



Fall Conditions Overview in the Ottawa River Basin

OTTAWA/GATINEAU, Thursday December 15, 2022 — 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 weather conditions as well as water levels and flows at multiple locations throughout the basin. This report is a summary of fall conditions in the Ottawa River basin.

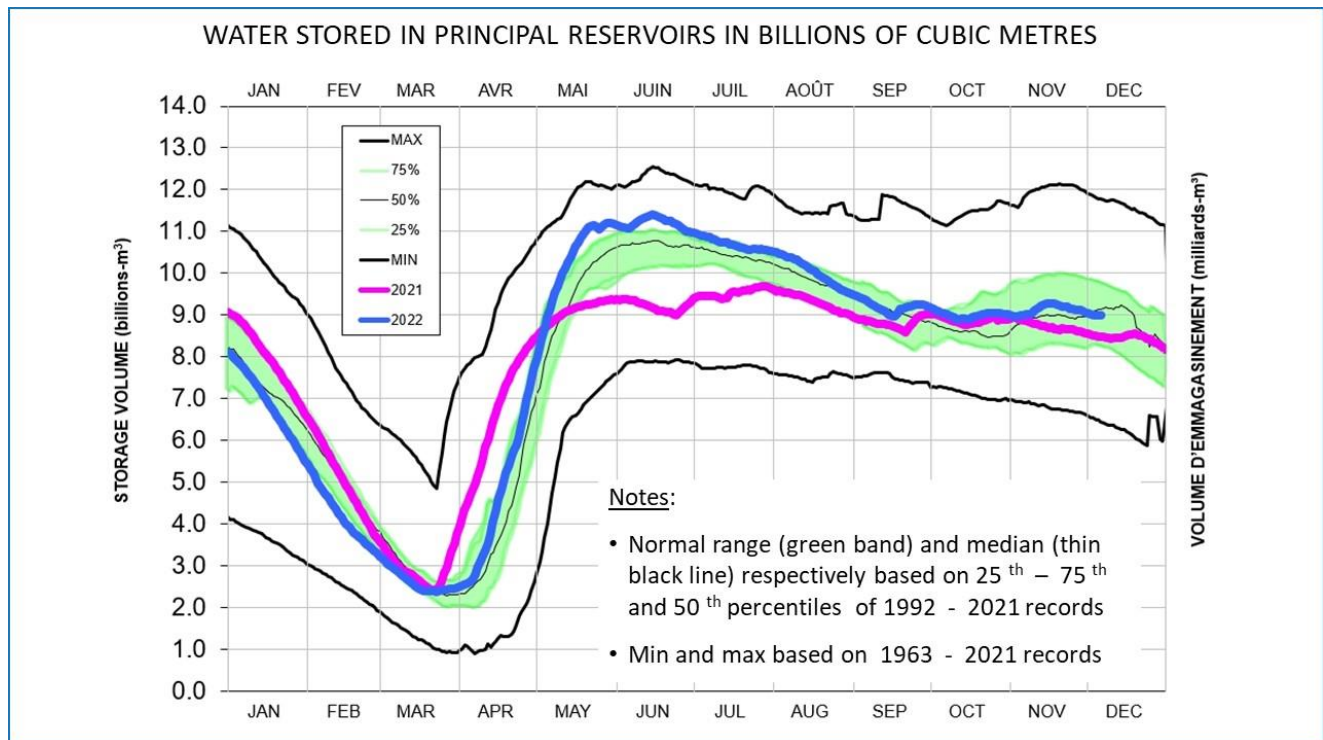
Fall River Conditions: This year, the fall period was characterized by drier than normal conditions over much of the basin. Mild to moderate shortages of precipitation were observed over a large part of the basin for the months of September, October and November. Low flow conditions prevailed in several natural tributaries of the Ottawa River, particularly in the southern part of the basin, through much of the fall period. Water levels and flows along the main stem of the river were however above average for most of the fall period thanks to a 3-day rainfall event in September. From September 17 to 19, a weather system brought between 70 and 85 mm of rain over the northern portion of the basin, and 30 and 70 mm over the central portion. In early fall, water levels on the main stem of the river were well above normal in some locations due to this weather event. Lower than normal precipitation received over the months of October and November resulted in water levels and flows on the main stem of the river returning to normal, and even below normal in some locations.

Did you know? There are thirteen principal reservoirs in the Ottawa River basin. These are areas upstream of dams where water can be stored for a long period of time (several months). Over one hundred years ago, most reservoirs used to be natural lakes. The building of dams at their outlet between 1911 and 1954 made it possible to store and release water from them, and hence, to alter or regulate the flows in the downstream river sections. According to the agreement between Canada, Ontario and Quebec that created the Planning Board, a reservoir must be able to store 200 million cubic metres of water or more to qualify as a “principal” reservoir. That’s larger than 80,000 Olympic-sized swimming pools! To find out more, visit the [“The Ottawa River Basin and its Reservoirs”](#) web page.

Flow Regulation Strategy: Water levels in the principal reservoirs will be lowered progressively during the winter period, as is done annually, as shown in the figure. Water levels in reservoirs are typically drawn down over a period of approximately three months. Some of the smaller reservoirs are emptied over a shorter period. The Des Joachims reservoir, for instance, is emptied over the course of only one month, in March. The water released from the reservoir only takes about three days to reach the watershed outlet. This strategy allows the flows from the principal reservoirs in the Ottawa River to decline to a minimum by 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.

Did you know? In the middle of winter, more than half of the water that flows in the main stem of the river between Lake Timiskaming and the Deux-Montagnes area is water just released from the principal reservoirs. After having been stored for several months in the reservoirs, the water is released during winter. It then flows to downstream river reaches, passing through numerous hydroelectric stations and generating electricity along the way, as it is making its way towards the basin outlet.



Long-term Overview: Water levels in late fall and early winter 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. 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 www.ottawariver.ca/.

Ottawa River Regulating Committee