

Probyn Log Ltd

4,578 M3/Yr

Fraser TSA

Tuesday, September 12, 2017

A General Comments

- 1 There is no rationale to sub-divide this sized RFL volume across all three economic zones
- 2 The age class is marginally skewed to primary old forest.
- 3 The operating method is well correlated with the TSA profile
- 4 The primary species is well correlated to the Residual TSA given its very narrow geographical distribution.

B Probyn Volume Summary

The AAC does not consider any FN allocations.

4,578 M3

C Unresolved Issues

WCTP has indicated a short term transition development along the lakeshore segment of the revised operating area.

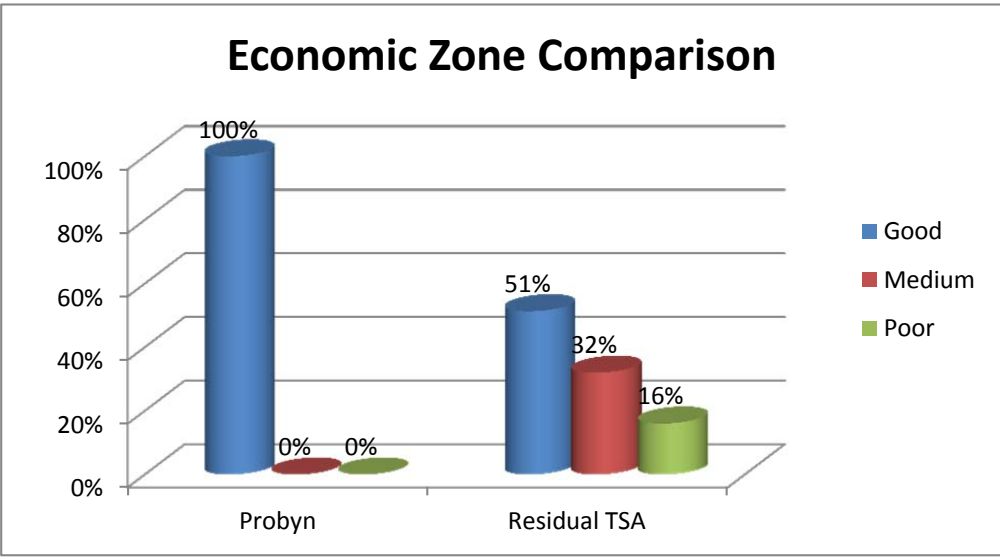
D Target Volume Position:

	Probyn	Residual TSA
Total THLB Volume:	319,766	57,074,507
AAC Estimate	4,578	1,030,449
% of THLB Volume	0.6%	100%
% of AAC	0.4%	100%
Years of AAC	70	55
Other Comparisons Requested by Tenure Holders:		
Ave Market Value	\$ 106.14	\$ 99.30
Volume per THLB Ha	525.4	461.8
% old HB>70%	11%	8%

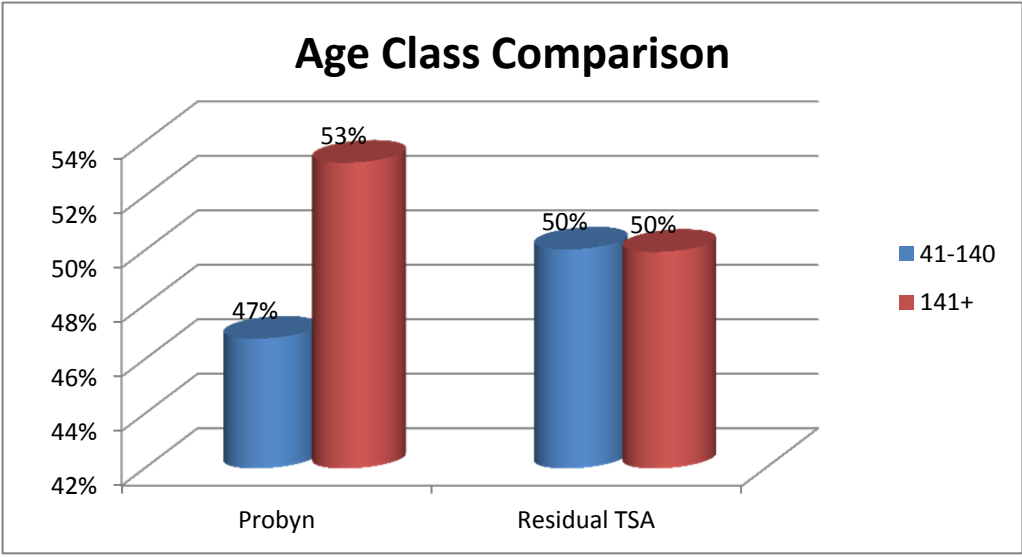
E Summary:

Probyn Log Ltd revised operating area has achieved a target of >50 years even with the removal of 33,262m3 of THLB Volume. Market Value and Volume Per THLB Ha are slightly higher than the TSA average due to the higher component of old primary forest, which also contains the difficult stand profile of the old growth Hem-Bal on >70% slopes as compared to the Residual TSA.

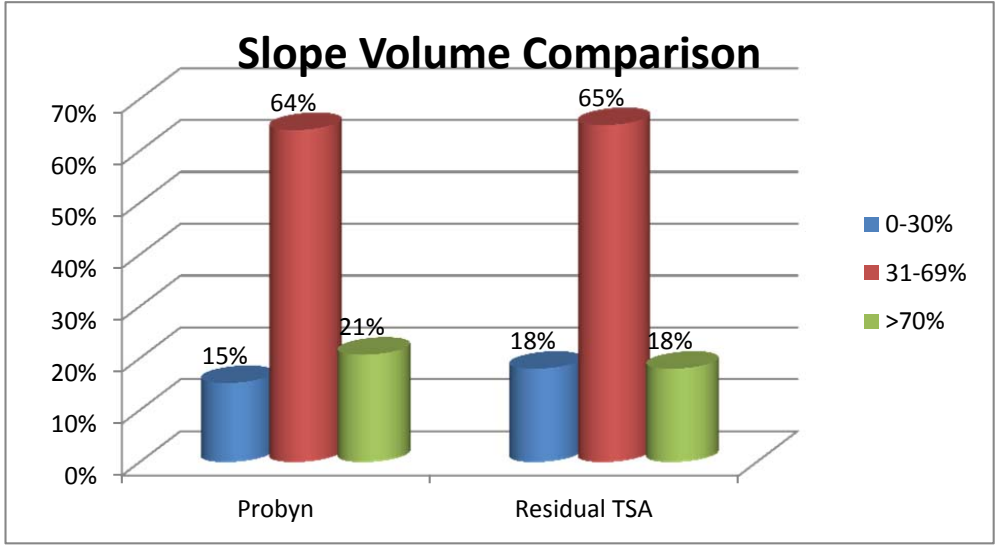
Comparison Graphs - Probyn Log Ltd Operating Area Compared to Residual Fraser TSA



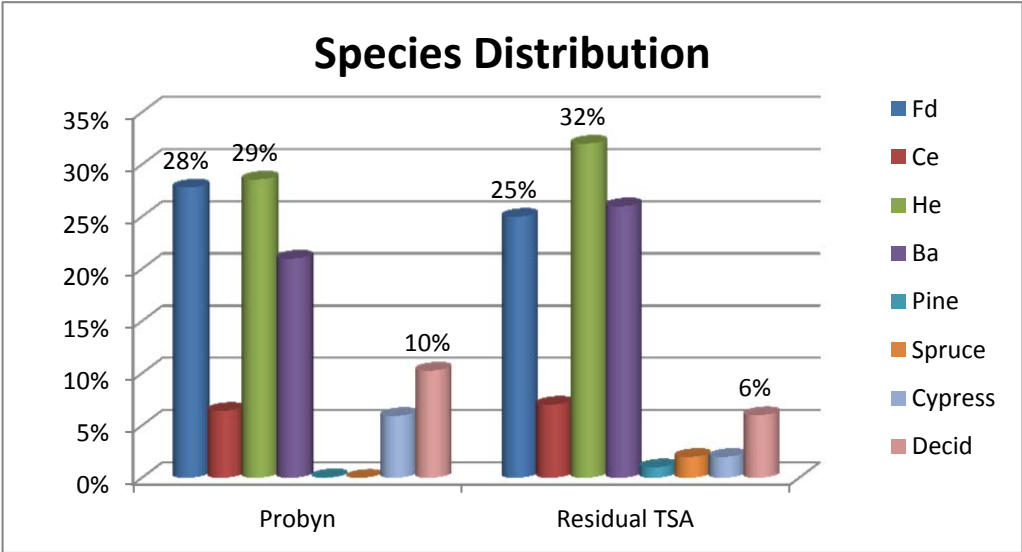
Economic Zone thlb Volume			
	Good	Medium	Poor
Probyn	100%	0%	0%
Residual TSA	51%	32%	16%



Age Class thlb Volume		
	41-140	141+
Probyn	47%	53%
Residual TSA	50%	50%



Slope thlb Volume			
	0-30%	31-69%	>70%
Probyn	15%	64%	21%
Residual TSA	18%	65%	18%



Species thlb Volume Distribution								
	Fd	Ce	He	Ba	Pine	Spruce	Cypress	Decid
Probyn	28%	6%	29%	21%	0%	0%	6%	10%
Residual TSA	25%	7%	32%	26%	1%	2%	2%	6%

100%

Net change of Version 3 Operating Area as compared to 2015 Benchmark

Change Summary	Total THLB Area Difference +/-from Benchmark	Total THLB Vol	Slope Criteria		
			<30%	31-69%	>70+%
Probyn Log Ltd					
Good - Economic Zone					
41-140 Years	132	-25,925	-17,157	-8,307	-461
141+ Years	4	-7,337	19,750	-16,401	-10,686
Good - Economic Zone Total	136	-33,262	2,593	-24,708	-11,147
Medium - Economic Zone		0		0	0
41-140 Years	0	0	0	0	0
141+ Years	0	0	0	0	0
Medium - Economic Zone Total	0	0	0	0	0
Poor - Economic Zone		0		0	0
41-140 Years	0	0	0	0	0
141+ Years	0	0	0	0	0
Poor - Economic Zone Total	0	0	0	0	0
Probyn Log Ltd	136	-33,262	2,593	-24,708	-11,147

check

136

-33,262

2,593

-24,708

-11,147

Timber Harvesting Land Base (THLB): Based on Fraser TSA TSR 4 Timber Supply Analysis using a compilation of the best available information.

August 2017 Version 3 - Licensee Operating Area Analysis Forest Cover Data Sources:

Vegetation Resource Inventory: Attributes projected to 2016

Change Detection Mapping: Denudation current to April 2017 using RESULTS forest_cover_inv_svw dataset and Landsat imagery

Burn Severity Mapping: Wildfire V10247 (Cougar Creek) & V10370 (Wood Lake) forest cover updated for Low, Medium & High severity burn

August 1, 2017 Licensee - Economic Zones	Total THLB Area (ha)	Total THLB Vol (m3)	Total Annual Yield (m3/yr)	Slope 0-30 %										Slope 31-69 %										> 69%															
				Slope THLB Area	THLB Volume (m3)							Slope THLB Volume m3	Annual Yield	Slope THLB Area	THLB Volume (m3)							Slope THLB Volume	Annual Yield	Slope THLB Area	THLB Volume (m3)							Slope THLB Volume	Annual Yield						
					FIR	CEDAR	HEMLOCK	BALSAM	PINE	SPRUCE	CYPRESS				DECIDUOUS	FIR	CEDAR	HEMLOCK	BALSAM	PINE	SPRUCE				CYPRESS	DECIDUOUS	FIR	CEDAR	HEMLOCK	BALSAM	PINE			SPRUCE	CYPRESS	DECIDUOUS			
Probyn Log Ltd																																							
Good																																							
41-140 Years				414	149,550	1,536	77	6,873	3,815	8,418	1,869	0	0	94	7,166	28,234	287	301	51,562	10,536	22,170	3,634	150	0	110	23,666	111,828	1,116	36	5,057	584	1,388	441	15	0	14	1,989	9,487	133
141+ Years				195	170,216	723	28	1,016	159	8,534	9,662	0	0	1,149	0	20,521	104	103	13,529	2,953	33,369	34,828	0	0	8,286	0	92,964	384	63	10,858	2,426	17,464	16,694	0	0	9,289	0	56,731	235
Good Total				609	319,766	2,259	105	7,888	3,973	16,953	11,531	0	0	1,243	7,166	48,755	391	404	65,091	13,488	55,539	38,462	150	0	8,396	23,666	204,792	1,500	99	15,915	3,010	18,853	17,135	15	0	9,303	1,989	66,219	368
Medium																																							
41-140 Years				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
141+ Years				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Medium Total				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Poor																																							
41-140 Years				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
141+ Years				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Poor Total				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Probyn Log Ltd Total				609	319,766	2,259	105	7,888	3,973	16,953	11,531	0	0	1,243	7,166	48,755	391	404	65,091	13,488	55,539	38,462	150	0	8,396	23,666	204,792	1,500	99	15,915	3,010	18,853	17,135	15	0	9,303	1,989	66,219	368

																												Hem-Bal Old >70% in Poor 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RESIDUAL FRASER TSA PROFILE				Species Distribution		
Economic Zone				Species	Volume	% Dist.
Good				Fd	14,006,709	25%
41-140 Years				Ce	3,875,448	7%
141+ Years				He	18,215,691	32%
Good Total				Ba	14,841,044	26%
Medium				Pine	739,842	1%
41-140 Years				Spruce	1,169,611	2%
141+ Years				Cypress	946,990	2%
Medium Total				Decid	3,279,171	6%
Poor				Check	57,074,507	100%
41-140 Years						
141+ Years						
Poor Total						

Total Age Class			Slope Criteria		
41-140 years	28,563,473	50%	0-30	10,121,380	18%
>140+ years	28,511,034	50%	31-69	36,849,560	65%
Check	57,074,507		>70+	10,103,566	18%
			Check	57,074,507	

Timber Harvesting Land Base (THLB): Based on Fraser TSA TSR 4 Timber Supply Analysis using a compilation of the best available information.

Benchmark 2015 - Licensee Operating Area Analysis Forest Cover Data Sources:

Vegetation Resource Inventory: Attributes projected to 2014

Change Detection Mapping: Denudation current to April 2014 using RESULTS forest_cover_inv_svw dataset and Landsat imagery

Benchmark 2015 Licensee - Economic Zones	Total Summary					Slope 0-30%										Slope 31-69%										Slope >69%									
	AAC (m³)	Yrs Supply	Total THLB Area	Total THLB Vol	% Total Vol (m³)	Slope THLB Area	THLB Volume (m3)								Slope THLB	Slope THLB Area	THLB Volume (m3)								Slope THLB	Slope THLB Area	THLB Volume (m3)								Slope THLB
							FIR	CEDAR	HEMLOCK	BALSAM	PINE	SPRUCE	CYPRESS	DECIDUOUS			FIR	CEDAR	HEMLOCK	BALSAM	PINE	SPRUCE	CYPRESS	DECIDUOUS			FIR	CEDAR	HEMLOCK	BALSAM	PINE	SPRUCE	CYPRESS	DECIDUOUS	
Probyn Log Ltd	4,578																																		
Good - Economic Zone																																			
41-140 Years	38.3		282	175,475	50%	76	28,876	4,258	10,523	481	0	0	0	1,253	45,391	187	51,254	9,318	49,729	2,907	0	0	3	6,925	120,135	18	6,340	1,080	2,251	118	0	0	1	158	9,949
141+ Years	38.8		190	177,553	50%	1	18	153	463	66	0	0	66	5	771	121	20,299	17,902	37,581	31,355	0	0	2,190	39	109,365	68	11,836	16,550	25,112	13,028	0	0	892	0	67,417
Good - Economic Zone Total	77.1		473	353,027	100%	77	28,894	4,410	10,987	546	0	0	66	1,258	46,162	309	71,552	27,220	87,310	34,262	0	0	2,192	6,963	229,500	86	18,176	17,630	27,363	13,147	0	0	893	158	77,366
Medium - Economic Zone	0.0				0%																														
41-140 Years	0.0	0		0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
141+ Years	0.0	0		0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Medium - Economic Zone Total	0.0	0		0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Poor - Economic Zone	0.0				0%																														
41-140 Years	0.0	0		0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
141+ Years	0.0	0		0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Poor - Economic Zone Total	0.0	0		0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Probyn Log Ltd Total	77.1		473	353,027	100%	77	28,894	4,410	10,987	546	0	0	66	1,258	46,162	309	71,552	27,220	87,310	34,262	0	0	2,192	6,963	229,500	86	18,176	17,630	27,363	13,147	0	0	893	158	77,366

Weighted Average Market Value of THLB Volume Position

Source 3month Vancouver Log Price

Probyn Log Ltd

319,766

Residual TSA Volume Total

319,766

Species	%	Volume	\$/m3	Total Value
Fi	28%	88893.49	\$ 164.86	\$ 14,654,980.02
Ce	6%	20471.68	\$ 232.55	\$ 4,760,689.11
He	29%	91343.93	\$ 58.68	\$ 5,360,061.89
Ba	21%	67127.67	\$ 58.68	\$ 3,939,051.58
Pine	0%	164.9358	\$ 49.15	\$ 8,106.59
Spruce	0%	0	\$ 64.88	\$ -
Cypress	6%	18942.71	\$ 122.81	\$ 2,326,354.16
Dec	10%	32821.31	\$ 88.11	\$ 2,891,885.35
100%		319766		\$ 33,941,128.69
			AMV	\$ 106.14

TSA Total

Species	Value	% Dist.
Fd	\$ 164.86	25%
Ce	\$ 232.55	7%
He	\$ 58.68	32%
Ba	\$ 58.68	26%
Pine	\$ 49.15	1%
Spruce	\$ 64.88	2%
Cypress	\$ 122.81	2%
Decid	\$ 88.11	6%
Check		57,074,507
		AMV \$ 99.30