



File: 280-20

Ref: 196729

April 30, 2013

To: Interior Executive Directors

From: Dave Peterson, A/Deputy Minister of Forests, Lands and Natural Resource Operations

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

I hereby approve Amendment No. 3 to the *Interior Appraisal Manual* and attach a copy for your use.

The following sections have been amended:

Section 4.3.3 (10)(b) The reference to the PST is updated.

Section 6.1 The coniferous average sawlog stumpage rates in Tables 6-1 are updated.

Section 6.1.2 The coniferous average sawlog stumpage rates in Tables 6-2 are updated.

Section 6.3 The coniferous average sawlog stumpage rates in Table 6-3 are updated.

Section 6.4 The coniferous average sawlog stumpage rates in Tables 6-4 and 6-5 are updated.

This amendment will come into force on May 1, 2013. Further amendments or revisions to this manual require my approval, or that of the Minister.

Dave Peterson  
A/Deputy Minister

Attachment

pc: Murray Stech, Director, Timber Pricing Branch  
Grant Loeb, Manager Timber Pricing, Timber Pricing Branch  
Vicky Groves, A/Forest Revenue Manager, Thompson Okanagan Region  
Shawn Rice, Team Leader Revenue, Omineca Region





**MANUAL REVISION  
TRANSMITTAL**

<p>FOR FURTHER INFORMATION OR IF YOU HAVE A CHANGE OF ADDRESS, PLEASE CONTACT:</p> <p>Bob Bull Senior Timber Pricing Forester (Interior) Timber Pricing Branch Ministry of Forests, Lands and Natural Resource Operations 1<sup>st</sup> Floor, 1520 Blanshard Street Victoria, BC V8W 3K1</p> <p>Phone: 250 – 356 – 7709 Email: Bob.Bull@gov.bc.ca FAX: 250 - 387-8393</p>	<b>MANUAL TITLE</b>	
	Interior Appraisal Manual	
	<b>AMENDMENT</b>	<b>ISSUE DATE</b>
	Amendment No. 3	May 1, 2013
	<b>MANUAL CO-ORDINATOR</b>	
	Ashley Sasaki Publication/Administrative Co-ordinator	
	<b>AUTHORIZATION</b>	
	Murray Stech Director, Timber Pricing Branch	

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

ACTION (Remove/Insert)	(VOL.) CHAPTER-SECTION-SUBJECT  TABLE OF CONTENTS	PAGE(S)	COMMENTS
Remove  Insert	Chapter 4	21-22	After Chapter 4 Tab
Remove  Insert	Chapter 6	1-4 7-12	After Chapter 6 Tab
INSERT	Memorandum from Minister and Transmittal Sheet		After Amendments Tab



estimate of costs of materials; equipment and labour or ministry approved competitive bid pricing; amount of timber accessed by the structure and the number of years of use for harvesting all timber are required.

10. Costs that may be included in the detailed engineered cost estimate are:

- a. Freight (for materials).
- b. Provincial sales tax if applicable (for materials purchased prior to July 1, 2010 and on or after April 1, 2013).
- c. Supervision of construction of complex structures by a professional engineer.
- d. Bridge Costs
  - i. In addition to other costs described in this section, bridge costs may include:
    - Crib back fills to a maximum distance of 15 m on either end.
    - Site preparation.
    - Protection features such as rip rap.
    - Material and equipment supply and delivery (subject to paragraphs (ii) and (iii) in this subsection).
    - Bridge certification by a professional engineer either employed by the licensee or contracted. A maximum of three field visits are permitted unless otherwise approved by the regional timber pricing co-ordinator.
  - ii. Where bridge materials are re-used by the original purchaser at a different site, the bridge cost estimate may include the cost of dismantling the materials at the site where they were previously used, and transportation to and installation at the different site, but may not include the initial materials and delivery costs.
  - iii. Where used bridge materials are purchased by the licensee from a legally non-associated party, only the cost of purchasing and transporting those materials approved by the person determining the stumpage rate may be included in the bridge cost estimate in addition to the costs listed above.
- e. Site plans, designs and layouts.
- f. Where equipment is not, or will not be already on site for adjoining tabular road, bridge or culvert construction, then the costs of mob and demob may be included in the engineered cost estimate.

11. GST/HST and supervision costs other than as stated above, are not to be included in the engineered estimate.
12. Where different timber volumes are used for separate cost estimates, the unit costs are rounded to the nearest cent before totalling.

#### 4.3.3.1 Trending of Detailed Engineering Costs

1. All detailed engineering costs must be adjusted to match the cost base of the manual in effect at the time of the appraisal or reappraisal (refer to Table 4-3). This includes development costs in apportionment agreements, ministry approved competitive bid tenders, and ECE's prepared using Appendix I.
2. ECE Cost Year means:
  - a. For ECEs (or portion(s) thereof) which are calculated using this manual, the ECE Cost Year is 2010.
  - b. For ECEs (or portions(s) thereof) which are calculated using tenders, materials costs, design and survey costs, etc. the year the costs are based on or incurred is the ECE Cost Year.
  - c. Where all components of an ECE have a common ECE Cost Year, the trend factor can be directly determined from Table 4-3.
  - d. For new or re-estimated (section 2.2(3)) ECEs where components of an ECE have different ECE Cost Years, it is necessary to trend all components to the Cost Base Year of the manual in effect at the time (based on the effective date of the cutting authority). The Cost Base Year then becomes the ECE Cost Year for future trending.

# Miscellaneous Policies

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**6**

## 6.1 Coniferous Average Sawlog Stumpage Rates by Forest Zone and Species

1. a. Each of the following forest zones referred to in Tables 6-1, 6-2, 6-4 and 6-5 is made up of the following forest districts:
  - i. North Central Zone - Fort St. James, Mackenzie, Nadina, Prince George, Quesnel and Vanderhoof Forest Districts.
  - ii. North East Zone - Fort Nelson and Peace Forest Districts.
  - iii. North West Zone - Kalum and Skeena Stikine Forest Districts.
  - iv. South East Zone - Arrow Boundary, Columbia, Headwaters, Kamloops, Kootenay Lake, Okanagan Shuswap and Rocky Mountain Forest Districts.
  - v. South West Zone - 100 Mile House, Cascades, Central Cariboo and Chilcotin Forest Districts.
- b. Where a species of coniferous timber is not listed in Table 6-1, 6-2, 6-4 and 6-5, the rate that shall be used for that species of timber is the rate listed in the column headed as OTHER.

**Table 6-1 Coniferous Average Sawlog Stumpage Rates in \$/m<sup>3</sup> by Forest Zone and Species**

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	Y. PINE	OTHER <sup>1</sup>
North Central	<u>8.91</u>	-	<u>13.11</u>	-	-	<u>6.92</u>	<u>11.05</u>	-	<u>9.85</u>
North East	<u>2.58</u>	-	-	-	-	<u>3.36</u>	<u>4.37</u>	-	<u>3.98</u>
North West	<u>4.49</u>	<u>3.69</u>	-	<u>3.74</u>	-	<u>6.99</u>	<u>4.10</u>	-	<u>4.92</u>
South East	<u>8.45</u>	<u>14.13</u>	<u>11.63</u>	<u>9.92</u>	<u>11.39</u>	<u>9.14</u>	<u>8.78</u>	<u>10.42</u>	<u>9.94</u>
South West	<u>9.84</u>	-	<u>11.23</u>	<u>9.89</u>	-	<u>11.25</u>	<u>9.65</u>	-	<u>10.66</u>

<sup>1</sup> Average for the Forest Zone



**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. Sections 1.4(1)(d), sections 6.1.2 through 6.5 and section 6.7 through 6.9 of this chapter do not apply to Community Forest Agreement cutting authorities.
3. The stumpage rate determined under this section is redetermined on August 1 of each year in accordance with this section.

**6.1.2 Woodlot Licences**

1. Except as provided in subsection (2) of this section, the sawlog stumpage rate for each species of coniferous timber harvested under a cutting permit issued for a woodlot licence with an effective date after November 30, 2008 is the rate prescribed in Table 6-2 for the forest zone in which the cutting authority area is located.
2. Where a woodlot licence cutting permit has been issued with an effective date after November 30, 2008 for the purpose of using amounts from an eligible extended road amortization agreement in an appraisal, then the stumpage rate will be determined using the procedures in this manual excluding this section.
3. Except as provided in subsection (4) of this section, the sawlog stumpage rate for coniferous timber harvested under a road permit issued for a woodlot licence is the rate prescribed in Table 6-2 for the forest zone in which the timber mark applies.
4. Where a woodlot has an eligible extended road amortization agreement before December 1, 2008 the sawlog stumpage rate for a road permit with an effective date on or after December 1, 2008 is calculated using the procedures in section 6.3.
5. The sawlog stumpage rate for each species of coniferous timber harvested under a blanket salvage permit issued for a woodlot licence is the rate prescribed in Table 6-2 for the forest zone in which the blanket salvage permit applies.
6. The stumpage rate determined under subsections (1), (3) and (5) of this section is redetermined on August 1, each year in accordance with this section.
7. Except as provided in subsections (2) and (4) of this section, sections 1.4(1)(d), 6.1.1, 6.1.3 through 6.5, 6.7 and 6.8 do not apply to woodlot licences.

**Table 6-2 Community Forest Agreements and Woodlot Licences:  
Coniferous Average Sawlog Stumpage Rates in \$/m<sup>3</sup>**

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	Y. PINE	OTHER <sup>1</sup>
North Central	<u>1.34</u>	-	<u>1.97</u>	-	-	<u>1.04</u>	<u>1.66</u>	-	<u>1.48</u>
North East	<u>0.39</u>	-	-	-	-	<u>0.50</u>	<u>0.66</u>	-	<u>0.60</u>
North West	<u>0.67</u>	<u>0.55</u>	-	<u>0.56</u>	-	<u>1.05</u>	<u>0.62</u>	-	<u>0.74</u>
South East	<u>1.27</u>	<u>2.12</u>	<u>1.74</u>	<u>1.49</u>	<u>1.71</u>	<u>1.37</u>	<u>1.32</u>	<u>1.56</u>	<u>1.49</u>
South West	<u>1.48</u>	-	<u>1.68</u>	<u>1.48</u>	-	<u>1.69</u>	<u>1.45</u>	-	<u>1.60</u>

<sup>1</sup> Average for the Forest Zone

### 6.1.3 Incidental Conifer in Deciduous Leading Stands

1. Except as provided in section 5.1.1(5), this section applies to coniferous timber in a cutting authority area where the total volume of all deciduous species to be harvested is greater than 70% of the total estimated net volume to be harvested.
2.
  - a. The stumpage rate for each species of coniferous timber must be determined by using the stumpage rate prescribed in Table 6-1 for the forest zone in which the cutting authority area is located.
  - b. Where the Crown is responsible for basic silviculture on the cutting authority area, the stumpage rate for each species of coniferous timber shall be the sum of the rate determined under paragraph (a) of this subsection and the silviculture levy determined under section 5.2.4.
3. A stumpage rate determined under subsection 2 shall be redetermined on June 1, of each year in accordance with this section.
4. Notwithstanding subsection (2) in this section, the stumpage rate may be determined through a full appraisal in accordance with chapters 1, 2, 3, 4, and 5.

roadside after a waste assessment has been made.

Then, the upset stumpage rate shall be the rate approved by the Regional Manager.

- b. Where the invitation for applications for a forestry licence to cut awarded to the highest bidder referred to in paragraph (a) of this subsection requires a bonus offer, and the amount of stumpage payable will be based on a cruise instead of a scale of the timber under section 106 of the *Act*, the upset stumpage rate shall be the rate approved by the Regional Manager, and shall apply to the net merchantable volume on the cutting authority area.
  - c. Where the forestry licence to cut is issued without competition for the purposes described in paragraph (a)(i) of this section the sawlog stumpage rate for such species of coniferous timber shall 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 on the cutting authority area is damaged timber as defined in section 6.4(3) then 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 (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 (a)(ii) of this section, the coniferous sawlog stumpage rate shall be \$1.20/m<sup>3</sup> when the licence to cut is issued to the lowest eligible bidder on a contract issued for the purpose referred to in paragraph (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 shall be the rate from Table 6.6.
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 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 as provided in section 2.2.2, 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 and Blanket Salvage Permits**

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. Except as provided in 6.1.1, 6.1.2(3) and (5) and subsections (3) and (4) and (5) of this section and for all timber in the Research Forests noted in Table 6-6 the stumpage rate for a road permit or a blanket salvage permit shall be the weighted average sawlog stumpage rate:
  - a. from the table provided to the regions by Timber Pricing Branch for all cutting authorities, authorizing harvesting on cutting authority areas that have been fully appraised, that authorize the harvesting of timber in the same forest district in which the road or blanket salvage permit cutting authority area is located, and that are issued under the licence that entitles the licensee to apply for the road or blanket salvage permit, if there is a minimum positive scaled based billed volume of 500 cubic metres of coniferous sawlogs from which the weighted average sawlog stumpage rate may be determined, or
  - b. the stumpage rate is the stumpage rate prescribed in Table 6-3 for the smaller of the area of the same forest district or the area of the same timber supply area in which the road permit or blanket salvage permit cutting authority area is located.
3. The bonus bid if applicable will be added to the stumpage rate determined under subsection 2(b).

**Table 6-3 Coniferous Average Sawlog Stumpage Rates by Smallest Geographic Unit**

<b>TSA is Smallest Geographic Unit</b>			
<b>District</b>	<b>Rate (\$/m<sup>3</sup>)</b>	<b>TSA</b>	<b>Rate (\$/m<sup>3</sup>)</b>
Arrow Boundary	<u>11.55</u>	Arrow	<u>13.64</u>
		Boundary	<u>8.79</u>
		Cascadia Blks 1, 2, 3	<u>13.64</u>
Cascades	<u>10.66</u>	Lillooet	<u>1.07</u>
		Merritt	<u>11.73</u>
Columbia	<u>5.16</u>	<u>Cascadia Bk 4</u>	<u>5.39</u>
		Golden	<u>4.96</u>
		Revelstoke	<u>5.39</u>
Headwaters	<u>8.46</u>	Robson Valley	<u>1.93</u>
Kalum	<u>2.76</u>	Cascadia Blks 9, 10, 11	<u>2.79</u>
		Kalum	<u>2.79</u>
		Nass	<u>0.25</u>
		Pacific Blks 28A, 28B	<u>2.79</u>
Nadina	<u>5.53</u>	Lakes	<u>1.33</u>
		Morice	<u>5.58</u>
Peace	<u>3.98</u>	Dawson Creek	<u>3.08</u>
		Fort St John	<u>4.68</u>
<u>Quesnel</u>	<u>8.20</u>	<u>Cascadia Bks 5,6,7,8</u>	<u>8.20</u>
		<u>Quesnel</u>	<u>8.20</u>
Rocky Mountain	<u>6.49</u>	Cranbrook	<u>7.11</u>
		Invermere	<u>5.14</u>
Skeena Stikine	<u>6.17</u>	Bulkley	<u>8.57</u>
		Cassiar	<u>0.71</u>
		Kispiox	<u>8.58</u>

<b>District is Smallest Unit</b>			
<b>TSA</b>	<b>Rate (\$/m<sup>3</sup>)</b>	<b>District</b>	<b>Rate (\$/m<sup>3</sup>)</b>
Kamloops	<u>8.45</u>	Headwaters	<u>8.46</u>
		Kamloops	<u>8.13</u>
Prince George	<u>12.98</u>	Fort St. James	<u>8.83</u>
		Prince George	<u>14.57</u>
		Vanderhoof	<u>5.03</u>
Williams Lake	<u>12.24</u>	Central Cariboo	<u>13.17</u>
		Chilcotin	<u>0.25</u>

<b>District &amp; TSA are the same</b>		
<b>District</b>	<b>TSA</b>	<b>Rate (\$/m<sup>3</sup>)</b>
Fort Nelson	Fort Nelson	<u>8.08*</u>
Kootenay Lake	Kootenay Lake	<u>9.43</u>
Mackenzie	Mackenzie	<u>5.08</u>
Okanagan Shuswap	Okanagan	<u>13.30</u>
100 Mile House	100 Mile House	<u>6.93</u>

\* Regional rate

Regions	
Region	Rate (\$/m <sup>3</sup> )
RNI	<u>8.08</u>
RSI	<u>9.97</u>

4. If there are no records from which the weighted average sawlog stumpage rate may be determined under paragraphs (a) or (b) of subsection (2) of this section, then the stumpage rate, for each species of coniferous timber, is the rate in Table 6-1 for the forest zone in which the road or blanket salvage permit cutting authority area is located.
5. a. The total stumpage rate (\$/m<sup>3</sup>) for a road permit granted to the holder of a timber sale licence entered into under section 20 of the *Act* shall be the same as the total stumpage rate for the timber sale licence which entitled the holder to apply for the road permit.
  - b. The total stumpage value (\$/ha) for a road permit granted to the holder of cruise based timber sale licence entered into under section 20 of the *Act* shall be the same as the total stumpage value of the timber sale licence which entitled the holder to apply for the road permit.
6. The stumpage rate for a road permit for a licence other than a BCTS licence shall be redetermined on June 1 of each year in accordance with the procedure in this section.
7. The costs of roads authorized for construction under road permits are eligible for inclusion as development cost estimates under section 4.3 in the appraisal of the licensees' first fully appraised tributary cutting authority. These roads will not be considered as existing roads under section 4.3.1.3(1).
8. 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.
9. The stumpage rate for a blanket salvage cutting permit shall be redetermined on June 1 each year in accordance with the procedures in this section.
10. Except as provided in 6.3(5), all new Road and Blanket Salvage Permits must be scale based for billing.

## **6.4 Salvage Timber Stumpage Rates**

1. This section applies to cutting authorities issued under licences which do not have an allowable annual cut. Salvaged timber is either post harvest material or damaged timber:
2. Post Harvest Material is either:
  - a. wooden culverts and bridges, or
  - b. post logging residue.
3. Damaged Timber is timber that:
  - a. Has been blown down,
  - b. Has been damaged by fire, disease, snow press, or
  - c. Will die within one year, as determined by the district manager, as a result of the affects of the mountain pine beetle, or other forest pests.
  - d. Will be or has been used for trap trees and associated overflow trees.
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. Except as provided in subsection (4)(d) of this section the total area of a clearcut salvage harvesting area shall not exceed 5 hectares.
  - d. Where salvage of only damaged stems through partial cutting will leave a stand that meets minimum stocking standards, the area harvested may be larger than 5 hectares.
  - e. Salvage logging stumpage rates may only be determined for a cutting authority where more than one-third of the total volume of coniferous timber to be harvested in the cutting authority area is damaged timber.
  - f. Post harvest salvage may only occur after primary logging has been satisfactorily completed and residue and waste assessments have been submitted to and accepted by the Ministry.

- g. Salvage cannot occur on a road right-of-way which has an active timber mark associated with it.
- h. Except as provided in section 2.2.2, a stumpage rate determined under this section is fixed for the term of the cutting authority and all extensions.
5. Where salvaged timber is damaged timber, the sawlog stumpage rate for each species of coniferous timber shall be the rate in Table 6-4 for the Forest Zone in which the cutting authority area is located.
6. Where the salvaged timber is post harvest material, the sawlog stumpage rate for each species of coniferous timber shall be 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 by Forest Zone and Species in \$/m<sup>3</sup>**

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	Y. PINE	OTHER <sup>1</sup>
North Central	<u>5.35</u>	-	<u>11.80</u>	-	-	<u>5.19</u>	<u>9.95</u>	-	<u>5.91</u>
North East	<u>1.55</u>	-	-	-	-	<u>2.52</u>	<u>3.93</u>	-	<u>2.39</u>
North West	<u>2.69</u>	<u>3.32</u>	-	<u>2.24</u>	-	<u>5.24</u>	<u>3.69</u>	-	<u>2.95</u>
South East	<u>5.07</u>	<u>12.72</u>	<u>10.47</u>	<u>5.95</u>	<u>10.25</u>	<u>6.86</u>	<u>7.90</u>	<u>7.82</u>	<u>5.96</u>
South West	<u>5.90</u>	-	<u>10.11</u>	<u>5.93</u>	-	<u>8.44</u>	<u>8.69</u>	-	<u>6.40</u>

<sup>1</sup> Average for the Forest Zone

**Table 6-5 Coniferous Average Sawlog Stumpage Rates for Salvage of Post Harvest Material by Forest Zone and Species in \$/m<sup>3</sup>**

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	Y. PINE	OTHER <sup>1</sup>
North Central	<u>2.23</u>	-	<u>6.56</u>	-	-	<u>3.46</u>	<u>5.53</u>	-	<u>2.46</u>
North East	<u>0.65</u>	-	-	-	-	<u>1.68</u>	<u>2.19</u>	-	<u>1.00</u>
North West	<u>1.12</u>	<u>2.95</u>	-	<u>0.94</u>	-	<u>3.50</u>	<u>2.05</u>	-	<u>1.23</u>
South East	<u>2.11</u>	<u>11.30</u>	<u>5.82</u>	<u>2.48</u>	<u>5.70</u>	<u>4.57</u>	<u>4.39</u>	<u>5.21</u>	<u>2.49</u>
South West	<u>2.46</u>	-	<u>5.62</u>	<u>2.47</u>	-	<u>5.63</u>	<u>4.83</u>	-	<u>2.67</u>

<sup>1</sup> Average for the Forest Zone