



Ministry of
Forests

Office of the Minister

MEMORANDUM

File: 280-20/195-30/CAPP

January 25, 2003

To: Regional Managers - Interior

From: The Honourable Michael de Jong
Minister of Forests

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.

Section 4.9, Basic Silviculture has been amended. Table 4-9 has been modified to include only the biogeoclimatic zone, subzone and variant cost estimates that are valid for use. There is some minor clarification of wording.

This amendment will come into force on the date of this memo. Further amendments or revision to this manual requires my approval.



for 
Michael de Jong
Minister

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. 3

ISSUE DATE
February 1, 2003

MANUAL CO-ORDINATOR

Judy Laton
Revenue Branch

AUTHORIZATION (Name, Title)

W. Howard
Director, Revenue Branch

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
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REMOVE	Data Sheet	11	
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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	$7296 + (324 * \text{SLOPE}\%) + (258 * \text{ROCK}\%) + (4686 * \text{OP})$

Where:

Road groups are defined in Table 4-3.

OP	=	1 if an Operational Road, otherwise = 0
SMR	=	1 if Soil Moisture Regime is “wet”. Otherwise SMR = 0.
ESSF	=	1 if road construction is within this biogeoclimatic zone. Otherwise ESSF = 0
ICH	=	1 if road construction is within this biogeoclimatic zone. Otherwise ICH = 0
BWBS	=	1 if road construction is within this biogeoclimatic zone. Otherwise BWBS = 0
SBS	=	1 if road construction is within this biogeoclimatic zone. Otherwise SBS = 0
IDF	=	1 if road construction is within this biogeoclimatic zone. Otherwise IDG = 0
CWH/MH	=	1 if road construction is within this biogeoclimatic zone. Otherwise CWH/MH = 0

Snow roads

The subgrade cost estimate for all new and annual refreezing of snow roads (winter) is \$2,718/km.

Table 4-3 Road Groups

Road Group #	Districts Included	Within the Geographic Boundary of a TSA, SB and TFL
1	Forest districts in this group have been redistributed, Kispiox to group 2 and Kalum to group 11	
2	Bulkley - (Cassiar) Kispiox Lillooet	
3	Lakes, Morice	
4		Williams Lake TSA, SBs J, K & L Prince George TSA, SBs G & H, TFLs 30, 53 Quesnel TSA, SBs E, F, G, H & I, TFL52 100 Mile House TSA, SBs, G & H
5	Vanderhoof	Prince George TSA, SBs C, E, F & I, TFL5
6		Mackenzie TSA, SBs G through P, Prince George TSA SB's A & B
7	Dawson Creek Fort St. John Fort Nelson	Mackenzie TSA, SBs A through F
8	Chilcotin	Williams Lake TSA, SBs F, G, H, I and P Quesnel TSA, SBs A, B, C & D, 100 Mile House TSA, SBs A, B, C, D, E, F
9	Kamloops Merritt Penticton Vernon	
10	Boundary Cranbrook Invermere	
11	Arrow Columbia (Golden, Revelstoke) Kalum Kootenay Lake	
12	Clearwater Robson Valley Salmon Arm	Williams Lake TSA, SBs M & N

Woodlot and Timber Licence cutting authorities are assigned to the road group for the area in which they are geographically located.

4.7 Road and Land Use Charges

Prior to a road or land use charge being included in an appraisal, the licensee must:

- a. submit a "Request for Approval of a Road Use Charge" form with the appraisal data submission; and
- b. receive written approval of the road or land use charge from the regional manager.

1. Charges as a Share of Road Maintenance

- a. No recognition is made of such charges. The routine road maintenance cost estimate, section 4.6, includes all relevant costs whether incurred directly by the licensee or by payment to another party for services performed.

2. Charges Other Than for Road Maintenance

There are three main categories of road status:

a. Forest Service Roads

A road that is declared, determined, built, maintained or modified by the ministry, as defined in forest legislation. No road use charges will be considered in appraisals,

b. Permitted Roads

Roads built on Crown land, authorized by road permit or other cutting authority documents. This category also includes foreshore leases, camp areas and dryland sorts. No road use charges will be considered in appraisals,

c. Other Roads

Road use charges for roads on Indian Reserves or on private land owned by an arm's length third party and not subject to a lease held by the licensee, their affiliate or an agent of either, may be considered in appraisals provided there is no lower cost route capable of development through Crown land.

The charges recognized must be reasonable, must not exceed compensation that might be determined under forest legislation and must be proven through the presentation of auditable documents.

3. Other Land Use Charges

Only non-governmental land use charges will be considered in appraisals.

4.8 Administration and Other Costs

4.8.1 Overhead

Overhead cost estimates are for the related administration and supervisory activities attributed to development, tree-to-truck, transportation and basic silviculture that occur at the head office, branch office and camp or operation.

Overhead costs include:

- Office Operations,
- Scaling,
- Cruising,
- Environmental Protection,
- Consultants fees (section 4.3.3),
- Archaeological surveys,
- Waste and Residue surveys,
- Right-of-way easements,
- Foreshore and other land leases,
- Tree marking Beetle probing & Pheromone baiting,
- Engineering (road layout, survey including geotechnical surveys, and design, other than those applicable as engineered cost estimate).

Cost estimates by forest district are shown in the following table:

Table 4-8 Overhead Cost Estimates

District	\$/m ³	District	\$/m ³
100 Mile House	7.64	Kispiox	6.84
Arrow	9.25	Kootenay Lake	9.82
Boundary	7.83	Lakes	6.89
Bulkley (Cassiar)	6.62	Lillooet	9.64
Chilcotin	7.01	Mackenzie	6.63
Clearwater	8.80	Merritt	7.29
Columbia (Golden, Revelstoke)	11.01	Morice	6.18
Cranbrook	8.08	Penticton	7.37
Dawson Creek	7.30	Prince George	6.84
Fort Nelson	6.12	Quesnel	6.89
Fort St. James	6.28	Robson Valley	8.69
Fort St. John	6.28	Salmon Arm	7.97
Horsefly	6.93	Vanderhoof	6.87
Invermere	9.68	Vernon	7.63
Kalum	9.64	Williams Lake	7.85
Kamloops	7.51		

4.9 Basic Silviculture Cost Estimate

Basic silviculture cost estimates are made for all cutting authorities where basic silviculture is required.

Basic silviculture treatment cost estimates include all treatment costs that are required to achieve the free-growing stocking standards, as referred to in the *Silviculture Practices Regulation* (B.C. Reg. 352/2002).

Basic silviculture treatment may not be required on some cutting authorities where:

1. this intent has been specified in the licence, cutting authority, or by applicants agreement, or,
2. basic silviculture work is funded by any Crown agency.

When any of these circumstances exist the basic silviculture cost estimate is not included in the appraisal, except as noted in section 6.6 of this manual.

The Table 4-9 lists the associated cost estimates (\$/m³) for each BioGeoClimatic (BGC) zone, subzone, and variant across the interior.

Where a cutting authority area includes more than one BGC/subzone/variant, the predominant BGC/subzone/variant by area shall be used for the cost estimate in the appraisal of the cutting authority.

Table 4-9 BGC Silviculture Cost Estimates*

BGC Zone	Subzone	Variant	\$/m ³	BGC	Subzone	Variant	\$/m ³
BWBS	dk	1	3.98	ICH	mc	2	5.37
BWBS	dk	2	3.98	ICH	mk	1	3.98
BWBS	mw	1	7.70	ICH	mk	2	3.83
BWBS	mw	2	7.70	ICH	mk	3	5.51
BWBS	un		6.69	ICH	mm		6.39
BWBS	vk		6.69	ICH	mw	1	5.78
BWBS	wk	1	4.50	ICH	mw	2	4.99
BWBS	wk	2	4.50	ICH	mw	3	6.95
BWBS	wk	3	4.50	ICH	un		5.39
CWH	un		3.26	ICH	vc		5.39
CWH	vh	1	3.26	ICH	vk	1	6.97
CWH	vh	2	3.26	ICH	vk	2	6.52
CWH	vm		3.26	ICH	wc		5.39
CWH	vm	1	3.26	ICH	wk	1	5.96

BGC Zone	Subzone	Variant	\$/m ³
CWH	vm	2	3.26
CWH	vm	3	3.26
CWH	wh	1	3.26
CWH	wh	2	3.26
CWH	wm		3.26
CWH	ws	1	3.26
CWH	ws	2	3.26
CWH	xm	1	3.26
CWH	xm	2	3.26
ESSF	dc	1	5.65
ESSF	dc	2	4.55
ESSF	dcp	1	5.08
ESSF	dcp	2	5.08
ESSF	dk		4.00
ESSF	dkp		5.08
ESSF	dku		5.08
ESSF	dv		5.32
ESSF	dvp		5.08
ESSF	mc		5.08
ESSF	mcp		5.08
ESSF	mk		5.08
ESSF	mkp		5.08
ESSF	mm	1	6.50
ESSF	mm	2	6.50
ESSF	mmp	1	5.08
ESSF	mmp	2	5.08
ESSF	mv	1	4.36
ESSF	mv	2	4.53
ESSF	mv	3	3.81
ESSF	mv	4	4.44
ESSF	mvp	1	5.08
ESSF	mvp	2	5.08
ESSF	mvp	3	5.08
ESSF	mvp	4	5.08
ESSF	mw		4.05
ESSF	mwp		5.08
ESSF	un		5.08
ESSF	vc		7.41

BGC	Subzone	Variant	\$/m ³
ICH	wk	2	6.15
ICH	wk	3	6.15
ICH	wk	4	6.15
ICH	xw		5.39
IDF	dk	1	3.80
IDF	dk	2	4.40
IDF	dk	3	4.22
IDF	dk	4	6.02
IDF	dm	1	8.29
IDF	dm	2	3.93
IDF	dw		4.58
IDF	mw	1	6.38
IDF	mw	2	6.58
IDF	un		4.58
IDF	ww		4.58
IDF	xh	1	4.48
IDF	xh	2	4.94
IDF	xm		6.18
IDF	xw		4.58
MS	dc	1	5.29
MS	dc	2	5.29
MS	dk		4.28
MS	dm	1	5.38
MS	dm	2	3.80
MS	dv		4.35
MS	un		4.35
MS	xk		5.12
MS	xv		4.11
PP	dh	1	0.60
PP	dh	2	0.60
PP	un		0.60
PP	xh	1	0.60
PP	xh	2	0.60
SBPS	dc		3.66
SBPS	mc		3.93
SBPS	mk		4.05
SBPS	un		3.93
SBPS	xc		3.89

BGC Zone	Subzone	Variant	\$/m ³
ESSF	vcp		5.08
ESSF	vv		6.92
ESSF	vvp		5.08
ESSF	wc	1	5.97
ESSF	wc	2	6.06
ESSF	wc	3	6.51
ESSF	wc	4	7.05
ESSF	wcp	2	5.08
ESSF	wcp	3	5.08
ESSF	wcp	4	5.08
ESSF	wk	1	6.02
ESSF	wk	2	6.43
ESSF	wm		4.54
ESSF	wmp		5.08
ESSF	wv		5.08
ESSF	wvp		5.08
ESSF	xc		4.91
ESSF	xcp		5.08
ESSF	xv	1	4.67
ESSF	xv	2	4.67
ESSF	xvp	1	5.08
ESSF	xvp	2	5.08
ICH	dk		5.39
ICH	dw		5.42
ICH	mc	1	3.77

BGC	Subzone	Variant	\$/m ³
SBS	dh		3.89
SBS	dh	1	3.89
SBS	dh	2	3.89
SBS	dk		3.86
SBS	dw	1	3.88
SBS	dw	2	3.23
SBS	dw	3	3.07
SBS	mc	1	3.31
SBS	mc	2	3.74
SBS	mc	3	4.27
SBS	mh		3.89
SBS	mk	1	3.77
SBS	mk	2	3.93
SBS	mm		3.75
SBS	mw		4.74
SBS	un		3.89
SBS	vk		5.63
SBS	wk	1	4.49
SBS	wk	2	4.64
SBS	wk	3	2.75
SWB	dk		3.89
SWB	dks		3.89
SWB	mk		3.89
SWB	mks		3.89
SWB	un		3.89
SWB	vk		3.89

* The dollar per cubic metre (\$/m³) cost estimates are net of overhead.

4.10 Manufacturing Cost Estimates

In the interior, appraisal calculations include estimates of the cost of manufacturing lumber and chips. Manufacturing cost estimates are developed from a survey of sawmills and encompass all phases of manufacturing beginning with the dewatering of logs or unloading of logging trucks at the mill log yard, (land or water or satellite log yards), and ending when the lumber and chips have been loaded on rail cars or trucks for transport to market.

The survey collects actual costs to the licensee, including wages, benefits, overtime, depreciation, fuel, supplies, repair, maintenance, applicable licences, insurance, etc. from a representative sample of interior operations.

The cost estimates reflect average conditions, operating practices, and phase accounting allocations experienced in the survey data. Because of this averaging, no additions to or subtractions from these estimates are permitted to reflect operation-specific conditions.

The estimates have an effective cost base date of July 1, 2000, and will be used for all appraisals, reappraisals and adjustments of stumpage rates.

INTERIOR APPRAISAL DATA SUBMISSION

Basic Silviculture (Section 4.9)

Predominant Biogeoclimatic (GC)		
Zone	Sub Zone	Variant

Specified Operation (Root Disease Control) (Section 4.1.1)

Total Cost (\$) _____

