

# Reservoir Impoundment

## For September 2, 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		
August 31	Sept 1	Forecast for Sept 2
168.40 m 552.5 ft	168.38 m 552.4 ft	168.34 to 168.40 m 552.1 to 552.5 ft

Clark Lake Level		
August 31	Sept 1	Forecast for Sept 2
167.85 m 550.7 ft	167.83 m 550.6 ft	167.75 to 167.85 m 550.3 to 550.7 ft

Gull Lake Level		
August 31	Sept 1	Forecast for Sept 2
156.87 m 514.7 ft	157.24 m 515.9 ft	157.5 to 158.0 m 516.7 to 518.4 ft

Level at Keeyask GS (inside the water-up area)		
August 31	Sept 1	Forecast for Sept 2
156.7 m 514.1 ft	157.12 m 515.5 ft	157.4 to 158.0 m 516.4 to 518.4 ft

### How are water levels raised during impoundment?

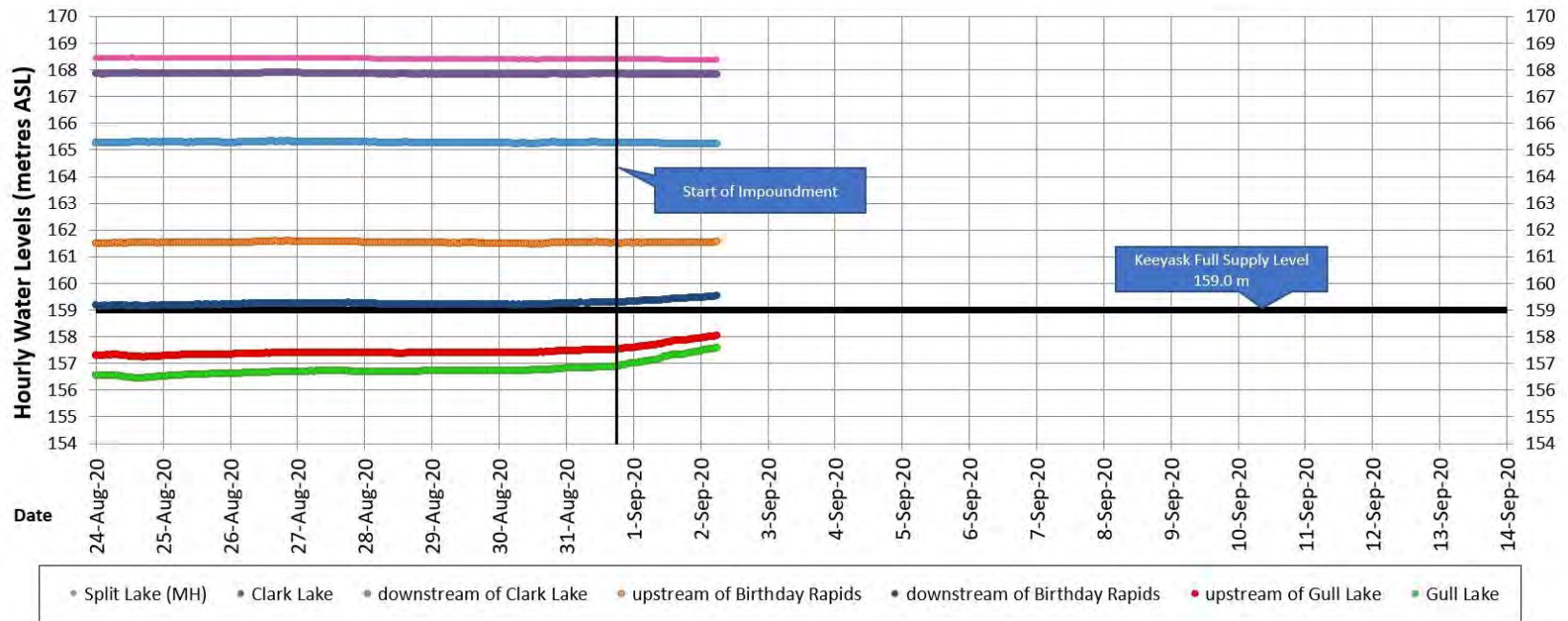
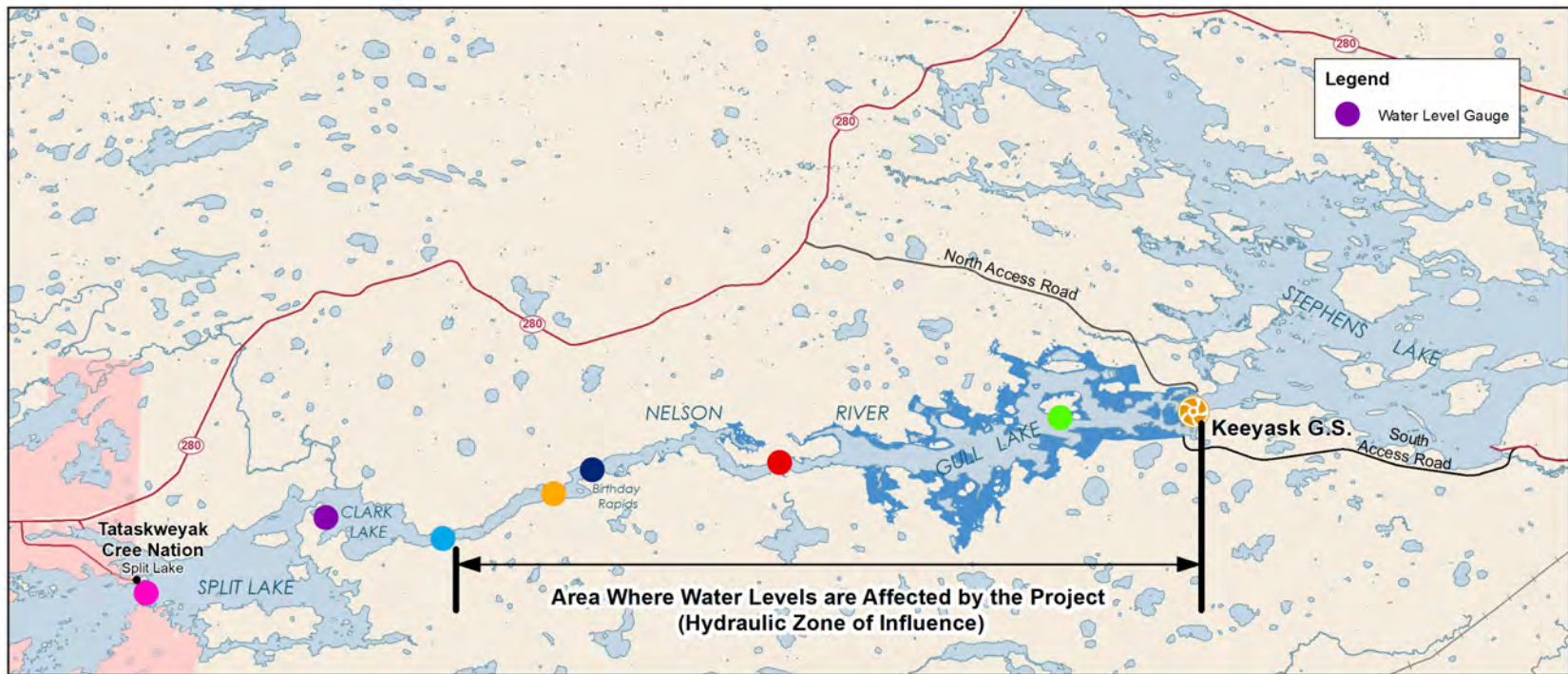
The flow of the Nelson River has been passing through the Keeyask spillway since August 2018. Water levels upstream of the spillway and in Gull Lake are controlled by the spillway gates. The gates will be lowered during impoundment to reduce the flow resulting in a slow increase in water levels on Gull 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 going up as anticipated. New islands are beginning to form and other areas of land are being covered in water. Monitors have observed an increase in woody debris in Gull Lake. 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 have been noted.

There were two bank swallow colonies with birds still present, but the burrows were located many metres above the area that will be affected by water level increases during impoundment. Two bald eagles were observed perching on replacement nesting platforms located just outside of the future reservoir area. There have been three occupied beaver lodges noted in the future reservoir area that are being monitored.

TCN, WLFN and FLCN ATK monitoring staff have participated in the helicopter surveys over the past few days. Planning is underway to involve ATK staff in additional monitoring activities. Boat and truck monitoring at site continues by technical science monitoring staff.



Nelson River shoreline at entrance of Gull Lake before impoundment.  
*Photo taken Aug 25, 2020*



Nelson River shoreline at entrance of Gull Lake one day after impoundment started.  
*Photo taken Sept 1, 2020*



Effie Bay looking towards Gull Lake and the Keeyask Powerhouse.  
*Photo taken Sept 1, 2020*



New island forming along north side of Nelson River near Portage Creek.  
*Photo taken Sept 1, 2020*



Birthday Rapids looking downstream.  
*Photo taken Sept 1, 2020*



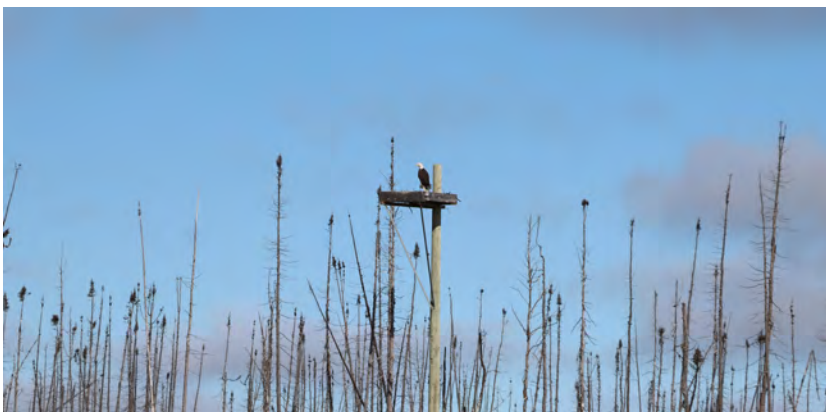
Wildlife crew surveying bank swallow colonies by boat.  
*Photo taken Sept 1, 2020*



Biologist checking for small mammals on a floating peat island.  
*Photo taken Sept 1, 2020*



Beaver lodge observed in the future reservoir area.  
*Photo taken August 25, 2020*

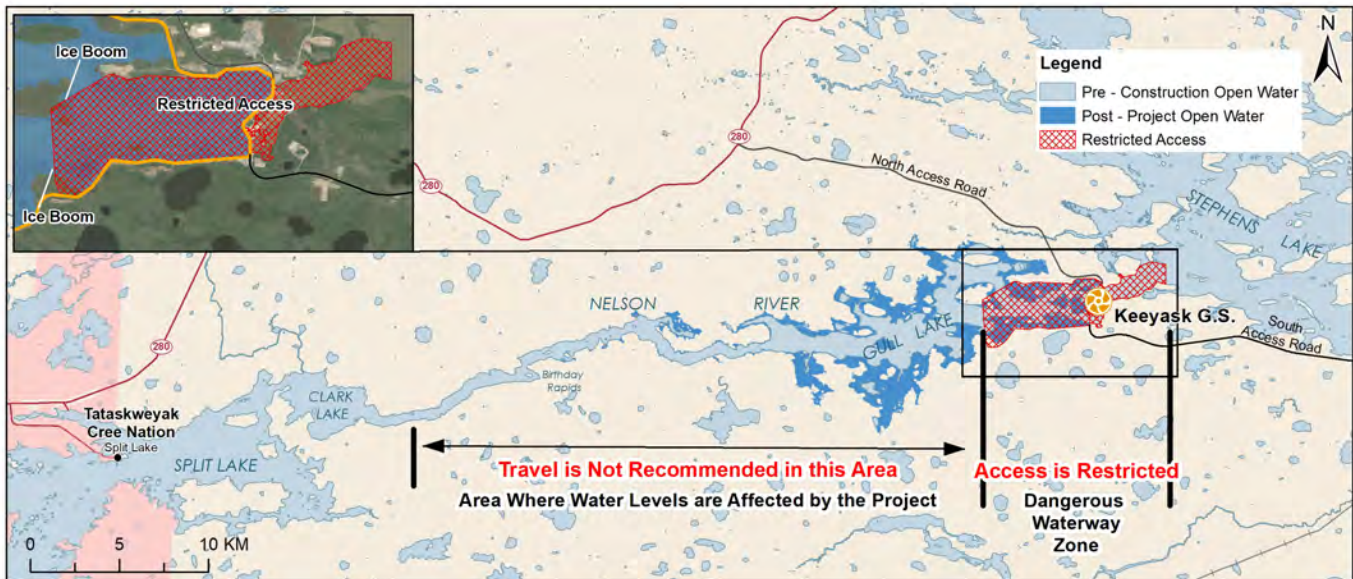


Bald eagle perched on a replacement nesting platform installed in 2017 near the Project site.  
*Photo taken August 25, 2020*



Keeyask Powerhouse and North Dyke.  
 Photo taken Sept 1, 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)

