

August 1, 2009

Drs Ted Yuzyk and Eugene Stakhiv, Co-Chairs
International Upper Great Lakes Study Board
234 Laurier Ave., West, 22nd Floor
Ottawa K1P 6K6

RE: Comments on Draft St. Clair River Report

Dear Drs Yuzyk and Stakhiv:

Great Lakes United appreciates the huge effort that has been undertaken in preparing the Draft St. Clair River Report and its background studies. However, we are disappointed with the conclusions that the Study Board has come to and urge the Study Board to change its two prime recommendations.

Regarding the first recommendation

The Study Board recommends:

“No remedial actions be undertaken to compensate for conveyance changes in the St. Clair River at this time, given that the conveyance change: appears to have stabilized; is likely attributable to natural rather than human-related causes; and is relatively small given the scientific uncertainty associated with it.”

The Study Board states that it is “confident” in the bases for most of this conclusion, although significantly in almost all cases the Study Board does not say it is “very confident.” Great Lakes United finds the reports posted as the bases for this conclusion to still be fraught with differences among the scientists that lead us to conclude that the confidence level should be “not confident.”

The prime example is over the amount of the increase in conveyance capacity of the St. Clair River between 1971 and 2000. Having carefully read the various arguments explaining the discrepancy between the 16 cm decrease the Study Board has adopted as the basis for its conclusions and the 23 cm decrease that Baird has arrived at, we are convinced that the Baird numbers should not be rejected. If the various scientists cannot come to agreement on a common number, the reasonable approach to take would be to say that the conveyance capacity has changed by somewhere between 16 and 23 cm between 1971 and 2000. This range of numbers should become the basis for the Board’s conclusions.

The Study Board gives three reasons for its recommendation. In each case, we do not find these to be convincing arguments for taking no action at this time.

1. *“Appears to have stabilized”*: Even if there is not on-going erosion since 2000 (and this is debatable), it does not mean that the system is being restored to conditions similar to those prior to the changes that have happened between 1971 and 2000. There is still substantially more water going through the St. Clair River everyday now than there was prior to 1971. This fact on its own is sufficient to say that remedial options should be explored.

The Study Board appears to have read the IJC’s Alerting Letter of October 31, 2007, to mean that the change has to be constantly increasing in order for them to recommend action. We think that this letter could just as logically be interpreted to mean that there are “ongoing changes in the river bed ...” if the river bed is not being restored and the flow is not returning to what it was prior to 1971. In other words, the changes in the river bed are “ongoing” if the previous conditions have not been restored.

2. *“Is likely attributable to natural rather than human-related causes”*: Great Lakes United believes that we should accept the natural flows and fluctuations in the system and adapt human activities to live within these natural changes. We believe that this approach is necessary for the well-being of nature and for us as members of the ecosystem. Where feasible, remediation actions should be based on efforts to restore natural levels, flows and fluctuations that have already been disrupted by human activities and to avoid further disruption in the future. Therefore, we agree with the principle that the Study Board uses here for making judgments on whether to consider remediation activities.

Great Lakes United does not, however, agree that human activities have not made a significant contribution to the changes in the conveyance capacity of the St. Clair River. First, it is clear that the dredging activities between 1958 and 1962 had a major ongoing impact on the conveyance of water through the St. Clair River. This change is the result of human activities; remediation actions were never taken to mitigate the impacts of that major activity. We shouldn’t just accept this dramatic change as a given, shrug our shoulders, turn our backs, and move on.

Secondly, the Study Board asserts that changes in climate patterns and glacial isostatic adjustment are the overwhelming causes of changes in the period since 1962, and, that, therefore, changes in conveyance, which could be the result of human causes, are insignificant. The Study Board’s report, however, shows that this is not true throughout the entire study period. For example, on page ii of the Draft Report Volume 1, the Board says that from 1962 to the mid-1980s, the Study concludes that “it is likely that conveyance changes and climate shifts were relatively comparable contributing factors in the

declining head difference.” Even during the period where climate shifts became more significant (1996 to 2005), the Study Board concludes that climate shift is only responsible for 75 percent of the change (p. ii). Even after adding glacial isostatic adjustment for that period, the amount of change as a result of changes in the conveyance capacity of the river is significant.

Thirdly, the Study Board asserts that it does not know what the causes are for the changes in conveyance capacity of the St. Clair River during this period. It speculates that an ice jam in 1984 may have been the major cause of changes in the river and states that this is a result of nature – not humans. However, as the Study Board states, this is all speculation. Was this ice jam the major cause of the changes in the river? Was the occurrence of the ice jam a result of changes that humans made to the shoreline, etc.? Were the disruptive impacts of the ice jam a result of the ice itself or of the ways in which humans tried to deal with the ice jam by using ice breakers? To use conjecture as the basis for a decision is unscientific.

3. *“Is relatively small given the scientific uncertainty associated with it”*: As shown in our comments on item 2 above, Great Lakes United does not agree that the conveyance change is small and that the proportion of it attributable to human activities is too small to justify assessing remediation options. This is even more true if one looks at the longer term changes including the dredging activities between 1958 and 1962.

The International Joint Commission has said that governments should use the precautionary approach when faced with scientific uncertainty [IJC, *Sixth Biennial Report on Great Lakes Water Quality*, 1994]. This means that in the face of scientific uncertainty it is not satisfactory to use the “no action” approach. Instead it becomes important to take the precautionary approach, which in this case would be to immediately assess remedial actions that could be taken to address the changes that we have caused while we continue to assess the scientific evidence for causes or carry out additional studies on causes. The assessment of remedial options should look carefully at the positives and negatives of each option. The assessment should include a major focus on:

- potential impacts on the St. Clair River ecosystem;
- potential upstream impacts on Lakes Superior, Michigan and Huron; and
- potential impacts on downstream areas such as Lake St. Clair, the Detroit River, Lake Erie, Lake Ontario and the St. Lawrence River.

Regarding the second recommendation

The Study Board recommends:

“The need for mitigative measures in the St. Clair River be examined as part of the broader comprehensive assessment of the future effects of climate change on water

supplies in the upper Great Lakes being undertaken in the second part of the Study, on Lake Superior regulation.”

It may appear that the Study Board’s second recommendation addresses Great Lakes United’s concerns with the Board’s first recommendation. However, this recommendation does not go far enough. Our two major concerns with this are:

1. The recommendation appears to only propose looking at problems as a result of climate change. This is obviously a critical component of part 2 of the study. However, it could prevent further consideration of studies related to non-climate change-related human causes of flow changes in the St. Clair River. Is there anything that we could do to make up for the water levels decline as a result of the 1962 major dredging of the river? Could we restore the effects from other human activities such as shoreline changes, ice breaking activities, maintenance dredging that have affected the flows? Could the report make recommendations to prevent future dredging activities and inappropriate shoreline and channeling changes? A strict reading of the Board’s second recommendation would not allow for anything to be considered beyond climate change.

It may seem unreasonable for us to fear that such a narrow reading of the recommendation will be used in determining studies and recommendations in part 2. It is, however, completely logical for us to have that fear, since the Study Board’s no-action recommendation in the current study (the first recommendation) is based upon a restrictive reading of IJC directives and alerting letters.

2. The recommendation says that “the **need** for mitigative measures in the St. Clair River be examined...”[bolding added]. It is not acceptable to after five years of study only have assessed the “need” for mitigative measures. The study should go beyond that to assess the kinds of mitigative measures that could be taken and to assess the positives and negatives of each type of measure both locally and for the entire Great Lakes-St. Lawrence River ecosystem.

Great Lakes United’s Conclusions and Recommendations

The work carried out for the Study Board indicates that water conveyance through the St. Clair River has increased by between 16 and 23 centimetres from 1971 to 2000. This is a seven to ten percent increase. It means that nine to twelve billion more gallons of water from Lakes Superior, Michigan and Huron could now potentially flow through the St. Clair River everyday than in 1971. This is a significant quantity.

On the basis of using the precautionary approach in the face of scientific uncertainty, Great Lakes United urges the Study Board to revise its “do nothing at this time”

recommendation. Instead, the Study Board should conclude that there is reason to believe that there have been significant changes in conveyance as a result of human activities and that it is time now to begin serious assessments of the various remediation options. These studies should go on at the same time as the Study Board conducts more work to increase our scientific understanding of changes in flows through the St. Clair River and their causes. As the Study Board has pointed out, assessing remedial options will take considerable time. It is, therefore, best to now begin those remediation assessments to decrease the time that it would take if we wait to begin carrying them out after the remaining scientific studies have been completed.

We would be pleased to discuss our conclusions with you and look forward to continuing to work with you throughout the rest of the study.

Yours sincerely,

A handwritten signature in blue ink that reads "John Jackson". The signature is fluid and cursive, with the first and last names clearly legible.

John Jackson
Program Director