ONE HUNDRED AND FIFTEENTH PROGRESS REPORT

to the

INTERNATIONAL JOINT COMMISSION

by the

INTERNATIONAL ST. LAWRENCE RIVER BOARD OF CONTROL Covering the Period

Governing the Fortest

SEPTEMBER 10, 2010 THROUGH MARCH 23, 2011



EXECUTIVE SUMMARY

REGULATION STRATEGY AND RESULTS

The total monthly water supplies during the reporting period were slightly below average. Supplies in October and December were above average, while the remaining months were at or below average. The supplies received were within the range of those used in the design of the regulation plan, Plan 1958-D. Lake Ontario levels began the reporting period at average, fluctuated near average until late December, before falling below average until the end of the reporting period. Water levels on Lake Ontario and in the St. Lawrence River were maintained within the criteria specified in the 1956 Supplementary Orders of Approval.

The Board's general regulation strategy throughout the reporting period was to release outflows in accordance with the regulation plan, while providing for short-term deviations to meet critical needs and to assist ice formation. However, there were no critical needs requiring deviations in the reporting period. Winter operations led to outflows being varied from Plan 1958-D for ice management purposes, resulting in overdischarges temporarily decreasing the lake levels by a maximum of 1.9 cm (0.7 in).

Lake Ontario began the reporting period at average and at the level specified by Plan 1958-D. At the end of the reporting period, levels rose sharply to reach long-term average. All deviations were removed by March 11.

COMMUNICATION ACTIVITIES

Communications activities during the reporting period were conducted within the constraints of limited existing resources. The Board held two public teleconferences during the reporting period. The first was on September 21, 2010 with meeting sites in Oswego and Cornwall. 12 attended in person and 8 participated by telephone. The second was on March 15, 2011 with meeting sites in Rochester and Dorval. 13 attended in person and about 4 members of the public participated by telephone. For both events, the Board posted its presentation materials beforehand on its web site for public access. The joint Board-Commission Communications Committee continues to provide advice and assistance on a variety of issues. The Board's website is now hosted by the IJC. Background work is being done to enhance the Board web site and develop a Facebook page. Board Members and staff responded to a number of public inquiries and requests for information.

BOARD ACTIVITIES

The Board met twice in person during the reporting period, and once by teleconference to conduct business, assess conditions, and affirm its outflow strategy. The Regulation Representatives continued to provide the Board with weekly information on conditions in the system, monthly assessments of hydrologic conditions and forecasts, and a risk assessment prior to each meeting and teleconference. The Operations Advisory Group continued its weekly teleconference to apprise the Regulation Representatives of operational requirements and constraints. The Gauging Committee performed their annual inspection of the water level gauges and flow computations from October 12 to 25, 2010.

COVER PHOTO: montage of interests affected by Lake Ontario regulation

TABLE OF CONTENTS

EX	EC	UTIVE SUMMARY	. i
TΑ	BLE	E OF CONTENTS	ii
LIS	ST (DF TABLES	iii
LIS	ST (OF FIGURES	iii
1	Н	IYDROLOGICAL CONDITIONS	1
		Lake Ontario Basin - Net Basin Supply	
		Precipitation	1
	1.3	·	
		Supply from Lake ErieLake Ontario - Net Total Supply	
		Ottawa River Basin	
2		REGULATION OF FLOWS & LEVELS	
	2.1	Board Regulation Strategies and Resulting Actions	
	2.2		2
	2.3	Ice Management	2
	2.4	· ·	
3		Results of Regulation	
		Board Meetings & Conference Calls	_
		Meetings with the Public and Input from the Public	
		Environmental considerations	
4	C	COMMUNICATIONS COMMITTEE REPORT	4
5	R	RIVER GAUGING COMMITTEE REPORT	5
	5.1	Raisin River	5
		Water Level Gauges	
		Turbine Upgrades	
6	S	ST. LAWRENCE SEAWAY REPORT	5
7	Н	IYDROPOWER PEAKING AND PONDING	6
8	В	SOARD AND COMMITTEE MEMBERSHIP CHANGES	6

LIST OF TABLES Table 2. Table 3. Table 4. Table 5. Table 6. LIST OF FIGURES Figure 8. Daily Lake St. Louis Levels @ Pointe Claire

Figure 9. Daily Port of Montreal Levels @ Jetty # 1

1 HYDROLOGICAL CONDITIONS

1.1 Lake Ontario Basin - Net Basin Supply

The local net basin supplies (NBS) to Lake Ontario were generally above average throughout the reporting period, except for January and February. The six-month average NBS would be expected to be exceeded 32% of the time. Monthly NBS values for the reporting period are provided in Table 1.

1.2 Precipitation

Monthly precipitation amounts for the Lake Ontario basin are provided in Table 2. Precipitation was below average in October and December, well below average in January, and above average in September, November and February. The total amount of precipitation in the six-month reporting period was 416 mm (16.4 in.), which was 93% of average and has been exceeded 68% of the time. Total precipitation for the entire Great Lakes basin for the six-month period was 381 mm (15.0 in.), which was 97% of average and has been exceeded 56% of the time.

1.3 Snow-pack on the Lake Ontario Basin

Much of the snow accumulation on the basin in December and January ran off during thaws in early January and mid February. The Lake Ontario basin snowpack was essentially melted and much had run into the lake by the end of the reporting period. This, as well as heavy rainfall, caused a sharp rise in the lake's level in March to the end of the reporting period.

1.4 Supply from Lake Erie

The inflows to Lake Ontario from Lake Erie during the reporting period are provided in Table 1. With Lake Erie's level below average during the reporting period, its flow to Lake Ontario was also below average. The six-month average outflow would be expected to be exceeded 70% of the time.

1.5 Lake Ontario – Net Total Supply

The monthly net total supplies (NTS) to the Lake are provided in Table 1 and shown graphically in Figure 1. Figure 1 shows the long-term average monthly NTS for the period 1900 to 2010 and the supplies for this reporting period. Also shown, for comparison purposes, are the monthly NTS for 2009 and 2010. The horizontal bars above and below the curves on the graph are the long-term monthly net total supplies maxima and minima. The six-month NTS for the past ten years are provided in Table 3 for comparison purposes. The monthly NTS were above average during October and December, and at or below average the other four months. Overall, the total supply was 96% of average during this reporting period and has been exceeded 56% of the time.

1.6 Ottawa River Basin

Ottawa River outflows (as shown in Figure 2) varied dramatically during the reporting period, ranging from near-record lows in September to near-record highs in October and December. Snow pack on the Ottawa River basin in early March was generally below average.

2 REGULATION OF FLOWS & LEVELS

2.1 Board's Regulation Strategies and Resulting Actions

In order to be responsive to conditions and the needs of interests, the Board assessed conditions once via conference call and held two meetings that reviewed conditions in the Great Lakes-St. Lawrence River system, and developed outflow strategies. Because conditions were close to average, and there were no

pressing needs or requests to deviate from the regulation plan, the Board did not meet by teleconference as often as in some years. The strategies for the reporting period, and their rationale, are available on the Board's Website: http://islrbc.iugls.org/en/main_accueil.htm. In summary, the Board strategy during the reporting period was to release outflows in accordance with the regulation plan, while providing for short-term deviations to meet critical needs and to accommodate ice formation and ice conditions. Figure 3 shows the Lake Ontario outflows during the reporting period, and Figure 4 shows the Lake Ontario actual, weekly computed Plan 1958-D and preproject conditions levels during the reporting period.

2.2 Deviations from Regulation Plan 1958-D

Table 4 summarizes the Board's deviations during the reporting period. On September 10, there were no accumulated deviations on Lake Ontario. Plan-prescribed flows were released until December 18. To assist in formation of a stable, secure ice cover, flows were varied for ice management in late December, January and early February. Throughout the reporting period, deviations were equivalent to less than 1.9 cm (0.7 in) removed from Lake Ontario relative to Plan-prescribed releases. All deviations were removed by March 11. At the Board's March 23 meeting, it decided to follow the outflows specified by Regulation Plan 1958-D, while allowing for variations to manage ice conditions and meet critical needs.

2.3 Ice Management

Ice booms were placed in the international section of the St. Lawrence River by the Power Entities, beginning on November 15. Following passage of the last commercial vessel (the "Algoma Spirit") on December 27, the last booms that cross the navigation waterway were closed on December 31.

Ice formation began in the Beauharnois Canal on January 10 and was essentially complete on January 23. Ice cover began to form in the international section of the river, upstream of the Moses-Saunders Dam, on January 17 and was essentially complete by the second week of February. It was not necessary to dip the gates at Iroquois Dam to facilitate ice cover formation this year. The date of last ice on Lake St. Lawrence was March 15. Ice remained on Lake St. Francis and in the Beauharnois Canal at the end of the reporting period.

The opening of the Montreal-Lake Ontario section of the Seaway was March 22 witth the passage of the Motor Vessel "Avonborg". This was preceded by opening of the A and G Booms (the two booms that cross the navigation channel).

2.4 Iroquois Dam Operations

The gates at Iroguois Dam were not dipped during the reporting period.

2.5 Results of Regulation

2.5.1 Upstream

Lake Ontario

The effects of Regulation Plan 1958-D and the Board's outflow strategies on the level of Lake Ontario are shown in Figure 3. For comparison purposes, the daily levels of 2009, 2010 and 2011 to the end of the reporting period are shown. During the reporting period, levels started at long-term average, stayed near or slightly below average to the end of the calendar year, then fell and stayed below average from the end of January to mid March, when they rose to average. Lake Ontario fell to its seasonal low of 74.38 m (244.03 ft) on February 18, 22 and 23. This level was about 23 cm (9.1 in) below the long-term average for that time of year. The levels then rose slowly until the beginning of March. Due to heavy rainfall and melting of the snowpack, the level rose sharply in early March and ended the reporting period at long-term average.

A comparison of Lake Ontario's actual monthly levels and outflows to those that would have been obtained under pre-project conditions is given in Table 5. This shows that Lake Ontario was about 11 -27 cm (0.36 – 0.89 ft.) lower during the reporting period than it would have been without regulation. A comparison of the daily levels to long-term average, and 2009 and 2010 levels is also shown in Figure 5.

Lake St. Lawrence

The water level of Lake St. Lawrence (shown in Figure 6) started the reporting period above average, and were generally above average during the reporting period. It was below average in late January and early February due to ice effects. The level then stayed above average until the end of the reporting period.

2.5.2 Downstream

Lake St. Francis

The daily water level at Summerstown on Lake St. Francis (shown in Figure 7) was generally near average until mid December, then it was generally below average for the rest of the reporting period. The level was above the Seaway Low Alert level of 46.58 m (152.8 ft) throughout the reporting period.

Lake St. Louis

During the reporting period, the level of Lake St. Louis remained well above the Seaway low alert level of 20.60 m (67.6 ft). The daily water level (shown on Figure 8) was generally below average (based on the period 1960 through 2010) from the beginning of the reporting period until the end of the reporting period. The level rose sharply in early October and early December due to precipitation events, particularly in the lower portion of the Ottawa River basin, but stayed well below flood level during those months. The level also rose sharply in early March due to heavy precipitation and snow melt, but again remained below the flood level. The level came to within 20 cm (7.9 in) of the flood alert level of 22.10 m (72.5 ft) briefly on March 19 before falling slowly.

Port of Montreal

The daily level at the Port of Montreal (shown in Figure 9) was generally below average, but above the chart datum level of 5.55 m (18.2 ft), throughout the reporting period. Similarly, the level rose sharply for brief periods in early October and early December following heavy rainfall events. The Port was also above average at the end of the reporting period.

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, monthly risk analyses using water level outlooks, and, advised the Board 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 Board continued to assess conditions in the basin and adjust or affirm its regulation strategy accordingly. During the reporting period, the Board held meetings on October 19 in Gatineau, Quebec and March 23 in Niagara Falls, New York. The Board also conducted a conference call on January 12 to assess regulation strategy. For the months in between the meetings and teleconference, the Board received assessments of conditions monthly from the Regulation Representatives. Table 6 provides a list of Board Members in attendance at these meetings and on the teleconference.

3.2 Meetings with the Public and Input from the Public

The Board held two public teleconferences during the reporting period. The first was on September 21, 2010 with meeting sites in Oswego and Cornwall. 12 people not associated with the Board or IJC attended in person and 8 participated by telephone. The second was on March 15, 2011 with meeting sites in Rochester and Dorval. 13 people not associated with the Board or IJC attended in person and about 4 public persons participated by telephone. For both events, the Board posted its presentation materials beforehand on its web site for public access. The Board was pressed for updates on plans for a new Lake Ontario regulation plan at the September event.

During the reporting period, the Communication Committee, individual Board Members and the Secretaries were actively engaged in outreach, information exchange and liaison with stakeholders throughout the Lake Ontario-St. Lawrence River system. Board members and staff 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 the Board's strategies.

3.3 Environmental considerations

As noted in the previous progress report, the Board held its second environmental workshop 13 months ago. The Board requested that an *ad-hoc* group of environmental experts be convened to better communicate Board operations to the experts, and to better update Board staff on the environmental implications of its operations. The Board was updated on this at its March 23 meeting and noted that its staff was engaged with environmental experts in support of the Working Group. The Board decided to set aside, for now, a separate convening of environmental experts. This will allow the limited human resources that support the Board to better focus on technical support to the Working Group in the area of environmental performance indicators and other technical work.

4 COMMUNICATIONS COMMITTEE REPORT

The Board continued to work with the International Joint Commission through the Communications Committee, to seek opportunities to improve communications with the public. In early 2008, the Committee prepared a communications strategy which highlights the need for adequate full-time communication resources. The Board approved this and forwarded it to the IJC for its support in implementation. Background work is being done on a *pro bono* basis that may lead to enhancements of the Board web site. The Canadian Section of the Board was provided communications assistance from Environment Canada. The Corps of Engineers provided a part-time communications specialist during the reporting period to the beginning of March. The Communications Committee is continuing work to enhance the Board's website and develop the use of social media.

Communication activities during the reporting period included:

 Preparation of news releases: The Board issued media releases after each Board regulation decision, to provide the public with recent information on water level conditions and regulation strategies;

- Operation of the Board's 1-800 numbers: The Board continued to post weekly updates of levels and flows (In the U.S., the number is 1-800-883-6390, and in Canada the numbers are 1-800-215-8794 (English) and 1-800-215-9173 (French));
- Operation of the Board's Web Page on the internet http://www.ijc.org/conseil_board/islrbc/en/main_accueil.htm The Page includes:
 - Weekly updates on water levels and outflows;
 - General information about the Board, its activities and its structure;
 - Announcements about the Board's outflow strategies and "related media" releases.
 - Posting of the Board's meeting minutes and teleconference summaries.
 - The Board's next annual meeting with the public and public teleconferences.

The Board's Regulation Representatives sent weekly updates on Lake Ontario regulation and water level and outflow conditions, to 281 e-mail subscribers. Stakeholders are encouraged to subscribe to this free service. Board staff continued work on development of a Facebook page.

5 RIVER GAUGING COMMITTEE REPORT

The 73rd (2009) report was accepted by the Board on December 17, 2010. The Board approved a new rating table for the intake valve that supplies water to the Cornwall canal. The valve did not change, but the method of driving the valve's motion was automated and slightly altered. The results of the previous precision survey were accepted by NOAA's National Geodetic Survey and Canada's Geodetic Survey and presented in the 2009 gauging report. The Power Entities will evaluate the impact and, if necessary, will revise the unit rating tables, based on the results of the precision survey. Any revised unit ratings tables will be submitted to the Board for acceptance and implementation.

5.1 Raisin River

The Raisin River Diversion was open at the beginning of the reporting period and was used until September 28 to augment flows in the headwaters of the South Branch of the Raisin River. The diverted outflows were about 0.1 m³/s (3.5 cfs).

5.2 Water Level Gauges

The Gauging Committee performed an annual inspection of the water level gauging network from October 12 to 25, 2010. The data audit has been forwarded to NOAA and Environment Canada.

5.3 Turbine Upgrades

Moses Unit 23 was removed from service for upgrade December 18, 2009 and returned to service on September 27, 2010. Moses Unit 24 was removed from service on September 29, 2010 and is expected to be returned to service sometime mid-June 2011. Two units (Units 19 and 20) remain to be upgraded.

6 ST. LAWRENCE SEAWAY REPORT

Navigation ceased in the Montreal-Lake Ontario Section with the passage of the last downbound commercial vessel, the "Algoma Spirit" through Snell Lock on December 27 and the 'Atlantic Erie' through St. Lambert Lock on December 29. The last upbound vessel through the locks was the "Maritime Trader" and it cleared Cape Vincent on December 28.

The Seaway navigation season opened on March 22 at 8:00 am. The first vessel transit was the Motor Vessel "Avonborg", carrying cargo for a windmill project.

7 HYDROPOWER PEAKING AND PONDING

By letter dated 13 October 1983, the Commission authorized Ontario Power Generation and the New York Power Authority to continue to carry out peaking and ponding operations at the St. Lawrence Project. The conditions governing peaking and ponding operations are specified in Addendum No. 3 to the Operational Guides for Regulation Plan 1958-D. On September 9, 2008, the IJC renewed the approval for a 3-year period, or until a new regulation plan is approved, whichever comes first.

Peaking operations were conducted throughout the reporting period. No ponding operations were conducted.

8 BOARD AND COMMITTEE MEMBERSHIP CHANGES

In November 2009, most Board Members had their appointments renewed through the end of 2011 or 2012. There remains a vacancy on the Canadian Section of the Board.

Respectfully submitted,	
-------------------------	--

MEMBERS FOR THE UNITED STATES	MEMBERS FOR CANADA
MG J. W. PEABODY, CHAIR	J. VOLLMERSHAUSEN, CHAIR
J. BERNIER	A. CARPENTIER
T. BROWN	J. FRAIN
T. HULLAR	P. YEOMANS
F. SCIREMAMMANO	

Table 1 - Monthly Mean Supplies to Lake Ontario

Month	Inflow from Lake Erie				Local Net Basin Supplies			Total Supplies			
	m³/s	tcfs	Exceed. Prob. ⁽¹⁾	% of LTA	m³/s	tcfs	Exceed. Prob. (1)	m³/s	tcfs	Exceed. Prob. (1)	% of LTA
Sep 10	5630	199	68	95	100	4	48	5730	202	65	95
Oct 10	5550	196	68	95	990	35	7	6540	231	28	108
Nov 10	5480	194	72	94	990	35	25	6470	228	47	100
Dec 10	5660	200	61	97	1120	40	31	6780	239	43	102
Jan 11	5330	188	68	94	770	27	59	6100	215	66	92
Feb 11	5160	182	72	93	700	25	71	5860	207	77	88

⁽¹⁾ Based on period of record 1900-2010

Table 2 - Provisional Precipitation Over the Great Lakes and Lake Ontario Basins

Month	Great Lakes B	asin	Lake Ontario Basin			
	mm (inches) ⁽¹⁾	% of LTA ⁽²⁾	Exceed. Prob. ⁽³⁾	mm (inches) ⁽¹⁾	% of LTA ⁽²⁾	Exceed. Prob. ⁽³⁾
Sep 10	125 (4.91)	144	6	95 (3.73)	114	32
Oct 10	58 (2.27)	79	72	74 (2.90)	94	54
Nov 10	66 (2.59)	94	58	84 (3.29)	104	43
Dec 10	45 (1.77)	75	84	62 (2.45)	83	70
Jan 11	41 (1.63)	73	82	37 (1.44)	54	95
Feb 11	46 (1.82)	102	45	64 (2.53)	107	40

⁽¹⁾ Provisional ⁽²⁾ Based on period of record 1900-2010 ⁽³⁾ Based on period of record 1900-2008

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. (1)	(m ³ /s)	(tcfs)	Percent	
Sep 01 - Feb 02	6420	227	6080	215	64	-340	-12	-5	
Sep 02 - Feb 03	6420	227	5690	201	80	-730	-26	-11	
Sep 03 - Feb 04	6420	227	6620	234	39	200	7	3	
Sep 04 – Feb 05	6420	227	7240	256	17	820	29	13	
Sep 05 – Feb 06	6420	227	7000	247	25	580	20	9	
Sep 06 – Feb 07	6420	227	7590	268	9	1170	41	18	
Sep 07 – Feb 08	6420	227	6540	231	43	120	4	2	
Sep 08 - Feb 09	6420	227	6910	244	28	490	17	8	
Sep 09 - Feb 10	6420	227	6500	230	44	80	3	1	
Sep 10 – Feb 11	6420	227	6250	221	56	-170	-6	-3	

⁽¹⁾ Based on period of record 1900-2010

Table 4 - Summary of Outflow Deviations from Regulation Plan 1958-D Flow

Date 2010-2011	Deviation (cms)	Dev. (cms- wks)	Acc. Dev. rounded (cms- wks)	Cum. Effect on Lake Ont. rounded (cm)	Reason for Deviation
Sep 10			0	0	
Dec 18-24	610 for 168 hrs	610	610	-1.9	Winter Ops – Ice Management
Dec 25-31	-40 for 168 hrs	-40	570	-1.8	Winter Ops – Ice Management
Jan 14	-230 for 4 hrs	-5	560	-1.7	Assist in Ice Formation in Beauharnois Canal
Jan 15-21	-230 for 168 hrs	-230	330	-1.0	Assist in Ice Formation in Beauharnois Canal
Jan 22-24	-230 for 61 hrs	-84	250	-0.8	Assist in Ice Formation in International Reach
Jan 29-31 Jan 31-Feb 1 Feb 4	-480 for 63 hrs -240 for 33 hrs -80 for 24 hrs	-180 -47 -11	10	-0.03	Assist in Ice Formation in International Reach Winter Ops – Ice Management Winter Ops – Ice Management
Mar 5-11	-10 for 168 hrs	-10	0	0	To restore water

Table 5 - Lake Ontario Recorded and Pre-Project Levels and Outflows

Month		Monthly Mean 1985) - meters		Lake Ontario Monthly Mean Outflow m³/s (tcfs)			
	Recorded Pre-project Diff.			Recorded	Pre-project	Diff.	
Sep 10	74.72 (245.14)	74.83 (245.50)	-0.11 (-0.36)	7120 (251)	6760 (239)	360 (13)	
Oct 10	74.61 (244.78)	74.76 (245.27)	-0.15 (-0.49)	6950 (245)	6640 (234)	310 (11)	
Nov 10	74.50 (244.42)	74.69 (245.04)	-0.19 (-0.62)	6950 (245)	6520 (230)	430 (15)	
Dec 10	74.52 (244.49)	74.79 (245.37)	-0.27 (-0.88)	7000 (247)	6690 (236)	310 (11)	
Jan 11	74.49 (244.39)	74.73 (245.17)	-0.24 (-0.78)	6160 (218)	6500 (230)	-340 (-12)	
Feb 11	74.41 (244.12)	74.66 (244.94)	-0.25 (-0.82)	6470 (228)	6170 (218)	300 (11)	

Table 6 - Attendance at Meetings (September 10, 2010 - March 23, 2011)

Board Member	Country	Oct. 19	Jan 12 teleconf	Mar 23
MG J. W. Peabody ¹ COL J. Drolet ²	U.S.	- X	- X	- X
Mr. J. Vollmershausen ³	Can.	Х	-	
Mr. J. Bernier ⁴	U.S.	4.	-	Х
Mr. T. Brown	U.S.	Х	Х	Х
Mr. A. Carpentier	Can.	Х	Х	Х
Ms. J. Frain	Can.	Х	Х	Х
Dr. T. Hullar	U.S.	Х	-	Х
Dr. F. Sciremammano, Jr.	U.S.	Х	Х	Х
Mr. P. Yeomans	Can.	Х	X	X

Notes: 1. U.S. Co-Chair

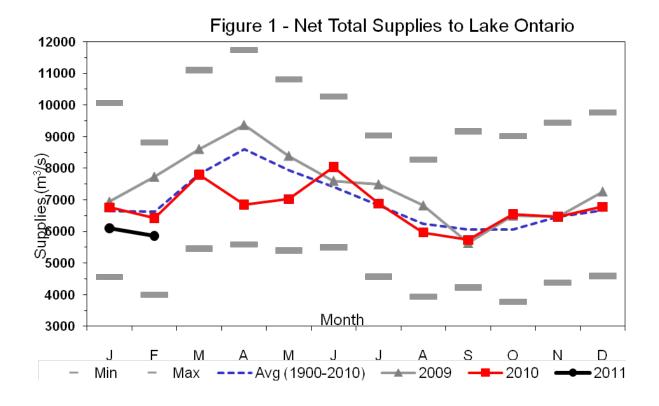
2. Alt. U.S. Co-Chair

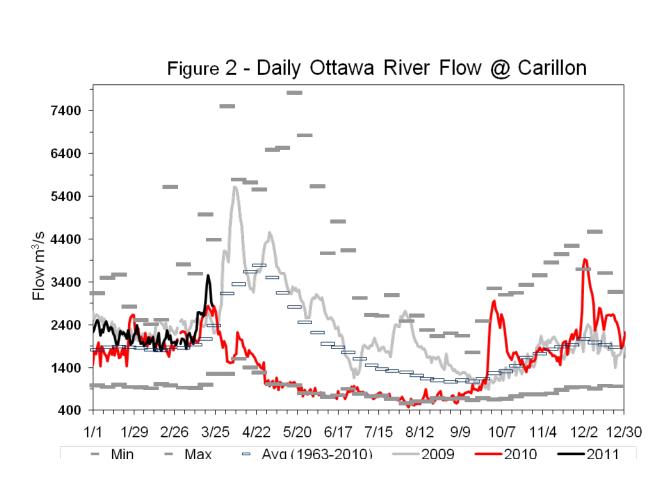
3. Canadian Co-Chair

4. In Ottawa for meeting, unable to attend due to illness

Location of Meetings:

October 19, 2010, Gatineau, Quebec March 23, 2011, Niagara Falls, New York





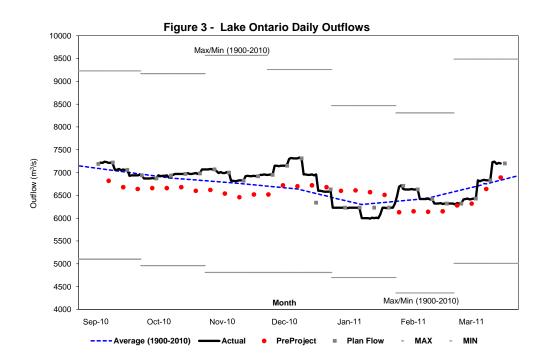


Figure 4 - Lake Ontario Actual, Preproject & Plan Levels

