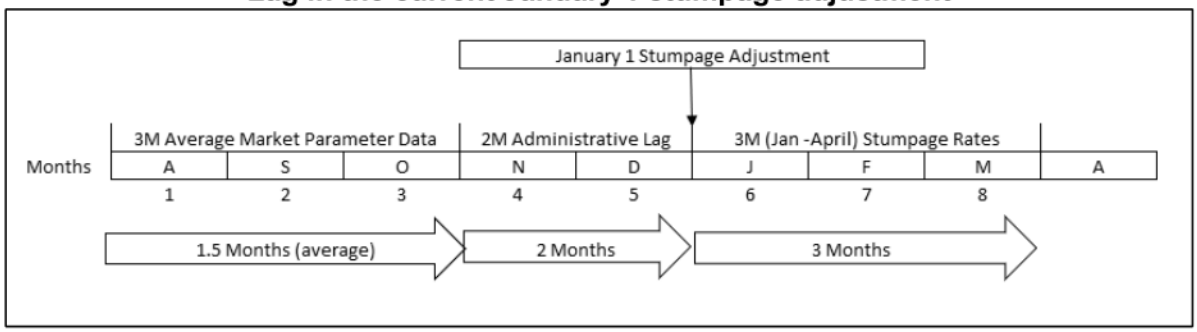
Monthly stumpage adjustments for Woodlots, Community Forests and other small scale and salvage cutting authorities on 'tabular' average sawlog stumpage rates would have to be phased in. The current semi-annual update schedule is completed manually. A monthly update schedule would require some automation and could be implemented in this fall.

Two-months of market data vs. three-months
Under current pricing policy, the monthly market parameters use three-months of data. Using three months of data creates a stable dataset with monthly fluctuations minimised. Two-months may cause slightly more instability in the averages but will remove one month of the lag in the parameters.

Combined, the current lag in the stumpage system can be as much as six and a half months (i.e., 3.5 months at the beginning of a quarter and 6.5 by the end). Alternatively, a combined monthly stumpage adjustment with only two-months of data (and the two-month administrative lag) would have a maximum four-month lag.

Below, is a visual of the time lag in the current system. The example shows the January 1 quarterly adjustment period.

Lag in the current January 1 stumpage adjustment



A two-month dataset can be approved by the minister. It would be important to schedule these changes with the annual updates to the EWB stumpage equations in order to maintain the symmetry between the EWB equation and stumpage. The Interior and Coast EWB updates are scheduled for July 1, 2023 and January 1, 2024 respectively.

Attachment #1 – Reducing lags

Attachment 1 contains two graphs (Interior and Coast). Each depicts an all-grade stumpage rate over the past four years to show the difference between a monthly and quarterly stumpage adjustment schedule; and a two-month vs three-month dataset of market parameters.

Of particular note is the smoothing effects of a monthly adjustment schedule compared to quarterly. As markets turn, the stumpage system responsiveness is shown as the gap between each line. As markets increase or decrease, quarterly stumpage rates lag a monthly update schedule.

Also of note, is the responsiveness of two-month parameter compared to a three-month parameter. As expected, the shorter parameter further removes the stumpage lag.

Industry consultation

Industry pricing representatives are aware of the lags in the stumpage system. This topic is discussed on a regular basis, especially when markets soften. TPB and Industry members continues to discuss the ‘correct’ level of responsiveness and predictability of stumpage under MPS.

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OPTIONS:

RECOMMENDATION: Option 1

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Approved / Not Approved

Signature
Rick Manwaring, RPF, Deputy Minister
Ministry of Forests

January 12, 2023.
Date

Attachments:
Attachment 1: Stumpage Lag Charts
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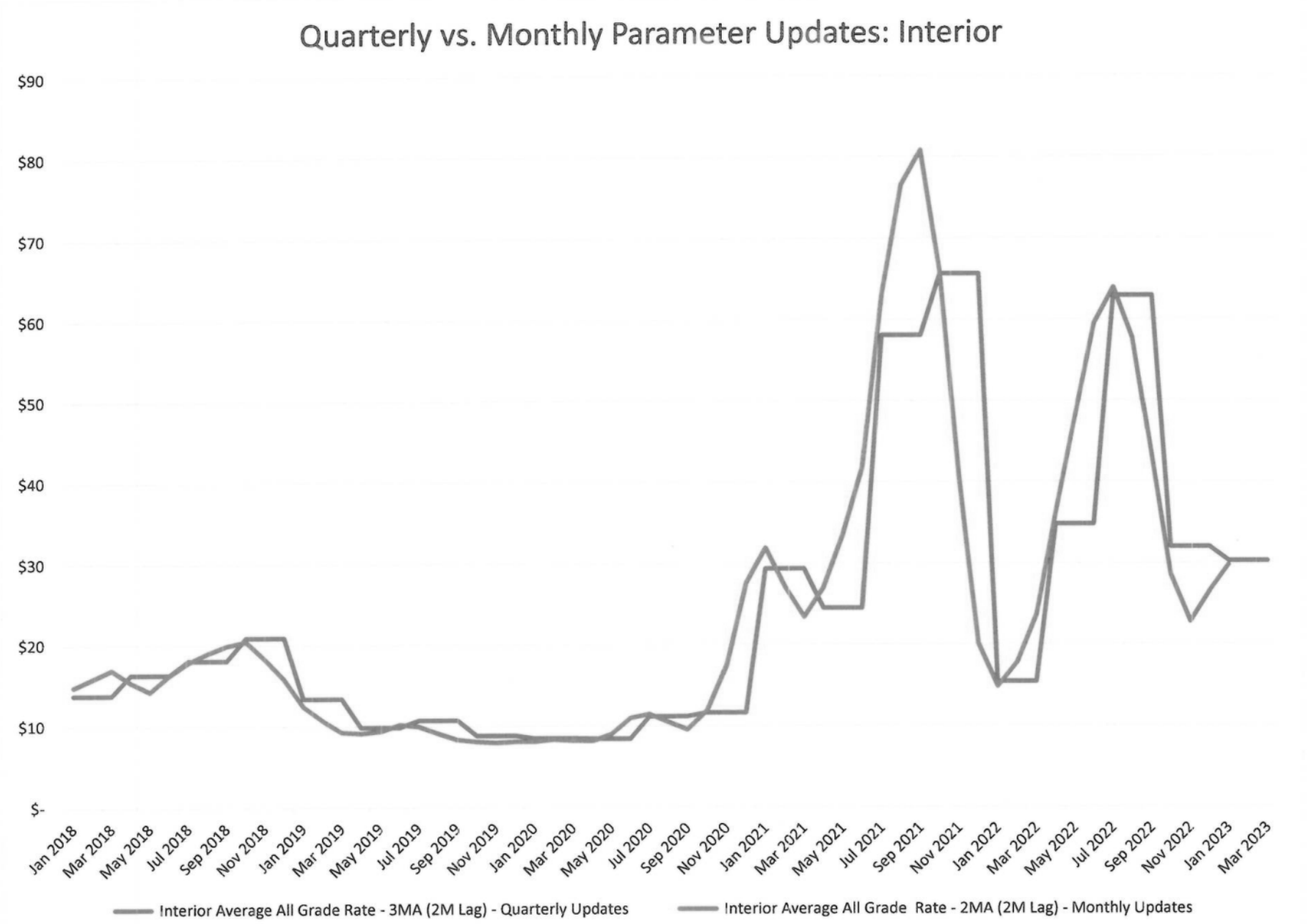
REVIEWED BY:

	Initials	Date
DMO	RM	Jan 12, 2023
ADM	MS	Jan 11, 2023
Program Dir/Mgr.	AB	Jan 11, 2023


Quarterly vs. Monthly Parameter Updates: Interior
$90
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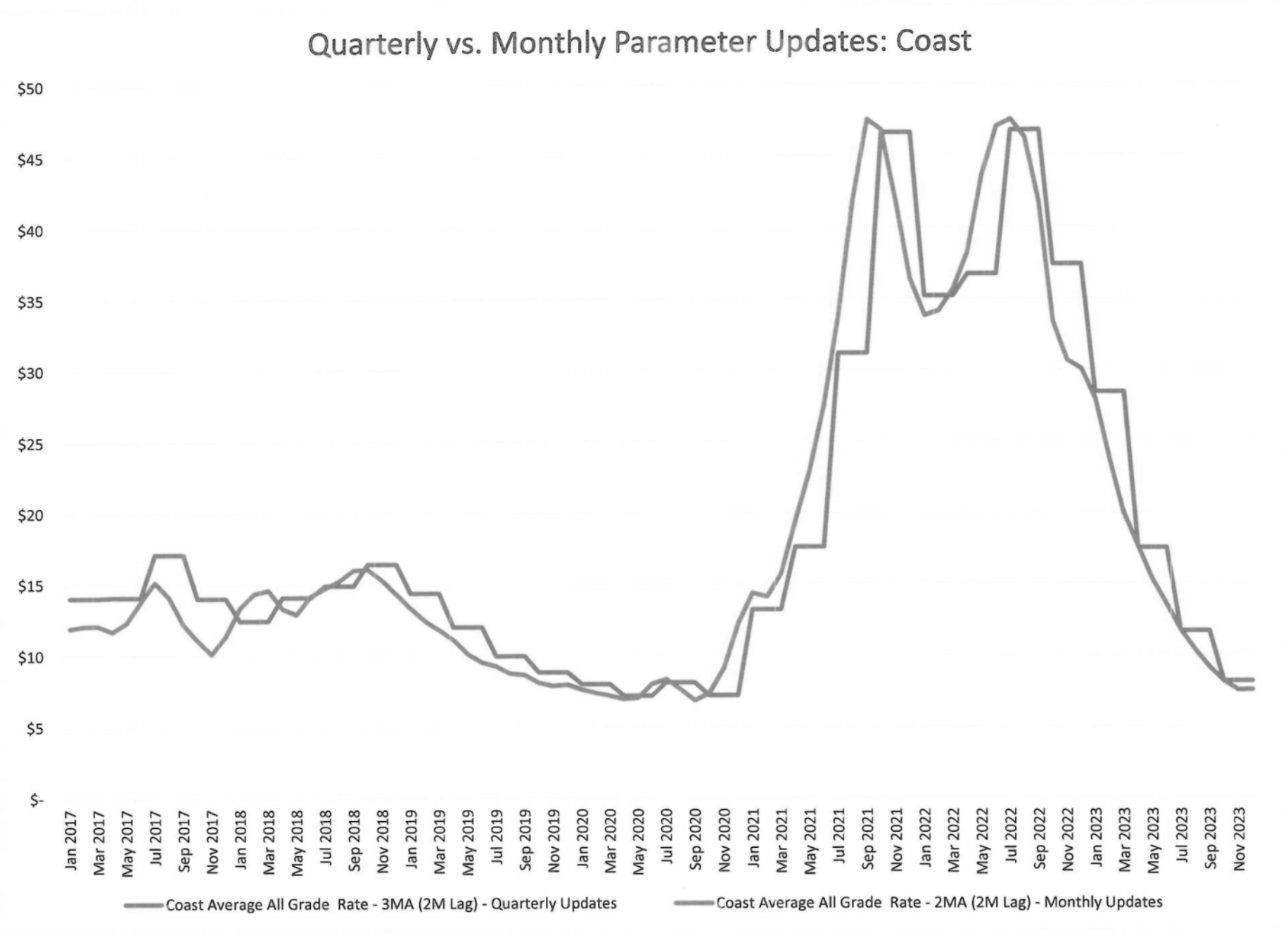
Interior Average All Grade Rate - 3MA (2M Lag) - Quarterly Updates
Interior Average All Grade Rate - 2MA (2M Lag) - Monthly Updates


Quarterly vs. Monthly Parameter Updates: Coast
$50
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Coast Average All Grade Rate - 3MA (2M Lag) - Quarterly Updates
Coast Average All Grade Rate - 2MA (2M Lag) - Monthly Updates

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Withheld pursuant to/removed as

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