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April 14, 2014

To: Interior Executive Directors

From: The Honourable Steve Thomson, Minister of Forests, Lands and Natural Resource Operations

Re: Amendment No. 3 to the *Interior Appraisal Manual (IAM)*

I hereby approve Amendment No. 3 to the IAM and attach a copy for your use.

The following sections have been amended:

Section 1.5.1(2)(c) – Clarification has been added regarding the compilation program version required.

Section 3.5.1.1 – New requirement added to measure primary cycle time to the closest appraisal log dump on the list of locations in Appendix VI.

Section 4.3.3(4) – Section reference corrected.

Section 4.3.3(7)(o) – Clarification added.

Sections 6.1.1 – Section references corrected.

Section 6.1.2 – Section references corrected.

Section 6.2 – Clarification added as to the source for the basic silviculture cost data.

Section 6.2.1 – Corrected regulation reference.

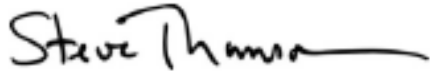
Section 6.7 – Section title has been updated. A new type of BCTS forestry licence to cut has been added as well as an exemption where the licensee will have silviculture obligations imposed by the ministry. Approval of the alternate scaling method has changed from the regional executive director to the minister to be consistent with the *Forest Act*.

Appendix VI – New appendix added with appraisal log dump locations.

This amendment will come into force on April 14, 2014. Copies of the amendment and the amended *IAM* are available at the following link:

<http://www.for.gov.bc.ca/hva/manuals/interior.htm>

Further amendments or revisions to this manual require my approval.

A handwritten signature in black ink that reads "Steve Thomson". The signature is written in a cursive style with a long horizontal line extending to the right.

Steve Thomson
Minister

Attachment

pc: Susanna Laaksonen-Craig, Executive Director, Timber Operations, Pricing and First Nations Division
Murray Stech, Director, Timber Pricing Branch
Grant Loeb, Manager Timber Pricing, Timber Pricing Branch
Len Marsh, Forest Revenue Manager, Thompson Okanagan Region
Anthony Giannotti, A/Revenue Team Leader, Omineca Region



**MANUAL REVISION
TRANSMITTAL**

<p>FOR FURTHER INFORMATION OR IF YOU HAVE A CHANGE OF ADDRESS, PLEASE CONTACT:</p> <p>Bob Bull Senior Timber Pricing Forester (Interior) Timber Pricing Branch Ministry of Forests, Lands and Natural Resource Operations 1st Floor, 1520 Blanshard Street Victoria, BC V8W 3K1</p> <p>Phone: 250 – 356 – 7709 Email: Bob.Bull@gov.bc.ca FAX: 250 – 387 – 8393</p>	MANUAL TITLE	
	<i>Interior Appraisal Manual</i>	
	AMENDMENT	ISSUE DATE
	Amendment No. 3	April 14, 2014
MANUAL CO-ORDINATOR		
Ashley Sasaki Publication/Administrative Co-ordinator		
AUTHORIZATION		
Murray Stech Director, Timber Pricing Branch		

Please make the following changes to your copy of the above Ministry manual.

ACTION (Remove/Insert)	(VOL.) CHAPTER-SECTION-SUBJECT TABLE OF CONTENTS	PAGE(S)	COMMENTS
Remove Insert	Table of Contents	i-iv	After Table of Contents Tab
Remove Insert	Chapter 1	9-10	After Chapter 1 Tab
Remove Insert	Chapter 3	9-12	After Chapter 3 Tab
Remove Insert	Chapter 4	17-20	After Chapter 4 Tab
Remove Insert	Chapter 6	3-6 17-18	After Chapter 6 Tab
Remove Insert	Appendix	13-16	After Appendix Tab
Insert	Memorandum from Minister and Transmittal Sheet		After Amendments Tab

Table of Contents

1 Introduction

1.1	Definitions.....	1-2
1.2	Terms of Reference.....	1-7
1.2.1	Responsibility for Stumpage Determination.....	1-7
1.2.2	Stumpage Appraisal Parameters	1-7
1.2.3	Minimum Stumpage Rate	1-7
1.3	Numbering and Calculation Conventions	1-8
1.4	Cutblocks within a Cutting Authority Area.....	1-9
1.5	Appraisal Data Submission Requirements.....	1-10
1.5.1	Cruise Information	1-10
1.5.1.1.	Comparative Cruise Data.....	1-11
1.5.2	Appraisal Data Forms	1-12
1.5.3	Appraisal Map.....	1-12

2 Appraisals, Reappraisals and Stumpage Adjustments

2.1	Appraisal Process.....	2-2
2.2	Reappraisals	2-4
2.2.1	Changed Circumstances.....	2-4
2.2.1.1	Changed Circumstance Reappraisal Procedure	2-7
2.2.1.2	Effective Date of a Changed Circumstance Reappraisal	2-8
2.2.2	Minister's Direction	2-8
2.2.2.1	Minister's Direction Procedure.....	2-8
2.2.3	Reappraisals Due to Insect Damage	2-9
2.2.3.1	Insect Damage Reappraisal Procedure.....	2-9
2.2.3.2	Effective Date of an Insect Damage Reappraisal	2-9
2.3	Stumpage Adjustments	2-10
2.4	Correctable Errors.....	2-11
2.5	Redetermination of Stumpage Rate by Agreement	2-13

3 Final Estimated Winning Bid

3.1	Highest Stumpage	3-2
3.2	MPS Lumber Selling Prices.....	3-3
3.2.1	Lumber AMVs.....	3-3
3.2.2	Calculation of the Real Stand Selling Price (RSP).....	3-3
3.3	Estimated Winning Bid Variables	3-5
3.4	Estimated Winning Bid Equation	3-9
3.5	Log Transportation.....	3-10

3.5.1 Cycle Time Variables	3-10
3.5.1.1 Primary Cycle Time (CT):	3-10
3.5.1.2 Haul Method	3-11
3.5.1.3 Secondary Haul	3-12
3.5.2 Point of Appraisal (POA).....	3-12
3.6 Specified Operations	3-14
3.6.1 Water Transportation	3-14
3.6.2 Special Transportation Systems	3-14
3.6.3 Camp Costs	3-16
3.6.4 Skyline and Intermediate Support Skyline	3-17
3.6.5 Helicopter Logging	3-18
3.6.6. Horse Logging	3-18
3.6.7. High Development Cost.....	3-18
3.7 Final Estimated Winning Bid.....	3-19

4 Tenure Obligation Adjustments

4.1 Tenure Obligation Adjustment (TOA).....	4-2
4.2 Administration Costs	4-3
4.2.1 Forest Management Administration (FMA)	4-3
4.2.2 Final Forest Management Administration (FFMA).....	4-3
4.3 Development	4-4
4.3.1 Development Cost Allocation.....	4-6
4.3.1.1 Development Cost Estimates on Crown Lands	4-6
4.3.1.2 Development Cost Estimates on Private Land.....	4-7
4.3.1.3 Existing Roads and Structures	4-7
4.3.1.4 Amortization Agreements.....	4-8
4.3.2 Tabular Cost Estimates	4-9
4.3.2.1 Subgrade Construction.....	4-9
4.3.2.2 Subgrade Construction Variables	4-9
4.3.2.3 Subgrade Cost Estimate	4-12
4.3.2.5 Additional Stabilizing Material.....	4-16
4.3.2.6 Cattle Guards, Fencing and Pipeline Crossings.....	4-17
4.3.3 Detailed Engineering Cost Estimates (ECE)	4-18
4.3.3.1 Trending of Detailed Engineering Costs.....	4-22
4.4 Road Management	4-24
4.4.1 Road and Land Use Charges.....	4-27
4.4.1 Road and Land Use Charges.....	4-27
4.4.2 Final Road Management (FRM).....	4-28
4.5 Basic Silviculture Cost Estimate.....	4-29
4.5.1 Root Disease Control	4-31
4.5.2 Total Silviculture Cost Estimate	4-31
4.6 Low Grade Percent Adjustment.....	4-35
4.7 Market Logger Cost	4-38
4.8 Return to Forest Management (RFM).....	4-39

4.9 Final Tenure Obligation Adjustment	4-40
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5 Stumpage Rate Determination

5.1 Stumpage Rate Determination for a Cutting Authority Entered into Under a BCTS Licence.....	5-2
5.1.1 Upset Stumpage Rates (Upset)	5-2
5.1.2 IU Calculation.....	5-4
5.1.3 Total Stumpage	5-4
5.2 Stumpage Rate Determination for a Cutting Authority Other than a Cutting Authority Entered into Under a BCTS Licence, or a Cutting Authority for Which a Stumpage Rate is Determined Under Chapter 6.....	5-5
5.2.1 Indicated Rate (IR).....	5-5
5.2.2 Reserve Stumpage.....	5-5
5.2.3 Stumpage Rate	5-5
5.3 Levies.....	5-6

6 Miscellaneous Policies

6.1 Coniferous Average Sawlog Stumpage Rates by Forest Zone and Species	6-2
6.1.1 Community Forest Agreements	6-3
6.1.2 Woodlot Licences	6-3
6.1.3 Incidental Conifer in Deciduous Leading Stands	6-4
6.2 Cutting Authorities With 5 000 m ³ or Less Volume.....	6-5
6.2.1 Forestry Licences to Cut for Specific Purposes (No Volume Limit).....	6-6
6.3 Road and Blanket Salvage Permits	6-8
6.4 Salvage Timber Stumpage Rates	6-11
6.5 Decked and Partially Harvested Timber for a Cutting Authority Other than a Cutting Authority Entered Into Under a BCTS Licence	6-13
6.6 Miscellaneous Stumpage Rates.....	6-15
6.7 Specific Licences to Cut	6-17
6.8 Controlled Recreation Areas (CRAs)	6-18
6.9 Cruise Based Stumpage Calculations	6-19

Appendices

Index

Tables

Table 3-1 LRF Update Add-ons for MPS.....	3-4
Table 3-2 District Average Number of Bidders (DANB).....	3-8
Table 3-3 Zonal Volume.....	3-8
Table 3-4 Points of Appraisal.....	3-13
Table 3-5 Rail Log Transportation.....	3-15
Table 3-6 Support Centres.....	3-17
Table 4-1 Road Groups.....	4-13
Table 4-2 Culvert Appraisal Cost Estimates.....	4-15
Table 4-3 Trend Factors for ECE Costs.....	4-23
Table 4-4 Road Management Cost Estimates.....	4-25
Table 4-5 BEC Silviculture Cost Estimates.....	4-32
Table 4-6 Point of Appraisal (POA) Low Grade Percent Adjustment by Timber Species (Cutting Authorities with Less than 35% R&G MPB Damage see 4.6(2)).....	4-36
Table 4-7 Point of Appraisal (POA) Low Grade Percent Adjustment by Timber Species (Cutting Authorities with 35% or more R&G MPB Damage see 4.6(2)).....	4-37
Table 6-1 Coniferous Average Sawlog Stumpage Rates in $\$/m^3$ by Forest Zone and Species.....	6-2
Table 6-2 Community Forest Agreements and Woodlot Licences: Coniferous Average Sawlog Stumpage Rates in $\$/m^3$	6-4
Table 6-3 Coniferous Average Sawlog Stumpage Rates by Smallest Geographic Unit.....	6-9
Table 6-4 Coniferous Average Sawlog Stumpage Rates for Salvage of Damaged Timber by Forest Zone and Species in $\$/m^3$	6-12
Table 6-5 Coniferous Average Sawlog Stumpage Rates for Salvage of Post Harvest Material by Forest Zone and Species in $\$/m^3$	6-12
Table 6-6 Miscellaneous Stumpage Rates.....	6-15

1.4 Cutblocks within a Cutting Authority Area

1. Cutblocks within a cutting authority area must:
 - a. Each be a single unit,
 - b. Each be within the same forest district,
 - c. Collectively be tributary to the same common point of appraisal as chosen in accordance with section 3.5.2 (unless they are to be included in a blanket salvage permit), and
 - d. Each not exceed a maximum distance of ten kilometres between the furthest boundaries of the furthest cutblocks, except when included in a blanket salvage permit.
2. A cutting authority shall not include both a cutblock where 35% or more of the Total Net Coniferous Volume is red and grey mountain beetle attacked Lodgepole pine and an authorisation to harvest on a cutblock that does not have those same characteristics.

1.5 Appraisal Data Submission Requirements

1.5.1 Cruise Information

1. Unless otherwise specified by the director, cruise data must be gathered and compiled according to the approved interior standard timber merchantability specifications in Table 1-1 below and in accordance with the following Ministry publications:
 - a. *Cruising Manual* at the following web site:
<http://www.for.gov.bc.ca/hva/manuals/cruising.htm>
 - b. *Cruise Compilation Manual* at the following web site:
<http://www.for.gov.bc.ca/hva/manuals/cruisecompilation.htm>
2. When cruise information is submitted to the district manager or the regional manager in order to determine a stumpage rate or an upset stumpage rate, that information must include:
 - a. The Cruise Compilation Report, and
 - b. The ASCII data files (if applicable, also the percent reduction ASCII file).
 - c. The CSV (if applicable, also the percent reduction CSV file) for appraisals submitted on or after November 1, 2013, when the cruise was compiled using the 2013.00 **or later** version of the approved cruise compilation program.
3. When requested by the district manager, a copy of the original field data must be supplied by the licensee.

Table 1-1 Interior Timber Merchantability Specifications

Description	
The following standard timber merchantability specifications must be used for all appraisals.	
Stumps (Measured on the side of the stump adjacent to the highest ground.)	
no higher than	30.0 cm
Diameter (outside bark) at stump height	
lodgepole pine: all timber that meets or exceeds	15.0 cm
all other species: all timber that meets or exceeds	20.0 cm
Top diameter (inside bark or slab thickness)	
for all species and ages, except cedar older than 141 years, all timber that meets or exceeds	10.0 cm
Top diameter (inside bark or slab thickness)	
for cedar older than 141 years, all timber that meets or exceeds	15.0 cm
Minimum length	
log or slab	3.0 m

3.4 Estimated Winning Bid Equation

Using the variables defined in section 3.3, the selling price calculated in section 3.2.2 and the equation below, calculate the estimated winning bid (EWB).

$$\begin{aligned} \text{EWB} &= [4.41 + 0.216 * \text{RSP} - 3.67 * \text{PC} + 1.15 * \ln (\text{VOL}/1000) - 9.97 * \text{CABLE} \\ (\$/\text{m}^3) & - 14.24 * \text{FIRE} - 1.31 * \text{CYCLE} - 10.77 * \text{HEMBAL} + 26.11 * [\text{CEDAR} * \\ & (1 - \text{CEDAR DECAF}) * (1 - \text{ZONE6})] - 6.42 * [(\text{FIRYP}) * \text{DRY BELT}] - \\ & 0.0386 * \text{SLOPE} + 1.07 * \text{DANB} - 14.34 * \text{DECAF} - 3.79 * \text{ZONE9} + \\ & 5.35 * \ln (\text{VPT}) + 0.421 * \text{HWY} - 7.90 * \text{DECID} + 1.46 * \ln (\text{VPH_CON}) - \\ & 1.54 * [\text{ATTACK} * (1 - \text{CB})] - 10.43 * (\text{LAYP}) - 4.40 * (\text{CB} * (1 - \text{RG35})) \\ & - 6.49 * (\text{CB} * \text{RG35}) + 1.77 * \text{AUC2012}] * \text{CPIF} \end{aligned}$$

If EWB less than \$0.25/m³ then EWB = \$0.25/m³

Note: ln = natural logarithm.

3.5 Log Transportation

The log transportation phase covers all aspects of log movement from the place of initial loading to the point of appraisal, including truck haul, rail, water and other specialized transportation. The use of section 3.5.1.1(3)(c) does not affect any other provision that requires the use of the point of appraisal, as per section 3.5.2.

3.5.1 Cycle Time Variables

3.5.1.1 Primary Cycle Time (CT):

1. The cycle consists of loading, hauling, weighing, unloading, return time, and unavoidable delays. The cycle time will normally be determined by taking into consideration all the factors that may affect it: distance, expected rate of speed, necessary delays, expected standard of roads and their maintenance, traffic density, and seasonal weather conditions.
2. If a district has developed standard cycle time schedules from specific road junctions to the point of appraisal, the person who determines the stumpage rate must use these schedules to calculate the Primary Cycle Time **in subsection (4) of this section**, except to the extent that he or she considers variation necessary to account for sudden and significant changes in road accessibility not reflected in the existing schedules.
3. For appraisal purposes, **the** weighted average Primary Cycle Time (CT) is the estimated time in hours (rounded to the nearest 0.1 hour) **using the procedure in subsection (4) of this section**.
4. To determine weighted average primary cycle time:
 - a. establish the geographical centre point of each cutblock and project a line from this point to the nearest road. The intersection of that line and the nearest road is the junction for the cutblock.
 - b. from the junction in subparagraph (a), determine the cycle time to the nearest point over which all appraised timber on the cutting authority area must travel on the way to the POA. This will be the common junction.
 - c. weight the cycle time from the junction for each cutblock by the Total Net Cruise Volume for the cutblock to determine the average weighted cycle time to the common junction.
 - d. Determine the cycle time from the common junction **by road to:**
 - i. **the point of appraisal chosen in accordance with Section 3.5.2, or**
 - ii. **the appraisal place of unloading for placement on railcars, or**
 - iii. **in the case of water transportation:**

- aa. the location closest by road to the cutting authority area that is listed in Appendix VI; or
 - bb. any closer location to the cutting authority area not included in Appendix VI that has in place authorizations allowing use of the location as a transfer point for water transportation of timber.
- iv. the place that would have been the point of appraisal if the timber had been harvested in the area from which the current cutting rights are transferred from, if the Regional Manager determines that both of the following conditions are met:
- aa. equal or higher sawlog stumpage rates for the timber to which the current cutting rights are transferred to, when compared to the sawlog stumpage rates for the timber where the current cutting rights are transferred from, and
 - bb. an increase in milling consumption of beetle infested timber by the licensee whose current cutting rights are transferred than the place that would have been the point of appraisal if the timber had been harvested in the area from which the current cutting rights are transferred from.
5. Unavoidable delays are periods when the truck is on the job but not operating due to unpredictable delays such as; tightening binder chains, minor repairs made by driver, checking and adjusting brakes, minor delays prior to loading and unloading, refuelling, etc. Unavoidable delay time does not include any breakdown which requires shop repair, the services of a skilled mechanic, or a spilled load of logs. The time for load, unload and unavoidable delay is set at 75 minutes for cable yarding systems and 60 minutes for all other systems.
6. Total CT is the sum of the times calculated under subsections 4(c), 4(d) and 5.

3.5.1.2 Haul Method

Cost estimates do not recognize different types of logging trucks. The estimate is based upon the possible haul method, either highway or off-highway and not specifically on the licensee's particular method.

Highway hauling is assumed when loaded logging trucks must travel in part over roads administered under the *Highway Act*, without truck-to-truck transfer, to the point of appraisal, or on roads administered under the *Industrial Roads Act* and Forest Service Roads as defined in *Forest Act* where prolonged known road restrictions prevent the use of oversize loads.

Off-highway hauling is assumed when loaded logging trucks can travel over roads administered under the *Industrial Roads Act* and Forest Service Roads as defined in *Forest Act* to the point of appraisal, or to a recognized reload. Where prolonged known restrictions (e.g., bridge load limit, narrow road, through rock cut, Regulations under the

Workers Compensation Act, etc.) prevent the use of oversize loads, highway haul is assumed.

3.5.1.3 Secondary Haul

Secondary haul is when logs must be truck hauled between the dewater and reload site and the point of appraisal.

3.5.2 Point of Appraisal (POA)

1. The POAs that may be considered for use in the appraisal are set out in Table 3-4 unless:
 - a. five years have passed from the date that a milling facility was permanently rendered incapable of producing lumber and chips, and
 - b. it was the only milling facility associated with that POA, or
 - c. The appraisal effective date is past the expiry date for that POA indicated in Table 3-4.
2. The POA chosen for the appraisal must:
 - a. Not be excluded by the conditions in subsection 1 of this section,
 - b. Be based on transportation routes that have not been deemed unsuitable by the district manager, and
 - c. Be the POA with the lowest transportation and development cost (TRDEV) using the following calculation:

$$\text{TRDEV Cost } (\$/\text{m}^3) = [(\text{CYCLE} * 1.31 - 0.421 * \text{HWY}) * \text{CPIF}] + [(\text{SO's} + \text{DC}) * (\text{CPI}/135.8)]$$

Where:

- CYCLE = the cycle time as defined in section 3.3 and measured in accordance with section 3.5.1.1 and 3.5.1.3.
- HWY = as defined in section 3.3.
- CPIF = as defined in section 3.3.
- SO's = the sum of the transportation specified operations that apply to the transportation route from sections 3.6.1 and 3.6.2.
- DC = Total Development Cost in the appraisal.
- CPI = as defined in section 3.3.

3. Except as provided in Table 3-3, the selling price zone indicated in Table 3-4 for the point of appraisal determined under this section must be used in the appraisal.

For each road, the additional stabilizing material cost estimate (\$/km) is determined from the equation for the appropriate road group.

Road Groups	Equation
1	Refer to section 4.3.3(7)(n)
2	20465
3	$13216 + (18754 * Q)$
4	6859
5	$10304 + (640 * D)$
6	14715
7	10066
8	7285
9	7285
10	$6437 + (3187 * D)$
11	$6437 + (3187 * D)$
12	$6437 + (3187 * D)$

Where:

Road groups are defined in Table 4-1.

- D = Distance in kilometres from source of ballast to the centre of the section that requires ballast (rounded to the nearest 0.1 km)
- Q = 1 if quarried or ripped rock, otherwise Q = 0

No cost estimate for additional stabilizing material is allowed for any snow and ice roads.

4.3.2.6 Cattle Guards, Fencing and Pipeline Crossings

1. Where the installation of cattle guards, remedial fences or wing fences are required to mitigate the impacts to range barriers resulting from harvesting on the cutting authority area, the following cost estimates apply:
 - a. Cattle Guards \$5788 each
 - b. Remedial Fences and Wing Fences \$888 per 100 m (post and wire, post and rail and/or log snake fence construction only)

2. For pipeline crossings, the following cost estimates apply:

\$3819 per single pipe crossing

\$2298 per pipe in multiple pipe crossings
(where 2 or more pipes are crossed within
the same right-of-way)

3. The cost estimates for subsections (1) and (2) include materials, transportation and installation.

4.3.3 Detailed Engineering Cost Estimates (ECE)

1. Where the tabular cost estimating procedures of this manual cannot be used due to their physical limitations, the cost of a project shall be estimated by preparing a detailed engineering cost estimate. The regional manager may approve standardized procedures to generate cost estimates for use in projects as listed below.
2. Where specific development projects involve detailed engineering cost estimates, the district manager shall be advised of project details no later than 60 days before the start of work on the project, unless otherwise agreed to between the district manager and the licensee.
3. For appraisal purposes, estimated development project costs for ECE's are made on the basis of the site-specific data using the definitions found in section 4.3.2.2 for common subgrade construction variables, the culvert costs included in Table 4-2, and the equipment and labour rates specified in Appendix I from the manual in effect at the time the costs were incurred. Due consideration is given to arm's length competitive bids for any specific project. The Crown is not liable for any difference between the appraisal estimate and the licensee's actual costs.
4. If the ECE is re-estimated once after construction as provided in section 2.2(4) (using more accurate on site information) the new detailed engineering cost estimate replaces the original (used in the initial appraisal). Detailed engineering cost estimates originally estimated using ministry approved competitive bids may be re-estimated once after construction provided the original call to tender included a methodology for adjusting the bid price based on more accurate site information and re-estimation of those costs is performed in accordance with that methodology. ECE's are not re-estimated due to labour and/or equipment rates being updated periodically in Appendix I .
5. Where the actual on-site information is known prior to the appraisal that information shall be used in the ECE as determined by the person who determines the stumpage rate.

6. Where road sections estimated as a detailed engineered cost estimate are contiguous with tabular cost estimates, costs for mobilization and demobilization will only be allowed for special equipment not required for the construction of the tabular roads. The costs for placement or addition of stabilizing material must be determined using section 4.3.2.5 unless the material is placed in conjunction with geo fabric, geo grids, corduroy or where the stabilizing material requires processing such as screening or crushing.
7. The following specific situations are considered for detailed engineering cost estimates:
 - a. New construction of long term, primary access road sections, that will have 300 000 cubic metres of harvested Crown timber hauled over them annually for at least ten years.
 - b. Road construction on uphill side slopes greater than 50%.
 - c. When rock percent as calculated in section 4.3.2.2(4) is greater than 50%, or terrain class 4 and 5.
 - d. End haul construction (of roads and landings) requiring removal by truck of excavated material to a separate area to avoid side casting on steep and/or sensitive sites.
 - e. Overland construction to provide a roadbed by trucking in material for extensive filling; see page 81 of *Forest Road Engineering Guidebook* for a more detailed description.
 - f. Log bridges and non-log bridges (including ice bridges) that are not included in the subgrade cost estimates. Eligible costs are described in section 4.3.3(10).
 - g. Structural maintenance of bridges, substructure and cribwork.
 - h. Reconstruction of roads and pertinent structures. Cost estimates for reconstruction are not to exceed the tabular cost for new construction under similar conditions.
 - i. Upgrade of roads and pertinent structures resulting in a change in the standard of the road and structure or where the licensee was not obligated to carry out road maintenance prior to the appraisal. Where road maintenance obligations exist, road upgrade is limited to widening the running surface, vertical and horizontal realignment, and additional culverts.
 - j.
 - i. Placement or addition of stabilizing material to the existing road running surface or where stabilizing material was not previously used, for uninterrupted road lengths of 0.3 km, or greater.

- ii. Road lengths less than 0.3 km are included in the road management cost estimate.
 - k. Culverts greater than 1.8 m in diameter, or culverts greater than 30 m in length regardless of diameter. The cost estimate includes all costs of transporting the culvert to the jobsite and all costs of installation of the culvert to the final subgrade stage.
 - l. Placement of additional stabilizing material where geo fabric, corduroy, crushed and/or screened rock/gravel are used.
 - m. Retaining walls, railway crossings and other structures (such as multiple culverts, baffled culverts, arched culverts and other structures determined by the timber pricing co-ordinator).
 - n. Subgrade and ballast cost estimate in road group 1, Kalum District. The subgrade and ballast cost estimate will be determined using the detailed engineering cost methodology specified by the Northern Interior Forest Region.
 - o. The costs of designing and constructing a forwarding road, where the timber pricing co-ordinator is satisfied that **when included in an appraisal it will result in an appraisal with** the highest stumpage rate. A forwarding road is not a trail but a road built to a designed standard which includes stripping, grubbing, stumping and primary excavation to establish subgrade that is used for transporting crews and equipment and forwarding timber but not for hauling logs.
8. The data which may be required for excavation and fill estimates are:
- a. Plans, profiles, cross-sections showing the ground and design grade lines.
 - b. Volume summary sheets showing excavation quantities by various soil types, for subgrade and stabilization.
 - c. Type of construction equipment and quantity of material to be used, or Ministry approved competitive bid costing.
 - d. Location of borrow and waste areas to calculate material haul distances.
9. The data required for bridges, culverts and for other structures are:
- a. Where the bridge span is 15.4 m or less and the crib height is 5.4 m or less and a permanent structure is proposed, an economic life cycle comparison between a log structure and the permanent proposal is required.
 - b. Where the bridge span is greater than 15.4 m, and/or the crib height is greater than 5.4 m or more and for pipe culverts greater than 1.8 m in diameter or 30 m in length: plans, specifications and design for the proposed structure; detailed

6.1.1 Community Forest Agreements

1. The sawlog stumpage rate for each species of coniferous timber harvested under any cutting authority issued under a Community Forest Agreement is the rate prescribed in Table 6-2 for the forest zone in which the cutting authority area is located.
2. Section 1.4(1)(d), sections 6.1.2 through 6.5 and sections 6.7 through 6.9 do not apply to Community Forest Agreement cutting authorities.
3. The stumpage rate determined under this section is redetermined on August 1 of each year in accordance with this section.

6.1.2 Woodlot Licences

1. Except as provided in subsection (2) of this section, the sawlog stumpage rate for each species of coniferous timber harvested under a cutting permit issued for a woodlot licence with an effective date after November 30, 2008 is the rate prescribed in Table 6-2 for the forest zone in which the cutting authority area is located.
2. Where a woodlot licence cutting permit has been issued with an effective date after November 30, 2008 for the purpose of using amounts from an eligible extended road amortization agreement in an appraisal, then the stumpage rate will be determined using the procedures in this manual excluding this section.
3. Except as provided in subsection (4) of this section, the sawlog stumpage rate for coniferous timber harvested under a road permit issued for a woodlot licence is the rate prescribed in Table 6-2 for the forest zone in which the timber mark applies.
4. Where a woodlot has an eligible extended road amortization agreement before December 1, 2008 the sawlog stumpage rate for a road permit with an effective date on or after December 1, 2008 is calculated using the procedures in section 6.3.
5. The sawlog stumpage rate for each species of coniferous timber harvested under a blanket salvage permit issued for a woodlot licence is the rate prescribed in Table 6-2 for the forest zone in which the blanket salvage permit applies.
6. The stumpage rate determined under subsections (1), (3) and (5) of this section is redetermined on August 1, each year in accordance with this section.
7. Except as provided in subsections (2) and (4) of this section, sections 1.4(1)(d), 6.1.1, 6.1.3 through 6.5, and sections 6.7 through 6.9 do not apply to Woodlot Licence cutting authorities.

**Table 6-2 Community Forest Agreements and Woodlot Licences:
Coniferous Average Sawlog Stumpage Rates in \$/m³**

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	Y. PINE	W. PINE	OTHER ¹
North Central	1.71	-	2.44	1.77	-	1.61	2.16	-	-	1.98
North East	0.85	-	-	-	0.25	0.69	0.82	-	-	0.77
North West	0.86	0.34	-	0.60	-	1.28	0.88	-	-	0.91
South East	1.48	2.47	2.02	1.95	2.14	1.74	1.61	1.64	1.72	1.82
South West	1.85	2.78	1.92	1.86	-	2.25	1.85	-	1.63	2.02

¹ Average for the Forest Zone

6.1.3 Incidental Conifer in Deciduous Leading Stands

1. Except as provided in section 5.1.1(5), this section applies to coniferous timber in a cutting authority area where the total estimated volume of all deciduous species to be harvested is greater than 70% of the total estimated volume of all species to be harvested.
2.
 - a. The stumpage rate for each species of coniferous timber must be determined by using the stumpage rate prescribed in Table 6-1 for the forest zone in which the cutting authority area is located.
 - b. Where the Crown is responsible for basic silviculture on the cutting authority area, the stumpage rate for each species of coniferous timber shall be the sum of the rate determined under paragraph (a) of this subsection and the silviculture levy determined under section 5.3.
3. A stumpage rate determined under subsection 2 shall be redetermined on June 1, of each year in accordance with this section.
4. Notwithstanding subsection (2) in this section, the stumpage rate may be determined through a full appraisal in accordance with chapters 1, 2, 3, 4, and 5.

6.2 Cutting Authorities With 5 000 m³ or Less Volume

1. Where the total estimated coniferous volume to be harvested in a cutting authority area is 2 000 m³ or less, and where the agreement under which the cutting authority authorizing harvesting on the cutting authority area has been issued has a coniferous allowable annual cut of not more than 3 000 cubic metres, or no coniferous annual allowable cut:
 - a. The stumpage rate for each species of coniferous timber in the cutting authority area must be determined using the stumpage rate in Table 6-1 for the forest zone in which the cutting authority area is located, except that,
 - b. Where the agreement holder is not required to establish a free growing crop of trees on the cutting authority area, the stumpage rate for each species of timber shall be
 - i. the sum of the rate determined under paragraph (a) of this subsection and the basic silviculture cost **from the current quarterly stumpage appraisal parameters** for the species in the **applicable region**, or
 - ii. where the Crown has the responsibility for silviculture, the sum of the rate determined under paragraph (a) of this subsection and the silviculture levy determined under section 5.3.
2. Except as provided in subsection 4 of this section or section 6.2.1, where the total estimated coniferous volume to be harvested on a cutting authority area is 5 000 m³ or less, and the cutting authority authorizing harvesting on the cutting authority area is a competitively awarded forestry licence to cut, other than a BCTS licence:
 - a. Except as provided in paragraph (d) of this subsection, the upset stumpage rate for each species of coniferous timber in the cutting authority area will be 70 % of the stumpage rate for that species in Table 6-1 for the forest zone in which the cutting authority area is located, except that,
 - b. Where applications for a forestry licence to cut have been invited with upset stumpage rates determined under this subsection and no applications have been received, the upset stumpage rate for each species of coniferous timber shall be the rate requested by the district manager and approved by the regional manager.
 - c. Where the regional manager does not anticipate that applications for a forestry licence to cut will be received due to market conditions or timber profile, the upset stumpage rate for each species of coniferous timber shall be the rate requested by the district manager and approved by the regional manager.
 - d. Where the Crown is responsible for basic silviculture on the cutting authority area, the upset stumpage rate for each species of coniferous timber in the cutting authority area will be the sum of the stumpage rate determined under paragraphs (a), (b) or (c) of this subsection and the basic silviculture levy determined under section 5.3.

3. Where the cutting authority authorizing harvesting is a competitively awarded licence to cut other than a BCTS licence, and
 - a. The Total Net Cruise Volume is 5000m³ or less, and
 - b. The cutting authority has been approved as cruise based under section 106 of the *Act*,

the upset shall be no less than the district's cost to prepare the timber for sale as calculated by the district manager and the total stumpage shall apply to all species of timber on the cutting authority area.
4. An upset stumpage rate determined under subsection (2) of this section shall not be less than the district's variable cost per cubic meter to prepare the timber for sale as calculated by the district manager.
5. Except as provided in section 2.2.2, where the upset stumpage rate is determined under this section, the total stumpage is fixed for the term of the cutting authority and all extensions.
6.
 - a. Notwithstanding subsections (1), (2) or (3) of this section, where the total coniferous volume to be harvested on a cutting authority area is 5 000 m³ or less, the stumpage rate may be determined through a full appraisal in accordance with chapters 1, 2, 3, 4 and 5.
 - b. Where the stumpage rate is determined in accordance with this subsection the total stumpage rate is fixed for the term and all extensions.

6.2.1 Forestry Licences to Cut for Specific Purposes (No Volume Limit)

1.
 - a. Where the cutting authority is a forestry licence to cut awarded to the highest bidder, other than a BCTS licence and it has been issued:
 - i. For the purpose of protecting a community from wildfire as prescribed under section 1 of the *Licence to Cut Regulation*, or
 - ii. For the purpose of removing damaged timber from natural stands or plantations where:
 - aa. at least 70% of the total estimated volume of all species on the cutting authority area is Pine that has been damaged by mountain pine beetle, and either
 - bb. at the time of death, the age of the damaged timber was not more than 60 years, or
 - cc. a field survey indicates that the average stems per hectare on the cutting authority area is greater than 2 000 with a minimum diameter at breast height of 5 centimetres, or

6.7 Specific Licences to Cut

1. This section applies to:
 - a. Master licences to cut,
 - b. Occupant licences to cut, and
 - c. Forestry licences to cut :
 - i. Issued under section 47.6(3) of the *Act* in conjunction with an activity funded out of the BCTS account,
 - ii. Issued in conjunction with a works contract other than BCTS, or
 - iii. Issued for a fence line or protection of a fence line administered under the *Range Act*.
2. This section does not apply to:
 - a. Cutting authorities issued for any of the activities listed in Table 6-6 that have an area reserve stumpage rate in the following districts: Fort Nelson, Peace, Mackenzie, or Rocky Mountain; or Cassiar TSA, or
 - b. The proposed Site C reservoir and dam site, or
 - c. Projects where cruising of the timber to be harvested on any tenure listed in subsection (1) has been initiated for use in a full appraisal prior to November 1, 2013.
3. Unless otherwise directed under section 2.2.2, the stumpage rate for any tenure listed in subsection (1) issued on or after November 1, 2013, shall be the stumpage rate prescribed in Table 6-3 for the smaller of the area of the forest district, timber supply area or region in which the entire cutting authority area for the tenure is located, plus the average basic silviculture cost from all species from the current quarterly stumpage appraisal parameters in the applicable region for the forest region in which the cutting authority area is located at the time the stumpage rate is determined.
4. Where the licensee will have a silvicultural obligation imposed by the Ministry then the basic silviculture cost is not added under subsection (3) of this section.
5. Where the timber felled on the cutting authority area of any tenure listed in subsection (1) will not be removed from the site the volume used for billing may be estimated using a method approved by the Minister.
6. Except as provided under paragraph (6) of this section, the stumpage rate determined under this section will be re-determined annually on June 1st.
7. The stumpage rate determined under this section for a forestry licence to cut issued under section 47.6(3) of the *Act* is fixed for the term and all extensions.

6.8 Controlled Recreation Areas (CRAs)

1. The sawlog stumpage rate for coniferous timber harvested under any cutting authority issued for a cutting authority area within a CRA is the stumpage rate approved by the director for each quarter.
2. The stumpage rate determined under subsection (1) is redetermined on the anniversary date of the cutting authority in accordance with this section.
3. Notwithstanding any other subsection in this section, the stumpage rate may be determined through a full appraisal in accordance with chapters 1, 2, 3, 4 and 5.

Appendix V Geophysical Clearance Line Categories

The following categories of geophysical line clearing apply to Table 6-6. All clearing activity in the categories below must follow the best practices of meandering avoidance, line of site to a maximum of 200 metres, and avoidance of merchantable timber wherever possible. Failure to employ these best practices (as determined by the district manager) will result in the line clearing being billed as Category 1. The categories are defined as follows:

Category 1 - Any line section over 100 metres in length and over 4.25 metres in width.

Category 2 - Any line section over 100 metres in length and between 3.0 metres and 4.25 metres in width.

Category 3 - Any line section over 100 metres in length and less than 3.0 metres in width.

Appendix VI Appraisal Log Dumps

Region	District	Marine (M) Natural (N) or Reservoir (R)	Water Body Name	Dump Location Name
NIR	Kalum	M	Devastation Channel	Heysham Creek
NIR	Kalum	M	Devastation Channel	Hugh Creek
NIR	Kalum	M	Devastation Channel	North Kitsaway
NIR	Kalum	M	Devastation Channel	Pike/Sleeman
NIR	Kalum	M	Devastation Channel	South Kitsaway
NIR	Kalum	M	Douglas Channel	Miskatla
NIR	Kalum	M	Eagle Bay	Eagle Bay
NIR	Kalum	M	Gardner Canal	Barrie Creek
NIR	Kalum	M	Gardner Canal	Kemano Bay
NIR	Kalum	M	Kildala Arm	Dala River
NIR	Kalum	M	Kildala Arm	Falls River
NIR	Kalum	M	Kitimat Arm	Minette Bay
NIR	Mackenzie	R	Williston Lake	Bear Valley
NIR	Mackenzie	R	Williston Lake	Chowika
NIR	Mackenzie	R	Williston Lake	Clearwater
NIR	Mackenzie	R	Williston Lake	Factor Ross
NIR	Mackenzie	R	Williston Lake	Ingenika
NIR	Mackenzie	R	Williston Lake	Lost Cabin
NIR	Mackenzie	R	Williston Lake	Manson
NIR	Mackenzie	R	Williston Lake	Mesilinka
NIR	Mackenzie	R	Williston Lake	Nation
NIR	Mackenzie	R	Williston Lake	Omineca
NIR	Mackenzie	R	Williston Lake	Ospika
NIR	Mackenzie	R	Williston Lake	Swannell
NIR	Nadina	R	Knewstubb Lake	Ootsa Cheslatta
NIR	Nadina	R	Knewstubb Lake	Ootsa Deerhorn
NIR	Nadina	R	Knewstubb Lake	Table Bay
NIR	Nadina	R	Knewstubb Lake	Tahtsa Reach
NIR	North Coast	M	Gardner Canal	Collins Bay
NIR	North Coast	M	Verney Passage	Cheenis Creek
SIR	Arrow Boundary	N	Slocan Lake	Rosebery
SIR	Arrow Boundary	R	Arrow Lakes	Cayuse
SIR	Arrow Boundary	R	Arrow Lakes	Fosthall
SIR	Arrow Boundary	R	Arrow Lakes	Halfway
SIR	Arrow Boundary	R	Arrow Lakes	Island Point - Gladstone
SIR	Arrow Boundary	R	Arrow Lakes	Needles
SIR	Arrow Boundary	R	Arrow Lakes	Octopus

Region	District	Marine (M) Natural (N) or Reservoir (R)	Water Body Name	Dump Location Name
SIR	Arrow Boundary	R	Arrow Lakes	Renata
SIR	Arrow Boundary	R	Arrow Lakes	Snag Bay
SIR	Arrow Boundary	R	Arrow Lakes	Stobo
SIR	Columbia	R	Arrow Lakes	Shelter Bay
SIR	Headwaters	N	Adams Lake	North end
SIR	Okanagan Shuswap	N	Okanagan Lake	Bear Creek
SIR	Okanagan Shuswap	N	Shuswap Lake	2 Mile
SIR	Okanagan Shuswap	N	Shuswap Lake	Lee Creek
SIR	Okanagan Shuswap	N	Shuswap Lake	Wilson Creek

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