

1
2 **INTERNATIONAL NIAGARA BOARD OF CONTROL**

3
4 Minutes of the September 28, 2021 Meeting
5 Virtual Meeting
6

7 Mr. Thompson called the virtual meeting to order at 1:05 PM. Those in attendance
8 were:
9

UNITED STATES

CANADA

BOARD MEMBERS

Mr. K. McCune, Alt. Co-Chair
Mr. D. Capka, Member

Mr. A. Thompson, Co-Chair
Ms. J. Keyes, Member

SECRETARIES

Mr. B. Carmichael

Mr. D. Beach

WORKING COMMITTEE AND ASSOCIATES

10
11
12
13 LTC E. Adams

Mr. H. Ahmad

14 Ms. L. Schifferle

Ms. C. Cho

15 Mr. M. Asklar

Dr. K. Kornelsen

16 Mr. J. Allis

Mr. J. Staples

17 Ms. C. Fisher

Mr. J. Schooley

18 Mr. K. Koralewski

Mr. S. Frick

19 Ms. E. Cuddihy

20 Mr. M. McClerren

21 Mr. E. Tauriainen

22 Ms. L. Greer

23 Ms. M. Kropfreiter

24 Ms. J. Jury

25 Ms. D. Apps

26 **OTHER**

27 Comm. L. Yohe, IJC

Ms. E. Klyszejko, IJC

28 Mr. M. Colosimo, IJC

Mr. E. Virden, IJC

29 Mr. A. Greeley, IJC
30
31

32 **Item 1. Opening Remarks, Introductions**

33 Mr. Thompson welcomed attendees to the third fully virtual meeting of the board. This
34 board meeting was held virtually due to travel restrictions during the COVID-19
35 pandemic. Each attendee provided a brief introduction at the start of the meeting.

36

37 **Item 2. Approval of Agenda**

38 The draft agenda was approved with addition of item 13 e) and is attached.

39

40 **Item 3. Membership Changes, Roles and Responsibilities**

41 The Canadian and US members of the board remained the same during this reporting
42 period.

43

44 **Item 4. Review of Previous Meeting Minutes**

45 The review of meeting minutes from the last virtual board meeting on March 26, 2021
46 will be completed by email. A first draft was distributed to the board on September 28,
47 2021 for comments by October 4, 2021.

48

49 **Item 5. Update on Lake Erie/Niagara River Conditions**

50 The board received an update of water levels, precipitation, net basin supplies and flows
51 for Lake Erie and Niagara River for the reporting period. The water levels of Lake Erie
52 were above average for the reporting period. Lake Erie began the reporting period with a
53 March mean level 48 cm (19.0 inches) above its period-of-record (1918-2020) average
54 level for the month. The level of Lake Erie remained above average on a monthly basis
55 from March through August. During its seasonal rise, Lake Erie's water level rose 13 cm
56 (5.1 inches) from March to June, compared to its average rise of 26 cm (10.2 inches). In
57 July, the lake level further rose 10 cm (3.9 inches) instead of its average decline of 2 cm
58 (0.8 inches) for the month. Lake Erie levels ended the reporting period with an August
59 monthly mean water level of 51 cm (20.2 inches) above average.

60

61 **Item 6. Lake Erie – Niagara River Ice Boom**

62 **a) 2020-21 Ice Boom Season Review and Preparations for 2021-22 Season**

63

64 The Lake Erie – Niagara River Ice Boom was operated by the Power Entities in accordance
65 with conditions of International Joint Commission Order of Approval for the 2020-21 ice
66 season. The 2020-2021 ice season typically consisted of seasonal and higher than seasonal
67 temperatures. Ice cover over Lake Erie started increasing during the last week of January
68 and peaked at about 83% during the second week of February. It then steadily declined
69 throughout the remainder of the 2020-2021 ice season.

70

71 The fixed wing survey flight to estimate Lake Erie ice cover was not undertaken due to
72 COVID-19 restrictions. Satellite imagery was used to estimate the ice cover on the eastern

73 basin of Lake Erie instead. Satellite imagery analysis on March 12 showed more than 650
74 km² (250 mi²) ice cover, which rapidly decreased to 213 km² (82 mi²) on March 14.

75
76 A media advisory was issued by the board on March 16, 2021 informing the public that
77 removal operations would begin on March 18. However, due to staff shortages during
78 COVID-19, NYPA began ice boom removal on March 22 and completed removal by March
79 23 with all spans tied off at the Buffalo Harbor Breakwall. Transport of boom components up
80 the Buffalo River to dry storage was delayed due to COVID-19 safe operating procedures
81 and repair work on the Michigan Avenue Bridge, which required the bridge to be locked in
82 the down position, so NYPA tugs could not pass the bridge. All spans were moved to their
83 summer storage facility by April 16, 2021, ending the 2020–2021 ice boom season.

84
85 In preparation for the 2021-2022 ice boom season, NYPA has been doing maintenance
86 throughout summer. The INWC and Power Entities are starting to watch Lake Erie for
87 temperatures close to freezing in order to begin installation of the ice boom. It is anticipated
88 that there will be no need for additional approvals this coming ice season.

89

90 **b) Status of 2020-21 Ice Boom Report**

91 The first draft of the Ice Boom Report was circulated last week and comments have
92 been incorporated. The final version will be sent out soon. Notable changes are the
93 additional graphics to improve comprehension and communication, as well as quality
94 assurance.

95
96 For example, the Lake Erie water temperatures as recorded at the Buffalo Intake were
97 converted from tabular format to graphical format. Similarly, this was also done for the
98 observed dates of last ice 1905 to present.

99
100 Going forward, the INWC will continue to evaluate graphical communication and focus
101 on intent. A larger scale review of the Ice Boom Report is expected from the Board and
102 INWC with comments due by October 11, 2021.

103

104 **Item 7. Falls Flow Violations**

105 On June 27, 2021 at 21:00 EST, the flow over Niagara Falls was below the Treaty
106 requirement by 370 m³/s. This violation was the result of actions undertaken by the New
107 York State Parks Police to rescue a vessel grounded on a shoal in the CGIP. To aid in
108 the rescue, the INCW closed all gates at 20:40 EST to increase water levels in the
109 CGIP. The INCW operation was back to normal at 22:00 EST. It was agreed no further
110 action is required.

111

112 **Item 8. Chippawa-Grass Island Pool**

113 The board received a summary of the operation and maintenance of the Chippawa-
114 Grass Island Pool (CGIP) and International Niagara Control Works (INCW).

115 **a) Compliance to Directive**

116 The Power Entities were able to comply with the board's directive at all times during the
117 reporting period March 1, 2021 through August 31, 2021.

118

119 **b) Operations and Maintenance**

120 The board received an update on regulatory gauge outages, regulatory reporting,
121 International Niagara Control Works (INCW) outages, and INCW environmental issues.
122 Operations of the CGIP and INCW were satisfactory for this reporting period. An update
123 on regular maintenance of the INCW was provided. As well update on the ongoing
124 reconfiguration of the control room was provided as well as an update on a pilot for use
125 of radar to aid in River Control staff detecting public safety issues around the INCW.

126

127 All gauges required for the operation of the INCW were in service during this reporting
128 period with minimal down time.

129 Following a forced station service outage due to switchgear failure, a maintenance
130 program was created for the INCW primary power supply components. The new strategy
131 of performing gate maintenance is being implemented and is shown to provide greater
132 flexibility. This consists of specific equipment overhauls depending on the season which
133 permit work that cannot usually be done in the winter months due to ice conditions. For
134 example, the Gate 4 hydraulic rehabilitation was performed over winter with the gate on
135 the bottom and did not require installing a dewatering structure. The philosophy of the
136 gate overhaul maintenance has been changed from preventive to condition-based. This
137 will accommodate for the upcoming major gate rehabilitation project starting in 2023 and
138 avoid any duplication of work.

139

140 **Item 9. Plant Upgrades and Unit Testing**

141 The board received a summary of the operation and maintenance of the power plant
142 generating units.

143

144 **a) OPG**

145 OPG is continuing a unit rehabilitation program which began in 2007. However,
146 COVID-19 has impacted project execution. Dates are subject to change and will
147 likely be extended. The board received an update on the ongoing upgrades.

148

149 OPG is in the process of replacing the existing Water Record Accounting (WRA)
150 system for both the SAB and DeCew GS. The Kisters WISKI product will be used

151 and is expected to go live in early 2022. Through careful planning and
152 understanding of existing processes, the impact to existing regulatory processes
153 is expected to be minimal. The NRCC has a separate WRA system that will not
154 be replaced by this project.

155

156 **b) NYPA**

157 The board received an update via slides from the INWC meeting on ongoing
158 maintenance activities for the Lewiston Pump Generating Plant and Robert
159 Moses Plant LEM.

160

161 **Item 10. Review Discharge Measurement Programs**

162 **a) Overall Schedule** – Flow measurements are taken on a regular schedule to
163 confirm the accuracy of the gauges used to determine the allocation of water from
164 the Niagara River. This includes in the upper Niagara River at the International
165 Railway Bridge, over Niagara Falls at the American Falls, in the lower Niagara
166 River at the Ashland Avenue Rating Section, and finally in the Welland Canal. The
167 schedule for these flow measurements were reviewed. The measurements at
168 Welland Canal are tentative for Fall 2021. All other locations are scheduled or
169 postponed for Spring/Fall 2022. The measurement schedule is subject to change
170 due to the COVID-19 restrictions. However, the measurements as required from
171 Water Survey may all be due in 2022. This would need further discussion and
172 planning to get the measurements in time for 2022. Some prioritization and
173 postponement of locations may be required. There are no key issues with the
174 current ratings.

175 **b) International Railway Bridge** – The last set of flow measurements in the upper
176 Niagara River were taken in May 2018. All reports are up to date for this location.
177 The next scheduled measurements have been postponed from 2021 to Fall 2022
178 due to COVID-19.

179 **c) Welland Canal** – The last set of flow measurements were taken in May 2018. The
180 measurements are currently under review with an outstanding report being written
181 by ECCC. This will be worked on in conjunction with getting the next set of
182 measurements which are tentatively scheduled for Fall 2021. If this cannot be
183 done in 2021, it will be reconsidered for 2022.

184 **d) Ashland Avenue Rating Section** – The last set of flow measurements in the
185 lower Niagara River were taken in September 2019. The final report for this has
186 been finalized and is currently awaiting review from the INWC. The next set of
187 measurements is planned for Spring/Fall 2022.

188 e) **American Falls** – The last set of flow measurements were taken in May 2017. All
189 reports are up to date at this location. The next set of measurements is planned
190 for May 2022. Coordination with the American crew is to be determined.

191 f) **Lower Niagara Index Velocity Gauge** – This gauge has been installed by
192 USACE at Old Fort Niagara, Youngstown, New York. It is up and running, and
193 continues to monitor. The last set of measurements were taken in June 2021. All
194 reports are up to date for this location. The next set of measurements is planned
195 for Fall 2021.

196

197 **Item 11. 2021 Public Outreach Events**

198 The tri-board public webinar took place on August 27, 2021 in English and September 8,
199 2021 in French. There were some technical issues at the start of the English version but
200 we were able to regain the majority of audience with ~150 members of the public
201 participating. The webinars focused on current and forecast conditions of the great
202 Lakes and water levels throughout the system. Overall, both webinars went well and
203 participants appreciated the opportunity to be more engaged. For the 2022 public
204 outreach, a suggestion is to coordinate the tri-board webinar with another event in the
205 local hosting area as opposed to having it independently. For example, setting up an
206 informational booth at the chosen event. This would potentially increase awareness of
207 the outreach and further encourage participation from the public.

208

209 **Item 12. Review 137th Semi-Annual Progress Report**

210 The 2nd draft of the 137th progress report was distributed to the INBC members and
211 associates for comment. Comments and revisions were requested by October 6, 2021.

212

213 **Item 13. Other Business**

214 a. **Adaptive Management Update**

215 The IJC Great Lakes Adaptive Management (GLAM) committee is not currently
216 engaged in any work to support the board. The board is in agreement that it is
217 best to give GLAM space to do their work at this time. Should extra hands be
218 required, priorities should be identified first before letting GLAM know.

219 b. **Falls Recession**

220 The board was updated on monitoring of the Niagara Falls crest recession. There
221 were no significant changes in the crest line as noted over the last reporting
222 period based on available camera images of Niagara Falls on the internet.

223 c. **American Falls Bridge Update**

224 An update of the ongoing plans for construction of the two replacement pedestrian
225 bridges from the mainland to Goat Island was provided to the board. The New York
226 State Office of Parks, Recreation and Historic Preservation recognized that the

227 pedestrian bridges from Niagara Falls, New York to Goat Island over the American
228 Falls channel are in need of reconstruction. The project's current status is in
229 deliberation awaiting for NYS to make a decision to pursue channel or localized
230 cofferdams. There are no active plans for IJC application at this time. It is expected
231 that a representative will reach out when they have made a decision.

232 **d. Changes to Board Webpage (Maps/Directive)**

233 There is a need to update the directive and mandate information on the board
234 webpage based on questions from the public. This would inform the public more
235 clearly of what the board can and cannot do. Additionally, the board wishes to
236 ensure that documents intended to be public will be easily accessible to
237 potentially affected communities.

238
239 The IJC Geospatial team has been developing new dynamic map products for
240 each board's transboundary watershed basin. This will be good for users to
241 quickly identify structures and access detailed location-specific information
242 interactively. A list of suggested additions and modifications to the board's
243 dynamic map were provided to the IJC Geospatial Team. Once these
244 suggestions have been considered and/or implemented, the board would like to
245 view and approve the final map product before publication.

246
247 **e. Niagara River Control Staff Recognition**

248 The board received an update of a public safety incident of note that occurred at
249 the INCW recently, but outside this reporting period which ended August 31. On
250 September 6, 2021 at 2:40 PM, INCW shift supervisor was quick to respond to a
251 member of the public in distress. Despite his warnings to the individual to get
252 back, they jumped into a dangerous section of the river and entered the water
253 upstream of Gate 1 and the Tunnel 3 Intake. INCW staff immediately closed the
254 spillway gates, called the police, saved the individual with a rescue ring, and
255 aided the police in finishing the rescue successfully. The staff member was
256 praised by the police for quick thinking and heroic response.

257
258 **Item 14. IJC Appearance**

259 The next IJC Appearance is scheduled for October 20, 2021 10:45-11:15 AM via virtual
260 meeting. The MS Teams invitations will be sent out. No specific items were identified for
261 presentation to the IJC. A presentation for the IJC will be prepared based on requested
262 requirements from the IJC and provided for comment.

263
264 **Item 15. Next Board Meeting, Closing Remarks, and Adjourn**

265 The next board meeting is tentatively scheduled for March 2022 with location to be
266 determined. The closing remarks were made and the meeting adjourned at 3:25 PM.

267

268
269
270
271
272
273
274

**International Niagara Board of Control
Fall Semi-annual Meeting
September 28, 2021
1:00 p.m. – 3:30 p.m.**

Agenda

- | | |
|---|-----------|
| 1. Opening Remarks, Introductions | 1:00-1:05 |
| 2. Approval of Agenda | 1:05-1:10 |
| 3. Membership Changes, Roles and Responsibilities | 1:10-1:15 |
| 4. Review of previous meeting minutes | 1:15-1:20 |
| 5. Update on Lake Erie/Niagara River Conditions | 1:20-1:30 |
| 6. Lake Erie – Niagara River Ice Boom | |
| a) 2020-21 / 2021-22 Ice Boom Seasons | 1:30-1:35 |
| b) Status of 2020-21 Ice Boom Report | 1:35-1:45 |
| 7. Falls flow violations | 1:45-1:50 |
| 8. Chippawa-Grass Island Pool | |
| a) Compliance to Directive | 1:50-1:55 |
| b) Operations and maintenance | 1:55-2:05 |
| 9. Plant Upgrades and Unit Testing | |
| a) OPG | 2:05-2:15 |
| b) NYPA | 2:15-2:25 |
| 10. Review discharge measurements program | 2:25-2:35 |
| a) Overall schedule | |
| b) International Railway Bridge (Buffalo and Fort Erie) | |
| c) Welland Canal | |
| d) Ashland Avenue Rating Section | |
| e) American Falls | |
| f) Lower Niagara Index Velocity Gauge | |
| 11. 2021 Public Outreach Events | 2:35-2:45 |
| 12. Review of 137 th Semi-Annual Progress Report | 2:45-2:55 |
| 13. Other Business | |
| a) Adaptive Management Update | 2:55-3:00 |
| b) Falls Recession | 3:00-3:05 |
| c) American Falls Bridge Update | 3:05-3:15 |
| d) Changes to Board webpage (maps/directive) | 3:15-3:20 |
| e) Niagara River Controls Centre Staff Recognition | 3:20-3:25 |
| 14. IJC Appearance – Date, topics for presentation | 3:25-3:30 |
| 15. Next Board Meeting, Closing Remarks and Adjourn | |

275