

Chapter 5 - Framework for Developing a New Lake Superior Regulation Plan

Reviewer – R. Halliday

1. Page 8. The paragraph directly above the Ecosystem Indicator heading mentions PIs for domestic, municipal and industrial uses, but Table 5-1 on page 7 says no PIs were used.

The paragraph was expanded to rationalize the reasons for listing the performance indicators and not using them (page 69 of full report):

“PIs for domestic, municipal and industrial uses were based on data provided by most of the largest and some of the smaller water supply and treatment plants that define the levels at which service is impacted and the levels at which service is lost, along with the numbers of people affected. The elevations provided exceed the range of water levels modelled, so these functions are applicable to extreme climate conditions. In the end, these indicators did not factor into the selection of plans, because there were no significant differences in how plans scored on these PIs. As with other interests, the Study Board’s analysis showed that extreme NBS could cause problems, most of which could not be addressed through regulation of Lake Superior”.

2. Page 16. In view of the comment re sequence 7, it’s not clear to me why it was selected.

The comments were expanded to provide better rationalization of using the NBS sequence (page 73 of full report):

“A climate change sequence. One of the sequences produced by the Canadian RCM that produces higher highs and lower lows. The range of RCM projections was not large. Two NBS sequences, CC-AET and CC-AEV (Sequence 9) were chosen to represent the range of RCM projections, but the plan rankings for the two sequences were similar”.

3. Page 24. The text of the footnote could use some editing. I would say the IGLD is a “... fixed vertical reference used ...”. In the second sentence I would say, “... has its zero reference elevation as mean sea level near Rimouski ...”. That would make it a little clearer to the reader that the datum uses Helmert heights, not dynamic heights.

The footnote for the IGLD1985 was revised to read (page 78 of the full report):

“International Great Lakes Datum (IGLD 1985) is a fixed vertical reference used to measure water levels in the Great Lakes-St. Lawrence River system. The datum has its zero reference elevation as mean sea level near Rimouski, QC on the St. Lawrence River”.

Reviewer – P. Johnson

4. The document reads well and is comprehensive. However, the most important revision that could be made would be to provide a concise statement of the objectives at the beginning instead of the reader having to infer what the objectives are.

The opening sections of the chapter were revised to reflect the objectives and purpose of the chapter. The opening sections now read (page 63 of the full report):

“Chapter 5 describes the framework and the tools that were developed to help the Study formulate, evaluate and rank candidate plans for Lake Superior regulation.

This chapter sets out how the International Upper Great Lakes Study (the Study) approached the challenge of formulating, evaluating and ranking alternative regulation plans. Chapter 6, in turn, describes how the Study Board applied this framework and these tools to evaluate and rank candidate Lake Superior regulation plans, and to identify a preferred plan for recommendation to the International Joint Commission (IJC)”.

5. Also, the figures were fairly hard to read. A bit more explanation in the captions would be helpful in most cases.

The Study has expanded captions where the deficiencies were seen. The Study also made a concerted effort in standardizing and improving the quality of graphics throughout the report. The completed version of the report attached with the response shows the improvements of the graphics in all chapters. For file size reasons, these graphics are still at a low resolution (the high quality report is several gigabytes in size). The printed version that will be made available later this month will be the highest quality.