PUBLIC MEETING

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

MEETING SUMMARY

DATE:	Thursday, August 12, 2004
TIME:	7:00 P.M. to 9:00 P.M.
LOCATION:	Akwesasne Mohawk School Cornwall Island, Ontario

PARTICIPANTS:

Benoit Barbeau	Water Uses
Dan Barletta	Public Interest Advisory Group
Irene Brooks	IJC Commissioner (U.S.)
André Carpentier	Study Board
Annie Carriere	Water Uses
Nancy Connelly	Recreational Boating
Doug Cuthbert	Study Board
Stephanie Dumoulin	IJC Staff
Ed Eryuzlu	Study Manager
David Fay	Hydrology & Hydraulics
Kathy Forde	Recording Secretary
Herb Gray	IJC Commissioner (Canada)
Marc Hudon	Public Interest Advisory Group
Elaine Kennedy	Public Interest Advisory Group
Arleen Kreusch	IJC Staff
Henry Lickers	Study Board
Tom McAuley	IJC Liaison
Greg McGillis	IJC Staff
Jon Montan	Public Interest Advisory Group
John Osinski	Hydroelectric
Denis Peloquin	Water Uses
Jim Snyder	Study Board
Gene Stakhiv	Study Board
Serge St. Martin	Recreational Boating
Russ Trowbridge	IJC (U.S.)
Bill Werick	Plan Formulation and Evaluation Group
Attending Guests	(12 approximately)

1. **INTRODUCTIONS**

Elaine Kennedy welcomed everyone to the public meeting. Ernie Benedict, Akwesasne member, provided native greetings. Members of the Study Team were introduced. Handout material was available for information. Approximately 12 guests were in attendance.

2. **OPENING REMARKS**

IJC Commissioners Herb Gray and Irene Brooks provided opening remarks. The importance of public input is essential to the progress of the study. Public meetings provide a venue to listen closely to all concerns and to gather input. As the study nears its final phase, collection of input remains extremely important. Cornwall Island is the first of a series of public meetings scheduled throughout the summer. Results will be reported to the Commission to incorporate changes and to finalize the report.

The focus of the Study concentrates on water levels and flows. In an attempt by the IJC to improve the current regulation plan 1958D, a stakeholder approach has been initiated through the Public Interest Advisory Group to ensure that users are not isolated in the new regulated plan. The intention is to produce a comprehensive plan that serves all interests. Public meetings provide a forum to communicate and report on progress. Conflicting viewpoints do exist. Although the system is complex and natural impacts are unknown, regulations are needed. Research continues.

3. **STUDY PRESENTATION**

Dan Barletta 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. Diverse interests are express at various times for different reasons. Work continues to integrate performance indicators and to evaluate criteria. Various issues and cultural interests are now 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. As a consensus building process, public input and cultural interests are extremely important and will be considered in the study. Concerns were expressed on water levels, fish, winter ice, shipping, cultural interests, water quality, water flow data, water diversion, species restoration and the regulation plan. Recorded questions, answers and comments are appended.

Follow-up action is identified for Q8, Q10 and Q18 as required.

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. Closing native remarks were also provided.

6. **ADJOURNMENT**

The meeting adjourned at 9:00 P.M.

PUBLIC MEETING QUESTIONS AND ANSWERS

Water Levels

Q1. The figures presented refer to sea level. How do we know the sea level is constant and how is this figure arrived at?

A1. We do not measure with fluctuating sea levels. Long-term measurements and average levels have been used based on a sea level benchmark. With an established base level

everything is relevant. Sea level may change but measurement is relevant to the land.

Q2. Are all scientists involved in agreement with that measurement?

A2. Field experts in the movement and level of the earth establish the vertical data and measure everything from the zero level. All measurements are then done against benchmarks. Both Canada and the U.S. are in agreement to the water level measurements.

Q3. Is there any way to determine and advise the public on whether water levels will be two feet higher or lower than normal?

A3. People want to know about any changes to water levels. As such, the Public Interest Advisory Group is making a recommendation on how to improve communication and notification on any changes that may provide impact. Advance notification is preferred.

Q4. Fluctuating water leve1s within a 1 ½-foot range and within a 12-hour period are a definite concern. Peaking and ponding are also of great concern, especially with proximity to the dam. Comments?

A4. These concerns are recognized. However, changes to criteria and to the regulation plan would not get down to peaking and ponding levels, which are considered a secondary issue. Peaking becomes more of an issue where fluctuations are within shorter timeframes. This occurrence is beneficial to hydropower generation and is an economic benefit. For example, peaking provides the ability to produce more power during high demand hours and to reduce production during low demand hours. Peaking and ponding depends on geographical location so the impact effects everyone differently. Sensitivities to spawning will be considered and acceptable ranges for peaking and ponding will be reviewed.

Q5. What are the impacts of fluctuating water levels on the bubbles of contamination in the channels?

A5. Under the RAP on the Cornwall side, contaminated sediments are under review in another study. Henry Lickers is aware of the study. Contact names can be provided upon request.

<u>Impact on Fish</u>

Q6. As the owner of a fish farm for the last 10 years, I have been working on an indigenous species of yellow perch. During a discussion and tour with Ontario Hydro in 1988-89, I enquired about water levels. Impressed with advice regarding the IJC recommended four-inch fluctuation, I started researching yellow perch and built a hatchery. However, one January at 5:00 a.m. the water unbelievably dropped 3 ½ feet exposing rocks and riprap and did not start to rise until 12 hours later. My water was gone. My fish were killed. Ontario Hydro indicated that a cold snap was to blame and others needed water. The four-inch water level fluctuation recommended was not reliable. That is not the proper way to do business. I have experienced great loss and incurred high costs to convert to wells for backup. How can I get trusted information?

A6. Your experience, loss and frustration are noted. Your comments are appreciated. It is unlikely that IJC controls or guidelines called for this to happen. Historical records can be reviewed if needed. Yes, water levels should have remained more constant. These sensitivities and dependencies need to be expressed where there are problems. Better communication is needed to ensure this does not happen again. However, whether a

new plan could prevent this situation from ever happening again is unknown for sure. Nothing is 100 percent certain.

Q7. Ontario Hydro does not care. My electrical bills are up to $3200 per month. When I am $100 short on my bill they could turn me off. How do I get my money and fish back?

A7. Occasionally, unexpected things happen like the power blackout last year that caused major problems and the flow that needed to be adjusted. Concerning the four inches that you were relying on, speak with a real engineer to discuss, evaluate and analyze your water concerns where a great deal of time and money is invested. We are available to review designs.

Q8. Over the last seven years huge water level fluctuations have been noticed. High levels have washed fish eggs over the riverbank and low levels have exposed rocks, permitting fish eggs to be eaten and obstructing their harvest. A variety of fish studies are needed to evaluate water levels. Why are walleye not included in the study?

A8. Many of the questions raised are items that we need to know more about. More information is needed on the effect of water levels on spawning. Specifics on the sensitive times and sensitive water level variations need to be identified. Details defined and provided through Study Board member Henry Lickers would be appreciated.

FOLLOW-UP ACTION

Q9. Apart from walleye, perch needs to be considered in the study. Eyewitness accounts of the perch population should be provided and incorporated within the report. Comments?

A9. Comments noted. Perch are being reviewed in terms of habitat rather than mortality.

Winter Ice

Q10. Winter ice serves a purpose. Ice cover protects the environment. We use it to get around and to fish. Ice roads are needed. How do the fluctuating water levels affect the fish living throughout the winter? How can we trust the ice cover? Perhaps special advisories are needed. Comments?

A10. We are not sure of the effect that ice cover has on spawning. Any applicable study information will be reviewed and relevant details provided as follow-up if available. However, it is known that flows and water levels do impact ice cover and also create scouring effects resulting in shoreline erosion. Flows are reduced when ice begins to form. Flows need to be low enough so ice is strong enough. Ice needs to be monitored very closely to keep a stable cover. However, Mother Nature is really in charge. Where Mother Nature is dominant we have least control.

FOLLOW-UP ACTION

Shipping

Q11. The shipping season has been extended by two months since the seaway opened. Why?

A11. Navigation and ice conditions are a concern. Ice crossing details and real life examples are needed to study the effects of ice breaking on the environment, shoreline erosion and crossings.

Q12. Shipping can be dangerous. Previously during a tour, a five-foot wave created by a passing ship nearly swamped my boat. When the ship could not complete its second turn it actually dented the island and riverbed. Recklessness on the water is a concern. Are there pilots in the seaway?

A12. Yes, laws require a pilot. A pilot is mandatory to go up the river to Montreal. Point well taken.

Cultural Concerns

Q13. The study is overwhelming and modeling is impressive but out here the culture and way of life for the Mohawk people have been affected. Cultural matters and the environment are underlying concerns in this area. How would you consider cultural indicators within the modeling exercise?

A13. Akwesasne principles are written in the report and can be considered for value judgments along with all others. Also, practical expressions of cultural interests can be further discussed, such as the endangerment of medicinal plants, etc. More details are needed to determine tradeoffs. We can work together.

Q14. The rate of diabetes continues to rise. It is estimated that 80 percent of the people here will become diabetic. Although linked with genetic and hereditary conditions, the initiative to raise yellow perch in an attempt to go back to a traditional diet and to improve the well being of the community is one that represents the whole community. Fish continue to be contaminated and are impacting on human health. Importance of the fish farm project and of the river, land and air must not be understated. Mother Nature is intended to perform as nature's law.

In this location, ice is broken up to support shipping but the perch and walleye are no longer plentiful. It seems that Mother Nature has been restricted. Ice cover is extremely important and when ice is broken prematurely elements in the river are destroyed. You cannot shortcut Mother Nature. Is the cost of money lost in shipping worth the loss of life other than human?

In terms of leadership, common good for all must be acknowledged. Answers and solutions for all must be found. We need to learn from our elders and work with Mother Nature. Mother Nature must not be understated. Awareness must be raised.

A14. Points noted and well taken.

Q15. Ultimately, we would like to see restored conditions for future generations. Is original healthy restoration possible within a certain timeframe?

A15. As long as there is a need for a seaway there will be a need for a regulation plan. So, as long as there are dams there will be regulations.

Water Quality

Q16. At the fish farm in the spring, a spike in chloride was observed. After contacting U.S. environmental officials, it was discovered that crews were washing down bridges but no catchments were used. This situation alerted us to what was happening upstream. Prime spawning areas are affected by clumps of oil whether falling into the main rivers or tributaries. We need to be vigilant. Either do something or do nothing. Water quality is a big issue.

A16. Thank you.

Q17. What remedial measures exist on flushing water levels? Are there any flushing concerns?

A17. No regular flushing actions occur. Salt content is unknown. We are unaware of any impacts. However, from a recent incident 12,000 gallons of calcium chloride was

determined not to be a toxic substance so remedial action was not required. Lessons were learned and plans are being reviewed for any future actions that may be required.

Q18. During this event there was no indication for the people at Akwesasne to get involved in measuring or analyzing any residue. How can we be involved in remedial action and emergency response?

A18. Point well taken. Normally, Akwesasne is involved in emergency measures but likely due to volume and location the incident was not a major concern. The occurrence will be followed-up.

FOLLOW-UP ACTION

Water Flow Data

Q19. Regarding water flow data, there appears to be no specific information for the St. Lawrence over the Internet. Comments?

A19. The St. Lawrence River does not need a separate stream flow gauge because flows are noted under the dam and daily flows are posted on the web. Flow information is also available automatically on a weekly basis.

Water Diversion

Q20. I have read that prairie farmers would like to divert water from Lake Michigan. If so, how will the water be regulated and how much actually comes down the river?

A20. In the mid-1800s, diversion started due to returns and wastewater. With a considerable increase in diversion, concerns were raised in the 1930s. Subsequent to the 1960s, diversion was reduced and is now controlled through a court order. Any diversion from Lake Michigan is very closely controlled. In terms of balance, more water flows into the Great Lakes than is diverted so there is no net loss. Canadian legislation stipulates no exporting of water from the Great Lakes system. In the U.S., a ruling was issued about one month ago (Annex 2000) to set up a diversion agreement related to consumption thresholds and the comment period is currently underway. Rest assured that water diversion is being addressed.

Species Restoration

Q22. Can you regulate restoration of species?

A22. Although governments want a quality of species there is no mandate for species. Only a mandate for flows exists. Under the Great Lakes Water Quality Agreement signed in the early 1970s, both governments must conduct a review every six years. A full, open and transparent consultation process is the approach for dealing with water quality issues. Approximately 40 hot spots are being addressed where remedial action plans are underway. In Cornwall, residents are encouraged to contact their local environment departments where action task forces are addressing various issues. Water quality is important, however, this forum is here to address water levels. Minimum and maximum levels will be addressed within the five-year study.

Regulation Plan

Q21. What is the duration of the plan?

A21. The current regulation plan is about 50 years old and is dated. New issues and concerns need to be addressed. Criteria are being developed. It is anticipated that the new plan will be in place by spring 2006 to adapt to new concerns. Climate change remains a challenge. The new plan will perhaps strive for another 50 years.

Comments

- Provision of reliable information on water levels is essential to the public.

- Performance indicators for this area must not be overlooked.

- Although a global viewpoint is important, specific economic, cultural and environmental aspects need to be included.

- In terms of the fish farm as an innovative project, some members of the study team need to be more respectful of native concerns.

- Money should be directed for shoreline protection on the islands to ensure they do not wash away since the ice tears up the water's edge. However, it must be noted that we like ice cover. We do not want to get rid of the ice. Ice is good for the environment, fish spawning, animals in the river and crossing. Clear natural ice that is not clouded is preferred for good health of the animals.

- When the environment is altered with cut tree limbs, habitat is altered and perch loose their preferred shaded areas. Habitat requirements must be considered. Simple strategies, like placing willow branches in the water, should be considered. Money to cover fuel costs would be helpful. Habitat modification is easy and achievable.

- People do eat the perch although none are safe to eat, as examined. Contaminate-free fish are desired.

- Appreciation was extended to Study Board members for listening and for gathering feedback.