

1 **INTERNATIONAL NIAGARA BOARD OF CONTROL**

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3 Minutes of the March 12, 2020 Meeting
4 Ann Arbor, MI

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6 Mr. Durrett called the meeting to order at 1:00 PM at NOAA's Great Lakes Research
7 Lab, 4840 South State Road, Ann Arbor, Michigan, USA. Those in attendance were:
8

UNITED STATES

CANADA

BOARD MEMBERS

Mr. Stephen Durrett, Alt. Chair Mr. A. Thompson, Co-Chair (phone)
Mr. David Capka, Member (phone) Ms. J. Keyes, Member (phone)

SECRETARIES

Mr. B. Carmichael Mr. D. Beach (phone)

WORKING COMMITTEE AND ASSOCIATES

Ms. L. Schifferle, USACE Mr. H. Ahmad, ECCC (phone)
Ms. C. Fisher, USACE (phone) Mr. K. Kornelson, OPG (phone)
Mr. J. Allis, USACE
Mr. M. McClerren, USACE

OTHER

Mr. M. Colosimo, IJC Ms. E. Klyszejko, IJC
Mr. K. Koralewski, USACE (phone)
Ms. E. Cuddihy, USACE
Mr. A. Armstrong, USACE
Mr. A. Greely, IJC

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31 **Item 1. Opening Remarks and Introductions**

32 Introductions were conducted. Several changes to the Board and the
33 International Niagara Working Committee (INWC) were noted. Mr. Stephen
34 Durrett replaced MG Mark Toy as the board US Co-Chair, and Mr. Kyle McCune
35 replaced Mr. Stephen Durrett as the Alternate US Co-Chair in September 2019.
36 Changes to the board's Working Committee during the reporting period were:
37 Ms. Lauren Schifferle, USACE, replaced Mr. Keith Koralewski, USACE, as the
38 US Alternate Co-Chair of the INWC. Mr. Derrick Beach replaced Dr. Frank
39 Seglenieks as the Canadian Co-Chair of the INWC. The US Co-Chair welcomed
40 everyone and commenced the meeting.

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42 **Item 2. Approval of Agenda**

43 The agenda was approved by the Board.

44

45 **Item 3. Review of Previous Meeting Minutes.**

46 Draft minutes circulated. Comments requested by 17 March, 2020.

47

48 **Action Item: submit final comments on September minutes by 17 March, 2020.**

49

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

51 The Board was provided with an update of levels, precipitation and net basin supplies
52 for Lake Erie and the Niagara River. The Lake Erie basin received 36.6 cm (14.4 inches)
53 of precipitation from September 2019 to February 2020, which is approximately 11 percent
54 below average for the period. Lake Erie began the reporting period with a September
55 mean level at 71 cm (28.0 inches) above its 1918–2018 period-of-record long-term
56 average level for the month. Between September and February, the monthly mean lake
57 level on average gained 3 cm (1.2 inches). Lake Erie levels ended the reporting period
58 with February mean water level 90 cm (35.4 inches) above average, with its level
59 continuing to rise through the beginning of March. Niagara River flows remained above
60 the long term average throughout the reporting period.

61

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

63 **a) 2019-20 installation and maintenance update**

64 Preparations for installing the ice boom began on November 21. Repairs to the
65 anchor cables were completed by dive crews and all anchor cables were ready for
66 attachment to boom pontoon spans by December 17. Towing of the boom's
67 pontoon spans from summer storage to the Buffalo Harbor breakwall began on
68 December 6 and was completed by December 16. Installation of the ice boom was
69 initiated on December 17. Some installation delays were encountered due to high
70 wind and wave conditions. All twenty-two spans of the boom were placed by the end
71 of day December 21.

72 **b) Status of 2019-20 Ice Boom Report**

73 The 2019-20 Ice Boom Report has just begun to be drafted and will be circulated
74 for comment prior to the Fall Board meeting in September.

75 **c) Media Advisories for Boom**

76 The board issued a media advisory to the public on December 16, informing that
77 installation of the boom would start as early as December 17.

78 **d) 5 Year Review of Ice Boom**

79 Every 5 years a comprehensive review report is prepared and submitted to the
80 Commission in order to meet this directive. The 5 year review report was drafted
81 and is being reviewed by the board for submission to the IJC.

82
83 **ACTION ITEM: All Board members and INWC members to submit**
84 **comments prior to Close of Business on 23 March, 2020.**

85
86 **e) GLAM Proposal for investigation of impacts to charter fishers**

87 There was discussion on the value of engaging GLAM to study the impacts of
88 Boom installation and removal on charter fishing. It was noted that GLAM has
89 limited resources and that the expedited review of Plan 2014 has committed those
90 resources for this year. Any work on this initiative would not be able to be
91 accomplished in 2020.

92
93 **Action Item: Board Secretaries to prepare a draft scope of work for review**
94 **and circulate to the INWC to be prepared for when the GLAM would have**
95 **capacity to do the work.**

96
97 **Item 6. Chippawa-Grass Island Pool update**

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

100 **a) Compliance to directive**

101 The water level in the CGIP is regulated in accordance with the Board's 1993
102 Directive. During the reporting period, one exceedance of the board's Directive
103 occurred on November 1, 2019 at 01:00 hours EST when the elevation of the
104 Chippawa-Grass Island Pool went above the abnormal flow conditions limit of 171.77
105 metres (563.55 feet) by 3 cm (1.18 in). The INWC was not aware of any negative
106 impacts to riparian interests due to the high water level in the CGIP.

107
108 **b) Operations and maintenance**

109 The Board was provided an update on regulatory gauge outages, regulatory
110 reporting, International Niagara Control Works (INCW) outages, and INCW
111 environmental issues. Operations of the CGIP and INCW were satisfactory for this
112 reporting period. Tolerances for regulation of the CGIP were suspended on a
113 number of occasions for abnormally high flows during the reporting period, as
114 follows: September 4, 14, 15 (3), October 23, 24, 27, 28, 30, 31 (6), November 1, 27,
115 28 (3), December 11, 12, 15, 30, 31 (5), January 1, 6, 7, 12, 16, 18, 19, 26, 27 (9),
116 and February 13, 14, 21, 22, and 27-29. Additionally, operating tolerances were
117 suspended for emergency rescue and or recovery on September 11, 12, 2019 for a
118 Jet Ski through control dam, October 29, 2019 for a body recovery in the Canadian
119 Niagara Plant forebay, and November 7, 8, 2019 for an American Falls channel
120 rescue. Also, tolerances were suspended on September 17 and 18, 2019 for
121 Government flows testing.
122

123 Gate 5 of the INCW was out of service for major overhaul from May 16 to Nov 21
124 2019, and Gate 4 has been out of service to investigate hydraulic issues from Nov
125 16, 2019 and is tentatively set to return to service March 1, 2020.
126
127

128 **Item 7. Falls Flow Violations**

129 During this reporting period, flows over Niagara Falls were below the minimum Treaty
130 requirement on September 11 due to a request from Niagara Regional Police to reduce
131 flows above the Falls to aid in rescue operations, and on September 17 and 18 for
132 planned Government flow measurements for verification of the Ashland Avenue Flow
133 Gauge measurements. The International Niagara Committee reviewed the
134 circumstances surrounding these violations and agreed no further action was required.
135

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

137 a) **OPG** – A unit rehabilitation program that began in 2007 continues, with Sir
138 Adam Beck 1 units G3, G7, G9 and G10 scheduled for upgrades.

139 Currently the G10 Gibson draft report is under review by NYPA. The G5
140 overhaul is ongoing, beginning in January 2020 and expected to be
141 complete in March 2021. SAB 1 units G1 and G2 are undergoing a
142 frequency conversion from 2021 to 2022 with the installation of new 60
143 Hz units. The power canal refurbishment project has been delayed until
144 2027. SAB 2 unit overhauls will begin in September 2020.

145 b) **NYPA** – Improvements to the Lewiston Pump Generating Plant continue with PG
146 unit 3 put back in Service January 31, 2020, and an 8 month replacement
147 outage started February 3, 2020 on PG 10. Of the 12 pump-turbine units, PG 1
148 remains to be completed with the outage scheduled for November 2020. At the
149 Robert Moses Plant planned control upgrades are scheduled to start in June
150 2020. The unit control boards will be upgraded in the secondary control room in
151 September 2020. The Robert Moses Unit 1 refurbishment is scheduled to be
152 completed in May 2021, and unit mechanical upgrades will begin in 2023.
153

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

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

156 b) **American Falls** – The last set of measurements were completed in May 2017 and
157 the report has been finalized. The next measurements are scheduled for May 2022.

158 c) **International Railway Bridge** – The regularly scheduled discharge measurements
159 near the International Railway Bridge were taken in May 2018. The next
160 measurements at the International Railway Bridge are scheduled for spring 2021.

161 d) **Welland Canal** – Measurements were made in the Welland Supply Canal in May
162 2018. These measurements are currently under review. The next measurement
163 series in the Welland Supply Canal will take place in the spring of 2021.

164 e) **Ashland Avenue Rating Section** – Measurements taken in September
165 2019 are currently under internal review. The next measurements at
166 this location are scheduled for September 2022. This set of
167 measurements has been coordinated between ECCC, USACE and
168 the Power Entities.
169

170 **Item 10. 2018 Public Outreach and Engagement**

171 The Board discussed different opportunities to hold an outreach event and it was
172 decided that the board could coordinate with the other Great Lakes Boards to hold a tri-
173 Board/ IJC webinar sometime in the summer of 2020.

174
175 **ACTION ITEM: Secretaries to coordinate a date and time with the other**
176 **Great Lakes Boards and the IJC Communications team to participate in a**
177 **public tri-Board webinar in summer 2020.**

178
179 **Item 11. Review 134th Semi-Annual Progress Report**

180 The first draft was distributed to the Board on March 7th and comments requested by
181 March 12th. The second draft will be distributed the week of March 16th. Clean-up and
182 finalization of report will be completed prior to the April Appearances in Washington,
183 DC.

184
185 **Item 12. Other Business**

186 **a. Directive and high Niagara River Flows**

187 The Board discussed the existing directive to the power entities and it's
188 effectiveness given the extraordinary high water levels and flows observed over the
189 last year. It was concluded that the Directive is still accomplishing it's intent and it
190 does not currently need to be updated.

191
192 **b. Adaptive Management Update**

193 Provided updates on current staffing of GLAM and discussed a request from the
194 Board to GLAM to assess the impacts of Ice Boom installation and removal on
195 charter fishing.

196
197 **c. Falls Recession**

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

201
202 **d. Ashland Avenue Gauge intake update**

203 No new developments were noted regarding the new Ashland Avenue gauge
204 intake and that this agenda item need not be included in future board meetings.

205
206 **e. Power Entity Gauge Maintenance Program**

207 Members of the INWC are still in the process of compiling information on the
208 methods employed by NYPA, OPG, ECCC, and USACE to maintain and verify the
209 gauge readings at the agencies' respective gauges. Though methods vary
210 somewhat from agency to agency the general level of accountability is similar and
211 very rigorous. A report capturing the similarities in methods used has been
212 delayed but is still forthcoming.

213
214 **f. American Falls Bridge Project**

215 The New York State Office of Parks, Recreation and Historic Preservation
216 (Parks), in conjunction with the New York State Department of Transportation
217 (NYSDOT) and their contractor Greenman-Pedersen, Inc. (GPI), have been
218 developing a feasible path towards the reconstruction of the Goat Island Road
219 bridges. The two bridges cross the American channel of the Niagara River and

220 traverse very turbulent water flows. The ramifications of various cofferdam
221 options need to be considered with a heightened focus on the rise and reduction
222 of water flow levels within the Niagara River, specifically within the Canadian
223 channel and further upstream.
224

225 This project will be closely monitored by the International Working
226 Committee and progress will be reported as needed to IJC staff over the
227 next several months.
228

229 **g. IGLD 2020 update and GNSS survey**

230 Information on the IGLD 2020 update and GNSS survey was provided to the
231 board. Important notes included the intent of the survey to determine heights
232 of permanent & seasonal water level stations in IGLD (2020). It was noted
233 that existing Bench Marks will not be updated to IGLD (2020) unless occupied
234 with GNSS. It was noted that a link to the Coordinating Committee and IGLD
235 update page should be circulated to the board for reference.
236

237 **h. Long Lac and Ogoki Diversions – general information**

238 Information regarding the history, functions, and impacts on water levels of the
239 diversions was provided to the Board. It was noted that the Superior Board is
240 developing an informational handout on the diversions and this would be circulated
241 to the board when complete.
242

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

244 The next IJC Appearance is currently scheduled for 21 April in Washington, DC. The
245 next Board meeting is scheduled for September 17th, 2020 in Montreal, Quebec,
246 Canada.
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248 **Item 14. Closing Remarks**

249 The closing remarks were given and the meeting adjourned at 3:00 PM.
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International Niagara Board of Control
Board Meeting, 12 March, 2020, 1:00 pm to 3:45 pm
NOAA Great Lakes Environmental Research Laboratory
4840 South State Road, Ann Arbor, Michigan 48108

Agenda

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|----------------|---|-----------|
| 1. | Opening Remarks, Introductions (Durrett) | 1:00-1:05 |
| 2. | Approval of Agenda (Durrett) | 1:05-1:10 |
| 3. | Review of Previous Meeting Minutes (Beach) | 1:10-1:15 |
| 4. | Update on Lake Erie/Niagara River conditions (Schifferle) | 1:15-1:25 |
| 5. | Lake Erie – Niagara River Ice Boom | 1:25-1:45 |
| | a) 2019-20 installation and maintenance update (Schifferle) | |
| | b) Status of 2019-20 Ice Boom Report (Armstrong) | |
| | c) Media Advisories for Boom (Schifferle) | |
| | d) 5 Year Review of Ice Boom (Beach) | |
| | e) GLAM Proposal for investigation of impacts to charter fishers (Carmichael) | |
| 6. | Chippawa-Grass Island Pool | 1:45-2:00 |
| | a. Compliance to Directive (Schifferle/Beach/Schooley) | |
| | b. Operations and maintenance (Schooley) | |
| 7. | Falls flow violations (Schifferle) | 2:00-2:05 |
| 8. | Plant Upgrades and Unit Testing | 2:05-2:25 |
| | a) OPG (Kornelson) | |
| | b) NYPA (Asklar) | |
| Break (15 min) | | |
| 9. | Review discharge measurements program (Beach/Taurianen) | 2:40-2:50 |
| | a) Overall Schedule | |
| | b) American Falls | |
| | c) International Railway Bridge (Buffalo and Fort Erie) | |
| | d) Welland Canal | |
| | e) Ashland Avenue Rating Section/ Niagara River | |
| 10. | 2019/ 2020 Public Outreach and Engagement (Carmichael/Beach) | 2:50-2:55 |
| 11. | Review of 134 th Semi-Annual Progress Report Draft (Carmichael) | 2:55-3:00 |
| 12. | Other Business | 3:00-3:30 |
| | a. Directive and High Niagara River Flows (Beach) | |
| | b. Adaptive Management (Carmichael) | |
| | c. Falls Recession (Beach) | |
| | d. Ashland Avenue Gauge Intake Update (Asklar) | |
| | e. Gauge Maintenance Program (Beach) | |
| | f. American Falls Bridge Project (Schifferle) | |
| | g. IGLD 2020 update and GNSS survey (Thompson) | |
| | h. Long Lac and Ogoki - General Information (Kornelsen) | |
| 13. | Next Board Meeting and IJC Appearance (Carmichael) | 3:30-3:35 |
| 14. | Closing Remarks and Adjourn (Durrett) | |