

Slave Lake Pulp Corporation

2000 Detailed Forest Management Plan

Appendix I– FMU S1 Partition and FMA Quota Re-Allocation

The expansion of the Slave Lake Pulp FMA into FMU S1 did not encompass the entire unit. The portion of the FMU that falls within the Slave Lake Pulp FMA was re-labelled as FMU S1S. The portion outside of the Slave Lake Pulp FMA was labelled as FMU S1 and has now been allocated to Buchanan Lumber and Tolko Industries as a joint FMA. The conifer quota holders conditionally agreed to pursue the partitioning of the FMU into two discrete timber supply areas (FMU's). The condition of the agreement was that the quota holders within the Slave Lake Pulp FMA would work towards the amalgamation of the FMU's within the FMA area.

This appendix summarizes the results of the partitioning of FMU S1/S1S. A detailed summary of the procedures and results was submitted to SRD under separate cover. In addition, the amalgamation of the FMU's within the FMA area and re-allocation of the conifer rights is also described.

I.1 Partitioning of S1 Forest Management Unit (FMU)

The current conifer AAC for Forest Management Unit S1/S1S was derived from the entire unit as one single sustained yield unit. A detailed analysis of the timber supply was completed and the results are presented in the table below. The table summarizes the sequenced (aspatial) AAC for the entire S1/S1S unit as well as for each portion of the split FMU. The AAC implication of dividing the FMU into two distinct timber supply units is 500 m³/yr.

Table I-1: FMU S1/S1S Individual Unit Conifer AAC (derived from new AVI)

FMU	Conifer AAC (m ³ /yr)
S1/S1S Combined	352,000
S1	119,500
S1S	231,000
Sum of Split Units	350,500

The sum of the split unit AAC's was then prorated by company to determine the portion of the AAC allocated to each company (Table I-2).

Table I-2: Allocation of AAC for FMU S1/S1S by Current Quota Percentage

Company	Current Quota Percentage		Conifer AAC (m ³ /yr-split units)	=	Company Conifer AAC Allocation (m ³ /yr)
Alberta Plywood	38.06	x	350,500	=	133,400
Buchanan Lumber	48.95	x	350,500	=	171,570
Millar Western Forest Products	12.99	x	350,500	=	45,530
Total	100.00				350,500

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The next step was to allocate as much of Buchanan Lumber's AAC to the non-FMA portion of the FMU (i.e. FMU S1). The remainder of Buchanan Lumber's AAC was allocated to FMU S1S. The allocation is summarized in the following table:

Table I-3: Allocation of Company AAC to FMU S1/S1S Split Units

Company	AAC Allocation (m ³ /yr)	=	FMU S1 (m ³ /yr)	+	FMU S1S (m ³ /yr)
Alberta Plywood	133,400	=	0	+	133,400
Buchanan Lumber	171,570	=	119,500	+	52,070
Millar Western Forest Products	45,530	=	0	+	45,530
Total	350,500	=	119,500	+	231,000

The final step was the re-determination of the percentage AAC in each portion of the split S1/S1S units by company (see table I-4). Note that the sequenced AAC of 118,500 m³/yr in FMU S1 was recommended for approval as the new AAC for that unit.

Table I-4: Revised S1/S1S Quota Percentages by Company¹

Company	FMU S1	FMU S1S
Alberta Plywood	0.00	57.75
Buchanan Lumber	100.00	22.54
Millar Western Forest Products	0.00	19.71
Total	100.00	100.00

I.2 FMA Amalgamation and Determination of New Quota Percentages

I.2.1 Determination of the Discrete Landbase Conifer AAC on the FMA

The discrete conifer landbase AAC was determined for each FMU within the FMA. For the purposes of this analysis, the conifer understorey stands in the deciduous landbase were not included in the conifer landbase². The intent was to apply a consistent methodology for determining the conifer AAC for each FMU and for the FMA as a single sustained yield unit. The uplift from combining the FMU's was then determined as the difference between sum of the AAC's for each unit and the single combined unit AAC.

Table I-5: Discrete Conifer Landbase Individual FMU AAC's³

FMU	Conifer AAC (m ³ /yr)
S1S	206,000
S2/S2S	236,500
S6/S6S	58,000
Sum of FMU's	500,500
FMA	519,000
Uplift of FMU amalgamation	18,500

¹ Current carry-over volumes for the entire S1/S1S unit will be prorated across the split FMU's according to AAC percentage (FMU S1: 34.1%, FMU S1S: 65.9%).

² The FMA agreement states that these stands contribute to the deciduous landbase with provision for understorey protection.

³ Aspatial harvest sequence, conifer u/s excluded

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1.2.2 Apportioning the Uplift from an Amalgamated FMA

The DFMP team recognized that the benefits of amalgamation were attributed to the combining of the units and contribution of the stand types and age classes within each FMU. To account for the significant amount of potentially productive ground in S6, the team agreed to apportion the uplift based on the percentage of productive and potentially productive ground that each FMU contributes to the amalgamated FMA landbase.

Table I-6: FMU Proportion of Productive and Potentially Productive Area

FMU	Net Productive Area (ha)	Net Potentially Productive Area (ha - burns)	Net Productive and Potentially Productive Area (ha)	Percent of FMA Area
S1S	181,794	920	182,714	38.01
S2/S2S	173,473	1,236	174,709	36.34
S6/S6S	80,307	42,977	123,284	25.65
Total	435,574	45,133	480,707	100.00

In addition, the DFMP team also recognized that the proportionate share of conifer incidental in each FMU should be attributed to the individual units as a contribution to the amalgamated FMA AAC. Consequently, the 20 year average incidental conifer supply by unit from the deciduous landbase was added to the uplift proportion and the base conifer AAC in each unit. This was essential to determine the total conifer contribution of the individual companies to the amalgamated FMU AAC.

**Table I-7: AAC Re-Allocation Method
(using FMU proportion of productive and potentially productive ground and including conifer incidental)**

Distribution of AAC Uplift	AAC Uplift (amalgamation of FMU's - m ³ /yr)	Percentage of FMA Area	Proportion of uplift (m ³ /yr)	
S1S	18,500	38.01	7,032	
S2/S2S	18,500	36.34	6,724	
S6/S6S	18,500	25.65	4,745	
Total		100.00	18,500	
FMU	Individual FMU Conifer AAC's (m ³ /yr)	20 Year Average Conifer Harvest from Pure Deciduous Stands (m ³ /yr)	Proportion of AAC Uplift (m ³ /yr)	Total Conifer Allocation (m ³ /yr)
S1S	206,000	35,753	7,032	248,785
S2/S2S	236,500	24,698	6,724	267,922
S6/S6S	58,000	22,300	4,745	85,045
FMA	500,500	82,751	18,500	601,751

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1.2.3 AAC Distribution by Company on the FMA (New Quota Percentages)

The total conifer allocation (Table I-7) was distributed by the newly determined percentages in S1 (section I-1 above) and the historical percentages in S2 and S6, by company. The company total AAC on the FMA was then summarized to reflect the total AAC (Table I-8). The individual company quota allocation was calculated as the company's percentage of the total conifer allocation in the FMA. The quota percentages described below will be applied against the conifer AAC described in the Preferred Forest Management Strategy (Chapter 8) to obtain individual company annual allowable cut levels.

Table I-8: Amalgamated FMA Conifer AAC Percentages⁴

FMU AAC by Company	Company	Quota Percentage	Total Conifer Allocation (m3/yr)	
S1S	Alberta Plywood	57.76	143,686	
	Buchanan Lumber	22.53	56,059	
	Millar Western Forest Products	19.71	49,040	
	Total	100.00	248,785	
S2/S2S	Alberta Plywood	22.95	61,488	
	Millar Western Forest Products	71.55	191,698	
	Local MTU (S2)	5.50	14,736	
	Total	100.00	267,922	
S6/S6S	Alberta Plywood	35.16	29,902	
	Vanderwell Contractors	59.36	50,482	
	Local MTU (S6)	5.48	4,660	
	Total	100.00	85,045	
Amalgamated FMA Area	Company		Conifer Allocation by Company (sum of above)	Quota Percentage
	Alberta Plywood		235,075	39.06
	Buchanan Lumber		56,059	9.32
	Millar Western Forest Products		240,738	40.01
	Vanderwell Contractors		50,482	8.39
	Local MTU (S2)		14,736	2.45
	Local MTU (S6)		4,660	0.77
	Total		601,751	100.00

⁴ Includes secondary harvest levels from pure deciduous stand types.