

Water Level & Flow Update for the Lower Nelson River

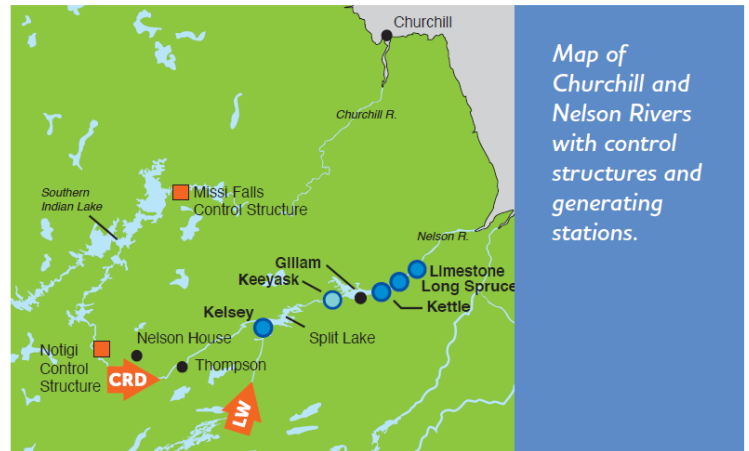
Weekly Update #5 September 8, 2020

Reservoir impoundment at Keeyask began August 31st and was completed on September 5th, 2020. This is the fifth edition of the weekly water level and flow updates provided over the course of the impoundment period to describe water conditions on the Nelson River system generally, and specifically for the lower Nelson River.

Nelson River Watershed

In recent weeks rivers in the Nelson River watershed have transitioned from high flows resulting from significant rainfall across northern Manitoba through much of the summer, to more average flows as rainfall has tapered off. This, combined with reduced outflows from Lake Winnipeg, has led to lower flows and water levels along the Nelson River. Hydro system flows to Split Lake and the Lower Nelson River come from two sources – Lake Winnipeg (LW) outflows through Kelsey generating station (at 3230 cms or 114,100 cfs) and Churchill River Diversion (CRD) through Notigi control structure (at 850 cms or 30,000 cfs). These combined flows total 4080 cms (or 144,100 cfs). The Nelson's flow downstream of Keeyask is 5180 cms (or 182,900 cfs), measured at Limestone. See Map

Nelson River flow depends largely on Lake Winnipeg outflows which are mostly controlled by the Jenpeg Generating Station (upstream of Kelsey Generating Station). In recent weeks these outflows have been reduced from over 120,000 cfs to 60,000 cfs with plans to be reduced further as both tributary inflows to Lake Winnipeg, and energy demands, decrease.



Map of Churchill and Nelson Rivers with control structures and generating stations.

Lower Nelson River (Split Lake to Hudson Bay)

Graphs of Split, Clark, Gull and Stephens Lakes and Nelson River flow are available on the following pages. As of September 8 Lower Nelson River lake and forebay levels are:

- Split Lake 168.10 m (or 551.5 ft)
- Clark Lake 167.59 m (or 549.8 ft)
- Gull Lake 158.83 m (or 521.1 ft)
- Stephens Lake 141.0 m (or 462.6 ft)
- Long Spruce forebay 109.83 m (or 360.3 ft)
- Limestone forebay 85.05 m (or 279.0 ft)

This update is based on a combination of current and forecasted weather data from Environment and Climate Change Canada; recent and historic stream flow conditions based on both federal and Manitoba Hydro data.

If you have any questions or concerns, please contact:

Dale Hutchison–Waterway Community Engagement @ (204) 360-3505 or WCE@hydro.mb.ca.

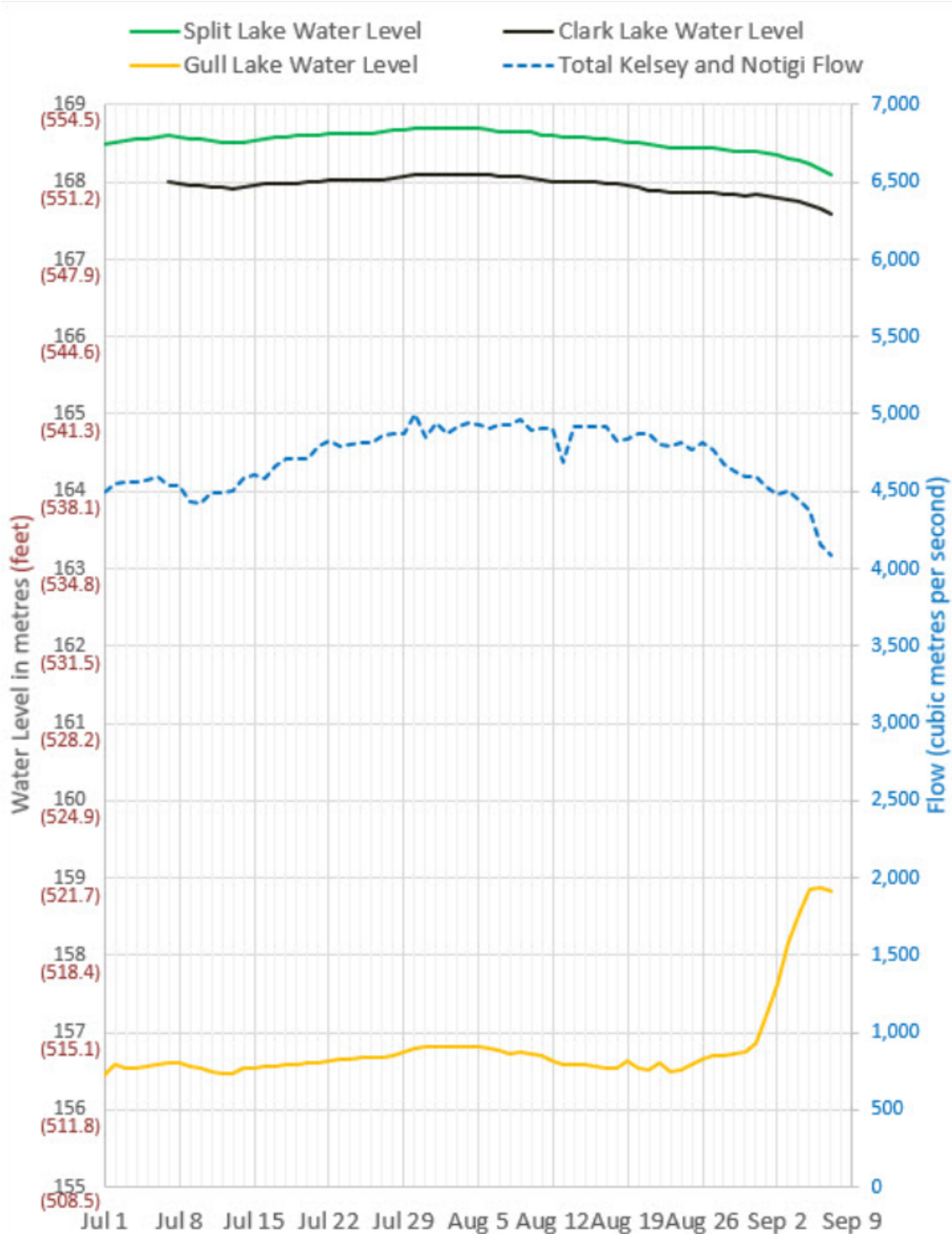
More information on water level forecasts and current year actual outflows are on our website at:

<https://www.hydro.mb.ca/waterlevels/>

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Water Flows to Split Lake and Water Levels Split to Gull Lakes (July 1 to present)



Note: All values shown above are daily averages. Clark Lake gauge was not functioning during early July so that data is missing.

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Stephens Lake Water Levels (July 1 to present)

