# Lake Winnipeg Water Levels

### Flood Update - Fall 2022

We've received a number of questions from communities regarding Lake Winnipeg water levels. In response, we have prepared this info sheet and are making it available to communities and groups with an interest in Lake Winnipeg.

#### **Current status**

Water levels on Lake Winnipeg have gradually fallen since mid-July. On September 29, the level of the lake was 716 feet above sea level (ASL) and it is forecast to fall below 715 feet ASL before winter freeze up.

For up-to-date water level and flow information, please refer to www.hydro.mb.ca/waterlevels.

### Why is the level of the lake still high?

Spring flows into Lake Winnipeg were the highest since records began in 1913. At the end of May, all the rivers flowing into Lake Winnipeg contributed to a peak inflow of over 450,000 cubic feet per second (CFS). That's like the water from five Olympic-sized swimming pools or the Pan Am Pool in Winnipeg, flowing into the lake every second.

These exceptional inflows caused Lake Winnipeg to rise more quickly than ever before in recorded history — a full 5.5 feet in the six months between January and mid-July — to a peak of 717.5 feet ASL.

## What is Manitoba Hydro doing to lower the level of the lake?

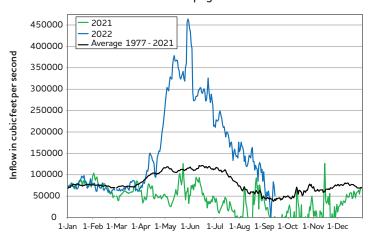
Through Lake Winnipeg Regulation, we continue to pass as much water out of the north end of the lake and down the Nelson River as possible.

Our operating license requires we maintain maximum outflows when the level of Lake Winnipeg is over 715 feet ASL. Lake Winnipeg Regulation, which increases the outflow potential by up to 50 per cent, has been in operation since 1976. The project was approved in 1970 to regulate the flow out of Lake Winnipeg to help reduce shoreline flooding and to optimize power generation along the Nelson River.

### Could Manitoba Hydro have done more to reduce the water levels?

No. Manitoba Hydro reacted to the heavy winter snowpack and projected spring melt conditions by increasing lake outflows in January.

Lake Winnipeg Total Inflow



As spring flood conditions developed in southern Manitoba and Northwest Ontario, outflows were further increased to their maximum. However, record inflows overwhelmed our capacity to move more water out of the lake any faster.

Drought conditions in the summer and fall of 2021 contributed to low water levels across southern Manitoba, including on Lake Winnipeg. Even though there was heavy snowpack coming into the spring of 2022, there was thought to be enough room in the rivers and lakes to absorb the spring melt. Then six Colorado Low storms swept across the Red River and Winnipeg River watersheds. That rain fell on frozen ground and immediately flowed into the rivers and lakes causing unprecedented flows on the Winnipeg River and flood levels on the Red River and other tributaries.

These inflows to Lake Winnipeg simply overwhelmed the outflow potential and that surplus water drove an unprecedented rise in water levels. The peak outflow, which naturally coincides with the lake's peak level, reached about 185,000 CFS in mid-July.

Record inflows to Lake Winnipeg also contributed to high river flows and lake levels on the Nelson River this summer and fall

If you have any additional questions or concerns, please contact us at WCE@hydro.mb.ca.

