



**Okanagan TSA**  
**A G&Y Perspective on Timber Supply**  
 Primary Source: ©  
 Timber Supply Area Analysis Report, July 2000  
 AAC Rationale, July 2001

**Short Summary:** A robust timber supply with inherent flexibility and options, including potential for IFPA lifts in next determination. G&Y perspective similar to Kamloops TSA.

| Characteristic or sensitivity                      | Short-term  | Mid-term  | Long-term   | Implications   |
|--|---|---|---|--|
| Final AAC and base case harvest flow               | Final AAC 2.65M, revised LRMP base case 2.62M constant for 80 yrs | 10% drop at 90 yrs to 2.35M   | 2.01M LTHL attained at 100yrs; original base case LTHL 2.26M  | Explore IFPA lifts with improved site index and PHR yield estimates. Final AAC determination revised base case to consider LRMP. |
| Age-class distribution under base case             | 59% of THLB is above MHA  |   | At 200 yrs, only 1.1% of THLB older than 120 yrs              | THLB 47.1% of TSA area and 73.4% of productive forest area; can expect more downward pressures on THLB                           |
| Alternate harvest flow                             | Cut increased to 3.73M, 42% above original base case              | Stepping down to after 20 yrs but no dip below LTHL                                     | Original base case LTHL attained in 60 yrs                    | Illustrates inherent short-term flexibility in relation to harvest policy  |
| Sensitivity to site index of managed stands (OGSI) | LRMP base case maintained for 70 yrs                              |   | 2.52M LTHL, attained at 80 yrs, 22% above LRMP base case LTHL | Documenting better PHR site index estimates would improve PHR yields and help offset downward pressures                          |
| Sensitivity to green-up ages                       | Base case maintained  | Base case maintained  | Base case maintained  | No site index related effects apparent, so main site index effect likely from increased PHR yields                               |
| Sensitivity to managed stand yields                | LRMP base case maintained with 10% yield increase or decrease     | 10% yield increase shifts falldown 10 yrs later; 10% decrease shifts it 10 yrs earlier  | 10% yield increase raises LTHL 10%; decrease lowers LTHL 8%   | Improved PHR yields (incl. site index, yield tables, OAFs) would help raise LTHL and help offset downward pressures.             |
| Sensitivity to existing stand yields               | Original base case maintained                                     | Step down occurs 70 yrs earlier with 10% yield decrease; 80 yrs later with 10% increase | No change in LTHL, just timing                                | Although the inventory audit appears OK, age of the inventory is a concern (species comp issues, etc)                            |

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|------------------|--|
| Other issues     | <ul style="list-style-type: none"> <li>• Root Rot effects need better understanding (TSR, etc) – recent CFS info indicates chronic growth-loss may have greater impact than mortality</li> <li>• Dry IDF and partial cutting (incl variable retention) support need to improve modelling of complex stands (e.g., PrognosisBC and TASS).</li> </ul>  |
| Standard caveats | <ul style="list-style-type: none"> <li>• A long-term G&amp;Y data and model building strategy is needed to continually check and improve G&amp;Y predictions. This includes a rationalized data strategy incorporating PSP's, EP's and Monitoring Plots. G&amp;Y co-ops help coordinate these strategies across management units to gain cost and logistic efficiencies.</li> <li>• Under a given a set of data and assumptions, every unit has many possible timber supply forecasts depending on harvest policy and analyst prerogative. A base case and its associated sensitivity analyses represent only one perspective; there are many others. Before pursuing investments to improve the base case harvest flow, one should first determine what alternate forecasts are possible with the existing data and assumptions.</li> <li>• Regardless of AAC effects, G&amp;Y investments should be pursued in their own right, as a matter of due diligence, in continuous pursuit of better information to support sustainable forest management. A balanced program looks at both positive and negative factors affecting G&amp;Y and AAC. For PHR yields, this means moderating potential growth with realistic management expectations through appropriate application of site index, models and OAFs.</li> <li>• Ecosystem mapping is frequently justified solely as a spatial linkage for PHR site index estimates. It is also becoming an important management tool to support and document an ecosystem-based approach to sustainable forest management.</li> </ul> |

Abbreviations used: **AAC**, Allowable Annual Cut; **DWB**, Decay, Waste and Breakage; **EP**, Experimental Plot; **G&Y**, Growth and Yield; **LTHL**, Long-term Harvest Level; **M**, million (cubic meters); **MHA**, Minimum Harvest Age; **OAF**, Operational Adjustment Factor; **OGSI**, Old-growth Site Index, **PHR**, Post-harvest Regenerated (managed stands); **PSP**, Permanent Sample Plot; **THLB**, Timber Harvesting Land Base; **TSA**, Timber Supply Area; **TSR**, Timber Supply Review; **VQO**, Visual Quality Objective

Selected TSR terms: **Short-term**, harvest flow over the first couple decades relying solely on the current inventory of existing mature and over-mature stands; **Mid-term**, the gradual transition (fall down) to LTHL that occurs during the shift to managed PHR stands; **Long-term**, maintenance of the LTHL where harvesting has reached equilibrium with growth and other management objectives (harvest constraints).

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