

1 **INTERNATIONAL LAKE SUPERIOR BOARD OF CONTROL**

2
3 Minutes of the 07 March 2019 meeting

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5 The International Lake Superior Board of Control met on 07 March 2019 in the Empire conference room
6 at the Marriott Downtown Syracuse at 100 East Onondaga Street in Syracuse, New York. Mr. Stephen
7 Durrett, US Chair, chaired and convened the meeting at 8:30 a.m. The attendees were:

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<u>United States</u>		<u>Canada</u>
	Board Members	
Mr. S. Durrett (Alt.)		Mr. J-F. Cantin (phone)
	Secretaries	
Mr. B. Carmichael		Mr. R. Caldwell
	Regulation Representatives	
LTC G. Turner		Mr. J. Bruxer
Mr. J. Allis (Alt.)		Ms. J. Dickhout (Alt.)
	Associates/IJC	
Mr. M. McClerren		Mr. J.S. Verner
Mr. M. Colosimo		Mr. B. Lismanis
Mr. C. Sidick		Mr. D. Fay
Ms. C. Fisher		Ms. W. Leger
Ms. R. Stowe (Dept. of State via phone)		Ms. S. Lobrichon
		Mr. A. Thompson

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26 **Item 1. Welcome and Introductions**

27 Chair Durrett initiated a round of introductions.

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29 **Item 2. Approval of Agenda and Status of Prior Action Items**

30 The agenda was approved as drafted. Mr. Carmichael noted that all prior action items were promptly
31 completed.

32
33 **Item 3. Update from Regulation Representatives**

34 *a. Hydrologic Conditions*

35 The Board was provided with an update on hydrologic conditions for Lakes Superior, Michigan-Huron,
36 and Erie. Mr. Sidick presented slides showing recent net basin water supplies, levels and flows (observed
37 and forecasted), precipitation, and climate outlooks. Highlights included:

- 38 • Lake Superior Net Basin Supplies remained above average throughout the reporting period and the
39 6 month average NBS is provisionally a new record high for September through February.
- 40 • Lake Superior water levels also remained above average throughout the reporting period.
41 Approximately 40% of the modeled supply sequences indicate that the lake will exceed maximum
42 seasonal records in 2019.

43
44 *b. Regulation and Deviation Strategy Update*

45 *i. Review of winter (December 2018- April 2019) Deviation Strategy*

46 Mr. Sidick then provided an update on the Board's winter flow deviation strategy. Due to hydropower
47 outages in December 2018 and January 2019, an equivalent of two gates open was maintained through
48 winter, whereas typically there is a half gate open setting during this period. Flows were less than Plan

49 2012 in December and January, while flows greater than Plan 2012 occurred in February and continuing
50 into March. Additionally, with Plan-prescribed flows released in September through November, total
51 outflows over the reporting period were approximately equal to the prescribed Plan 2012 flows.

52
53 *ii. Proposed May- November 2019 deviation strategy*

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55 The proposed May to November deviation strategy was discussed and the benefits to the St. Marys
56 Rapids of spreading the side channel flow deficits over the time period was emphasized. It was noted
57 that due to the lack of a quorum of IJC Commissioners, the Board should submit the request for
58 deviation authority as soon as possible so that the two governments would have time to review and
59 approve the request.

60
61 The regulation representatives emphasized that the gate movement strategy should consider the
62 feasibility of meeting the 10 cm/ hour water level rate of change requirement when reducing flows. It
63 was noted that the reduction from a two gate open equivalent setting to a one gate open equivalent
64 setting over one hour is mostly out of compliance with the rate of change requirement. If this operation
65 is spread over four hours, then the rate of change requirement is met in about 90% of the rapids area.
66 This is especially important during critical seasonal timing for spawning fish. It was noted that spring
67 and fall are the more sensitive seasons for spawning fish. Optimization of these gate change operations
68 will be tested starting in the spring. It was noted that this is a good news story and it was proposed that
69 the gate automation project could be highlighted on the Board's website.

70
71 **Action Item: Board Secretaries to submit deviation request to IJC Secretaries for May-November by**
72 **the first week of April.**

73 **Action item: Board to post write up on the gate automation project on the website.**

74
75 **Item 4. Hydropower**

76 *Recent and Expected Maintenance and Other Outages*

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78 *Brookfield*

79 The Board was briefed on Brookfield plant maintenance and outages. There were no planned outages
80 during the reporting period. However, unplanned outages occurred from July 9th, 2018 to January 16th,
81 2019 due to a cracked runner blade on Unit G1 and a cooler leak on Unit G2. This outage totaled 3,424
82 hours or approximately 79% of the reporting period. There are four planned outages in 2019.

83
84 *U.S. Government Hydropower Plant*

85 LTC Turner reported there were 12 unit outages totaling 184 hours, with 13 hours spent on scheduled,
86 routine maintenance. An issue was found with the exciter malfunctioning when inspecting Unit 2 and it
87 took 171 hours to resolve. There were no outages in October and November. Extended outages are
88 scheduled for April and May 2019 in support of the governor upgrade project and September and Octo-
89 ber 2019 for the exciter upgrade project. The average flow reductions expected for these outages are
90 80 m³/s in April and May and 160 m³/s in September and October.

91
92 *Cloverland Electric Co-op (CEC)*

93 LTC Turner reported that canal restoration work resumed on September 1st, and ended on November 3rd
94 for winter conditions. Flows were reduced to approximately 300 m³/s while the contractor was in the
95 canal and 765 m³/s when the contractor was not working in the canal. The total flow reduction owing to

96 this work was about 150 m³/s for September, 145 m³/s for October, and 170 m³/s for November. The
97 additional reduction in November was due to difficulties in demobilization for the winter.

98
99 Anchor Ice conditions experienced on January 19th-January 20th resulted in flow reductions to nearly
100 0 m³/s for thirteen hours over the two days. The total flow reduction due to the icing was about 10 m³/s
101 (350 ft³/s) for the month of January.

102
103 Canal restoration work will commence in late April 2019 and continue through June 2019.

104 **Item 5. Compensating Works**

105 *Inspections and Maintenance*

106 Brookfield renewable launched a geotechnical investigation of the earth dam in the fall of 2018. Five
107 shallow bore holes and one deep borehole were drilled. A single slotted screen type piezometer was
108 installed on 2 of the boreholes. As a public safety measure, 140 meters of fencing was installed on the
109 eastern property line from the Compensating Works to the CN railway. Routine monthly maintenance
110 inspections of fencing and signs, the concrete and masonry structure, gates, and mechanisms, on-site
111 safety equipment such as life jackets and air horns were continued during the rating period.

112
113
114 In addition, repair of the construction cold joint and the crack in the Gate 8 downstream concrete apron
115 is being planned for 2019. In adherence to restrictions for working in water, the work will be undertaken
116 during the July 16th to September 1st timeframe. The repairs are planned to be undertaken underwater
117 using divers. To facilitate the work, closure of Gates 7 to 9 will be required for two weeks.

118
119 LTC Turner noted that the US Army Corps of Engineers (USACE) performed a routine 5-year periodic in-
120 spection of the US Gates at the Compensating Works and the North dike on 23 October 2018. It was
121 found that the Compensating Works is in satisfactory condition. Minor repairs including sandblasting
122 and painting, and crack and spall repair will be scheduled in the future. Vegetation control is needed
123 and a scour survey needs to be completed. USACE is in the process of determining a suitable contractor
124 to inspect the railroad bridge piers. This inspection is expected to be scheduled in the spring of 2019
125 requiring an undetermined amount of flow reduction.

126
127 Additionally, work on the new lock could start as early as fall of 2019. 400,000 cubic yards of material
128 have already been removed upstream of the lock in preparation of the new lock work.

129
130 **Action Item: Add an agenda item to update on the status of the new lock work.**

131 **Item 6. GLAM Committee and Superior Board Task Update**

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133
134 Some recent changes to GLAM's US Section membership were summarized. When the IJC has quorum
135 again, it is expected that US Co-Chair, Mr. Arun Heer will be replaced by Mr. John Allis. Mr. Allis will
136 likely be replaced by Mrs. Missy Kropfreiter. Mr. Fred Luckey retired and was replaced by Mr. Kevin
137 O'Donnell (USEPA District 5). Dr. Drew Gronewold left to become a university professor and has been
138 Ms. Debbie Lee is currently sitting in as an acting member until he is replaced.

139 *FY2019 work plan*

140
141 Ms. Leger provided an update to the Board on the status of several GLAM work plan items in progress to
142 support the Board. The IJC released the Committees report on 2017 conditions on November 29th,
143 2018. It received some US attention but the overall response was generally muted. The intense level of

144 effort put into this report will not be repeated, and such annual reporting will be limited to an annex in
145 future September semi-annual progress reports. The GLAM Committee provided a brief summary of the
146 work plan items relevant to the Board's priorities and interests. The Board was informed of the ongoing
147 development of the 12-year strategy in conjunction with the Committee's directive to perform a 15-year
148 review of the regulation plan. The strategy will include a review and update of the performance indica-
149 tors, development of targeted hydroclimate initiatives to aid in assessment of regulation, and decision
150 process strategy linked to a trade-off analysis. The Committee would like the opportunity to engage
151 more closely with the Board on this process and proposed a workshop-type meeting with GLAM Com-
152 mittee members and Board members to develop a dialogue about the 12-year strategy.

153
154 The Board noted that over the past several reporting periods the Board has been deviating nearly all the
155 time to accommodate side channel flow variances. It was proposed to look into a method to incorpo-
156 rate the deviation process into Plan 2012 to avoid the need to request deviations. GLAM indicated that
157 a review of 2018 water levels and flows under prescribed Plan 2012 flows and with the approved devia-
158 tion will be completed in March 2019 to look at the differences.

159 160 *Status of St Marys River IERM rapids data collection and IERM model expansion*

161 Mr. Allis provided an update on the planned updates to the Integrated Ecological Response Model
162 (IERM) with the inclusion of newly surveyed substrate conditions that will be collected in spring of 2019.
163 Several calls had been initiated to update the Scope of Work for the IWI submission and schedule the
164 survey work.

165 166 *Other recent and expected tasks*

167 Additional initiatives include the development of a performance indicator for flooding on Whitefish
168 Island, and the possibility of a performance indicator exploring effects of flow changes on the
169 smoothness of ice conditions.

170
171 A joint workshop with the Great Lakes Boards will be held on 24 September in Burlington, ON.

172 173 **Item 7. Communications**

174 *2019 Meeting with the Public*

175 Mr. Carmichael confirmed that the IJC is willing to provide a moderator to assist with the webinar and
176 allow for a more orderly public interaction. July 10th was decided on for the US Section to host the webi-
177 nar.

178 **Action Item: US Secretary to coordinate the logistics of the webinar and work with the IJC to advertise
179 the event.**

180 181 *2019 Engineer's Day*

182 The 2019 Engineers day is scheduled for June 28th. Representatives from the Board will be in attend-
183 ance.

184 185 *Website/Facebook Updates*

186 The new IJC Board website was launched in October 2018 and the Secretaries and Regulation represent-
187 atives have received training on updating content on the website. There will be additional training
188 scheduled this spring. Ms. Dickhout noted that the Facebook page continues to be relatively popular
189 and continues to support updates and postings. The new Great Lakes Boards public relations expert,
190 Mr. Andy Kornacki, will begin to assist in regular updates and postings for the Facebook page.

191

192 *Additional communication with the public*

193 The Board continues to issue, at the beginning of each month (and before any significant change in out-
194 flows), news releases informing the public about Lake Superior regulation and water level conditions.
195 These news releases are sent by both the Canadian and US regulation representative offices to e-mail
196 distribution lists that include various agencies, stakeholders and media outlets. The regulation repre-
197 sentatives noted that there is the potential to reach record highs on Lake Superior. The need for talking
198 points to communicate these conditions was raised.

199

200 **Action Item: Regulation representatives to develop top-line messages concerning high water levels**
201 **and circulate for Board and IJC review.**

202

203 *Status of Response to the Restore Our Water Initiative letter*

204 The Board was updated on the status of the communications with ROWI concerning the Long-Lac Diver-
205 sion and Mr. Fay requested a copy of the Board's response to ROWI. It was noted that an educational
206 pamphlet on the Long-Lac diversion is on-going and will be useful in communicating the function of the
207 diversion. It was suggested that the IJC be requested to help with the graphic design of the pamphlet
208 after the content has been finalized.

209 **Action Item: Regulation representatives to finalize content for the Long-Lac diversion pamphlet and**
210 **engage the IJC to assist with the graphic design.**

211 **Action Item: Regulation representatives to coordinate logos used in public documents.**

212

213 **Item 8. Review Semi-Annual Progress Report**

214 Mr. Carmichael requested timely receipt of any additional comments or changes to the draft semi-
215 annual progress report. He will incorporate changes, update the available data, and distribute advance
216 copies to the IJC prior to the May 1st deadline for report submission. Mr. Cantin noted that the language
217 concerning gate settings in sections 3.2 and section 8.0 was inconsistent and requested the next draft
218 ensure that the report is consistent when referencing gate settings in these sections.

219 **Action Item: Secretaries to add a section on diversions to the report.**

220

221 **Item 9. Other Business**

222 No additional business was noted.

223

224 **Item 10. Upcoming Meetings**

225 *IJC Appearances*

226 Mr. Carmichael noted that the Appearances have been postponed due to the lack of a quorum of IJC
227 Commissioners.

228

229 *Fall Board Meetings*

230 Mr. Carmichael noted that the fall Board meeting would be held on 26 September in Burlington,
231 Ontario. The GLAM workshop will be held on 24 September in Burlington, Ontario.

232

233 *GLAM meetings*

234 Mr. Caldwell noted that there will be committee meetings in Buffalo, NY in June. Invitations will be
235 extended to Board members.

236

237 **Item 11. Action Item Review**

238 Mr. Caldwell noted several major actionable items during this meeting which are referenced in bold
239 throughout this document.

240

241 **Item 12. Closing Remarks and Adjourn**

242 Mr. Durrett and Mr. Cantin thanked everyone, and there being no other business, Mr. Durrett adjourned
243 the meeting at 11:15 am.

244

245 **INTERNATIONAL LAKE SUPERIOR BOARD OF CONTROL**
246 **Board Meeting, 7 March, 2019, 8:30 am to 12:00 pm**

247 Empire Room (10th floor)
248 Marriott Syracuse Downtown
249 100 East Onondaga Street, Syracuse, NY 13202
250 *(Webinar and teleconference info follows)*

251 **AGENDA**

- 252 1. Welcome and introductions [Durrett] 0830-0840
253 2. Approval of agenda and status of prior action items [Durrett/ Carmichael] 0840-0845
254 3. Update from Regulation Representatives [Allis] 0845-0930
255 a. Hydrologic conditions
256 b. Regulation and deviation strategy update
257 i. Review of winter (December 2018 – April 019) deviation strategy
258 ii. Proposed May – November 2019 deviation strategy
259 4. Hydropower [Verner, Line, LTC Turner] 0930-0945
260 a. Recent and expected maintenance and other outages
261 5. Compensating Works 0945-1000
262 a. Inspections and maintenance [Verner, LTC Turner]
263 *Break (15 min)*
264 6. GLAM Committee and Superior Board task update 1015-1045
265 a. FY2019 work plan task update[Carmichael]
266 b. Status of St. Marys River IERM rapids data collection and IERM model expansion [Allis]
267 c. Other recent and expected tasks [Leger]
268 7. Communications 1045-1115
269 a. 2019 meeting with the public (webinar) [Carmichael]
270 b. 2019 Engineer’s day [Sidick]
271 c. Website/Facebook updates [Dickhout]
272 d. Additional communication with the public [Dickhout, Sidick]
273 e. Status of response to Restore Our Water Initiative letter [Carmichael, Allis]
274 8. Review semi-annual progress report [Carmichael] 1115-1120
275 9. Other business 1120-1130
276 10. Upcoming meetings [Carmichael] 1130-1140
277 a. IJC Appearances – April, 2019, DC
278 b. Fall Board meetings - Sep ??2019, CAN
279 c. GLAM meeting – US, ?? Jun 2019
280 11. Action item review [Caldwell] 1140-1155
281 12. Closing remarks and adjourn [Durrett] 1155-1200

282 Webex info:

283 https://usace.webex.com/meet/LRD_Great_Lakes

284 Teleconference info:

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

286 Conference ID: 5162099

287 Security: 1111