

June 6, 2008

**MEMORANDUM**

**TO:** Commissioners, International Joint Commission

**FROM:** Dr. Gail Krantzberg, Director and Professor  
McMaster University

**RE:** **Public hearings on the IJC's proposed new Order and Plan 2007 for regulating water levels and flows in Lake Ontario and the St. Lawrence River**

---

These remarks address the following statement:

“The proposed new order explicitly recognizes the additional interests of recreational boating and the environment, brings into one place related authorities such as those for placing and removing ice booms, and provides for adaptive management. Relative to the current plan, Plan 2007 is an improvement with respect to environmental and overall economic benefits, and takes a more balanced approach to all interests.”<sup>1</sup>

Plan D+ (Plan 2007) indeed brings economic benefits to land owners arguably situated too close to the shorelines of select regions. The plan does not represent a substantial improvement with respect to the environment; rather it is in conflict with the basic water level timing principles that govern the function of many Lake Ontario marshes. At least tens of millions of dollars have been invested to remediate and rehabilitate degraded habitat in conjunction with and beyond Remedial Action Plans for the Great Lakes Areas of Concern. Plan 2007 will not achieve and protect ecological integrity.

The Plan being recommended is neither sympathetic to fish and wildlife reproduction nor to the perpetuation of emergent plant coverage, critical habitat for biota. The Plan the Commission is recommending would result in significantly greater annual water level fluctuation, further increasing the likelihood of winter freeze up in conjunction with the winter lows. This would compound damage to emergent and submergent plant communities and the biota they support.

Plan B provides excellent timing for the annual high-water mark, which is crucial for fish and wildlife reproduction. Further, Plan B is coherent with basic ecological water cycle timing principles for ecosystem health. Variability in the timing of the annual high water mark provides

---

<sup>1</sup> [http://www.ijc.org/LOSLdocuments/letter\\_e.php](http://www.ijc.org/LOSLdocuments/letter_e.php), accessed 6/6/08

excellent reproduction conditions in individual years for the range of species associated with coastal marshes<sup>2</sup>.

Overall Plan B is the most protective of the most sensitive use, ecosystem structure and function, and is preferred due to the water cycle characteristics that enhance the ability to regenerate and protect substantial areas of emergent marshes, the biological engine of the Lake and River.

I conclude by concurring with the recent announcement by the Minister of Natural Resources, Plan D is not a sustainable plan for the ecological integrity of Lake Ontario and the St. Lawrence River.

“[Plan B] won’t do enough to sustain the health of the lake and the river in the long term. Ontario believes there is still the most merit in the Plan B+ option – one of the original three proposals developed by the IJC. This option takes steps toward emulating the natural pattern of water flow and level variability that existed before the dam was built in the 1950s. We believe our choice would be better for the environment than Plan 2007, offering greater protection for wetland habitats that support many species, including some that are at-risk. We also believe this choice is better at balancing the various interests in these waterways – including those of shore property owners, commercial navigation and recreational boaters. While supporting this option, we recognize there may be a need to consider mitigation measures to ensure effective shoreline management.”<sup>3</sup>

Respectfully,



---

<sup>2</sup> T. Theysmeyer 2005. Examination of Potential Lake Ontario Water Cycle Scenarios. Royal Botanical Gardens.

<sup>3</sup> Minister Donna Cansfield, <http://www.energy2100.ca/Presentations.html>, accessed 6/6/08