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November 25, 2020

To: Interior Regional Executive Directors

From: Honourable Doug Donaldson, Minister of Forests, Lands, Natural Resource Operations
and Rural Development

Re: **Amendment No. 1 to the Interior Appraisal Manual (IAM)**

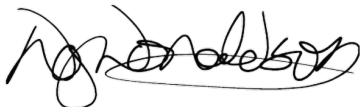
The following is a summary of the key changes:

- Updated average stumpage rate tables; including new salvage rate reductions
- Updated subgrade cost equation for Skeena Stikine region
- New upset rate policy for BCTS post-harvest debris sales
- Expiry dates added to the Kelowna and Vavenby Points of Appraisal
- New requirement to redetermine blanket salvage stumpage rates semi-annually

This amendment will come into force on December 15, 2020. Copies of the amendment and the amended IAM are available at the following link:

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

Further amendments or revisions to this manual require my approval.



Doug Donaldson
Minister

pc: Melissa Sanderson, Assistant Deputy Minister, Forest Policy and Indigenous Relations Division
Jim Schafthuizen, Executive Director, Forest Policy and Indigenous Relations Division
Allan Bennett, Director, Timber Pricing Branch
Len Marsh, Director, Pricing and Tenures, Regional Operations Division, South Area
Jim Sayle, Director, Regional Operations Divisions, North Area
Darius Low, Revenue Team Lead, Regional Operations Division, North Area
Bruce Sullivan, Revenue Officer, Regional Operations Division, South Area

TIMBER PRICING BRANCH

Interior Appraisal Manual

Effective July 1, 2020

Cost Base of: 2018

Includes Amendments

Amendment No. 1

Effective Date

December 15, 2020



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- “**GAS**” means the ministry’s General Appraisal System;
- “**Harvest Method**” means ground skidding, overhead cable, helicopter or horse;
- “**Harvest Method Volume**” means the net merchantable volume reported for the harvest method in the appraisal summary report;
- “**Hogged Tree Material**” means tree residues or by-products that have been shredded into smaller fragments by mechanical action;
- “**Interior Area**” means the North and South Areas;
- “**Licensee**” means the holder of a cutting authority;
- “**Long-Term Arrangement**” for the purposes of camp specified operations, means for a period of one or more years;
- “**Manual**” means *Interior Appraisal Manual*;
- “**Mature Timber**” means, exclusively for the purposes of section 30 of the Wildfire Regulation of the Wildfire Act, in respect of Crown timber that was cut, damaged or destroyed without authorization contrary to section 52(1) of the Forest and Range Practices Act, or damaged or destroyed within the meaning of sections 25(1)(b) and 27(1)(c) of the Wildfire Act, timber meeting the Interior Timber Merchantability Specifications described in Table 1-2 in this manual.
- “**Minister**” means Minister of Forests, Lands, Natural Resource Operations and Rural Development;
- “**Ministry**” means Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD);
- “**MPS**” means **Market Pricing System**;
- “**Net Merchantable Area**” means the net area for all treatment units reported in the appraisal summary report;
- “**New Construction**” means the following construction phases: subgrade construction, placement of additional stabilizing material and the construction and installation of drainage and other pertinent structures;
- “**North Area**” means Northeast, Omineca, and Skeena Regions excluding that portion that lies geographically within the North Coast Timber Supply Area;
- “**Original Appraisal**” means the appraisal data submission effective on the effective date of the cutting authority;
- “**Partially Harvested Timber**” means timber that has been felled and/or bucked and not yet forwarded to roadside;
- “**Prescribed Minimum Stumpage Rate**” means the minimum stumpage rate prescribed by the *Minimum Stumpage Rate Regulation* (BC Regulation 354/87);
- “**Primary Harvesting Activities**” means the cutting and removal of timber from a cutting authority area;

- “**Reconstruction or Replacement**” means replacement or structural repair of a major drainage structure (e.g. replacing stringers, cross ties, or cribbing), or major resurfacing, which means resurfacing sections of more than 0.3 km in length that were initially surfaced but have deteriorated due to long term wear and tear, where stabilizing material was not previously used, or major reconstruction, which means restoring at least 0.1 km of road (per occurrence) that requires complete rebuilding of the subgrade;
- “**Regional Manager**” means a regional executive director of the Ministry or except for section 1.2.1(1)(b), the regional executive director’s designate;
- “**Regulations**” means regulations under the *Act*;
- “**Remedial Fence and Wing Fence**” means a fence that is required to remedy, reduce or manage the impact of timber harvesting activities on range management;
- “**Road Permit**” means road permit or road timber mark;
- “**Scale Based**” means the stumpage payable is based on a scale of the timber harvested from the cutting authority area in accordance with part 6 of the *Act*;
- “**Single Unit**” means a cutblock has one continuous boundary and it is not made up of two or more pieces separated by timber that is not within the gross area of the cutblock from the cruise compilation;
- “**Skyline System**” means a cable logging system used to fully suspend logs for protection of the soil, for crossing streams without damage, or to yard logs for long distances. Skyline systems may use intermediate supports to reduce the sag in long cables;
- “**South Area**” means Cariboo, Kootenay-Boundary and Thompson-Okanagan Regions;
- “**Species Net Volume**” means the species net merchantable volume reported in the appraisal summary report;
- “**Stand as a Whole (SAAW) Pricing**” means that one stumpage rate is determined for all of the Total Net Coniferous Volume of timber on the cutting authority area. In a cruise based cutting authority, the single stumpage rate applies to the Total Net Cruise Volume;
- “**Timber Harvesting**” means the felling or removal of timber other than on road rights-of-way or landings on a cutblock;
- “**Timber Pricing Branch**” means the Timber Pricing Branch of the Ministry;
- “**Timber Sales Manager**” means the timber sales manager or the timber sales manager’s designate;
- “**Total Net Coniferous Volume**” means the sum of all the coniferous species net volumes reported in the appraisal summary report;

3. The volume that is manufactured to Canadian Lumber Standard/American Lumber Standards (CLS/ALS) is in foot board measure (fbm). Volume that is manufactured to non-CLS/ALS sizes are adjusted to equivalent CLS/ALS sizes.
4. If there is insufficient data reported, the lumber AMV for a species or species group may be determined using an alternate procedure approved by the director.

1.2.3 Minimum Stumpage Rate

1. A stumpage rate or an upset determined using this manual must not be less than the prescribed minimum stumpage rate.

1.2.4 Numbering and Calculation

1. The following exemplifies the numbering system used in this manual:
 1. = Chapter
 - 1.1 or 1.1.1 = Section
 - 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. Unless otherwise specified in this manual, 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.
3. Each calculation of a tenure obligation adjustment or specified operation expressed in dollars per cubic metre will be rounded to the nearest cent.

1.3 Point of Appraisal (POA)

1. The POA used in an appraisal is the POA for the appraised Transportation Route determined under section 1.4.4.
2. The POAs that may be considered for use in the appraisal are set out in Table 1-1 unless:
 - a. the last remaining milling facility associated with the POA is permanently rendered incapable of producing lumber and chips and a minimum of three years has passed since the mill stopped producing; or
 - b. eight years has passed since the mill stopped producing; or
 - c. the appraisal effective date is past the expiry date for that POA indicated in subsection (4) of this section.
3. For the purposes of subsection (2)(a), permanently rendered incapable means the equipment required to produce lumber and chips has either been destroyed or permanently removed from the site.
4. The following Point of Appraisal will expire on the date indicated; Kelowna (June 30, 2022); Vavenby (June 30, 2022).
5. The selling price zone used in an appraisal is the Zone indicated in Table 1-1 for the point of appraisal; except for determining the Conifer Zonal Volume (as provided in Table 3-2).

Table 1-1: Points of Appraisal

Zone 5 (Northern Interior)	Zone 6 (Skeena)	Zone 7 (Southern Interior)		Zone 8 (South Cariboo)	Zone 9 (Fort Nelson-Peace)
Bear Lake Burns Lake Engen Fort St. James Fraser Lake Houston Isle Pierre Mackenzie Prince George Quesnel Smithers Strathnaver Vanderhoof	Terrace	Adams Lake Armstrong Castlegar Creston Elko Galloway Grand Forks Kelowna Lavington Merritt	Midway Princeton Radium Revelstoke Thrums Vavenby Westbank Ymir	100 Mile House Chasm Williams Lake	Fort St. John Chetwynd

2. Road Types:

- a. Long Term (LT) - A long term road is a road with a continuous raised sub-grade and ditch line (the raised sub-grade and ditch line may be interrupted for short section <100 m in length (e.g., when crossing a short section of rock or at the crest of a hill). In flat terrain the ditch line may simply be the depression created when sub-grade material is excavated to create a raised sub-grade.
- b. Short Term (S) - A short term road is a road with the stumps removed and a bladed running surface. There may be elements of ditching and elevated grade, particularly around wet areas but these features are not continuous.
- c. Snow/Ice Road - A snow/ice road is a single lane seasonal winter road including turnouts, with a flat road profile that is built with a combination of snow, ice and dirt, on a surface that may or may not have been stumped. The driving surface is built up using multiple layers of snow and ice such that extra stabilizing material costs are not applicable. A flat road profile means the side slope is less than or equal to 15% and there is minimal side cut. Minimal means that cuts into mineral or organic soil must not exceed 0.5 m in depth for distances up to 0.1 km. Seismic lines being used for roads, that have not previously been used as roads, will be considered as new construction and qualify as snow/ice roads provided they fall within the above criteria.

3. Uphill Side Slope: (SLOPE %)

Uphill side slope % may show a variation of (+/- 15% about the average) within any section length and represents the average of all slopes in the section to a maximum of 50%. To derive an average for uphill side slope %, several representative cross-section measurements are taken along the section length and the sum of one-half of the distance on each side of the measurement is applied as a weight against the measurement at that cross-section. The uphill side slope % is measured at right angles to the road centreline and is recorded to the nearest integer. Where the road is located on a bench, the uphill side slope of the bench is used.

4. Percent Rock: (ROCK %)

Rock includes bedrock and large boulders (each greater than 1.5 m in diameter). It may be rippable or may require drilling and blasting. Rock % may show a variation (+/- 15% about the average) within any section length and represents the average of all rock % in the section to a maximum of 50%. To derive an average % rock, representative cross-section measurements are taken along the section length and the % rock calculated. The sum of one-half of the distance on each side of where the measurements were taken is applied as a weight against the % rock calculated at that cross-section. The percent rock is determined as follows:

$$ROCK \% = \frac{h^2}{H^2} \times 100$$

Where:

h = the vertical cut height of all rock measured from the bottom of the ditch.

H = the total vertical cut height of all materials above the bottom of the ditch.

To determine the percent rock for roads not yet constructed, constructed roads on similar land/rock forms are used as a guide. Alternately, where estimates of rock volume from commercial road design programs are available for tabular sections, that information may be used to estimate the rock %.

5. Soil Moisture Regime Class (SMR):

Those biogeoclimatic zones/subzones with site series identified as “M”, “VM” or “W” in the dark shaded area of the table in Appendix III are considered “Wet” for appraisal purposes. The zones/subzones with site series identified as “SD” and “F” in the light shaded area are considered “Moist”. Those zones/subzones with the site series identified as “ED”, “VD”, “MD” in the unshaded area are considered “DRY”.

6. Biogeoclimatic Zone Abbreviations Used in Section 4.3.2.3

ESSF - Engelmann Spruce - Subalpine Fir
 ICH - Interior Cedar Hemlock
 SBS - Sub Boreal Spruce
 MS - Montane Spruce

4.3.2.3 Subgrade Construction Cost Equations

For each road type, except snow/ice roads, the subgrade cost estimate in \$/km is determined from the equation for the appropriate road group.

Road Group	Equation
1	Refer to subsection 4.3.6(8)(q)
2	$3,071 + (5,296 * ICH) + (9,295 * LT)$
3	$6,763 + (3,117 * LT)$
4	$7,643 + (89 * SLOPE \%) + (5,764 * LT)$
5	$5,392 + (188 * SLOPE \%) + (2,511 * LT)$
6	$5,044 + (112 * SLOPE \%) + (1,379 * ESSF) + (3,117 * LT)$
7	$6,474 + (83 * SLOPE \%) + (1,605 * LT) + (4,067 * SBS)$
8	$4,203 + (68 * SLOPE \%) + (4,811 * LT)$
9	$9,348 + (9,998 * LT)$
10	$6,894 + (3 * SLOPE \%^2) + (4,504 * LT) + (3,497 * ESSF) + (2,949 * MS)$
11	$19,975 + (491 * SLOPE \% * LT)$
12	$5,931 + (259 * SLOPE \%) + (9,975 * LT)$

4.5.3 Total Silviculture Cost Estimate

Total Silviculture (\$/m³) =

$$\text{Silviculture (\$/m}^3\text{)} + \frac{\text{Root Disease Control (\$)}}{\text{ATNCV or TNCRV (m}^3\text{)}^1}$$

Table 4-7: BEC Silviculture Cost Estimates

The dollar per hectare (\$/ha) cost estimates are net of overhead.

BEC Unit	Basic \$/ha	Enhanced \$/ha	BEC Unit	Basic \$/ha	Enhanced \$/ha
BWBS	1313	-	ESSFwc2	1800	-
BWBSdk	950	-	ESSFwc3	1820	⁵ 580
BWBSmk	1313	-	ESSFwc4	1935	-
BWBSmw	1497	-	ESSFwcv	1739	-
BWBSvk	1313	-	ESSFwh1	2127	-
BWBSwk1	1126	-	ESSFwh2	2192	-
BWBSwk2	1120	-	ESSFwh3	2336	-
BWBSwk3	1124	-	ESSFwk1	1391	⁵ 161
CWH	851	-			⁸ 65
CWHds1	851	-	ESSFwk2	1248	-
CWHms1	851	-	ESSFwm1	1545	-
CWHvm1	851	-	ESSFwm2	1545	-
CWHvm2	851	-	ESSFwm3	1552	-
CWHws1	769	-	ESSFwm4	1539	-
CWHws2	933	-	ESSFwv	1473	-
ESSF	1473	-	ESSFxc1	1145	⁷ 340
ESSFdc1	1281	-	ESSFxc2	1178	⁷ 340
ESSFdc2	1265	⁷ 348	ESSFxc3	1148	-
ESSFdc3	1280	-	ESSFxcv1	380	-
ESSFdk1	1048	-	ESSFxcv2	380	-
ESSFdk2	1049	-	ICH	1693	-
ESSFdv1	1334	-	ICHdk	1693	-
ESSFdv2	1334	-	ICHdm	1257	-
ESSFmc	995	² 285	ICHdw1	1669	-
		⁴ 156	ICHdw3	1588	-
		⁸ 220	ICHdw4	1588	-
ESSFmh	1767	-	ICHmc1	1268	-
ESSFmk	1473	-	ICHmc2	1419	-
ESSFmm1	1752	-	ICHmk1	1232	-
ESSFmm2	1566	-	ICHmk2	1210	-
ESSFmm3	1520	-	ICHmk3	1222	⁶ 52
ESSFmv1	733	⁸ 285	ICHmk4	1222	-
ESSFmv2	805	-	ICHmk5	1222	-
ESSFmv3	783	-	ICHmm	1693	-
ESSFmv4	805	-	ICHmw1	1565	-
ESSFmw1	1191	⁷ 249	ICHmw2	1627	-
ESSFmw2	1191	-	ICHmw3	1522	-
ESSFvc	4006	-	ICHmw4	1921	-

¹ For scale based CAs, use ATNCV. For cruise based CAs use TNCRV.

BEC Unit	Basic \$/ha	Enhanced \$/ha
ICHmw5	1523	-
ICHvc	1693	-
ICHvk1	2942	-
ICHvk2	2530	⁸ 43
ICHwc	1693	-
ICHwk1	1937	-
ICHwk2	1906	⁶ 100
ICHwk3	1906	⁸ 194
ICHwk4	1895	⁶ 114
ICHxw	1693	-
IDF	1174	-
IDFdc	1174	-
IDFdk1	1098	¹ 651 ⁷ 892
IDFdk2	1160	⁷ 503
IDFdk3	1048	¹ 589
IDFdk4	1094	¹ 630
IDFdk5	1010	-
IDFdm1	1174	-
IDFdm2	1174	-
IDFdw	1174	-
IDFmw1	1255	-
IDFmw2	1339	-
IDFww	1174	-
IDFww1	1174	-
IDFxc	1174	-
IDFxb1	1219	⁷ 355
IDFxb2	1212	¹ 657 ⁷ 418
IDFxb4	1215	-
IDFxbk	1174	-
IDFxbm	1174	¹ 550
IDFxbw	1174	-
IDFxbx2	1174	-
MH	1603	-
MHmm1	1603	-
MHmm2	1603	-
MS	1049	-
MSdc1	957	-
MSdc2	957	-
MSdc3	957	-
MSdk	1075	-
MSdm1	1362	-
MSdm2	1272	-
MSdm3	1334	-
MSdv	1049	-
MSdw	1000	-
MSmw1	1049	-
MSmw2	1049	-
MSxk1	1016	⁷ 343

BEC Unit	Basic \$/ha	Enhanced \$/ha
MSxk2	1151	¹ 611 ⁷ 343
MSxk3	1036	-
MSxv	318	-
PP	74	-
PPxh1	74	-
PPxh2	74	-
PPxh3	74	-
SBPS	381	-
SBPSdc	304	⁸ 257
SBPSmc	348	-
SBPSmk	515	⁵ 306
SBPSxc	207	-
SBS	964	-
SBSdh1	964	-
SBSdh2	964	-
SBSdk	922	² 231 ⁸ 176
SBSdw1	944	⁵ 254 ⁶ 121
SBSdw2	879	⁵ 350 ⁶ 228 ⁸ 289
SBSdw3	805	⁸ 233
SBSmc1	896	⁵ 263
SBSmc2	913	² 256 ³ 371 ⁴ 140 ⁸ 198
SBSmc3	790	⁸ 394
SBSmh	964	⁸ 237
SBSmk	863	-
SBSmk1	869	⁸ 201
SBSmk2	844	-
SBSmm	978	-
SBSmw	1443	⁵ 241 ⁶ 71 ⁸ 156
SBSvk	1189	406
SBSwk1	1183	⁵ 166 ⁶ 41 ⁸ 103
SBSwk2	995	-
SBSwk3	968	⁸ 238
SWB	1229	-
SWBmks	1229	-
SWBvk	1229	-
SWBvks	1229	-
*BWBSdk1	950	-
*BWBSdk2	950	-

BEC Unit	Basic \$/ha	Enhanced \$/ha
*ESSFdm	1473	-
*ESSFdv	1334	-
*ESSFmw	1191	-
*ESSFvv	1473	-
*ESSFwc1	1849	-
*ESSFwm	1545	-
*ESSFxc	1148	-
*ICHdw	1646	-
*ICHdw2	1646	-
*IDFdk	1105	-

BEC Unit	Basic \$/ha	Enhanced \$/ha
*MSdk1	1075	-
*MSxk	1046	-
*PPdh1	74	-
*PPdh2	1174	-
*SWBdk	1229	-
*SWBdks	1229	-

* Indicates BEC units that have expired and are not to be included in appraisals submitted after October 31, 2018. Reference applicable Land Management Handbook crosswalk tables where necessary.

Approved Plan	Regime Name
2017 Wildfire	¹ Post-Wildfire Fdi
Bulkley Integrated Silviculture Strategy	² Pli leading -1800 sph
	³ Pli leading - 2000 sph
	⁴ Sx leading
Cariboo Regional Standard	⁵ Enhanced Density
	⁶ Enhanced Diverse
Merritt Integrated Silviculture Strategy	⁷ Increased Planting Density
Prince George FSP#11	⁸ Increased Target Stocking

4.6 Low Grade Percent Adjustment

1. The POA low-grade percent adjustment by timber species as shown in Tables 4-8 and 4-9 must be used in the calculation of the specified operations and tenure obligation adjustment to account for the timber that is priced at the statutory rate.
2. The low-grade percent adjustment for each timber species to be used in the appraisal or reappraisal of the cutting authority area must be the percent adjustment by timber species by the POA to which the cutting authority area is appraised. Where the Total Net Coniferous Volume of timber on the cutting authority area is comprised of 35% or greater red and grey Mountain Pine Beetle (MPB) attacked Lodgepole pine, the adjustment from Table 4-9 is used. For cutting authorities with less than 35% red and grey MPB attacked Lodgepole pine, the adjustment is used from Table 4-8.
3. The low-grade percent adjustment to be used in the calculation of the specified operations and tenure obligation adjustment for a cutting authority area being appraised or reappraised is the sum of the products of the net coniferous cruise volume of each timber species in the cutting authority area multiplied by the low-grade percent adjustment for that species, divided by the Total Net Coniferous Volume on the cutting authority area.
4. The low-grade percent adjustment does not apply to cruise based cutting authorities.

5 Stumpage Rate Determination

5.1 Stumpage Rate Determination for a Cutting Authority Entered into Under a BCTS Licence

1. An upset can either be an upset rate (\$/m³) or an upset value (\$).
2. An upset rate or determination of an upset value must not be lower than \$0.25/m³.
3. An MPS Indicated Upset (IU) must be determined by the regional revenue staff using data from a full appraisal; where

$$\text{IU} = \text{FEWB} \times (1 - \text{DF})$$

$$\text{FEWB} = \text{Final Estimated Winning Bid from section 3.4}$$

$$\text{DF} = 0.30 \text{ (Discount Factor)}$$

4. A cutting authority must be scale-based unless it meets the criteria for a cruise-based cutting authority in section 6.9 or the Executive Director, BCTS has approved cruise-based under section 106 of the *Act*.
5. All upsets are fixed for the term and all extensions except where a reappraisal is completed under section 2.2.3 (suddenly and severely damaged timber) or section 2.2.4 (minister's direction).

5.1.1 Upset Stumpage Rates (Upset)

1. Except as otherwise provided in this section, the upset must be the greater of either the **MPS indicated upset (IU)** or, the timber sales manager's calculated cost to prepare the timber for sale (i.e. the variable cost upset or 'VCU'); unless the upset is approved by the Executive Director, BCTS.
 - a. If applications for a timber sale license are invited but none are received, the timber sales manager may request a new upset with the purpose to **re-advertise** the timber sale license. The new upset must be greater than or equal to the VCU; unless the upset is approved by the Executive Director, BCTS.
 - b. Where the timber sale is scale-based for billing, the total upset and bonus applies to coniferous sawlog grades (grades 1 and 2).
 - c. Where the timber sale is cruise-based for billing, the total upset and bonus applies to the Total Net Cruise Volume.
2. For **decked timber or partially harvested timber sales**, the upset is the rate or value requested by the timber sales manager.
 - a. Where the timber sale is scale-based for billing, the total upset and bonus applies to coniferous sawlog grades (grades 1 and 2).
 - b. If the timber sales manager intends to sell the timber competitively as a lump sum,
 - i. the volume used to determine the upset value must be determined by an authorised scaler using a method approved by the minister, and
 - ii. the total upset and bonus applies to the entire volume of decked or partially

harvested timber.

3. For **salvage timber sales** (see section 6.4.3 or 6.4.4), the upset is the rate calculated under that section multiplied by the discount factor 0.30.
 - a. For cruise-based salvage timber sales, the total upset and bonus applies to the total net merchantable volume.
 - b. For blanket salvage timber sales, the total upset and bonus applies to coniferous sawlog grades (grades 1 and 2).
4. For **deciduous timber sales**, where the Total Net Deciduous Volume to be harvested is equal to or greater than sixty percent of the Total Net Cruise Volume, the upset for coniferous and deciduous timber is the upset determined under subsection (1) or (1)(a).
 - a. Where the timber sale is scale-based for billing, the total upset and bonus applies to coniferous and **deciduous sawlogs** (grades 1 and 2).
 - b. Where the timber sale is cruise-based for billing, the total upset and bonus applies to the Total Net Cruise Volume.
5. For **post-harvest material timber sales**, issued for the specific purpose of manufacturing special forest products, the upset rate is the special forest product reserve stumpage rate from Table 6-7.
 - a. The total upset and bonus applies to the total scaled product volume.

5.2 Stumpage Rate Determination for a non-BCTS, Fully Appraised Cutting Authority

Sections 5.2.1 through 5.2.3 are the policies and procedures for determining a stumpage rate for a cutting authority other than a cutting authority entered into under a BCTS licence or a cutting authority for which a stumpage rate is determined under chapter 6.

5.2.1 Indicated Rate (IR)

1. The IR is the difference between the final estimated winning bid (FEWB) calculated for the cutting authority under section 3.4 and the tenure obligation adjustment (TOA) calculated under section 4.7.
2. Expressed as an equation:

$$IR = FEWB - FTOA$$

5.2.2 Reserve Stumpage

The reserve stumpage for a cutting authority is determined by selecting:

1. The greater of:
 - a. the indicated rate, or
 - b. the minimum stumpage rate.
2. The greater of:
 - a. the upset stumpage rate or value, or
 - b. the minimum stumpage rate or equivalent value.

5.2.3 Stumpage Rate

1. Unless otherwise provided in subsection 2 of this section, the total stumpage is the sum of the reserve stumpage plus any administration and silviculture levies which may apply under section 5.3.
2. If the cutting authority is awarded on the basis of competition, the total stumpage is:
 - a. the sum of the reserve stumpage plus the bonus bid, or
 - b. the sum of the reserve stumpage plus the bonus offer.

6 Miscellaneous Policies

6.1 Coniferous Average Sawlog Stumpage Rates by Forest Zone and Species

1. Each of the following forest zones referred to in Tables 6-1, 6-2, 6-4, 6-4a, 6-5 and 6-6 is made up of the following forest districts and or geographic units:
 - North Central Zone - Mackenzie, Nadina, Prince George (less Robson Valley TSA), Quesnel and Stuart Nechako
 - North East Zone - Fort Nelson and Peace
 - North West Zone - Coast Mountain (excluding that portion that lies geographically within the North Coast Timber Supply Area), Skeena Stikine
 - South Central Zone - Williams Lake TSA Blocks A, B, C, D, E & I
 - South East Zone - Okanagan Shuswap, Rocky Mountain, Selkirk, and Thompson Rivers (plus Robson Valley TSA)
 - South West Zone - 100 Mile House, Cascades, and Williams Lake TSA Blocks F, G, H, and J to N

2. Each of the following species referred to in Tables 6-1, 6-2, 6-4, 6-4a and 6-5 is as follows:
 - BA - Balsam
 - CE - Cedar
 - FI - Interior Douglas-Fir
 - HE - Hemlock
 - LA - Larch
 - LO - Lodgepole Pine
 - SP - Spruce
 - WH - White Pine
 - YE - Yellow Pine
 - AVG - Average of all species

3. Where a species of coniferous timber is not listed in Table 6-1, 6-2, 6-4, 6-4a and 6-5, the average rate for the zone (AVG) must be used for that species of timber.

Table 6-1: Coniferous Average Sawlog Stumpage Rates in \$/m³

FOREST ZONE	BA	CE	FI	HE	LA	LO	SP	WH	YE	AVG
North Central	23.27		40.93	9.76		22.70	27.55			25.57
North East (Fort Nelson)	20.57					21.30	20.06			20.35
	5.91					7.04	8.09			7.93
North West	6.23	8.71		2.79		20.71	14.23			7.60
South Central	1.23		10.13			2.00	4.06			6.30
South East	25.31	22.75	27.41	18.75	26.75	25.87	26.68	22.87	18.75	25.35
South West	29.49	33.53	29.25	31.41	26.75	32.48	35.88	9.37		31.91

6.1.1 Community Forest Agreements

1. The sawlog stumpage rate for each species of coniferous timber harvested under any cutting authority issued under a Community Forest Agreement is the rate prescribed in Table 6-2 for the forest zone in which the cutting authority area is located.
2. Section 1.4.2, sections 6.1.2 through 6.5, commercial thinning in section 6.6, and sections 6.7 through 6.9 do not apply to Community Forest Agreement cutting authorities.
3. The stumpage rate determined under this section is redetermined on August 1 of each year in accordance with this section.
4. Notwithstanding subsection (1), (2), and (3), when a cutting authority is issued for the specific purpose to include projects funded by the Forest Enhancement Society of BC, the stumpage rate must be determined through a full appraisal (“fully appraised”). Refer to section 6.11 for details regarding cutting authorities with FESBC funding.

6.1.2 Woodlot Licences

1. Except as provided in subsection (2) and (8) of this section, the sawlog stumpage rate for each species of coniferous timber harvested under a cutting permit issued for a woodlot licence with an effective date after November 30, 2008 is the rate prescribed in Table 6-2 for the forest zone in which the cutting authority area is located.
2. Where a woodlot licence cutting permit has been issued with an effective date after November 30, 2008 for the purpose of using amounts from an eligible extended road amortization agreement in an appraisal, then the stumpage rate will be determined using the procedures in this manual excluding this section.
3. Except as provided in subsection (4) of this section, the sawlog stumpage rate for coniferous timber harvested under a road permit issued for a woodlot licence is the rate prescribed in Table 6-2 for the forest zone in which the timber mark applies.
4. Where a woodlot has an eligible extended road amortization agreement before December 1, 2008 the sawlog stumpage rate for a road permit with an effective date on or after December 1, 2008 is calculated using the procedures in section 6.3.
5. The sawlog stumpage rate for each species of coniferous timber harvested under a blanket salvage cutting authority issued for a woodlot licence is the rate prescribed in Table 6-2 for the forest zone in which the blanket salvage cutting authority applies.
6. The stumpage rate determined under subsections (1), (3) and (5) of this section is redetermined on August 1, each year in accordance with this section.
7. Except as provided in subsections (2) and (4) of this section, sections 1.4.2, 6.1.1, 6.1.3 through 6.5, commercial thinning and Pre-harvest Waste Assessment in section 6.6, and sections 6.7 through 6.9 do not apply to Woodlot Licence cutting authorities.

8. Notwithstanding subsection (1) through (7), when a cutting authority is issued for the specific purpose to include projects funded by the Forest Enhancement Society of BC, the stumpage rate must be determined through a full appraisal (“fully appraised”). Refer to section 6.11 for details regarding cutting authorities with FESBC funding.

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

FOREST ZONE	BA	CE	FI	HE	LA	LO	SP	WH	YE	AVG
North Central	3.49		6.14	1.46		3.40	4.13			3.84
North East	3.08					3.20	3.01			3.05
(Fort Nelson)	0.89					1.06	1.21			1.19
North West	0.93	1.31		0.42		3.11	2.13			1.14
South Central	0.25		1.52			0.30	0.61			0.95
South East	3.80	3.41	4.11	2.81	4.01	3.88	4.00	3.43	2.81	3.80
South West	4.42	5.03	4.39	4.71	4.01	4.87	5.38	1.41		4.79

6.1.3 Incidental Conifer in Deciduous Leading Stands

1. Except as provided in section 5.1.1(4), this section applies to coniferous timber in a cutting authority area where the total estimated volume of all deciduous species to be harvested is greater than 70% of the total estimated volume of all species to be harvested.
2.
 - a. The stumpage rate for coniferous timber is the rate prescribed in Table 6-3 for the smaller of the area of the forest district/district portion, timber supply area, region, or Area in which the entire cutting authority area for the tenure is located.
 - b. Where the Crown is responsible for basic silviculture on the cutting authority area, the stumpage rate for each species of coniferous timber must be the sum of the rate determined under paragraph (a) of this subsection and the silviculture levy determined under section 5.3.
3. A stumpage rate determined under subsection 2 must be redetermined on June 1, of each year in accordance with this section.
4. Notwithstanding subsection (2) in this section, the stumpage rate may be determined through a full appraisal in accordance with chapters 1, 2, 3, 4, and 5.
5.
 - a. In this section the area of a forest district or the area of a timber supply area does not include the area of a park located within that district or timber supply area.
 - b. In this section the area of a Tree Farm Licence will be included in the area of the district or timber supply area in which it is geographically located.

- c. Where the forestry licence to cut is issued without competition for the purposes described in paragraph (1)(a)(i) of this section the sawlog stumpage rate for such species of coniferous timber must be:
 - i. Except as provided in (ii), the stumpage rate in Table 6-1 for the forest zone in which the cutting authority area is located.
 - ii. If more than one-third of the total volume of coniferous timber to be harvested in the cutting authority area is damaged timber as defined in section 6.4.1(3), the stumpage rate in Table 6-4 for the forest zone in which the cutting authority area is located.
 - iii. When the licence to cut is issued to the lowest eligible bidder on a contract issued for the purpose referred to in paragraph (1)(a)(i) of this subsection, the stumpage rate determined from the applicable paragraph (c)(i) or (c)(ii) above.
 - d. Where the forestry licence to cut is issued without competition meets the requirements set out in paragraph (1)(a)(ii) of this section, the coniferous sawlog stumpage rate must be \$1.20/m³ when the licence to cut is issued to the lowest eligible bidder on a contract issued for the purpose referred to in paragraph (1)(a)(ii).
 - e. Notwithstanding any paragraph in this subsection when the timber on the cutting authority area will be scaled as chips or hogged tree material the reserve stumpage rate must be the rate from Table 6-7.
2. An upset stumpage rate determined under this section must be calculated using the *Interior Appraisal Manual* in effect on the date that the rate is determined and must not be less than the district's variable cost to prepare the timber for sale as calculated by the district manager.
 3. Notwithstanding subsections 1(c) or (d) the stumpage rate for the forestry licence to cut may be determined through a full appraisal in accordance with chapters 1, 2, 3, 4 and 5. The cruise data that is used in the appraisal may be from the cruise of a comparable cutting authority as per section 1.5.1.1.
 4. Except for a minister directed reappraisal (as provided in section 2.2.4), when the upset stumpage rate or stumpage rate is determined under this section, the total stumpage rate is fixed for the term of the cutting authority and all extensions.

6.3 Road Permit Stumpage Rates

1. a. In this section the area of a forest district or the area of a timber supply area does not include the area of a park located within that district or timber supply area.
 - b. In this section the area of a Tree Farm Licence will be included in the area of the district or timber supply area in which it is geographically located.
2. This section does not apply to Community Forest Agreements in section 6.1.1, Woodlots Licences in section 6.1.2 except 6.1.2(4), or any timber in the Research Forests noted in Table 6-7.
3. A stumpage rate determined under this section, other than for a road permit for a BCTS licence under subsection (6), must be re-determined annually on June 1st in accordance with this section.
4. Except as provided in subsection (6)(b), stumpage rates determined under this section are scale based for billing.
5. Except as provided in subsection (6) of this section, the stumpage rate for a road permit must be the stumpage rate:
 - a. from the table of licence average rates by district provided to the regional Area by Timber Pricing Branch if there is a minimum positive scale based billed volume of 500 m³ of coniferous sawlogs from which the weighted average sawlog stumpage rate may be determined, or
 - b. where a rate under (a) is not available, the **average** stumpage rate is that prescribed in Table 6-3 for the smaller area of the forest district/district portion, timber supply area, region, or Area in which the entire cutting authority area for the tenure is located.
6. a. The total stumpage rate (\$/m³) for a road permit granted to the holder of a scale-based timber sale licence entered into under section 20 of the Act must be the same as the total stumpage rate (\$/m³) for the timber sale licence which entitled the holder to apply for the road permit.
 - b. The total stumpage rate (\$/ha) for a road permit granted to the holder of a cruise-based timber sale licence entered into under section 20 of the Act must be the same as the total stumpage rate (\$/ha) of the timber sale licence which entitled the holder to apply for the road permit.
7. Where a woodlot has an eligible extended road amortization agreement before December 1, 2008 the sawlog stumpage rate for a road permit with an effective date on or after December 1, 2008 is calculated using the procedures in this section.
8. The bonus bid if applicable will be added to the stumpage rate determined under subsection 5(b).

Table 6-3: Coniferous Average Sawlog Stumpage Rates in \$/m³ by Smallest Geographic Unit

Smallest Geographic Unit	Average	¹ ESC	Smallest Geographic Unit	Average	¹ ESC
North Area	21.96	27.31	South Area	27.11	33.65
Northeast Region	20.35	25.49	Cariboo Region	27.69	35.54
Fort Nelson District	7.93	13.07	100 Mile House District	20.60	33.28
Peace District	20.35	25.49	Cariboo-Chilcotin District	32.99	39.48
Fort St. John TSA	20.73	27.62	Williams Lake TSA, blks F-H, J-N	35.75	42.07
Dawson Creek TSA	20.14	24.33	Williams Lake TSA, blks A-E, I	6.30	14.43
Omineca Region	27.03	33.34	Quesnel District	23.88	30.93
Mackenzie District	14.19	18.59	Quesnel TSA	23.88	30.93
Prince George District	28.30	35.16	Cascadia TSA, blks 5-8	23.88	30.93
Robson Valley TSA	17.52	22.59	Kootenay/Boundary Region	23.49	29.31
Prince George TSA, blks E-I	29.56	36.39	Rocky Mountain District	26.59	31.56
Stuart Nechako District	29.81	35.56	Invermere TSA	22.98	27.07
Prince George TSA, blks A-C (formerly Fort St. James District)	33.35	38.73	Cranbrook TSA	29.88	35.66
Prince George TSA, blk D (formerly Vanderhoof District)	17.85	24.86	Selkirk District	22.48	28.57
Skeena Region	14.12	17.94	Arrow TSA	21.36	28.36
Coast Mountains District	0.37	0.90	Cascadia TSA, blks 1-3	21.36	28.36
Nass TSA	0.28	0.90	Boundary TSA	27.56	34.76
Kalum TSA	0.54	0.89	Golden TSA	23.64	27.59
Cascadia TSA, blks 9-11	0.54	0.89	Revelstoke TSA	5.48	11.29
Pacific TSA	0.54	0.89	Cascadia TSA, blk 4	5.48	11.29
Nadina District	19.80	25.39	Kootenay Lake TSA	26.54	32.42
Morice TSA	20.17	25.65	Thompson/Okanagan Region	29.32	35.66
Lakes TSA	17.59	23.81	Cascades District	32.85	37.97
Skeena Stikine District	14.07	16.99	Merritt TSA	40.60	46.26
Bulkley TSA	19.11	22.81	Lillooet TSA	1.62	4.56
Kispiox TSA	11.42	14.22	Okanagan Shuswap District	28.58	35.37
Cassiar TSA	0.25	0.25	Thompson Rivers District	27.01	33.76

¹ ESC is the average rate excluding silviculture costs.

6.4 Salvage Timber Stumpage Rates

6.4.1 Post-Harvest Material or Damaged Timber

1. This section applies to cutting authorities issued under licences which do not have an allowable annual cut.
2. Post-Harvest Material is defined as:
 - a. wooden culverts and bridges, or
 - b. post logging residue.
3. Damaged Timber is defined as:
 - a. Trees that are dead or damaged as a result of wind, fire, snow press, drought, landslide, flooding; or
 - b. Trees as a result of the effects of forest pests or disease that are dead; or
 - c. Trees that require management and control of insect infestation or will die within one year (sanitation timber salvage), as determined by the district manager.
4. Except as provided in section 6.2.1(1)(c)(ii), the criteria and methodology for the calculation of salvaged timber stumpage rates are:
 - a. Post-harvest material may not be combined in the same cutting authority area with damaged timber.
 - 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 be adjacent to or contiguous with an existing cutting authority area.
 - c. Cut block(s) must be less than or equal to 5 hectares in size; (unless the silviculture system used on the cut block is other than clear cutting, and at the completion of harvest the trees retained on the harvested area conform to the specifications in the Chief Forester's Reference Guide for Forest Development Plan Stocking Standards for the applicable silviculture system).
 - d. Salvage logging stumpage rates may only be determined for a cutting authority where more than one-third of the total estimated volume of coniferous timber to be harvested in the cutting authority area is damaged timber.
 - e. Post-Harvest Material 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. Except for a minister directed reappraisal (as provided in section 2.2.4), a stumpage rate determined under this section is fixed for the term of the cutting authority and all extensions.
5. a. The Damaged Timber sawlog stumpage rate for each species of coniferous timber is the rate in Table 6-4 or 6-4a for the Forest Zone in which the cutting authority area is located. The stumpage rates in Table 6-4a may be used when the:
- estimated total net coniferous volume of timber on each cutblock is comprised of 80% or more Burnt Timber¹ (Burnt timber means any trees that meet the definition of Fire Codes A, B or C as per the Cruising Manual), and
 - the burnt timber is evenly distributed throughout the cutblock(s).
- b. Where the Crown is responsible for basic silviculture on the cutting authority area, the stumpage rate for each species of coniferous timber must be the sum of the rate determined under paragraph (a) of this subsection and the silviculture levy determined under section 5.3.
- c. Notwithstanding paragraph (a), the stumpage rate for Damaged Timber may be determined through a full appraisal in accordance with chapters 1, 2, 3, 4 and 5.
6. The Post-Harvest Material sawlog stumpage rate for each species of coniferous timber is the rate in Table 6-5 for the forest zone in which the cutting authority area is located.

Table 6-4: Coniferous Average Sawlog Stumpage Rates for Salvage of Damaged Timber in \$/m³

FOREST ZONE	BA	CE	FI	HE	LA	LO	SP	WH	YE	AVG
North Central	14.04		23.82	4.55		12.65	17.15			15.18
North East	12.41					11.88	12.49			12.08
(Fort Nelson)	3.56					3.93	5.03			4.71
North West	3.76	4.87		1.30		11.55	8.86			4.51
South Central	0.74		5.90			1.12	2.53			3.74
South East	15.27	12.71	15.95	8.75	13.94	14.42	16.61	12.23	11.00	15.05
South West	17.79	18.73	17.02	14.65	13.94	18.11	22.34	5.01		18.94

¹ Eighty (80) percent or more of the estimated total net coniferous volume defined as burnt timber in each cutblock, based on a professional estimate by a forest professional registered with the Association of BC Forest Professionals. The professional estimate must include a description and supporting information of how the estimate was generated.

Table 6-4a: Coniferous Average Sawlog Stumpage Rates for Salvage of Fire Damaged Timber in \$/m³

FOREST ZONE	BA	CE	FI	HE	LA	LO	SP	WH	YE	AVG
North Central	9.84		23.96	3.76		10.48	12.85			12.10
North East	8.70					9.83	9.35			9.63
(Fort Nelson)	2.50					3.25	3.77			3.75
North West	2.63	4.16		1.08		9.56	6.64			3.59
South Central	0.52		5.93			0.93	1.89			2.98
South East	10.70	10.86	16.05	7.23	12.11	11.94	12.44	10.13	9.60	11.99
South West	12.47	16.01	17.12	12.11	12.11	15.00	16.73	4.15		15.09

Table 6-5: Coniferous Average Sawlog Stumpage Rates for Salvage of Post-Harvest Material in \$/m³

FOREST ZONE	BA	CE	FI	HE	LA	LO	SP	WH	YE	AVG
North Central	5.82		20.47	2.44		11.35	13.77			12.22
North East	5.14					10.65	10.03			9.72
(Fort Nelson)	1.48					3.52	4.04			3.79
North West	1.56	6.97		0.70		10.36	7.11			3.63
South Central	0.31		5.07			1.00	2.03			3.01
South East	6.33	18.20	13.71	4.69	13.38	12.93	13.34	11.44	9.38	12.11
South West	7.37	26.83	14.63	7.85	13.38	16.24	17.94	4.69		15.24

6.4.2 Blanket Salvage Cutting Authorities

1. This section may apply to cutting authorities issued under licences with an allowable annual cut or maximum harvest volume; excluding Community Forest Agreements in section 6.1.1, Woodlots Licences in section 6.1.2, BCTS or any timber in the Research Forests noted in Table 6-7.
2. Cutblocks amended into blanket salvage cutting authorities prior to February 15, 2016, must use section 6.4.2 of this manual as it was prior to February 15, 2016.
3. Cutblocks amended into blanket salvage cutting authorities on or after February 15, 2016 must be consistent with the Deputy Minister Memo: *Harvesting under a Blanket Salvage Permit (For Interior Regions)* signed January 29, 2016, where the cutblocks must be:
 - a. less than or equal to 15 hectares in size and 5000 m³ in volume; (unless the silviculture system used on the cut block is other than clear cutting, and at the completion of harvest the trees retained on the harvested area conform to the stocking standards specified in an approved Forest Stewardship Plan); and
 - b. issued for purposes of harvesting damaged timber as defined in section 6.4.1 (3); and
 - c. consistent with *District Guidelines for Blanket Salvage Cutting Authorities*.

The stumpage rate for each species of coniferous timber on the cutting authority area is the stumpage rate for that species indicated in Table 6-4 or 6-4a for the forest zone in which the cutting authority area is located. The stumpage rates in Table 6-4a may be used when the:

- a. estimated total net coniferous volume of timber on each cutblock is comprised of 80% or more Burnt Timber¹ (Burnt Timber means any trees that meet the definition of Fire Codes A, B or C as per the Cruising Manual), and
 - b. the burnt timber is evenly distributed throughout the cutblock(s).
4. All blanket salvage cutting authorities are scale based for billing.
 5. A stumpage rate determined under this section must be re-determined **semi-annually** on June 1st and **December 15th** in accordance with this section.
 6. The bonus bid if applicable will be added to the stumpage rate determined under subsection 4.

6.4.3 Cruise Based Salvage Cutting Authorities

1. This section may apply to cutting authorities entered into under a Timber Sale Licence or issued under licences with an allowable annual cut or maximum harvest volume; excluding Community Forest Agreements in section 6.1.1, Woodlots Licences in section 6.1.2, or any timber in the Research Forests noted in Table 6-7.
2. The primary purpose for the cutting authority must be the removal of Mountain Pine Beetle (MPB) attacked Lodgepole pine where:
 - a. The estimated total net coniferous volume of timber on each cutblock for the cutting authority area is comprised of 75% or more grey MPB attacked Lodgepole pine²; and
 - b. The conifer species other than Lodgepole pine must be evenly distributed throughout each cutblock.
3. The stand-as-a-whole stumpage rate on the cutting authority area is the greater of:
 - a. Stumpage rate

$$= \text{BASE RATE} - [1.602 * (\text{CYCLE} + (0.5 * \text{CYCLE_INC6})) + 5.673 * \text{ZONE 9} + (0.03722 * \text{ISOLATED} * (\text{DISTANCE} - 100))] * \text{CPIF} - [\text{SO's} * (\text{CPI/ACPI}) / (1 - \text{LG})]$$

Where:

BASE RATE = Rate indicated in Table 6-6 for the Forest Zone in which the cutting authority is located.

CYCLE = as defined and measured in accordance with section 3.2.13.

CYCLE_INC6, = as defined in section 3.2

¹ Eighty (80) percent or more of the estimated total net coniferous volume defined as burnt timber in each cutblock, based on a professional estimate by a forest professional registered with the Association of BC Forest Professionals. The professional estimate must include a description and supporting information of how the estimate was generated.

² Seventy-five (75) percent or more of the estimated total net coniferous volume defined as grey attack in each cutblock, based on a professional estimate by a forest professional registered with the Association of BC Forest Professionals. The professional estimate must include a description and supporting information of how the estimate was generated.

ZONE 9,
ISOLATED,
DISTANCE,
CPI and CPIF

SO's = the sum of the transportation specified operations that apply to the transportation route from section 3.3.

LG = as defined in section 3.4

ACPI = as defined in section 3.4; or

b. The prescribed minimum stumpage rate.

Table 6-6: Base Rate* for Cruise Based Salvage Cutting Authorities by Forest Zone

FOREST ZONE	BASE RATE**(\$/m ³)	TSL BASE RATE***(\$/m ³)
North Central	2.42	16.94
North East	2.42	16.94
North West	2.42	16.94
South Central	2.66	19.35
South East	0.43	26.07
South West	1.90	17.05

* Rate prior to adjustments for transportation, *isolated* and zone 9

** The Base Rate for cutting authorities issued under licences with an allowable annual cut or maximum harvest volume

*** The Base Rate for cutting authorities entered into under a Timber Sale Licence

4. All cruise-based salvage cutting authorities under this section are cruise based for billing.
5. The net merchantable volume per hectare for the cutting authority area must be determined using the method described in section 2.9.1 of the *Cruising Manual*.
6. The total net merchantable volume is equal to the net merchantable area multiplied by the net merchantable volume per hectare.
7. A stumpage rate determined under this section must be re-determined on the 1st day of the month following the month in which this section is updated with a new cruise-based salvage equation. As per section 5.1(5), this does not apply to cutting authorities entered into under a Timber Sale Licence.

6.4.4 BCTS Salvage Timber Sale Licence

1. This section may apply to cutting authorities entered into under a Timber Sale Licence.
2. Cutblocks must be consistent with the requirements in subsection 6.4.2 (3) for blanket salvage cutting authorities.
3. The BCTS salvage upset rate (section 5.1.1(3)) is the average stumpage rate, weighted by the estimated volume of each species in the cutting authority, indicated in Table 6-4 for the forest zone in which the cutting authority area is located. The stumpage rates in Table 6-4a may be used when the:
 - a. estimated total net coniferous volume of timber on each cutblock is comprised of 80% or more Burnt Timber¹ (Burnt timber means any trees that meet the definition of Fire Codes A, B or C as per the Cruising Manual), and
 - b. the burnt timber is evenly distributed throughout the cutblock(s).
4. All BCTS salvage timber sale licences are scale based for billing.
5. A stumpage rate determined under this section is fixed for the term and all extensions.

¹ Eighty (80) percent or more of the estimated total net coniferous volume defined as burnt timber in each cutblock, based on a professional estimate by a forest professional registered with the Association of BC Forest Professionals. The professional estimate must include a description and supporting information of how the estimate was generated.

6.5 Decked and Partially Harvested Timber for a non-BCTS Cutting Authority

1. When decked timber only is advertised for sale to the highest bidder, the upset stumpage rate for the timber must be the total of the silviculture levy determined under section 5.3 and:
 - a. The prescribed minimum stumpage rate if the timber has been decked for over three years, or
 - b. 70% of the stumpage rate from Table 6-4 for the applicable species and forest zone if the timber has been decked for three years or less.
2. When decked timber only is sold directly without the use of the competitive bidding process, the stumpage rate for the timber must be the total of the silviculture levy determined under section 5.3 and:
 - a. The variable cost to prepare the timber for sale if the timber has been decked for over three years, or
 - b. The stumpage rate from Table 6-4 for the applicable species and forest zone if the timber has been decked for three years or less.
3. When partially harvested timber only is advertised for sale to the highest bidder the upset stumpage rate for the timber must be the total of the silviculture levy determined under section 5.3 and:
 - a. The prescribed minimum stumpage rate, if three years or more have passed since the timber was felled, or
 - b. 70% of the stumpage rate for the applicable species and forest zone from Table 6-5 if less than three years have passed since the timber was felled.
4. When partially harvested timber only is sold directly without the use of the competitive bidding process, the stumpage rate for the timber must be the total of the silviculture levy determined under section 5.3 and:
 - a. The variable cost to prepare the timber for sale if three years or more have passed since the timber was felled, or
 - b. The stumpage rate from Table 6-5 for the applicable species and forest zone if less than three years have passed since the timber was felled.
5.
 - a. Where applications for decked timber or partially harvested timber being sold to the highest bidder have been invited with an upset stumpage rate determined under subsections 1(b), 3(b) or 6(a) of this section and no applications have been received, the upset stumpage rate must be the rate approved by the Regional Manager.
 - b. Where the regional manager does not anticipate that applications will be received for decked timber or partially harvested timber being sold to the highest bidder due to market conditions or timber profile, the upset stumpage rate determined under subsections 1(b), 3(b) and 6(a) of this section must be the rate approved by the regional manager.
 - c. An upset stumpage rate determined under paragraphs (a) or (b) of this subsection

must not be less than the district's variable cost to prepare the timber for sale.

6. a. Where applications for a forestry licence to cut that applies to both decked timber and partially harvested timber have been invited, the upset stumpage rate must be the total of the rate determined using the procedures in subsection (1) of this section, as if the timber was all decked timber and the silviculture levy determined under section 5.3.
 - b. Where a forestry licence to cut that applies to both decked timber and partially harvested timber is entered into directly without the use of the competitive bidding process the stumpage rate must be the total of the rate determined using the procedure in subsection 2 of this section as if the timber was all decked timber and the silviculture levy determined under section 5.3.
7. Where the upset stumpage rate or the stumpage rate has been determined using this section the total stumpage rate must be fixed for the term of the cutting authority and all extensions.
 8. An upset stumpage rate calculated under this section must be calculated using the *Interior Appraisal Manual* in effect on the date that the rate is determined (appraisal effective date).

6.6 Miscellaneous Stumpage Rates

1. Unless otherwise specified in this manual, the stumpage rates, at the time of scale for timber harvested for the purposes described, in the districts listed, in the forest district specific section of Table 6-7 are as prescribed in that table. This table does not apply to cruise based cutting authorities.
2. Special Forest Product (SFP) Codes are described in the Special Forest Products Regulation under the Act.
3. For SFP codes CH and HF, where the post-harvest material is removed under a tenure different from the original cruise based cutting authority, a waste assessment is not required.

Table 6-7: Miscellaneous Stumpage Rates

All Interior Forest Regions

Species	SFP Code	Product	Reserve Stumpage Rate
All Species	SB	Shake & Shingle Bolts, Blocks and Blanks	\$5.30/m ³
All Species	SK	Shakes	\$6.00/m ³
Cedar	PR	Posts & Rails (Split and Round)	\$3.00/m ³
All other Species	PR	Posts & Rails (Split and Round)	\$1.20/m ³
All Species	MT	Mining Timbers	\$3.00/m ³
All Species	FW	Firewood	\$0.50/m ³
Yew		All	\$0.25/m ³
All Species	CH	Wood chips from post-harvest material where a waste assessment has been made	\$0.25/m ³
All Species	HF	Hogged tree material from post-harvest material where a waste assessment has been made	\$0.25/m ³
All Species		Grades 4 and 6, except where the upset stumpage rate is determined under section 6.2.1(1)(a) and (b) and 5.1.1(4)	\$0.25/m ³
Deciduous Species		All, except grades 4 and 6 and except where the upset stumpage rate is calculated under section 6.2.1(1)(a) and (b) and 5.1.1(4)	\$0.50/m ³
All Species	SS	Stakes & Sticks	\$1.20/m ³
All Species	XM	Christmas Tree Length:	under 3m 3-5 m over 5 m \$0.20/each \$1.00/each \$1.50/each
All Species	CA	Cants (produced from dead and down post-logging residue)	\$3.00/m ³
All Species		Logs salvaged below the high-water levels of Reservoir Lakes and the Shuswap, Slocan, Kootenay, Mineral, and Babine Lakes	\$0.25/m ³
All Species		Marine Beachcomb	\$0.70/m ³
All Coniferous		For logs harvested from the following Research Forests: Alex Fraser (UBC), Aleza Lake (UBC and UNBC), College of New Caledonia (CNC), and Fort St. James (UNBC)	\$0.25/m ³
All Species		Firmwood Reject (Grade code Z)	NIL

All Coniferous	Commercial thinning refers to an intermediate harvest with regard to even-aged stand management with: <ul style="list-style-type: none"> • Commercial thin stocking standards incorporated in a Forest Stewardship plan, • Stand age less than 45 years old; and • Residual stand left in a healthy, productive condition 	\$0.25/m ³
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District/TSA Specific

Description of Activity	Forest District	Reserve Stumpage Rate
New Crown land area disturbed for mining exploration trails, Seismic lines, gas or oil well sites and right-of-way to well sites or, authorizations for investigative purposes issued under the Land Act	Ft. Nelson	\$ 1,384/ha
	Mackenzie	\$ 1,221/ha
	Peace	\$ 1,325/ha
	Rocky Mountain	\$ 2,014/ha

4. For Seismic lines, the corresponding district reserve stumpage rate from the above table is adjusted according to the category of line clearing as follows:
 - a. Category 1 - no adjustment
 - b. Category 2 - 1/2 of the reserve stumpage rate
 - c. Category 3 - 1/3 of the reserve stumpage rate
5. For Seismic lines, the gross area for each category reported as new line on either:
 - a. the Oil and Gas Commission's Geophysical Final Plan cover sheet; or
 - b. an As Cleared Plan
 is multiplied by the reserve stumpage rate as adjusted in subsection (4) above. Refer to Appendix V for category definitions.
6. For gas or oil well sites and right-of-way to well sites (pipeline rights-of-way) a stumpage rate must be determined by using the above rates for cutting authorities containing 2000 m³ or less, of merchantable coniferous volume. For pipeline rights-of-way cutting authorities greater than 2000 m³ use section 6.7.

6.7 Specific Licences to Cut

1. This section applies to:
 - a. Master licences to cut,
 - b. Occupant licences to cut, and
 - c. Forestry licences to cut:
 - i. Issued under section 47.6(3) of the *Act* in conjunction with an activity funded out of the BCTS account,
 - ii. Issued in conjunction with a works contract other than BCTS or issued for a fence line or protection of a fence line administered under the *Range Act*.
2. This section does not apply to:
 - a. Cutting authorities issued for any of the activities listed in Table 6-7 that have an area reserve stumpage rate in the following districts: Fort Nelson, Peace, Mackenzie, or Rocky Mountain, or
 - b. The proposed Site C reservoir and dam site, or
 - c. Projects where cruising of the timber to be harvested on any tenure listed in subsection (1) has been initiated for use in a full appraisal prior to November 1, 2013, or
 - d. Cutting authorities issued within a Controlled Recreational Area.
3. Unless otherwise directed by the Minister under section 2.2.4, the stumpage rate for any tenure listed in subsection (1) issued on or after November 1, 2013, must be the stumpage rate **excluding silviculture costs** prescribed in Table 6-3 for the smaller of the area of the forest district, timber supply area, region, or Area in which the entire cutting authority area for the tenure is located.
4. Where the timber felled on the cutting authority area of any tenure listed in subsection (1) will not be removed from the site the volume used for billing may be estimated using an alternate method of scale approved by the Minister.
5. Except as provided under paragraph (7) of this section, the stumpage rate determined under this section will be re-determined annually on June 1st.
6. The stumpage rate determined under this section for a forestry licence to cut issued under section 47.6(3) of the *Act* is fixed for the term and all extensions.

6.8 Controlled Recreation Areas (CRAs)

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

6.9 Cruise Based Stumpage Calculations

1. Pursuant to section 106 of the *Forest Act*, and subject to subsection 2 of this section, the amount of stumpage payable on Crown timber will be calculated using information provided by a cruise of the timber before it is cut where the timber is authorized for harvest:
 - a. Under a cutting authority issued or entered into prior to June 1, 2010 where:
 - i. the stumpage rate is adjustable,
 - ii. the Total Net Coniferous Volume of timber on the cutting authority area is comprised of 35% or more red and grey Mountain Pine Beetle (MPB) attacked Lodgepole pine¹, and
 - iii. timber harvesting has not started on the cutting authority, or,
 - b. Under a cutting authority issued or entered into on or after June 1, 2010 where:
 - i. the stumpage rate is adjustable,
 - ii. the licensee applied for a cutting permit and submitted an ADS to the district manager before June 1, 2010, and,
 - iii. the Total Net Coniferous Volume of timber on the cutting authority area is comprised of 35% or more red and grey MPB attacked Lodgepole pine¹, or,
 - c. Under a cutting authority issued or entered into on or after June 1, 2010 where:
 - i. the stumpage rate is adjustable,
 - ii. the licensee submitted an ADS to the district manager on or after June 1, 2010, and
 - iii. the Total Net Coniferous Volume in each cutblock within the cutting authority area is comprised of 35% or more red and grey MPB attacked Lodgepole pine¹, or,
 - d. Under a timber sale licence with a fixed stumpage rate, which meets the criteria in paragraph (1)(c) (ii) and (iii) of this section, or a timber sale licence with a fixed stumpage rate where the executive director, BCTS has approved cruise based under section 106 of the *Act*, or
 - e. Under a cutting authority that meets the criteria of section 6.4.3.
2. Except as provided in subsections (3) of this section, and section 5.1.1 (4), the stumpage rate effective July 1, 2010 for a cutting authority where the stumpage payable is cruise based must be calculated as stand as a whole in accordance with the following:
 - a. the stumpage rate is determined using chapters 1, 2, 3, 4, 5, or section 6.4.3 of this manual,
 - b. the stumpage rate determined under paragraph (a) of this subsection must apply to

¹ The absolute fraction to the nearest 0.1% derived from dividing the sum of the Red and Grey attack volumes in each cutblock by the total net coniferous cruise volume in each cut block (both from the appraisal summary report from the cruise compilation).