

## **EXTREME FLOWS IN THE WINNIPEG RIVER WATERSHED**

Record precipitation for the month of April has caused extremely high flows to develop in the Rainy River-Lake of the Woods watershed. The Lake of the Woods Control Board (LWCB) sharply increased outflow from Lake of the Woods into the Winnipeg River in response to rising inflows, but the maximum outflow capacity is much less than the current rate of inflow rate to Lake of the Woods.

Lake of the Woods is expected to rise toward the top of the legislated operating range for the lake by mid-May. The LWCB is directing the full opening of the Norman Dam in Kenora by May 7 in response. Lake of the Woods and Winnipeg River Ontario water levels will continue to rise until inflow to Lake of the Woods falls below the outflow rate. The rate of rise will depend on rainfall in the coming weeks. Wet weather could result in very high lake and river levels and preparations for this should be made in areas that have had impacts from past high-water events.

High flows are expected to develop in the Lac Seul-English River local watershed over the next week as the late melt of a very deep snowpack develops. Lac Seul outflow increases are scheduled.

Combined flows of the Winnipeg River and English River will see high water levels develop in May through the Whiteshell.

### **Record April Precipitation Leads to Extreme Flows**

Following the drought conditions of 2020 and 2021, this past winter saw a substantial snowpack develop by the end of March. The LWCB adjusted outflow from Lake of the Woods throughout the winter to create storage room in the lake in anticipation of a moderately high spring freshet runoff, and continued gradual outflow increases in early April.

Unusually cold conditions in April delayed the start of the spring freshet, and additional snowfall accumulated. Colorado lows passed through the region in three consecutive weeks, dropping heavy precipitation. April precipitation was the highest on record for the Lake of the Woods and Rainy-Namakan watersheds. The combination of rainfall, melting snow and frozen ground led to the rapid development of extremely high Rainy River flows. At Rainy Lake, dam operators are releasing very high flows as the lake quickly rises, while natural tributaries to the Rainy River are adding more flow than the dam. The result is exceptionally high inflow to Lake of the Woods.

### **Rapid Lake of the Woods and Winnipeg River Level Rise**

Lake of the Woods has risen by 65 cm (25 in) since early April, while the Winnipeg River near Kenora has risen by 170 cm (67 in) in the same period. Most of the Winnipeg River level rise has occurred in the past two weeks as the LWCB directed a series of large outflow increases.

The maximum outflow rate from Lake of the Woods depends on the lake level. The lake provides the pressure to push water through the outlet and past Norman Dam, and the higher the lake the greater the pressure. With the lake lower than normal summer levels for much of April, the maximum outflow capacity has been relatively low. The most recent outflow increase, on Sunday, May 1, brought outflow to approximately 90% of the maximum possible for the lake level, but this was still just 1/3 of the inflow rate on May 1. The lake will continue to rise so long as the inflow is greater than the outflow.

Even with dry weather, the LWCB projects that Lake of the Woods will near the top of the operating range for Lake of the Woods (323.47 m or 1061.25 ft) by mid-May.

### **LWCB Directing Full Opening of Norman Dam in Kenora**

Based on this projection, the LWCB is directing additional outflow increases this week, with a full opening of the Norman Dam by May 7. Once the dam is fully opened, the peak level for Lake of the Woods and for the Winnipeg River will be determined by rainfall over the coming weeks.

A return to wet weather could see very high water levels develop on Lake of the Woods and the Winnipeg River. Property owners and communities affected by past high water events should make preparations for this possibility.

### **Lac Seul and the English River Watershed**

April also brought record precipitation to the Lac Seul watershed, where the spring freshet has slowly begun. Exceptionally high snowpack in this region is expected to result in a rapid rise in tributary flows over the next week as the snow melt picks up. The LWCB is directing further outflow increases from Lac Seul this week as the lake is expected to rise quickly.

### **Winnipeg River in Manitoba**

The Winnipeg River at Nutimik Lake has risen sharply in recent weeks in response to outflow increases from Lake of the Woods, heavy precipitation, and local spring freshet flows. With additional outflow increases from Lake of the Woods and Lac Seul, high water levels along the Winnipeg River through the Whiteshell are expected in May.

### **Further Information**

For regular updates on lake and river level forecasts, including details on this week's outflow increases from Lake of the Woods and Lac Seul, visit the LWCB's Notice Board [www.lwcb.ca/noticeboard.html](http://www.lwcb.ca/noticeboard.html) or call its toll-free Recorded Message line: at 800-661-5922 ex. 1

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