

## **PUBLIC MEETING**

### **PUBLIC INTEREST ADVISORY GROUP INTERNATIONAL LAKE ONTARIO - ST. LAWRENCE RIVER STUDY**

#### **MEETING SUMMARY**

**DATE:** Wednesday, August 18, 2004  
**TIME:** 7:00 P.M. to 9:00 P.M.  
**LOCATION:** Beacon Harbourside Best Western  
2793 Jordan Boulevard  
Jordan, Ontario

#### **PARTICIPANTS:**

Jack Blaney	IJC Commissioner
John Ching	Hydroelectric
Doug Cuthbert	Study Board
Jim Dike	Recreational Boating
Susan Doka	Environment (alternate for Ken Minns)
Marie-Claire Doyle	Environment Canada
Stephanie Dumoulin	IJC Staff
Larry Field	Toronto Region Conservation Authority
Kathy Forde	Recording Secretary
John Hall	Public Interest Advisory Group
Connie Hamilton	Information Management
Marc Hudon	Public Interest Advisory Group
Joel Ingram	Environment
Wendy Leger	Plan Formulation and Evaluation Group
Tom McAuley	IJC Liaison
Greg McGillis	IJC Staff
Syed Moin	Hydrology & Hydraulics
Ralph Moulton	Coastal
Peter Zuzek	Study Consultant
Attending Guests	(27 approximately)

#### **1. INTRODUCTIONS**

Larry Field welcomed everyone to the public meeting. Members of the Study Team were introduced. Handout material was available for information. Approximately 27 guests were in attendance.

#### **2. OPENING REMARKS**

IJC Commissioner Jack Blaney provided opening remarks. The lakes and river system are fundamental to the welfare and economy of Canada. Transboundary water and air issues

are resolved nationwide through the IJC treaty signed in 1909. The Great Lakes - St. Lawrence River system is vast and extremely important. Regulation of flows is essential. This study is unique in terms of the whole ecosystem, its scope and public involvement, which will form a model in years to come. PIAG members are commended for their contributions. The exchange of public information continues to be a vital part of the study.

### **3. STUDY PRESENTATION**

John Hall provided a presentation on the study. As a part of the Public Interest Advisory Group, the role of volunteer members is to represent various locations and interests concerning the International Lake Ontario - St. Lawrence River Study. The five-year study, initiated in 1999 by the IJC to review the regulation of outflows, is currently in year four. Both Canada and the United States are equally represented. On average, 85 percent of Lake Ontario water supplies come from Lake Erie outflow. The system is complex. Nature is unpredictable. The Ottawa River must be carefully considered when regulating flows on the St. Lawrence, particularly in the spring. Plan 1958D, implemented by the International St. Lawrence River Board of Control, was based on water supplies from the first half of the century. However, following a dry period in the mid-1960s and a wetter period in the 1970s deviations were needed. Deviation adjustments occur approximately 50 percent of the time to allow for changes in supplies, new interests and ice formation.

Technical Work Groups have been researching, collecting and studying data. The Plan Formulation and Evaluation Group has been running computer models to formulate potential plans for evaluation by the Study Board. Guidelines for ranking options include environmental sustainability, no disproportionate loss, flexible management, mitigation alternatives, climate change adaptability, transparent decision-making and adaptable future technology. Based on input provided by stakeholders and scientists, the decision process includes plans, criteria/metrics and performance indicators. Details are being refined to develop a variety of plans to best determine the minimum and maximum water levels desired most often and to measure the environmental, social and economic benefits. For example, wetlands require higher lake levels (75.50 m / 247.71 ft) once every 20 to 25 years for about a three-week period. In contrast, wetlands also require a very dry period with low lake levels (74.7 m / 245.08 ft) every 20 to 25 years for two years in succession with a gradual return to higher levels during the succeeding two years. These are the preferred levels for healthy wetlands to produce a greater abundance and diversity of fish. The first week of April is also important for fish spawning.

Minimum and maximum water levels considered for Lake St. Lawrence at Long Sault Dam were illustrated with respect to frequency, severity and duration for the benefit of shoreline property owners, navigation and water uses. Preferred levels and impacts associated with beach access, coastal and recreational boater interests were also depicted. Diverse interests are expressed at various times for different reasons. Work continues to integrate performance indicators and to evaluate criteria. Various issues and interests are being addressed. Comments will be incorporated where possible.

Based on operations and deviations experienced with 1958D, plans are being evaluated. Environment plans, considered the most important component, continue to be entered into the computer model (Shared Vision Model) along with economic benefit plans, stakeholder plans and baseline plans to improve and meet new demands. Work will continue over the winter to develop recommendations for the plans that will be presented next year. In 2005, alternative plans based on science and stakeholder input will be presented for consideration. Meetings are tentatively scheduled in June and July. In the fall of 2005, a report will be

submitted to the IJC for their decision process. Numerous stakeholders are participating in the study. Contributions of past and present PIAG and Study Board members were acknowledged.

#### **4. QUESTIONS/COMMENTS**

Marc Hudon facilitated a question and answer session following the presentation. Jordan was connected concurrently with the Massena meeting for an interactive audio session. As a consensus building process, public input is extremely important and will be considered in the study. Concerns were expressed on water levels, flows, shoreline property, measurement, regulation plan, expansion, winds and stakeholder representation. Recorded questions, answers and comments are appended. Accuracy of speaker names was based on audio clarity.

#### **5. CLOSING REMARKS**

Appreciation was extended to all participants for their knowledge and insight to various concerns. Public input is extremely important to the study. Although it will be difficult to please all of the people at all times, ideally a plan that satisfies most of the people most times is essential. The Public Interest Advisory Group will visit again in 2005. Comment cards were provided in the handout material. Study information is available at [www.losl.org](http://www.losl.org).

#### **6. ADJOURNMENT**

The meeting adjourned at 9:00 P.M.

### **PUBLIC MEETING QUESTIONS AND ANSWERS**

#### **Water Levels**

- Q1. It seems we can drop levels up and down like a light switch. Perhaps we need to further develop something. Is construction required? (Jordan - Unidentified Speaker)
- A1. *Basically, we are dealing with a regulation plan in effect since 1958 that can hold water back. Flows are regulated from the Moses Saunders Dam. This is just an operating plan. No new construction will take place. (Tom McAuley)*
- Q2. How much higher or lower will we see this lake? What is the difference in the minimum and maximum annual elevations? (Jordan - Unidentified Speaker)
- A2. *Joint monthly water level charts showing the extreme highs and lows can be referenced. 75.7 metres is the level we try not to exceed although with natural input that level can go up. Regulations over the last 50 years have reduced the highs and increased the lows, enhancing environmental conditions around the wetlands. We should rejuvenate those wetlands so the challenge will be to see if we can do better on levels and meet specific interests. (Doug Cuthbert)*
- Q3. Why do the water levels have to fluctuate? What is the main reason? I understand the erosion issue but why not keep the level halfway and hold it there? (Jordan - Unidentified Speaker)
- A3. *The difficulty rests with controlling Mother Nature. We need to understand how much we can control the natural fluctuations of the flows. (Study Board member)*

- Q4. Why do you have to jolt the waterway every 25 years to bring it back to life? (Jordan - Unidentified Speaker)
- A4. *Every 20 to 25 years, Lake Ontario wetlands need high water levels for about a three-week duration and also very dry conditions for two years in succession. High water levels allow flooding of cattails and other areas that is needed. Periodic low water levels allow the seed banks to germinate. Varying conditions produce healthy wetlands and increase the diversity and abundance of fish. (Joel Ingram)*
- Q5. Within the next 10 to 20 years can we expect higher or lower levels than we have had over the last three to five years? (Jordan - Bill Corbett)
- A5. *It will depend on climate. When the plan was first developed, we experienced a dry period in the 1960s and then a wet period in the 1970s. If similar weather events occur the levels will go up and down. We hope to develop a regulation plan that works with the variations to modify natural fluctuations. (Ralph Moulton)*
- Q6. Right now the water levels are fine but by the end of September boats will have to come out of the water. Can the levels be held higher longer to extend the boating season? (Massena - Willy Cooper)
- A6. *We are looking at this. When the lake peaks, supply goes up more than flows. It should be gradual and natural. Once the lake peaks, we will look at holding levels but cannot keep levels as high as desired due to natural flows. (Study Board member).*
- Q7. We can allow more water down the St. Lawrence but we cannot control nature. Put in more hydro producing generators so we can let more power out and allow more water to flow out during the high points. Can the lake level be more constant? (Jordan - Martin Reiserwash)
- A7. *The Board of Control releases flows based on 1958D. Lake Ontario gets fatter in the summer. In the fall, to minimize damage to the system we make the lake level go down because we know we will have windstorms. We are studying higher flows and lower flows into the system. When the regulation plan reduces the level on Lake Ontario because nobody likes extreme highs or lows, problems are created in the lower St. Lawrence. As we try to achieve balance, the amount of influence to deliver higher or lower levels is unknown. That answer will come next year. (Syed Moin/Doug Cuthbert/Bill Werick)*
- Q8. Lake levels were considerably lower in 1972 than they are now. I have had to cover protection costs three times. Perhaps a fund should be created. Also, a road from St. Catharines to Hamilton has eroded. What has changed since 1972? (Jordan - Unidentified Speaker)
- A8. *We are aware of the sensitivities and erosion problems in this area. A tremendous amount of work has been done to factor these concerns into the study. Approximately 20,000 properties have been entered into a database to study erosion, shoreline damage and protection structures on the lake and the river. Based on scientific work, riparian areas are in better condition now than prior to 1960. Previously, landowners were in worse conditions. Without the dam and controls, levels would be even higher. So, when moving forward we need to consider compromise, to realize that conditions are better than before and that situations will continue to be optimized. (Doug Cuthbert/Pete Zuzek)*
- Q9. How much can you raise and lower the lake and for how long? (Jordan - Rick Forbes)

A9. *It depends on nature. High amounts of rainfall will increase lake levels. Ultimately Mother Nature regulates the limits. However, there are limitations to ensure the dam does not overflow. Water is only released when levels are low. (Syed Moin/Doug Cuthbert)*

Q10. Can you raise it by inches or feet? (Jordan - Unidentified Speaker)

A10. *The current regulation plan tries to maintain a four-foot range on the lake rather than six feet as previously experienced pre-plan. We can modify several inches but not several feet. Because the lake has such a large surface area, the level does not change too much. A 9 percent discharge or hold back only changes the level by 2 centimetres. (Tom McAuley)*

*If referring to the whole system, the Study Board needs to deal with the full scope. A decrease in Lake Ontario by two centimetres creates a 23-centimetre increase downstream. The current 15 centimetre higher than average level is still not very high. (André Carpentier)*

## **Flows**

Q11. Decisions to change the outflow are done weekly but can this be done more frequently? Better judgment is needed for closer approximations. (Massena - Unidentified Speaker)

A11. *Normally, the Control Board makes changes weekly (every Friday) but more frequent changes are made as needed or for emergency. We may recommend changes be done more frequently. (Study Board member)*

Q12. Why is it important to keep even water flow throughout the year in the St Lawrence River? Why can it not go higher in the summer? (Jordan - Peggy Less)

A12. *Water flow in the St. Lawrence does fluctuate in the summer. In the spring it is much higher and in the winter much lower. In terms of varying it even further, thresholds need to be determined. There is quite a variation. In the St. Lawrence Seaway, commercial navigation requires certain levels to get through the locks. (Doug Cuthbert/Tom McAuley)*

## **Shoreline Property**

Q13. Shoreline property owners have conflicting interests with boaters. Property owners want lower levels and boaters want higher levels. Levels in Stoney Creek are currently much too high. It is not fair to have high levels because of the boaters. Property owners spend a lot of money fixing their shores. Shoreline owners do not like high levels. (Jordan - Marie Mackowski)

A13. *Conflicting interests are a major difficulty. The study is looking at impacts on shoreline erosion and at shore protection. Protection may not be good enough. The seasonal cycle in the water allows levels go down in the fall. Right now, levels are typically 10 to 15 centimetres higher than the normal average. (Ralph Moulton/Tom McAuley)*

Q14. As a property owner in Stoney Creek, I have less damage during harsh winters because splashing waves freeze. Some of the worst experiences have been during mild winters, which had some of the fiercest storms. Does the study consider these phenomena? (Jordan - Mike Mackowski)

A14. *We have been looking at how seasonality and storm activity corresponds to lake*

*levels. The big storms can come in the winter and spring. Jordan has a higher threshold for storms in the summer so we can suggest that the lake can get a little higher at that time but we need to also regulate the lake level in the winter to reduce property damage. In the winter, ice formation can be a good thing for property owners because waves will not reach the shoreline when cold winds prevail throughout the season. However, the regulation plan cannot control the ice although it is an important factor. Open water conditions are also under review. (Pete Zuzek/Syed Moin)*

Q15. As a waterfront property owner in Vineland, erosion is a serious concern. Costs are significant. We appreciate the need for the study and for navigation, however, significant consideration must be given to land damage. Funding for protection measures would be useful. (Jordan - Stu Morgan)

A15. *Noted. (Study Board member)*

Q16. Not only do we have to fight the forces of nature but regulatory bodies too. In the past, one could easily put in a groin or a load of concrete. Is any assistance available in terms of regulations and obtaining permits to protect shorelines? (Jordan - Mike Mackowski)

A16. *Noted. (Study Board member)*

Q17. I have put shoreline protection in one location but it is very difficult to get a permit and costs are prohibitive. Even after hiring engineers to produce drawings, the expected six-month process took three years. I am now entering into shoreline protection again and need a permit before this winter. Can you help? (Jordan - Bill Corbett)

A17. *Permitting is beyond the scope of this study. Professional designs are often the most expensive option but likely to have a longer lifespan. Although the process may be more difficult, results will be better over the long run with well-designed shoreline protection. (Ralph Moulton)*

## **Measurement**

Q18. How do you measure the depth of the lake? (Jordan - Unidentified Speaker)

A18. *Levels are measured based on international data. For this exercise, one specific level is established for the Great Lakes system because levels continue to change. Five to six gauges are placed at various locations around the lake to get the average level above sea level. (Syed Moin)*

Q19. The measurement of 75.7 metres does not mean too much unless we know what the depth is today. We need perspective. Comments? (Jordan - Unidentified Speaker)

A19. *Currently the depth is around 75.0 metres. (Tom McAuley)*

## **Regulation Plan**

Q20. You have done a good job in collecting data but after the decisions are made will there be some type of independent evaluation on how this plan will be managed? (Massena - Dalton Foster)

A20. *We are looking at how to manage the new regulations and criteria after the study is over but we are still in the early stages. We have to think about institutional changes, forms of representation and adaptive management. (Bill Werick)*

Q21. An accounting system is needed to track the debit and credit from the water system. Water released from the basin into the Atlantic Ocean needs to be tracked. Balance is important. An account of natural discharges is needed so that extra water can be

released as required to achieve balance. (Massena - Dalton Foster)

A21. *The Control Board keeps track on a weekly basis. Information is available. We are looking at the plan as thoroughly as possible so any new concerns and details are welcome. Regardless of the plan, the same amount of water goes into the Atlantic Ocean. Various scenarios, compromises, flows and net benefits are being reviewed. We need to perform better. Sometimes levels are good for the economy and other times good for the environment. We will continue to strive for balance. (Bill Werick)*

### **Expansion**

Q22. Will the St. Lawrence be expanded for shipping? (Jordan - Martin Reiserwash)

A22. *About three years ago, the U.S Army Corps looked at various options through a scoping exercise to develop a number of possibilities concerning expansion of the seaway to accommodate ships from Panama. However, it was decided to conduct more research and to look at the existing seaway in more detail. The current seaway is quite old and expensive to maintain. Long-term viability, physical aspects and environmental impacts of maintaining the seaway are being studied. Work is 14 months into a 3 ½-year study. Environment Canada is involved along with other Canadian and U.S. agencies. The Canadian government is not interested in expansion at this time. (Ralph Moulton)*

### **Winds**

Q23. Where can I find out about prevailing winds? (Jordan - Unidentified Speaker)

A23. *Wind stations are located all around the lake. Many are located at local airports. Airports are a source of wind data. Wind speed and direction is recorded. Data is available. You may wish to speak with Ralph Moulton after the meeting. (Pete Zuzek)*

### **Stakeholder Representation**

Q24. How many different interests are represented tonight? (Jordan - Jenny Morgan)

A24. *In Jordan the majority of participants were concerned homeowners (20) while others expressed interest in the environment (6), recreational boating (6) and industry (1).*

*In Massena, participants represented combined interests as homeowners, environmentalists and recreational boaters.*

### **Comments**

- The problem is dramatic increases in short periods of time. Everyone recognizes that water levels need to be dropped and raised significantly but it is important to understand that we cannot make changes for the weekend. A plan that moderates levels in the long-term is needed.
  
- Ironically, in contrast to a concern in 1972 about large boats not fitting into the rivers, we now have little recreational boats on Lake Ontario receiving clout.

- Data dissemination is also a large part of the study under Information Management. All data gathered will be available to the public and is available on the website. A convenient and effective system is being developed to disseminate the information.