

1 **INTERNATIONAL NIAGARA BOARD OF CONTROL**

2  
3 Minutes of the March 7, 2019 Meeting  
4 Syracuse, NY

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6 Mr. Durrett called the meeting to order at 1:00 PM in the Empire meeting room at the  
7 Marriott Syracuse Downtown, 100 East Onondaga, Syracuse, New York, United States  
8 of America. Those in attendance were:

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**UNITED STATES**

**CANADA**

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**BOARD MEMBERS**

Mr. Stephen Durrett, Alt. Chair

Mr. A. Thompson, Co-Chair

Mr. David Capka, Member

Ms. J. Keyes, Member (via  
teleconference)

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**SECRETARIES**

Mr. B. Carmichael

Mr. D. Beach

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12 **WORKING COMMITTEE AND ASSOCIATES**

13  
14 Mr. K. Koralewski, USACE

Dr. F. Seglenieks, ECCC

15 Mr. M. Asklar, NYPA

Mr. H. Ahmad, ECCC (teleconference)

16 Ms. C. Fisher, USACE

Mr. K. Kornelson, OPG (teleconference)

17 Mr. J. Allis, USACE

18 Mr. M. McClerren, USACE

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20  
21 **OTHER**

22 Mr. M. Colosimo, IJC

Mr. D. Fay, IJC

23 Mr. M. McClerren, USACE

Ms. S. Lobrichon, IJC

24 Mr. C. Sidick, USACE

25 Ms. R. So, US Dept. of State (teleconference)

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32 **Item 1. Introductions and Membership changes**

33 Introductions were conducted. No new changes to the Board or Working Committee  
34 were recorded.

35

36 **Item 2. Approval of Agenda**

37 The agenda was approved by the Board with the following additions:

38 5d) 5 year review of Ice Boom

39 12f) Upper Niagara River flow issues

40

41 **Item 3. Approval of Previous Meeting Minutes.**

42 Draft minutes circulated. Comments requested by 14 March, 2019.

43

44 **Item 4. Update on Lake Erie/Niagara River Conditions**

45 The Board was provided with an update of levels, precipitation and net basin supplies  
46 for Lake Erie and the Niagara River. The Lake Erie basin received 41.1 cm (16.2  
47 inches) of precipitation from September 2018 through February 2019, which is the same  
48 as the long term average (LTA) of 41.1 cm (16.2 in) for this period. Lake Erie began the  
49 reporting period with a September mean level at 49 cm (19.3 in) above its 1918–2017  
50 period-of-record, long-term average level for the month. From September 2018 to  
51 February 2019 the lake level fell 5 cm (1.9 in). This is 12 cm (4.7 in) less than the  
52 average decline of 17 cm (6.7 in) for this period. Lake Erie levels ended the reporting  
53 period with a February monthly mean water level 62 cm (24.4 in) above average.  
54 Niagara River flows remained above the long term average throughout the reporting  
55 period.

56

57 **Item 5. Lake Erie – Niagara River Ice Boom**

58 **a) 2018-2019 Installation and Maintenance update**

59 The Board was provided a review of the 2018-19 installation season ice boom activities.  
60 In accordance with condition (d) of the international joint commission order of approval,  
61 installation of the lake Erie-Niagara river ice boom may begin when the Lake Erie water  
62 temperature reaches 4°C (39°F) or on 16 December, whichever occurs first. Water  
63 temperature reached 4°C (39°F) on 12 December 2018 satisfying the criteria to begin ice  
64 boom installation. Ice boom crews began installation of the (2.7 km) 1.7 mile long ice  
65 boom on 13 December 2018. Installation of the ice boom was completed on December  
66 18th, 2018. During the 2018-2019 ice season, a thick lake ice cover formed behind the  
67 boom. On February 28<sup>th</sup>, 2019 ice covered 93% of Lake Erie.

68

69 Weekly reports on the ice conditions for Lake Erie and the Niagara River were prepared  
70 and submitted to the Board by the Power Entities beginning on November 26, 2018.

71

72 Snow and high winds on January 25, 2019 caused ice to come over the boom and the  
73 NYPA and OPG ice breakers were requested however due to abnormal high flows greater  
74 than 7,650 cms (270,157 cfs) the breakers deployment was delayed until January 26,  
75 2019. The Niagara Queen II and the Latham deployed at 5:27 AM on January 26, 2019  
76 and at 5:50 AM the NYPA ice affected flood warning notification plan (IA-FWNP) was  
77 activated for “flood watch at Lasalle Expressway”. On January 27, 2019 additional ice was  
78 reported pushed over the boom and the Flood Watch at LaSalle Expressway was  
79 elevated to a Flood Warning. On January 28, 2019 an ice Boom Pontoon was retrieved  
80 from the GIP. All flood watches and warnings had been revoked by January 31, 2019.

81 Strong westerly winds across Lake Erie on February 24 and 25 pushed large quantities  
82 of ice over the Lake Erie – Niagara River Ice Boom. On February 24, 2019, the NYPA  
83 ice affected flood warning notification plan (IA-FWNP) was activated for a “flood watch at  
84 Aqualane”. This was elevated to a Flood Warning at 5:40 pm that same day. The Flood  
85 Warning was cancelled at Aqualane on February 25, 2019, but a Flood Watch was  
86 activated at Lasalle Expressway at the same time. The Flood Watch at Lasalle  
87 continued until later on February 25, 2019 when it was cancelled.  
88

89 The New York Power Authority has identified some damage to the boom due to the  
90 strong winds and the large forces of the ice pushing up against it. The full extent of the  
91 damage was not determined due to the strong winds and heavy ice conditions limiting  
92 the ability to observe the boom. As of February 28, the New York Power Authority  
93 reported that, despite damage to the ice boom which included some missing spans, the  
94 natural ice arch shows signs of reforming. New York Power Authority’s assessment was  
95 ongoing subject to safety and operational conditions.  
96

#### 97 **b) Status of 2018-19 Ice Boom Report**

98 The draft version of the 2018-19 Ice Boom report is expected to be complete by  
99 September 2019.  
100

#### 101 **c) Media Advisories for Boom**

102 On 12 December 2018 a media advisory was released stating that installation of the  
103 lake Erie-Niagara river ice boom was scheduled to begin the following day. The Working  
104 Committee will continue to monitor conditions and hold coordination calls to establish  
105 when conditions are acceptable for boom removal.  
106

107 The Board suggested that the Great Lakes Adaptive Management Committee (GLAM)  
108 be requested to put together a short video to be posted on the Board’s website. The  
109 video would highlight the operations of the Ice Boom and its design and function under  
110 varying conditions. GLAM could potentially request IWI funds to support the video  
111 production.

112 **ACTION ITEM: US Secretary to bring this idea to GLAM and explore the feasibility**  
113 **of an IWI project to support video production.**  
114

#### 115 **d) 5 Year Review of Lake Erie – Niagara River Ice Boom**

116 The 5 year review of the Ice Boom operations is to be completed this year (2019). The Working  
117 Committee will initiate this work and target to have it completed by the end of the calendar  
118 year.

119

120 **Item 6. Chippawa-Grass Island Pool update**

121 The Board was provided a summary of the operation and maintenance of the  
122 Chippawa-Grass Island Pool (CGIP) and International Niagara Control Works (INCW).

123 **a) Compliance to directive**

124 The water level in the CGIP is regulated in accordance with the Board's 1993 Directive.  
125 During the reporting period the CGIP was operated within all criteria indicated in the  
126 1993 Directive.

127 **b) Operations and maintenance**

128 The Board was provided an update on regulatory gauge outages, regulatory reporting,  
129 International Control Dam (ICD) outages, and ICD environmental issues. Operations of  
130 the CGIP and INCW were satisfactory for this reporting period. Five gauges were  
131 unavailable for 1.5 hours on November 14, 2018 due to a communications failure.  
132 Gauges at Fort Erie, Frenchman's Creek, Material Dock, Slater's Point and Ashland  
133 Avenue were all affected during the outage. During the reporting period, tolerances for  
134 regulation of the CGIP were suspended due to ice on January 26 – February 4, 2019  
135 (inclusive); due to abnormally high flows on October 20, 2018, November 6, 7, 10, 11, 21,  
136 2018, December 29, 2018, January 1, 25, 2019, and February 8, 9, 2019; and due to an  
137 emergency rescue on October 3, 4, 6, 7, 2019.

138

139 **Item 7. Falls Flow Violations**

140 Niagara Falls flow met or exceeded minimum Treaty requirements at all times during the  
141 reporting period.

142

143 **Item 8. Plant Upgrades and Unit Testing**

144 **a) OPG** – Beck 1 G10 Gibson test was observed by INWC members on February 28,  
145 2019. OPG is proposing changing the instrumentation to conduct the Gibson test  
146 by using new digital pressure gauges rather than the old method. NYPA has  
147 agreed with the new proposed instrumentation.

148 **ACTION ITEM: A report on the new instrumentation will be presented**  
149 **to the INC for final approval with a copy given to the Board for**  
150 **reference.**

151 G5 planned to be overhauled beginning in May 2019. Canal rehabilitation  
152 anticipated in 2021-2022.

153 **b) NYPA** – Lewiston Pump Generating Plant PG4 to be back in service on June 4,  
154 2019. PG1 will begin an 8 month replacement outage start in June 30, 2019. The  
155 Robert Moses Plant control upgrades are scheduled to begin in 2020. The River  
156 intakes gate and control refurbishment is ongoing with confirmation of guide wheel  
157 slots occurring in March 2019 and an estimated completion in 2020.

158

159 **Item 9. Review discharge measurement programs**

160 **a) Overall Schedule** – Overall review intervals summarized.

161 **b) American Falls** – Measurements were taken between May 8 and May 12, 2017 to  
162 verify the American Falls rating equation. Results show that the discharge  
163 measurements fit very close to the 1978 Rating Equation, with all measurements  
164 falling within 1% of the rating. The next scheduled measurement is in May 2022.

165 **c) International Railway Bridge** – The last measurements taken at this section was May  
166 2018. Draft results compare well to the 2012 Buffalo rating equation and the 2018 Fort  
167 Erie equation.

- 168 d) **Welland Canal** – The last measurements taken at this location were in May 2018. Data  
169 processing and analysis from the 2018 verification exercise is planned to be  
170 completed in spring 2019 along with a draft report.
- 171 e) **Ashland Avenue Rating Section** – Last measurement was May 2016 and the next  
172 measurement is scheduled for May 2019. The report on the 2016 measurement is  
173 complete and measurements were within 5% of 2009 Ashland Avenue equation.
- 174 f) **Niagara River at Niagara-on-the-lake** -The index velocity meter located at the outflow of  
175 the Niagara River into Lake Ontario continues to be measured to develop an accurate  
176 rating equation. Last measurements were taken in November 2018 and next  
177 measurements are scheduled for spring of 2019.
- 178 g) **Fort Erie rating equation** – The index velocity meter located at Fort Erie was re-installed  
179 late in 2018. The previous section was corrupted by a collapse of the sea wall upstream  
180 of the gauge. A new rail for the side-looking ADCP was designed and fabricated by  
181 ECCC and was installed in the fall of 2018. The process of rating the index-velocity  
182 meter will begin with measurements in the near future.

#### 184 **Item 10. 2018 Public Outreach and Engagement**

185 The Board plans to staff a booth at the 2019 Erie County Fair in August 2019. The  
186 Board requested a public webinar interface to be scheduled for the Spring of 2019.

187  
188 **ACTION ITEM: Secretaries to coordinate a date and time with the Board**  
189 **and the IJC Communications team to host a public webinar in April/May**  
190 **2019.**

191 **ACTION ITEM: INWC to prepare presentations and FAQs to support spring**  
192 **webinar.**

#### 194 **Item 11. Review 132<sup>nd</sup> Semi-Annual Progress Report**

195 The first draft was distributed to the Board on February 26<sup>th</sup> and comments submitted by  
196 March 7<sup>th</sup>. The second draft will be distributed on March 22<sup>nd</sup> and comments are due  
197 April 5<sup>th</sup>. Clean-up and finalization of report will be completed by April 12<sup>th</sup> prior to  
198 submission to the IJC.

#### 200 **Item 12. Other Business**

##### 201 **a. Glam Update**

202 Provided updates on current staffing of GLAM and discussed a request from the  
203 Board to GLAM to perform an assessment regarding Climate Change consistent  
204 with the IJC's Climate Change strategy for the Niagara Board's mandate. GLAM  
205 will also be asked to investigate a potential IWI project to fund the development  
206 of an informational video describing the Ice Boom, its' purpose and how it works  
207 when deployed.

##### 209 **b. Falls Recession**

210 The Board was updated on monitoring the Falls crest for rock movement. No  
211 significant changes in the crest line of the Falls were noted over the last reporting  
212 period.

##### 214 **c. Power Entity Gauge Maintenance Program**

215 Members of the INWC have compiled information on the methods employed by  
216 NYPA, OPG, ECCC, and USACE to maintain and verify the gauge readings at the  
217 agencies' respective gauges. Though methods vary somewhat from agency to

218 agency the general level of accountability is similar and very rigorous. A report is to  
219 be compiled on the similarities in methods used.

220 **ACTION ITEM: INWC members to prepare and submit a report to the Board**  
221 **on the similarities in maintenance and verification programs across the 4**  
222 **agencies by September 26<sup>th</sup>, 2019.**

223  
224 **d. IJC website update**

225 The IJC has launched its' new Board websites for public use. Training on the use  
226 of the new websites has been completed by the Secretaries and some INWC  
227 members. Updates to content and posts can now be done by these individuals.

228  
229 **e. Updating INC Inspection schedule procedure**

230 Discussion on the current weekly International Niagara Committee water  
231 accounting inspection procedure and the potential for updating the procedure to an  
232 electronically submitted method. There was agreement between INWC members  
233 and OPG to continue the discussion at a later date and develop a proposal on a  
234 potential new inspection method.

235  
236 **f. Upper Niagara River Flow Issues**

237 The US INWC Co-Chair raised the potential concern of impacts on flow  
238 conveyance in the Upper Niagara River due to compounding projects within and  
239 adjacent to the existing river channel. Though the planning process and regulatory  
240 conclusions of each project done to date has states that any impacts to  
241 conveyance were negligible, there is some concern that the compounded negligible  
242 impacts from multiple projects could potentially have a meaningful impact on the  
243 conveyance of the channel. Proposal to develop a two-dimensional (2D) model of  
244 the upper river was put forward with the intention of being able to quantify the  
245 impacts form multiple projects.

246 **ACTION ITEM: INWC US Co-Chair to investigate existing ECCC 2D model for**  
247 **potential collaboration or calibration on a model that can accurately assess**  
248 **the impacts from the recent projects done on and in the upper Niagara River.**  
249 **Provide update on this project at the next Board meeting.**

250  
251 **Item 13. Next Board & INC meetings and IJC Appearance**

252 The next IJC Appearance is postponed due to the current state of Commissioner  
253 appointments. A quorum of 4 Commissioners is required to hold the Appearances and  
254 currently there are only 2 US Commissioners and no Canadian Commissioners. The  
255 next Board meeting is scheduled for September 26<sup>th</sup>, 2019 in Burlington, Ontario,  
256 Canada.

257  
258 **Item 14. Closing Remarks**

259 The closing remarks were made and the meeting adjourned at 3:00 PM.

260

261 **International Niagara Board of Control**  
262 **Board Meeting, 7 March, 2019, 1:00 pm to 3:00 pm**  
263 Empire Room (10<sup>th</sup> floor)  
264 Marriott Syracuse Downtown  
265 100 East Onondaga Street, Syracuse, NY 13202  
266 *(Webinar and teleconference info follows)*  
267

268 **Agenda**  
269

- 270 1. Opening Remarks, Introductions (Durrett) 1:00-1:05  
271 2. Approval of Agenda (Durrett) 1:05-1:10  
272 3. Review of Previous Meeting Minutes (Beach) 1:10-1:15  
273 4. Update on Lake Erie/Niagara River conditions (Koralewski) 1:15-1:25  
274 5. Lake Erie – Niagara River Ice Boom 1:25-1:35  
275 a) 2018-19 installation and maintenance update (Koralewski)  
276 b) Status of 2018-19 Ice Boom Report (Koralewski)  
277 c) Media Advisories for Boom (Koralewski /Beach)  
278 d) 5 Year Review of Ice Boom (Seglenieks)  
279  
280 6. Chippawa-Grass Island Pool 1:35-1:45  
281 a. Compliance to Directive (Koralewski)  
282 b. Operations and maintenance (Koralewski)  
283  
284 7. Falls flow violations (Carmichael) 1:45-1:50  
285  
286 8. Plant Upgrades and Unit Testing 1:50-2:00  
287 a) OPG (Kornelson)  
288 b) NYPA (Asklar)  
289 Break (15 min)  
290 9. Review discharge measurements program (Devries/Taurianen) 2:15-2:30  
291 a) Overall Schedule  
292 b) American Falls  
293 c) International Railway Bridge  
294 d) Welland Canal  
295 e) Ashland Avenue Rating Section/ Niagara River  
296 f) Fort Erie rating equation  
297 10. 2018 Public Outreach and Engagement (Seglenieks/Koralewski) 2:30-2:35  
298 11. Review of 132<sup>nd</sup> Semi-Annual Progress Report Draft (Carmichael) 2:35-2:40  
299  
300 12. Other Business 2:40-2:55  
301 a) GLAM (Carmichael/Seglenieks)  
302 b) Falls Recession (Seglenieks)  
303 c) Power Entity Gauge Maintenance Program (NYPA, OPG, ECCC, USACE)  
304 d) IJC web site update (Derrick Beach/Carmichael)  
305 e) Updating INC inspection schedule procedure (Seglenieks)  
306 f) Upper Niagara River Flow issues (Koralewski)  
307

- 308 13. Next Board Meeting and IJC Appearance (Carmichael) 2:55-3:00  
309 14. Closing Remarks and Adjourn (Durrett)

310

311 **Conference Call Information:**

312 Call-in toll-free number: 1-877-336-1839

313 Participant Code: 5162099

314 Security Code (if prompted): 1111

315

316 **WebEx:** [https://usace.webex.com/meet/LRD\\_Great\\_Lakes](https://usace.webex.com/meet/LRD_Great_Lakes)

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