



September 15, 2006

Canadian Section Secretary
International Joint Commission
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**RE: Final Report by the International Lake Ontario – St. Lawrence River
Study Board**

Dear Commissioners:

The Shipping Federation of Canada (the Federation), incorporated by an Act of Parliament in 1903, is the representative of the owners, operators and agents of ocean ships trading at Canadian ports, particularly in the Atlantic, St. Lawrence and Great Lakes regions. The ships represented by Federation members transport virtually all of the trade moving between overseas ports and eastern Canada.

We are pleased to provide our comments to the International Joint Commission regarding the selection of a new regulation plan for the management of Lake Ontario outflows. We would like to acknowledge the commendable work carried out by the International Lake Ontario – St. Lawrence River Study Board, and its use of a new scientific approach in the development of an analytical framework that integrates scientific and public input in the formulation of different plans and the execution of different management scenarios.

The Federation has reviewed the Study Board's final report entitled "*Options for Managing Lake Ontario and St. Lawrence River Water Levels and Flows*". As a basis for our comments, we would like to identify and briefly discuss what we view as the key elements in the selection of a new regulation plan for the management of Lake Ontario outflows for commercial navigation.

Key Elements in the Selection of a New Plan:

- Equity between upstream and downstream benefits for commercial navigation: The selected plan should maximize net economic and environmental benefits overall and produce a net benefit to the Lake Ontario – St. Lawrence River system with regard to commercial navigation. It should not result in disproportionate loss to any particular interest or geographic area, and negative impacts should not surpass those of the current 1958-DD plan. The risk of high flows and strong currents should be minimized for the whole Lake Ontario – St. Lawrence River system so as not to adversely impact international trade.
- Improved management of water levels: The selected regulation plan should be sufficiently adaptable to accommodate potential changes in water supply and to respond to unusual or unexpected conditions affecting the Lake Ontario – St. Lawrence River system. To achieve this goal, plan adjustments that are approved by the Board of Control or other designated authority should be permitted. At the same time, we strongly urge the International Joint Commission to maintain the current mechanisms for short and long term modifications to water levels.
- Minimum requirement of water levels at chart datum for the Lake Ontario – St. Lawrence River system: In the past, the Federation has called for water levels in Montreal to at least be maintained at chart datum, which is the minimal year round requirement for St. Lawrence users. However, in order to ensure optimal operational levels, water levels should be maintained at at least 30 cm above chart datum for the whole Lake Ontario – St. Lawrence River system, as this is the level for which the channel was dredged.
- Stability of water levels: Water levels should remain within the operational limits for safe navigation on the Lake Ontario – St. Lawrence River system and rapid changes in water levels should be avoided. This is due to the fact that low water levels in the Lake Ontario – St. Lawrence River system or high velocities in the Seaway will impact the duration of the trip and the amount of cargo carried.

Methodological Considerations

After reviewing the final report, the Federation is concerned with some methodological aspects of the study related to the evaluation of impacts on commercial navigation. A primary concern is that the study used operational costs to evaluate impacts for commercial navigation, while using revenues to evaluate impacts for other sectors. Nevertheless, we will not call into question the conclusions reached by the model, as we were able to evaluate the potential benefits and losses for commercial navigation based on experience and knowledge within the shipping industry. However, we would like to point out that the use of different costs bases renders comparisons of economic impacts between the different interests invalid.

The methodology used also causes us to question the assertion that all plans show economic benefits for commercial navigation compared to Plan 1958-D with deviations. We would suggest that potential losses in revenue for commercial navigation attributable to water level fluctuations would not be accurately represented, as such fluctuations (e.g. periods of low water levels on Lake Ontario or high velocities on the St. Lawrence River) would modify the economic outcome for every proposed plan.

Unlike the outputs from the models used for other interests, the outputs from the model developed by the Commercial Navigation (CN) Technical Work Group was not directly integrated into the Shared Vision Model (SVM). Although the CN model did develop cost curves approximating the economic impacts of low and high water levels, including high velocities and gradients, integration of those outputs into the SVM were unsuccessful and as a result, the CN Working Group did not approve the commercial navigation portion of the SVM as required by the Study Board.

Another issue of concern related to the CN Model is that it includes operating costs for movements from Bécancour, Québec to Port Weller, Ontario, which do not represent total origin to destination costs for oceangoing vessels. For example, if one were to consider a ship travelling from Europe, this segment would represent less than 5% of the total trip.

In this section of the river, differences in revenues can be significant depending on the water levels resulting from the implementation of the proposed plans. Larger size vessels, with a deeper draft, may have to leave cargo behind if water levels are below what is deemed necessary for safe navigation.

It is then difficult to see how a 20 centimetre difference between water levels associated with each plan for four consecutive months (August, September, October and November as shown on figure 33, p. 52) would **not** have any economic impact for the port of Montreal (as asserted on table 6, p. 55 of the report). Such a difference would definitely affect ships that are bound for Montreal carrying cargo to their full draft, as well as the container ships that constitute the majority of traffic at the port. Since container ships do not navigate in the St. Lawrence Seaway proper, this would constitute a major economic impact for commercial navigation downstream.

Evaluation of Plans

We used figures 29, 30, 31, 32 and 33 as the basis for our comments in evaluating the various plans, while the water levels charts are most appropriate for measuring the costs for commercial navigation for the Lake Ontario – St. Lawrence River system.

Plan A+: Balanced Economics

- Characteristics:
- Focus is on producing the best overall economic scores for each interest.
 - This plan presents a higher risk of low water levels in Montreal Harbour. As shown in figure 33 (p. 52), during a dry scenario, plan A+ is the plan least likely to ensure suitable water levels at the Port of Montreal.
 - Higher risk of longer duration of water levels below chart datum at Long Sault.
 - Higher risk of Lake Ontario outflows above the safe operating limit for the Seaway.
 - Limited environmental benefits for the upper St. Lawrence River, and no improvements for Lake Ontario and the lower St. Lawrence River.

Plan B+: Balanced Environmental

- Characteristics:
- Objective is for the Lake Ontario – St. Lawrence River system to return to a more natural regime.
 - Increased flooding risk for the lower St. Lawrence.
 - With regard to commercial navigation and water levels during the fall, plan B+ is not likely to ensure suitable water levels. The same comment applies for the dry scenario projections.
 - Best environmental performance for Lake Ontario and upper St. Lawrence, but no benefits for the lower St. Lawrence River segment.

Plan D+: Blended Benefits

- Characteristics:
- Objective is to balance benefits and increase the net economic and environmental benefits of regulation compared to plan 1958-DD. Does not cause any disproportionate losses for any of the system users.
 - Stability of water levels: lower frequency and duration of outflows higher than those considered safe for navigation.
 - For commercial navigation, ensures adequate depths at Montreal Harbour and downstream.
 - For the dry scenario, water levels at Pointe Claire on Lake St. Louis are higher from June until the end of the navigation season. Also, lower frequency and duration of water levels below 20.6 meters at Pointe Claire, which level is considered critical for commercial navigation.
 - Modest environmental gains for Lake Ontario and upper St. Lawrence River, and some environmental gains for the lower River.

"Modest" environmental gains are rated at 16%, while "great" environment benefits are at 22% for Plan B+.

Shipping Federation of Canada Recommendation

In order to recommend a regulation plan, the Shipping Federation of Canada has focused on finding the plan that would abide by the four key selection criteria enumerated earlier in this submission; namely, equity between upstream and downstream users, improved water level management, maintenance of water levels at least above chart datum for the Lake Ontario – St. Lawrence River system, and stability of water levels and current velocity.

Plan D+ is the only plan that meets the International Joint Commission's objective of maximizing economic and environmental benefits overall. Moreover, plan D+ is the only plan which results in environmental benefits for the lower St. Lawrence River. Plans B+ and D+ produce benefits for three species on the upper River, and plan B+ is the most beneficial plan for Lake Ontario. However, as far as overall environmental benefits are concerned, plan B+ adds up to 22%, while D+ totals 16% – a very slight difference which must be weighed against the significant losses that other interests such as commercial navigations would incur if plan B+ were to be adopted.

We believe that plan D+ is the only plan to fulfill the four plan evaluation conditions articulated earlier in this submission. **Therefore, the Shipping Federation of Canada recommends that the International Joint Commission adopt Plan D+ as the new water level regulation plan for Lake Ontario – St. Lawrence River system, provided the powers of the Board of Control are maintained.**

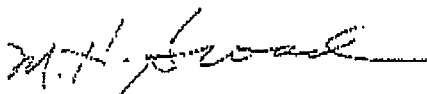
Additional Recommendations

Since forecasting is an imperfect science, we recommend maintaining the current practices for discretionary adjustments. These are implemented after consensus has been reached by the members of the Board of Control for situations such as emergencies, ice condition operations or forecast adjustments. We consider that the Board of Control should continue to have authority to perform long and short term discretionary adjustments, with the authority for immediate response in cases of short-term emergencies being exercised by the Board of Control.

Moreover, the Shipping Federation of Canada is concerned with Plan D+'s provisions for setting outflows to periodically lower Lake Ontario, and its maintenance at a lower level through July. Based on our understanding, there appears to be no option in Plan D+ to stop the lowering of Lake Ontario if supplies turn wet. We would suggest the establishment of clear procedures in the operational guidelines to implement an adaptive management strategy.

Finally, we recommend the assessment of the selected plan on a regular basis, and the periodic publication of reports on the results of this revision. A performance examination should be completed five years after its implementation, and a detailed assessment every ten years. This assessment should comprise a comparison between modelled and measured impacts, conclusions on whether the objectives have been reached and recommendations on model or plan changes. However, this process should be designed to allow for adjustments to the regulation plan, and should not incur new comprehensive studies.

Respectfully submitted,



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Montréal, Québec