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FEB 28 2017

To: Sharon Hadway, Regional Executive Director, West Coast
Allan Johnsrude, Regional Executive Director, South Coast

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

Re: **Amendment No. 3 to the Coast Appraisal Manual**

I hereby approve Amendment No. 3 to the *Coast Appraisal Manual*, which will come into force on March 1, 2017. The amendment:

1. Reflects recent changes brought into force by the Great Bear Rainforest (Forest Management) Regulation.
2. Updates the community forest agreement and woodlot licence rate table in Section 7.2.
3. Housekeeping changes.

<http://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/coast-timber-pricing/coast-appraisal-manual>

Further amendments or revisions to this manual require my approval.

Steve Thomson
Minister

Attachment: Amendment No. 3 to the *Coast Appraisal Manual* – Effective March 1, 2017

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Coast Appraisal Manual

March 1, 2016

Includes Amendments

Effective Date

Amendment No. 1

June 15, 2016

Amendment No. 2

September 1, 2016

Amendment No. 3

March 1, 2017



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1 **Definitions and Interpretations**

1.1 Definitions and Interpretations

In this manual:

“**Act**” means *Forest Act*;

“**Accurate**” for the purposes of Section 105.1 of the *Act* as it applies to this manual means submitted in accordance with the requirements of this manual;

“**Anniversary date**” means the annual recurrence of the month and day when the term of the cutting authority began;

“**Appraisal Data Submission (ADS)**” means the information required by the person who determines the stumpage rate to determine the stumpage rate including a forest professional’s signed submission in the form required by the director and any other information required by the regional manager or district manager;

“**Billing history record**” means a record of log scale data derived from a record kept by the Timber Pricing Branch of log scale data reported on stumpage invoices issued by the Timber Pricing Branch for timber scaled under Section 94 of the *Act*; and for greater certainty does not include billing data from cruise based cutting authorities; but for any cutting authority with an effective date prior to October 1, 2012, the billing history record to be used in a minister-directed reappraisal under Section 3.3.8 shall include billing data from cruise based cutting authorities;

“**BCTS**” means BC Timber Sales;

“**BCTS licence**” means a timber sale licence entered into under Section 20 of the *Act* or Section 21 as it was before it was repealed;

“**Bonus Bid**” means a bonus bid described in Section 103(1)(d) of the *Act*;

“**Bonus Offer**” means a bonus offer described in Section 103(2) of the *Act*;

“**Coast Area**” means West Coast and South Coast forest regions or Coast Forest Region;

“**Coast Mountain Forest District**” means that part of the Coast Mountain forest district that is within the geographic boundaries of the **Great Bear Rainforest North**;

“**Coniferous cruise volume**” means that part of the total net cruise volume which is coniferous timber;

“**Controlled Recreation Area**” means controlled recreation area as defined in the *Resort Timber Administration Act*;

“**Cruise based billing cutting authority**” means a cutting authority where under Section 106 of the *Act* the stumpage payable is calculated using information provided by a cruise of the timber conducted before the timber is cut;

"**Cutting authority**" means:

- a. a cutting permit issued under a forest licence, a timber sale licence, a timber licence, tree farm licence, a community forest agreement, a community salvage licence, a woodlot licence, a master licence to cut, a forestry licence to cut, or First Nations woodland licence;
- b. a timber sale licence that does not provide for the issuance of a cutting permit,
- c. all other licences to cut, or
- d. a road permit;

"**Cutting authority area**" means the area where timber may be harvested under authority of;

- a. a cutting permit,
- b. a timber sale licence that does not provide for the issuance of a cutting permit,
- c. a licence to cut, or
- d. a road permit;

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

“**Detailed engineering**” means non-tabular;

"**Director**" means director of Timber Pricing Branch of the Ministry of Forests, Lands and Natural Resource Operations;

"**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*, then district manager means an employee of the Ministry to whom the minister has delegated the minister’s powers and duties under Section 2 of the *Resort Timber Administration Act*;

“**Effective Date**” means, unless otherwise specified in the manual:

- a. the date the stumpage rate is determined when required for advertising for competitive award, or

- b. the effective date of the cutting authority when the stumpage rate is determined for a cutting permit or a direct award licence;

“Executive Director, BCTS” means Executive Director, BCTS or Executive Director, BCTS’ designate;

“Forest Professional” means a Registered Professional Forester (RPF) or a Registered Forest Technologist (RFT) or a special permit holder acting within the scope of their permit, registered and in good standing with the Association of British Columbia Forest Professionals;

Great Bear Rainforest North (GBRN)” means all Crown land that is within the geographic boundaries of:

- (a) the GBR North Timber Supply Area as prescribed by regulation;
- (b) the Mid Coast and North Coast Timber Supply Areas as designated or prior designated, as applicable, by the Minister under the Act; and
- (c) that part of Tree Farm Licence No. 25 within the Coast Mountain and North – Island-Central Coast Forest Districts, or within Forest Licence A91438;

“Harvest Area” means the area indicated for harvest on an appraisal map submitted by the licensee;

“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 and is made from post-harvest material where a waste assessment has been made. Where the post-harvest material is removed from an area that is or was a cruise based billing cutting authority, a waste assessment is not required;

“Immature coniferous timber” means coniferous timber that is younger than 121 years old;

“Intact cutblock” means 90% or more of a cutblock’s total net cruise volume approved under the cutting authority remains unharvested (standing, felled or decked);

“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;

"**Manual**" means *Coast Appraisal Manual*;

"**Mature coniferous timber**" means coniferous timber that is 121 years old or older;

"**Minister**" means Minister of Forests, Lands and Natural Resource Operations;

"**Ministry**" means Ministry of Forests, Lands and Natural Resource Operations;

"**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;

"**Problem forest stands**" means a cut block approved by the district manager for inclusion in the coast problem forest stand pilot project under Section 2.2.3;

"**Regional manager**" means regional executive director of the Ministry or except for Section 2.1.1(1)(a), 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;

"**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*;

"**Scale Based cutting authority**" means a cutting authority where under Part 6 of the *Act*, the stumpage payable is based on a scale of the timber harvested from the cutting authority area;

"**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, Timber Pricing Branch;

"**Selling price zone 52**" means the table of coast market pricing system log values for second growth coniferous timber, approved by the Director, Timber Pricing 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;

“Stumpage Appraisal Parameter” means the BC Consumer Price Index and applicable Coast Domestic or Export-Adjusted Log Values approved by the Director;

“Timber Pricing Branch” means Timber Pricing Branch of the Ministry of Forests, Lands and Natural Resource Operations;

“Timber Sales Manager” means the timber sales manager or the timber sales manager’s designate;

“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:
$$\text{tncv} = \frac{\text{ncv}}{\text{ha}} \times \text{tmta};$$

“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 and is made from post-harvest material where a waste assessment has been made. Where the post-harvest material is removed from an area that is or was a cruise based billing cutting authority, a waste assessment is not required.

2 Scope and Requirements

2.1 Terms of Reference

1. Pursuant to Section 105 of the *Act*, the provisions of this manual are the policies and procedures to be used in the determination, redetermination and variance of stumpage rates for Crown timber harvested in the Coast Area (except Manning Park) and **including** all cutting authority areas within the **Great Bear Rainforest North**.

2.1.1 Responsibility for Stumpage Determinations

1. The following employees are authorized to determine, redetermine and vary rates of stumpage:
 - a. The director, and employees of the Timber Pricing Branch of the Ministry, and
 - b. Regional managers, regional appraisal coordinators and employees of the regional revenue sections, of the Ministry.
2. The employees of the Timber Administration Section, Resort Development Branch of the Ministry are authorized to determine or redetermine stumpage rates in accordance with Section 7.8(1) or (2).

2.1.2 Market Pricing System Parameters

1. The Market Pricing System parameters are compiled, calculated and/or adopted by Timber Pricing Branch.
2. Once approved by the director they become an integral part of this manual.
3. The parameters are published by Timber Pricing Branch.
4. Current and historical parameters may be found at the following web site:

<http://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/coast-timber-pricing/coast-appraisal-parameters>

2.1.3 Minimum Stumpage Rate

A stumpage rate determined using this manual shall not be less than the prescribed minimum stumpage rate.

2.2 Numbering System

The following exemplifies the numbering system that is used in this manual.

- 1. = Chapter
- 1.1 or 1.1.1.1 = Section
- 1.1.1.1 (2) = Section with subsection
- 1.1.1 (2)(a) = Section with subsection and paragraph.
- Table 4-2 = Table 2 within Chapter 4

2.2.1 Calculation Conventions

1. Every calculation required to be performed will be performed to the full capacity of a calculating machine with the results truncated at four places of decimals and rounded to two places.
2. A result from 5 to 9 will be rounded upward and a result from 1 to 4 will be rounded downward.
3. Each calculation of a tenure obligation adjustment or specified operation adjustment expressed in dollars per cubic metre will be rounded to the nearest cent.
4. Where a value is specified as a limit, for example a constraint or a requirement for an equation,
 - a. the value will be treated as an absolute value, and
 - b. an actual measurement or record will not be rounded before use unless otherwise specified in this manual.

2.2.2 Cutblocks within a Cutting Authority Area

1. Except as provided for in subsections 1(c), 2, 5 and Section 2.2.4, all cutblocks within a cutting authority area must:
 - a. have each of their geographic centres within the same appraised point of origin area as identified in Section 4.2.5.3; and
 - b. be fully contained within the same timber supply block, or in the case of a cutting authority area under a tree farm licence, be contained within the same forest district.
 - c. For a cutting authority issued under Section 20 of the *Forest Act* within the **Great Bear Rainforest North**:
 - i. have each of their geographic centres within the same appraised point of origin area as identified in Section 4.2.5.3; and
 - ii. **must be located and fully contained within only:**

- i. the Mid Coast; or
- ii. the North Coast

Timber Supply Area, as designated or prior designated, as applicable, by the Minister under the Act.

2. A cutting authority approved by the district manager under Section 2.2.3:
 - a. is not constrained by subsection 1 above;
 - b. must be located anywhere within the same timber supply area, or in the case of a tree farm licence or first nations woodland licence, be contained within the same forest district, where the licensee is entitled to harvest under the licence that the cutting authority has been issued under; and
 - c. is not eligible for an extended road amortization agreement.
3. Helicopter single standing stem selection as described in Section 4.4.4 must not be combined with any other harvest method within the same cutting authority area.
4. Except as provided in subsection (3) of this section, there are no other restrictions on what types of harvest methods may be used in or which types of timber can be contained in a cutting authority area.
5. The road right of way that provides access to and is sold as part of a BCTS licence, is exempt from the requirement to be located within the same timber supply block or tree farm licence as the BCTS licence.

2.2.3 Coast Problem Forest Stands Pilot

1. A problem forest stand is a cutblock comprised completely of one or more of the following stand characteristics:
 - a. Poor timber types (old growth timber height class 3 or less), or
 - b. located at elevations greater than 700 metres, or
 - c. greater than 80% old growth hemlock/balsam.
2. A cutting authority considered for this pilot must be under a tree farm licence, a First Nations woodland licence or a replaceable forest licence and have one or more cutblocks meeting the criteria of subsection 1.
3. Licensees participating in this pilot must submit appraisal information allowing for the determination of the value differential in accordance with the requirements prescribed by the director.
4. Licensees must not exceed their value allocations for this pilot.

5. Cutting authority applications under this pilot will not be accepted after March 31, 2017.
6. The minister may terminate this pilot at any time.

2.2.4 Great Bear Rainforest North (GBRN)

1. This section does not apply to:
 - a. cutting authorities entered into under Section 20 of the *Act*; and
 - b. subject to Section 7.10, to any cutting authority appraised in accordance with Chapter 7.
2. A cutblock(s) within a cutting authority area other than within a cutting authority described in subsection 1 above, for the purposes of the **GBRN**:
 - a. must be located and contained within the same forest district where the licensee is entitled to harvest under the licence that the cutting authority has been issued under; **and**
 - b. **must be located and fully contained within only:**
 - i. **the Mid Coast; or**
 - ii. **the North Coast**
Timber Supply Area, as designated or prior designated, as applicable, by the Minister under the Act; or
 - iii. **that part of Tree Farm Licence No. 25 within the Coast Mountain and North – Island Central Coast Forest Districts, or within Forest Licence A91438**
 - c. is not approved under a Section 2.2.3 cutting authority.

2. A stumpage rate determined under subsection (1) of this section will be a fixed stumpage rate until the cutting authority area is reappraised.

3.3.7 Annual Reappraisal of a Cutting Authority in the Great Bear Rainforest North

1. Subject to Section 7.10, all road permits, and a cutting authority area with an effective date on or after June 15, 2016, located within the Great Bear Rainforest **North** must be reappraised effective March 1 of every year.
2. Stumpage rates determined under subsection (1) of this section will be fixed stumpage rates until the cutting authority area is reappraised.

3.3.8 Minister's Direction

1. The Minister may direct:
 - a. a determination, redetermination or variance of a stumpage rate at any time, and that
 - b. the determined, redetermined or varied stumpage rate will be effective on any future date.

3.3.8.1 Minister's Direction Procedure

1. If requested by the person responsible for stumpage determinations, the licensee shall submit to the district manager an appraisal data submission within forty-five days of the request.
2. Thereafter, the procedure for determining, redetermining or varying a stumpage rate under Section 3.3.8 shall be the same procedure as that required by subsections 3.2 (3) through 3.2 (12) except as may otherwise be directed by the minister.

3.4 Quarterly Adjustments

1. Unless a cutting authority, previous manual, or a provision of this manual specifies that the stumpage rates of a cutting authority are fixed, the stumpage rate of a cutting authority is adjusted quarterly on January 1, April 1, July 1, and October 1, of each year.
2. a. At the time of the quarterly adjustment referred to in subsection (1) of this section, the stumpage rate will be recalculated in accordance with the equations applicable for the appraisal effective date and the appraisal data submission which was used in the most recent appraisal or reappraisal. The domestic log market values for cutting authorities with appraisal or reappraisal effective dates prior to March 1, 2016, and export-adjusted log market values for cutting authorities with appraisal or reappraisal effective dates on or after March 1, 2016; and CPI, each effective for the month of the adjustment, will be used in the calculation of the adjustment. All other data will remain unchanged.
- b. The procedure referred to in this subsection is conducted each quarter until the cutting authority area is reappraised or the cutting authority expires.

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 (5) and (6), 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. The date of issue of a stumpage invoice shall determine the period for which the log scale data in that invoice will be included in a billing history record.
3. Except as provided in sections 4.2.2.3.1(8), 4.2.2.3.2(8) and 4.2.2.3.2(11), the billing history record shall be for a period of two years.

Table 2-1: Billing History Record Dates

Column 1 Date of Appraisal or Reappraisal	Column 2 Billing History Record Ends on the Preceding
January 1 to March 31	November 30
April 1 to June 30	February 28/29
July 1 to September 30	May 31
October 1 to December 31	August 31

4. Except as provided in subsection (6) of this section, where the effective date of the appraisal or reappraisal falls within the period of the year listed in Column 1 of Table 4-3, the two-year billing history record shall be for the two-year period ending on the corresponding date in Column 2 of Table 4-3 which immediately precedes the effective date of the appraisal or reappraisal.
5. Where the log grade percentages must be determined in accordance with Section 4.2.2.3.1(8), 4.2.2.3.2(8) or 4.2.2.3.2(11) and the effective date of an appraisal or reappraisal falls within the period of the year listed in Column 1 of Table 4-3, the five-year billing history record shall be for the five-year period ending on the corresponding date in Column 2 of Table 4-3 which immediately precedes the effective date of the appraisal or reappraisal.

6. Where the log grade percentages must be determined in accordance with Section 4.2.2.2(7) and where the effective date of the appraisal or reappraisal falls within the period of the year listed in Column 1 of Table 4-4, the two-year billing history record shall be for the two-year period ending on the corresponding date in Column 2 of Table 4-4 which immediately precedes the effective date of the appraisal or reappraisal.

7. Miscellaneous Timber Pricing Policies

7.1 Average Stumpage Rates by District and Species

1. Timber Pricing Branch shall produce a schedule of average sawlog stumpage rates for each species of timber in each forest district of the Coast Area, and for the Great Bear Rainforest **North**. Those rates are effective on the date they are approved by the director.

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:

Species	Zone	
	Northern Coast	Southern Coast
Balsam	\$1.96	\$0.85
Hemlock	\$1.38	\$1.14
Cedar	\$2.64	\$3.82
Cypress	\$2.51	\$1.23
Fir	\$4.72	\$1.87
Spruce	\$0.57	\$1.85
Other	\$2.11	\$1.80

- b. The Northern Coast Zone is the Haida Gwaii Forest District, Coast Mountain (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 as designated or prior designated, as applicable, by the Minister under the Act.
- c. The Southern Coast Zone is the Coast Area 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 until a cutting permit has been issued with tabular rates as specified under Section 7.2(1)(a). Stumpage rates for road permits will also change to tabular rates on that date.

7.10 Great Bear Rainforest **North (GBRN)**

The following applies to:

1. Cutting authorities that meet the requirements of Section 2.2.4 and that are not located within that part of Tree Farm Licence No. 25 within the Coast Mountain and North Island - Central Coast Forest Districts, or are not within Forest Licence A91438:
 - a. For all cutting authorities, except road permits, with an effective date:
 - i. prior to June 15, 2016, existing stumpage rates and applicable quarterly adjustments will continue until expiry of the cutting authority.
 - ii. on or after June 15, 2016, and before January 1, 2017, that do not meet the **GBRN** cruise based standards of the Cruising Manual, the stumpage rate shall be determined through a full appraisal.
 - iii. on or after June 15, 2016 and prior to January 1, 2017, that meet the **GBRN** cruise based standards of the Cruising Manual, the stumpage may, at the option of the licensee, be the rate determined through a full appraisal or be the rates by species as approved by the director under subsection 7.1(3).
 - iv. on or after January 1, 2017, must meet the **GBRN** cruise based standards of the Cruising Manual, and the stumpage rates by species shall be as approved by the director under subsection 7.1(3).
 - b. For all timber to be harvested under the authority of a road permit:
 - i. on or after June 15, 2016, and before January 1, 2017, that was not all cruised under the **GBRN** cruise base standards of the Cruising Manual, the stumpage rates by species shall be as approved by the director under subsection 7.1(3), and shall be based on the information provided by a scale of the timber.
 - ii. on or after June 15, 2016, and before January 1, 2017, that was all cruised under the **GBRN** cruise based standards of the Cruising Manual, the stumpage rates by species shall be as approved by the director under subsection 7.1(3), and shall be based on the information provided by a cruise of the timber.
 - iii. on or after January 1, 2017, the stumpage rates by species shall be as approved by the director under subsection 7.1(3), and shall be based on the information provided by a cruise of the timber.
2. Cutting authorities that meet the requirements of Section 2.2.4 and that are located within that part of Tree Farm Licence No. 25 within the Coast Mountain and North Island - Central Coast Forest Districts, or within Forest Licence A91438:

- a. For all cutting authorities, except road permits, with an effective date:
 - i. prior to June 15, 2016, existing stumpage rates and applicable quarterly adjustments will continue until expiry of the cutting authority.
 - ii. on or after June 15, 2016, the stumpage rates by species shall be as approved by the director under subsection 7.1(3), and shall be based on the information provided by a scale of the timber.
- b. For timber harvested under the authority of a road permit on or after June 15, 2016, the stumpage rates by species shall be as approved by the director under subsection 7.1(3), and shall be based on the information provided by a scale of the timber.
3. Notwithstanding subsections 1(a)(i) and 2(a)(i), where the source of the timber is the GBRN, the stumpage rate for each species of the GBRN timber will be determined using the schedule of average sawlog stumpage rates for GBRN timber approved by the director.

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