



Commission de planification de la régularisation de la rivière des Outaouais

Fall Conditions Overview in the Ottawa River Basin

OTTAWA/GATINEAU, Thursday December 19, 2024 — 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: The above-normal flows observed this summer along the main stem of the Ottawa River, due to repeated episodes of heavy rainfall, continued into early fall. The season began with wet conditions, marked by a significant rainfall event from September 24 to 26, followed by another less significant during the first week of October. Flows remained above normal at all locations until mid-October due to these precipitations, with high water levels in some locations, for instance at Pembroke and Lake Deschenes. The drier period that followed until the end of October allowed flows and water levels to return to seasonal values. However, the northern part of the watershed was hit by a series of precipitation events between late October and early November, from October 29 to November 10, that brought precipitation up to twice the average amounts in some places during these two weeks. These rains led to sharp increases in flows in the Abitibi-Timiskaming area, with associated increases along the river between Mattawa and Lake Deschenes. Although levels exceeded seasonal values in some locations, they remained below minor flood thresholds. With the arrival of drier and colder weather, conditions returned to normal along the main stem of the river by the end of November. The season concluded with a mix of weather conditions between December 5 and 19, beginning with significant snowfall that established the first snow cover on the basin, followed by freezing rain and rain, mainly in the southern part of the basin. However, these precipitations did not significantly impact river conditions, which remained within seasonal values.

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		
12	2024.11.10	153.75		

Ranking of maximum fall levels along the Ottawa River

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Start of record period

**Daily level

+ 1928 level estimated to be 43.1 m

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Rank	Date	Level** (m)		Rank
1	1928.10.27	113.04		1
2	1966.12.10	112.78		2
3	1932.11.01	112.73		3
4	1951.11.01	112.62		4
5	1954.10.19	112.55		5
6	1979.12.03	112.43		6
7	2014.10.21	112.40		7
8	1965.10.01	112.39		8
9	1990.12.01	112.39		9
10	1941.11.14	112.38		10
17	2024.11.11	112.23		28

Pembroke

Lake Deschenes at Britannia (Ottawa)				
Start* : 1916				
۱k	Date	Level** (m)		
	1928.10.28	59.80		
	1966.12.12	59.54		
	1932.11.01	59.46		
	2003.11.29	59.23		
	1990.12.04	59.18		
	1951.11.03	59.13		
	2006.11.21	59.13		
	2014.10.24	59.10		
	1918.11.04	59.07		
)	1979.12.02	59.06		
`	0004 44 45	50.04		

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			
42	2024.11.14	41.77			

<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).

<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 will reservoirs allow for the storing of а 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 <u>www.ottawariver.ca/</u>.

Ottawa River Regulating Committee