



Comments to the International Joint Commission
on
IJC's Proposed new Order of Approval and Plan 2007
For Regulation of Lake Ontario and the St. Lawrence River
Through the Moses-Saunders Dam at Cornwall-Massena

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Great Lakes United is pleased that the International Joint Commission recognizes the need to change the bases upon which it makes decisions regarding the release of water through the Moses-Saunders Dam in order to take into account the needs of the Lake Ontario and St. Lawrence River basin ecosystem.

The ecosystem crisis that must be addressed

The disruption of natural flows and variations in water levels by the Moses-Saunders hydropower dam at Cornwall-Massena has had dramatic negative effects on the Lake Ontario and St. Lawrence River ecosystem over the past 50 years. These effects have been particularly serious for Lake Ontario and the upper St. Lawrence River because decisions regarding water releases through the dam were aimed at minimizing water level fluctuations to protect property owners along the shores of Lake Ontario and the upper St. Lawrence River.¹

¹ Clinton Edmonds and Associates Limited, *Lake Ontario and St. Lawrence River - Changes in the Institutional Structure and Their Impact on Water Levels, 1950-2001*,

The IJC's International Lake Ontario – St. Lawrence River Study Board concluded that, as a result of this significant reduction in the natural fluctuations in this area,

there has been a reduction of 50% in meadow marsh and in emergent-floating vegetation since regulation was implemented in the late 1950s. During the same time period, there has been a 29% increase in cattail-dominated emergent marsh area.²

These changes in near-shore systems have had dramatic negative consequences for fish, amphibians, birds and wildlife that depend upon these areas as critical habitat. Earlier this year, American Rivers designated the St. Lawrence River as the fourth most endangered river in the U.S. because of the damage to the ecosystem caused by this dam.³

Since construction of the dam, fluctuations in levels in the St. Lawrence River downstream of the dam have varied more substantially than above the dam to balance out decisions to stabilize Lake Ontario levels. Changes in the ecosystem downstream of the Moses-Saunders Dam have been quite different than those above the dam. The Study Group's Environmental Technical Work Group concluded that the lower St. Lawrence River ecosystem is much more dynamic than upstream and heavily influenced by outflows by the Ottawa River and local tributaries.⁴ The Environmental Technical Work Group concluded that

[the ecosystem of] the lower St. Lawrence River is less sensitive to regulation, and none of the candidate plans, or even the natural flow plan, has much affect on the environment on the lower St. Lawrence River.⁵

The IJC's Path Forward

After a five-year study, which was completed in March 2006, a study board presented the IJC with three options for managing Lake Ontario and St. Lawrence River water levels and flows. Plan A+ focused on keeping Lake Ontario fluctuation within the narrowest range possible, primarily providing economic benefit to recreational boaters both in Lake Ontario and in the St. Lawrence River and protection to Lake Ontario shoreline owners from shoreline protection maintenance and flooding concerns. Plan B+ focused on benefiting the environment by returning the Lake Ontario-St. Lawrence River system to a more naturally fluctuating system, while taking into account other interests. Plan D+ provided gains for recreational boaters, hydropower and commercial navigation, with

Report to International Lake Ontario-St. Lawrence River Study Board, January 2002, p 14

² International Lake Ontario – St. Lawrence River Study Board, *Options for Managing Lake Ontario and St. Lawrence River Water Levels and Flows*, March 2006, p. 16

³ American Rivers, *America's Most Endangered Rivers: 2008 Edition*, March 2008.

⁴ *Options for Managing Lake Ontario and St. Lawrence River Water Levels and Flows*, March 2006, p. 69.

⁵ Ibid.

some losses for Lake Ontario shoreline owners and some improvements to ecosystem health.

After reviewing the proposals of its study board, in its release on March 28, 2008, the IJC said that it preferred Plan B+ but that “this would require measures [known as ‘mitigation’] to compensate or assist those whose current benefits are at stake.” So instead of choosing Plan B+, they proposed a new plan called Plan 2007 aimed at some improvement to the environment while minimizing negative changes for shoreline owners. Plan 2007 is a modification of the study board’s Plan D+.

Great Lakes United’s Position on IJC’s Plan 2007

Great Lakes United believes that the primary factor that the IJC should use in deciding on changes to its regulatory regime for the Moses-Saunders Dam should be ecosystem needs. This is necessary to address the ecological crisis that has been caused by the decisions made over the past 50 years.

IJC’s Plan 2007 fails to guarantee any substantial improvement to the Lake Ontario and St. Lawrence River ecosystem. Plan 2007 does not provide for sufficient seasonal and year-to-year fluctuations in water levels to restore coastal wetlands in Lake Ontario and the upper St. Lawrence River, which are critical as breeding grounds, nurseries, and feeding habitats for a wide range of fish and wildlife.

The IJC states that it hopes to be able to revise the plan at some point down the road to become Plan B+, the environmentally preferred plan. However, there is no assurance that this up-grading will happen. We fear that an inadequate Plan 2007 could become the plan for the long-term.

The IJC lists positive and negative results for a range of environmental factors and for economic factors. We believe that the priority should be placed on enhancement of environmental indicators even though there are some negative economic indicators in this option. This is a critical adjustment that must be made because for the past fifty years the overwhelmingly dominating factors in making decisions about levels and flows in the Lake Ontario and St. Lawrence River system have been in favour of the economic interests of commercial navigation, hydro power supply, and shoreline owners. It is time now to start to make the adjustments needed to enhance the ecosystem before it is further degraded and irreparably destroyed. The IJC estimates that the economic impacts from adoption of Plan B+ would be less than five million dollars a year. This is not an unreasonable expense to incur to restore and protect the Lake Ontario and St. Lawrence River ecosystem. In fact, some economic interests would financially gain from the adoption of Plan B+.

Our concerns are shared by several government agencies. For example, New York State, the Province of Ontario, the Great Lakes Fishery Commission, and the Council of Great Lakes Fishery Agencies, which is made up of the natural resources agencies for each of the federal, provincial, and state governments in the Great Lakes basin and some of the tribal agencies, have each already stated their preference for Plan B+.

Therefore we recommend that the IJC immediately adopt Plan B+ as its new order of approval to guide decisions on flows through the Moses-Saunders hydropower dam and levels in Lake Ontario and the St. Lawrence River.

Addressing Negative Impacts - especially on the Lower St. Lawrence River

The primary focus in Plan B+ is on trying to repair the damage that has already been done to the ecosystem around Lake Ontario and along the upper St. Lawrence River. This Plan pays less attention to the downstream needs along the St. Lawrence River. Unfortunately, this is the necessary consequence of misguided decisions under the existing order, which has resulted in substantial damage to the ecosystem of Lake Ontario and the upper St. Lawrence River.

However, in taking care of the needs that Plan B+ attempts to address, we must ensure that we do not once again pay less attention to the needs in the lower St. Lawrence River. The downstream positive and negative consequences that the IJC cites as possibly arising from Plan B+ include:⁶

- Recreational boating gains below the dam except for at Lac St. Pierre where it is neutral in its impact. It improves recreational boating around Montreal.
- Hydro Quebec gains substantially from Plan B+.
- Commercial navigation is seen as possibly slightly negative for Montreal, but it is well below what is considered statistically significant. [\$0.10 is defined as significant and the change on this item is -\$0.02.⁷]
- In terms of shoreline protection and flooding, for the lower St. Lawrence River, the flooding issue is significant (-\$0.22).
- Negative consequences for black tern reproduction, reproductive habitat for certain frog species, and muskrat habitat.

The lower St. Lawrence River is not the only area that would experience negative consequences as a result of implementing Plan B+. The substantially highest costs would be for shore protection maintenance around Lake Ontario [-\$2.16].

In order to address the main negative items just listed, we recommend that immediately mitigation plans be developed and implemented. Mitigation plans should mesh with the intention to encourage natural fluctuations and flows to enhance the condition of the ecosystem. This means that we may have to adjust our human expectations in order to live as responsible members of the ecosystem rather than as disruptive members.

⁶ International Joint Commission, *Your Guide to the IJC's Proposed new Order of Approval and Plan 2007*, pp 10 & 11.

⁷ Economic numbers in this section are in millions of U.S. dollars per year.

Great Lake United recommends that mitigation plans immediately be developed and implemented. These plans should be ones that contribute to enhancement of the natural ecosystem.

Provision should be made for short-term discretionary deviations from Plan B+ if a potential emergency should arise before the mitigation plan has been implemented. There should, however, be strict limitations on how frequently and for how long this power can be used so that it does not just become part of the on-going mitigation plan and a mechanism to by-pass the intent of Plan B+ to enhance the ecosystem. The IJC's proposed Plan 2007 contains such short-term discretionary deviations provisions.

Great Lakes United recommends that short-term discretionary deviations from Plan B+ be allowed in emergency situations until the mitigation plan has been implemented provided they do not have on-going impacts on the intent of Plan B+.

Planning for the Long-term

The IJC's Study Board's final report included a Plan E, which they called the "Natural Flow Plan."⁸ The Environmental Technical Work Group, which developed this plan for the IJC study, described this plan as "the best possible plan for the environment." This was not one of the final three options that the Study Board recommended to the IJC because "they recognized that because of historical economic development, there are considerable adverse economic impacts associated with Plan E." Nevertheless, the Study Board's final report stated that "many Study Board members believe that the environmental objectives of Plan E should be considered a longer-term management goal for the system."

Great Lakes United recommends that Plan E [the natural flow plan] remain on the table and be reviewed periodically according to a specific publicized schedule by the IJC as part of its adaptive management process to determine when it is appropriate to adopt additional components of that plan.

IJC's Decision-Making Structure

The IJC recommends changes to the board that makes decisions regarding flows through the dam. These include placing some non-government people on the new Lake Ontario-St. Lawrence River Board, forming a group of public advisors, and having a monitoring and adaptive management committee.

Great Lakes United supports the changes that the IJC is proposing for the management structure and process. The structure must not, however, become one that is simply a debating forum for competing interests. It must always be remembered that the ecosystem is not an interest competing with the others. Enhancement of the ecosystem must remain in the forefront of the deliberations by this board.

⁸ See pages 34-37.