

# Reservoir Impoundment

September 6, 2020

## Reservoir Impoundment at Keeyask is completed.

Reservoir Impoundment at Keeyask started in late afternoon on August 31, 2020 and was completed in five days, reaching a peak water level on Gull Lake of about 158.92 metres (521.4 feet) late Saturday afternoon, September 5, 2020.

Water level data show that there has been no changes in water levels on Split Lake and Clark Lake due to the impoundment of the Keeyask Generating Station reservoir. While the water level on Gull Lake was raised approximately 2.05 metres (6.7 feet), the water levels on Split Lake and Clark Lake decreased about 0.17 metres (7 inches). Water levels on Split Lake, Clark Lake and immediately downstream of Clark Lake dropped slightly during impoundment because flows into Split Lake were decreasing during this time.

## Water Levels

Split Lake Level		
Sept 4	Sept 5	Forecast for Sept 6
168.27 m 552.1 ft	168.23 m 551.9 ft	168.13 to 168.23 m 551.6 to 551.9 ft

Clark Lake Level		
Sept 4	Sept 5	Forecast for Sept 6
167.74 m 550.23ft	167.70 m 550.2 ft	167.60 to 167.70 m 549.9 to 550.2 ft

Gull Lake Level		
Sept 4	Sept 5	Forecast for Sept 6
158.53 m 520.1 ft	158.86 m 521.2 ft	158.7 to 159.0 m 520.7 to 521.7 ft

Level at Keeyask GS (inside the water-up area)		
Sept 4	Sept 5	Forecast for Sept 6
158.4m 519.7 ft	158.77 m 520.9 ft	158.7 to 159.0 m 520.7 to 521.7 ft

## How were water levels raised during impoundment?

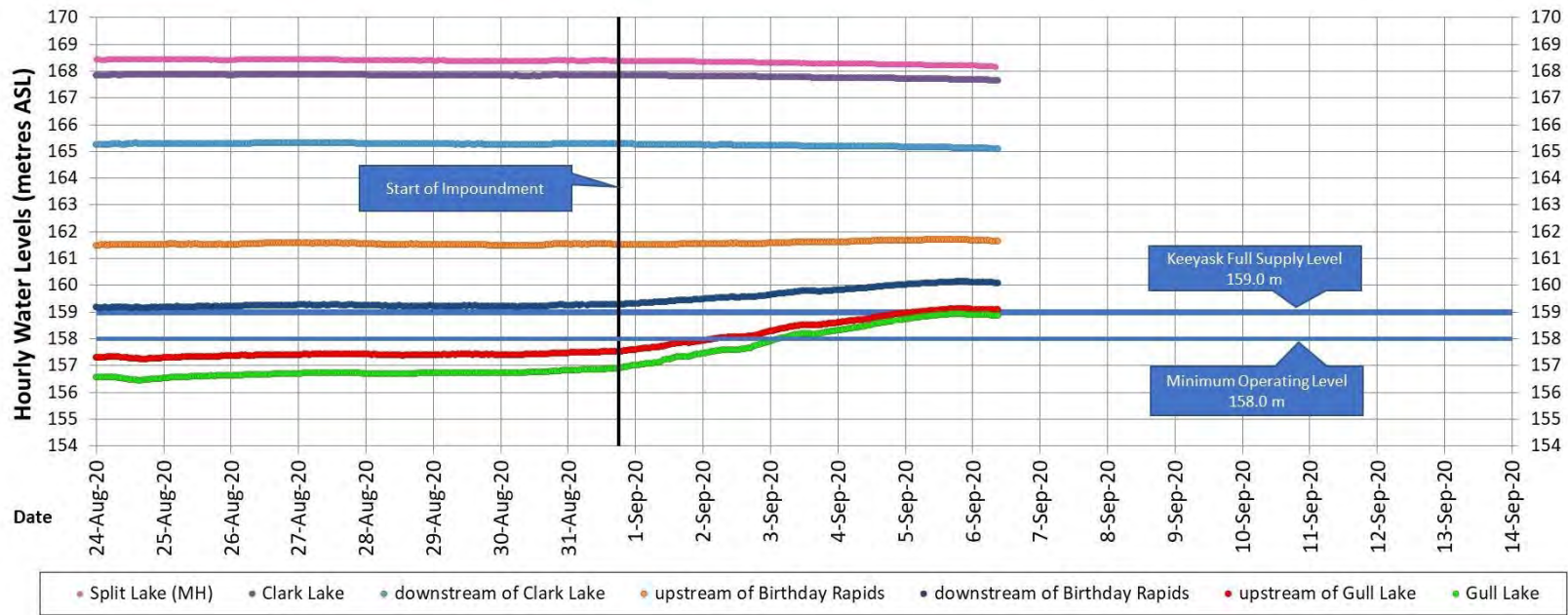
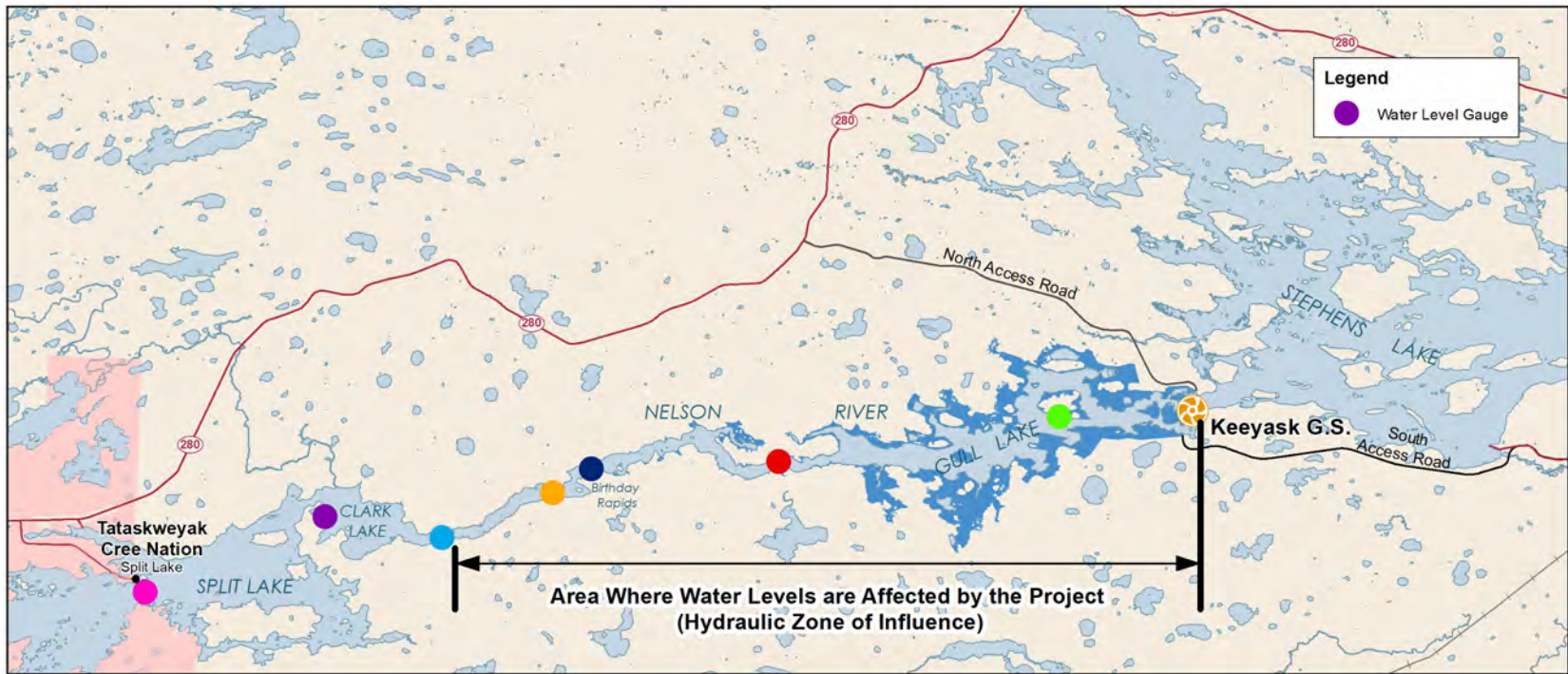
The flow of the Nelson River has been passing through the Keeyask spillway since August 2018. Water levels upstream of the spillway and in Gull Lake are controlled by the spillway gates. The gates were lowered during impoundment to reduce the flow resulting in a slow increase in water levels on Gull Lake to create the planned reservoir. Smaller increases were observed at locations further upstream of Gull 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.

**STAY SAFE:** Due to rapidly changing conditions avoid all travel on the Nelson River from Clark Lake outlet to the Keeyask Site 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

The rise of water levels upstream – within the expected area – averaged 0.5 metres (about two feet) per day and peaked at a level of about 158.92 metres. The water level in the Keeyask forebay (Gull Lake) is within the normal operating range of 158-159 metres (518.4 to 521.7 feet). It is expected that the forebay water level will fluctuate within this range going forward.

Surveys by helicopter, boat, and truck were done in the days leading up to impoundment, and were continued during impoundment, to monitor wildlife and waterway conditions in the future reservoir area. No unexpected effects to wildlife were noted.

All four partner community ATK monitoring staff participated in a number of helicopter surveys during impoundment. FLCN ATK monitoring staff were also able to participate in boat and truck monitoring at site with technical science monitoring staff (within the current site and community pandemic protocols).



Birthday Rapids on first day of reservoir impoundment.  
*Photo taken Sept 1, 2020*



Birthday Rapids on last day of reservoir impoundment  
*Photo taken Sept 5, 2020*



Aerial view of the Neslon River looking downstream from Birthday Rapids.  
*Photo taken Sept 5, 2020*



Aerial view of the Keeyask Project Site from Gull Lake looking towards Stephens Lake.  
*Photo taken Sept 5, 2020*





Three swans observed along the South Dyke.  
*Photo taken Sept 5, 2020*



Young Bald eagle observed on the South Dyke. *Photo taken Sept 3, 2020*



TCN ATK monitor participating in aerial survey. *Photo taken Sept 5, 2020*

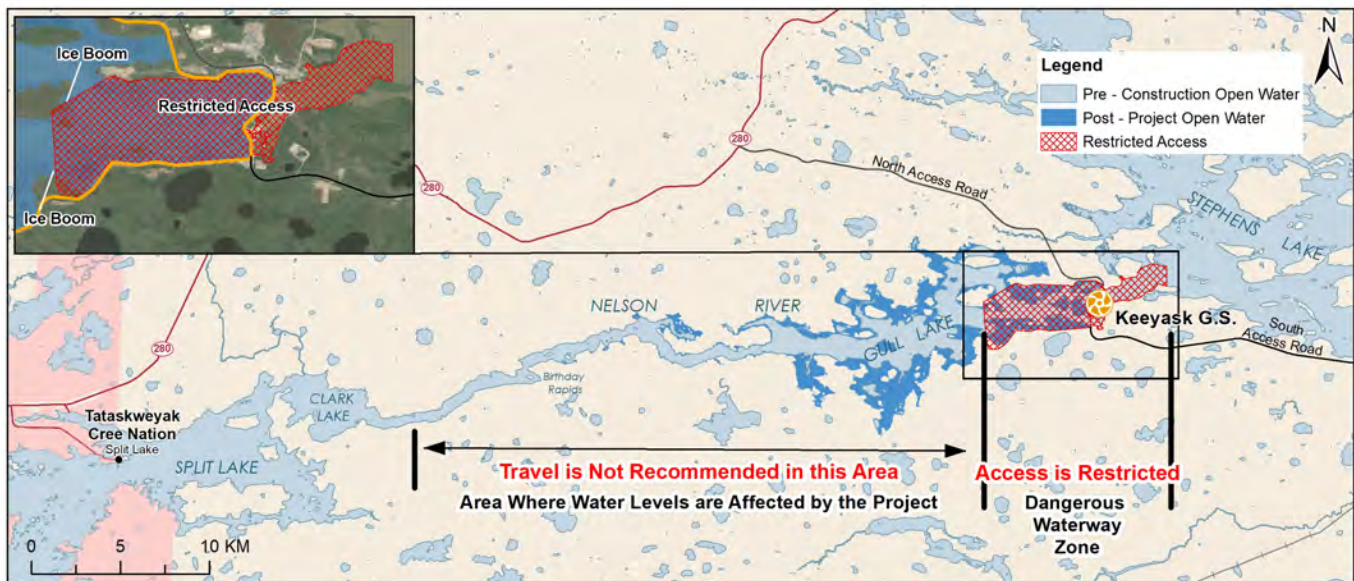


Spruce grouse observed along North Dyke at Little Gull Lake.  
*Photo taken Sept 5, 2020*



Upstream boat launch at the Keyask site.  
 Photo taken Sept 5, 2020

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



**Visit these websites for more information on:**

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

