

INTERNATIONAL LAKE ONTARIO - ST. LAWRENCE RIVER BOARD
Board Meeting 22 October 2019 - 8:30 am to 12:00 pm
200 Kent Street, Business Continuity Centre
Ottawa, ON

The meeting began at 8:30 pm (EDT) with the following participants:

United States		Canada
	Board Members	
Mr. S. Durrett, Chair Mr. K. McCune, Alt. Chair (ph) Mr. T. Brown Mr. R. Company Mr. A. David Dr. D. Kuehn		Dr. G. Béchar, Chair Mr. J. Aubry-Morin Ms. P. Clavet (ph) Ms. J. Frain Mr. M. Hudon Ms. S. Miron
	Secretaries	
Mr. B. Carmichael		Mr. R. Caldwell
	Regulation Representatives	
LTC J. Toth Mr. K. Koralewski (Alt.)		Mr. J. Bruxer Ms. J. Dickhout (Alt.)
	IJC Staff	
Dr. M. Colosimo Mr. F. Bevacqua		Mr. D. Fay Ms. E. Klyszajko
	Associates	
Mr. P. Davis Ms. C. Fisher Mr. A. Kornacki (ph) Mr. J. Scharf Ms. L. Schifferle Ms. S. Wagner		Ms. S. Grady Ms. W. Leger Mr. P-M Rondeau Mr. M. Shantz Ms. G. Faveri (ph)

1 Roll, Opening Remarks, Objectives

Dr. Béchar opened the meeting with a roll-call, introductory remarks and a warm welcome to recently appointed member, Ms. S. Miron.

2 Approval of Agenda

The agenda was adopted (attached). Owing to some late arrivals, a fire drill and the short meeting, some agenda

items were re-ordered to best fit the available time and permit priority items to be fully discussed.

3 Previous Action Items

Action items from the 25 September 2019 meeting were marked complete or deferred. Some actions were carried forward as follows:

- Mr. Aubry-Morin will schedule a Seaway closing call with the Board, Power Entities, and Canadian Coast Guard officials.
- NGS to host a special workshop in Washington in April to update the Board on the IGLD 2020 update. NGS officials will provide a packet of material in advance of the workshop.
- NGS to send an official letter to the Board's Gauging Committee regarding support of the IGLD 2020 update.
- IJC Canadian Co-Chair Béland will coordinate a request for Quebec snow-water equivalent data with Ms. Clavet.
- Mr. Reilich to coordinate a workshop with Mr. Bernard Gigas and Ms. Sarah Delicate.
- IJC advisors to lead development of a roles and responsibilities storyboard for online website(s).

4 Current Conditions and Regulation Overview

a. Regulation Overview

The Canadian Regulation Representative presented a brief update on water level and outflow conditions, noting that water levels throughout the Great Lakes, including Lake Ontario, remain well above seasonal averages. Outflows remain well above average as well, the second-highest on record for this time of year behind only those in the fall of 1986 when record-high inflows caused a rapid rise in levels late in the year. Outflows continue to be released that are 200 m³/s above Plan 2014's L-Limit values. It was shown that net basin supplies to lakes Superior and Michigan-Huron and net total supplies to lakes Erie and Ontario have been generally above average since about early 2013, and especially and persistently high over the past three years. It was noted that the high levels and inflows increases the risk of high levels next spring, but it was also demonstrated that there remains considerable uncertainty in terms of the levels that might occur and that January Lake Erie and Ontario levels and winter inflows are not good predictors of peak Lake Ontario levels later in the year. Spring inflows are the most-important contributing factor to high peak levels of Lake Ontario, and these are impossible to accurately predict months in advance.

b. Minor Deviation for Boat Haulout

This 48-hour flow reduction by 1,000 m³/s during the October long weekend to assist Lake St. Lawrence residents and businesses with boat haul-out proved successful. This minor deviation resulted in a 0.8 cm increase of Lake Ontario will be paid back as soon as possible as conditions permit.

c. Minor Deviation for Hydro-Quebec Drawdown

Each spring, Hydro-Quebec installs safety booms in the north channel of the St. Lawrence River during the freshet. This requires dewatering areas of the north channel downstream of the Coteau/Les Cedres facilities. Hydro-Quebec usually re-locate up to 12,000 individual fish during this work. They typically can do this and remove these booms each fall without problems, as the flow is normally below $8,500 \text{ m}^3/\text{s}$ and can be passed through the Beauharnois Canal. However, this year, the total outflows are expected to be higher than this value.

Hydro-Quebec has taken measures this year to make it possible to perform this work at total flows up to about $8,900 \text{ m}^3/\text{s}$. This year's work started yesterday with a flow of $8,870 \text{ m}^3/\text{s}$. However, if heavy rainfall is observed over the next two weeks and inflows to Lake St. Francis increase, it may be necessary to reduce the flow for up to two days by perhaps $300 \text{ m}^3/\text{s}$ or so.

The Board was asked for concurrence with the minor deviation to accommodate safety boom removal. All present members concurred. The Secretaries will seek concurrence from absent members.

d. Forecast

The Canadian Regulation Representative demonstrated that current forecasts indicate significant uncertainty and a wide range of possible water levels by next spring, noting that this is an especially challenging time of year for forecasting, as winter and spring water supplies and ice conditions are highly variable and difficult to accurately predict. Forecasts also demonstrate that releasing higher outflows in the fall reduces Lake Ontario levels slightly in the short-term, but this lowering also reduces the capacity of the upper St. Lawrence River and reduces the amount of water that can be released during the winter (e.g., when low levels on Lake St. Lawrence can become an issue) or in early spring (e.g., due to the impacts on velocities when navigation season re-opens). As a result, higher fall flows do not necessarily result in lower lake levels next spring, because results converge over time. These higher outflows also impact areas of the river, causing lower levels on Lake St. Lawrence and higher levels on Lake St. Louis and other areas of the lower St. Lawrence, which may further limit outflows at times.

Forecast results using various water supply scenarios and potential winter deviation strategies were presented. Plan 2014 outflows are expected to be very high and near maximum flow limits for at least the next several weeks, and likely through the winter. This will help lower Lake Ontario levels on its own, but also limit the potential that additional water can be released. Nonetheless, several potential opportunities to continue to deviate and release higher flows than Plan 2014 this winter were identified and discussed. These include releasing flows above the Plan 2014 rule curves and/or maximum flow limits throughout the winter and spring. Whether these opportunities arise, and how much additional outflow/lowering these opportunities will allow, will depend primarily on weather and water supplies, as well as the impacts these measures may have on other interests along the St. Lawrence River. It was noted that under some of the wettest scenarios, even a series of aggressive measures will not eliminate the risk of high water next spring. Such measures result in a few centimetres of difference to Lake Ontario levels at most, and most individual measures will have less than a couple of centimetres of difference. As a result, there remains approximately a 10 to 30 percent chance of levels reaching 75.5 m or higher again in 2020 regardless of which

measures the Board can implement successfully. It was stressed that Great Lakes levels depend primarily on water supplies, and no deviation strategy can fully reduce the risk of high water during extreme wet weather conditions.

5 Extension of Deviation Authority - Conditions

a. Potential Early Seaway Closure

Several members noted the need to be proactive and look at all possible deviation opportunities as every centimetre matters to riparians and others impacted by this year's high water. It was agreed that the Board can undertake testing of various temporary deviations from Plan 2014 in accordance with Condition J of the 2016 Supplemental Order of Approval, but it must continue to follow the IJC's Directives, Boundary Water Treaty of 1909 and the other conditions within the Order when implementing any temporary deviations. It was again recommended that the IJC meet with the Seaway Corporations directly, as Seaway officials apparently feel that forcing an early closure is beyond the Board's authority. Some members noted that the IJC needs to provide firmer direction to the Board on what Condition J tests are permissible. The question of the Board's legal standing in considering deviation strategies that would cause a Seaway closure was raised. It was noted that the Board had been given authority by the IJC to consider deviations from Plan that could cause impacts to all interests, but must consider the effects of those impacts when making regulatory decisions. Several Board members noted that the possibility of adopting a deviation strategy that would cause a delayed opening of the Seaway should remain on the table and be part of the conversation when considering causing an early Seaway closure.

A detailed discussion on the merits and detrimental impacts of an early Seaway closure followed. The Board enquired when the most likely timeframe for the Ottawa River freshet was within the historic record. It was noted that the most likely timing of the freshet was in mid-April to mid-May. It was noted that the threat of flooding at Lake St. Louis corresponding to the Ottawa River freshet could potentially nullify the possibility of deviating from Plan to effect a delayed Seaway opening.

It was noted that the GLAM workshop with commercial navigation interests on 5 November may help inform the Board when considering the impacts and benefits of increasing flows in December and thereby causing the Seaway Corporations to implement an early closure of the Seaway. It was agreed to defer this discussion until 8 November.

b. Framework Due 1 November

All Board members agreed that it would not be possible to look out beyond two to three months with any certainty. Several members noted, for example, the lack of information regarding what lake level is necessary to preclude ice damage to certain infrastructure in embayments located on the lake. Several deviation opportunities were identified for the Board's consideration in development of a deviation strategy. Aside from the possibility of an early Seaway closure, these options include:

1. Maintaining the L+200 strategy through end of navigation season, even after criterion H14 expires

2. Pushing the I limit Lake St. Lawrence threshold for water intakes to some level below 71.8 m
3. Increased flows above the prescribed rule curve.
4. Increasing flows in spring that would delay opening of the Seaway.

The Secretaries will prepare a draft framework by the end of the week. A board teleconference call will be arranged on 28 October to finalize the framework.

c. Periodic Webinars – Proposed Dates

The Board agreed that regular Board meetings would need to continue. A total of four webinars with the IJC were proposed and target weeks agreed upon prior to the end of April. The proposed timeframes of the meetings were the first week in December, mid-January, the end of February, and mid-April.

d. Seaway Notification by 1 November

Options for notifying the Seaway either formally or informally were discussed. It was agreed that if the framework were to include an early closure, the Board ought to be up front about this possibility. A draft notification to the Seaway will be prepared for Board review after the next Board teleconference.

e. IJC/Board Public Announcement

The IJC advisors will coordinate a draft press release with the Communications Committee. IJC legal advisors will need to authorize its release prior to publishing.

f. Condition J Testing

A draft winter deviation strategy in accordance with Condition J testing will be prepared. Condition J permits the Board to undertake deviations to test potential modifications to Plan 2014 through the summer of 2020 when Lake Ontario reaches its crest.

g. Follow Up Call (prior to 1 November)

A call on 28 October will be arranged. This teleconference will focus on the finalization of the deviation framework and the method of communication needed to explain the framework to the IJC.

6 Gauging Committee

a. Outstanding Reports

The 2017 report was approved. The 2018 Audit and report preparation will now follow.

7 Communications Committee

The Board requested clarification from the IJC advisors present on communications protocol given the recent lawsuit filed by the state of New York. In particular, the Board requested guidance on any questions that should be deferred

to IJC staff and what information could be communicated by the Board without IJC approval to the media and stakeholders. It was noted that any questions regarding the lawsuit or IJC business would be deferred to IJC Communication staff for response. Any requests for technical information such as water level and flow data and forecasting results could be communicated directly to the public with no IJC approval needed. Any higher-level products created by the Board that highlight simulation results or impact trade-off analysis would need to be reviewed by the IJC legal team prior to publication.

a. Public Outreach Activities

Communications Committee highlights were provided, including an upcoming webinar with community leaders, media interviews, and weekly briefings. The brief narrative comparison of Plan 2014 performance versus former Plan 1958-DD is almost ready for public release. A meeting with New York State representatives is being arranged for November in Massena, NY.

Board members and associates continued to routinely provide information on conditions and current regulation strategy to numerous media outlets, and concerned citizens via its website contact form.

b. Social Media Activity

The Board continues to group common queries into bins to facilitate the preparation of #YAWA (You Ask, We Answer) posts. Given many stakeholders do not use Facebook, it's important to develop targeted, multi-use products. Therefore, the full list of recent #YAWA posts will also be made available on the Board's website soon.

c. Joint IJC/Board Webinar

This webinar with community leaders around the System was postponed from 6 November until a later date to be determined.

d. 9 October Position Paper

The Board and IJC were two of the many recipients of a "position paper" delivered by several groups around Lake Ontario and the upper St. Lawrence River urging more action to prevent high waters in 2020. The paper originated from the Thousand Islands association, marina operators, boating groups and community organizations. It was distributed to the Board, the IJC, and the Seaway Corporations. The Board and IJC will collaborate on a response, but it was agreed that development of the extended deviation authority for this winter must take precedence over a response to this letter.

e. Communications Plan

The Communications Committee prepared a Communications plan tracker with proposed products and estimated timelines for these products. The US Secretary will circulate the two-slide tracker to outline the Board's primary communications goals going forward.

f. Ongoing Support

This item was skipped due to time constraints.

8 GLAM Committee

This item was skipped due to time constraints

- a. IWI Projects - Update**
- b. Expedited Plan 2014 Review**
- c. FY20 Work Plan and Other Items**

9 Semi-Annual Appearance Presentation

This item was skipped due to time constraints. The Canadian Secretary had prepared a final draft version to be delivered by the Canadian Co-Chair to the Commission the following morning.

10 Other Business

a. Next Board Meeting

This item was skipped due to time constraints. The next Board meeting is expected to be in March in Ann Arbor, Michigan. Details will be confirmed as soon as possible.

b. GLAM Meetings

This item was skipped due to time constraints. The GLAM Committee expects to hold meetings in Canada in February and in the US in June. Details will be shared as arrangements are finalized.

11 Action Item Review

This item was skipped due to time constraints.

12 Closing Remarks and Adjourn

Dr. Bécharad adjourned the meeting at 12:45 pm.

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Board Meeting 22 Oct 2019 - 8:30 am to 12:00 pm

200 Kent St., BCC Room

Ottawa, ON

AGENDA

1. Roll, Opening Remarks, Objectives [Bécharde] 8:30 am
2. Approval of Agenda [Bécharde] 8:40 am
3. Previous Action Items [Caldwell] 8:45 am
4. Current Conditions & Regulation Overview [Bruxer] 8:50 am
 - a) Regulation Overview [Bruxer]
 - b) Minor Deviation for Boat Haulout – Review [Bruxer]
 - c) Minor Deviation for Hydro-Quebec Drawdown [Rondeau]
 - d) Forecast [Bruxer]
5. Extension of Deviation Authority – Conditions [Bécharde] 9:10 am
 - a) Potential Early Seaway Closure
 - b) Framework Due 1 November
 - c) Periodic Webinars – Proposed Dates
 - d) Seaway Notification by 1 November
 - e) IJC/Board Public Announcement
 - f) Condition J Testing
 - g) Follow up Call (prior to 1 November)
- BREAK (15 min) 10:30 am**
6. Gauging Committee [McNiven] 10:45 am
 - a) Outstanding Reports
7. Communications Committee [Kornacki] 10:50 am
 - a) Public Outreach Activities [Kornacki]
 - b) Social Media Activity [Caldwell, Kornacki]
 - c) Joint IJC/Board Webinar [all]
 - d) 9 October Position Paper [all]
 - e) Communications Plan [Carmichael]
 - f) Ongoing Support [Bécharde, Durrett]
8. GLAM Committee [Leger, Allis] 11:20 am
 - a) IWI Projects - Update
 - b) Expedited Plan 2014 Review
 - c) FY20 Work Plan and Other Items
9. Semi-Annual Appearance Presentation [Caldwell] 11:35 am
10. Other Business [Caldwell, Carmichael] 11:50 am
 - a) Next Board Meeting: GLERL in Ann Arbor, MI; 11 March 9 am to 4 pm
 - b) GLAM meetings: Canada Feb. 2020; US June 2020 [TBD]
11. Action Item Review [Carmichael] 11:55 am
12. Closing Remarks and Adjourn [Bécharde] 12:00 pm