

Ministry of Forests and Range

Minister's Office

MEMORANDUM

File: 280-20 Ref: 121923

To: Jim Gowriluk

Section 5.6 and 5.7

Section 6.1.5

Regional Manager Coast Forest Region

From: The Honourable Pat Bell

Minister of Forests and Range and Minister Responsible for the Integrated Land

Management Bureau

Re: Amendment No. 5 to the Coast Appraisal Manual

I hereby approve Amendment No. 5 to the *Coast Appraisal Manual* and attach a copy for your use. The following sections have been amended:



Chapter 1 Obsolete definitions are deleted and new ones have been added Section 2.3 (1) Revised for provincial consistency Section 3.2 (1) (4) and (6) Housekeeping Section 3.2 (8) Changes rate advisory process for BCTS Section 3.5 (6) Section reference updated Section 4.2 Name change for Queen Charlotte Islands to Haida Gwaii Forest District Section 4.2.2.3.1 (4) (a) and 5 (a) Volume from road permits now included in TFL billing history for grade source. Section 4.2.2.3.2 (4) (a) and 5 (a) Volume from road permits now included in forest licence and licence to cut billing history for grade source Clarifies the grade source for a licence to cut that does not Section 4.2.2.3.2 (6) (a), (7) (a) and (8) (a) have a cutting permit Section 5.3.4 (3) and (4) Clarifies which road development projects require district manager notification prior to construction

Forest District

Obsolete term deleted

Name change for Queen Charlotte Islands to Haida Gwaii

Section 6.2.6 Obsolete term deleted

Section 7.2 Name change for Queen Charlotte Islands to Haida Gwaii

Forest District

Section 7.3 (2) Section 21 and 23 timber sales will now follow the

procedures in section 7.3

Section 7.3 (4) (5) and (6) A minimum volume of 500 cubic meters is now required in

the billing history for road permits. Timber sale licence

volumes will now be excluded from that report. Name changes for Queen Charlotte Islands to Haida Gwaii Forest District

Section 7.4 Maximum opening size for salvage is increased to three

hectares

Appendix VI Name change for Queen Charlotte Islands to Haida Gwaii

Forest District. Also correction to coordinates for

Nutcracker Bay.

This amendment will come into force on February 1, 2010. Further amendments or revisions to this manual require my approval.

Pat Bell Minister

JA BOO

pc: Murray Stech, Director, Revenue Branch



Ministry of Forests and Range



MANUAL REVISION TRANSMITTAL

FOR FURTHER INFORMATION OR IF YOU HAVE A CHANGE OF ADDRESS, PLEASE CONTACT:

George Silvestrini

Senior Timber Pricing Forester (Coast)

Revenue Branch Ministry of Forests

1st Floor, 1520 Blanshard Street

Victoria, BC V8W 3K1

Phone: 250 - 387-8377

PROFS userid: George.Silvestrini@gov.bc.ca

FAX: 250 - 387-5670

MANUAL TITLE

Coast Appraisal Manual

AMENDMENT

ISSUE DATE

Amendment No. 5

February 1, 2010

MANUAL CO-ORDINATOR

Judy Laton

Publication/Administrative Co-ordinator

AUTHORIZATION (Name, Title)

Murray Stech

Director, Revenue Branch

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

ACTION	(VOL.) CHAPTER-SECTION-SUBJECT		
(Remove/Insert)	TABLE OF CONTENTS	PAGE(S)	COMMENTS
Remove	Table of Contents	i - iv	After Table of Contents Tab
Insert		i - iv	
Remove	Chapter 1	3 - 6	After Chapter 1 Tab
Insert		3 - 6	
Remove	Chapter 2	5 - 6	After Chapter 2 Tab
Insert		5 - 6	
Remove	Chapter 3	3 – 4 11 - 12	After Chapter 3 Tab
Insert		3 – 4 11 - 12	
Remove	Chapter 4	5 – 6 11 - 18	After Chapter 4 Tab
Insert		5 – 6 11 - 18	
Remove	Chapter 5	15 – 18 21 - 22	After Chapter 5 Tab
Insert		15 – 18 21 - 22	
Remove	Chapter 6	3 - 6	After Chapter 6 Tab
Insert		3 - 4	
Remove	Chapter 7	3 - 8	After Chapter 7 Tab
Insert		3 - 8	
Remove	Appendix	13 - 14 21 - 22	After Appendix Tab
Insert		13 - 14 21 - 22	
Remove	Index	1 - 4	After Index Tab
Insert		1 - 4	
INSERT	Letter from Minister and Transmittal Sheet		After Amendments Tab

Table of Contents

1	Definitions and Interpretations	
	1.1 Definitions and Interpretations	1-2
2	Scope and Requirements	
	2.1 Terms of Reference	2-2
	2.1.1 Responsibility for Stumpage Determinations	
	2.2 Numbering System	
	2.2.1 Calculation Conventions	2-3
	2.2.2 Cutblocks within a Cutting Authority Area	2-3
	2.3 Cruise Information	2-5
	2.4 Appraisal Data Submission	
	2.5 Appraisal Map	2-8
	3.1 Types of Determination 3.2 Appraisals 3.3 Reappraisals 3.3.1 Changed Circumstances 3.3.1.1 Changed Circumstance Reappraisal Procedure 3.3.1.2 Effective Date of Changed Circumstance Reappraisal 3.3.2 Annual Reappraisal of a Road Permit.	3-3 3-4 3-6 3-6
	3.3.3 Annual Reappraisal of Salvage Logging Stumpage Rates	
	3.3.4 Annual Reappraisal of a Linear Tenure	
	3.3.5 Minister's Direction	
	3.4 Quarterly Adjustments	
	3.5 Fixed Rates and Extensions of Term	
	3.6 Correctable Errors	
	3.7 Redetermination of Stumpage Rate by Agreement	
4	Estimated Winning Bid	
	4.1 Appraisal Methodology	4-2
	4.2 Market Pricing System (MPS) Variables	
	4.2.1 Log Selling Prices	

	4.2.1.1 Coniferous Timber	4-6
	4.2.2 Log Grade Percentages	4-6
	4.2.2.1 Billing History Record	4-6
	4.2.2.2 Log Grade Percentage Criteria	
	4.2.2.3 Source of Log Grade Percentages for Each Cutting Authority	
	Area	4-10
	4.2.2.4 Damaged Timber	4-14
	4.2.3 Stand Selling Price	
	4.2.3.1 Stand Selling Price Calculation	
	4.2.4 Haul Distance	
	4.2.5 Marine Log Transportation	
	4.2.5.1 Point of Appraisal	
	4.2.5.2 Appraisal Log Dump	
	4.2.5.3 Log Towing	
	4.2.5.4 Log Barging	
	4.3 Estimated Winning Bid (EWB) Equation	
	4.4 Specified Operations	
	4.4.1 Skyline	
	4.4.2 Inland Water Transportation	4-21
	4.4.3 Clayoquot Sound Operating Costs	
	4.4.4 Helicopter Single Standing Stem Selection	4-21
	4.4.5 Destumping for Root Disease Control	4-22
	4.4.6 Tree Crown Modification	4-22
	4.4.7 Ecosystem Based Management Operating Costs	4-23
	4.5 Final Estimated Winning Bid	4-24
に に	Tanuna Obligation Adiustments	
J	Tenure Obligation Adjustments	
	5.1 Tanum Obligation Adjustment	5 0
	5.1 Tenure Obligation Adjustment	
	5.2 Forest Planning and Administration Cost	
	5.2.1 Low Volume Cost	
	5.3 Road Development Cost	
	5.3.1.1 New Road Construction	
	5.3.1.2 Road Reconstruction	
	5.3.1.2 Road Reconstruction 5.3.1.3 Total Road Development Cost	
	5.3.2 Existing Roads	
	5.3.2.1 Extended Road Amortization	
	5.3.3 Tabular Cost Estimates	
	5.3.3.1 New Road Construction	
	5.3.3.2 Bridges and Culverts	
	5.3.4 Non-tabular Cost Estimates	
	5.3.4.1 Data Requirements	
	5.4 Road Management Cost	
	5.5 Dood Has Charges	5 10
	5.5 Road Use Charges	5-1

ii

	5.5.1 Land Use Charge	5-20
	5.6 Basic Silviculture Cost	
	5.7 Low Grade Number	
	5.8 Market Logger Cost	
	5.8.1 Market Logger Cost	
	5.8.2 BC Timber Sales Infrastructure and Services	
	5.8.3 Competitive Timber Sales Specified Operations Adjustment	
	5.9 Return to Forest Management (RFM)	
	5.10 Tenure Obligation Adjustment	
6	Stumpage Rate Determination	
	6.1 Stumpage Rate Calculation for a Cutting Authority Entered into Under	6.2
	Section 20 of the Act	
	6.1.1 Indicated Upset Stumpage Rate (IUSR)	
	6.1.2 Prescribed Minimum Stumpage Rate	
	6.1.3 Upset Stumpage Rate	
	6.1.4 Stumpage Rate	0-3
	6.2 Stumpage Rate Calculation for a Cutting Authority Other than a Cutting	
	Authority Entered into Under Section 20 of the <i>Act</i> or a Cutting Authority for which a Stumpage Rate is Determined Under Chapter 7	6.1
	6.2.1 Indicated Rate (IR)	
	6.2.2 Prescribed Minimum Stumpage Rate	
	6.2.3 Reserve Stumpage Rate	
	6.2.4 Upset Stumpage Rate	
	6.2.5 Total Stumpage Rate	
	0.2.3 Total Stumpage Nate	0 ¬
7	Miscellaneous Timber Pricing Policies	
	7.1 Average Stumpage Rates by District and Species	
	7.2 Community Forest Agreements and Woodlot Licences	
	7.2.1 Woodlot Licences with Cutting Authorities under MPS	
	7.3 Road Permits	
	7.4 Salvage Logging Stumpage Rates	
	7.4.1 Levies for Salvage Forestry Licences to Cut Cutting Authorities 7.5 Cutting Authority Area With Less than 2 500 m ³ of Timber Volume	
	7.5 Cutting Authority Area with Less than 2 500 in of Timber Volume	
	7.7 Linear Tenures	
	7.7 Linear Tenures	
	7.8 1 Marine Log Salvage	
	7.8.1 Beachcomb	
	7.8.1.1 Beachcomb	
	7.8.1.2 Wool Buck 7.8.1.3 Wahleach Island Catchment Basin	
	7.8.1.4 Deadhead Logs	
	7.0.1.7 Deathead Logs	/-12

Appendices

Appendix I Equipment and Labour Rates	A-2
Appendix II Reconstruction and Replacement	A-4
Appendix III Development Cost Proration	A-5
Appendix IV Rock Mass Classification	A-6
Appendix V Appraisal Map Content	A-8
Appendix VI Appraisal Log Dumps	A-9
Appendix VII Definition of 'Bankheight' Tabular Road Categories	A-28
Appendix VIII Non-Tabular Cost Estimates	A-29
VIII.1 Non-Tabular Cost Estimates	A-29
VIII.2 Subgrade Construction	A-29
VIII.3 Additional Stabilizing Material	A-33
VIII.4 Additional Stabilizing Material Cost Estimate	A-33
VIII.5 Capping	A-36

Index

"Deciduous timber" means timber that is any of the alder, birch, cottonwood and maple species;

"Detailed engineering" means non-tabular;

"Director" means director of Revenue Branch of the Ministry of Forests and Range;

"District manager" means:

- (a) Except as provided in paragraph (b) of this definition, the district manager or district manager's designate.
- (b) Where the cutting authority area being appraised or reappraised is located in a controlled recreation area designated under the *Resort Timber Administration Act*, (RTAA) then district manager means an employee of the Ministry of Tourism, Sports and the Arts to whom the minister of that ministry has delegated the minister's powers and duties under section 2 of the RTAA.

"Effective Date" means, unless otherwise specified in the manual,

- i. the date the stumpage rate is determined when required for advertising for competitive award, or
- ii. the effective date of the cutting authority when the stumpage rate is determined for a cutting permit or a direct award licence.
- **"Helicopter Selection"** means the harvesting of single trees within standing residual timber that have been felled and then removed using a helicopter;
- **"Hogged Tree Material"** means tree residues or by-products that have been shredded into smaller fragments by mechanical action. All post-harvest material where a waste assessment has been made and the material will be hogged at the roadside or the landing;
- "Immature coniferous timber" means coniferous timber that is younger than 121 years old;
- "Licensee" means the holder of a cutting authority;
- "Low grade" means grades 'X' and 'Y' of all species and 'U' grade hemlock and balsam;
- "Main Access Road" means a long-term (i.e., in use for more than ten years) mainline road that is tributary to the appraised cutting authority area, or is used to transport bulk fuels, supplies, equipment or harvesting crews necessary to carry out day-to-day harvesting activities on that area, and has an average stabilized subgrade width greater than seven metres:

- "**Net cruise volume**" means the gross volume of all species listed in section 4.2.3(1), plus alder, birch, cottonwood and maple in the cutting authority area minus the volume of decay, waste and breakage in that timber unless otherwise specified in the *Cruising Manual*;
- "Old growth coniferous timber" means coniferous timber that is 141 years old or greater;
- "Regional manager" means regional executive director or regional executive director's designate;
- "**Regulations**" means regulations under the *Act*;
- "Remaining volume" means the total net cruise volume of a cutting authority area minus the total volume of timber in the billing history record of the cutting authority area on the effective date of the reappraisal of the cutting authority area;
- "Revenue Branch" means Revenue Branch of the Ministry;
- "Road Permit" means road permit or the timber mark for a road permit that is associated with the applicable tenure listed in Section 115(1) of the *Act*;
- "Second growth coniferous timber" means coniferous timber that is less than 141 years old;
- "Selling price zone 51" means the table of coast market pricing system log values for old growth coniferous timber, approved by the director, Revenue Branch;
- "Selling price zone 52" means the table of coast market pricing system log values for second growth coniferous timber, approved by the director, Revenue Branch;
- "Skyline" means any method of yarding where the logs are fully suspended above the ground by a short span, long span, or multi-span system using a carriage with standing or running lines;

[&]quot;Manual" means Coast Appraisal Manual;

[&]quot;Mature coniferous timber" means coniferous timber that is 121 years old or older;

[&]quot;Minister" means Minister of Forests and Range;

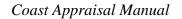
[&]quot;Ministry" means Ministry of Forests and Range;

"Total net cruise volume" of a cutting authority area (tncv) is the product of the net cruise volume per hectare of the cutting authority area (ncv/ha) multiplied by the total merchantable timbered area to be harvested under the cutting authority (tmta). Expressed as an equation: tncv = $\frac{\text{ncv}}{\text{ha}}$ x tmta;

"Tributary cutting authority area" means a cutting authority area from which timber must be transported over the road that is developed, or a cutting authority area to which bulk fuels, supplies, equipment and harvesting crews necessary to carry out the day-to-day harvesting activities on that area must be taken on a regular basis over the road that is developed;

"Unit cost" means cost estimate expressed in dollars per cubic metre;

"Woodchips" means timber that has been cut into small pieces by a chipper. Made from post-harvest material where a waste assessment has been made and the material will be chipped at the roadside or the landing.



This page is intentionally left blank.

2.3 Cruise Information

- 1. Unless otherwise specified by the director, cruise data must be gathered and compiled according to the approved coast timber merchantability specifications in Table 2-1 and in accordance with the following ministry publications:
 - a. Cruising Manual, (Cruising Manual web site: http://www.for.gov.bc.ca/hva/manuals/cruising.htm),
 - b. Cruise Compilation Manual.

http://www.for.gov.bc.ca/hva/manuals/cruisecompilation.htm

Table 2-1 Coast Timber Merchantability Specifications

Description						
The following coast timber merchantability specifications must be used in all appraisals.						
Maximum stump height (measured from the top of the stump down to the highest ground level adjacent to the stump)	Mature 30.0 cm	Immature 30.0 cm				
2. Minimum slab thickness for cedar only	15.0 cm	10.0 cm				
3. Minimum top diameter (inside of the bark)	15.0 cm	10.0 cm				
4. Minimum length of a log or slab	3.0 m	3.0 m				

- 2. The licensee must provide, when requested by the district manager a photocopy of the tally sheets and an electronic version of the compilation in a format specified by the regional manager.
- 3. a. The cutting authority area will be appraised using the total net cruise volume of timber authorized for harvest in that area.
 - b. The total area of merchantable timber in the cutting authority area is obtained from the appraisal summary of the cruise compilation report.
- 4. If the licensee or BCTS modifies its application for a cutting authority the applicant must recompile the cruise data when any of compiled plots used in the cruise lie outside the boundaries of the proposed cutting authority area.
- 5. a. Where a boundary of a cutting authority area has been changed after the appraisal or reappraisal of the cutting authority area, every reappraisal of the cutting authority area must use the total net cruise volume of the cutting authority area as it is after the boundary has changed.

b. If, after a cruise compilation or recompilation was used for an appraisal or reappraisal, the total of all additions or deletions of areas containing merchantable timber made to the cutting authority area exceeds twenty-five hectares or twenty-five percent of the area containing merchantable timber, whichever is less, the entire cruise must be recompiled.

3.2 Appraisals

- 1. Except where the sawlog stumpage rate or an upset stumpage rate is determined in Chapter 7:
 - a. an appraisal is a process used to determine a stumpage rate for a cutting authority area using the manual in effect on the effective date of the cutting authority.
 - b. the appraisal is effective on the effective date of the cutting authority.
- 2. A licensee or BCTS shall submit an appraisal data submission to the district manager when the licensee or BCTS makes an application for a cutting authority.
- 3. The district manager may require the licensee or BCTS to complete and submit an estimated stumpage rate calculation for both helicopter and cable methods of harvesting when the district manager is not satisfied that the method proposed by the licensee or BCTS is the only method that is suitable for the area intended to be harvested.
- 4. The district manager may review the appraisal data submission of the licensee or BCTS, and may inform the licensee or BCTS of any omissions, errors or provisions of the manual that, in the opinion of the district manager, the signing RPF or RFT may not have considered. The licensee or BCTS signing RPF or RFT may consider the district manager's information and may revise the appraisal data submission.
- 5. The district manager shall give any information supplied by the licensee or BCTS under this section to the person who determines the stumpage rate together with any other information that the district manager considers relevant to the appraisal.
- 6. The person who determines the stumpage rate may review the appraisal data submission of the licensee or BCTS, and information supplied by the district manager and may inform the licensee or BCTS of any omissions, errors or provisions of the manual that, in the opinion of the person who determines the stumpage rate, the signing RPF or RFT may not have considered. The licensee or BCTS signing RPF or RFT may consider the information and may revise the appraisal data submission.
- 7. The person who determines the stumpage rate shall consider:
 - a. the information provided by the licensee or BCTS and the district manager, and
 - b. any information available to the person who determines the stumpage rate that is relevant to the appraisal.
- 8. Regional revenue staff will notify:
 - a. BCTS of the upset stumpage rate determination, or
 - b. except for Section 20 timber sale licensees, all other licensees of the stumpage rate determination.

3.3 Reappraisals

- 1. A reappraisal is a process used to redetermine a stumpage rate for a cutting authority using the manual in effect on the effective date of the reappraisal.
- 2. Except as provided for under sections 3.3.1(1)(d), 3.3.1(2)(d), 3.3.2, 3.3.3, 3.3.4 and 3.3.5, a reappraisal is based on a complete reassessment of the cutting authority area on the effective date of the reappraisal, as if the area has been returned to the condition as it was prior to development or harvesting.
- 3. Non-tabular cost estimates made in the appraisal of a cutting authority area may be re-estimated once in a subsequent reappraisal after works have been constructed using information required under section 5.3.4.
- 4. Road development costs originally estimated using ministry approved competitive bids may not be re-estimated in a reappraisal.

3.3.1 Changed Circumstances

- 1. A changed circumstance on or in relation to a cutting authority area where the effective date of the most recent appraisal or reappraisal of the cutting authority area prior to the circumstance was prior to June 1, 2006 means a circumstance where:
 - a. (i) The licensee planned or plans to use a method of harvesting to harvest at least twenty-five percent of the volume of timber in the cutting authority area that was or is different from the method that was planned to be used for that timber at the time of the most recent appraisal or reappraisal of the cutting authority area, and
 - (ii) the different method of harvesting that was or is planned to be used:
 - (aa) when used in the changed circumstance reappraisal will produce the highest stumpage rate, and
 - (bb) is or was different from the method of harvesting that was used in the most recent appraisal or reappraisal, or
 - b. The licensee planned or plans a change in the amount of road development that will lead to a difference of at least twenty-five percent between the total road development unit cost that was used in the most recent appraisal or reappraisal and the total road development unit cost that will be used in a changed circumstance reappraisal done in accordance with the changed circumstance reappraisal procedure, or
 - c. land containing merchantable timber has been either added to or deleted from

- ii) if the licensee gives written notice to the regional appraisal coordinator later than 21 days following receipt of the stumpage advisory notice, the non-adjusting stumpage rate will be the stumpage rate in effect three weeks after the regional appraisal coordinator receives the notice.
- d. On the date that the stumpage rate becomes a non-adjusting stumpage rate, the stumpage rate for the cutting authority continues to be the stumpage rate of the cutting authority that was in effect on that date.
- e. Where a stumpage rate is changed from an adjusting stumpage rate to a non-adjusting stumpage rate, the stumpage rate for the cutting authority shall not change for the term of the cutting authority and all extensions from the date that the stumpage rate is changed to a non-adjusting stumpage rate, except where the cutting authority area is reappraised under section 3.3.1(d) or under section 3.3.3.

Average Stumpage Rates by District and Species

5. Where the stumpage rate for a cutting authority has been determined under section 7.1, 7.5 or section 7.6 and the term of the cutting authority is extended, the stumpage rate shall not change during the term of the cutting authority and all extensions.

Miscellaneous Stumpage Rates

6. Except where miscellaneous stumpage rates are otherwise specified in a cutting authority the miscellaneous stumpage rates applicable to timber under section 7.8 are the rates that are in effect on the date that the timber is scaled.

3.6 Correctable Errors

- 1. In this section, a correctable error means:
 - a. an error made by a Ministry employee in selecting or transcribing the correct log grade source, or
 - b. a stumpage adjustment calculation that has not been made by using a stumpage appraisal parameter in effect on the effective date of the stumpage adjustment.
- 2. Where a person believes that a correctable error has been made in a stumpage determination, that person shall give written notice of the correctable error as follows:
 - a. in the case of an appraisal or a reappraisal, the notice shall be given to the regional manager, and in the case of a quarterly adjustment, the notice shall be given to the director, and
 - b. the notice shall identify the stumpage determination, the correctable error, and the cause of the correctable error to the extent reasonably possible.
- 3. The regional manager or the director, upon receipt of the notice shall determine whether or not a correctable error was made.
- 4. Where the regional manager or the director determines that a correctable error has not been made, the person who determined the stumpage rate or director shall notify the person who gave the notice of the correctable error.
- 5. Where the regional manager or the director determines that a correctable error has been made, then:
 - a. the regional manager or the director will notify the person who gave the notice of the correctable error,
 - b. the regional manager or the director will take reasonable steps to ensure that all licensees who may have been affected by a similar correctable error are informed of the decision, and
 - c. (i) where the regional manager determines that a correctable error has been made in an appraisal or a reappraisal the cutting authority area shall be reappraised to correct the error by the person who determined the stumpage rate, using the procedure under subsections 3.2(7) to 3.2 (8), and,
 - (ii) the effective date of the reappraisal shall be the first day of the month following the date on which the notice of the correctable error was received by the regional manager.

GAMBDIST POA distance is the average straight line distance based on a BC

Albers projection, weighted by net cruise volume, between the geographic centre of each cutblock in the cutting authority area and Gambier Island. GAMBDIST is measured and rounded to the

nearest kilometre.

The Gambier Island BC Albers co-ordinate is northing 499,955 and

easting 1,185,166.

DISTAVGNBID The average number of bidders for the forest district within which

the cutting authority area is located is listed in Table 4-2.

AUC2008 2008 Auctions dummy variable.

AUC2008 = 1.

Table 4-2 Average Number of Bidders by Forest District

Forest District	Average Number of Bidders
Haida Gwaii Forest District	3.42
Chilliwack Forest District	3.15
Squamish Forest District	3.52
Sunshine Coast Forest District	3.44
South Island Forest District	5.34
Campbell River Forest District	5.70
North Island- Central Coast Forest District	4.13
North Coast Forest District	3.64

4.2.1 Log Selling Prices

1. The Revenue Branch shall:

- a. Compile invoiced free on board log market values using prime, domestic, arm's-length sales reported to the Revenue Branch prior to sixty days before the stumpage rate adjustment date that have occurred in areas adjacent to:
 - i. the Strait of Georgia;
 - ii. the Strait of Juan de Fuca;
 - iii. Alberni Inlet east of a line drawn south from Amphitrite Point;

- iv. Johnstone Strait;
- v. the Queen Charlotte Strait south of a line drawn west from Cape Caution; and
- vi. Fraser River west of the bridge at the confluence of the Pitt River.
- b. Subject to subsection 2 of this section compile schedules of average log market values by species and log grade using sales data for each one-month reporting period. The data shall be summarized into a three-month schedule of average log market values by species and log grade for old growth timber stumpage rate determinations. A three-month schedule of average log market values by species and log grade for second growth stumpage determinations shall also be produced. These schedules can be found at:

http://www.for.gov.bc.ca/hva/parameters.htm

- 2. The volumes and prices of alder, birch, cottonwood and maple shall not be included in the schedules of average log market values.
- 3. The director shall approve schedules of average log market values for use in stumpage appraisals, reappraisals and quarterly adjustments.

4.2.1.1 Coniferous Timber

- 1. The volume of old growth coniferous timber and the volume of second growth coniferous timber in a cutting authority area will each be compiled from the timber cruise of the cutting authority area on a tree by tree basis.
- 2. Where the volume of second growth coniferous timber in a cutting authority area is at least eighty percent of the volume of all of the coniferous timber in that cutting authority area, the cutting authority area will be appraised and reappraised as if all of the coniferous timber in that cutting authority area were second growth coniferous timber.

4.2.2 Log Grade Percentages

Log grade percentages are obtained for each species of timber in each cutting authority area being appraised or reappraised as described in section 4.2.2.1, 4.2.2.2, 4.2.2.3, 4.2.2.3.1, 4.2.2.3.2 and 4.2.2.4.

4.2.2.1 Billing History Record

1. Except as provided in sections 4.2.2.2, and 4.2.2.4, the billing history record that will be used in an appraisal or reappraisal of a cutting authority area will be determined using either Table 4-3 or Table 4-4 as may be required by this manual.

- 2. a. Where the cutting authority area is the only cutting authority area in the cutting authority and is entirely within the geographic boundaries of a single timber licence, the person determining the stumpage rate will proceed to subsection 3 of this section.
 - b. Where subsection 2 (a) of this section is not applicable, the person determining the stumpage rate will proceed to subsection 4 of this section.
- 3. a. Where the species being considered has a billing history record for cutting permits issued under the timber licence under which the cutting permit that authorizes harvesting on the cutting authority area being appraised or reappraised has been issued that meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.
 - b. Where there is no such billing history record, the person determining the stumpage rate will proceed to subsection 4 of this section.
- 4. a. Where the species being considered has a billing history record derived from cutting permits issued under the tree farm licence or licence to cut and their associated road permits authorizing harvest in that part of the tree farm licence area that lies within the geographic boundaries of the forest district that contains the cutting authority area being appraised or reappraised and that billing history record meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.
 - b. Where there is no such billing history record, the person determining the stumpage rate will proceed to subsection (5) of this section.
- 5. a. Where the species being considered has a billing history record derived from cutting permits issued under the tree farm licence or licence to cut and their associated road permits authorizing harvest and that billing history meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.
 - b. Where there is no such billing history record, the person determining the stumpage rate will proceed to subsection (6) of this section.
- 6. a. Where the species being considered has a billing history record for cutting authority areas in that part of the tree farm licence area that lies within the geographic boundaries of the forest district that contains the cutting authority area being appraised or reappraised that meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.
 - b. Where there is no such billing history record, the person determining the

- stumpage rate will proceed to subsection (7) of this section.
- 7. a. Where the species being considered has a billing history record for cutting authority areas in a tree farm licence area that contains the cutting authority area being appraised or reappraised that meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.
 - b. Where there is no such billing history record, the person determining the stumpage rate will proceed to subsection (8) of this section.
- 8. Where the species being considered has a five-year billing history for cutting authority areas in a tree farm licence area that contains the cutting authority area being appraised or reappraised that meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.

4.2.2.3.2 Log Grade Percentages for a Cutting Authority Area Within a Timber Supply Area

Where the cutting authority area being appraised or reappraised is entirely within the geographic boundaries of a single timber supply area, the log grade percentages for the cutting authority area will be determined in the following manner:

- 1. a. Where at least eighty percent of the timber in the cutting authority area is second growth coniferous timber, the log grade percentages for that cutting authority area will be determined in accordance with the requirements of subsection 4.2.2.2(6).
 - b. Where at least eighty percent of the timber in the cutting authority area is not second growth coniferous timber the person determining the stumpage rate will proceed to subsection 2 of this section.
- 2. a. Where the cutting authority area is entirely within the geographic boundaries of one or more timber licences, the person determining the stumpage rate will proceed to subsection 3 of this section.
 - b. Where the cutting authority area is not entirely within the geographic boundaries of one or more timber licences, the person determining the stumpage rate will then proceed to subsection 4 of this section.
- 3. a. Where the cutting authority area being appraised or reappraised is authorized for harvest under a cutting permit issued under a timber licence, and the species being considered has a billing history record for cutting permits issued under that timber licence and any other timber licence with which that licence has been amalgamated and approved by the district manager that meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the

log grade percentages for that species.

- b. Where there is no such billing history record, the person determining the stumpage rate will proceed to subsection 6 of this section.
- 4. a. Where the cutting authority area in a timber supply block being appraised or reappraised is authorized for harvest under a cutting permit issued under either a forest licence or licence to cut, and the species being considered has a billing history record for cutting permits issued under the licence authorizing harvest in that same timber supply block and associated road permits, and that billing history record meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.
 - b. Where there is no such billing history record, the person determining the stumpage rate will proceed to subsection 5 of this section.
- 5. a. Where the cutting authority area in a timber supply area being appraised or reappraised is authorized for harvest under a cutting permit issued under either a forest licence or licence to cut, and the species being considered has a billing history record for the cutting permits issued under the licence authorizing harvest in that same timber supply area and associated road permits and that billing history record meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.
 - b. Where there is no such billing history record, the person determining the stumpage rate will proceed to subsection 6 of this section.
- 6. a. Where the cutting authority area being appraised or reappraised is authorized for harvest under a licence to cut or under a cutting permit issued under either a forest licence, timber licence or licence to cut, and the species being considered has a billing history record for all cutting authority areas that have been authorized for harvest in that timber supply block that meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.
 - b. Where there is no such billing history record, the person determining the stumpage rate will proceed to subsection 7 of this section.
- 7. a. Where the cutting authority area being appraised or reappraised is authorized for harvest under a licence to cut or under a cutting permit issued under either a forest licence, timber licence or licence to cut, and the species being considered has a billing history record for all cutting authority areas that have been authorized for harvest in that timber supply area that meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.

- b. Where there is no such billing history record, the person determining the stumpage rate will proceed to subsection 8 of this section.
- 8. a. Where the cutting authority area being appraised or reappraised is authorized for harvest under a licence to cut or under a cutting permit issued under either a forest licence, timber licence or a licence to cut, and the species being considered has a five-year billing history for cutting authority areas in a timber supply area that contains the cutting authority area being appraised or reappraised that meets the criteria of subsection 4.2.2.2(4), then that billing history record will be the source of the log grade percentages for that species.

4.2.2.4 Damaged Timber

Where the regional manager determines that timber in a cutting authority area is suddenly and severely damaged, then notwithstanding section 4.2.2.1, 4.2.2.2, 4.2.2.3, 4.2.2.3.1 and 4.2.2.3.2 the log grade percentages for the cutting authority area being appraised or reappraised may be estimated from available site-specific information.

4.2.3 Stand Selling Price

1. The stand selling price shall be calculated in an appraisal or reappraisal by using the net cruise volumes and species selling prices of the following species of timber:

Balsam Lodgepole Pine
Cedar White Pine
Cypress Sitka Spruce
Fir Engelmann Spruce

Hemlock

4.2.3.1 Stand Selling Price Calculation

- 1. Subject to subsection 2 of this section:
 - a. a species grade value for a species of timber in a cutting authority area is the product of the percentage of that grade of that species as derived from section
 4.2.2 multiplied by the average log market value for that grade of that species of timber,
 - b. a species selling price for a species of timber in a cutting authority area is the sum of all of the species grade values for that species of timber in the cutting authority area.
 - c. the rounded species selling price is the species selling price for a species of timber in a cutting authority area rounded to the nearest cent,

- d. a species value is the product of the rounded species selling price multiplied by the species net cruise volume in the cutting authority area, and
- e. the stand selling price is the quotient of the sum of all of the species values in a cutting authority area divided by the total net cruise volume of all of the species in the cutting authority area.
- 2. For the purposes of determining a stand selling price:
 - a. in the Pemberton, Yale and Nahatlatch timber supply blocks:
 - i. all spruce is deemed to be Engelmann spruce, and
 - ii. the hemlock and balsam species grade average log market values will be used to determine the species grade values for all spruce in the cutting authority area,
 - b. where outside the Pemberton, Yale and Nahatlatch timber supply blocks:
 - i. Engelmann spruce is identified as the predominant spruce species in the cruise of the cutting authority area, or
 - ii. the district manager determines that Engelmann spruce is the predominant spruce species in the cutting authority area,
 - the hemlock and balsam species grade average log market values will be used to determine the species grade values of all spruce in the cutting authority area,
 - c. where a cutting authority area is located on Cortes Island or on an Island between Vancouver Island and the British Columbia mainland west of a line drawn between Grief Point near Powell River and the Tsawwassen ferry terminal, and south of 50 degrees north latitude, the second growth Douglas-fir species grade average log market values will be used to calculate the species selling price for all Douglas-fir timber.

4.2.4 Haul Distance

- 1. Haul distance does not contribute to the calculation of a stumpage rate but must be determined and reported on the appraisal data submission.
- 2. The haul distance for a cutting authority area being appraised or reappraised shall be determined as follows:
 - a. For each cutblock in the cutting authority area from which any timber may be removed by road from that cutblock:

- i. determine for that cutblock the point that is the closest point on a road to the geographical centre of the cutblock,
- ii. determine the shortest distance by road from the point on the road determined in subparagraph (i) of this paragraph to the appraisal log dump for that cutblock, measured in kilometres (km) and rounded to the nearest 0.1 km,
- iii. weight for that cutblock the distance determined in subparagraph (ii) of this paragraph by the net cruise volume of timber on the cutblock.
- b. Determine the average weighted distance of all the cutblocks for which a weighted distance was determined in subparagraph (iii) of paragraph (a), rounded to the nearest 0.1 km.
- c. Haul distance is the average weighted distance calculated in paragraph (b) of this subsection plus the rehaul distance in the case of inland water transportation as described in section 4.4.2.
- d. Where a rehaul is required for inland water transportation, the appraisal log dump is the final log dump at the end of the rehaul.

4.2.5 Marine Log Transportation

4.2.5.1 Point of Appraisal

1. The Points of Appraisal are:

Points of Appraisal Location

Alberni At the head of Alberni Inlet.

Chemainus At Chemainus Bay.

Gambier Island At Gambier Harbour on Gambier Island.

Pitt River Bridge At the confluence of the Fraser and Pitt Rivers.

4.2.5.2 Appraisal Log Dump

- 1. Except as provided in subsection 2 of this section, where any timber may be removed from any part of a cutblock by road, the appraisal log dump for that cutblock that must be used in the appraisal or reappraisal of the cutting authority area is the closest location by road listed in Appendix VI to that cutblock,
- 2. Where any timber may be removed from any part of a cutblock by road, and a log dump exists or will exist during the removal of the timber from the cutblock at a location that is closer to the cutblock than any location listed in Appendix VI, then that log dump location is the appraisal log dump for that cutblock that must be

4-17

used in the appraisal or reappraisal of the cutting authority area.

- 3. a. When no timber may be removed from any part of a cutblock by road, and except as provided in paragraph (b) of this subsection, the appraisal log dump for that cutblock that must be used in the appraisal or reappraisal of a cutting authority area is the closest location to that cutblock listed in Appendix VI to which logs may be yarded by helicopter or A-frame and placed in water.
 - b. If a location to which timber will be yarded by helicopter or A-frame from the cutblock and placed in water is closer to the cutblock than any location listed in Appendix VI, then that location must be used as the appraisal log dump for that cutblock in the appraisal or reappraisal of the cutting authority area.

4.2.5.3 Log Towing

- 1. a. The information in Table 4-5 is not used in the calculation of a stumpage rate but must be used by the licensee when completing the appraisal data submission.
 - b. Where the appraisal log dump is at a towing point of origin listed in Table 4-5, that towing point of origin must be reported in the appraisal data submission.
 - c. Where the appraisal log dump lies between two towing points of origin, both towing points of origin must be reported in the appraisal data submission.

4.2.5.4 Log Barging

- 1. a. The information in Table 4-6 is not used in the calculation of a stumpage rate but must be used by the licensee when completing the appraisal data submission.
 - b. Where the appraisal log dump is at a barging point of origin listed in Table 4-6, that barging point of origin must be reported in the appraisal data submission.
 - c. Where the appraisal log dump lies between two barging points of origin, both barging points of origin must be reported in the appraisal data submission.

Table 4-5 Towing Points of Origin

Code	Point of Origin	P/A	Code	Point of Origin	P/A
ALBE	ALBERNI	Α	BUIM	M. OF BUTE INLET	G
CHCK	CHINA CREEK	Α	KIIM	M. OF KINGCOME INLET	Ğ
COCK	COLEMAN CREEK	Α	KNIM	M. OF KNIGHT INLET	Ğ
SARV	SARITA RIVER	Α	LOUM	M. OF LOUGHBOROUGH	Ğ
SPCK	SPENCER CREEK	Α	TOIM	M. OF TOBA	Ğ
TOBY	TOQUART BAY	Α	NACK	NAKA CREEK	G
UCHU	UCHUCKLESIT	Α	NOBY	NORTHWEST BAY	G
UCLU	UCLUELET	Α	PHAR	PHILLIPS ARM	G
CHEM	CHEMAINUS	С	PTEB	PORT ELIZABETH	G
COBY	COWICHAN BAY	С	PTHD	PORT HARDY	G
JORV	JORDAN RIVER	С	PTHV	PORT HARVEY	G
LADY	LADYSMITH	С	PTMN	PORT McNEILL	G
NANA	NANAIMO	С	PTNE	PORT NEVILLE	G
SOOK	SOOKE	С	PORV	POWELL RIVER	G
VICT	VICTORIA	С	SENA	SECOND NARROWS	G
AGAM	AGAMEMNON	G	SYIN	SEYMOUR INLET	G
BECV	BEAVER COVE	G	SEBY	SOUTHEAST BAY	G
COUR	COURTENAY	G	SQUA	SQUAMISH	G
DRIN	DRURY INLET	G	STIL	STILLWATER	G
EVRV	EVE RIVER	G	TEAR	TEAKERNE ARM	G
FOHA	FORWARD HARBOUR	G	THIN	THEODOSIA INLET	G
FRAR	FREDERICK ARM	G	THSO	THOMPSON SOUND	G
BUIH	H. OF BUTE INLET	G	WASA	WAKEMAN SOUND	G
JEIH	H. OF JERVIS INLET	G	GAMB	GAMBIER ISLAND	G
KIIH	H. OF KINGCOME INLET	G	CHWK		P
KNIH	H. OF KNIGHT INLET	G	HALF	FOOT HARRISON LAKE	P
LOUH	H. LOUGHBOROUGH	G	PILF	FOOT OF PITT LAKE	Р
SEIH	H. OF SECHELT INLET	G	HABY	HARRISON BAY	Р
TOIH	H. OF TOBA INLET	G	HATZ	HATZIC	Р
INAR	INDIAN ARM	G	HALH	HEAD HARRISON LAKE	Р
KLBY	KELSEY BAY	G	PILH	HEAD OF PITT LAKE	Р
MNCK	McNAB CREEK	G	HALM	MID HARRISON LAKE	Р
MEBY	MENZIES BAY	G	PIRV	PITT RIVER BRIDGE	Р
MESD	MEREWORTH SOUND	G	SICK	SILVERHOPE CREEK	P P
JEIM	MOUTH JERVIS INLET	G	WHON	WHONNOCK	Р

P/A = Point of Appraisal as follows:

5.3.3.2.3 Culverts

- 1. All pipe culverts 0.3 m diameter to 1.8 m diameter are estimated using Table 5-4.
- 2. All wood culverts up to 3.4 m span length are estimated at \$1000.00 each.

Table 5-4 Culvert Cost Estimate

Diameter (m)	Cost per lineal metre	Diameter (m)	Cost per lineal metre
0.3	\$49.00	0.9	\$150.00
0.4	\$59.00	1.0	\$162.00
0.5	\$84.00	1.2	\$304.00
0.6	\$102.00	1.4	\$365.00
0.7	\$118.00	1.6	\$502.00
0.8	\$133.00	1.8	\$569.00

5.3.4 Non-tabular Cost Estimates

- 1. The cost for any of the non-tabular projects identified in section 5.3.1.1(4)(a) will be estimated by preparing a non-tabular cost estimate. The regional manager may approve a standardized methodology to estimate the cost for the following projects:
 - a. end hauling,
 - b. road reconstruction and replacement,
 - c. stabilizing material, including:
 - i. capping,
 - ii. surfacing,
 - iii. material hauls (greater than 3.2 km),
 - iv. bridge approaches,
 - v. fords,
 - vi. culverts,
 - vii. keyed-in fills,

- d. overlanding, including:
 - i. trucked in fills,
 - ii. large fills,
 - iii. stored fills,
- e. permanent bridge construction,
- f. bridge structural repair.
- g. regional manager approved tributary development projects.
- 2. The cost information contained in Appendix VIII is to be used in conjunction with the *Detailed Engineering Estimates for Coast Stumpage Appaisal* February 1, 2001 and as amended to September 1, 2002.
- 3. The following non-tabular cost estimate projects require notification by the licensee to the district manager prior to commencement of construction:
 - a. road reconstruction,
 - b. re-surfacing, or
 - c. permanent bridge construction.

Notification must allow a minimum of fifteen (15) work days, or such other time as may be mutually agreed to between the district manager and the licensee. Such notification is needed to provide time for a field review of pre-construction site conditions.

- Regional manager approved development projects require notification by the licensee to the regional manager. Sufficient lead time will be determined on a project by project basis.
- 5. The road development project cost estimate will be based on the data that is required by the regional manager and the equipment and labour rates as specified in Appendix I. Where a piece of equipment required to complete the project is not included in Appendix I then the equipment rate may be obtained from the 2007 2008 Equipment Rental Rate Guide 'The Blue Book'. Where a required piece of equipment is in neither Appendix I nor the 'Blue Book', approval for any other rate must be obtained from the regional manager for use in the project cost estimate. All equipment rates are assumed to be for a 3 year old machine using the July 1, 2007 cost base.
- 6. Where the cost of a project is the subject of a contract entered into after arms-length competitive bids have been made for the contract, the cost of completing that project

may be used as the development project cost estimate where that is authorized by the regional manager.

5.3.4.1 Data Requirements

- 1. A project requiring a non-tabular cost estimate must be designed so as to require only the amount of materials and labour that are necessary to build a safe and functional structure.
- 2. The data that may be required by the district manager for non-tabular "excavation and fill" cost estimates are:
 - a. plans, profiles, cross-sections showing the ground and design grade lines,
 - b. volume summary sheets giving quantities by various soil types,
 - c. time and materials, equipment and labour, repairs, drainage structures and surfacing where required, and
 - d. a cost estimate for the project.
- 3. The data that may be required by the district manager for non-tabular reconstruction cost estimates are:
 - a. a map showing details of the project including stations, drainages, and other information important to the project,
 - b. time and materials, equipment and labour, estimate for excavation, repairs, drainage structures, reditching, and resurfacing where required, and
 - c. a cost estimate for the project.
- 4. The data that may be required by the district manager for non-tabular bridge and culvert construction cost estimates are:
 - a. for permanent structures of 30.4 m span or greater: plans, specifications and design for the proposed structure, detailed materials cost estimate, equipment and labour, amount of timber accessed by the structure, and usage in years for harvesting all the timber,
 - b. for permanent structures of 20.4 m span or less: an economic comparison between a log structure and the permanent structure, and
 - c. for pipe culverts greater than 1.8 m in diameter: the same information as required for permanent structures of 30.4 span or greater.

5.4 Road Management Cost

- 1. A road management cost may be used in the calculation of a tenure obligation adjustment to take into account the licensee's performance of the following activities:
 - a. grading,
 - b. brush control,
 - c. minor surfacing repairs,
 - d. sanding,
 - e. snowplowing,
 - f. ditch maintenance and repair,
 - g. replacement of culverts ≤ 0.9 m on active roads,
 - h. slough removal (confined to ditchline),
 - i. deactivation,
 - j. minor repairs to roads due to slides, erosion and flood damage,
 - k. road use charges except those described in section 5.5.
- 2. A road management cost may only be included in the calculation of a tenure obligation adjustment for those parts of a cutting authority area where the logs will be transported over a road by truck.
- 3. The road management cost is $2.13/\text{m}^3$.

5.6 Basic Silviculture Cost

- 1. Except where basic silviculture performed or to be performed on a cutting authority area is or will be funded by the Crown or an agent of the Crown a basic silviculture cost may be used in the calculation of a tenure obligation adjustment where the licensee is required to perform basic silviculture on the cutting authority area being appraised or reappraised.
- 2. The basic silviculture cost depends on the geographic location of the cutting authority area being appraised or reappraised as described in table 5-5.

Table 5-5: Basic Silviculture Cost

Where the cutting authority area is located in:	The basic silviculture cost expressed in \$/m³ is:
Haida Gwaii Forest District	4.31
Chilliwack Forest District	5.50
Squamish Forest District	8.79
Sunshine Coast Forest District	4.17
South Island Forest District	4.07
Campbell River Forest District	2.52
North Island - Central Coast Forest District	2.50
North Coast Forest District	5.39

5.7 Low Grade Number

- 1. The forest district low grade fractions by timber species as shown in Table 5-6 shall be used in the calculation of the tenure obligation adjustment to account for the low grade timber that is not subject to the appraised stumpage rate.
- 2. The low grade fraction for each timber species to be used in the appraisal or reappraisal of the cutting authority area shall be the fraction by timber species by the forest district in which the cutting authority area is located (refer to Table 5-6).
- 3. The low grade number to be used in the calculation of the tenure obligation adjustment for a cutting authority area being appraised or reappraised is the sum of the products of the net cruise volume of each timber species in the cutting authority area multiplied by the low grade fraction for that species, divided by the total net cruise volume in the cutting authority area.

Table 5-6: Forest District Low Grade Fractions by Timber Species

Forest District	ВА	CE	CY	FI	HE	LO	SP	WH	Decid.
Chilliwack	0. 1894	0.0499	0.0747	0.0416	0.2604	0.2373	0.1137	0.1224	0.0365
Campbell River	0.1991	0.0310	0.1137	0.0392	0.2450	0.1077	0.1500	0.1130	0.1795
North Coast	0.0711	0.0250	0.0446	0.0303	0.1039	0.0303	0.0342	0.0303	0.0303
North Island Central Coast	0.1970	0.0439	0.2155	0.0441	0.2298	0.1917	0.0829	0.1420	0.0143
Haida Gwaii	0.1263	0.0430	0.1053	0.1263	0.3271	0.0732	0.0663	0.2156	0.3034
Sunshine Coast	0.1907	0.0421	0.0848	0.0423	0.2433	0.0479	0.0981	0.1452	0.0521
South Island	0.1683	0.0324	0.0700	0.0332	0.2015	0.1405	0.0546	0.1846	0.0333
Squamish	0.4227	0.0653	0.2138	0.0912	0.4718	0.3560	0.3764	0.5550	0.1471

value shall be the value approved by the Director of Operations, BC Timber Sales that may not be less than the variable cost to prepare the timber for sale.

- 6. Where decked timber is sold competitively, refer to section 7.6(2) and (4).
- 7. The variable cost to prepare the timber for sale shall be calculated by the Timber Sales Manager.

6.1.2 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.

6.1.3 Upset Stumpage Rate

The upset stumpage rate for a timber sale licence is the greater of:

- 1. The indicated upset stumpage rate, or
- 2. the prescribed minimum stumpage rate.

6.1.4 Stumpage Rate

- 1. The stumpage rate is the total of the upset stumpage rate plus the bonus bid, if any, that must be paid by the licensee.
- 2. Where the upset stumpage rate is determined under section 6.1.1(5) the stumpage rate applies to the timber species and volumes specified by the Director of Operations, BC Timber Sales.

6.2 Stumpage Rate Calculation for a Cutting Authority Other than a Cutting Authority Entered into Under Section 20 of the *Act* or a Cutting Authority for which a Stumpage Rate is Determined Under Chapter 7

Sections 6.2.1 through 6.2.5 are the policies and procedures for determining a stumpage rate for a cutting authority other than timber sale licence entered into under section 20 of the *Act* or a cutting authority for which a stumpage rate is determined under chapter 7.

6.2.1 Indicated Rate (IR)

- 1. The IR is the difference between the final estimated winning bid (FEWB) determined for the cutting authority under section 4.5 and the tenure obligation adjustment (TOA) determined under section 5.10.
- 2. Expressed as an equation:

IR = FEWB - TOA

6.2.2 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.

6.2.3 Reserve Stumpage Rate

The reserve stumpage rate for a cutting authority is determined by selecting the greater of:

- 1. the indicated rate, or
- 2. the prescribed minimum stumpage rate.

6.2.4 Upset Stumpage Rate

The upset stumpage rate is the total of the reserve stumpage rate plus any administration and silviculture levies which may be charged under section 7.4.1.

6.2.5 Total Stumpage Rate

The total stumpage rate is the upset stumpage rate plus the bonus bid, if any, that must be paid by the licensee.

7.2 Community Forest Agreements and Woodlot Licences

1. a. Except as provided for under section 7.2.1, the sawlog stumpage rate (\$/m³) for each species of coniferous timber and zone harvested under a cutting authority issued under a community forest agreement or woodlot licence and their associated road permits will be:

	Zone				
Species	Northern Coast	Southern Coast			
Balsam	3.66	4.27			
Hemlock	4.01	3.98			
Cedar	5.54	8.48			
Cypress	5.58	5.35			
Fir	0.25	4.55			
Spruce	3.40	2.95			
Other	4.86	5.63			

- b. The Northern Coast Zone is the Haida Gwaii Forest District, North Coast Forest District and that part of the North Island-Central Coast Forest District within TFL 25 and all Crown land within the Mid-Coast Timber Supply Area boundaries.
- c. The Southern Coast Zone is the Coast Forest Region except the Northern Coast Zone as defined in 1(b).
- d. The stumpage rate determined under paragraph (a) of this subsection shall be redetermined on March 1st of each year in accordance with this subsection.
- 2. The sawlog stumpage rate for each species of coniferous timber harvested under a salvage permit issued under a woodlot licence is the rate prescribed in the table in section 7.2(1)(a) for the zone in which the salvage permit applies.
- 3. Section 7.3, 7.4, 7.4.1, 7.5 and 7.6 do not apply to community forest agreements, woodlot licences and associated road permits.

7.2.1 Woodlot Licences with Cutting Authorities under MPS

- 1. Where a cutting authority has been issued under a woodlot licence with an effective date after November 30, 2008, with an extended road amortization agreement that has been entered into under section 5.3.2.1, the stumpage rate will be calculated using the market pricing system.
- 2. The sawlog stumpage rate for a road permit is calculated using the procedures in section 7.3.

7.3 Road Permits

- 1. Except as provided in subsection (2) of this section, the stumpage rate for a road permit will be determined using Ministry stumpage billing records.
- 2. The stumpage rate for a road permit issued in conjunction with a timber sale licence entered into under section 20 of the *Act* or a licence to cut entered into under Section 47.6 of the *Act* will be the stumpage rate applicable to the cutting authority that authorizes harvesting in the cutting authority area to which the road permit provides access.
- 3. For the purposes of this section, a stumpage billing history record of timber harvested under a timber licence, where the timber licence area is within a tree farm licence area will be included with and be considered the stumpage billing history record of timber harvested under the tree farm licence.
- 4. a. Where the Ministry has a stumpage billing history record of 500 cubic metres or greater of timber harvested under a licence within the same district as the area to which the road permit applies, the stumpage rate for a road permit is the weighted average sawlog stumpage rate of cutting authorities, other than a road permit, for cutting authority areas that are located in the same forest district as the area to which the road permit applies, and that are issued under the licence that entitles the licensee to apply for the road permit.
 - b. The weighted average stumpage rate is the sum of the stumpage billed for all coniferous sawlogs during the billing period referred to in paragraph (c) of this subsection, divided by the sum of the volume of those species and grades.
 - c. The billing period referred to in paragraph (b) of this subsection for a road permit appraisal or reappraisal, will be updated annually effective February 1st and will be the twelve month period ending November 30th.
- 5. Where there is less than 500 cubic metres in the stumpage billing history records from which the stumpage rate may be determined under subsection (4), and the licence that the cutting authority is issued under does not provide for an allowable annual cut or has an allowable annual cut of Crown timber equal to or greater than 7 000 m³, the stumpage rate for a road permit is the weighted average sawlog stumpage rate of:
 - a. all cutting authorities, other than road permits, that are issued under the licence to which the road permit applies that entitles the licensee to apply for the road permit.
 - b. where there is less than 500 cubic metres in the stumpage billing history record from which the stumpage rate may be determined under paragraph (a) of this

subsection, the person determining the stumpage rate will proceed to subsection (c) of this section.

- c. all the cutting authorities that do not provide for an allowable annual cut or have an allowable annual cut of Crown timber equal to or greater than 7 000 m³, other than road permits and timber sale licences entered into under Section 20 of the *Act*, that are for areas located in the same forest district as the area to which the road permit applies.
- 6. Where there is less than 500 cubic metres in the stumpage billing history records from which the stumpage rate may be determined under subsection (4), and the licence that the cutting authority is issued under has an allowable annual cut of Crown timber less than 7 000 m³ per year, the stumpage rate for a road permit is the weighted average sawlog stumpage rate of:
 - a. All cutting authorities, other than road permits and timber sale licences entered into under Section 20 of the *Act*, that are for licences that have an allowable annual cut of less than 7 000 m³ in the same forest district as the area to which the road permit applies.
 - b. Where there is less than 500 cubic metres in the stumpage billing history record from which the stumpage rate may be determined under paragraph (a) of this subsection, the person determining the stumpage rate will proceed to subsection (c) of this section.
 - c. All cutting authorities, other than road permits and timber sale licences entered into under Section 20 of the *Act*, that are for licences that have an allowable annual cut of less than 7 000 m³ in the same timber supply area as the area to which the road permit applies.
 - d. Where there is less than 500 cubic metres in the stumpage billing history record from which the stumpage rate may be determined under paragraph (c) of this subsection, the person determining the stumpage rate will proceed to subsection (e) of this section.
 - e. All cutting authorities, other than road permits and timber sale licences entered into under Section 20 of the *Act*, in the same forest district as the area to which the road permit applies.
- 7. The cost of a road constructed under a road permit may be eligible for inclusion as a tenure obligation adjustment under chapter 5 in the appraisal of the first tributary cutting authority.
- 8. All road permits will be reappraised in accordance with section 3.3.2.

7.4 Salvage Logging Stumpage Rates

- 1. The source of salvaged timber is:
 - a. Post-Harvest Material:
 - i. wooden culverts and bridges, and
 - ii. post-logging residue, and
 - b. Damaged Timber:
 - i. blowdown green and aged timber, and
 - ii. fire, disease, insect or physically damaged timber.
- 2. The qualifying criteria and methodology for calculating salvage logging stumpage rates for round logs is specified below:
 - a. post-harvest material must not be combined in the same cutting authority area with timber damaged through natural events.
 - b. except where damage to adjacent or contiguous timber occurs after harvesting is completed on the adjacent primary logging cutting permit area and the harvesting equipment has been demobilized from the area, damaged timber salvage cutting authority areas must be scattered, and not adjacent or contiguous to an existing cutting authority area.
 - c. the total cutting authority area for damaged salvage harvesting may vary in size but individual clearcut openings within the cutting authority area shall not exceed three hectares.
 - d. only damaged trees and hazard trees as approved by the Ministry may be removed on a damaged timber salvage cutting permit.
 - e. post-harvest salvage may only occur after primary logging has been satisfactorily completed and residue and waste assessments have been submitted to and accepted by the Ministry.
 - f. salvage cannot occur on a road right-of-way which has an active timber mark associated with it.
 - g. the stumpage rate will be fixed for a period not exceeding one year.
- 3. Where the source of the salvaged timber is damaged timber, the stumpage rate for each species of the salvaged timber in a forest district will be determined using

- schedule of average sawlog stumpage rates for damaged timber approved by the Director.
- 4. Where the source of the salvaged timber is post-harvest material, the stumpage rate for each species of timber in a forest district will be determined using the schedule of average sawlog stumpage rates for post-harvest material approved by the Director.

7.4.1 Levies for Salvage Forestry Licences to Cut Cutting Authorities

- 1. An administration levy may be added to the reserve stumpage rate. The administration levy is equal to the district manager's cost estimate of administration provided by the Crown for preparing a Forestry Licence to Cut for salvage timber. An administration cost estimate is made for every cutting authority where the district office has to prepare all details of a Forestry Licence to Cut for salvage. No levy is applicable to professional applications.
- 2. A basic silviculture levy may be added to the reserve stumpage rate. The levy is equal to the district manager's cost estimate of silviculture liability to be incurred by the Crown.

Revenue Branch Appendices

District: Sunshine Coast						
Location	ALD	Co-ordinates (Approximately)				
	Code	Latitude		Longitude		
		Degrees	Minutes	Degrees	Minutes	
Toba Inlet - Higgins Bay	ТОНВ	50	22	124	40	
West Redonda Island - Desolation	WRDE	50	08	124	46	
West Redonda Island - Doctor Bay	WRDB	50	15	124	49	
West Redonda Island - Lewis Channel	WRLC	50	12	124	56	
West Redonda Island - Redonda Bay	WRRB	50	15	124	57	
West Redonda Island - Talbot Cove	WRTC	50	10	124	52	
West Redonda Island - Teakerne Arm	WRTA	50	11	124	49	

Squamish Forest District

District: Squamish Coast					
Location	ALD	Co-ordinates (Approximately)			ately)
	Code	Latitude		Longitude	
		Degrees	Minutes	Degrees	Minutes
Squamish DLS	SQUA	49	40	123	10

Haida Gwaii Forest District

District: Haida Gwaii						
Location	ALD	Co-ordinates (Approximately)			ately)	
	Code	Latitude Long		Long	gitude	
		Degrees	Minutes	Degrees	Minutes	
Cumshewa Inlet - Beatty Anchorage, Louise Island DLS	CUBE	53	02	131	54	
Masset Inlet - Collison Point Dump	MICP	53	47	132	13	
Masset Inlet - Dinan Bay DLS	MIDB	53	41	132	36	
Masset Inlet - Ferguson Bay DLS	MIFB	53	40	132	16	
Masset Inlet – McClinton Bay DLS	MIMB	53	38	132	35	
Masset Inlet – Port Clements, Abfam Mill	MIAM	53	41	132	10	
Masset Inlet - Port Clements, O'Brien DLS	MIOB	53	42	132	09	
Naden Harbour - Colnett Point DLS	NHCP	53	58	132	40	
Naden Harbour - Davidson DLS	NHDA	53	59	132	34	
Rennell Sound - Clonard Bay Dump	RSCB	53	20	132	30	
Rennell Sound - Rennell Sound DLS	RSRS	53	21	132	28	
Rennell Sound - Tartu Inlet DLS	RSTI	53	29	132	40	
Sewell Inlet - Sewell Inlet DLS	SISI	52	53	131	58	
Skidegate inlet - Alliford Bay DLS	SIAB	53	12	131	59	
Skidegate Inlet - Long Inlet, Lagins Creek DLS	SILI	53	13	132	18	
Skidegate Inlet - Queen Charlotte City, Skidegate DLS	SIQC	53	14	132	09	
Skidegate Inlet - South Bay DLS (South of Sandilands Island)	SISB	53	09	132	05	
Van Inlet - (South of Rennell Sound)	VIRS	53	16	132	30	

Revenue Branch Appendices

District: Campbell River						
Location	ALD	Co-ordinates (Approximately)				
	Code	Latitude		Longitude		
		Degrees	Minutes	Degrees	Minutes	
Quadra Island - Plumper Bay	QIPB	50	09	125	20	
Royston	ROYS	49	39	124	57	
Sonora Island - Barnes Bay	SIBA	50	19	125	15	
Sonora Island - Horn Bay, North of Sonora Island	SIHB	50	25	125	12	
Sonora Island - Innes	SIIN	50	23	125	10	
Sonora Island - Nutcracker Bay	SINB	50	19	125	18	
Sunderland Channel - Bessborough Bay	SCBB	50	29	125	46	
Sunderland Channel - Forward Harbour, East of Hardwicke Island	SCFH	50	28	125	44	
Sunderland Channel - Jackson Bay, Topaze Harbour	SCJB	50	31	125	45	
Sunderland Channel - McLeod Bay	SCMB	50	28	125	57	
Sunderland Channel - Shaw	SCSH	50	28	125	54	
Sunderland Channel - Topaze Harbour, Jackson Bay	SCTH	50	31	125	49	
Tahsis Inlet - Tsowwin River	TITR	49	46	126	38	
Tahsis Inlet - West Tahsis	TIWT	49	52	126	40	
Tahsish Inlet - Artlish River DLS	TIAR	50	06	127	05	
Thurston - Sonora Island	THUR	50	22	125	18	
Tlupana Inlet - Head Bay	TLHB	49	47	126	29	
Tlupana Inlet - Deserted Lake	TLDL	49	46	126	28	
Tlupana Inlet - Nesook Bay	TLNB	49	45	126	25	
Union Bay - Union Bay DLS	UBUB	49	35	124	53	
Wellbore Channel - Darcy Point, East of Hardwicke Island	WCDP	50	25	125	43	
West Thurlow North	WTNO	50	26	125	33	
West Thurlow Island - Butterfly Bay	WTBB	50	24	125	33	
West Thurlow Island - Knox Bay DLS	WTKB	50	23	125	37	
Zeballos Inlet - Little Zeballos	ZILZ	49	57	126	49	
Zeballos Inlet - South (Ciriaco)	ZISC	49	55	126	48	
Zeballos Inlet - Zeballos	ZIZE	49	59	126	51	

South Island Forest District

Location	ALD	Co-ordinates (Approximately)			
	Code	Latit	tude Longitude		itude
		Degrees	Minutes	Degrees	Minutes
Alberni Inlet - China Creek	ALCH	49	9	124	47
Alberni Inlet – Coleman Creek	ALCO	49	00	124	52
Alberni Inlet - Shoemaker Bay	MISB	49	13	124	50
Alberni Inlet - Spencer Creek DLS	ALSP	48	58	124	56
Barkley Sound - Cataract Lake DLS	BACA	48	58	125	16
Barkley Sound - Sarita DLS	BASA	48	54	125	00
Barkley Sound - Skull Lake DLS	BASK	49	02	125	09
Barkley Sound - Toquart Bay DLS	BATO	49	01	125	21
Barkley Sound - Tzartus Island	BATZ	48	56	125	04
Chemainus	CHEM	48	55	123	43
Coastland	COAS	49	10	123	56
Cypre River DLS, Hecate Bay	CYPR	49	14	125	56
Duke Point	DUKE	49	09	123	53
Effingham Inlet	EFIN	49	05	125	12
Flores Island - Steamer Cove	FLSC	49	22	126	11
Galiano Island	GALI	48	53	123	20
Great Central Lake - Dorothy	GCDO	49	21	125	23
Great Central Lake - Lakeside	GCLA	49	21	125	13
Great Central Lake - McBride	GCMC	49	23	125	25
Great Central Lake - Mercs	GCME	49	21	125	18
Great Central Lake - View	GCVI	49	21	125	15
Herbert Inlet - Beddingfield Bay DLS	HEBE	49	21	125	59
Jordan River	JORD	48	25	124	02
Ladysmith DLS	LADY	48	59	123	48
Ladysmith Head	LADH	49	01	123	51
Mayne Island - Horton Bay	MIHB	48	49	123	15
Mud Bay, Fanny Bay DLS	MUDB	49	27	124	47
Mooyah	MOOY	49	37	126	27
Nootka Sound - Zuciarte Channel, Mooyah Bay	NSZC	49	38	126	27
Northwest Bay, Parksville	NBPA	49	17	124	12

Revenue Branch Index

Index

Α

Additional Stabilizing Material, A-33 Additional Stabilizing Material Cost Estimate, A-33 Annual Reappraisal of a Road Permit, Annual Reappraisal of Salvage Logging Stumpage Rates, 3-7 Appendices, A-1 Appraisal Data Submission, 2-7 Appraisal Log Dump, 4-16 Appraisal Log Dumps, A-9 Appraisal Map, 2-8 Appraisal Map Content, A-8 Appraisal Methodology, 4-2 Appraisals, 3-3 Average Stumpage Rates by District and Species, 3-11, 7-2

В

Basic Silviculture Cost, 5-21 Beachcomb, 7-12 Billing History Record, 4-6 Bridge Cost Estimates, 5-7 Bridges and Culverts, 5-11

C

Calculation Conventions, 2-3
Capping, A-36
Changed Circumstance Reappraisal
Procedure, 3-6
Changed Circumstances, 3-4
Clayoquot Sound Operating Costs, 4-21

Community Forest Agreements and Woodlot Licences, 7-3
Coniferous Timber, 4-6
Correctable Errors, 3-12
Cruise Information, 2-5
Culvert Cost Estimates, 5-7
Culverts, 5-15
Cutblocks within a Cutting Authority Area, 2-3
Cutting Authority Area With Less than 2 500 m3 of Timber Volume, 7-9

D

Damaged Timber, 4-14
Data Requirements, 5-17
Deadhead Logs, 7-12
Decked Timber, 7-10
Definition of 'Bankheight' Tabular Road Categories, A-28
Definitions and Interpretations, 1-2
Destumping for Root Disease Control, 4-22
Development Cost Proration, A-5

Ε

Ecosystem Based Management Operating Costs, 4-23 Effective Date of Changed Circumstance Reappraisal, 3-6 Equipment and Labour Rates, A-2 Estimated Winning Bid (EWB) Equation, 4-20 Existing Roads, 5-9 Extended Road Amortization, 5-9

F

Final Estimated Winning Bid, 4-24 Fixed Rates and Extensions of Term, 3-10 Forest Planning and Administration Cost, 5-3

Н

Haul Distance, 4-15

Helicopter Single Standing Stem Selection, 4-21

ı

Indicated Rate (IR), 6-4 Indicated Upset Stumpage Rate (IUSR), 6-2 Inland Water Transportation, 4-21

L

Levies for Salvage Forestry Licences to Cut Cutting Authorities, 7-8 Log Barging, 4-17 Log Bridges, 5-12 Log Grade Percentage Criteria, 4-8 Log Grade Percentages, 4-6 Log Grade Percentages for a Cutting Authority Area Within a Timber Supply Area, 4-12 Log Grade Percentages for a Cutting Authority Area Within the Geographic Boundaries of a Tree Farm Licence, 4-Log Selling Prices, 4-5 Log Towing, 4-17 Low Grade Number, 5-22 Low Volume Cost, 5-3

М

Marine Log Salvage, 7-12
Marine Log Transportation, 4-16
Market Logger Cost, 5-23
Market Pricing System (MPS) Variables, 4-3
Minister's Direction, 3-7
Minister's Direction Procedure, 3-7
Miscellaneous Stumpage Rates, 3-11, 7-12

Ν

New Road Construction, 5-6, 5-10 Non-tabular Cost Estimates, 5-15 Non-Tabular Cost Estimates, A-29 Non-tabular Road Cost Estimates, 5-6 Numbering System, 2-3

0

Order-in-Council, 3-2

P

Permanent/Portable Bridges, 5-12 Point of Appraisal, 4-16 Prescribed Minimum Stumpage Rate, 6-3, 6-4

Q

Quarterly Adjustments, 3-9

R

Reappraisals, 3-4 Reconstruction and Replacement, A-4 Redetermination of Stumpage Rate by Agreement, 3-14 Reserve Stumpage Rate, 6-4 Responsibility for Stumpage Determinations, 2-2 Return to Forest Management (RFM), 5-24 Road Development Cost, 5-4 Road Development Cost Proration, 5-5 Road Management Cost, 5-18 Road Permits, 7-5 Road Reconstruction, 5-8 Road Use Charges, 5-19 Rock Mass Classification, A-30 Rock Mass Classifiction, A-6 Root Buck, 7-12

S

Salvage Logging Stumpage Rates, 7-7 Skyline, 4-21 Source of Log Grade Percentages for Each Cutting Authority Area, 4-10 Special Forest Products, 7-12 Specified Operations, 4-21 Stand Selling Price, 4-14 Stand Selling Price Calculation, 4-14 Stumpage Rate, 6-3 Revenue Branch Index

Stumpage Rate Calculation for a Cutting Authority Entered into Under Section 20 of the Act, 6-2
Stumpage Rate Calculation for a Cutting Authority Other than a Cutting Authority Entered into Under Section 20 of the Act or a Cutting Authority for which a Stumpage Rate is Determined Under Chapter 7, 6-4
Subgrade Construction, 0-29
Subgrade Cost Estimates, 0-30

T

Tabular Cost Estimates, 5-10
Tabular road cost estimates, 5-6
Tenure Obligation Adjustment, 5-2, 5-25
Terms of Reference, 2-2
Timber licence, 4-11, 4-12, 4-13, 7-5
Timber Sale Licences, 3-10, 7-12
Total Road Development Cost, 5-9
Total Stumpage Rate, 6-4
Towing Points of Origin, 4-18
Tree Crown Modification, 4-22
Types of Determination, 3-2

U

Upset Stumpage Rate, 6-3, 6-4

W

Wahleach Island Catchment Basin, 7-12 Woodlots, 3-10



This page is intentionally left blank.