

**The Nova Scotia Primary Forest Products
Marketing Board**

**Summary Report of
Survey Results and Prices for
Standing Timber Sales from Nova Scotia Private
Woodlots**

for the period

January 1 to December 31, 2008

Prepared By:

Nortek Resource Solutions Inc.

March 16, 2009

This report is a summary of the results from the stumpage survey that covers the period from January 1 to December 31, 2008. The detailed report is available from Nova Scotia Primary Forest Products Marketing Board (see contact information at the end of this report).

Tables 1,2 and 3 highlight the results of the stumpage survey for the period from January 1 to December 31, 2008.

The provincial results have been separated into three regions, Eastern Central and Western which are shown in Figure 1.

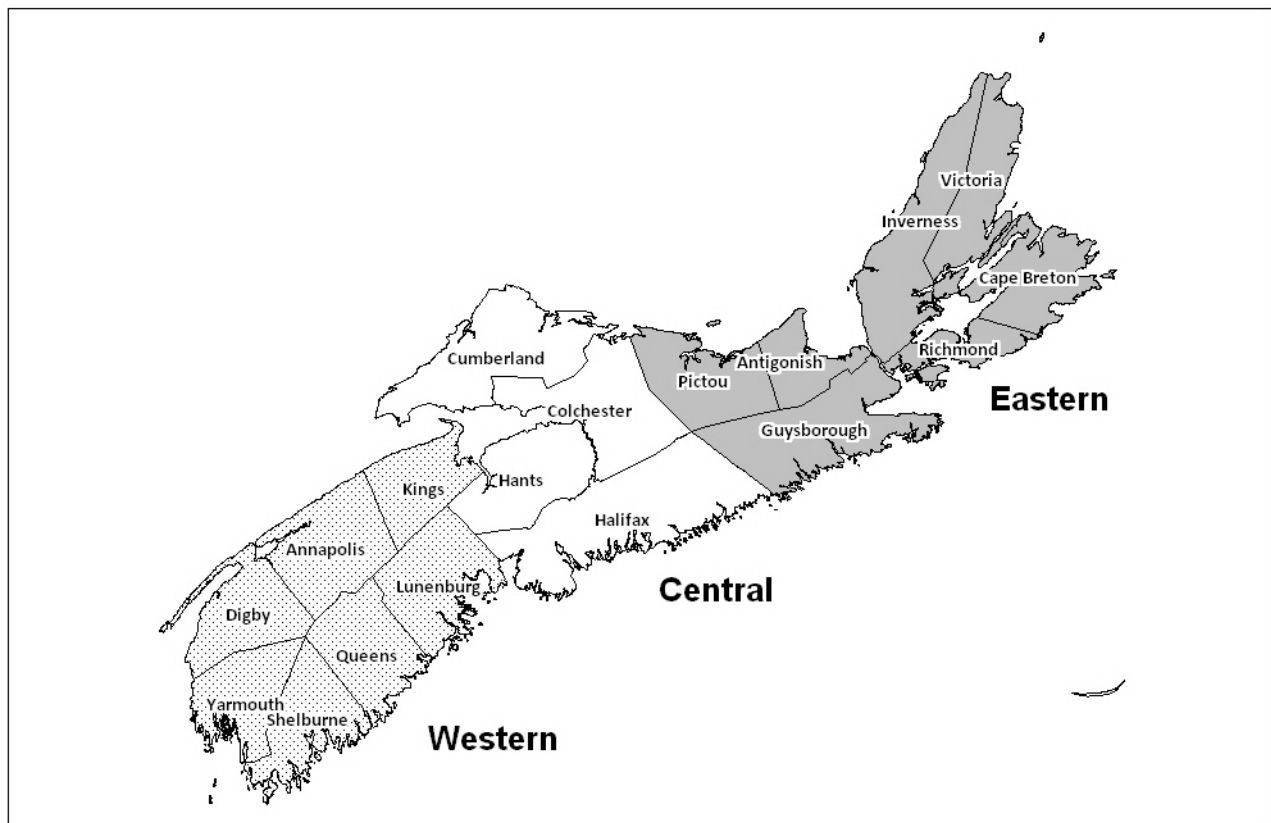


Figure 1: Regions Used to Report Nova Scotia Stumpage Prices.

The tables provide product specific stumpage rates reported for each region. Each product has an average, an upper value and a lower value. The upper and lower values give an indication of the range of survey responses that were reported during the survey (+/- one standard deviation). The tables include a rating of the mean based on the coefficient of variation which provides an indication of the reliability of the mean value. The results from the previous 6 month period (January 1 to June 30, 2006) are also provided for comparison purposes.

The tables show modified stumpage rates that were normalized using modifiers that were developed from this survey during face-to-face interviews with participants. The modifiers

are designed to adjust reported stumpage values if favourable or unfavourable conditions existed for the stumpage transaction reported during the survey.

The Regional User Guides (Tables 4, 5 and 6) are provided which allow users to convert the regional survey results to a particular job or woodlot. The following example highlights the steps required to make the necessary adjustments.

A woodlot owner in central Nova Scotia wishes to obtain an estimate of the current stumpage value for a white spruce stand on his farm woodlot. With a harvest block in mind, a landowner can make the necessary conversions from the regional tables to suit local conditions:

The regional stumpage report for the Central Region (Table 2) shows that the average normalized price for white spruce sawlogs is \$22.39/m³. The average value has a 'Very Good' rating. By referencing the Central Regional Users Guide, the operating condition thresholds can be determined. For this example, assume that the total harvest is expected to yield 350 m³ of sawlog grade wood. The regional user guide (Table 5) indicates that at job size volumes less than 452 m³, a stumpage reduction of 22.1% is reasonable for the Region. On the other hand, assume the stand contains large trees and stand volumes are approximately 200 m³/ha. The regional user guide indicates that in harvest blocks with more than 168 m³/ha, an 11.5% premium on stumpage may be achievable. A maximum adjustment factor has also been introduced which can be used to set the maximum +/- adjustment if more than one modifier is favourable or unfavourable.

Therefore:

(Sum the negative and positive modifiers) **(-22.1% + 11.5%) = - 10.6%**
(Compare with maximum adjustments) **(-10.6% is between -13.8% and +14.2%)**
Therefore, no change
(Convert the normalized rate) **(\$22.39/m³ x [1 - 0.106]) = \$20.02/m³**

The final result is \$20.02/m³ which can be converted to \$/Mfbm by multiplying the result by 5.663 (Table 7):

(Convert \$/m³ to \$/Mfbm) **(\$20.02/m³ x 5.663) = \$113.37/Mfbm**

Alternatively, the normalized price is also presented in Mfbm at the right hand side of the table. Simply replace the price/m³ with the \$/Mfbm and the result will not have to be converted:

Therefore:

(Sum the negative and positive modifiers) **(-22.1% + 11.5%) = - 10.6%**
(Compare with maximum adjustments) **(-10.6% is between -13.8% and +14.2%)**
Therefore, no change
(Convert the normalized rate) **(\$126.79 x [1 - 0.106]) = \$113.35/Mfbm**

Individual products with 1 survey response did not allow for the calculation of upper/lower standard deviations and ratings. If data was not reported for a product, values were calculated by deducting regional operating costs from regional product price lists.

This is a summary of the survey findings and the public can obtain a copy of the final report by contacting the Nova Scotia Primary Forest Products Marketing Board at the following address:

Suite 804, Queen Square
45 Alderney Drive
Dartmouth, Nova Scotia
B2Y 2N6

Tel (902) 424-7598
Fax (902) 424-6965

For information on the use of modifiers, please contact Kirk Schmidt at (902) 922-3607.

Table 1: Eastern Region Stumpage Report
January 1 to December 31, 2008

Products	Values	Normalized Formal Price (\$/ m ³)				Normalized Price (\$/ UNIT)		
		Current Period	Rating	Previous Period	Rating	Current Period	Previous Period	UNIT
Softwood G1 Pulpwood (N=23)	SDA	\$13.90		\$9.57		\$32.28	\$22.20	Cord
	Mean	\$11.45	Excellent	\$6.03	Unreliable	\$26.59	\$13.99	Cord
	SDB	\$9.01		\$2.48		\$20.92	\$5.75	Cord
Softwood G2 Pulpwood (N=10)	SDA	\$8.90		\$10.83		\$20.67	\$25.13	Cord
	Mean	\$5.48	Acceptable	\$5.71	Unreliable	\$12.72	\$13.25	Cord
	SDB	\$2.05		\$0.60		\$4.76	\$1.39	Cord
Softwood Studwood (N=17)	SDA	\$20.69		\$27.48		\$48.04	\$63.75	Cord
	Mean	\$15.81	Very Good	\$18.42	Acceptable	\$36.71	\$42.73	Cord
	SDB	\$10.94		\$9.36		\$25.40	\$21.72	Cord
Spruce Sawlog (N=8)	SDA	\$20.90		\$28.34		\$118.36	\$160.40	Mfbm
	Mean	\$15.51	Good	\$19.54	Acceptable	\$87.83	\$110.60	Mfbm
	SDB	\$10.13		\$10.75		\$57.37	\$60.85	Mfbm
Fir Sawlog (N=3)	SDA	\$19.66		\$29.86		\$111.33	\$169.01	Mfbm
	Mean	\$15.80	Good	\$19.95	Poor	\$89.48	\$112.92	Mfbm
	SDB	\$11.93		\$10.04		\$67.56	\$56.83	Mfbm
White Pine Sawlog (N=1)	SDA	n/a		n/a		n/a	n/a	Mfbm
	Mean	\$15.32	n/a	No Data	n/a	\$86.76	\$106.80*	Mfbm
	SDB	n/a		n/a		n/a	n/a	Mfbm
Hemlock / Larch Sawlog (N=3)	SDA	\$16.68		n/a		\$94.46	n/a	Mfbm
	Mean	\$10.39	Unreliable	\$12.93	n/a	\$58.84	\$73.18	Mfbm
	SDB	\$4.10		n/a		\$23.22	n/a	Mfbm
Hardwood Pulp/Fuelwood (N=13)	SDA	\$10.82		\$13.36		\$20.84	\$25.78	Cord
	Mean	\$8.24	Very Good	\$7.80	Unreliable	\$15.87	\$15.05	Cord
	SDB	\$5.66		\$2.25		\$10.90	\$4.34	Cord
Hardwood Palletwood (N=2)	SDA	\$12.10		n/a		\$26.73	n/a	Cord
	Mean	\$11.09	Very Good	\$3.99	n/a	\$24.50	\$7.70	Cord
	SDB	\$10.08		n/a		\$22.27	n/a	Cord
Hardwood G1 Sawlog (N=6)	SDA	\$40.46		\$28.53		\$25.26	\$161.48	Mfbm
	Mean	\$28.32	Acceptable	\$18.62	Unreliable	\$160.38	\$105.39	Mfbm
	SDB	\$16.17		\$8.71		\$91.57	\$49.30	Mfbm
Hardwood G2 Sawlog (N=3)	SDA	\$28.56		n/a		\$161.74	n/a	Mfbm
	Mean	\$21.69	Acceptable	No Data	Acceptable	\$122.83	No Data	Mfbm
	SDB	\$14.81		n/a		\$83.87	n/a	Mfbm
Hardwood Veneer (N=1)	SDA	n/a		\$59.10		n/a	\$334.51	Mfbm
	Mean	\$88.59	n/a	\$46.57	n/a	\$501.69	\$263.59	Mfbm
	SDB	n/a		\$34.04		n/a	\$192.67	Mfbm

RATINGS

Coefficient of Variance	Estimate Quality
CV <= 5%	Excellent
5% < CV <= 10%	Very Good
10% < CV <= 15%	Good
15% < CV <= 20%	Acceptable
20% < CV <= 25%	Poor
CV > 25%	Unreliable

Other	Meaning
N	Sample Size
n/a	Not Available
SDA	Standard Deviation Above
SDB	Standard Deviation Below
*	Value Derived from Residual Calculation

Table 2: Central Region Stumpage Report
 January 1 to December 31, 2008

Products	Values	Normalized Formal Price (\$ / m ³)				Normalized Price (\$ / UNIT)		
		Current Period	Rating	Previous Period	Rating	Current Period	Previous Period	UNIT
Softwood G1 Pulpwood (N=17)	SDA	\$11.93		\$14.32		\$27.70	\$33.22	Cord
	Mean	\$9.31	Very Good	\$8.82	Good	\$21.62	\$20.46	Cord
	SDB	\$6.70		\$3.33		\$15.56	\$7.73	Cord
Softwood G2 Pulpwood (N=17)	SDA	\$7.37		\$10.18		\$17.11	\$23.62	Cord
	Mean	\$4.55	Acceptable	\$6.11	Poor	\$10.57	\$14.18	Cord
	SDB	\$1.73		\$2.03		\$4.02	\$4.71	Cord
Softwood Studwood (N=18)	SDA	\$24.22		\$26.24		\$56.24	\$60.88	Cord
	Mean	\$19.05	Very Good	\$19.20	Good	\$44.23	\$44.54	Cord
	SDB	\$13.87		\$12.16		\$31.81	\$28.21	Cord
Spruce Sawlog (N=16)	SDA	\$30.11		\$35.03		\$170.51	\$198.27	Mfbm
	Mean	\$22.39	Very Good	\$24.53	Very Good	\$107.88	\$138.84	Mfbm
	SDB	\$14.66		\$14.02		\$78.55	\$79.35	Mfbm
Fir Sawlog (N=5)	SDA	\$30.96		\$25.79		\$175.33	\$145.97	Mfbm
	Mean	\$23.79	Good	\$17.88	Excellent	\$134.72	\$101.20	Mfbm
	SDB	\$16.63		\$9.96		\$94.18	\$56.37	Mfbm
White Pine Sawlog (N=1)	SDA	n/a		\$27.49		n/a	\$155.59	Mfbm
	Mean	\$9.80	n/a	\$21.07	Good	\$55.50	\$119.26	Mfbm
	SDB	n/a		\$14.65		n/a	\$82.92	Mfbm
Hemlock / Larch Sawlog (N=4)	SDA	\$21.79		\$14.68		\$123.40	\$83.09	Mfbm
	Mean	\$14.00	Unreliable	\$11.70	Good	\$79.28	\$66.22	Mfbm
	SDB	\$6.21		\$8.72		\$35.17	\$49.36	Mfbm
Hardwood Pulp/Fuelwood (N=16)	SDA	\$12.49		\$8.00		\$24.06	\$15.44	Cord
	Mean	\$9.17	Very Good	\$5.08	Poor	\$17.66	\$9.80	Cord
	SDB	\$5.85		\$2.17		\$11.27	\$4.19	Cord
Hardwood Palletwood (N=0)	SDA	n/a		No Data		n/a	No Data	Cord
	Mean	No Data	n/a	No Data	n/a	No Data	No Data	Cord
	SDB	n/a		No Data		n/a	No Data	Cord
Hardwood G1 Sawlog (N=5)	SDA	\$21.28		n/a		\$120.51	n/a	Mfbm
	Mean	\$16.26	Good	\$13.88	n/a	\$92.08	\$78.56	Mfbm
	SDB	\$11.25		n/a		\$63.71	n/a	Mfbm
Hardwood G2 Sawlog (N=1)	SDA	n/a		n/a		n/a	n/a	Mfbm
	Mean	\$9.33	n/a	No Data	n/a	\$52.84	No Data	Mfbm
	SDB	n/a		n/a		n/a	n/a	Mfbm
Hardwood Veneer (N=1)	SDA	n/a		n/a		n/a	\$n/a	Mfbm
	Mean	\$9.33	n/a	\$44.36	n/a	\$52.84	\$251.08	Mfbm
	SDB	n/a		n/a		n/a	n/a	Mfbm

RATINGS

Coefficient of Variance	Estimate Quality
CV <= 5%	Excellent
5% < CV <= 10%	Very Good
10% < CV <= 15%	Good
15% < CV <= 20%	Acceptable
20% < CV <= 25%	Poor
CV > 25%	Unreliable

Other	Meaning
N	Sample Size
n/a	Not Available
SDA	Standard Deviation Above
SDB	Standard Deviation Below
*	Value Derived from Residual Calculation

Table 3: Western Region Stumpage Report
January 1 to December 31 2008

Products	Values	Normalized Formal Price (\$ / m ³)				Normalized Price (\$ / UNIT)		
		Current Period	Rating	Previous Period	Rating	Current Period	Previous Period	UNIT
Softwood G1 Pulpwood (N=10)	SDA	\$9.38		\$4.73		\$21.78	\$10.97	Cord
	Mean	\$6.63	Good	\$3.20	Unreliable	\$15.39	\$7.42	Cord
	SDB	\$3.88		\$1.68		\$9.01	\$3.90	Cord
Softwood G2 Pulpwood (N=3)	SDA	\$1.60		\$4.73		\$3.72	\$10.97	Cord
	Mean	\$1.27	Acceptable	\$3.45	Poor	\$2.95	\$8.00	Cord
	SDB	\$0.94		\$2.17		\$2.18	\$5.03	Cord
Softwood Studwood (N=6)	SDA	\$28.51		\$33.50		\$66.20	\$77.72	Cord
	Mean	\$22.99	Very Good	\$25.70	Acceptable	\$53.38	\$59.62	Cord
	SDB	\$17.47		\$17.91		\$40.57	\$41.55	Cord
Spruce Sawlog (N=14)	SDA	\$29.34		\$29.74		\$166.15	\$168.33	Mfbm
	Mean	\$24.63	Very Good	\$24.90	Very Good	\$139.48	\$140.93	Mfbm
	SDB	\$19.93		\$20.06		\$112.86	\$113.54	Mfbm
Fir Sawlog (N=10)	SDA	\$27.93		\$27.86		\$158.17	\$157.69	Mfbm
	Mean	\$23.98	Very Good	\$23.13	Very Good	\$135.80	\$130.92	Mfbm
	SDB	\$20.03		\$18.39		\$113.43	\$104.09	Mfbm
White Pine Sawlog (N=9)	SDA	\$25.88		\$28.36		\$146.56	\$160.52	Mfbm
	Mean	\$18.77	Good	\$23.66	Very Good	\$106.29	\$133.92	Mfbm
	SDB	\$11.65		\$18.96		\$65.97	\$107.31	Mfbm
Hemlock / Larch Sawlog (N=4)	SDA	\$21.03		\$26.52		\$119.09	\$150.10	Mfbm
	Mean	\$16.79	Good	\$20.25	Acceptable	\$95.08	\$114.62	Mfbm
	SDB	\$12.55		\$13.98		\$71.07	\$79.13	Mfbm
Hardwood Pulp/Fuelwood (N=11)	SDA	\$15.86		\$8.23		\$30.55	\$15.88	Cord
	Mean	\$11.42	Good	\$6.11	Acceptable	\$21.99	\$11.79	Cord
	SDB	\$6.97		\$3.99		\$13.42	\$7.70	Cord
Hardwood Palletwood (N=0)	SDA	n/a		No Data		n/a	n/a	Cord
	Mean	No Data	n/a	No Data	n/a	No Data	No Data	Cord
	SDB	n/a		No Data		n/a	n/a	Cord
Hardwood G1 Sawlog (N=2)	SDA	\$62.47		n/a		\$353.77	n/a	Mfbm
	Mean	\$34.66	Unreliable	\$25.52	n/a	\$196.28	\$144.44	Mfbm
	SDB	\$6.85		n/a		\$38.79	n/a	Mfbm
Hardwood G2 Sawlog (N=1)	SDA	n/a		n/a		n/a	n/a	Mfbm
	Mean	\$14.99	n/a	\$31.35	n/a	\$84.89	\$177.44	Mfbm
	SDB	n/a		n/a		n/a	n/a	Mfbm
Hardwood Veneer (N=0)	SDA	n/a		\$16.88		n/a	\$32.58	Mfbm
	Mean	\$103.30*	n/a	\$10.81	Unreliable	No Data	\$20.86	Mfbm
	SDB	n/a		\$4.74		n/a	\$9.15	Mfbm

RATINGS

Coefficient of Variance	Estimate Quality
CV <= 5%	Excellent
5% < CV <= 10%	Very Good
10% < CV <= 15%	Good
15% < CV <= 20%	Acceptable
20% < CV <= 25%	Poor
CV > 25%	Unreliable

Other	Meaning
N	Sample Size
n/a	Not Available
SDA	Standard Deviation Above
SDB	Standard Deviation Below
*	Value Derived from Residual Calculation

Table 4: Eastern Regional User Guide

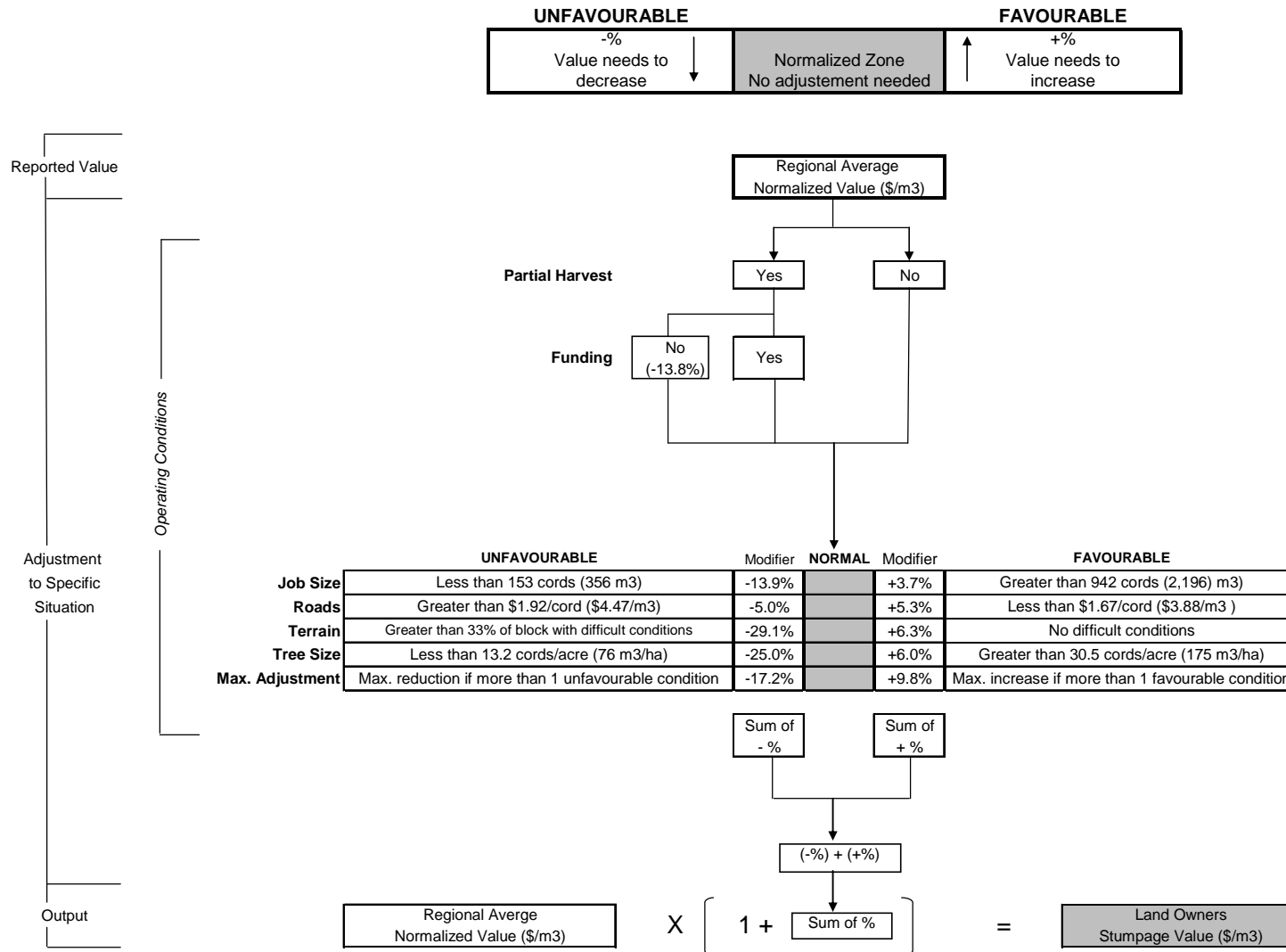


Table 5: Central Regional User Guide

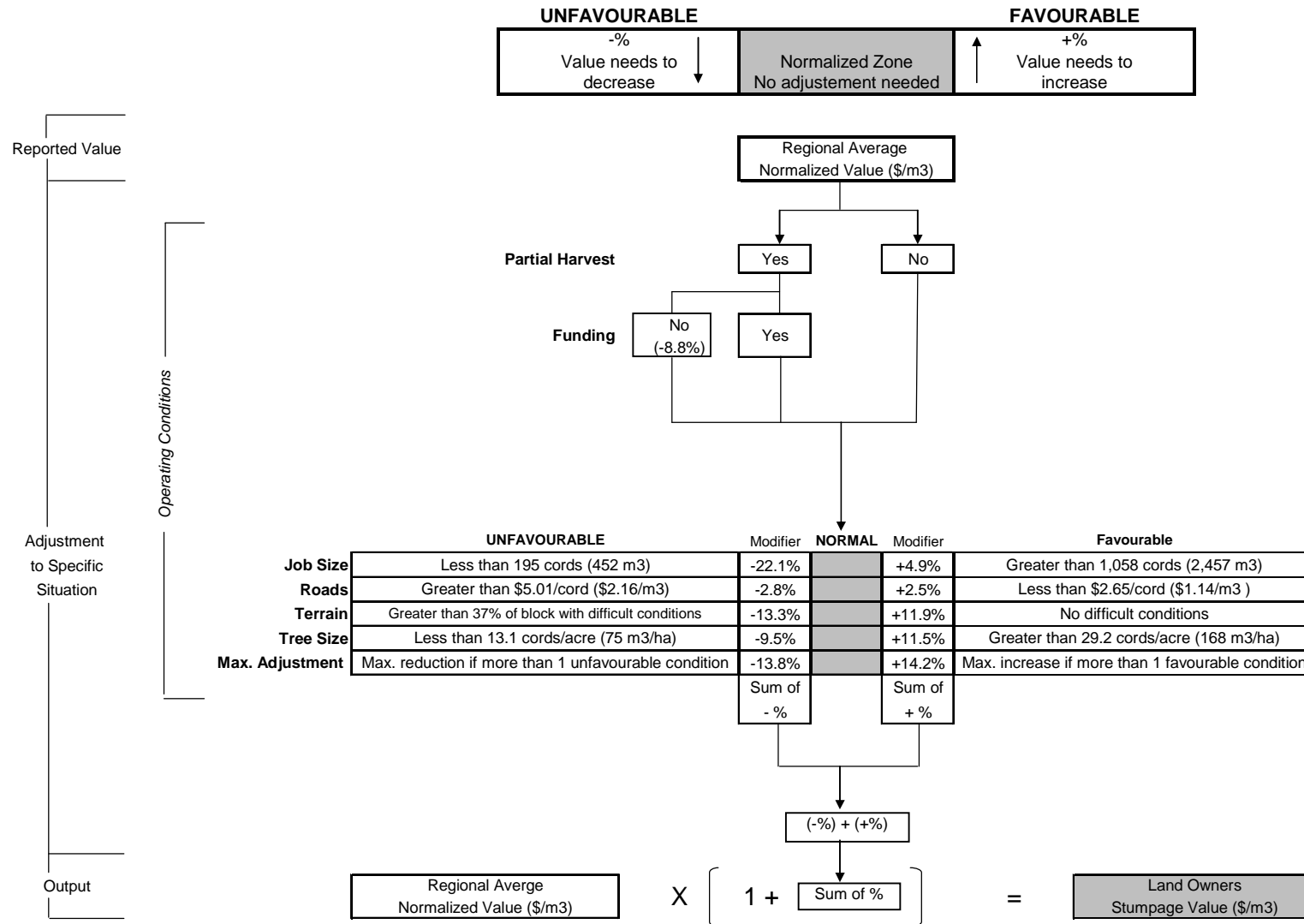


Table 6: Western Regional User Guide

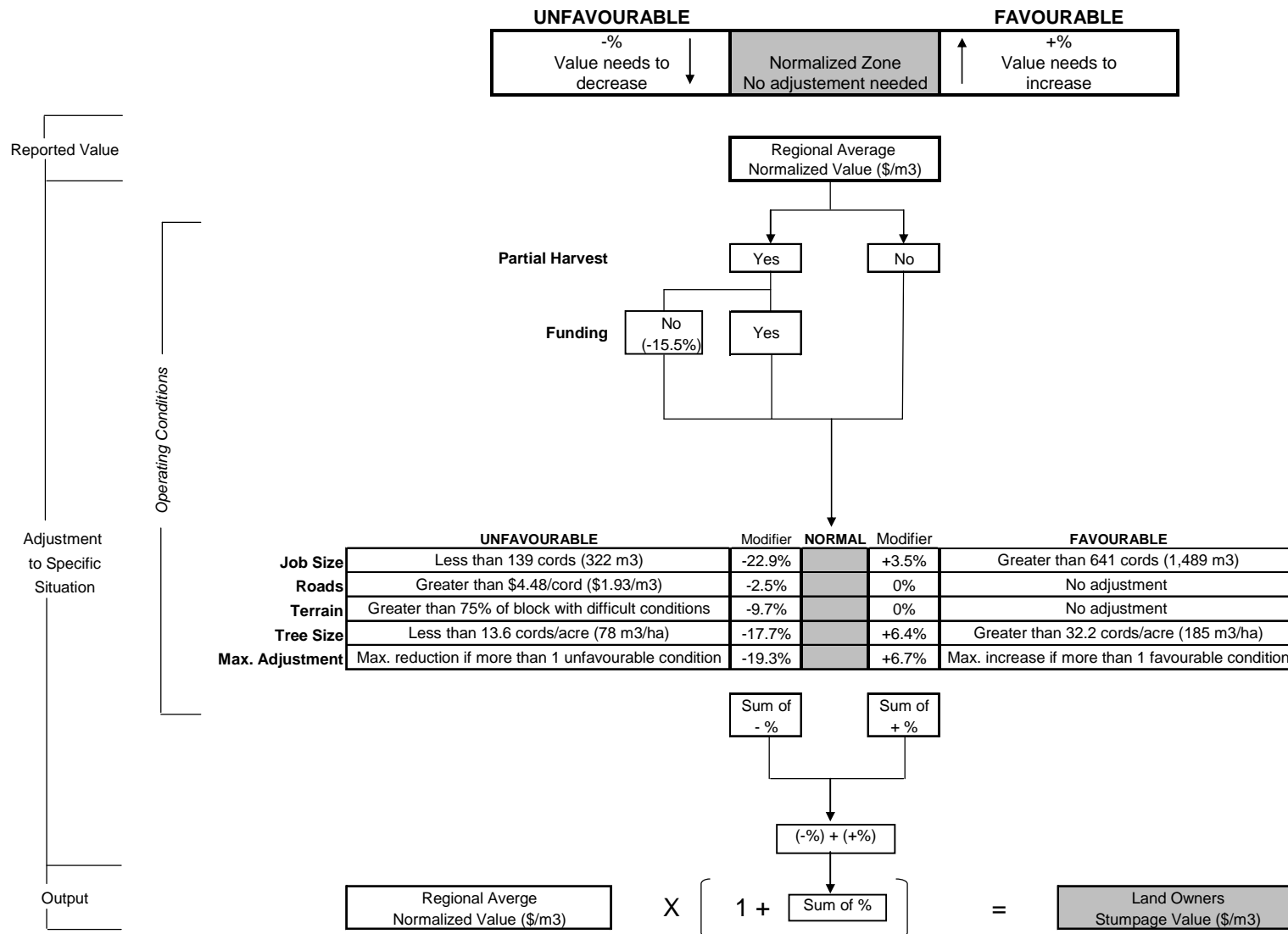


Table 7: Conversion Factors

Type	Species	Product	Detail*	Original Unit of Measure	Multiply	Conversion Factor	Volume m3	
Softwood	SPF	Sawlogs	CTL	mbfm	x	5.663		
				fbm	x	0.005663		
			TL	tonnes	x	1.167		
		Studwood	8'	cords	x	2.322		
				tonnes	x	1.167		
				m3 (s)	x	0.641		
			10'	cords	x	2.265		
				tonnes	x	1.167		
				m3 (s)	x	0.625		
		Pulp/Fuel	TL	tonnes	x	1.167		
			8'	cords	x	2.209		
				tonnes	x	1.167		
				m3 (s)	x	0.609		
			RL	tonnes	x	1.167		
	Pulp	Chips	tonnes	x	1.2690			
	Fuel	Chips	tonnes	x	0.817			
		Hemlock		All	tonnes	x	1.026	
		Larch		All	tonnes	x	1.033	
	White Pine		All	tonnes	x	1.11		
Hardwood	All	Sawlogs	CTL	mfbm	x	5.663		
				fbm	x	0.005663		
				m3	x	1		
				tonnes	x	0.963		
		Pulp/Fuel	TL	tonnes	x	0.9630		
		Pallet	8'	mbfm	x	5.663		
				fbm	x	0.005663		
				cords	x	2.209		
				m3(s)	x	0.609		
				tonnes	x	0.963		
		Pulp/Fuel	8'	cords	x	1.926		
				m3(s)	x	0.531		
				tonnes	x	0.963		
		Veneer		mbfm	x	5.663		
				fbm	x	0.005663		
		tonnes	x	0.963				

* CTL: Cut to Length; TL: Tree Length; RL: Random Length; 8': 8 Foot Length; 10': 10 Foot Length; Chips: Chips.