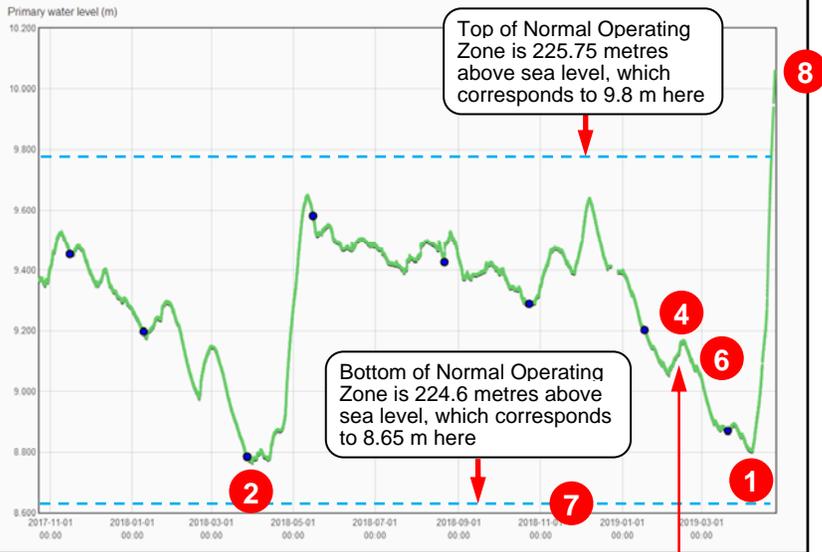
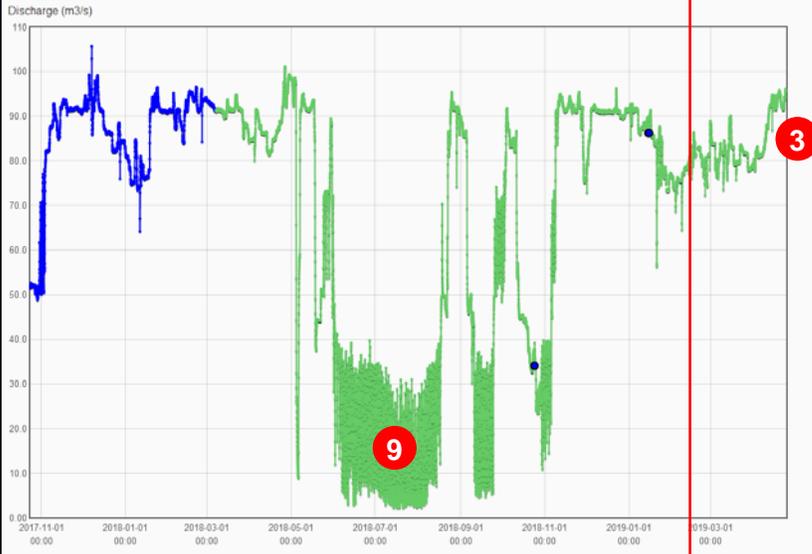


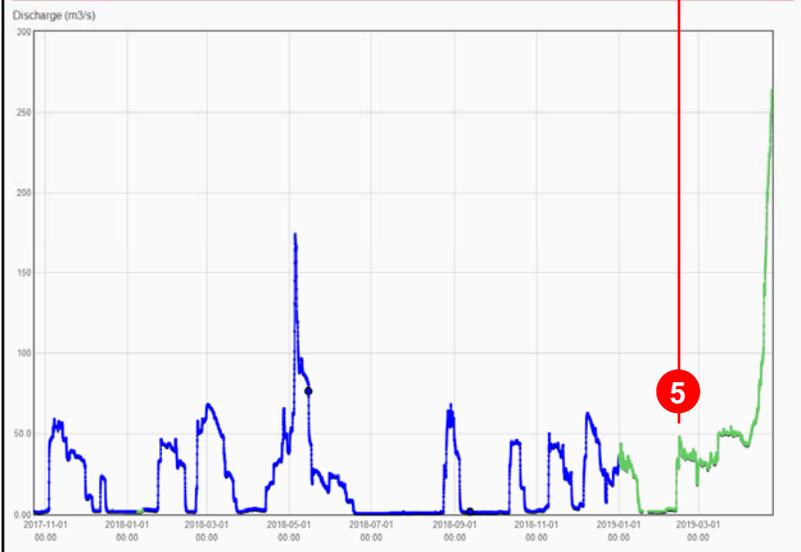
Real-Time Hydrometric Data Graph for LAKE MUSKOKA AT BEAUMARIS (02EB018) [ON]



Real-Time Hydrometric Data Graph for MUSQUASH RIVER AT HIGHWAY NO. 400 (02EB012) [ON]



Real-Time Hydrometric Data Graph for MOON RIVER AT HIGHWAY NO. 400 (02EB011) [ON]



These graphs are from Environment Canada's WaterOffice, showing the 18-month period from October 24, 2017 to April 24, 2019. The top graph shows the water level of Lake Muskoka.

First, note that in advance of the 2019 spring freshet the water level of Lake Muskoka was drawn down less (1) than it was last year (2), so more could have been done to reduce the 2019 flooding.

Specifically, the Muskoka River Water Management Plan allowed the water level to have been drawn down 6" more than it was. This made the flooding worse.

Downstream of Bala, the Moon River splits into two:

- The south branch is the Musquash River, and this water flow is controlled by Ontario Power Generation as it flows through their Big Eddy and Ragged Rapids hydro-electric generating stations on its way to Georgian Bay and Lake Huron.
- The north branch is the Moon River, and this water flow is controlled by the Moon Dam, which is owned and operated by Ontario Power Generation.

OPG's Big Eddy and Ragged Rapids hydro-electric generating stations have been operating at their maximum flow of 80 to 90 m³/s since November 9, 2018 (3), this was not enough flow out of the Muskoka River watershed so the water level of Lake Muskoka started to rise (4), so on February 12, 2019 OPG opened their Moon Dam (5) which had been closed since mid-January 2019, so the water level of Lake Muskoka started to go down (6).

But this was too late. The water level did not get down to the minimum allowed (7), it didn't even get down to the maximum draw-down of last year (2). As a result, when the April showers started, the ground was still frozen so wouldn't absorb the rain, and this with the warmer temperatures rapidly melted the snow-pack and the water levels quickly increased to above the Normal Operating Zone (8) resulting in the spring flooding of 2019.

Observations:

- Had the water level of Lake Muskoka been drawn-down the additional 6" allowed, the flooding would have been reduced (though not by the full 6").
- Note that all summer of 2018 the operation of the OPG generating stations were cycled on and off (9), as there wasn't enough flow to run them continuously, so the Bala would be as well; starting without warning, and creating huge dangers for the in-water recreation there.