

## **International Upper Great Lakes Study – Sub-Product Reviews, Synthesis Product Reviews, and Draft Final Study Report Reviews Template**

### **Peer Review of Manuscripts**

This manuscript has been submitted for independent peer review to the Co-Chairs of the Independent Peer Review Group (IRG) as identified in the Independent Review Plan (IRP) of the International Upper Great Lakes Study (IUGLS).

The evaluation and acceptance of the technical report (documentation) will include, as part of the review criteria, how effectively the goals of the work have been accomplished within the limits as described in the “background and context statement in Article 9.3.1.2.

Manuscripts shall be evaluated on the extent to which the authors’ efforts have been covered/documented and the extent to which the reviewers can answer the review questions:

- Are the methods employed by the authors sufficient to answer the questions;
- are they being used correctly;
- are the analyses and tests appropriate for the problem at hand; and
- are the derived conclusions supportable by the model and analyses?
- Are there any other comparable methods or approaches that may/ought to be considered, which would provide more insight for the specific task under review?

### **Checklist for the Reviewer**

Your review is:

- To provide the authors with directions as to how they could improve their analysis and technical report. Please provide clear instructions and comment objectively, remembering the efforts that they have made to prepare the manuscripts. On a separate sheet, you may provide comments for the editor that you feel are necessary. These separate comments will not be provided to the authors.

Some additional points are:

- Please document statements adequately so that authors may fully understand your concerns. You may do this using additional sheets and cross-referencing your additional comments to the specific questions below.
- Some of the questions follow a scale of 1 through 5, with 1 be the highest rank (yes -- always or excellent) and 5 being the lowest (no -- never or very poor). Please encircle your responses.

**Manuscript: Incorporating Impact Assessment for Low Water Conditions on the Upper Great Lakes.**

**Author(s): None Listed**

**Name of Reviewer: John B. Braden**

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 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 best part of the analysis is the observation that the study should consider only the relative changes in water levels that result from the implementation of an alternative management plan, and that those changes will be very small in any case.*

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

*The most critical aspect of the analysis is the decision not to conduct a hedonic study of property values. The rationale offered is that such a study faces data limitations and would take too long to complete. I concur that such a study is unwarranted if any changes in management plans will have barely-measurable effects on water level outcomes. Concerning the hydrologic outcomes, I am taking at face value the author's claims. This report does not document the hydrologic analyses.*

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

*The absence of an empirical investigation is the weakest aspect of the study. If the hydrologic forecasts of minimal effect are true, I do not think this shortcoming requires remedial work.*

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?

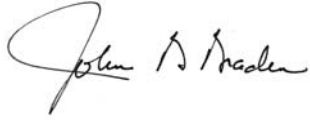
*The analysis would be more compelling if the hydrologic analyses and their findings were summarized in slightly more detail here in support of the claim that little is to be gained from a hedonic study.*

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.

*I found the report generally disorienting:*

- 1. No authors are named*
- 2. The report presumed contextual knowledge of other aspects of the IUGLS, particularly the analysis of management alternatives and their implications for lake levels*
- 3. The report consists mainly of appendices; the body of the report is very short*
- 4. The appendices seem redundant and add little of substantive importance; they seem designed to document lots of billed hours rather than to provide cogent analysis of the matters at hand.*
- 5. While I do not think much more time should be spent on this report, I also believe it would benefit from reorganization:*

- a. *Brief statement of the problem at hand and purpose of this report*
- b. *Brief history of work done to date*
- c. *Succinct description and assessment of valuation methods*
- d. *Brief summary of the conclusions and how this report contributes to the broader effort*



Signature: \_\_\_\_\_ Date: February 21, 2011

## 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.

1. *The report might benefit from the following observation: The value of a durable asset, such as real estate, may be thought of as the present value of a stream of expected future services. Due to both intrinsic and extrinsic factors, those future services may be stochastic. Variation may influence the value of the asset. (On pp. 8&9, there are bolded passages indicating that real estate professionals agrees with this premise.) Two assets with identical expected services may be valued differently because one varies less from year to year than the other. Two otherwise-identical homes – one on a shallow-water beach that expands or contracts very significantly with level fluctuations, the other on a more steeply-pitched shoreline with ample depth and modest changes in beach width – may be valued differently.*

*This picture is further complicated by the potential for correlated risks and myopic decision making. By myopic decision making, I mean that valuations rely on observations of recent water levels rather than the full hydrologic record. Myopic decision makers are likely to overvalue properties favored by recent levels (e.g., erosion-prone properties when lake levels are low; shallow-water properties when lake levels are high) and undervalue properties disadvantaged by recent levels. When the hydrologic cycle reverses, their valuations errors become apparent. By correlated risks, I mean in this case that the stochastic determinants of services are correlated over time. In the case of Great Lakes water levels, the hydrologic record is clear that extended periods of high water follow extended periods of low water (see Baird & Assoc., Low Water Theme Report, p.3). Myopic buyers of property would base their valuation on recent experience. As a result, we should expect cycles in the relative values of lakeside properties. During high-water (low-water) phases, shallow water properties property prices should be high (low) relative to erodible property prices. Such a finding would support the hypothesis of myopic decision-making.*

*All considered, these observations suggest the difficulty of testing the proposition that low water levels exact an economic cost in the form of reduced property values. First, such a cost probably reflects the failure of the buyer to properly assess water level risks, and pay a lesser price for the property, at the outset. Hence, what is perceived to be a cost to an individual property owner may be a penalty for poor decision making, not a cost to society. Second, while low levels may reduce the services associated with some properties, others may gain in value. The overall economic cost to society is not necessarily negative.*

2. *I'm not comfortable with the second paragraph on p. 3 (and perhaps, by extension, with P&G, 1983): a) The first two sentences seem pretty much divorced from the remainder of the paragraph; b) Why is it that EIA deals only with "direct effects" and not with property values? In fact, property values should reflect those direct effects. The more vulnerable a property is to storm surges, in principle, the less a buyer should pay*

*for it, recognizing that it is a more costly property to own. I would agree that the direct and derivative effects should not both be included, for then there would be double-counting. But, to say that property values are not included is to undercut a major premise of this report – that the hedonic property value method would be the best way to measure the economic impact of water level changes.*

*3. P. 7. What are “interest-satisfaction curves”? Do you really need to bring in this level of detail?*

*4. p. 8. First para of section 4.4: .” ...real estate professionals would define as PRODUCING significant shifts...”*

*e. p. 9 Top line: .”some areas would REALIZE benefits.”*

*6. p. 11. Item 1 in list at bottom. Virtually all economists would argue that assessor data sets provide biased information and that transaction data (i.e., “realty data” are much better for valuation studies.*