

File: 280-20

AUG 31 2004**BY EMAIL**

To: Interior Regional Managers

From: The Honourable Michael de Jong
Minister of Forests**Re: Amendment No. 12 to the *Interior Appraisal Manual***

I hereby approve Amendment No. 12 to the *Interior Appraisal Manual* and attach a copy for your use. The following changes have been made:

- Section 2.3.2.2: Annual Reappraisal for Road Permits and Blanket Salvage Cutting Permits. This subsection is revised such that the expiry date for blanket salvage permits that existed prior to September 1, 2004, may be extended until April 30, 2005.
- Section 4.2.2: Appraisal Data Submission. A new subsection is added addressing the change over to the electronic submission of appraisal data to the ministry. The Electronic Commerce Appraisal System is specified as the form acceptable for submitting appraisal data and the previous paper data sheet and process is discontinued.
- Section 4.3.2.2 Subgrade Construction Variables. The definitions for operational, block and snow/ice roads in Subsection 2 are revised. Subsection 4 now includes a definition for large boulders.
- Section 4.11: Cost Trend. This change adds a trend factor for logging, silviculture and manufacturing costs in appraisals with effective dates between October 1, 2004, and December 31, 2004, to each of the trend factor tables.
- Section 6.2.1.a.ii: Cutting Authorities with 5,000 m³ or Less Volume. This subsection is revised to address the inherent silviculture cost estimate in the tabular average saw log stumpage rates by region and species where there is no silviculture liability for the licensee or the Crown.



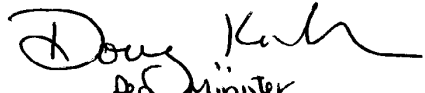
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Interior Regional Managers

Table 6-4: Miscellaneous Stumpage Rates. The existing district specific seismic clearing rates have been revised and a fourth one for Mackenzie Forest District has been added.

Appendix IV: Map Content. Subsection (f) is revised for clarity.

This amendment will come into force on September 1, 2004. Further amendments or revisions to this manual require my approval.


Dep Minister
Michael de Jong
Minister of Forests

Attachment

pc: Bill Howard, Director, Revenue Branch

All Subscribers, *Interior Appraisal Manual*



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MANUAL TITLE

Interior Appraisal Manual

REVISION No.

Amendment No. 12

ISSUE DATE

September 1, 2004

MANUAL CO-ORDINATOR

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Revenue Branch

AUTHORIZATION (Name, Title)

W. Howard
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Please make the following changes to your copy of the above Ministry manual. Please insert the following specified pages and **file this notice** immediately after the Amendments Tab.

ACTION (Remove/Insert)	(VOL.) CHAPTER-SECTION-SUBJECT	PAGE(S)	COMMENTS
	TABLE OF CONTENTS		
REMOVE	Table of Contents	i - iv	After Table of Contents Tab
INSERT	Table of Contents	i - iv	
REMOVE	Chapter 2	5 - 6	After Chapter 2 Tab
INSERT	Chapter 2	5 - 6	
REMOVE	Chapter 4	5 - 6 11 - 14 55 - 58	After Chapter 4 Tab
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REMOVE	Chapter 6	3 - 4 13 - 14	After Chapter 6 Tab
INSERT	Chapter 6	3 - 4 13 - 14	
REMOVE	Appendices	A-9 - A-10	After Appendices Tab
INSERT	Appendices	A-9 - A-10	
REMOVE	Index	1 - 4	After Index Tab
INSERT	Index	1 - 4	
REMOVE	Data Sheet Tab and Data Sheets		After Index Tab
INSERT	Minister's Letter and Manual Revision Transmittal		After Amendments Tab

Table of Contents

1 Introduction

1.1 Conventions and Terms of Reference	1-2
1.1.1 Terms and Conventions.....	1-2
1.1.2 Terms of Reference	1-2
1.2 Area of Application.....	1-3
1.3 Cutting Authority	1-4
1.3.1 Cutting Authority Area.....	1-4
1.3.2 Cutblocks within a Cutting Authority Area	1-4
1.4 Responsibility for Stumpage	1-5
1.5 Market Pricing System	1-6
1.6 Comparative Value Timber Pricing	1-7
1.7 CVP Stumpage Adjustments.....	1-8

2 Appraisal Principles and Procedures

2.1 Types of Determination.....	2-2
2.2 Appraisal Procedure	2-3
2.3 Reappraisals	2-5
2.3.1 Changed Circumstances	2-5
2.3.2 Annual Reappraisal for Road Permits and Blanket Salvage Cutting Permits	2-6
2.3.3 Minister's Direction	2-6
2.3.4 Mathematical Error	2-6
2.4 Changed Circumstance Reappraisal Procedure.....	2-9
2.4.1 Effective Date of Changed Circumstance Reappraisal	2-10
2.4.2 Minister Directed Reappraisal Procedure.....	2-10
2.5 Fixed Stumpage Rate and Extension of Term.....	2-11
2.6 Point of Appraisal.....	2-13
2.6.1 Method of Transportation to be Used in Determining Point of Appraisal.....	2-14
2.7 Calculation Conventions	2-15

3 Interior Selling Prices

3.1 Lumber Average Market Values	3-2
3.1.1 Application of Lumber Average Market Values	3-4

3.1.2 Lumber Average Market Value Zones	3-4
3.2 Chip Average Market Values	3-5
3.3 Calculation of Species End Product Selling Price	3-6

4 Operating Cost Estimation

4.1 Cost Estimates	4-2
4.1.1 Specified Operations	4-3
4.2 Appraisal Data Requirements	4-4
4.2.1 Comparative Cruising	4-5
4.2.2 Appraisal Data Submission	4-5
4.3 Development	4-6
4.3.1 Development Cost Categories	4-7
4.3.1.1 Development Cost Allocation	4-9
4.3.1.1.1 Development Cost Estimates on Crown Lands	4-9
4.3.1.1.2 Development Cost Estimates for Full Appraisal on Timber Licence (TL) Cutting Authorities	4-10
4.3.1.1.3 Development Cost Estimates on Private Land	4-10
4.3.1.1.4 Existing Roads and Structures	4-10
4.3.1.1.5 Extended Road Amortization	4-11
4.3.2 Tabular Cost Estimates	4-11
4.3.2.1 Subgrade Construction	4-12
4.3.2.2 Subgrade Construction Variables	4-12
4.3.2.3 Subgrade Cost Estimate	4-14
4.3.2.4 Drainage Structures	4-17
4.3.2.5 Additional Stabilizing Material	4-19
4.3.2.6 Cattle Guards, Remedial Fences and Pipeline Crossings	4-21
4.3.3 Detailed Engineering Cost Estimates	4-21
4.3.3.1 Trending of Detailed Engineering Costs	4-24
4.4 Tree-to-Truck	4-25
4.4.1 Harvesting Methods	4-25
4.4.2 Tree-to-Truck Variables	4-26
4.4.3 Tree-to-truck Cost Estimate	4-30
4.4.4 Tree-to-Truck Additive for Damaged Timber	4-33
4.4.5 Prorating Tree-to-Truck Cost Estimates	4-34
4.5 Log Transportation	4-35
4.5.1 Truck Haul Variables	4-35
4.5.2 Truck Haul Cost Estimates	4-37
4.5.2.1 Primary Haul	4-37
4.5.2.2 Secondary Haul	4-38
4.5.3 Water Transportation Cost Estimate	4-39
4.5.4 Special Transportation Systems	4-39
4.6 Road Management	4-41
4.7 Road and Land Use Charges	4-44

4.8 Administration and Other Costs	4-45
4.8.1 Overhead	4-45
4.8.2 Isolated Cutting Authority Areas.....	4-46
4.8.3 Low Volume Cost Estimate	4-46
4.9 Basic Silviculture Cost Estimate	4-48
4.10 Manufacturing Cost Estimates	4-52
4.11 Cost Trend	4-55

5 Stumpage Rate Determination

5.1 Indicated Stumpage Rate (ISR)	5-2
5.2 Value Index	5-3
5.3 Interior Mean Value Index	5-4
5.4 Market Value Indexing.....	5-5
5.4.1 Converting Indexes From 1997=100 Base to 1992=100 Base.....	5-5
5.4.2 Calculating the Interior Composite Index (ICI)	5-5
5.4.3 Calculating the Interior Target Rate	5-5
5.5 Interior Base Rate (IBR).....	5-7
5.6 Calculation of Stumpage Rate.....	5-8
5.6.1 Calculation of Indicated Stumpage Rate	5-8
5.6.2 Prescribed Minimum Stumpage Rate.....	5-8
5.6.3 Reserve Stumpage Rate.....	5-8
5.6.4 Upset Stumpage Rate	5-8
5.6.5 Total Stumpage Rate	5-8

6 Miscellaneous Timber Pricing Policies

6.1 Average Stumpage Rates by Forest Zone and Species.....	6-2
6.2 Cutting Authorities With 5 000 m ³ or Less Volume.....	6-3
6.3 Right-of-way Cutting Authorities	6-5
6.4 Salvage Logging Stumpage Rates	6-6
6.5 Partially Harvested Timber	6-8
6.6 BC Timber Sales (BCTS).....	6-9
6.7 Levies (CVP only).....	6-10
6.8 Miscellaneous Stumpage Rates.....	6-11
6.8.1 Special Forest Products and Other Miscellaneous Rates	6-11
6.8.2 Miscellaneous Stumpage Rates for Timber Licences	6-13

7 Market Pricing System

7.1 MPS Introduction	7-2
7.2 MPS Principles and Procedures	7-3
7.2.1 MPS Appraisals.....	7-3

7.2.2 MPS Stumpage Adjustments.....	7-3
7.2.3 Reappraisals for MPS Appraisals.....	7-3
7.2.4 Methodology	7-3
7.3 MPS Selling Prices.....	7-5
7.3.1 MPS Lumber Average Market Values	7-5
7.3.2 Calculation of Species Lumber Selling Price.....	7-5
7.4 Market Stumpage Price Calculation.....	7-7
7.4.1 Market Stumpage Price Variables.....	7-7
7.4.2 Market Stumpage Price Equation.....	7-9
7.5 MPS Stumpage Rate.....	7-10
7.5.2 Upset Stumpage Rate Calculation.....	7-10
7.5.3 Prescribed Minimum Stumpage Rate.....	7-10
7.5.4 Total MPS Stumpage Rate	7-11
7.6 Deciduous and Miscellaneous Forest Products.....	7-12

Appendices

Appendix I Equipment and Labour Rates	A-2
Appendix II Development Cost Allocation.....	A-4
Appendix III Relative Soil Moisture to Absolute Soil Moisture Conversion Table	A-5
Appendix IV Map Content.....	A-10

Index

2.3 Reappraisals

1. A reappraisal is a process used to redetermine a stumpage rate for a cutting authority area using the *Interior Appraisal Manual* in effect on the effective date of the reappraisal.
2. A reappraisal is based on a complete reassessment of the cutting authority area at the time of the reappraisal, as if the area has been returned to the condition it was in prior to development or harvesting.
3. At the time of a reappraisal, initial detailed engineering cost estimates may be re-estimated once after construction utilizing information as specified in section 4.3.3. However, development costs originally estimated using ministry approved competitive bids are not re-estimated in a reappraisal.

2.3.1 Changed Circumstances

1. An adjustable stumpage rate cutting authority shall be reappraised when a changed circumstance has occurred. The licensee will make a request (including a revised appraisal data submission and map) to the district manager to carry out a reappraisal stating in the request the changed circumstance that has occurred. If the district manager determines that a changed circumstance has occurred and a licensee has not requested a reappraisal, the district manager will notify the licensee in writing that a reappraisal is required, stating the changed circumstance that has occurred. The regional manager must be satisfied that any of the following changed circumstances have occurred:
 - a.
 - (i) The licensee plans to use a method of harvest to harvest at least fifteen percent of the volume of timber in the cutting authority area that is different from the method planned to be used for that timber prior to the appraisal of the cutting authority area, and
 - (ii) the method of harvesting that will produce the appraisal least total operating cost estimate in the reappraisal is different from the method of harvesting that was used to produce the appraisal least total operating cost estimate in the appraisal, or
 - b. there will be at least a fifteen percent change in the total appraised development cost estimate due to changed site conditions upon reappraisal, or
 - c. land containing merchantable timber has been either added to or deleted from the cutting authority area since the most recent cruise compilation or recompilation was used in an appraisal or reappraisal that exceeds the lesser of
 - i. fifteen hectares, or

- ii. fifteen percent of the area of the cutting authority area as it was prior to the addition or deletion of the land, or
 - d. at least fifteen percent of the volume of the appraised timber in a cutting authority area has been suddenly and severely damaged, unless the timber was damaged by a fire for which the licensee was responsible and the licensee failed to comply with any of section 75 through 95 of the *Forest Practices Code of British Columbia Act* or the *Forest Fire Prevention and Suppression Regulation*. Despite subsection 2.3(2) where the cutting authority area is reappraised because of sudden and severe damage the redetermined stumpage rate is based upon the remaining timber only. The reappraisal cost estimate for development takes into account volume of timber already removed from the cutting authority area. This subsection is applicable to cutting authorities with either a non-adjusting (fixed) stumpage rate or a quarterly adjusted stumpage rate.
2. Where a cutting authority is reappraised under this section, any existing bonus bid remains in effect despite a redetermination of the upset rate.

2.3.2 Annual Reappraisal for Road Permits and Blanket Salvage Cutting Permits

1. A road permit must be appraised or reappraised effective June 1 of each year. The stumpage rate determined at the appraisal or reappraisal is fixed for one year.
2. A blanket salvage permit issued on or after September 1, 2004, must be reappraised at the anniversary date of the cutting authority. For blanket salvage permits issued prior to September 1, 2004, the appraisal expiry date may be extended to April 30, 2005.

2.3.3 Minister's Direction

1. The Minister of Forests may direct that a reappraisal be made at any time and that the redetermined stumpage rate be effective on any future date, and may specify criteria and procedures for the reappraisal.
2. A reappraisal directed by the Minister of Forests, may be a re-estimation of operating cost, lumber recovery factor, or selling price, or any combination of these, as may be directed by the Minister of Forests.

2.3.4 Mathematical Error

- a. If a government employee or contractor in the Ministry of Forests or a licensee (or employee or contractor of a licensee) becomes aware of what is or probably is a mathematical error in a stumpage determination, that person shall give written notice of the error ("the Notice") as follows:

The net cruise volume (m^3) is the gross volume (m^3) less decay, waste and breakage by species. The cutting authority total net cruise volume is calculated by multiplying the net cruise volume per hectare (m^3/ha) by the total merchantable timbered area (ha) to be harvested, net cruise volume is rounded to the nearest cubic metre as required in the *Cruise Compilation Manual*.

Each reappraisal uses a cruise volume by species which is the original net cruise volume adjusted for amendments to the cutting authority since the last appraisal.

4.2.1 Comparative Cruising

Comparative cruising is defined as the borrowing of cruise data from an existing, appropriately comparable, cutting authority in place of site specific data for an appraisal of a new cutting authority. If there is time to perform a full cruise, then the timber will be cruised. However, comparative cruise data may be utilized for cutting authorities with volumes greater than $5\,000\text{ m}^3$ if:

- the regional manager has determined that the timber is in imminent danger of being destroyed,
- the area is in an approved Emergency Bark Beetle Management Area (EBBMA) as designated by the Minister of Forests and within an approved Emergency Management Unit (EMU) as designated by the beetle management coordinator,
- the licensee has previously harvested comparative cutting authority's in a timely manner, and
- the regional manager has determined that the requirement to perform a full operational cruise will delay expeditious harvesting and result in further damage.

Comparative cruise data will be chosen following procedures set out in section 2.1.2.3 of the *Cruising Manual*.

For cutting authorities with volumes of $5\,000\text{ m}^3$ or less refer to section 6.2.

4.2.2 Appraisal Data Submission

The form of Appraisal Data Submission (ADS) that is required may be found at:

<http://www.for.gov.bc.ca/hva/ECAS/index.htm>

4.3 Development

Development costs are estimated for each of two categories:

1. New construction.
2. Reconstruction and replacement.

Throughout this section the term "roads" includes roads, drainage and other pertinent structures.

- a. A total cost (\$) is calculated for each category of section 4.3.1, and 4.3.1.1. These category costs are summed to provide a total development cost estimate.
- b. In order to calculate a unit (\$/m³) cost by category, the applicable volume will be the total net cruise volume (as defined in section 4.2) or the remaining volume (section 4.3.1(2)). The applicable volume includes the deciduous volume where the licence requires harvesting in deciduous stands.

Tributary Volume

The costs for development works may only be allocated to the first tributary cutting authority, subject to section 4.3.1.1.5. A cutting authority is considered to be tributary:

1. If timber from the cutting authority is appraised over the development works in question, or
2. If the development works occur on a main service road. A main service road is defined as a main access road to the operation, necessary to maintain and supply the day-to-day harvesting activities of the cutting authority being appraised. To qualify, a main service road must be used on a regular basis for transportation of bulk fuels, supplies, equipment and the harvesting crew.

Development Cost Estimating

1. Tabular cost estimates are made for construction of roads and drainage structures using the applicable equations in section 4.3.2 of this manual. Tabular estimates must be used for an appraisal when physical dimensions and conditions fall within the tabular limitations.
2. Detailed engineering cost estimates are made when the physical dimensions and conditions of a road section or a drainage structure exceed the tabular limitations of the manual. A detailed engineering estimate is made according to section 4.3.3. Projects eligible for this costing method are listed in section 4.3.3.

5. If the existing road requires reconstruction or replacement after August 1, 1996, the cost estimate is made as described in section 4.3.1. If the existing road is on private land, road and land use charges may be recognized as described in section 4.7.

A road on private land that has previously been included in an appraisal because it was required for only short term timber extraction (as per previous policy) shall continue to be included upon reappraisal.

4.3.1.1.5 Extended Road Amortization

For new appraisals, where the development cost estimate for roads accessing more than one tributary cutting authority exceeds \$4.00/m³, a written agreement may be made which distributes a portion of the development cost estimate to two or more tributary cutting authorities..

The agreement is subject to the following conditions:

1. Each cutting authority area must be in the licensee's approved forest development plan, site plan or woodlot licence area.
2. The road portion that may be included in the agreement ends at the far boundary of the first cutting authority being appraised
3. The agreement must be signed by the licensee and the regional manager or the regional manager's designate.
4. The total lump sum costs may be adjusted once at reappraisal provided no harvest has occurred on any cutting authority included in the agreement
5. The costs apportioned to each cutting authority under the agreement may be adjusted once, in conjunction with section 4.3.1.1.5,(4), at reappraisal using the same ratio for distributing the costs as in the original agreement. The adjustment can only be made where no harvest has occurred on any cutting authority included in the agreement.
6. The agreement confers no obligation on the Crown to compensate licensees for any unamortized costs.

4.3.2 Tabular Cost Estimates

These roads are generally a single lane width with turnouts. These roads may or may not be stabilized (ballasted or surfaced) with additional materials.

4.3.2.1 Subgrade Construction

The subgrade construction cost estimate includes:

- clearing,
- grubbing,
- stripping,
- debris disposal,
- stump removal,
- ditch construction,
- turnout construction (not landings),
- material costs, and
- installation of culverts with diameters up to 950 mm or the equivalent cross-section area or single log abutment culverts up to 3.4 m span.

Right-of-way felling and logging is excluded.

4.3.2.2 Subgrade Construction Variables

For appraisal purposes the following subgrade construction variables are recognized:

1. Section length: (L)

Road sections are recorded in multiples of 0.1 km. Each section should be representative of a single moisture class. Each section should be 1 km or longer, although some individual section lengths less than 1 km but greater than 0.1 km are acceptable for extreme variations of slope or percent rock. The section length includes that portion traversing through landings. For ground skidding, short roads (up to and including 100 m long) that access single landings are included in the tree-to-truck cost estimates (section 4.4) and are not eligible for development cost estimates.

2. Road Type:

- Snow/Ice Road (WINTER): - A single lane seasonal 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 15% and there is minimal side cut. Minimal means, 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.
- Operational Road (OP): - A single lane road with turnouts, which does not meet the definition of a snow/ice road or a block road. Is generally built under the authority of a road permit but portions may be constructed under the cutting authority. An operational road exists within a cutblock when the road accesses

timber beyond the cutblock or is intended to access timber beyond the block as shown on an approved forest development plan, or forest stewardship plan. There must be a physical separation of the blocks or cutting authorities. Blocks or cutting authorities that share a common boundary are not considered separate for the purposes of defining the road type.

- **Block Roads (BLOCK):** - A single lane road with turnouts, which does not meet the definition of a snow/ice road or an operational road. Is generally built under the cutting authority and includes roads which are located completely within the cutblock, continuous to the edge of a cutblock, accesses separate portions of a disconnected cutblock, or accesses a series of cutblocks that share a common boundary. Those cutblocks that share boundaries may be included in the cutting authority being appraised or a different cutting authority.

3. Uphill Side Slope: (SLOPE %)

Uphill side slope percent may show a variation (+/- 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 percent, 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 percent 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 percent may show a variation (+/- 15% about the average) within any section length and represents the average of all rock percents in the section to a maximum of 50%. To derive an average percent rock, several representative cross-section measurements are taken along the section length and the percent 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 percent rock calculated at that cross-section. The percent rock is determined as follows:

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

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 percent.

5. Soil Moisture Regime (SMR):

Those biogeoclimatic zones/subzones with site series identified as “M”, “VM” or “W” in the shaded area of the table in Appendix IV are considered “Wet” for appraisal purposes.

6. Biogeoclimatic Zones

CWH/MH	-	Coastal Western Hemlock/Mountain Hemlock
BWBS	-	Boreal White and Black Spruce
ICH	-	Interior Cedar Hemlock
SBS	-	Sub Boreal Spruce
SBPS	-	Sub Boreal Pine/Spruce
ESSF	-	Engelmann Spruce - Subalpine Fir
IDF	-	Interior Douglas Fir

4.3.2.3 Subgrade Cost Estimate

For each operational and block road the subgrade cost estimate in \$/km is determined from the equation for the appropriate road group.

Road Group

2	$14512 + (101 * \text{SLOPE}\%) + (135 * \text{ROCK}\%) + (3181 * \text{OP})$
3	$1283 + (545 * \text{SLOPE}\%) + (9682 * \text{OP})$ (\$2,176/km set as minimum. If equation yields less than \$2,176/km then use \$2,176/km)
4	$5404 + (296 * \text{SLOPE}\%) + (5556 * \text{SMR}) + (5518 * \text{OP})$
5	$4989 + (159 * \text{SLOPE}\%) + (171 * \text{ROCK}\%) + (4831 * \text{SMR}) + (4054 * \text{OP})$
6	$-1218 + (551 * \text{SLOPE}\%) + (369 * \text{ROCK}\%) + (8241 * \text{OP}) + (3202 * \text{ESSF})$ (\$2,817/km set as minimum. If equation yields less than \$2,817/km then use \$2,817/km)
7	$6093 + (6179 * \text{ESSF}) + (22592 * \text{ESSF} * \text{OP}) + (6024 * \text{BWBS} * \text{OP}) + (14525 * \text{SBS} * \text{OP})$
8	$2567 + (6249 * \text{OP}) - (5547 * \text{IDF} * \text{OP})$
9	$2956 + (182 * \text{SLOPE}\%) + (237 * \text{ROCK}\%) + (4348 * \text{OP})$
10	$8429 + (176 * \text{SLOPE}\%) + (331 * \text{ROCK}\%)$
11	$2698 + (474 * \text{SLOPE}\%) + (371 * \text{ROCK}\%) + (5329 * \text{OP}) + (27430 * \text{CWH/MH})$ (\$5,287/km set as minimum. If equation yields less than \$5,287/km then use \$5,287/km)
12	$7296 + (324 * \text{SLOPE}\%) + (258 * \text{ROCK}\%) + (4686 * \text{OP})$

4.11 Cost Trend

Cost trend factors are separately applied to the total logging, silviculture and manufacturing cost estimates. The factors cover the period from the effective date of the cost base to the effective date of the rate calculation. Cost trend factors are applied at the appraisal effective date and at the date of each stumpage adjustment.

For trend factors applicable prior to November 1, 2002, refer to earlier *Interior Appraisal Manuals*.

Appraisal Effective Dates From October 1, 1994 to July 31, 1995

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
May 1 to June 30, 2003	1.154	1.0
July 1 to September 30, 2003	1.154	1.0
October 1 to December 31, 2003	1.154	1.0
January 1 to March 31, 2004	1.154	1.0
April 1 to June 30, 2004	1.154	1.0
July 1 to September 30, 2004	1.154	1.0
October 1 to December 31, 2004	1.154	1.0

Appraisal Effective Dates From August 1, 1995 to July 31, 1996

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
May 1 to June 30, 2003	1.045	1.0
July 1 to September 30, 2003	1.045	1.0
October 1 to December 31, 2003	1.045	1.0
January 1 to March 31, 2004	1.045	1.0
April 1 to June 30, 2004	1.045	1.0
July 1 to September 30, 2004	1.045	1.0
October 1 to December 31, 2004	1.045	1.0

Appraisal Effective Dates From August 1, 1996 to November 30, 1997

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
May 1 to June 30, 2003	0.986	1.0
July 1 to September 30, 2003	0.986	1.0
October 1 to December 31, 2003	0.986	1.0
January 1 to March 31, 2004	0.986	1.0
April 1 to June 30, 2004	0.986	1.0
July 1 to September 30, 2004	0.986	1.0
October 1 to December 31, 2004	0.986	1.0

Appraisal Effective Dates From December 1, 1997 to August 31, 1998

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
May 1 to June 30, 2003	0.917	1.0
July 1 to September 30, 2003	0.917	1.0
October 1 to December 31, 2003	0.917	1.0
January 1 to March 31, 2004	0.917	1.0
April 1 to June 30, 2004	0.917	1.0
July 1 to September 30, 2004	0.917	1.0
October 1 to December 31, 2004	0.917	1.0

Appraisal Effective Dates From September 1, 1998 to September 30, 1999

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
May 1 to June 30, 2003	0.968	1.0
July 1 to September 30, 2003	0.968	1.0
October 1 to December 31, 2003	0.968	1.0
January 1 to March 31, 2004	0.968	1.0
April 1 to June 30, 2004	0.968	1.0
July 1 to September 30, 2004	0.968	1.0
October 1 to December 31, 2004	0.968	1.0

Appraisal Effective Dates From October 1, 1999 to August 31, 2000

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
May 1 to June 30, 2003	1.017	1.0
July 1 to September 30, 2003	1.017	1.0
October 1 to December 31, 2003	1.017	1.0
January 1 to March 31, 2004	1.017	1.0
April 1 to June 30, 2004	1.017	1.0
July 1 to September 30, 2004	1.017	1.0
October 1 to December 31, 2004	1.017	1.0

Appraisal Effective Dates From September 1, 2000 to June 30, 2001

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
May 1 to June 30, 2003	1.0	1.0
July 1 to September 30, 2003	1.0	1.0
October 1 to December 31, 2003	1.0	1.0
January 1 to March 31, 2004	1.0	1.0
April 1 to June 30, 2004	1.0	1.0
July 1 to September 30, 2004	1.0	1.0
October 1 to December 31, 2004	1.0	1.0

Appraisal Effective Dates From July 1, 2001 to October 31, 2002

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
May 1 to June 30, 2003	0.960	1.0
July 1 to September 30, 2003	0.960	1.0
October 1 to December 31, 2003	0.960	1.0
January 1 to March 31, 2004	0.960	1.0
April 1 to June 30, 2004	0.960	1.0
July 1 to September 30, 2004	0.960	1.0
October 1 to December 31, 2004	0.960	1.0

Appraisal Effective Dates On or After November 1, 2002

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
May 1 to June 30, 2003	1.0	1.0
July 1 to September 30, 2003	1.0	1.0
October 1 to December 31, 2003	1.0	1.0
January 1 to March 31, 2004	1.0	1.0
April 1 to June 30, 2004	1.0	1.0
July 1 to September 30, 2004	1.0	1.0
October 1 to December 31, 2004	1.0	1.0

6.2 Cutting Authorities With 5 000 m³ or Less Volume

1. This subsection applies to a cutting authority area that has a total coniferous volume of 2 000 m³ or less :

- a. Sawlog Stumpage Rates by Forest Zone and Species

- i. Except as provided in section 6.4, and in subsections (1)(a)(ii) and (1)(b) of this section, where a cutting authority area has 2 000 m³ or less of coniferous timber, the stumpage rate for each species of timber must be determined using the stumpage rate prescribed in table 6-1 for the forest zone in which the cutting authority area is located.
- ii. Where the licensee is not required to establish a free growing crop of trees on the cutting authority area, the stumpage rate for a species of timber shall be the sum of the rate prescribed in table 6-1 plus the basic silviculture cost for the species in the forest region or, where the Crown has the responsibility for silviculture, the basic silviculture levy as determined under section 6.7.
- iii. The stumpage rates calculated under this section are not adjusted quarterly.
- iv. For extensions of the cutting authority, see section 2.5(3).

- b. Full Appraisal

Alternatively, an indicated stumpage rate may be determined through a full appraisal. The stand data may be site-specific (i.e., timber cruised or scaled) or obtained from one or more comparable cutting authorities (e.g., similar stand and terrain characteristics, etc.). When choosing the comparative cruise data, the district manager may require that procedures in section 2.1.2.3 of the *Cruising Manual* be followed. The total stumpage rate is adjustable for the term of the cutting authority, except as provided in section 6.6.

Each full appraisal is made as described in chapters 3, 4 and 5.

2. Total coniferous volume of greater than 2 000 m³ to 5 000 m³.

An indicated stumpage rate is determined on the basis of full appraisal data. The data may be site-specific or the data may be obtained from comparable cutting authorities, as per section 2.1.2.3 of the *Cruising Manual*.

Each appraisal is made as described in chapters 3, 4 and 5.

These cutting authorities are cruised if specified by the regional manager in accordance with section 4.2 of this manual.

The total stumpage rate is adjustable for the term of the cutting authority, except as provided in section 6.6.

Forest District Specific

Description	District	Reserve Stumpage Rate
Gross area cleared for seismic lines, gas or oil well sites and right-of-way to well sites	Cranbrook Peace Ft. Nelson Mackenzie	\$1,663/ha \$1,731/ha \$1,040/ha \$2,122/ha

* For pipe line rights-of-way a stumpage rate may be determined by using the above rates for cutting authorities containing less than 2 000 m³, of merchantable volume. For cutting authorities of 2 000 m³ and over see section 6.2.

6.8.2 Miscellaneous Stumpage Rates for Timber Licences

Timber licence cutting authority areas that have not been appraised and have a cutting authority term that began before May 1, 1995, must be appraised effective April 1, 2003.

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Region	BEC		Relative Soil Moisture Regime Class (from field guide)							
	Zone	Subzone	0	1	2	3	4	5	6	7
VAN	CWH	ds2	VD	MD	MD	SD	F	M	VM	W
VAN	CWH	ms1	VD	MD	MD	SD	F	M	VM	W
VAN	CWH	ms2	VD	MD	MD	SD	F	M	VM	W
VAN	CWH	ws2	VD	MD	MD	SD	F	M	VM	W
VAN	CWH	mm1	MD	SD	SD	F	F	M	VM	W
VAN	CWH	mm2	MD	SD	SD	F	F	M	VM	W
VAN	CWH	vm1	MD	SD	SD	F	F	M	VM	W
VAN	CWH	vm2	MD	SD	SD	F	F	M	VM	W
VAN	CWH	wh1	SD	SD	SD	F	F	M	VM	W
VAN	CWH	wh2	SD	SD	SD	F	F	M	VM	W
VAN	CWH	vh1	SD	SD	F	F	M	VM	W	W
VAN	CWH	vh2	SD	SD	F	F	M	VM	W	W
VAN	MH	mm1	SD	SD	F	F	F	M	VM	W
VAN	MH	mm2	SD	SD	F	F	F	M	VM	W
VAN	MH	wh	SD	SD	F	F	F	M	VM	W

NOTES: ED = Extremely Dry (0, extreme xeric)

VD = Very Dry (1, xeric)

MD = Moderately Dry (2, sub-xeric)

SD = Slightly Dry (3, sub-mesic)

F = Fresh (4, mesic)

M = Moist (5, sub-hygic)

VM = Very Moist (6, hygric)

W = Wet (7, sub-hydric)

Appendix IV Map Content

The map(s) submitted with the appraisal data submission must be at a scale of 1:5000 or 1:10000. Additional maps at other scales may be included as required. At a minimum the map(s) shall indicate the following information:

- a. Cutting permit block boundaries.
- b. Retention areas within the cutting permit blocks.
- c. Delineation of biogeoclimatic zone, subzone and variant areas.
- d. Delineation of areas by harvest method (ground, cable, or helicopter, etc.) and partial cut percent.
- e. Delineation of areas that are the subject of specified operations cost estimates (e.g., skidder swing, root disease control).
- f. The geographic midpoint of each cutblock and common junction of the permit.
- g. Existing roads.
- h. Roads to be built by type (operational, block, winter) including sections to be gravelled and or sections that are “wet” (as defined in this manual).
- i. Location of roads/structures that are the subject of detailed engineered estimates.
- j. Location and type of other development such as remedial fencing, cattleguards and pipeline crossings.

The map may include other information considered relevant to the appraisal.

For reappraisal data submissions, reference may be made to the original map submitted. Any change to the harvest plan or area of harvest due to a “changed circumstance (section 2.3.1) during the term of the cutting authority must be mapped and promptly submitted to the district.

As part of the initial appraisal data submission the map(s) may be submitted in electronic format. At least two copies shall be submitted to the district in paper form prior to the cutting permit being approved.

Index

A

Adjustable Stumpage Rates, 6-9
 Adjustments, 2-7
 CVP, 1-8
 MPS, 7-3
 Administration and Other Costs, 4-45
 Administration Levy, 6-10
 AMVs for Small Log Cutting Authorities, 3-2
 AMVs for Small Log Licences, 3-2
 Applicable Licences, 4-2
 Appraisal LRF, 3-11
 Appraisals
 New MPS, 7-3
 New MPS Reappraisals, 7-3
 Area, 4-5
 Average Cost Estimates, 4-7
 Average Stumpage Rate, 1-7

B

Barge/Ferry, 4-40
 Barge/Ferry Not Used for Truck Haul, 4-40
 Basic Silviculture, 4-48
 Basic Silviculture Levy, 6-10
 BCTS, 6-9
 Benefits, 4-2, 4-52
 Biogeoclimatic Zone, 4-26
 Blasting, 4-13
 Block Roads, 4-13
 Bonus Bid, 1-7, 5-8
 Boom, 4-39
 Borrow Pit, 4-19
 Boulders, 4-13
 Breakage, 4-5

Bridges, 4-22

C

Calculating the Interior Composite Index (ICI), 5-5
 Calculating the Interior Target Rate, 5-5
 Calculating the Target Rate, 5-5
 Calculation of Total Species End Product Selling Price, 3-10
 Camp, 4-39
 Canadian Lumber Standard/American Lumber Standard, 3-2
 Cattle Guards, 4-21
 Charges as a Share of Road Maintenance, 4-44
 Charges Other Than for Road Maintenance, 4-44
 Chip Value, 3-11
 Chip Yield, 3-11
 Chip Yield Derivation, 3-8
 Chip Yield Factors, 3-9
 Chips, 4-52
 Clear Cut, 4-31
 Clearing, 4-12
 Combined Product Recovery Factors, 3-7
 Comparative Cruising, 4-5
 Continuous Road Access, 4-46
 Conventions and Terms of Reference, 1-2
 Converting Indexes From 1997=100 Base to 1992=100 Base, 5-5
 Corduroy, 4-22
 Cost Trend, 4-55
 Cost Trend Factors, 4-55
 Crib Back Fills, 4-19
 Cruise Data, 4-4
 Cruising Manual, 4-4
 Culverts, 4-12, 4-17
 Cutting Authority, 1-4
 Cutting Authority Document, 4-3
 Cycle Time, 4-35

D

Dead/Live Useless Snags, 4-33
 Debris Disposal, 4-12

Decay, 4-5
Decked Timber, 6-8
Depreciation, 4-2, 4-52
Detailed Engineering Cost Estimates, 4-6, 4-7
Determination of Stud Log Percent, 3-9
Development Costs, 4-6
Development Costs on Private Land, 4-10
Development Levy, 6-10
Dewater, 4-38
Dewater and Reload, 4-39
Distance to Support Centre, 4-27
Ditch Construction, 4-12
Drain Structure Cost Estimates, 4-7
Drainage Structures, 4-17
Drilling, 4-13
Dump, 4-39

E

Effective Date, 4-55
End Haul Construction, 4-22
Existing Roads and Structures, 4-10
Extended Road Amortization, 4-11

F

Fences, 4-21
Fire Damage, 4-33
Fixed Stumpage Rates, 6-9
Forest Act, 1-2
Forest Development Plan, 4-3
Forest District Specific, 6-13
Forest Service *Cruising Manual*, 4-33
Forest Service Roads, 4-44
Free-Growing Stocking Standards, 4-48
Fuel, 4-2, 4-52
Full Appraisal, 2-2

G

Geo-tech Fabric, 4-22
Grade 4 Hemlock AMVs, 3-3
Gravel, 4-19
Gross Volume, 4-28
Ground Skidding, 4-25, 4-31
Grubbing, 4-12

H

Haul Method, 4-36
Heli Yarding Distance, 4-29
Helicopter, 4-25
Helicopter Logging, 4-30
Highway Haul, 4-37
Highway Hauling, 4-36
Horse, 4-25
Horse Logging, 4-30

I

Indicated Stumpage Rate, 1-7, 5-8
Installation, 4-19
Insurance, 4-2, 4-52
Interior Appraisal Data Submission, 4-4
Interior Base Rate, 1-7, 5-8
Interior Mean Value Index, 5-8
Interior Target Rate, 1-7, 5-5
Interior, Area of Application, 1-3
Isolated Cutting Authorities, 4-28
Isolated Cutting Authority Areas, 4-46

L

Landings, 4-12
Least Total Harvesting Cost Estimate, 4-2
Licensee, 2-3
Log Bridges, 4-19
Low Volume Additive, 4-46
LRF Update Add-ons, 3-7
Lumber, 4-52
Lumber Market Values, 1-7
Lumber Recovery Factors, 3-6

M

Main Service Road, 4-6
Maintenance, 4-2, 4-52
Manufacturing Cost Differential, 3-10
Manufacturing Costs, 1-2
Market Pricing System, 7-2
Material Costs, 4-12
Mean Value Index, 1-7
Minimum Stumpage Rate, 1-7
Miscellaneous Stumpage Rates, 1-7, 6-11

Moving Assistance, 4-2
MPS Stumpage Rate, 7-10

N

New Construction, 4-7
New Construction, 4-22

O

Off-Highway Haul, 4-37
Off-Highway Hauling, 4-37
Operating Cost, 1-7, 5-3
Operational Road, 4-12
Order, 2-2
Other Land Use Charges, 4-44
Other Roads, 4-44
Overhead, 4-2
Overhead Cable Logging, 4-25, 4-31
Overland Construction, 4-22
Overtime, 4-2, 4-52

P

Partial Cut Variables, 4-26
Partial Cutting, 4-27
Percent (%) Stud AMV, 3-9
Percent Blowdown, 4-26
Percent Rock, 4-13
Percentage of the Indicated Stumpage Rate, 1-7
Permitted Roads, 4-44
Pipe Line Rights-of-Way, 6-13
Pipeline Crossings, 4-21
Point of Appraisal, 4-35
Prescribed Minimum Stumpage Rate, 7-10
Primary Haul, 4-37
Profit and Risk Margins, 4-2

R

Railway, 4-39
Railway Transportation, 4-40
Random Lumber, 3-2
Random Lumber AMVs, 3-3
Reappraisal, 2-2
Reconstruction, 4-22
Reconstruction and Replacement, 4-8

Reload, 4-38
Repair, 4-2, 4-52
Request for Approval for a Road Use Charge, 4-44
Reserve Stumpage Rate, 1-7
Retaining Walls, 4-22
Right-of-way Felling, 4-12
Rip Rap, 4-19
Road Type, 4-12
Road Use Charges, 4-44
Roads, 4-6
Rock, 4-13
Rock Drilling, 4-19
Root Disease Control, 4-3
Routine Road Maintenance Cost Estimate, 4-41

S

Secondary Haul, 4-38
Section Length, 4-12
Sector Times, 4-36
Selling Price, 1-7, 5-3
Shipping Differential, 3-10
Side Slopes, 4-22
Silviculture Prescription, 4-3
Site Preparation, 4-19
Skidder Swinging, 4-3
Skyline, 4-32
Skyline Yarding Distance, 4-29
Slope, 4-26
Small Log, 3-2
Small Tree Dummy Variable, 4-29
Small Tree Volume, 4-28
Snow Roads, 4-15
Snow/Ice Road (WINTER), 4-12
Soil Moisture Regime (SMR), 4-14
Special Structures, 4-22
Stabilizing Material, 4-19
Stripping, 4-12
Stud Lumber, 3-2, 3-3
Stump Removal, 4-12
Subgrade Construction, 4-12
Subgrade Cost Estimate, 4-14
Supplies, 4-2, 4-52
Supply and Delivery, 4-19

T

Tabular Cost Estimates, 4-6
Tally Sheets, 4-4
Total Coniferous Volume of greater than 2
000 m³ to 5000 m³, 6-3
Total Coniferous Volume of Less than 2000
m³ or less, 6-3
Total Merchantable, 4-5
Total MPS Stumpage Rate, 7-11
Total Stumpage Rate, 1-7
Tow, 4-39
Tributary Cutting Authorities, 4-6
Truck Hauling, 4-19
Truck to Rail Transfer, 4-39
Turnout Construction, 4-12

U

Uphill Side Slope, 4-13
Upset Stumpage Rate, 1-7, 5-8
Upset Stumpage Rate Calculation, 7-10

V

Value Index, 1-7, 5-2, 5-8
Volume per Hectare, 4-5
Volume Per Hectare, 4-26
Volume per Tree, 4-28

W

Wages, 4-2, 4-52
Waste, 4-5