

Manuscript: Chapter 8

Author(s): the Study Team

Name of Reviewer: R. A. Halliday

1. Are the objectives of the work clearly stated? 1 2 3 4 5
2. Are the methods employed valid, appropriate and sufficient to address the questions, hypotheses or the problem? 1 2 3 4 5
3. Are the observations, conclusions and recommendations supported by the material presented in the manuscript (e.g., data, model and analyses)? 1 2 3 4 5
4. Are the assumptions used valid and are the mathematics presented correct? 1 2 3 4 5
5. Is the manuscript well organized, material precise and to the point, and clearly written using correct grammar and syntax? 1 2 3 4 5
6. Are all of the figures and tables useful, clear, and necessary? 1 2 3 4 5
7. What is the quality of the overall work? 1 2 3 4 5

**Recommendation** (please circle your response)

**A** - acceptable

**B** - acceptable with suggestions for revision

**C** - acceptable if adequately revised

**D** - unacceptable

If you have selected **C**, do you wish to receive the revised manuscript for further review?

yes no

**Rating** (Circle the rating you would like to give this manuscript. Unacceptable work should be given a score of 40 or less.)

100 90 **85** 80 70 60 50 40 30 20 10 0

Comments (limit responses to one paragraph for each question; reference pages, charts, and data. Please distinguish if responses are of major or minor concerns.)

A. What is the best/most unique part of the analysis?

*The analysis clearly supports the key points and the recommendation.*

B. What is the most critical aspect of the study/analysis? Why?

*Although the analysis, especially the cost analysis could be refined, the authors wisely chose the appropriate level of analysis to reach an informed conclusion.*

C. Which aspect of the analysis/modeling is weakest? Why? How can it be improved?

*A more extensive discussion of perfect forecasts and the conclusions that may flow from such forecasts could prove instructive.*

D. Are there any other suggestions that are related to how this analysis may be used more effectively or the results explicated in a more understandable manner? *no*

Please indicate any confidential comments to the Co-Chair(s) of the Independent Peer Review Group in the space below. Comments for transmission to the author(s) should be on a separate sheet attached.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### **Comments for Transmission to Authors**

It would be useful to have both general comments and specific comments for major and minor revision. Please use additional sheets should they be required.

## **General Comment**

This chapter is very complex and is more difficult to read for non-specialists than other chapters in the report. On the other hand the authors are to be commended for their logical presentation leading naturally to the recommendation. The key points are an asset in helping the reader.

## **Detailed Comments**

8.2.2 first sentence doesn't quite jive with the IJC direction, which speaks of "all potentially affected sectors". It also sells the chapter a little short as 8.6.2 does cover the affected sectors briefly.

Page 5, last sentence. "Selected" seems a little strong in view of the discussion in 8.3.3. Perhaps say "identified".

Page 8, last para, line 4.1 and figure 8-3. How does the simulated historical range compare to the actual historical range? Can the difference between actual and simulated historic water levels be used as a performance indicator for the simulations?

Page 17, last para of 8.4.4. Would it be fair to say that the four point plans, because it is able to maintain appropriate Lake Erie levels, would not require re-regulating structures in the lower St. Lawrence? A mention here may aid the subsequent discussion in 8.6.3.

Page 23, section 8.6.1. It may be instructive in this section to consider a scenario with two-point regulation scheme. Since this would represent the current structures, this could demonstrate to the reader, the extent to which perfect knowledge could improve the current regulation scheme. Depending on the outcome of this analysis, a key point relating to perfect forecasts under the present infrastructure could be in order.