March 2021

Ottawa River Regulation Planning Board Newsletter



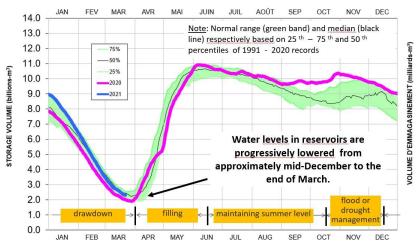
SPRING RIVER CONDITIONS

OTTAWA/GATINEAU, March 23, 2021

The Ottawa River Regulating Committee just released its Spring Conditions Overview bulletin. The complete bulletin is available <u>here</u>. Much like 2020, the Ottawa River basin is experiencing spring like weather earlier than usual.

The spring melt has begun slowly in the central and southern parts of the basin during the first and second week of March. There have been periods of daytime high temperatures well above zero and some nighttime low temperatures above zero. These periods of melt combined with snow loss through sublimation has resulted in a significantly reduced snowpack through mid-March.

The principal reservoirs located in the northern part of the Ottawa River basin are essentially empty. They are ready to retain spring runoff once the freshet begins in those upstream basin areas.



Annual Water Management of the Principal Reservoirs

With the warm weather that we are currently experiencing, snowmelt is expected to continue to increase over the coming weeks.

While it is not possible to completely rule out the occurrence of a large spring freshet, the factors that are known at this time indicate a year without excessive flooding along the Ottawa River. For updates, follow basin conditions on the Ottawa River Regulation Planning Board's website <u>www.ottawariver.ca</u>.

DID YOU KNOW?

It is not possible to forecast in advance the duration and strength of a spring freshet, or whether flooding will occur.

Five primary factors influence the quantity of water that will collect in the Ottawa River in spring. The combination of these and the precise timing when maximum water from melting snow and rain move through the river system determine how high peak water levels will be along the river.

Only one of the five factors can be measured at the onset of spring. It is the amount of water contained in the snow pack. The other four factors are related to weather and cannot be forecast in advance.

To learn more, check out our website's <u>FAQ section</u>.



SPECIAL FEATURE

Keeping track of the changing snow cover

During winter, most precipitation is stored as snow on the ground in the Ottawa River basin. During the spring melt, large quantities of water are released. This water can combine with rainfall, which typically leads to increased spring flows. This is called freshet.

The Ottawa River Regulation Planning Board website now has a map available to the public to help track the changing snow cover in the watershed. The map of the snow water equivalent can be found by clicking <u>here</u>.

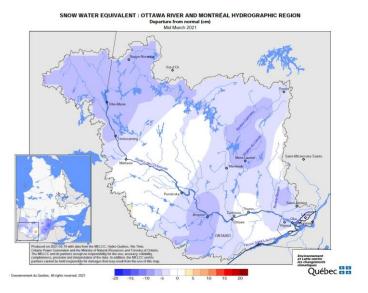
This map provides an overview of conditions at the time of the most recent measurements (figure to the right). It shows the amount of water held in the snow cover compared to the amount of water it normally holds at this same time of year. This amount of water is called 'snow water equivalent'. The map covers the entire Ottawa River watershed. At a glance, it is possible to see if there is more or less snow than usual.

Snow water equivalent before the start of melting is a factor that contributes to the duration and strength of the freshet. Keeping track of the snow water content throughout the freshet is important.

Some years, a layer of snow that has diminished and become dense following freeze-thaw cycles may contain more water than a thick layer of fresh snow. Other years, a significant part of the snow cover may disappear by sublimation. Follow us on <u>Twitter</u> to be notified of news releases, latest bulletins and website updates

This depends on the late winter weather conditions. The sublimation process is similar to how snow disappears from roofs even though it is too cold to melt.

This map is updated approximately every two weeks in the period before and during the spring freshet. Visit our website to stay up to date on the 2021 spring freshet!



Map Credit: MELCC, 2021, Québec.

Ottawa River Regulation Planning Board 351 St Joseph Blvd. Gatineau, Quebec J8Y 3Z5 Ottawa/Gatineau 819-994-9049 Elsewhere 1-800-778-1246 <u>secretariat@ottawariver.ca</u> http://ottawariver.ca/