FRASER TSA Residual Affect Analysis associated with proposed First Nation Woodland Licence Tenures -END GAME

Background: the original efficiency afforded volume based tenures within a Timber Supply Area ensured that land based changes or decisions were proportionally shared, access to timber was to the best extent equalized and the development of primary forests could be focussed to overcome initial development cost challenges. Since then, the second growth profile has increased in its prominence and importance to fulfill volume based tenure rights. These second growth forests proximity to the Vancouver Log Market, lower logging costs coupled with non existent pulp log component have in turn made this a preferred log profile. Further more, non timber constraints combined with a "cut and leave" pattern of forest development has lengthened the duration for which a volume based tenure holder can recoup the entire re-development costs from a return to second growth forest development.

Objective: On January 31, 2017 at an all tenure holder meeting, the Chilliwack District was asked to provide information on what level of impact would occur to the existing major tenure holders if the First Nation Woodland Licences as displayed were to be established. The objective of this sun "*What would the aggregate AAC for the residual portion of the Fraser TSA be if all proposed FNWL tenures were to become established?* The premise of this question is based upon the long standing belief in timber supply that the *"sum of the parts may not equal the whole* "and that the FNWL area are being disproportionally assigned from the TSA where site productivity and proportion of second growth is higher. While establishment of all 8 draft FNWLs at one time is improbable, this analysis consider that case to have the greatest affect.

Methodology:

1. All base case assumptions modelled as part of TSR IV were applied with no variations in land base or site classes.
2. No changes were implemented that would affect the THLB estimate.
3. The total areas removed to predict the residual TSA was based on August 1, 2017 Version 3 of the Operating Area Map
4. The same model and base case assumptions used in TSR IV were implemented.
5. The aggregate FNWL area consists of 8 proposed FNWL (Chawathil; Douglas, Katzie-Kwantlen, Sts'ailes, Matsqui, Leqamel, Ts'elxweyeqw, Yale)

Analysis:

TSR Run Date:	20-Jul-17		
Data Source:	Chilliwack Forest District Operating Area Map Version 3_August 1, 2017		
Analyst	Andres Enrich	Timber Supply Analyst	+1 (250) 751-7104
Controller:	Gordon Nienaber	Timber Supply Forester	+1 (250) 751-7398
Model Version:	SELES Standard Timber Supply Model		

Analysis Results	Subdivision	Crown Forest Area	THLB Area	THLB %	Ratio AAC Reg	Base Case AAC	% AAC
Fraser TSA TSR IV	Fraser TSA Portion	707,870	204,966	81.9	1,031,940		
	Fraser FNWL	108,974	45,437	18.1	228,060		
	Total Fraser TSA	816,844	250,403	100.0	1,260,000	1,260,000	100.0
Fraser End Game Sensitivity Analysis	Residual Fraser TSA	707,870	204,966	81.9		1,042,940	82.8
	Difference from TSR IV	108,974	45,437	18.1		217,060	17.2

TSA AAC Rationale 2016 Comments

February 18, 2016 the AAC for Fraser was set at 1,235,700m3/yr by the Chief Forester

Base Case was assessed at 1,260,000 m3/yr

"the continued premature harvest of young stands will reduce future timber supply as this practice has the same effect as decreasing the productivity of these sites in the TSA" D.Nichols Chief Forester

"I note that forest management practices related to the protectionof First Nation cultural heritage resources are evolving in the Fraser TSA. As implementation of the S'olh T'emexw use plan continues and as government formalizes the forest management requirements for both the STUP and area of cultural and spiritual importance to First Nations whose territories include the Fraser TSA, this infomation will be considered in AAC determinations. " D.Niclols Chief Forester

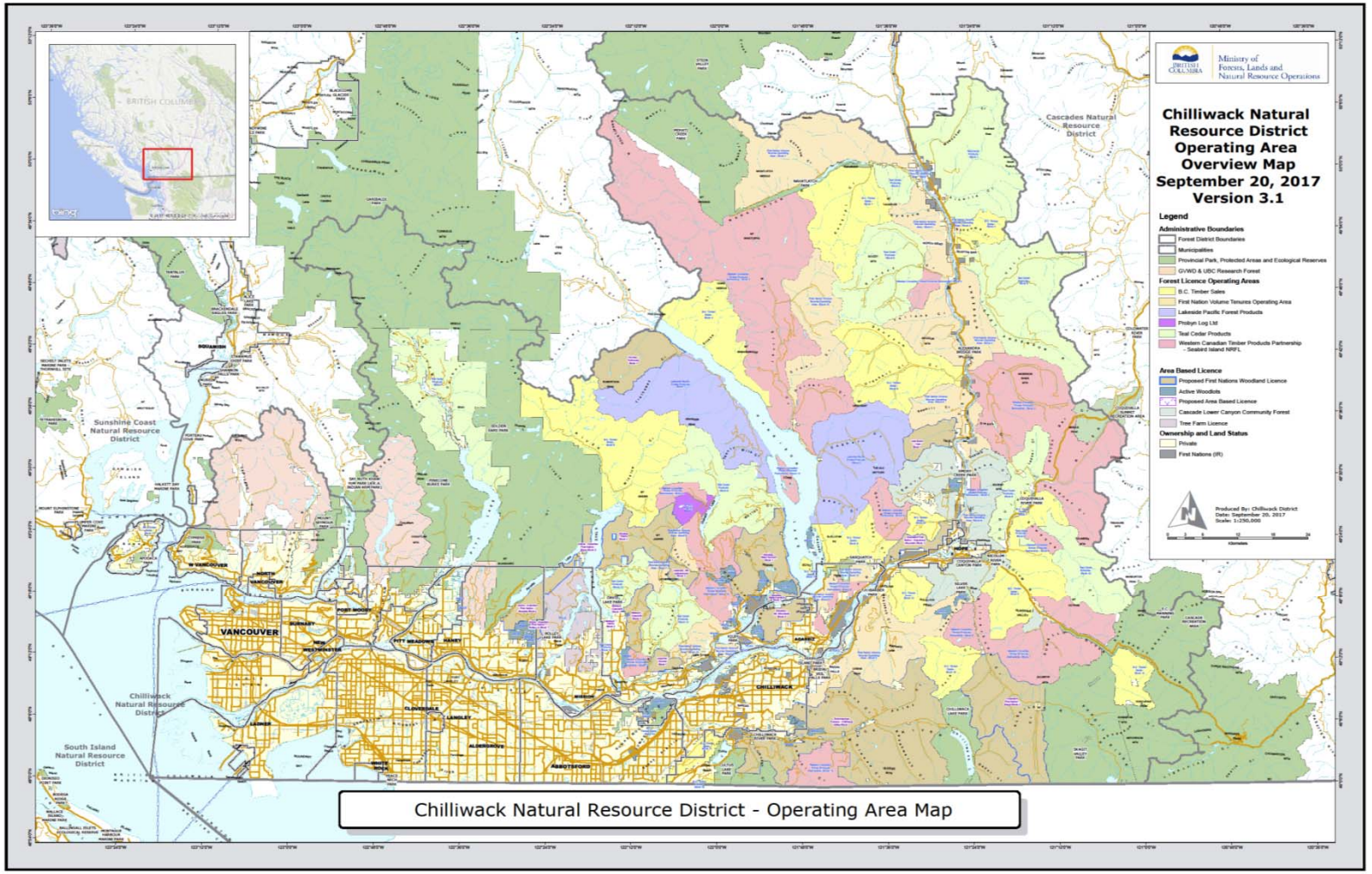
Notes:

1. *THLB ratio used to deplete TSA under the AAC Administration Regulation 69/2009. Ratio currently 5.03 m3/ha of THLB for TSA. This may actually vary as each FNWL is completed.*
2. *Chilliwack District Geomatics shadow analysis indicates a total annual yield of 216,889m3/year for all draft area based FNWLs.*
3. *District tracking of core allocation (FN NRFL and BCTS Reservation) assigned to FNWL is currently 218,880m3/year .*

Conclusions:

1. ***The residual TSA area contributes to the base case almost exactly proportionally to the THLB area.***
2. ***When all 8 FNWLs are removed in the sensitivity analysis, the remaining TSA supported a harvest level of 1,042,940 m3/yr***
3. ***The timber supply impact of removing all FNWL areas is slightly less than the estimated ratio used under the AAC Regulation (THLB Ratio), this indicates that the TSR IV model has the flexibility to find adequate replacement volume elsewhere in the residual TSA.***

TAB Appendices

A) Chilliwack District Operating Area Map Sept.20.2017

Appendix A. Proposed First Nation Woodland Licence Area as of Sept.20.2017