

File: 280-20/195-30/CAPP

March 16, 2001

To: Regional Managers - Interior

From: The Honourable Gordon Wilson
Minister of Forests

Re: *Interior Appraisal Manual*

I hereby approve Amendment No. 5 to the *Interior Appraisal Manual*, and attach a copy for your use. The following sections are amended as follows:

- Section 6.7 Update Table 6-1, "Miscellaneous Stumpage Rates" for seismic lines.
- Table 6-2 Update Table 6-2, "Miscellaneous Stumpage Rates for Timber Licences".
- Section 7.4 Clarify policy on the use of total "net cruise coniferous volume".



This amendment will come into force on April 1, 2001. Further amendments or revisions to this manual require my approval.



Gordon F. D. Wilson
Minister

Attachment

pc: Bill Howard, Director, Revenue Branch

All Subscribers, *Interior Appraisal Manual*



FOR FURTHER INFORMATION CONTACT:

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MANUAL TITLE

Interior Appraisal Manual

REVISION No.

5

ISSUE DATE

April 1, 2001

MANUAL CO-ORDINATOR

Judy Laton
Revenue Branch

AUTHORIZATION (Name, Title)

W. Howard
Director, Revenue Branch

Please make the following changes to your copy of the above Ministry manual. Please insert the following specified pages and **file this notice** immediately after the Amendments Tab.

ACTION (Remove/Insert)	(VOL.) CHAPTER-SECTION-SUBJECT	PAGE(S)	COMMENTS
	TABLE OF CONTENTS		
REMOVE	Chapter 6 - Miscellaneous Timber Pricing Rate	6-11 and 6-12	
INSERT	Chapter 6 - Miscellaneous Timber Pricing Rate	6-11 and 6-12	
REMOVE	Chapter 7 - Market Pricing System	7-7 to 7-10	
INSERT	Chapter 7 - Market Pricing System	7-7 to 7-10	

Forest District Specific

Description	District	Reserve Stumpage Rate
Gross area cleared for seismic lines, gas or oil well sites and right-of-way to well sites	Cranbrook	\$1,147/ha
	Dawson Creek	\$1,436/ha
	Ft. Nelson	\$1,436/ha
	Ft. St. John	\$1,436/ha

* For pipe line rights-of-way a stumpage rate may be determined by using the above rates for cutting authorities containing less than 1 000 m³, of merchantable volume. For cutting authorities of 1 000 m³ and over see Section 6.2.

6.7.2 Miscellaneous Stumpage Rates for Timber Licences

The stumpage rates in Table 6-2 apply only to timber licence cutting authorities that are not appraised and have a cutting authority term that began before May 1, 1995.

For each species of timber in column 1 of Table 6-2, the stumpage rate immediately opposite that species in columns 2, 3 and 4 respectively, apply to sawlogs scaled in the indicated forest regions on and after April 1, 2001.

Table 6-2 Miscellaneous Stumpage Rates for Timber Licences

Column 1 Species of timber	Forest Region		
	Column 2 Vancouver except the Mid-Coast and Queen Charlotte Forest Districts (that part west of the Cascade Mountains) \$/cubic metre	Column 3 Prince Rupert and the Mid-Coast and Queen Charlotte Forest Districts (that part west of the Cascade Mountains) \$/cubic metre	Column 4 All forest regions and those parts of regions east of the Cascade Mountains \$/cubic metre
Fir	30.20	24.50	25.10
Spruce	27.00	22.30	23.20
Balsam	15.80	12.60	20.40
Cedar	30.40	24.80	36.80
Hemlock	15.50	12.80	21.20
Cypress	31.40	25.90	26.30
White pine	20.60	18.60	33.30
Yellow pine	20.60	18.60	21.80
Larch	20.60	18.60	25.10
Lodgepole pine	9.50	6.40	22.20
Other conifers	20.60	18.60	26.30
All non-conifers	1.00	1.00	0.50
All species Grades 3, 4, 5, and 6	N/A	N/A	0.25
All species Firmwood reject	NIL	NIL	NIL
All species grade Y	0.25	0.25	N/A

7.4 Market Stumpage Price Calculation

The market stumpage price is calculated as detailed in this section. It is assumed that the market stumpage price will approximate the final stumpage rate, including the bonus bid, based on the variables used.

7.4.1 Market Stumpage Price Variables

MSP	=	Market Stumpage Price for the cutting authority in (\$/m ³).
CPIF	=	B.C. Consumer Price Index (P110000) for current month divided by the base CPI of 109.3.
QI	=	Stand Log Quality Index. See Section 7.3.
SP	=	Lumber Selling Price (\$/m ³). See Section 7.3.
DC	=	Estimated Development Cost Borne by the Licensee (\$) calculated using Section 4.3 and divided by the total net cruise coniferous volume.
VOL	=	Total net cruise volume of coniferous timber (m ³).
S%	=	Average cruise side slope for ground and cable yarding systems (does not include the area for horses and helicopter yarding systems).
VPT	=	Prorated net cruise coniferous volume per tree (m ³) for ground and cable yarding systems. Plus horse and helicopter systems use average VPT = 0.4705.
VPH	-	Net cruise coniferous volume per hectare (m ³ /ha).
BWDN%	=	Blowdown as a percent of net cruise coniferous volume for ground and cable yarding systems. Does not include the volume for horse and helicopter yarding systems).
BURN%	=	Species volume prorated total burn percent.
CY%	=	Overhead cable yarding coniferous volume (includes skyline) as a percent of total net cruise coniferous volume.
HP%	=	Helicopter yarding coniferous volume as a percent of total net cruise coniferous volume.
HORSE%	=	Horse yarding coniferous volume as a percent of total net cruise coniferous volume.

CYCLE	=	Hauling round trip cycle time from the landing to the point of appraisal or water dump site and return (hrs). See Section 4.5.1.
DUS%	=	Dead Useless Snags as a percent of net cruise coniferous volume for ground and cable yarding systems. Does not include the volume for horses and helicopter yarding systems.
HEM	=	Combined hemlock and balsam dummy variable.
Z9	=	Fort Nelson Peace selling price zone, dummy variable.

7.4.2 Market Stumpage Price Equation

Using the variables defined in Section 7.4.1, the selling price calculated in Section 7.3.2 and the equation below, calculate the market stumpage price (MSP).

$$\begin{aligned} \text{MSP} = & [8.5469 + 43.0570 * \text{QI} + 0.1431 * \text{SP/CPI} - 0.9216 * \text{DC/CPI} + 0.1663 \\ & * (\text{VOL}/1000) - 0.0860 * \text{S\%} + 11.1877 * \ln(\text{VPT}) + .007877 * \text{VPH} - \\ & 16.6309 * (\text{BWDN\%}/100) - 14.0790 * (\text{CY\%}/100) - 36.7619 * (\text{HP\%}/100) - \\ & 13.7335 * (\text{HORSE\%}/100) - 22.3433 * (\text{BURN\%}/100) - 2.4250 * \text{CYCLE} - \\ & 8.9936 * \text{HEM} - 8.7153 * (\text{DUS\%}/100) - 9.4184 * \text{Z9}] * \text{CPI} \end{aligned}$$

For the above equation the following definitions apply:

- if the percentage of Hemlock and Balsam volume in the cutting authority is greater than or equal to 60 percent of the total net cruise coniferous volume, then HEM = 1, otherwise enter 0,
- if the selling price zone is Fort Nelson Peace (9) then Z9 = 1, otherwise enter 0,
- if the total net cruise coniferous volume is greater than 50 000, then VOL = 50 000,
- if horse and helicopter log appraisals use VPT = 0.4705.

7.5 Calculation of MPS Stumpage Rate

For each cutting authority area, the MPS upset stumpage rate is determined by selecting the greater of:

- the MPS upset stumpage rate, or
- the prescribed minimum stumpage rate.

7.5.1 Upset Stumpage Rate Calculation

The upset stumpage rate (USR) is calculated by multiplying the Market Stumpage Price (MSP) by the difference between 1 and the discount factor (DF) as follows:

$$\text{USR} = \text{MSP} * (1 - \text{DF})$$

Where:

USR	=	Upset stumpage rate
MSP	=	Market Stumpage Price as defined in Section 7.4.2
DF	=	0.30 unless the Regional Manager determines that the cutting authority is for the salvage of epidemic beetle attacked timber, in which case the DF = 0.50

7.5.2 Prescribed Minimum Stumpage Rate

The minimum stumpage rate is prescribed by the Minimum Stumpage Rate Regulation (BC Regulation 354/87). The current minimum stumpage rate is \$0.25 per cubic metre.

7.5.3 Total MPS Stumpage Rate

The total stumpage rate is the upset stumpage rate plus any bonus bid.