

FLOOD REPORT FOR MANITOBA

April 18, 2019

Flood Warning*: - **Red River, from Emerson to the Red River Floodway Channel Inlet**

High Water Advisory*: - **Saskatchewan and Carrot Rivers, in the vicinity of the town of The Pas, due to potential for ice jamming during the melt and ice break-up period.**

Summary

- Forecasted peak water levels on the Red River from Winnipeg to Emerson have been adjusted based on updated information from the U.S. Flow measurements will occur daily at Emerson from now until the peak to verify and update forecasted peaks.
- Based on revised forecasted peak levels, an earthen ramp will be built at the north side of Morris April 21- 22. The lanes of PTH 75 at Morris will remain open as long as possible but high water levels may require closure of PTH 75 north of Morris next week.
- The Red River Floodway is operating under Rule 1 to lower water levels in Winnipeg while keeping water levels at or slightly below natural upstream of the inlet control structure.

Weather

- There was minimal precipitation across southern Manitoba yesterday. The low pressure system that moved through the southern portion of the Red River basin brought 9 mm of rain at Grand Forks and only 2 mm of rain at Fargo.
- Some precipitation is expected over the weekend in southern Manitoba, with some areas receiving 10-15 mm of rain. Temperatures for early next week appear to be at or slightly above seasonal.

Red River Basin

- Forecasted peak water levels on the Red River have been adjusted based on updated information from the U.S. Flow measurements will occur daily at Emerson from now until the peak to verify and update forecasted peaks. The measurement taken yesterday at Drayton, North Dakota by the U.S. Geological Survey (USGS) is the first since the river became ice-free.
- Most water levels on portions of the Red River in the U.S. are beginning to see increases as the second, smaller crest arrives. Water levels on the Red River in Manitoba upstream of Winnipeg continue to rise. The recorded water level rise in the last 24 hours was 0.6 feet at Emerson, 0.5 feet at Morris, and 0.4 feet at Ste. Agathe.

- The river is above banks at some locations, such as St. Jean Baptiste and Emerson. Natural Resources Canada produces up-to-date flood extent maps, which are available online at <https://www.nrcan.gc.ca/hazards/floods>. The satellite imagery used to produce these maps is captured on a three-day cycle, with the next update occurring on April 21, 2019.



Figure 1: Natural Resources Canada flood extent map (April 18, 2019)

- Based on the recent flow measurements, the forecasted water levels on the main stem of the Red River have gone up and the peak time at most locations on the Red River has now shifted earlier by a day or two. The latest forecast information is summarized below.

	Today's level (ft)	Forecasted peak	
		Level (Ft)	Date
Emerson	784.84	789.1-790.0	Apr 20-22
Letellier	780.31	783.6-784.5	Apr 21-23
St. Jean	773.94	779.1-780.3	Apr 22-24
Morris (@ PTH 23)	768.73	775.6-777.3	Apr 23-26
Ste. Agathe	760.72	767.5-769.0	Apr 24-27
St. Adolphe	756.80	762.4-764.0	Apr 24-27
Above floodway inlet	753.94	760.3-762.3	Apr 25-28
James Avenue	17.03	18.8-19.0	Apr 25-28

Note: water levels at Emerson and Ste Agathe will differ from those posted on the Water Survey of Canada website because different vertical datums are in use. For conversion information please see the most recent flood sheet.

- Provincial crews are deployed in a number of communities in the Red River Valley preparing for and implementing ring dike closures. Partial ring dike closures are currently in place at Emerson and at St. Jean Baptiste, and the communities will remain accessible by road. Partial ring dike closures are expected at Morris, Ste. Agathe, and St. Adolphe and are possible at Letellier as river levels rise. Over 300 super sandbags have been installed to provide necessary freeboard on the dike at Ste Agathe.
- Based on revised forecasted peak water levels, an earthen ramp will be built at the north side of Morris April 21- 22. The lanes of PTH 75 at Morris will remain open as long as possible but high water levels may require closure of PTH 75 north of Morris next week.
- Crews are also running pumping operations to facilitate internal drainage inside ring dike communities. Pumping operations are underway at Emerson, Dominion City, St. Jean, Morris, St. Adolphe, and Rosenort. As the water rises pumping operations are expected to be required at Letellier, and Riverside, depending on water levels pumping operations may be required at Brunkild and Aubigny. If pumping is required at Ste. Agathe, the RM of Ritchot will be undertaking these operations.
- The Red River Floodway is operating under Rule 1 to lower water levels in Winnipeg while keeping water levels at or slightly below natural upstream of the inlet control structure. Flow in the Floodway channel was 6,680 cfs (190 cms) this morning. Flows upstream of the Floodway Inlet this morning are approximately 48,100 cfs (1,360 cms).
- Sections of PR 320 remain closed or limited to local traffic because of high water levels. Water levels from Selkirk to the downstream end of the Red River continue to decline, and are expected to rise moderate amounts as the river flows increase. However, the water levels will be well below the peaks that occurred when ice was affecting river levels.

Roseau River

- Water levels on the Manitoba portion of the Roseau River are stable, with some areas having minor decreases. The forecast for the Roseau River is currently under review and will be available later in today's Flood Sheets. The flood watch for the Roseau River has been removed due to the lower water levels.

Northern Manitoba

- Water levels and flows on the Saskatchewan and Carrot Rivers are beginning to increase. Winter ice is mostly intact on these rivers, but some amount of melting and pulling away from the banks is occurring. Sections on the Saskatchewan River continue to open up.
- A high water advisory remains in place for the Saskatchewan and Carrot rivers in the vicinity of The Pas due to potential ice jamming next week. With high temperatures and increasing flows on the Saskatchewan and Carrot Rivers, ice is beginning to deteriorate and in conjunction with rising levels may cause ice blockages that result in sudden rises of water elevations. People are reminded to be watchful of local waterways as ice jams and flood conditions can develop quickly.

Manitoba Lakes

- Manitoba's major lakes remain largely ice covered. The largest lakes are reported at 90% or greater ice coverage, with some smaller lakes in southern Manitoba showing 80% or lower ice coverage. Some of the shallower lakes are less than 50% ice covered.
- Outflow from Lake Manitoba is approximately 3,315 cfs (94 cms) through the Fairford River Water Control Structure.
- The water levels on Manitoba's major lakes are relatively stable and within normal or desirable ranges. Today's water levels are provided below:

Major Manitoba Lakes – April 18, 2019		
Location	Water Level**	
	Metres (m)	Feet (ft)
Dauphin Lake	260.48 m	854.60 ft
Lake Manitoba – Steep Rock	247.36 m	811.56 ft
Lake Manitoba - Westbourne	247.39 m	811.63 ft
Lake St. Martin at Hilbre	243.60 m	799.21 ft
Lake Winnipeg at Gimli	217.42 m	713.32 ft
Lake Winnipeg at Victoria Beach	217.42 m	713.32 ft
Lake Winnipegosis at South	253.54 m	831.82 ft

**water level readings taken today

Notes

- All flow and water level information is based on data available at 7:00 am. Morning Conditions reports, with current water level data, are available on the department's website this morning and flood sheets with updated forecast information will be posted later today at https://gov.mb.ca/mit/floodinfo/#forecasts_reports.
- Any questions or concerns about flood mitigation should be directed first to the municipal authority. Questions about forecasts, water levels, provincial waterways, or provincial water control infrastructure can be directed to 204-945-1165 or by email to floodinfo@gov.mb.ca.
- For detours and road closures please call 511 or visit www.manitoba511.ca.

*Definitions

Flood Warning: A flood warning is issued when river or lake levels are exceeding or are expected to be exceeding flood stage within the next 24 hours.

Flood Watch: A flood watch is issued when river or lake levels are approaching and likely to reach flood stage, but likely not within the next 24 hours.

High Water Advisory: A high water advisory is issued when a heavy storm or high flows are expected and may cause water levels to rise, but not necessarily reach flood stage. A high water advisory can be an early indicator for conditions that may develop into a flood watch or flood warning.