



Fall Conditions Overview in the Ottawa River Basin

OTTAWA/GATINEAU, Friday December 17, 2021 — The Ottawa River Regulating Committee provides integrated management of the principal reservoirs in the Ottawa River basin throughout the year, including during the fall period when river conditions can change rapidly in response to changing weather conditions. This report is a summary of fall conditions in the Ottawa River basin.

Fall River Conditions: This year, Ottawa River water levels have been close to normal for much of the fall. After a relatively dry summer, river flows were well below normal in the first three weeks of September. In late September, a 3-day rainfall event brought up to 125 mm of rain. This system resulted in the monthly precipitation total exceeding normal values. During the months of October and November, precipitation was more moderate, with below normal amounts in November for both northern and southern regions. Overall, varied precipitation amounts were received, with above normal quantities for a large portion of the basin and below normal for the northern basins as show in the figure below.



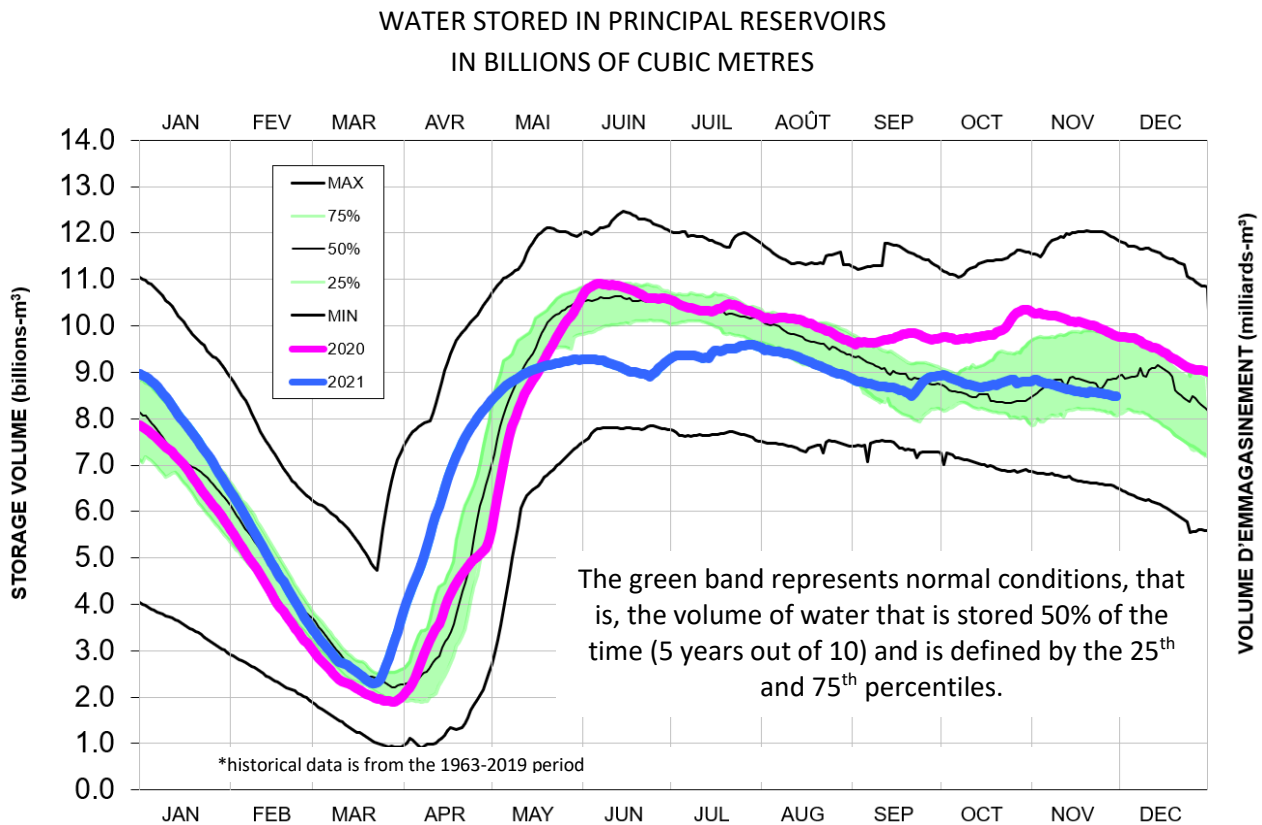
**CUMULATIVE PRECIPITATION ANOMALIES FOR SEPTEMBER, OCTOBER AND NOVEMBER 2021
COMPARED TO CLIMATOLOGICAL NORMS (1981 – 2010) IN %**

The weather event of late September mainly affected the center of the basin between September 21 and 23. As a result, water levels rose rapidly in many locations along the main stem of the Ottawa River. Significant increases of up to 60 cm above median^a levels were observed depending on location. As the amount of water in the river decreased in the following weeks, water levels and flows returned to normal.

To find out about water levels in your area and how they compare with normal conditions, visit the 'Current Conditions' webpage and click on the map marker closest to where you live. In the pop-up box, click on 'Graph View and Advanced Data'.

Did you know? Rainfall has a stronger influence over river flows during the fall compared to summer because reduced evapotranspiration during fall lessens the soil's capacity to absorb precipitation. When it rains, more water runs off to streams and rivers in the basin, which raises water levels in the Ottawa River.

Reservoir Regulation Strategy: Water levels in the principal reservoirs will be lowered progressively from December to the end of March as shown in the figure below.



^a The median is a measure of average conditions and is determined by the value that is exceeded 50% of the time.

The Des Joachims reservoir requires less time to empty (as it is the smallest of the thirteen principal reservoirs) and will be emptied during the month of March.

This strategy allows the flows from the principal reservoirs in the Ottawa River to decline to a minimum at the end of March, prior to the beginning of the usual snow melt period when natural increases of river flows and levels occur.

The annual emptying of the principal reservoirs can be followed on the Planning Board's website under the '[Current Conditions/Reservoirs Only](#)' tab.

Long-term Overview: End of fall early winter levels will continue to be highly dependent on weather conditions. 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. However, 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.

Did you know? The remaining flow in the river, just before the spring starts, is the total of all the natural tributaries (Petawawa River, Rouge River, etc.) in the basin and is termed the base flow. This base flow varies naturally depending on overwinter conditions and thaw cycles.

The Ottawa River Regulating Committee will continue to monitor basin conditions and report conditions to residents on its website www.ottawariver.ca/

Ottawa River Regulating Committee