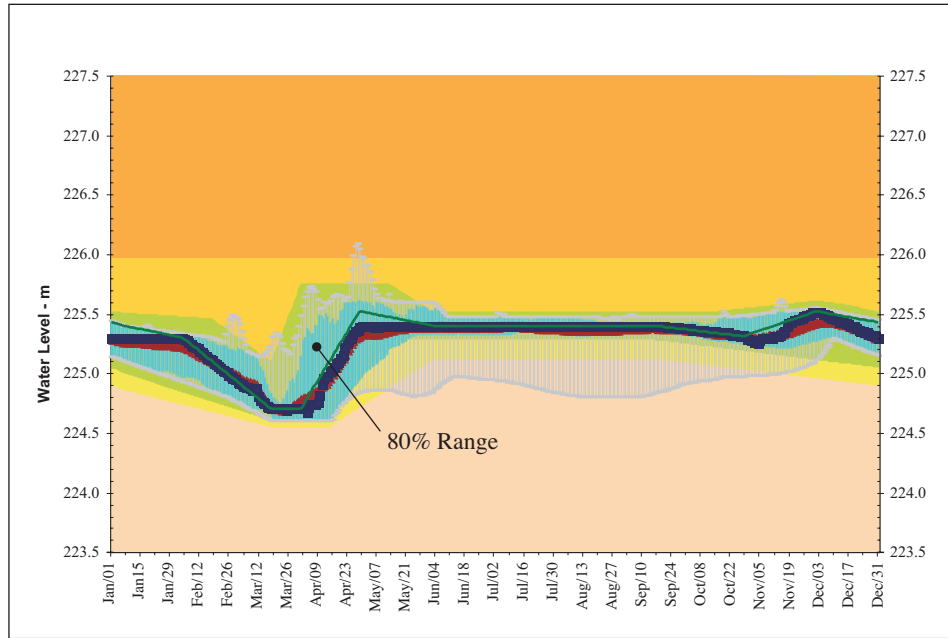


### **11.4.3 Lake Muskoka**

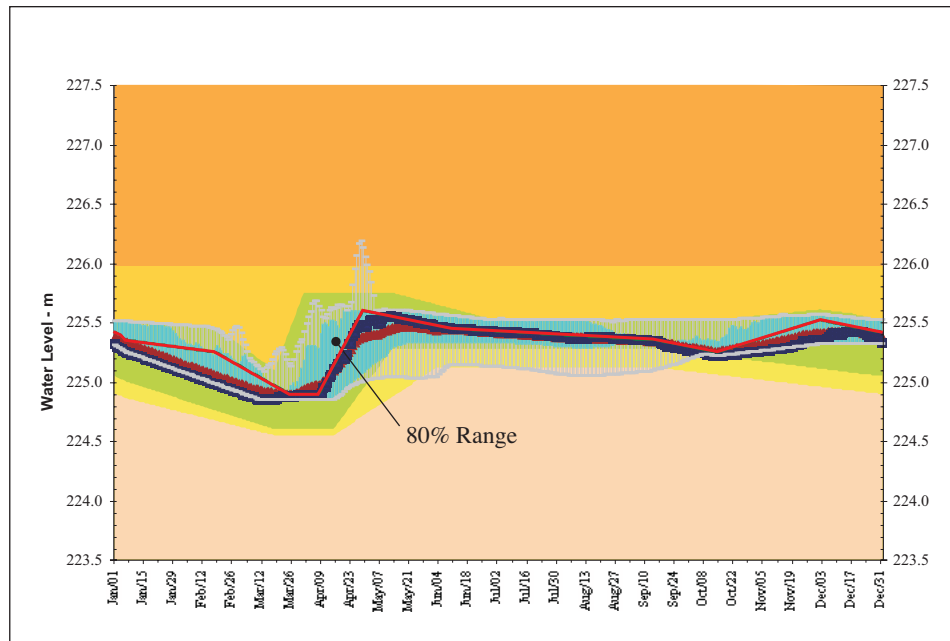
The proposed plan is compared to the present operating plan in Table 11.4.3 and Figure 11.4.3. The proposed plan decreases the extent of the TOL, as well as the lower limit of the NOZ for the fall period. It is anticipated that a similar number of dam operations will be required to achieve the proposed water levels and flow regime.

<b>Table 11.4.3 Lake Muskoka</b>				
<b>Component</b>	<b>Operating Characteristics</b>	<b>Present Plan</b>	<b>Proposed Plan</b>	<b>Comments</b>
Spring Water Level (freshet to May 30)	Upper NOZ (m) Lower NOZ (m) TOL (m) Peak Date* TOL Change WL Direction	225.75 224.6 – 225.28 225.52 – 225.4 April 29 0.12 Down	225.75 224.6 – 225.28 225.6 – 225.48 May 1 0.12 Down	A slightly higher spring high water level, followed by a gradual summer drawdown to a target elevation approximately 0.05 m lower.
Summer Water Level (June 1 to Sept 15)	Upper NOZ (m) Lower NOZ (m) TOL (m) TOL Change WL Direction	225.75 – 225.52 225.28 225.4 0 -	225.75 – 225.52 225.28 225.48 – 225.35 0.13 Down	
Fall Water Level (Sept 16 to Nov 30)	Upper NOZ (m) Lower NOZ (m) TOL (m) TOL Change (m) WL Direction	225.52 – 225.61 225.28 – 225.12 225.4 – 225.31 0.09 Down, then natural rise to 225.52 by Dec 1	225.52 – 225.61 225.28 – 225.12 225.35 – 225.25 0.1 Down, then natural rise to 225.52 by Dec 1	Drawdown to 0.06 m lower October 15 level for lake trout spawning; followed by a natural rise to the same December 1 elevation prior to the winter drawdown.
Winter Water Level (Dec 1 to March 15)	Upper NOZ (m) Lower NOZ (m) TOL (m) TOL Change (m) WL Direction	225.61 – 225.1 225.12 – 224.6 225.52 – 224.7 0.82 Down	225.61 – 225.1 225.12 – 224.6 225.52 – 224.9 0.62 Down	Slow decline in over-winter level to slightly higher (0.2 m) winter target elevation.
Downstream River Reach and Lake Outflow Characteristics	Planned flow release  Median Wkly Flow - Summer - Winter Minimum Daily Flow (7-d average) Maximum Daily Flow (50-yr average) 7Q2 (2-yr min) 7Q10 (10-yr min)	6 m <sup>3</sup> /s summer, 0.82 m, Dec 1 to Mar 15  29.66 m <sup>3</sup> /s 84.84 m <sup>3</sup> /s 7.34 m <sup>3</sup> /s 299.79 m <sup>3</sup> /s 5.0 m <sup>3</sup> /s 3.0 m <sup>3</sup> /s	6 m <sup>3</sup> /s summer, 0.62 m, Dec 1 to Mar 15  31.25 m <sup>3</sup> /s 88.08 m <sup>3</sup> /s 10.16 m <sup>3</sup> /s 309.57 m <sup>3</sup> /s 7.78 m <sup>3</sup> /s 3.0 m <sup>3</sup> /s	Higher summer flow, slightly more fall drawdown (September 15 to October 15) and less winter drawdown.

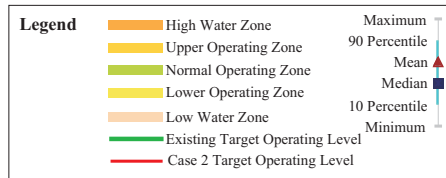
### Lake Muskoka / Burgess GS



a) Existing Operating Plan and Water Level Statistics \*



b) Proposed Operating Plan and Water Level Statistics \*



\* Derived from ARSP Model

Figure 11.4.3  
 Muskoka River Water Management Plan  
**Comparison of Present and Proposed Operating Strategies - Lake Muskoka**

