

# Reservoir Impoundment

## For September 3, 2020

Reservoir Impoundment at Keeyask started August 31, 2020. Impoundment is the stage of the Keeyask Generation Project where water will be held back upstream of the site to create a reservoir.

The rise of water levels upstream - within the expected area - will be quite slow, averaging 0.5 metres (about two feet) per day. However, water will flow into lower areas as soon as their surrounding landscape will allow; these localized areas may fill in quickly as they become accessible to the rising water level. This means that localized areas may appear to show a more rapid rise in water level.

Water levels will continue to rise gradually until impoundment is complete. Impoundment is expected to last five to seven days.

### Water Levels

Split Lake Level		
Sept 1	Sept 2	Forecast for Sept 3
<b>168.38 m 552.4 ft</b>	<b>168.35 m 552.3 ft</b>	<b>168.25 to 168.35 m 552.0 to 552.3 ft</b>

Clark Lake Level		
Sept 1	Sept 2	Forecast for Sept 3
<b>167.83 m 550.6 ft</b>	<b>167.81 m 550.5 ft</b>	<b>167.75 to 167.85 m 550.3 to 550.7 ft</b>

Gull Lake Level		
Sept 1	Sept 2	Forecast for Sept 3
<b>157.23 m 514.8 ft</b>	<b>157.64 m 517.2 ft</b>	<b>158.0 to 158.5 m 518.3 to 520.0 ft</b>

Level at Keeyask GS (inside the water-up area)		
Sept 1	Sept 2	Forecast for Sept 3
<b>157.1m 515.4 ft</b>	<b>157.5 m 516.7 ft</b>	<b>157.9 to 158.5 m 518.0 to 520.0 ft</b>

### How are water levels raised during impoundment?

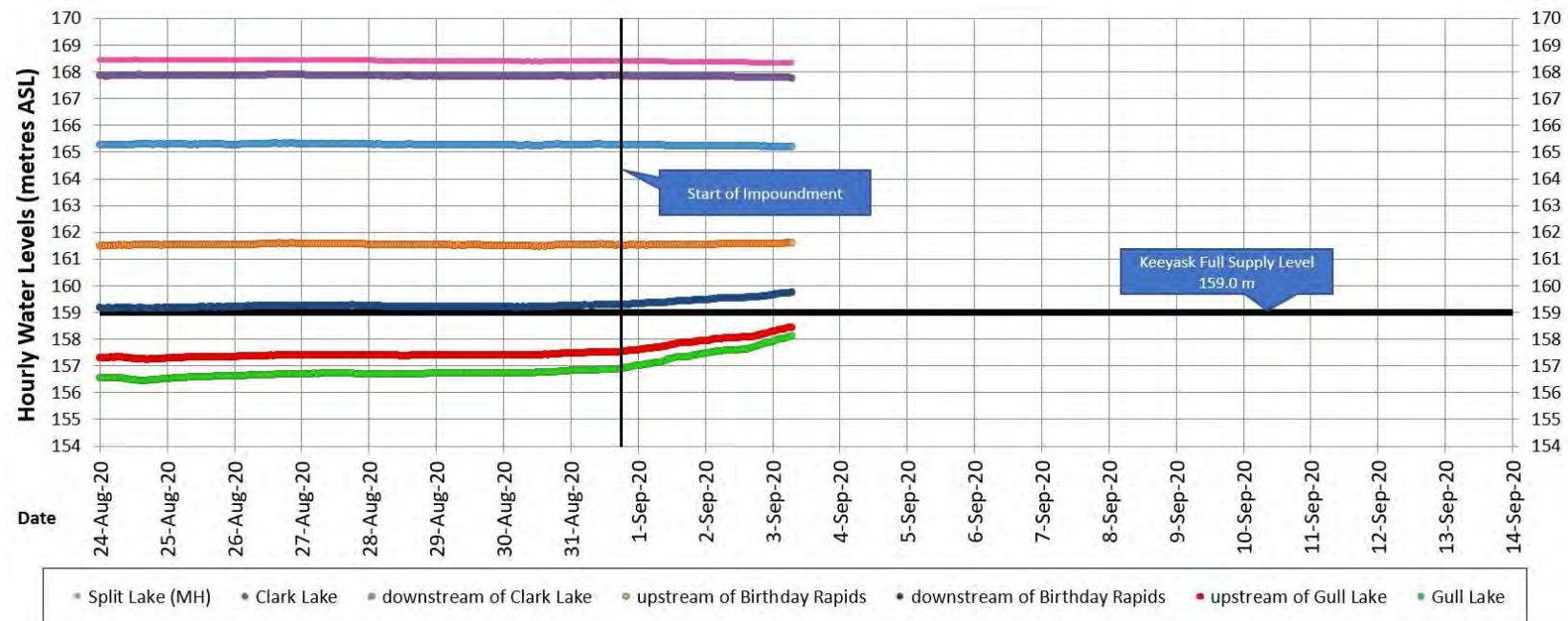
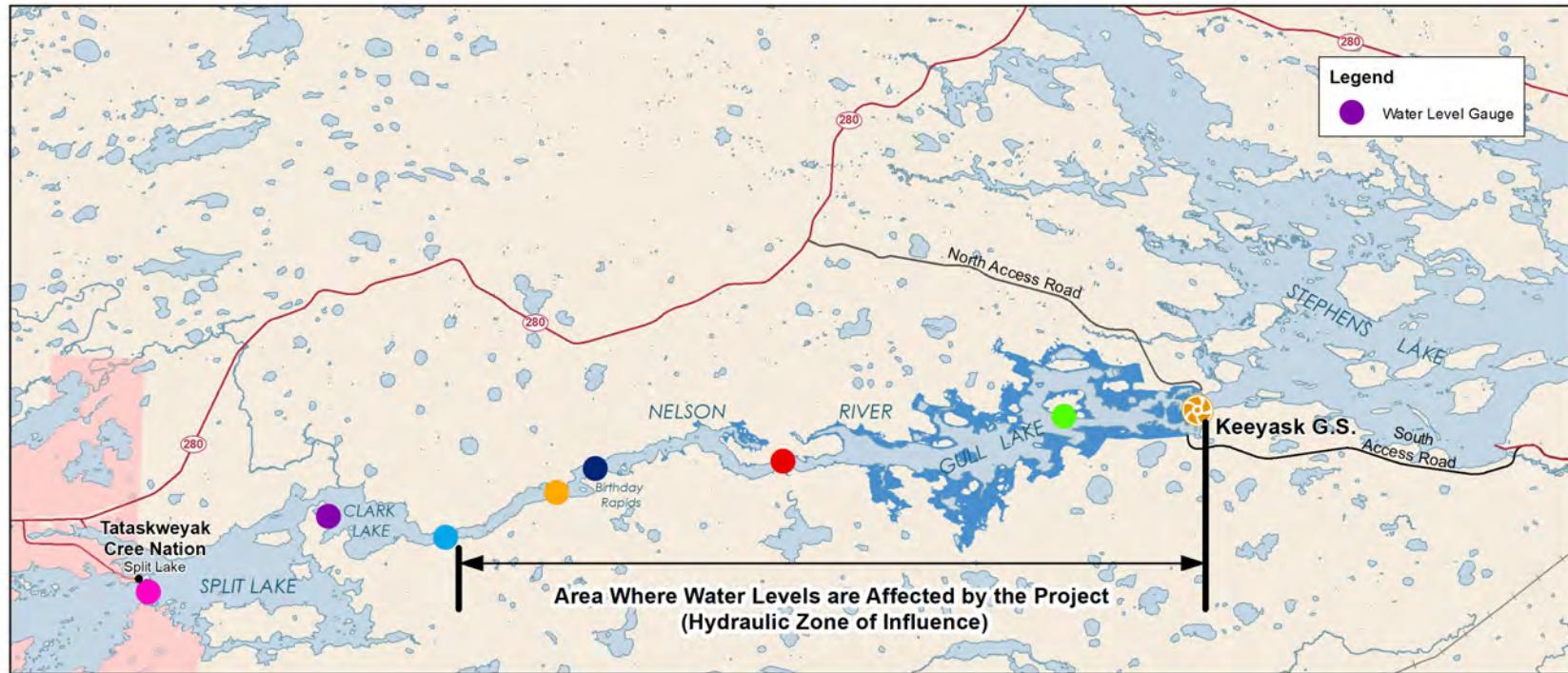
The flow of the Nelson River has been passing through the Keeyask spillway since August 2018. Water levels upstream of the spillway and in Gull Lake are controlled by the spillway gates. The gates will be lowered during impoundment to reduce the flow resulting in a slow increase in water levels on Gull Lake to create the planned reservoir. Increases will be smaller at locations further upstream of Gull Lake with **no increases expected on Clark Lake or Split Lake**.

### How are water levels monitored?

Water levels are monitored at seven sites from Split Lake to the Keeyask Generating Station. Water levels are shown on the following page and will be updated daily.

**STAY SAFE:** Due to rapidly changing conditions avoid all travel on the Nelson River from Clark Lake outlet to the Keeyask Site during and immediately after impoundment.





After impoundment, the reservoir will extend approximately 42 kilometres from the Keeyask Generating Station to about 3 kilometres downstream of the outlet of Clark Lake.

## Reservoir Impoundment Monitoring

Water levels are expected to reach the minimum operating level of 158 metres (518.4 feet) early September 3 and reach the full supply level of 159 metres (521.7 feet) sometime on Friday, September 4 or the following day. With impoundment underway there is an increase in the amount of floating woody debris in the area. A debris management program will be implemented immediately following impoundment and will continue for several weeks this fall. Implementation of this program will then resume during the 2021 open water season, consistent with the Joint Keeyask Development Agreement.

Surveys by helicopter, boat, and truck were done in the days leading up to impoundment, and are being continued during impoundment, to monitor wildlife and waterway conditions in the future reservoir area. To date, no unexpected effects to wildlife have been noted.

Bank swallows are no longer present at any of the nesting sites within the future reservoir area. There are three occupied beaver lodges in the future reservoir area that are being monitored. To date, very few large mammals have been observed during daily surveys (one black bear, one caribou with a calf, no moose).

All four partner community ATK monitoring staff participated in helicopter surveys during the first few days of impoundment. Planning is underway to involve ATK staff in additional monitoring activities. Boat and truck monitoring at site continues by technical science monitoring staff.



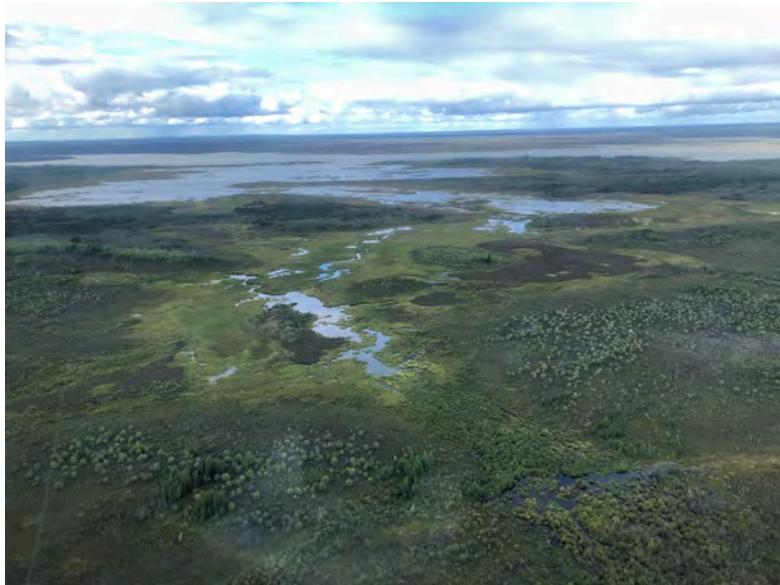
South Dyke looking west prior to impoundment.

*Photo taken Aug 25, 2020*



South Dyke looking west during impoundment.

*Photo taken Sept 2, 2020*



Rabbit Creek looking north  
towards Gull Lake.  
*Photo taken Sept 2, 2020*



Floating islands and debris in Gull  
Lake near Seebesis Bay.  
*Photo taken Sept 2, 2020*



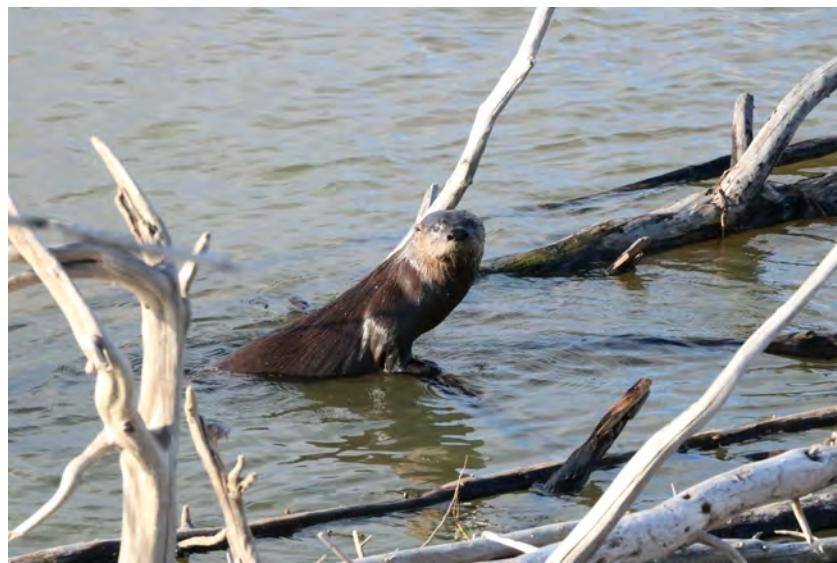
Gull Lake (top) starting to  
connect to Little Gull Lake  
(bottom).  
*Photo taken Sept 2, 2020*



Monitoring staff looking for small mammals along South Dyke.  
*Photo taken Sept 2, 2020*



Canada goose along the South Dyke.  
*Photo taken Sept 2, 2020*



River otter near the Keeyask upstream boat launch along the North Dyke.  
*Photo taken August 29, 2020*



Keeyask Spillway and South Dyke with accumulating debris.  
Photo taken Sept 2, 2020

**Stay Safe: Travel is not recommended in the area shown below during and immediately after impoundment.**



Visit these websites for more information on:

Impoundment: [keeyask.com](http://keeyask.com)

Water levels and flows: [www.hydro.mb.ca/waterlevels](http://www.hydro.mb.ca/waterlevels)

Weather: [https://weather.gc.ca/forecast/canada/index\\_e.html?id=MB](https://weather.gc.ca/forecast/canada/index_e.html?id=MB)

If you have any questions or concerns, please contact your KCN Site Rep or Diana Mager at [dmager@hydro.mb.ca](mailto:dmager@hydro.mb.ca)

