

Water Level & Flow Update for the Lower Nelson River

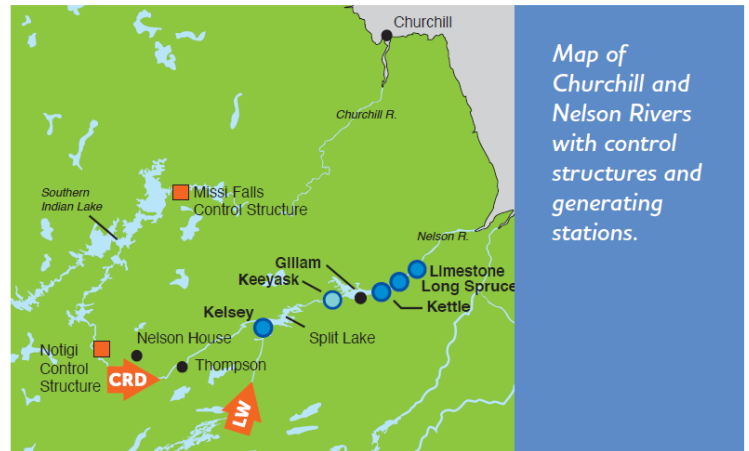
Weekly Update # 1 August 11, 2020

Reservoir impoundment at Keeyask is scheduled to start late August, 2020. This is the first edition of the weekly water level and flow updates that will be provided over the course of the impoundment period to describe the water conditions on the Nelson River system generally, and specifically for the lower Nelson River.

Nelson River Watershed

Significant precipitation across northern Manitoba through the summer has kept local tributary inflows to the Nelson River very high. This, combined with high outflows from Lake Winnipeg, has led to high 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 4270 cms or 150,800 cfs) and Churchill River Diversion (CRD) through Notigi control structure (630 cms or 22,200 cfs). These combined flows total 4900 cms (or 173,000 cfs). The Nelson's flow downstream of Keeyask is 6160 cms (or 217,500 cfs), measured at Limestone. See Map

Nelson River flow depends largely on Lake Winnipeg Water level: Lake Winnipeg outflows are largely controlled by the Jenpeg Generating Station (upstream of Kelsey Generating Station). Generally there are higher flows through Jenpeg when the level of Lake Winnipeg is higher – last year with Lake Winnipeg 1.5 feet lower at this time, flows through Jenpeg were 60,000 cfs; while this year with the lake 1.5 feet higher, flows through Jenpeg are 120,000 cfs!



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 August 11 Lower Nelson River lake and forebay levels are:

- Gull Lake 156.72 m (or 514.2 ft)
- Split Lake 168.64 m (or 553.3 ft)
- Clark Lake 168.04 m (or 551.3 ft)
- Stephens Lake 141.00 m (or 462.6 ft)
- Long Spruce forebay 109.93 m (or 360.7 ft)
- Limestone forebay 85.13 m (or 279.3 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.

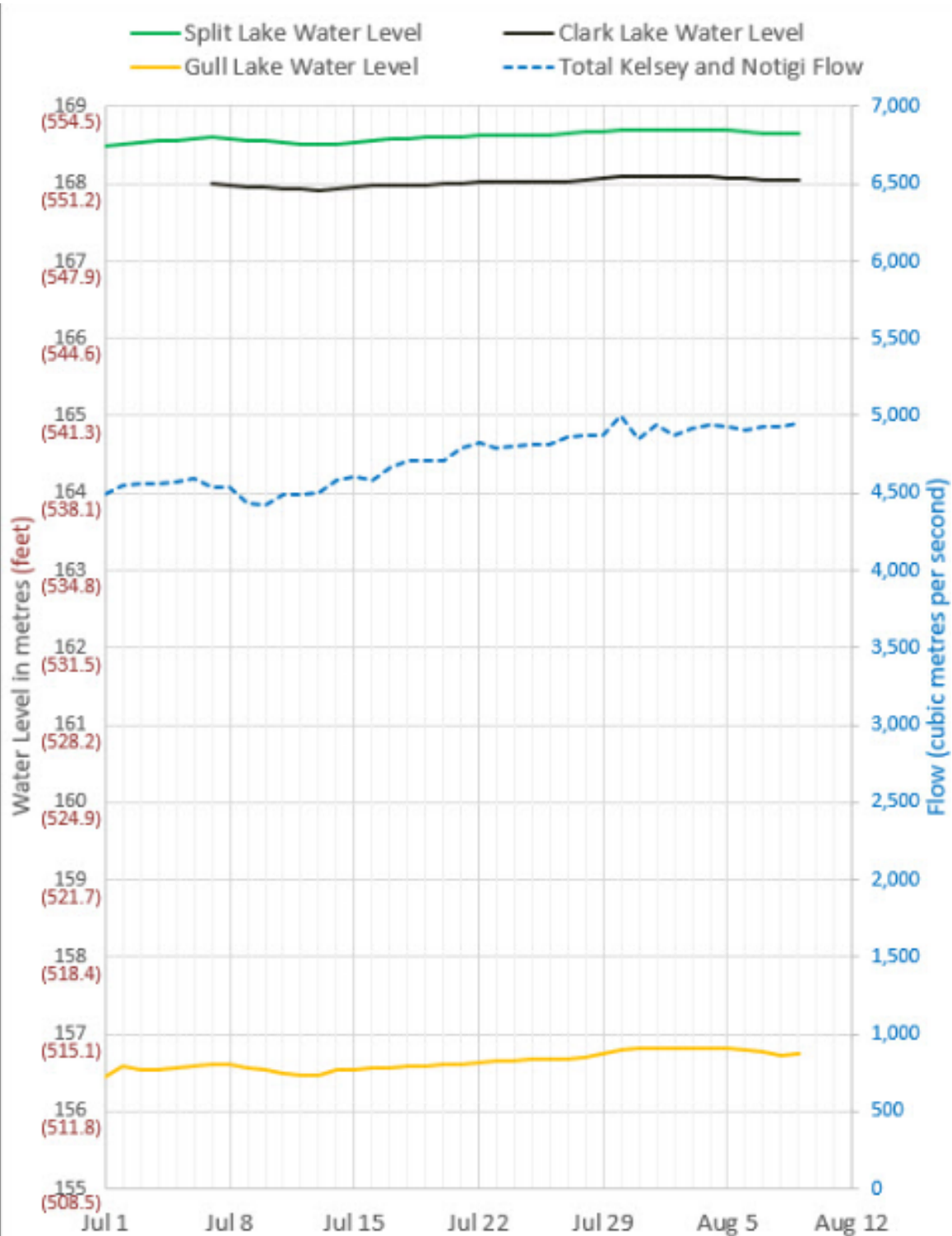
More information on water level forecasts and current year actual outflows are on our website at:

<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)

