Commission de planification de la régularisation de la rivière des Outaouais

## Fall Conditions Overview in the Ottawa River Basin

OTTAWA/GATINEAU, Thursday December 21, 2023 — The Ottawa River Regulating Committee provides collaborative management of the principal reservoirs in the Ottawa River basin throughout the year. Effective water management requires that the Committee continually monitors river conditions and forecasts the effects of weather conditions on water levels and flows at multiple locations throughout the basin. This report is a summary of fall conditions in the Ottawa River basin.

Fall River Conditions: Autumn, which began with dry and warm weather, was marked by very wet weather in October that brought large amounts of rain. The northern part of the basin was particularly affected by rainfall during the first three weeks of October. Portions of the Abitibi -Timiskaming area received nearly double the October monthly average rainfall over this period! An initial rain event from October 7 to 10 generated a lot of runoff, which caused water levels to rise along the main stem of the river from Mattawa to Lake Deschenes. A second rain event from October 20 to 22 affected the entire northern part of the basin and caused water levels to rise again. The reach from Mattawa to Lake Deschenes saw the largest level increases for this rain event. Levels remained below minor flood thresholds at all locations. These wet conditions prevailed for a period of six weeks. With below-normal precipitation throughout the watershed in November and daytime temperatures at times below freezing, levels and flows in the main stem of the river gradually returned to normal ranges in early December.

## Ranking of maximum fall levels along the Ottawa River

Mattawa					
	Start* : 1910				
Rank	Date	Level** (m)			
1	1928.10.26	154.40			
2	1951.10.30	154.27			
3	1954.10.19	154.26			
4	1966.11.29	154.19			
5	1965.09.30	154.00			
6	1990.11.29	153.88			
7	1956.10.04	153.87			
8	1932.10.20	153.82			
9	2014.10.20	153.81			
10	2018.10.18	153.80			
15	2023.10.28	153.64			

Pembroke				
Start* : 1913				
Rank	Date	Level** (m)		
1	1928.10.27	113.04		
2	1966.12.10	112.78		
3	1932.11.01	112.73		
4	1951.11.01	112.62		
5	1954.10.19	112.55		
6	1979.12.03	112.43		
7	2014.10.21	112.40		
8	1965.10.01	112.39		
9	1990.12.01	112.39		
10	1941.11.14	112.38		
13	2023.10.30	112.28		

Lake	Lake Deschenes at Britannia (Ottawa)				
	Start*: 1916				
Rank	Date	Level** (m)			
1	1928.10.28	59.80			
2	1966.12.12	59.54			
3	1932.11.01	59.46			
4	2003.11.29	59.23			
5	1990.12.04	59.18			
6	1951.11.03	59.13			
7	2006.11.21	59.13			
8	2014.10.24	59.10			
9	1918.11.04	59.07			
10	1979.12.02	59.06			
18	2023.11.01	58.92			

	Gatineau (Hull)				
	Start* : 1965				
Rank	Date	Level** (m)			
1+	2003.12.15	43.10			
2	1966.12.13	42.96			
3	2010.12.17	42.84			
4	2006.11.22	42.77			
5	1979.12.20	42.69			
6	2017.12.15	42.65			
7	1990.12.04	42.57			
8	1988.11.15	42.50			
9	1999.12.10	42.48			
10	1967.11.06	42.44			
18	2023.11.02	42.20			

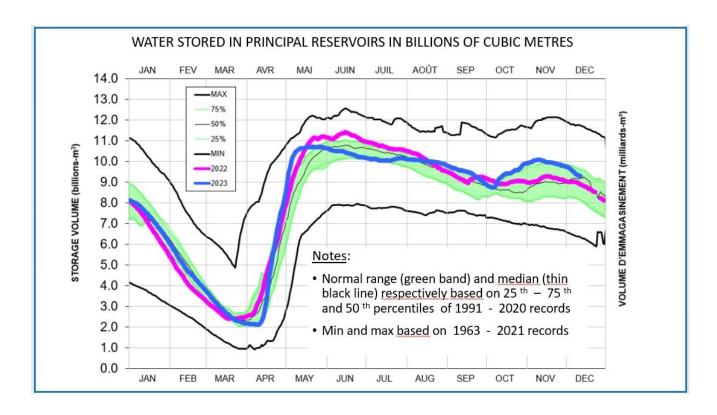
<u>Flow Regulation Strategy during a Fall with High Flows</u>: The management of water at the principal reservoirs during a high-flow event occurring in the fall aims to minimize downstream flooding while respecting maximum reservoir levels to ensure the safe operations of facilities. There has been no major flooding during the fall since the beginning of the data record (approximately 1915).

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<sup>\*</sup> Start of record period

<sup>\*\*</sup>Daily level

<sup>1928</sup> level estimated to be 43.1 m



<u>Long-term Overview</u>: Water levels in the principal reservoirs will be lowered progressively during the winter period, as is done annually (refer to the figure above). Water levels in reservoirs are typically drawn down over a period of three to four months starting in December. The lowering of water levels in the principal reservoirs will allow for the storing of a portion of the runoff next spring to mitigate downstream flooding while ensuring the safe operations of facilities. It should be noted that the Des Joachims reservoir, the smallest of the group, is emptied over the course of a few weeks which typically happens in March. The water released from this reservoir only takes about three days to reach the watershed outlet near Carillon. The annual emptying of the principal reservoirs can be followed on the Planning Board's website under the <u>Current Conditions - Reservoirs only</u> tab.

During the winter months, when most precipitation accumulates on the ground as snow, water levels and flows in natural tributaries are generally decreasing. However, in the Ottawa River, flows and water levels are generally stable because of the continuous release of water from the principal reservoirs as they are gradually emptied. Still, river conditions can fluctuate when a winter thaw occurs or, more rarely, when extreme cold weather causes the thickening of the ice cover and/or the accumulation of frazil ice to restrict the river flow.

The Ottawa River Regulating Committee will continue to monitor basin conditions and report conditions to residents on its website <a href="https://www.ottawariver.ca/">www.ottawariver.ca/</a>.

## Ottawa River Regulating Committee

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