

**One Hundred and Twenty-Seventh Progress Report
to the
International Joint Commission
by the
International Lake Ontario-St. Lawrence River Board
Covering the Period
1 September 2016 through 28 February 2017**



01 March 2017

Cover Photo: IJC Commissioners Signing Plan 2014. Pictured from left to right: Canadian Commissioner Benoit Bouchard, Canadian Chair Gordon Walker, US Commissioner Rich Moy, US Chair Lana Pollack, and Canadian Commissioner Richard Morgan.

Executive Summary

REGULATION STRATEGY and RESULTS

The International Joint Commission (IJC), having concurrence from the Governments of Canada and the United States on 6 December 2016, issued a new Supplementary Order of Approval on the St. Lawrence River Power Project and adopted Lake Ontario-St. Lawrence River Plan 2014 (Plan 2014) on 8 December 2016. The Commission also approved a new Directive on the Responsibilities of the newly renamed International Lake Ontario-St. Lawrence River Board. Beginning 7 January 2017, water releases from Lake Ontario followed Plan 2014.

After falling 8 cm (3.1 in) in August, water levels on Lake Ontario started September 2 cm (0.8 in) below average and remained slightly below average until early January, when they rose above average. Due to below average Ottawa River outflows until January, water levels in the St. Lawrence River near Montreal were below average. Levels in Lake St. Lawrence were near average in late 2016 with the exception of September, where levels dropped below average and then rose above average in early 2017. The levels of both Lake Ontario and in the St. Lawrence River remained within the criteria specified in the 1956 Amended Orders of Approval of the International Joint Commission through December. Due to an error when calculating the I-limit during the week ending 30 December, the total accumulated outflow deviations, relative to Plan 1958-D, were equivalent to 0.5 cm (0.2 in) of water removed from Lake Ontario.

Plan 1958-D prescribed outflows were followed from September through December with the exception of a 24-hour period on 13 September where outflows were increased by 400 m³/s (14,126 ft³/sec) to assist with a ship's entry into Montreal. Subsequently, a 48-hour flow decrease occurred in October to restore the water back to Lake Ontario. This was consistent with the Board's regulation strategy from the September 2016 Board meeting in Quebec City.

Starting on 7 January 2017, releases of water from Lake Ontario were set in accordance with the 8 December 2016 Order and as prescribed by Plan 2014. Plan 2014 computations began based on the actual level of Lake Ontario, and not the computed level of Plan 1958-D. Outflows were set according to Plan 2014 through the remainder of the reporting period, and included the application of operational adjustments to manage flows during several weeks of relatively mild temperatures and variable ice conditions.

While all of the other Great Lakes remained above average throughout the reporting period, Lake Ontario remained below average until early January, before rising and remaining above average through February. On 28 February 2017, the level of Lake Ontario was 30 cm (11.8 in) above average.

BOARD ACTIVITIES

The Board met in person twice during the reporting period to conduct business, assess conditions, and affirm its outflow strategy, and once via teleconference, along with IJC staff and members of the Great Lakes – St. Lawrence River Adaptive Management (GLAM) Committee, on 15 December 2016, following the public announcement of Plan 2014, to discuss available information and public/stakeholder communication. Additionally, Board members, associates, and IJC staff met with the Independent Electricity System Operator (IESO) by teleconference and in-person to discuss an IESO-based Reliability Directive related to the Moses-Saunders Dam.

The Regulation Representatives continued to provide the Board with weekly information on conditions in the system, monthly reviews of hydrologic conditions and forecasts, and risk assessments, as necessary. The Board reviewed the information each month through emails. The Operations Advisory Group (OAG) continued its weekly teleconference to apprise the Regulation Representatives of operational requirements and constraints, and an in-person OAG meeting was also hosted by Hydro Quebec at the Beauharnois Hydropower Plant on 11 January 2017 to discuss Plan 2014 implementation and related operational considerations. The GLAM Committee continued to work closely with the Board, presenting to common stakeholders and at Board meetings.

To fill a long standing vacancy, the International Joint Commission appointed a new United States Board Member, Mr. Anthony M. "Tehara'tats" David, for a two year term effective 1 February 2017.

COMMUNICATION ACTIVITIES

The joint Board-IJC Communications Committee, through regular monthly telephone conference calls, continued to work on preparing short one-minute videos on the operations of the Board, and continued to provide advice and assistance on a variety of issues, including targeting its communications activities to its strategic plan. In addition, the committee held a special workshop on 19-20 January 2017 to discuss the communication strategy in response to the approval of Plan 2014. Board members and staff attended one public stakeholder meeting in Clayton, NY on 4 February 2017, a conference hosted by Save the River. Board Members, Regulation Representatives, and Secretaries responded to public inquiries and requests for information, as needed. The Board continues to improve its communications effectiveness with the use of its website, Facebook and Flickr sites. Details on communications activities are in Appendix A and the members of the joint Board-IJC Communications Committee are listed in Appendix B.

Providing the background information that was included in the main body of the report prior to 2010 in an Appendix C, available on the Publications page of the Board's website, allows this report to focus on the issues and conditions of the current reporting period.

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1. Hydrological Conditions

1.1 Lake Ontario Basin - Net Basin Supply

The local net basin supplies (NBS) to Lake Ontario (see appendix C for definition) were well below average in September and November, near average in October and December, and above average in January and February. Monthly NBS values for September through February and for the total six-month period are provided in Table 1. Over the six-month period, supplies were above average and have been exceeded 44% of the time.

1.2 Precipitation

Monthly precipitation amounts for the Lake Ontario and Great Lakes basins, and the average for the total six-month period are provided in Table 2. Precipitation over the Lake Ontario basin was below average in September, November and December, near average in January and February, and above average in October. The total amount of precipitation in the six-month reporting period was 70 mm (2.74 in.), which was below average and has been exceeded 66% of the time. Total precipitation for the entire Great Lakes basin for the six-month period was 66 mm (2.58 in.), which was near average, having been exceeded 48% of the time.

1.3 Supply from Lake Erie

Reflecting higher water levels in the upper lakes, the inflows to Lake Ontario from Lake Erie during the reporting period were well above-average from September through February, as shown in Table 1. The six-month average outflow has been exceeded 16% of the time.

1.4 Lake Ontario – Net Total Supply

The monthly net total supplies (NTS) to Lake Ontario (see appendix C for definition) are provided in Table 1 and shown graphically in Figure 1. The six-month net total supplies for the past ten years are provided in Table 3 for comparison purposes. The monthly net total supplies were below average in September, and above average through the remainder of the reporting period. Overall, the total supply was 110% of average during this reporting period and has been exceeded 21% of the time. Figure 1 shows the long-term average monthly net total supplies for the period 1900 to 2015 and the supplies so far for 2017. Also shown, for comparison purposes, are the monthly NTS for 2015 and 2016. The horizontal bars above and below the curves on the graph are the long-term monthly NTS maxima and minima.

1.5 Ottawa River Basin

Figure 2 shows the Ottawa River flows. Flows were below average through the middle of January, were near average into February, and rose above average in late February.

2. Regulation of Flows & Levels

2.1 Regulation Overview

In order to be responsive to conditions and the needs of interests in the Lake Ontario – St. Lawrence River system, the Board assessed conditions throughout the year, twice in meetings and through numerous email exchanges, and developed outflow strategies with the aid of regular monthly reports from the Regulation Representatives. Figure 3 shows the actual Lake Ontario outflows for the reporting period in comparison to the long-term average, preproject and plan-specified outflows.

In summary, the Board strategy in September through 6 January 2017 was to pay back water removed from Lake Ontario to assist a ship entering Montreal, permit under-discharges or spill to accommodate New

York Power Authority (NYPA) maintenance activities 14 October – 3 November, transition flows smoothly during December prior to ice formation, follow Plan 1958-D outflows, and to permit under- or over-discharges that may be necessary to address critical needs. The removed water was restored in October.

Beginning 7 January 2017, releases of water from Lake Ontario followed those specified by Plan 2014. The Board will continue to permit minor under- or over-discharge deviations that may be necessary to address critical conditions, though no such deviations were incurred during this period.

2.2 Deviations from Regulation Plan 1958-D

Figure 3 shows daily outflows compared to Plan specified outflows from Lake Ontario and Table 4 summarizes the Board's minor discretionary deviations during the reporting period. The Board deviated from Plan 1958-D in September and October. On 13 September, outflows were increased by 400 m³/s (14,126 ft³/s), resulting in 0.2 cm (0.1 in) of water removed from Lake Ontario to assist a ship entering Montreal. To restore this water, the Board deviated on 23 and 24 October and decreased outflows by 210 m³/s (7,416 ft³/s) for a 48-hour period. Plan 1958-D outflows were followed throughout the entire month of December through 6 January 2017; however, due to an error in the I-limit estimated for the week ending 30 December 2016, the total accumulated outflow deviations, relative to Plan 1958-D, were equivalent to 0.5 cm (0.2 in) of water removed from Lake Ontario.

Effective 7 January 2017, water releases were specified according to Plan 2014. Calculations for Plan 2014 began based on the actual level of Lake Ontario, and therefore, the I-limit error was not carried over. Relatively mild temperatures and variable ice conditions required operational adjustments for ice formation to be made under Plan 2014 during every week through February. These adjustments were not deviations and remained within the intent of Plan 2014.

2.3 Iroquois Dam Operations

The gates at Iroquois Dam were not operated during the reporting period as limited ice formation on Lake St. Lawrence occurred this winter.

2.4 Long Sault Dam Operations

The Long Sault Dam was not operated during the reporting period.

2.5 Results of Regulation

2.5.1 Upstream

Lake Ontario

The effects of Regulation Plan 1958-D and Plan 2014, and the Board's outflow strategies on the levels of Lake Ontario, are shown in Figure 4. For comparison purposes, the daily levels of 2015, 2016 and 2017 through 28 February 2017 are shown. During this reporting period, levels started below average, and remained below average through mid-January 2017. Water levels climbed to above average through the remainder of January and remained above average through the end of February. At the end of the period, the level of Lake Ontario was 74.92 m (245.80 ft.), which was 30 cm (11.8 in) above the long-term average.

As a means of determining the impact of regulation activities on levels and outflows, the Board provides the IJC with a comparison of Lake Ontario's actual monthly levels and outflows to those that would have occurred under preproject conditions (i.e. the levels and outflows that would have occurred had regulation

not been undertaken). A summary of this comparison for the reporting period is given in Table 5. This summary shows that Lake Ontario ranged from about 29 cm (11.4 in) to 42 cm (16.5 in) lower than it would have been without regulation. A comparison of the daily levels to long-term average, and weekly computed Plan 1958-D and Plan 2014 levels is also shown in Figure 5.

Lake St. Lawrence

The water levels of Lake St. Lawrence (Figure 6) fluctuated slightly above and below average through mid-December, and then rose to above average through February. On 28 February 2017, the water level was 73.55 m (241.30 ft), 103 cm (40.6 in) above the long-term average.

2.5.2 Downstream

Lake St. Francis

Daily water levels at Summerstown on Lake St. Francis were generally below average from September through February. Daily mean levels were above the Seaway Low Alert level throughout the navigation season.

Lake St. Louis

The daily water levels on Lake St. Louis remained below average throughout the majority of the reporting period until the last week in February. As shown on Figure 7, the water levels on Lake St. Louis were above the initial M-limit threshold of 20.64 m (67.7 ft) throughout the reporting period.

Port of Montreal

The daily levels at the Port of Montreal are shown in Figure 8. Port levels were below the long-term average until the last week in February. Water levels generally remained above chart datum throughout the reporting period, except during a few days last fall.

3 Board Activities

3.1 Board Meetings & Conference Calls

The Board continued to oversee the operations of the hydropower project in the international reach of the St. Lawrence River. The Board, primarily through the offices of the Regulation Representatives, monitored conditions throughout the Lake Ontario-St. Lawrence River system. The Regulation Representatives provided the Board with: weekly regulation data, monthly reviews of the hydrological conditions, risk analyses using water level forecasts, and advice on regulation strategy options and their potential impacts on water levels and interests throughout the system. The Board's Operations Advisory Group (OAG) held weekly teleconferences to review conditions and advise the Regulation Representatives on weekly operational requirements and constraints. The Committee on River Gauging continued to monitor the power entities' program for operation and maintenance of the gauging system required for Board operations, hold teleconferences and report annually.

The Board continued to assess conditions in the basin and adjust or affirm its regulation strategy accordingly. Due to the announcement of the IJC's decision to adopt Plan 2014, the Board held a special conference call on 15 December with IJC advisors, GLAM Committee members, and Regulation Representatives. The purpose of the call was to discuss available information, public communication objectives, and a brief overview of operational differences between Plan 1958-D and Plan 2014. During the reporting period, the Board held face-to-face meetings on 14 September in Quebec City, QC, and on 24 October in Ottawa, ON. Table 6 provides a list of Board Members in attendance at the meetings.

In addition to the Board's regular meetings, members, associates, and IJC staff convened with the Independent Electricity System Operator (IESO) on 29 September 2017 to clarify to the IESO and Ontario Power Generation (OPG) the Board's ability to potentially assist with meeting an IESO-based Reliability Directive. The directive could require increasing or decreasing the plant's output in a timely manner. After a presentation of the Board's authority to regulate outflows, the Board indicated its willingness to assist when conditions allow; however, Board representatives stressed that sufficient lead-time was critical to enable the Board to review and grant approval for OPG to satisfy potential IESO-issued Reliability Directives in the future.

Also, in addition to the weekly OAG teleconferences, an in-person meeting was hosted by Hydro-Quebec at the Beauharnois Hydropower Plant on 11 January 2017 to discuss the recent implementation of Plan 2014 and related operational considerations.

3.2 Public Outreach and Engagement

The Board continued its efforts to improve its dialogue with the public through its Facebook page and media releases, in addition to Board Members' attendance to stakeholder meetings. During the reporting period, the Communications Committee, individual Board Members, the Secretaries and the Regulation Representatives were actively engaged in outreach, information exchange and liaison with stakeholders throughout the Lake Ontario-St. Lawrence River system. The Canadian Regulation Representative presented to Save the River at the 28th Annual Winter Environmental Conference on 04 February 2017. The presentation focused on the implementation of Plan 2014 including computational aspects, operational adjustments, deviations, and the results of the 2001-2016 weekly simulation. More details of these outreach efforts are listed in Appendix A.

Board Members, Regulation Representatives, and Secretaries responded to a number of inquiries and requests for interviews from the media and the general public concerning water level conditions and the effectiveness of Board strategies. Weekly postings on the Board's Facebook pages occur in both French and English, with total likes at 76 for the French page and 789 for the English page. The comment interchange reached 493 people on average in a single week, with more interest when monthly summaries were posted on the Facebook page, raising audience interest.

3.3 Board and Committee Membership Changes

Mr. Anthony M. "Tehara'tats" David was appointed as a US member to the Board by the IJC for a two year term effective 1 February 2017. Mr. David's appointment filled a long standing vacancy on the US side. Additionally, US member, Mr. Rob Campany replaced Dr. Frank Sciremammano, Jr. as a member of the Communications Committee.

4 Communications Committee Report

The Board continued to work with the IJC, through the Communications Committee, to seek opportunities to improve communications with the public. A full membership list is available in Appendix B.

Communication activities during the reporting period included:

- Preparation of a [fall media release](#). The Board issued a media release to announce Board leadership changes and a review of conditions.
- Operation of the Board's website, http://www.ijc.org/en_/islrbc/home. The Board is in the process of updating the website to include information regarding Plan 2014. The website includes:

- Photo banners indicating interests in the Lake Ontario – St. Lawrence River system
 - Weekly updates on water levels, outflows and water supply information;
 - General information about the Board, its activities and its structure;
 - Announcements about the Board's outflow strategies and "related media" releases;
 - A list of Frequently Asked Questions and responses; and
 - Posting of the Board's semi-annual progress reports, meeting minutes, teleconference summaries, and data updates.
- Weekly and monthly updates of the Board's renamed English (<https://www.facebook.com/InternationalLakeOntarioStLawrenceRiverBoard/>) and French (<https://www.facebook.com/ConseilIntlacOntarioetduFleuveSaintLaurent/>) Facebook pages, and frequent interaction with the public through the Facebook page.
 - Flickr account of publicly accessible photos.

The Board's Regulation Representatives sent weekly updates on Lake Ontario regulation and water level and outflow conditions, to about 300 email subscribers. Stakeholders are encouraged to subscribe to this free service by submitting an email as described on the [webpage](#).

5 Adaptive Management Committee

The St. Lawrence River - Great Lakes Adaptive Management (GLAM) Committee of technical experts, established by the IJC to consider adaptive management methods as part of an on-going evaluation of regulation plans, continued to work with the Board to implement the science-based recommendations of past studies and develop new ones. The Board seeks to evaluate regulation plan performance over time with regard to a broad range of environmental and economic indicators. A detailed report of GLAM activities, once approved and translated, may be found on the GLAM Committee's website.

6 Gauging Committee

The Board's St. Lawrence Committee on River Gauging monitors the power entities' program of maintaining gauges required for the Board to monitor water levels and flows.

6.1 Overview

The Board's Committee on River Gauging ensures the accuracy of flow estimates and water level measurements. This includes inspections of computational methods at each of the eight outflow structures and the 17 water level gauges used by the Board to monitor river conditions. This committee also conducts audits of the power entities' data processing. The inspection team prepares an annual report to the Gauging Committee. Operation and maintenance of the water level gauges are performed by the power entities and the Canadian Hydrographic Service.

6.2 Gauge Network Inspection

The Committee is responsible for annual inspections of the water level gauging network and provides the Board with an annual report on inspection results. The 79th (2015) Gauging report is currently undergoing audit before its submission to the Board.

6.3 Raisin River

The Raisin River Diversion was opened from 26 May 2016 until 1 September 2016. Flow rates ranged from 0 to 0.2 m³/s (7 ft³/sec).

7. St. Lawrence Seaway Report

The last vessel to transit the Seaway's Montreal/Lake Ontario section was the G3 Marquis which cleared the Iroquois Lock on 29 December 2016 at 6:18pm.

8. Hydropower Peaking And Ponding

By letter dated 13 October 1983, the IJC authorized OPG and NYPA to continue to carry out peaking and ponding operations at the St. Lawrence Project. The conditions governing peaking and ponding operations are currently specified in Addendum No. 3 to the Operational Guides for Regulation Plan 1958-D. On November 28, 2011, the IJC renewed the approval for a 5-year period, dated 1 December 2011 to November 30, 2016. The IJC wrote the Board requesting information regarding adverse impacts as a result of peaking and ponding operations. The Board responded indicating it has not received any notification of adverse impacts resulting from peaking and ponding. After communicating with the Board, the IJC wrote to the Power Entities requesting an analysis of potential impacts for flow variations greater than 570 m³/s during non-navigation season prior to approving the peaking and ponding extension. The Power Entities are preparing this analysis.

No ponding operations were conducted from 1 September 2016 to 28 February 2017. Peaking operations were conducted throughout the reporting period.

The abandoned ship "Kathryn Spirit" had grounded many years ago in Lake St. Louis but salvage was initiated in late June 2016 to avoid potential environmental risks of fuel spills from its corroding hull. During low water in early October the Coast Guard requested stable water levels to assist with efforts to empty contaminated oil from the ship at the same time more water was called for to assist ships arriving at the Port of Montreal. As a result, the Board sent correspondence to the Assistant Commissions Office – Central and Arctic Region to confirm discussions stating that the Board would consider requests under the Canadian Shipping Act (2001), Article 180 (1) as long as other interests would not be adversely affected. It was determined that the Boundary Waters Treaty and IJC Orders and Directives may supersede the authority under the above Canadian Shipping Act article with respect to outflow regulation and water level control.

Respectfully submitted,

MEMBERS FOR THE UNITED STATES

MEMBERS FOR CANADA

S. DURRETT, Alt. CHAIR

G. BECHARD, CHAIR

T. BROWN

J. AUBRY-MORIN

R. CAMPANY

P. CLAVET

A. DAVID

J. FRAIN

F. SCIREMAMMANO

M. HUDON

Table 1
MONTHLY MEAN SUPPLIES TO LAKE ONTARIO

Month	Inflow from Lake Erie				Local Net Basin Supplies			Total Supplies			
	m ³ /s	tcfs	Exceed. Prob. ⁽¹⁾	% of LTA ⁽²⁾	m ³ /s	tcfs	Exceed. Prob. ⁽¹⁾	m ³ /s	tcfs	Exceed. Prob. ⁽¹⁾	% of LTA ⁽²⁾
Sep 16	6230	220	34	105	-440	-16	92	5790	204	62	96
Oct 16	6220	220	28	106	90	3	58	6310	223	38	104
Nov 16	6320	223	22	108	200	7	75	6520	230	46	101
Dec 16	6500	230	16	111	760	27	52	7260	256	29	108
Jan 17	6510	230	13	114	1730	61	12	8240	291	9	124
Feb 17	6730	238	5	120	1660	59	15	8390	296	4	126
6-month Average	6420	230	16	110	670	20	44	7090	250	21	110

⁽¹⁾ Based on period of record 1900-2015

⁽²⁾ Based on period of record 1900-2016

Table 2
PROVISIONAL PRECIPITATION OVER GREAT LAKES AND LAKE ONTARIO BASINS

Month	Great Lakes Basin			Lake Ontario Basin		
	mm (inches) ⁽¹⁾	% of LTA ⁽²⁾	Exceed. Prob. ⁽³⁾	mm (inches) ⁽¹⁾	% of LTA ⁽²⁾	Exceed. Prob. ⁽³⁾
Sep 16	88 (3.46)	101	44	54 (2.13)	65	84
Oct 16	79 (3.11)	107	42	109 (4.29)	136	16
Nov 16	54 (2.13)	77	80	52 (2.05)	65	86
Dec 16	59 (2.32)	97	52	69 (2.72)	92	59
Jan 17	60 (2.36)	107	38	73 (2.87)	106	40
Feb 17	53 (2.09)	118	28	61 (2.40)	102	46
6-month Average	66 (2.58)	101	48	70 (2.74)	94	66

⁽¹⁾ Provisional

⁽²⁾ Based on period of record 1900-2016

⁽³⁾ Based on period of record 1900-2013

Table 3
AVERAGE AND RECORDED SIX-MONTH TOTAL SUPPLIES (Sep-Feb)

	Long-Term Average ⁽¹⁾		Recorded			Recorded Below (-) or Above Average (+)		
	(m ³ /s)	(tcfs)	(m ³ /s)	(tcfs)	Exceed. Prob. ⁽²⁾	(m ³ /s)	(tcfs)	Percent
Sep 07 – Feb 08	6440	227	6540	231	43	100	4	2
Sep 08 - Feb 09	6440	227	6910	244	28	470	17	7
Sep 09 - Feb 10	6440	227	6500	230	45	60	2	1
Sep 10 – Feb 11	6440	227	6270	221	56	-170	-6	-3
Sep 11 – Feb 12	6440	227	7540	266	10	1100	39	17
Sep 12 - Feb 13	6440	227	6130	216	62	-310	-11	-5
Sep 13 - Feb 14	6440	227	6520	230	44	80	3	1
Sep 14 - Feb 15	6440	227	6470	228	46	30	1	0
Sep 15 – Feb 16	6440	227	7290	257	16	850	30	13
Sep 16 – Feb 17	6440	227	7080	250	22	640	23	10

⁽¹⁾ Based on period of record 1900-2016

⁽²⁾ Based on period of record 1900-2015

Table 4
SUMMARY OF OUTFLOW DEVIATIONS FROM REGULATION PLAN 1958-D FLOW

Date 2016-2017	Deviation (cms)	Dev. (cms- wks)	Acc. Dev. rounded (cms- wks)	Cum. Effect on Lake Ont. rounded (cm)	Reason for Deviation
Sep 1			0	0.0	
Sep 3-9	10 for 168 hrs	10	10	-0.03	Unintentional – minor operational deviation
Sep 13	400 for 24 hrs	57			Port of Montreal request
Sep 13	-20 for 24 hrs	-3	60	-0.19	Unintentional – minor operational deviation
Oct 23-24	-210 for 48 hrs	-60	0	0.0	To restore water
Dec 24-30	170 for 168 hrs	170	170	-0.5	Winter Operations-Ice Management (I-limit estimate)
Jan 6			170	-0.5	END OF PLAN 1958-D REGULATION*

*Per 8 December 2016 IJC Order and Directive, Plan 1958-D was replaced by Plan 2014 on 7 January 2017. The 170 cms-weeks deviation (0.5 cm of water off of Lake Ontario relative to Plan 1958-D) was eliminated, and no deviations relative to Plan 2014 were generated based on the new plan rules/limits---only operational adjustments were made, which are not required to be paid back.

Table 5
LAKE ONTARIO RECORDED AND PREPROJECT LEVELS AND OUTFLOWS

Month	Lake Ontario Monthly Mean Water Levels (IGLD 1985) - meters (feet)			Lake Ontario Monthly Mean Outflow m ³ /s (tcfs)		
	Recorded	Preproject	Diff.	Recorded	Preproject	Diff.
Sep 16	74.70 (245.08)	75.03 (246.16)	-0.33 (-1.08)	7350 (260)	7160 (253)	190 (7)
Oct 16	74.54 (244.55)	74.90 (245.73)	-0.36 (-1.18)	6920 (244)	6890 (243)	30 (1)
Nov 16	74.48 (244.35)	74.87 (245.63)	-0.39 (-1.28)	7000 (247)	6840 (242)	160 (6)
Dec 16	74.46 (244.29)	74.88 (245.67)	-0.42 (-1.38)	6900 (244)	6840 (242)	60 (2)
Jan 17	74.62 (244.81)	74.98 (245.99)	-0.36 (-1.18)	6440 (227)	7050 (249)	-610 (-22)
Feb 17	74.82 (254.47)	75.11 (246.42)	-0.29 (-0.95)	6890 (243)	7240 (256)	-350 (-12)

Table 6
Meeting Attendance 1 September 2016 – 28 February 2017

Board Member	Country	14 Sept	24 Oct
BG M. Toy ¹	US	-	X
Dr. G. Bechard ²	Can	X	X
Mr. J. Aubry-Morin	Can.	X	X
Mr. T. Brown	US	X	X
Mr. R. Company	US	X	X
Ms. P. Clavet	Can.	X	X
Mr. S. Durrett ³	US	X	X
Ms. J. Frain	Can.	X	X
Mr. M. Hudon	Can.	X	X
Dr. F. Sciremammano, Jr.	US	X	X

- Notes:
1. US Co-Chair
 2. Canadian Co-Chair
 3. US Alternate chair

Location of Meeting:

14 September 2016: Quebec City, QC, Canada

24 October 2016: Ottawa, ON, Canada

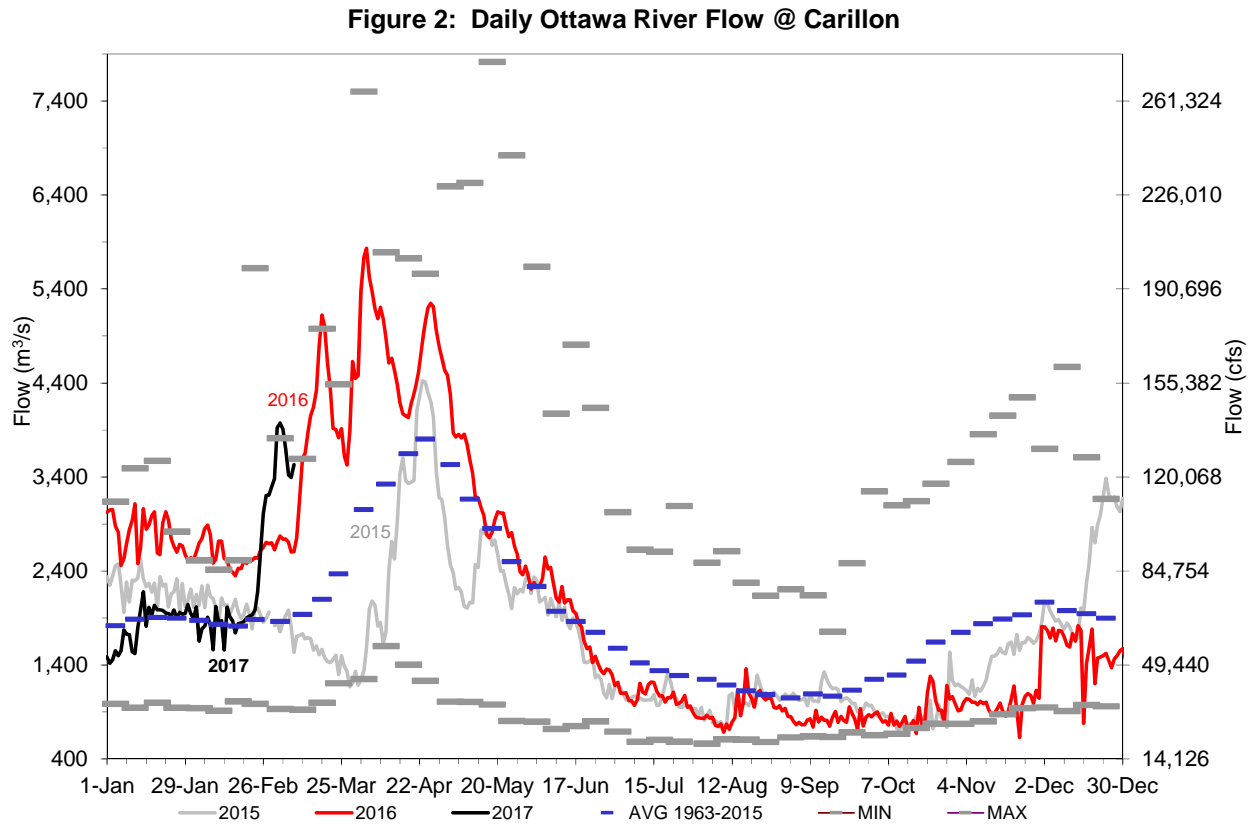
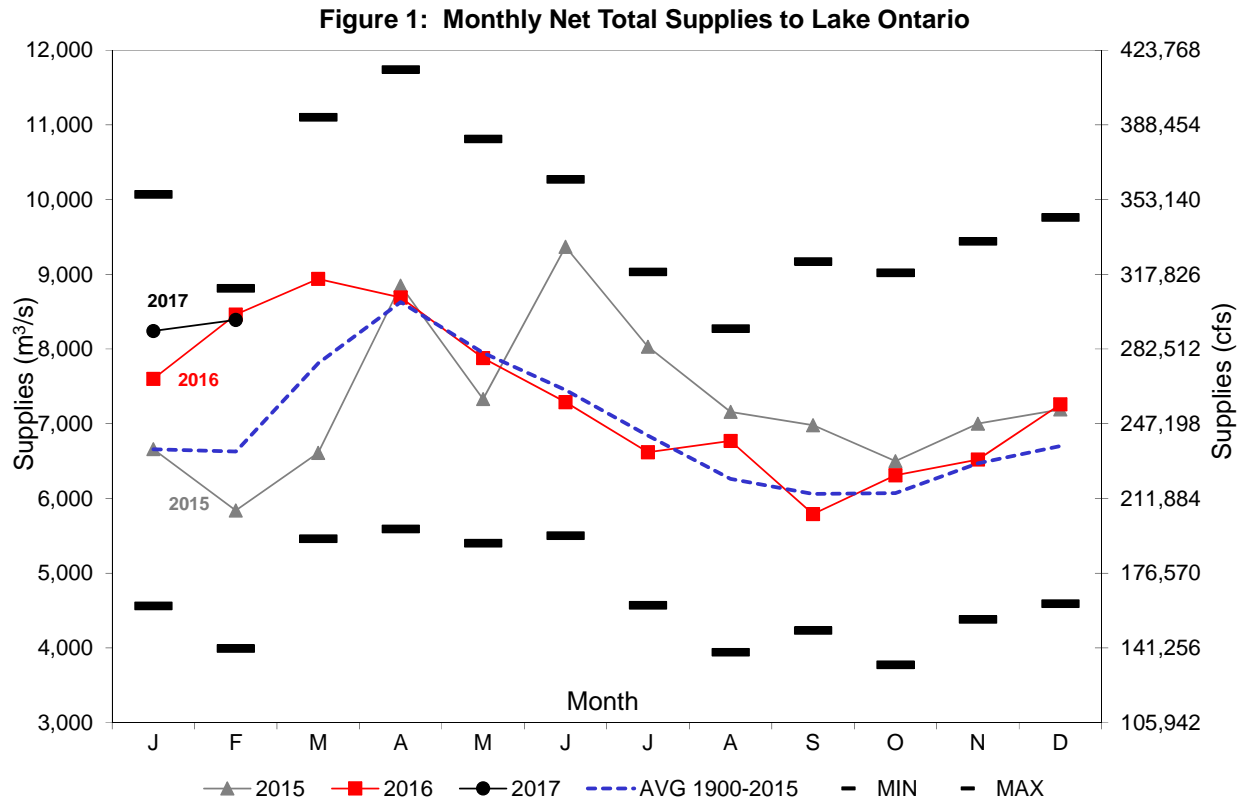


Figure 3: Lake Ontario Daily Outflows

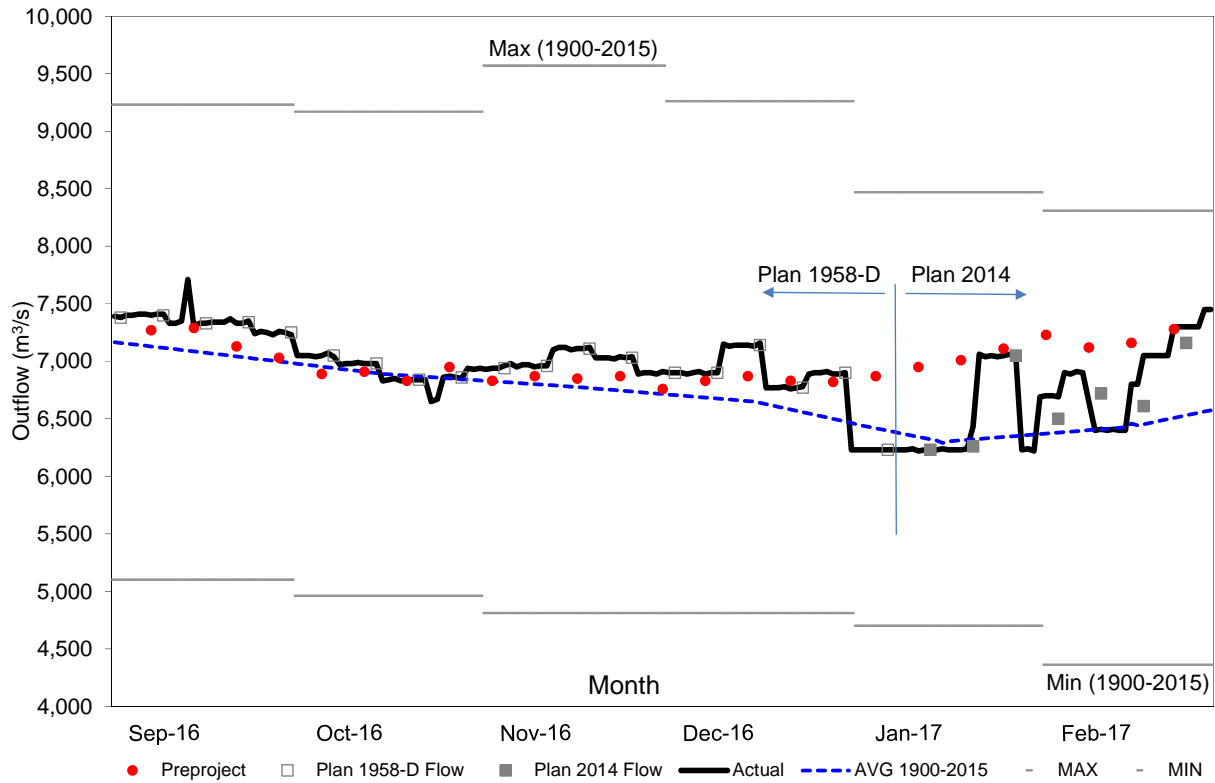


Figure 4: Daily Lake Ontario Water Levels

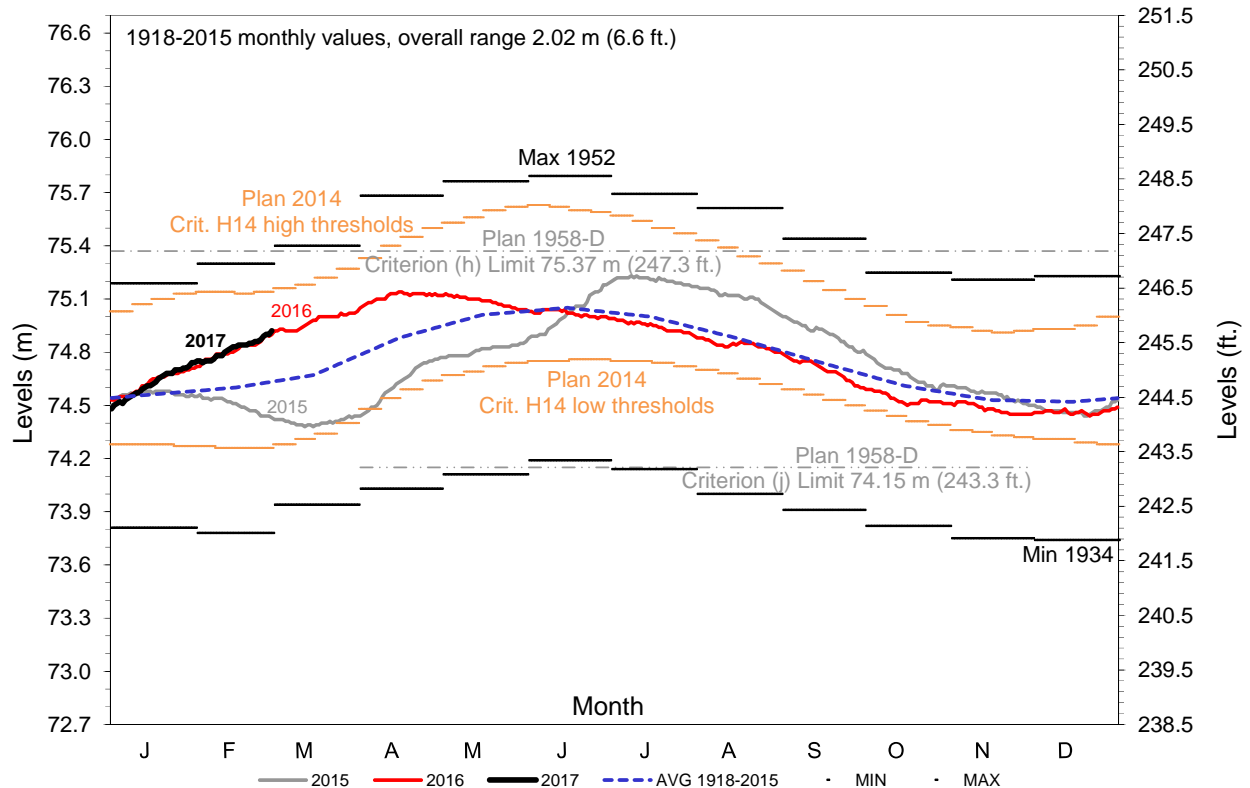


Figure 5: Lake Ontario Actual, Preproject & Plan Levels

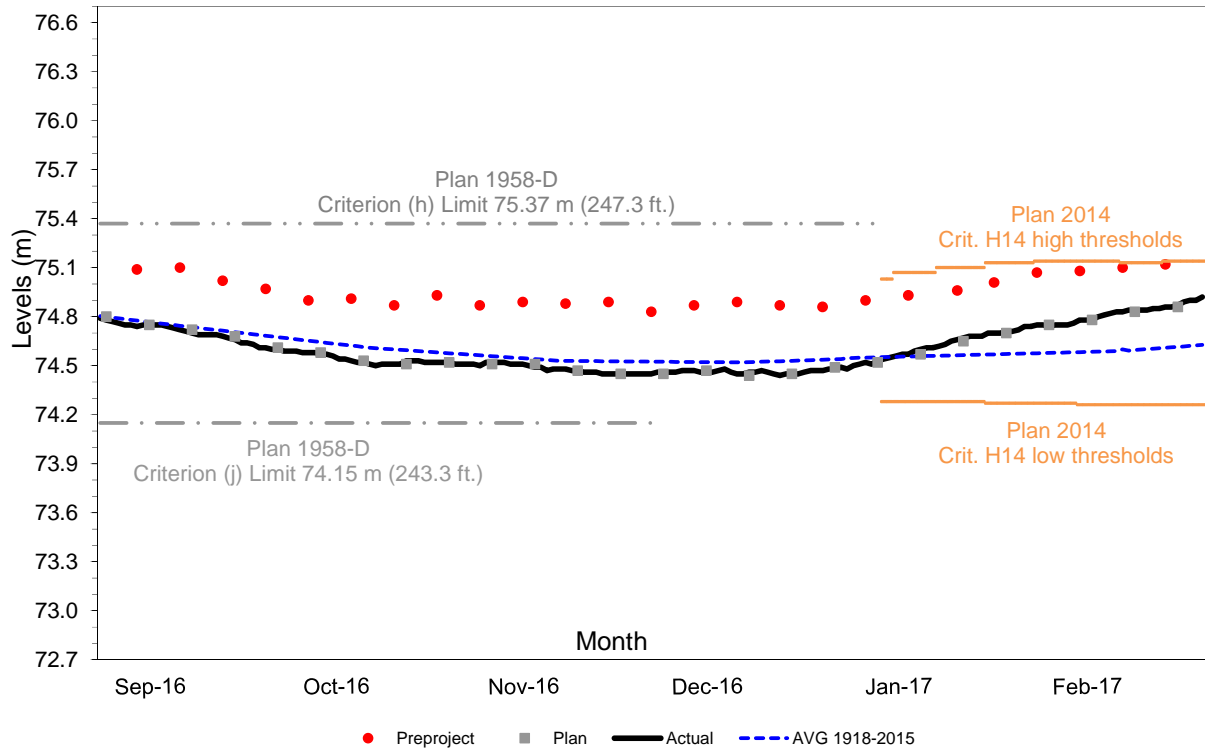


Figure 6: Daily Lake St. Lawrence Levels @ Long Sault Dam

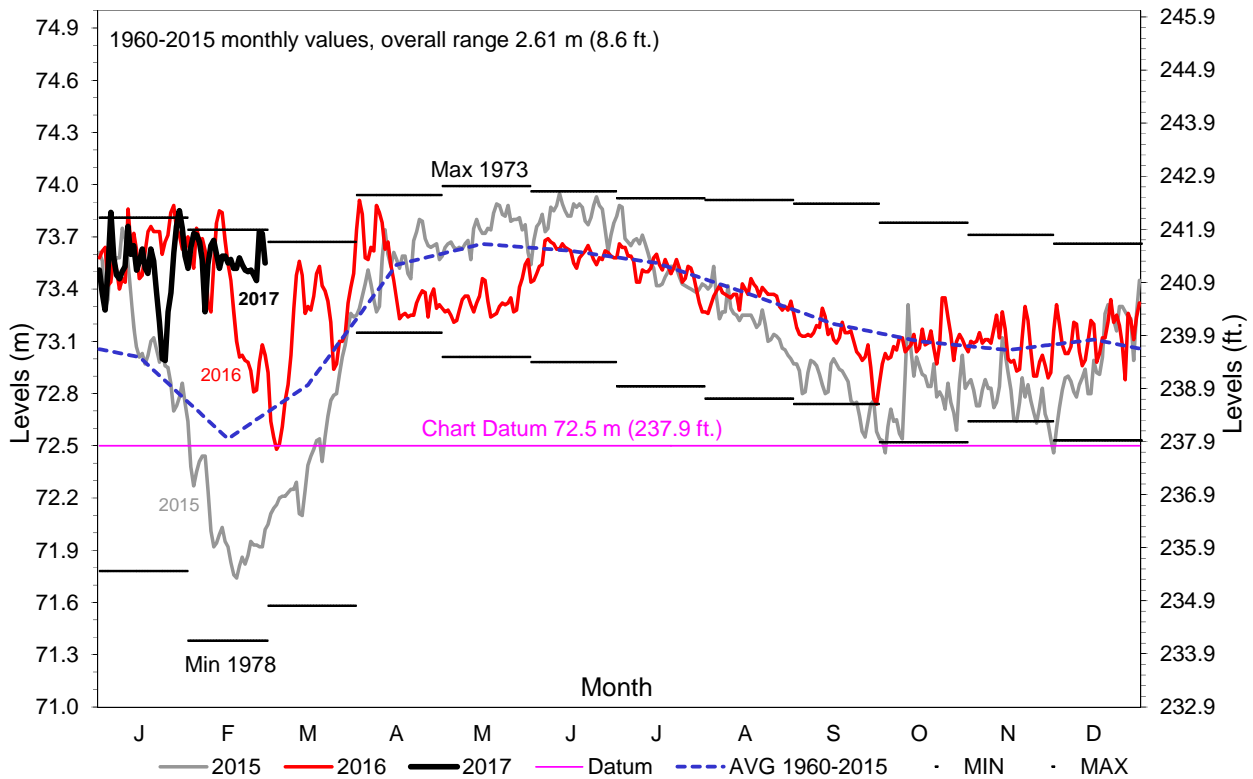


Figure 7: Daily Lake St. Louis Levels @ Pointe-Claire

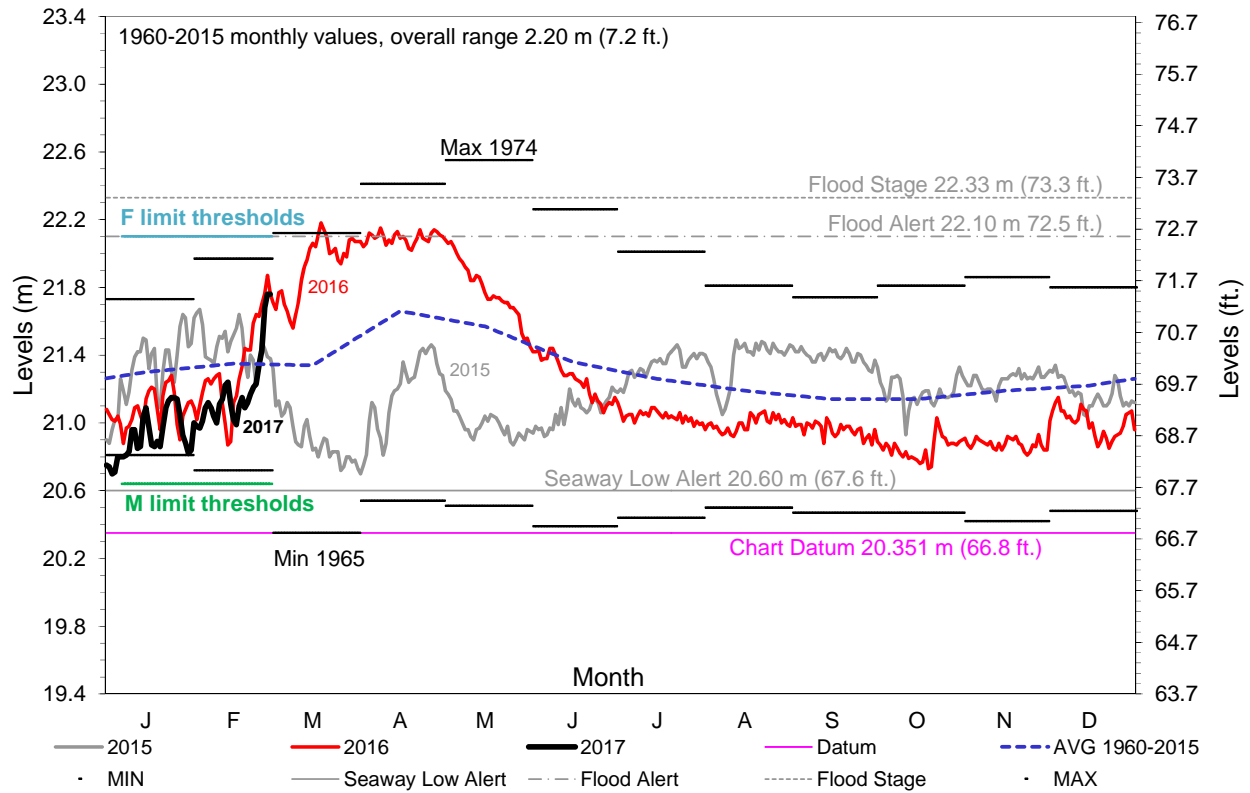
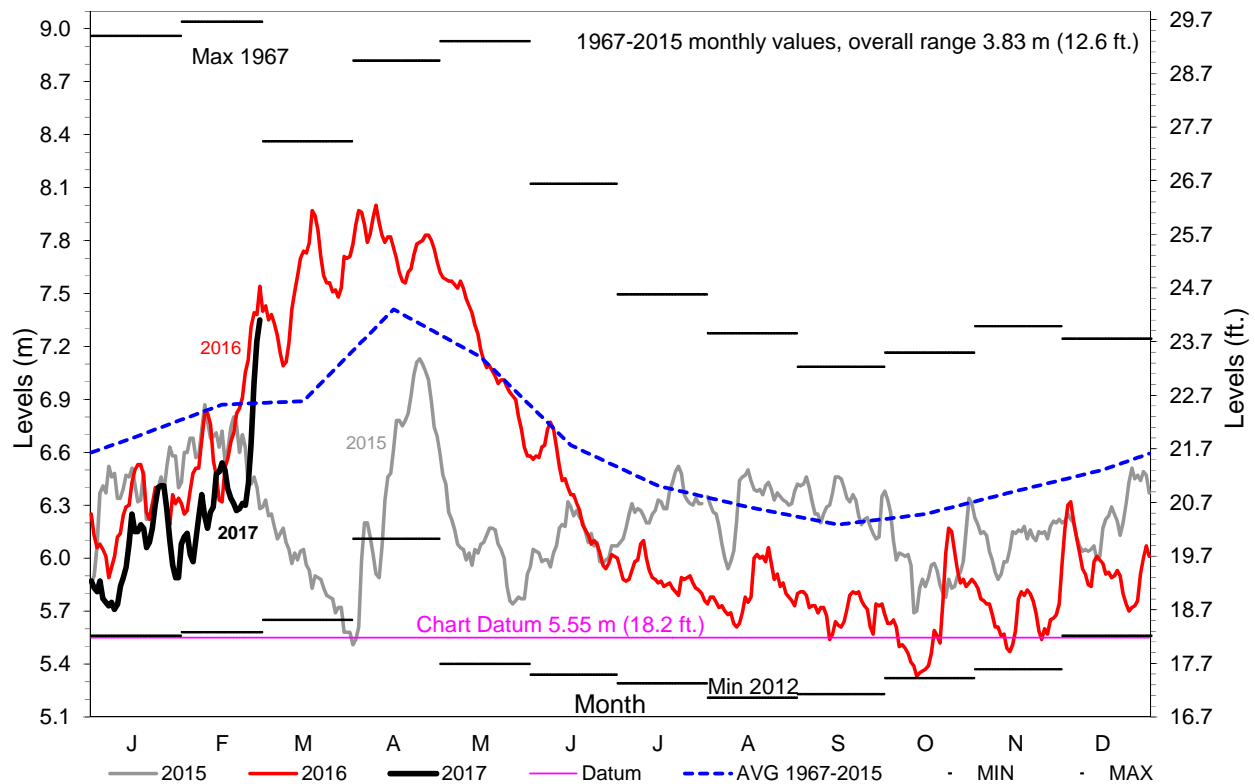


Figure 8: Daily Port of Montreal Levels @ Jetty #1



Appendix A: Communication Committee Summary of Activities

Since 1 September 2016, the International Lake Ontario - St. Lawrence River Board of Control Communication Committee held four meetings, generally occurring each month via teleconference. The Committee continued to engage in initiatives and develop products to accomplish five strategic communication goals:

1. increase general public awareness of the IJC and the Board;
2. communicate accurately and in a timely fashion the actions of the Board and the reason for those actions;
3. explain how natural factors and regulation affect water levels and flows;
4. increase understanding of the necessity of and need to prepare for fluctuations in levels and flows; and
5. consistently seek out, consider and respond to the views and concerns of all stakeholders.

Consistent with the communication goals the Canadian Regulation Representative presented to Save the River at the 28th Annual Winter Environmental Conference on 04 February 2017. The presentation focused on the implementation of Plan 2014 including computational aspects, operational adjustments, deviations, and the results of the 2001-2016 weekly simulation. The Committee also developed and is currently reviewing its first short video segment intended to be used as a public education tool describing causes of fluctuating water levels in Lake St. Lawrence.

With the approval of Plan 2014 in December, the Committee held a workshop in Cornwall, Ontario 19-20 January to review its communication goals, products, and activities. The workshop included Committee members, IJC advisors, and GLAM Committee members. The workshop focused on identifying key challenges and opportunities, and determining priority products and activities. Key challenges and opportunities included: explaining the role of adaptive management as a long-term concept, ensuring GLAM Communications are coordinated with the Board, and managing stakeholder expectations. Priority communication products and activities included: updating the Board's website, summarizing a summary of the Plan 2014 2001-2016 analysis, and developing a communication strategy for extreme water levels. The Committee will work to address these items and look to improve public communication through 2017.

Appendix B: Communication Committee List of Members

Mr. R. Company
Mr. A. Heer
Mr. K. Koralewski
Mr. F. Bevacqua
Ms. S. Runyon

Mr. M. Hudon
Ms. G. Faveri
Mr. R. Caldwell
Mr. J. Bruxer
Ms. S. Lobrichon