Impact Assessment Calculation on Timber Supply: CFA Expansion for Community Fire Buffer

A quick assessment of the impact of removing THLB from a TSA on the timber supply is to use the current ratio of AAC to THLB. This is the suggested approach given in the AAC Administration Regulation Section 5 (http://www.bclaws.ca/Recon/document/ID/freeside/69 2009#section5)

The benefit of this approach is that it is quick to calculate. The drawback is that it makes the assumption that timber supply is consistent across the timber harvesting land base. This assumption is overly simplistic, constraints are not evenly distributed across the landscape, and land productivity varies. However, it is a quick approach to getting a rough idea of what the impact would be. The formula as laid out in Section 5 follows:

(Current AAC / Total THLB (ha)) * THLB Removed (ha)

The following table shows the values for the areas in question.

Name of Area	TSA	Current AAC*	Total THLB** (ha)	THLB Removal Proposed*** (ha)	Cubic Meter Impact on Timber Supply
Logan Lake	Kamloops TSA 11	2,300,000	931,373	28,336	69,975
	Merritt TSA 18	1,500,000	557,813	20,779	55,876
Quesnel	Prince George TSA 24	8,350,000	2,724,751	1,802	5,522
	Quesnel TSA 26	2,607,000	1,020,699	34,316	87,648

^{*}Current AAC came from the Allowable Annual Cut - Timber Supply Areas table available from https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/timber-supply-review-and-allowable-annual-cut/allowable-annual-cut-timber-supply-areas

 $\label{thm:linear_constraint} $$ \xspatial files 2.bcgov\archive\FOR\VIC\HTS\FAIB_DATA_FOR_DISTRIBUTION\THLB\Consolidated_THLB.gdb\SIR\THLB_data_SIR $$$

These numbers sometimes vary from the THLB reported in the rationale due to a number of reasons, for example rounding when reporting and land base reductions not yet finalized (in the case of Prince George, the data package was finalized in 2015, prior to removal of 5 area based tenures).

The timber supply estimate for the Logan Lake expansion is **126,000** cubic meters, and for Quesnel, **93,000**.

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^{**}THLB came from spatial data available from:

^{***}THLB removal estimates were based on the overlap of proposed expansion areas with the THLB spatial file above.