# Hydrologic Forecast Centre

## Manitoba Transportation and Infrastructure

WINNIPEG, MANITOBA

**FEBRUARY FLOOD OUTLOOK**

**February 24, 2026**

Manitoba

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## Executive Summary

The February Outlook Report prepared by the Hydrologic Forecast Centre (HFC) of Manitoba Transportation and Infrastructure indicates a low to moderate risk of significant spring flooding across Manitoba basins. Water levels are expected to remain below dikes and community or individual flood protection levels at all locations where there are dikes and community or individual flood protection works. However, the risk of spring flooding could change depending on future weather conditions, including the amount of precipitation throughout the remainder of winter and spring, as well as the rate of snowmelt and thaw.

Overall, basin conditions across Manitoba indicate generally low to moderate spring runoff potential at this time, with considerable regional variability. Soil moisture, snow accumulation, and river base flows are mostly within or below seasonal norms, while soil frost depths are shallower than normal across much of the province. Some major Manitoba lakes, including Lake Winnipeg and Lake Manitoba, are currently tracking well below normal for this time of the year. Inflows into most major lakes are expected to be below seasonal normals, reflecting generally drier than normal conditions across major contributing river basins. Water levels on most Manitoba lakes are within their operating ranges and are expected to remain within these ranges after the spring runoff. Overall, the risk of significant spring flooding along Manitoba lakes is low.

**Soil Moisture Conditions at Freeze-up:**

Soil moisture at freeze-up is one of the major factors that affects spring runoff potential and flood risk. Soil moisture at freeze-up was generally near normal to below normal for most Manitoba basins, except for parts of southern Manitoba and the United States portions of the Red River and Souris River basins, which have near normal to above normal soil moisture. Parts of northern and

central Manitoba, including parts of the Interlake Region, have below normal soil moisture. Near normal to below normal soil moisture levels thus far indicate a potential for near normal to below normal spring runoff within these river basins; however, the extent of spring runoff is still largely dependent on future weather conditions, including the amount of remaining winter and spring precipitation, as well as snowmelt conditions.

**Winter Precipitation:**

Precipitation from November to February has ranged from near normal to below normal across much of Manitoba, with northeastern Manitoba experiencing particularly dry conditions. In contrast, the Saskatchewan portions of Manitoba river basins, including the Saskatchewan, Churchill and Qu'Appelle River basins, has seen precipitation amounts ranging from normal to well above normal during this period. Winter precipitation ranges from normal to well below normal in the Winnipeg River basin. Most of the U.S. portion of the Red and Souris River basins experienced normal to below normal precipitation.

**Snow Water Equivalent (SWE):**

Snow Water Equivalent (SWE) is the measure of the amount of water content in the snow. Field measurements conducted from February 19 to 23, 2026 indicate that SWE across Manitoba watersheds range from 15 to 148 mm (0.6 to 5.8 inches). The highest SWE was observed in western Manitoba near the Riding Mountain National Park. The Shellmouth Reservoir basin recorded SWE values of 38 to 102 mm (1.5 to 4.0 inches), averaging about 71 mm (2.8 inches), while the Interlake region showed SWE values between 53 and 81 mm (2.1 to 3.2 inches). Snow accumulations are generally within the normal range, except for parts of southern Manitoba where snow accumulation remains below typical values for this time of year.

**Soil Frost Depth:**

Soil frost depth across most of Manitoba is generally shallower than normal this winter. Frost depth is influenced by winter temperatures and the insulation effect of snow cover. Generally, when frost is deeper than normal, it takes longer to thaw, reducing the soil's ability to absorb water and leading to increased surface runoff. In contrast, shallower than normal frost depths allow the soil to absorb more meltwater, which can reduce overland flooding.

**Future Weather:**

Short-term weather forecast by Environment and Climate Change Canada indicates that there is less than 30% chance of receiving more than 25 mm of precipitation between February 23 and March 10, 2026 for most Manitoba basins. Long-term precipitation outlook for March, April, May and June issued in February by the International Research Institute (IRI) at the Columbia Climate School, indicates equal chances of above normal, below normal or near normal precipitation for most Manitoba basins. Similarly, the U.S. Climate Prediction Center's February 19, 2026 outlook forecasts equal chances of above normal, below normal, or near normal precipitation for the U.S. portions of the Red River and Souris River basins from March to May.

**Base Flows and Level Conditions:**

Base flows and levels indicate the amount of water available in the system prior to the spring runoff. Higher base flows may indicate higher soil saturation levels and increased potential for spring runoff. As of February 19, 2026, base flows and levels vary from below normal to above normal in southern Manitoba basins, near normal to below normal in central Manitoba basins, and near normal to well below normal in northern Manitoba basins.

Lake levels across Manitoba remain within their respective operating ranges heading into spring runoff. Lake Winnipeg and Lake Manitoba are well below normal for this time of year, tracking near the 15$^{th}$ and 5$^{th}$ percentiles, respectively. Lake St. Martin is below normal, while Lake Winnipegosis is slightly below normal for this time of year. Shellmouth Reservoir is slightly below its historical normal level as part of routine winter drawdown operations. Dauphin Lake is currently above normal for this time of year. Inflows into most major lakes are expected to be below seasonal normals, reflecting generally drier than normal conditions across major contributing river basins.

**Flood Outlook:**

The preliminary spring flood outlook, based on current basin conditions and future weather condition scenarios, indicates a low to moderate risk of significant flooding across Manitoba basins. The risk of significant flooding is moderate for the Red and Pembina rivers, as well as along the Assiniboine River and its tributaries, including the Souris and Qu'Appelle rivers. A moderate flood risk is also identified within the Interlake region and along the Saskatchewan River

in northern Manitoba. The risk of significant flooding is low for the Rat and Roseau rivers and in the eastern region, including the Winnipeg River basin and Whiteshell Lakes area. Under normal and favourable future weather conditions, most rivers are expected to remain within their banks. However, some locations may exceed bankfull capacity under the unfavourable future weather scenario. As in most years, there remains a risk of ice jam induced flooding on several rivers, including the Saskatchewan, Carrot, Swan, Icelandic and Fisher rivers. The province's practice is to plan and prepare for the unfavourable future weather condition scenario, which represents a 1-in-10 probability of occurrence from now until the spring runoff.

The magnitude of the 2026 spring runoff will continue to depend heavily on weather conditions between now and the spring melt period. Runoff potential is influenced by additional late-winter snowfall, spring rainfall, frost depth at the time of melt, and the timing and rate of thaw. A rapid thaw combined with heavy spring rainfall could increase overland runoff, resulting in higher flows on tributaries and larger rivers. Conversely, a gradual melt under favourable conditions would reduce peak flows and overall flood risk.

**Water Control Structures Operations:**

The Red River Floodway is not expected to be operated under normal and favourable weather conditions. If unfavourable weather occurs and higher flows are experienced, the Floodway will be operated to reduce water levels within the City of Winnipeg. The Portage Diversion is expected to be operated under unfavourable weather conditions. Also, operation of the Portage Diversion may also be necessary to mitigate ice related water level rises on the lower Assiniboine River (from Portage to Winnipeg). The Shellmouth Reservoir is being operated in consultation with the Shellmouth Liaison Committee members in order to reduce the risk of flooding downstream on the Assiniboine River, while also providing sufficient storage for water supply and recreation.

**Preparations:**

The Manitoba government, local authorities and First Nations communities are continuing to prepare for spring flooding. This includes ice cutting and breaking this spring along the Red River and reviewing of existing emergency plans, information sharing, and preparation of resources used in flood response.

## Contents

## Soil Moisture Conditions

A number of different tools have been used to determine the soil moisture at freeze-up. The most common method, which has been used for years, is Manitoba's MANAPI model, which is expressed by the API (Antecedent Precipitation Index) method. The MANAPI model indicates the degree of saturation in the soil. This method uses the recorded precipitation at a large number of meteorological stations throughout the various basins to calculate the amount of water from summer and fall rain that remains in the soil layer and has yet to contribute to runoff.

Figure 1 shows the API map for the fall of 2025 expressed in percent of normal. The API model results indicate that soil moisture at freeze-up was near normal to below normal for most Manitoba basins, except for parts of southern Manitoba and the United States portions of the Red River and Souris River basins, which have near normal to above normal soil moisture.

The U.S. National Weather Service Climate Prediction Center also monitors soil moisture conditions and indicates normal to below normal soil moisture across the U.S. portions of the Red and Souris River basins (Figure 2).

In summary, soil moisture is near normal to below normal for most of Manitoba basins, with the exception of parts of southern Manitoba that has above normal soil moisture levels.

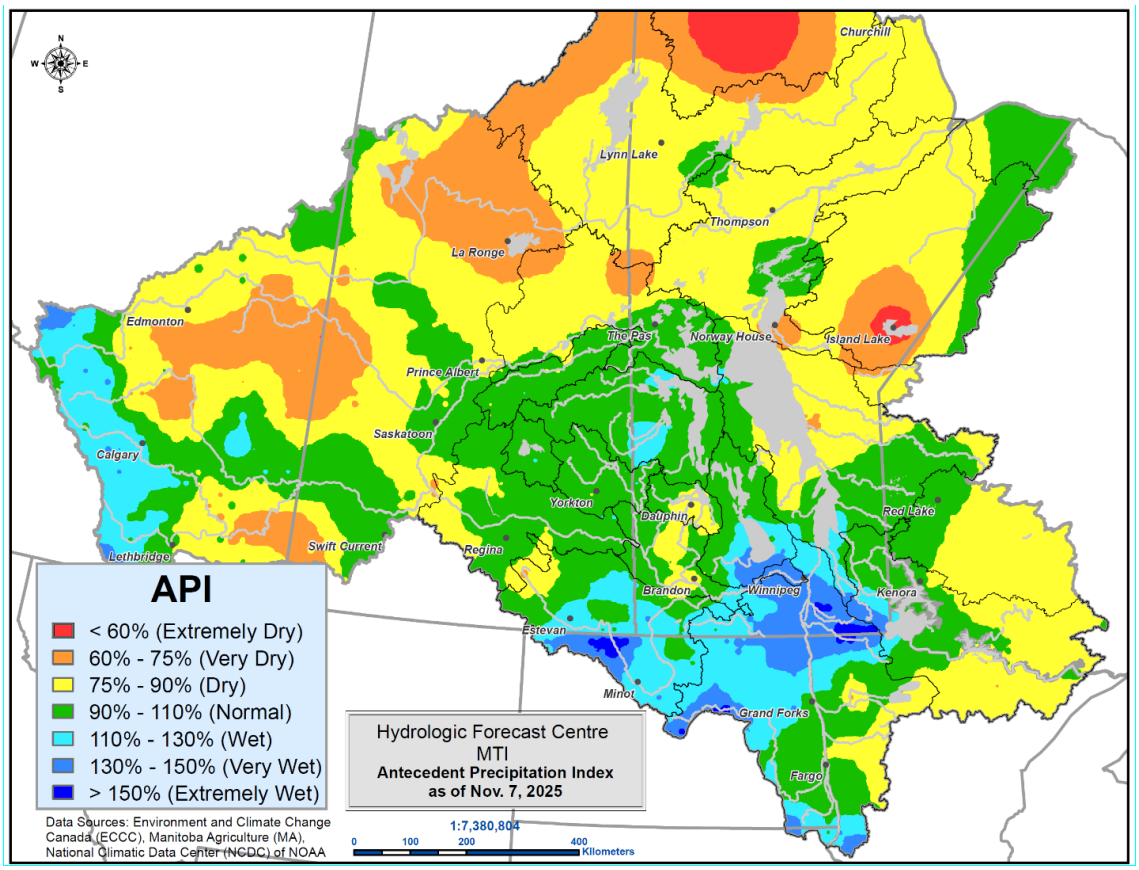


**Figure 1 – Soil moisture expressed as Antecedent Precipitation Index (API) for the fall of 2025.**

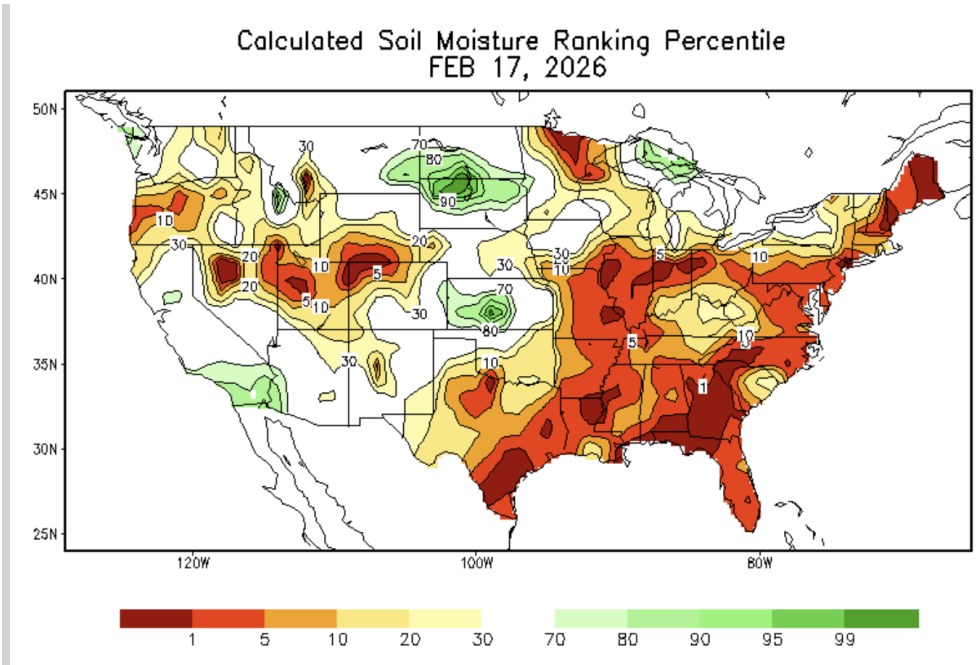


**Figure 2 – Calculated soil moisture ranking percentile as of February 17, 2026, from the National Weather Service.**

## Winter Precipitation

From November to February, precipitation across much of Manitoba ranged from normal to below normal, except for northeastern Manitoba, which received below normal to well below normal precipitation. Most of the U.S. portion of the Red and Souris River basins experienced normal to below normal precipitation. The Saskatchewan portions of Manitoba watersheds, including the Saskatchewan, Churchill and Qu'Appelle Rivers, received normal to well above normal precipitation during this period (Figure 3).

Most areas of Manitoba and the U.S. portion of the Red River basin have received 40 mm to 85 mm (1.6 to 3.3 inches) of precipitation, while some localized areas in southwest Manitoba and in the U.S. portion of the Red River basin have received 25 mm to 40 mm (1.0 to 1.6 inches) of precipitation. Most parts of Saskatchewan and the Winnipeg River basin in Ontario received 55 mm to over 100 mm (2.2 inches to over 4.0 inches) of precipitation during this time (Figure 4).

Most parts of southern and central Manitoba have received precipitation between the 20$^{th}$ and 40$^{th}$ percentiles of historical values, indicating generally dry conditions. Northeastern Manitoba has experienced dry to extremely dry conditions over the winter, receiving precipitation less than 20$^{th}$ percentile. In contrast, portions of northwestern Manitoba and much of Saskatchewan have received precipitation between 40$^{th}$ and 95$^{th}$ percentiles. Most parts of the Red and Souris River basins in the U.S. has received 20$^{th}$ to 60$^{th}$ percentile precipitation. (Figure 5).

As shown in Figure 6, recorded winter precipitation as of February 23, 2026, indicates that most areas of southern and northeastern Manitoba have received approximately 10 mm to 30 mm (0.4 to 1.2 inches) less precipitation than normal for this time of the year. In northwestern Manitoba precipitation ranges from 10 mm (0.4 inches) less to 10 mm (0.4 inches) more than normal for this time of the year. Most parts of the Red and Souris River basins in the U.S. received between 20 mm (0.8 inches) below normal and 10 mm (0.4 inches) above normal precipitation during this period. Across Saskatchewan, precipitation has ranged between 10 mm (0.4 inches) below normal to 30 mm (1.2 inches) above normal for this time of year.

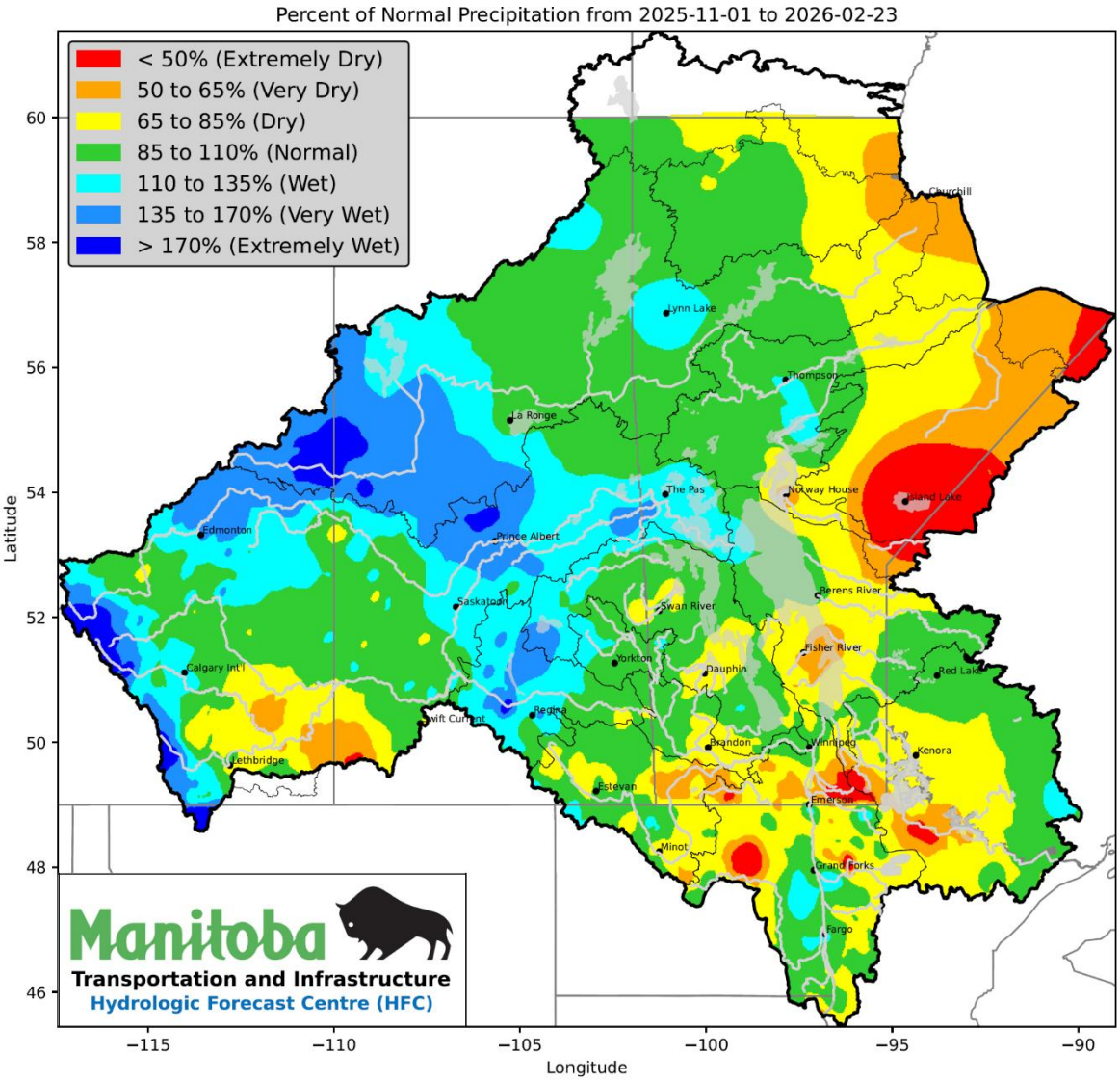


**Figure 3 – Percent of normal precipitation from November 1, 2025 to February 23, 2026.**

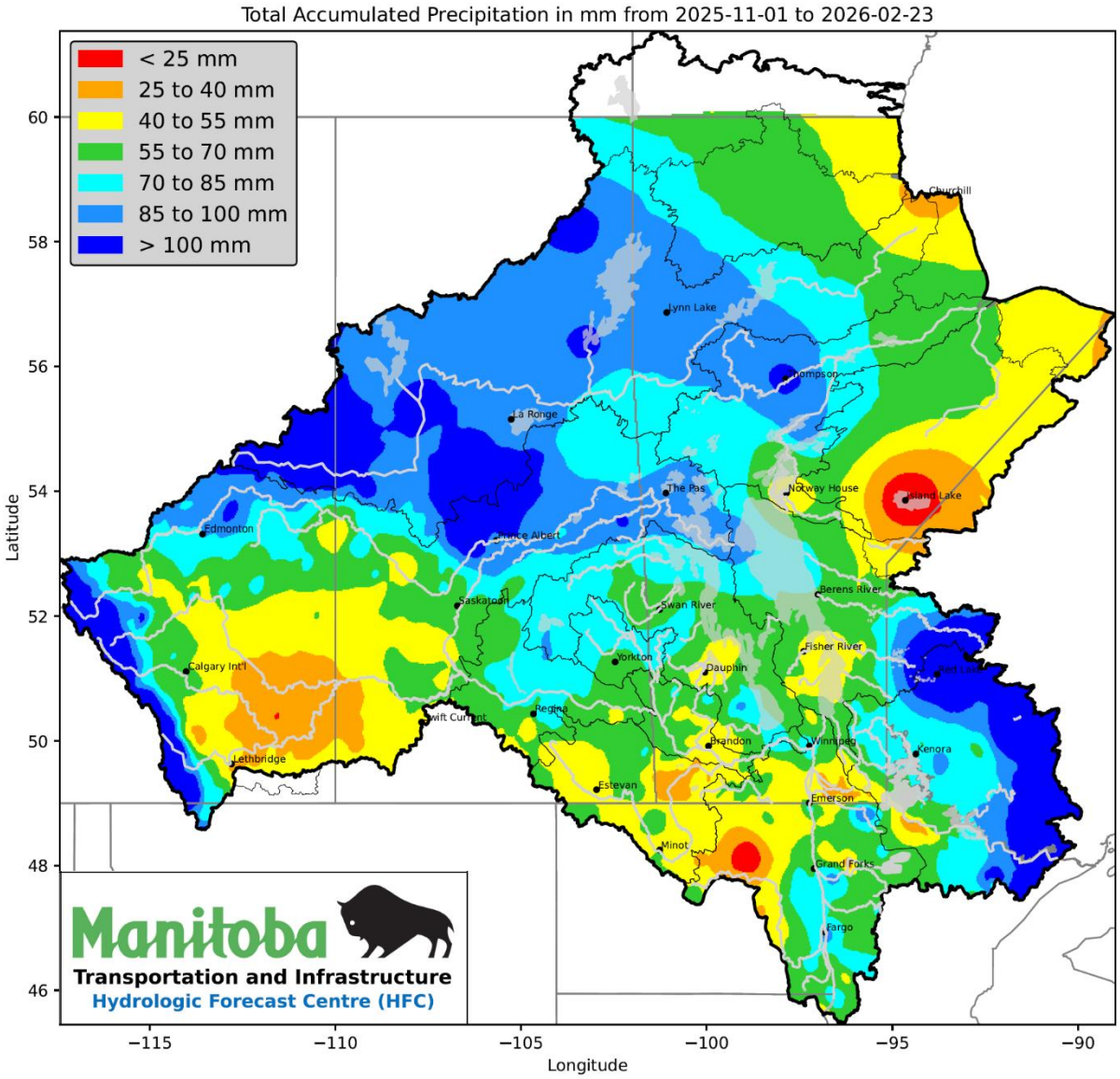


**Figure 4 – Cumulative precipitation in mm from November 1, 2025 to February 23, 2026.**

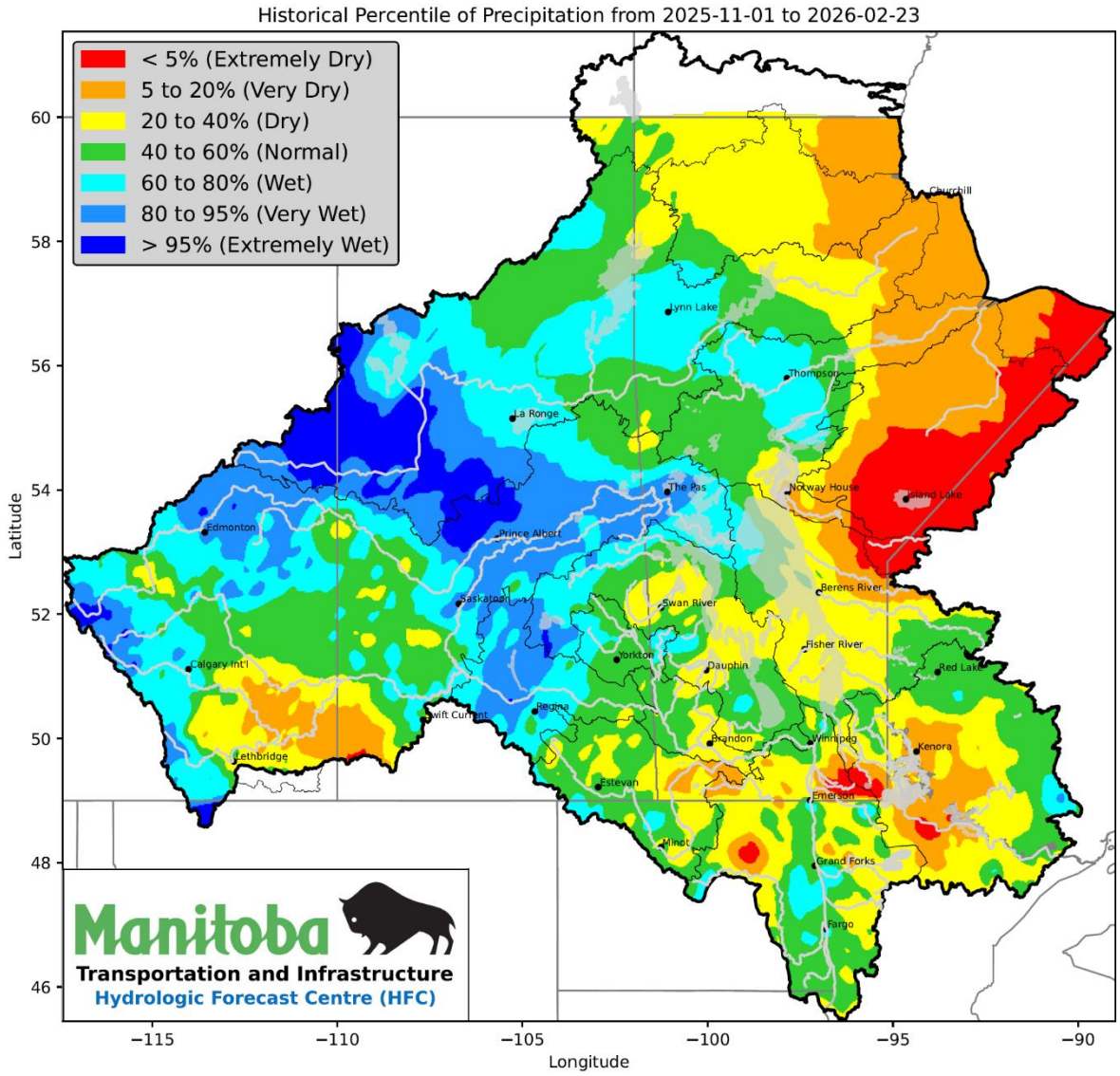


**Figure 5 – Percent ranking of precipitation from November 1, 2025 to February 23, 2026, compared to historic record.**

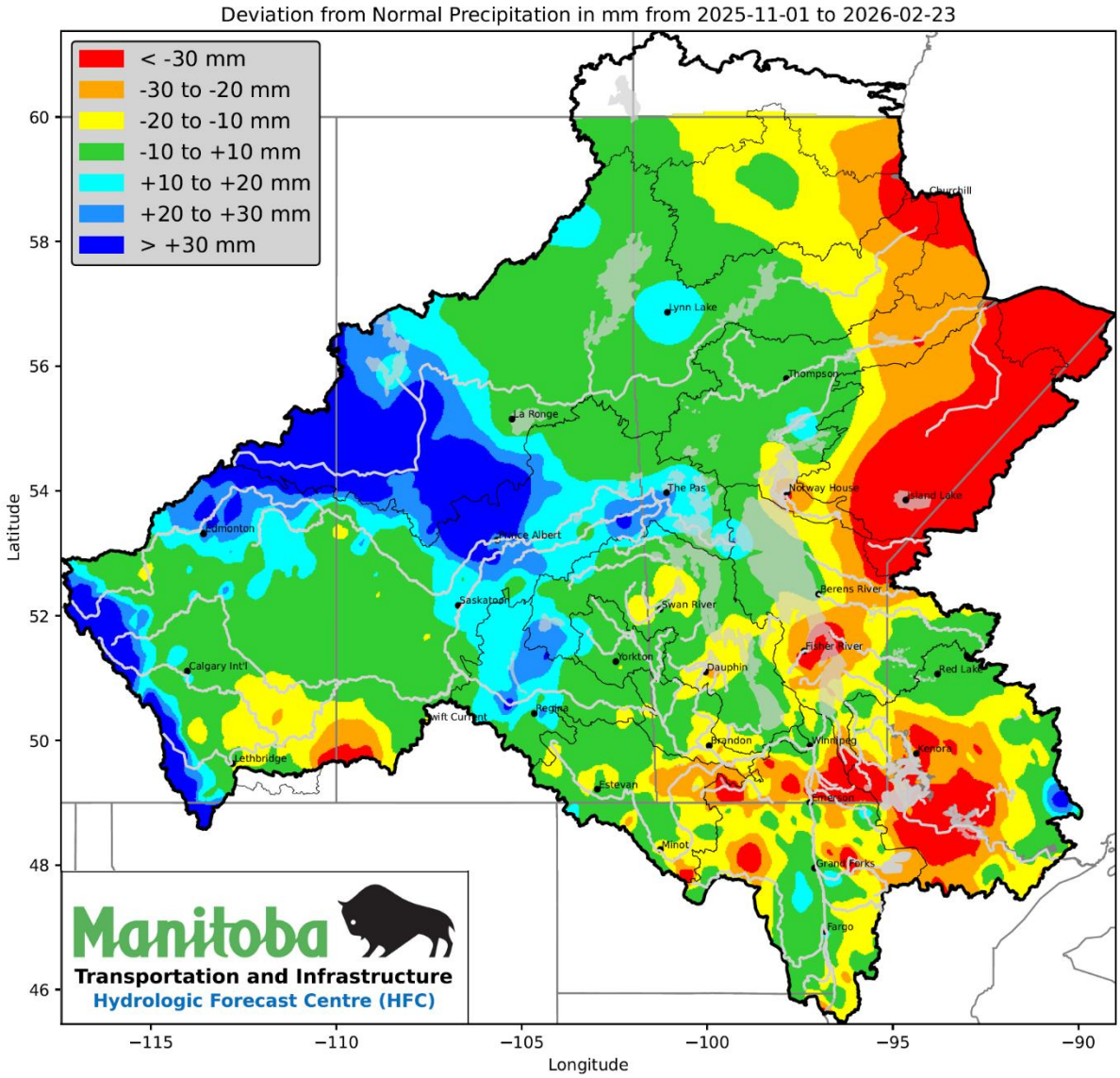


**Figure 6 – Precipitation from November 1, 2025 to February 23, 2026, deviation from normal (mm).**

## Snow Water Content

Snow Water Equivalent (SWE) is the measure of the amount of water content in the snow. Snow water equivalent estimates obtained from February 19 to 23, 2026 field measurements indicate SWE measurements range from 15 mm to 148 mm (0.6 to 5.8 inches) across Manitoba watersheds. The highest snow water content of 148 mm (5.8 inches) is measured in western Manitoba near the Riding Mountain National Park. The Shellmouth Reservoir basin has SWE values in the range of 38 to 102 mm (1.5 to 4.0 inches), with an average value of approximately

71 mm (2.8 inches). The Interlake region has SWE values in the order of 53 to 81 mm (2.1 to 3.2 inches) (Figure 7). Snow accumulations are generally within the normal range, except for parts of southern Manitoba where snow accumulation remains below typical values for this time of the year.

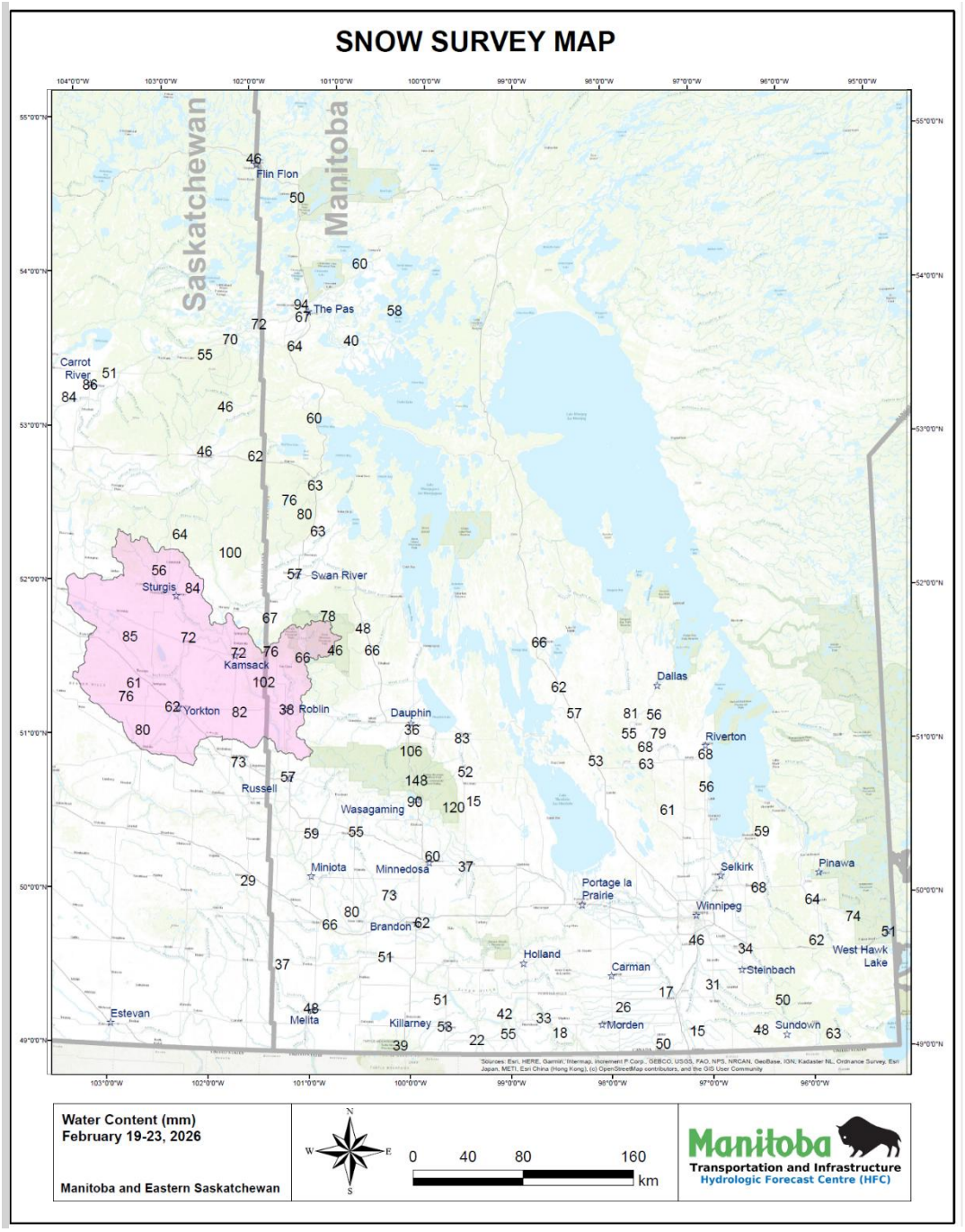


**Figure 7 – Snow Water Equivalent (SWE) in mm from field measurements conducted in February 2026.**

## Soil Frost Depth

Soil frost depth is dependent on winter temperatures and the insulating effect of snow cover. While frost depth varies across watersheds, it is generally shallower than normal throughout most of Manitoba. Generally, deeper than normal frost depth takes longer to thaw which means the soil absorbs less water and contributes to increased surface runoff; whereas shallower than normal frost depth means the soil can absorb more melting surface water and can potentially decrease the amount of overland flooding. Figure 8 shows comparative frost- depth measurements from various locations across the province, with the black line representing 2026 conditions.

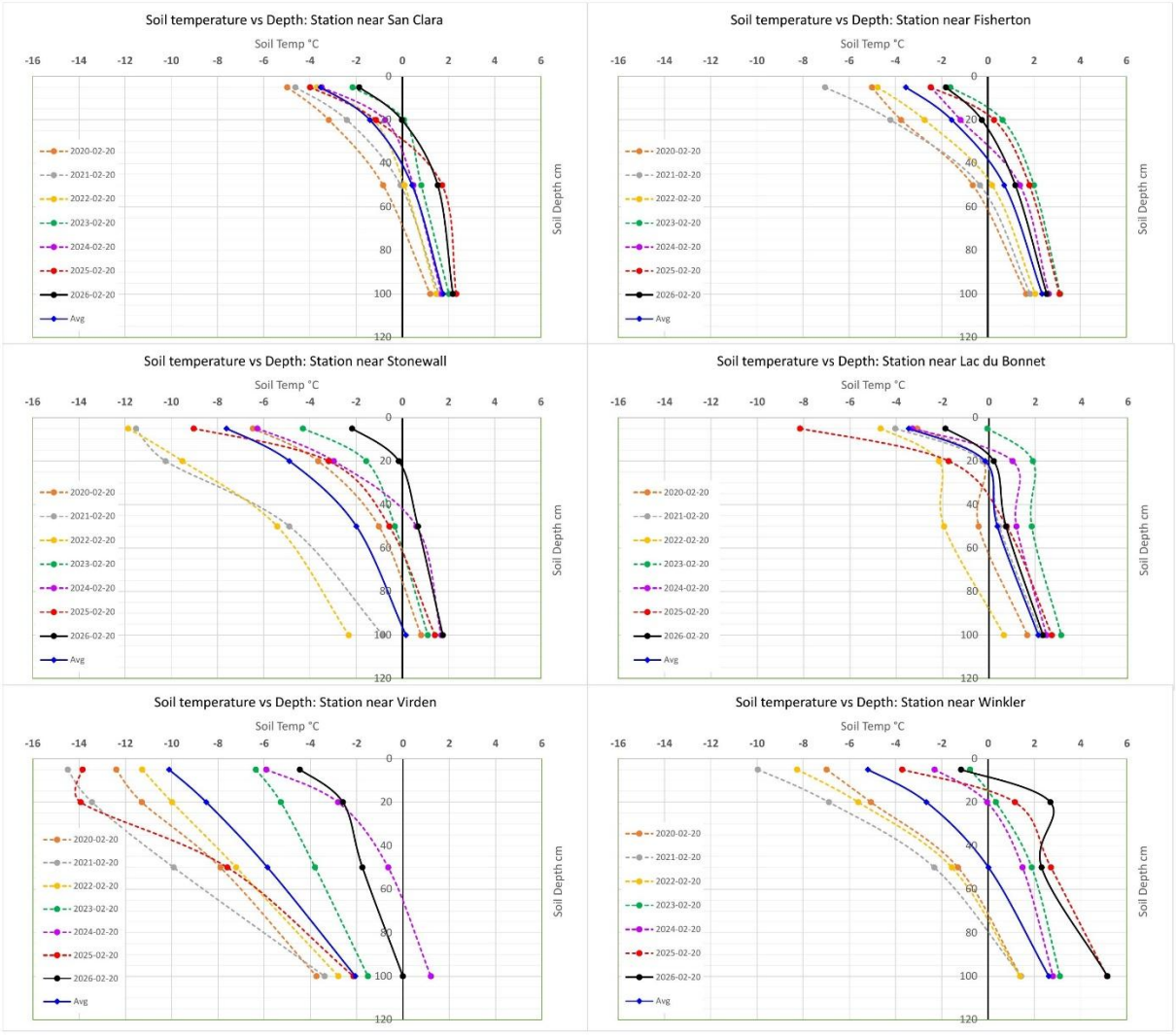


**Figure 8 – Frost depth in centimeters at various locations across the province.**

## Future Weather Outlook

The short-term weather forecast shows no significant precipitation in the next seven days and less than 30% chance of receiving more than 25 mm of precipitation by March 10, 2026 for most Manitoba basins (Figure 9). Most parts of the province could receive 10 to 25 mm of precipitation between February 23 and March 10 (Figure 10). Generally, the normal precipitation for March in Manitoba basins ranges from 20 to 25 mm. The long-term precipitation outlook for March, April, May and June, issued in February by the International Research Institute (IRI) at the Columbia Climate School, indicates equal chances of above normal, below normal or near normal precipitation for most of Manitoba basins (Figure 11); with a slight chance of above normal precipitation in parts of southern, western and central Manitoba (Figures 12).

The United States National Weather Service Climate Prediction Center's outlook, issued on February 19, 2026, forecasts equal chances of above normal, below normal or near normal precipitation for the U.S. portions of the Red River and Souris River basins from March through May (Figure 13).

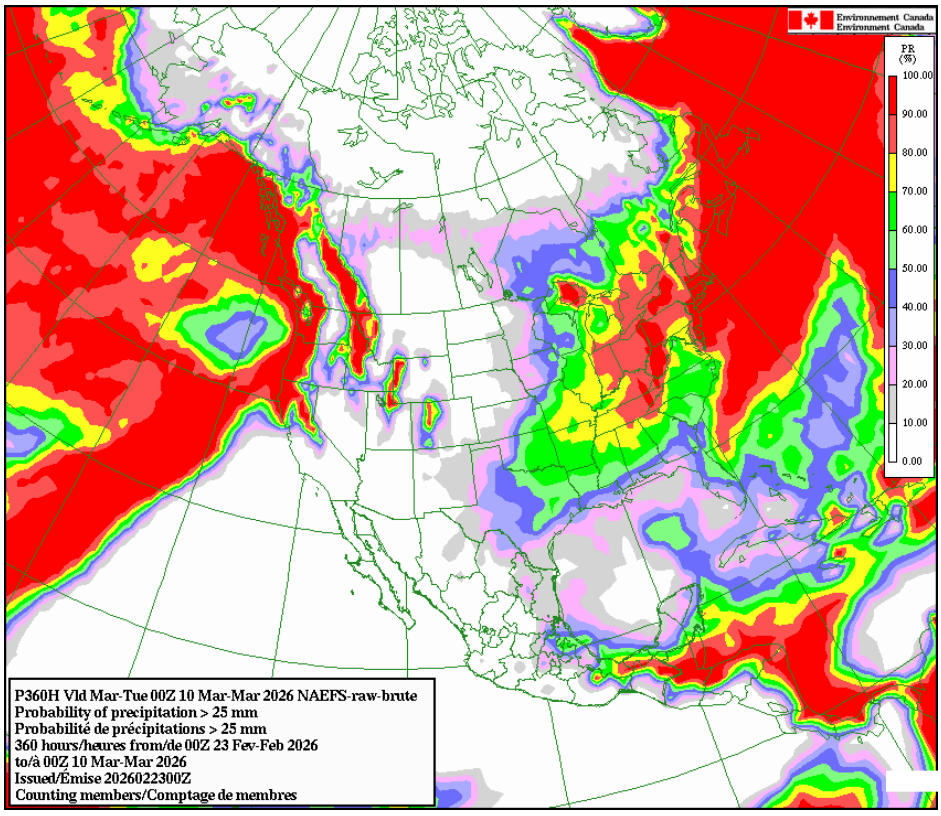


**Figure 8 – Short-term precipitation forecast between February 23rd and March 10th.**

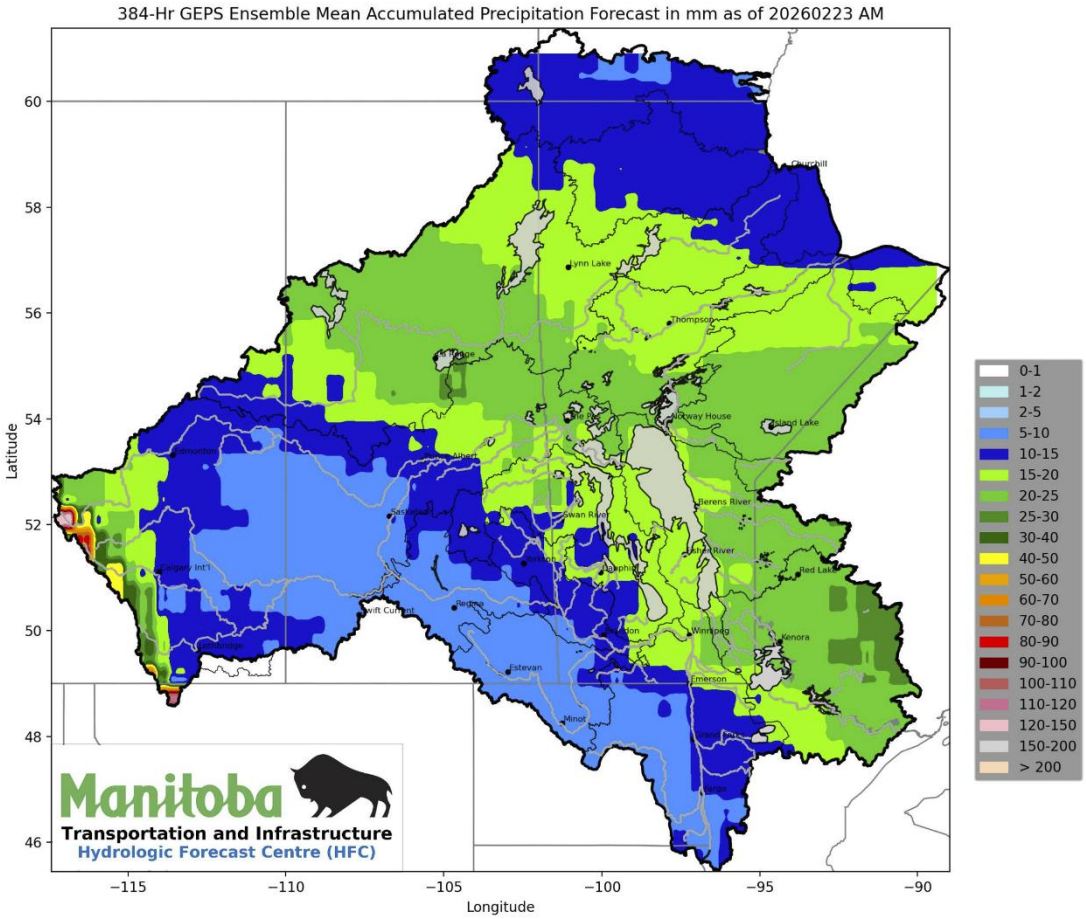


**Figure 9 – Ensemble Mean Accumulated Precipitation from Environment and Climate Change Canada for the time period between February 23 and March 10, 2026.**

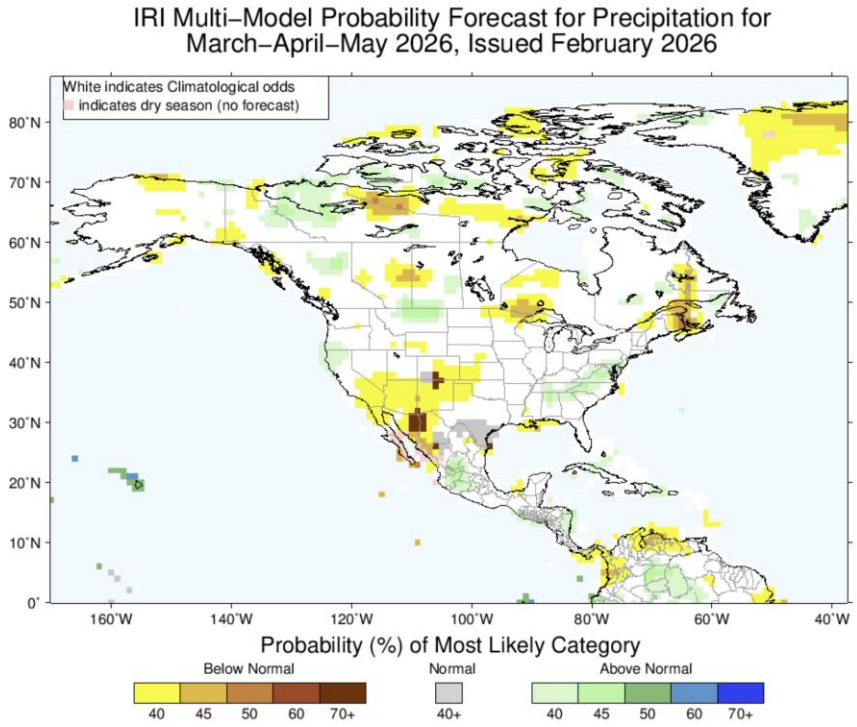


**Figure 10 – IRI Multi-Model Probability Forecast for Precipitation for March-April-May 2026, issued February 15th, 2026.**

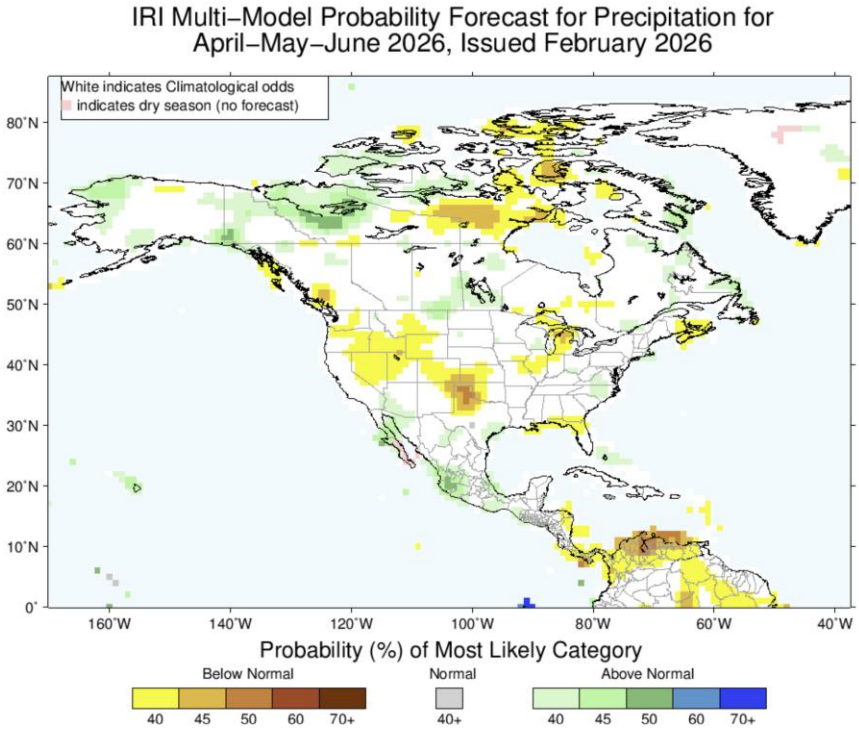


**Figure 11 – IRI Multi-Model Probability Forecast for Precipitation for April-May-June 2026, issued February 15th, 2026.**

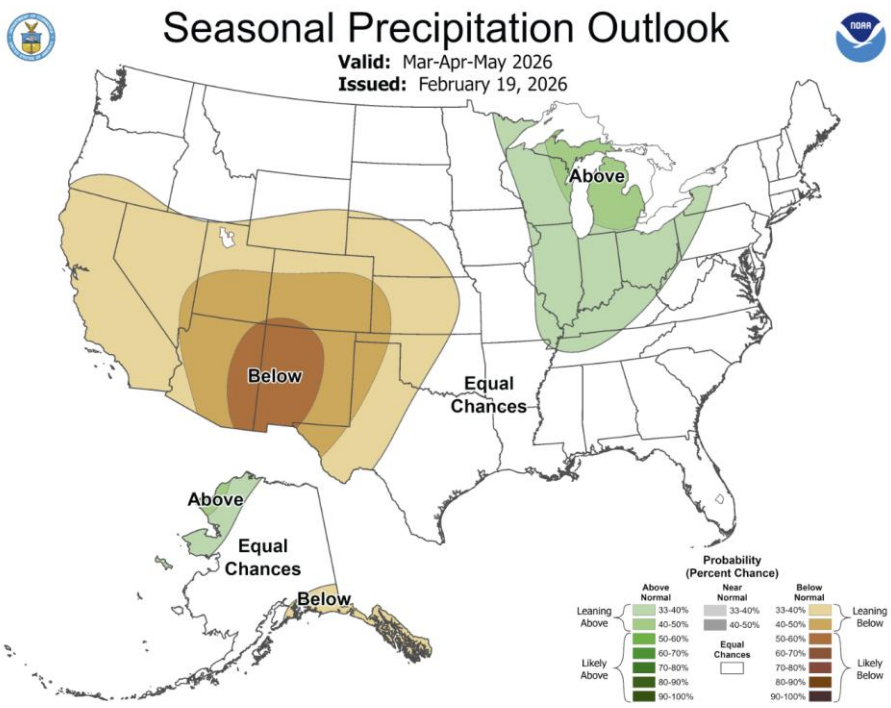


**Figure 12 – National Weather Service Climate Prediction Center's Precipitation Outlook for Mar-Apr-May 2026.**

## Base Flows and Level Conditions

Base flows and levels indicate the amount of water available in the system prior to the spring runoff. Higher base flows may indicate higher soil saturation levels and increased potential for spring runoff. As of February 19, 2026, base flows and levels mostly range from below normal to above normal in southern Manitoba basins, near normal to below normal in central Manitoba basins, and near normal to well below normal in northern Manitoba basins.

Current river flow conditions:

- Red River: flows are below normal for this time of year at all locations.
- Assiniboine River: flows are above normal for this time of year at all locations. This is due to the sustained release of between 750-800 cubic feet per second from the Shellmouth Dam since the beginning of February.
- The following rivers are experiencing near normal flows for this time of year: Dauphin River, Waterhen River, Saskatchewan River and Souris River.
- The Qu'Appelle River and Fairford River are experiencing slightly below normal flows for this time of year.

- The Churchill River and Winnipeg River are tracking well below normal for this time of the year.
- There is no current flow/level data for the Roseau River, Fisher River and Icelandic River. Flow/level reporting will resume in spring. Historically, these rivers have very low flows throughout the winter season.

Table 1 summarizes flows at main rivers at selected locations as of February 19, 2026.

Current lake water levels:

- All Manitoba lakes including Lake Winnipeg and Lake Manitoba are within their respective operating ranges heading into the spring runoff.
- Water levels for Lake Winnipeg (15$^{th}$ percentile) and Lake Manitoba (5$^{th}$ percentile) are well below normal for this time of year.
- Lake St. Martin and Lake Wahtopanah are also below normal for this time of year, while Lake Winnipegosis is slightly below normal.
- The Shellmouth Reservoir is slightly below its historical normal water level for this time of year. The reservoir is being drawn down as part of regular winter operations.
- Dauphin Lake and Lake Minnewasta are tracking above normal water levels for this time of year.

Table 2 summarizes water levels at major lakes as of February 19, 2026.

**Table 1. Flows for main rivers at selected locations as of February 19, 2026.**

**Note – The Assiniboine River flows and levels are regulated by the operation of Shellmouth Dam.*
*** Note – The Red River Level at James Avenue is measured in relative to the long term mean winter ice level at James Avenue, which is 727.57 feet geodetic or 0 ft James.*

| River | Location | Flow as of Feb. 19, 2026 | Flow Percentile | Minimum Flow/Level | 10th Percentile | 50th Percentile | 90th Percentile | Maximum Flow/Level | Last time flow was lower than today's value |
|---|---|---|---|---|---|---|---|---|---|
| **Red River** | Emerson | 960 cfs | 25% | 1 cfs (1937) | 470 cfs | 1,410 cfs | 2,700 cfs | 3,600 cfs (2020) | 850 cfs (2018) |
| | Ste. Agathe | 830 cfs | 20% | 198 cfs (1977) | 480 cfs | 1,390 cfs | 2,750 cfs | 4,000 cfs (2024) | 700 cfs (2013) |
| | James Avenue (level)** | 0.6 ft | 35% | -1.7 ft (1991) | -0.8 ft | 0.9 ft | 2.9 ft | 5.5 ft (2011) | 0.4 ft (2022) |
| | Selkirk | 2,010 cfs (estimated) | 30% | 1,078 cfs (2018) | 1,640 cfs | 2,600 cfs | 4,820 cfs | 6,900 cfs (2011) | 1,800 cfs (2025) |
| **Assiniboine River** | Russell | 820 cfs (estimated) | 80% | 15 cfs (1962) | 160 cfs | 370 cfs | 1,050 cfs | 1,600 cfs (2009) | 680 cfs (2025) |
| | Brandon | 950 cfs (estimated) | 80% | 9 cfs (1942) | 290 cfs | 620 cfs | 1,130 cfs | 2,200 cfs (2011) | 410 cfs (2024) |
| | Holland | 1,040 cfs (estimated) | 80% | 227 cfs (1989) | 410 cfs | 750 cfs | 1,220 cfs | 3,100 cfs (2011) | 740 cfs (2025) |
| | Headingley | 1,060 cfs | 80% | 60 cfs (1963) | 380 cfs | 780 cfs | 1,280 cfs | 2,800 cfs (2011) | 870 cfs (2025) |
| **Shellmouth Dam** | Outflow | 780 cfs | 80% | 28 cfs (1969) | 160 cfs | 450 cfs | 1,050 cfs | 1,800 cfs (2011) | 740 cfs (2025) |
| **Souris River** | Wawanesa | 25 cfs | 50% | 0 cfs (1990) | 0 cfs | 20 cfs | 160 cfs | 500 cfs (2011) | 20 cfs (2025) |
| **Qu'Appelle River** | Welby | 74 cfs | 35% | 7 cfs (1989) | 20 cfs | 110 cfs | 250 cfs | 500 cfs (2011) | 50 cfs (2025) |
| **Fairford River** | Fairford | 1,260 cfs | 35% | 3 cfs (1971) | 610 cfs | 2,310 cfs | 6,270 cfs | 12,700 cfs (2012) | 600 cfs (2022) |
| **Waterhen River** | Waterhen | 320 cfs | 40% | 0 cfs (1963) | 10 cfs | 620 cfs | 3,100 cfs | 5,500 cfs (2017) | 200 cfs (2025) |
| **Dauphin River** | Dauphin | 1,200 cfs | 40% | 15 cfs (1982) | 310 cfs | 1,840 cfs | 5,090 cfs | 10,000 cfs (2012) | 200 cfs (2022) |
| **Saskatchewan River** | The Pas | 15,540 cfs | 50% | 1,939 cfs (1930) | 11,730 cfs | 15,330 cfs | 19,150 cfs | 22,300 cfs (1975) | 13,400 cfs (2025) |
| **Winnipeg River** | Seven Sisters Dam | 23,800 cfs | 10% | 20,659 cfs (1988) | 23,970 cfs | 32,970 cfs | 43,900 cfs | 52,300 cfs (1969) | 22,300 cfs (2021) |
| **Churchill River** | Leaf Rapids | 14,940 cfs | 2% | 13,949 cfs (1994) | 20,990 cfs | 27,480 cfs | 36,870 cfs | 49,800 cfs (2021) | 13,900 cfs (1994) |

**Table 2: Lake levels and corresponding operation ranges as of February 19, 2026.**

**Levels on these lakes are managed by operation of dam structures.*

| Lake | Current level, Feb. 19 (ft) | Change from last week (ft) | Level Percentile | Operating range (ft) | Normal level for Feb. 19 (ft) | Last time level was lower than today's value | Historical comparison |
|---|---|---|---|---|---|---|---|
| **Lake Manitoba*** | 810.9 | 0.0 | 5% | 810.5 - 812.5 | 811.7 | 810.5 (2022) | *Historic water level for this time of year is above the current level 95% of the time* |
| **Lake Winnipeg*** | 712.2 | 0.0 | 15% | 711 - 715 | 713.3 | 712.0 (2024) | *Historic water level for this time of year is above the current level 85% of the time* |
| **Lake St. Martin*** | 798.1 | 0.1 | 30% | 797 - 800 | 799.0 | 797.1 (2022) | *Historic water level for this time of year is above the current level 70% of the time* |
| **Lake Winnipegosis** | 830.5 | 0.1 | 40% | --- | 830.7 | 830.1 (2024) | *Historic water level for this time of year is above the current level 60% of the time* |
| **Dauphin Lake*** | 854.3 | 0.0 | 75% | 853.0 - 854.8 | 854.1 | 854.2 (2022) | *Historic water level for this time of year is above the current level 25% of the time* |
| **Shellmouth Reservoir*** | 1395.2 | -0.8 | 40% | 1386 - 1400 | 1396.3 | 1392.3 (2025) | *Historic water level for this time of year is above the current level 60% of the time* |
| **Lake Wahtopanah near Rivers*** | 1532.2 | -0.2 | 20% | --- | 1534.3 | 1530.5 (1999) | *Historic water level for this time of year is above the current level 80% of the time* |
| **Lake Minnewasta** | 1081.7 | 0.1 | 75% | --- | 1078.8 | 1068.8 (2022) | *Historic water level for this time of year is above the current level 25% of the time* |

## River Ice Conditions and Ice Jamming[1]

The province has begun collecting ice thickness measurements on the Red River, with data collection continuing throughout February. Normal ice thickness at this time of the year varies based on factors such as air temperature since freeze-up, the amount of flow in the river, and location along the river. Typically, normal ice thickness for this time of the year ranges from 46 cm (18 inches) to 76 cm (30 inches). Measurements taken from Netley Creek to Willow Springs show an average ice thickness of approximately 58 cm (23 inches). Similarly, measurements from Willow Springs to McIvor Lane show an average ice thickness of approximately 60 cm (24 inches). On average, this year's ice is slightly thinner than last year's at this time, when the average ice thickness was 64 cm (25 inches) (Figure 14).

Spring weather influences the timing and rate of river ice deterioration and will play a significant role in determining ice strength at break-up. The ongoing ice cutting and breaking activities on the Red River should help reduce the likelihood of ice jamming and associated flooding along the lower Red River.

Localized flooding can occur when and where ice jams develop, even with below average river flows. The chances of localized flooding due to snow and ice blockages in drains, ditches and small streams during the early part of the runoff period will depend on the nature of the spring breakup and rate of melt.

[1] See Appendix A for 'Ice Jam' definition

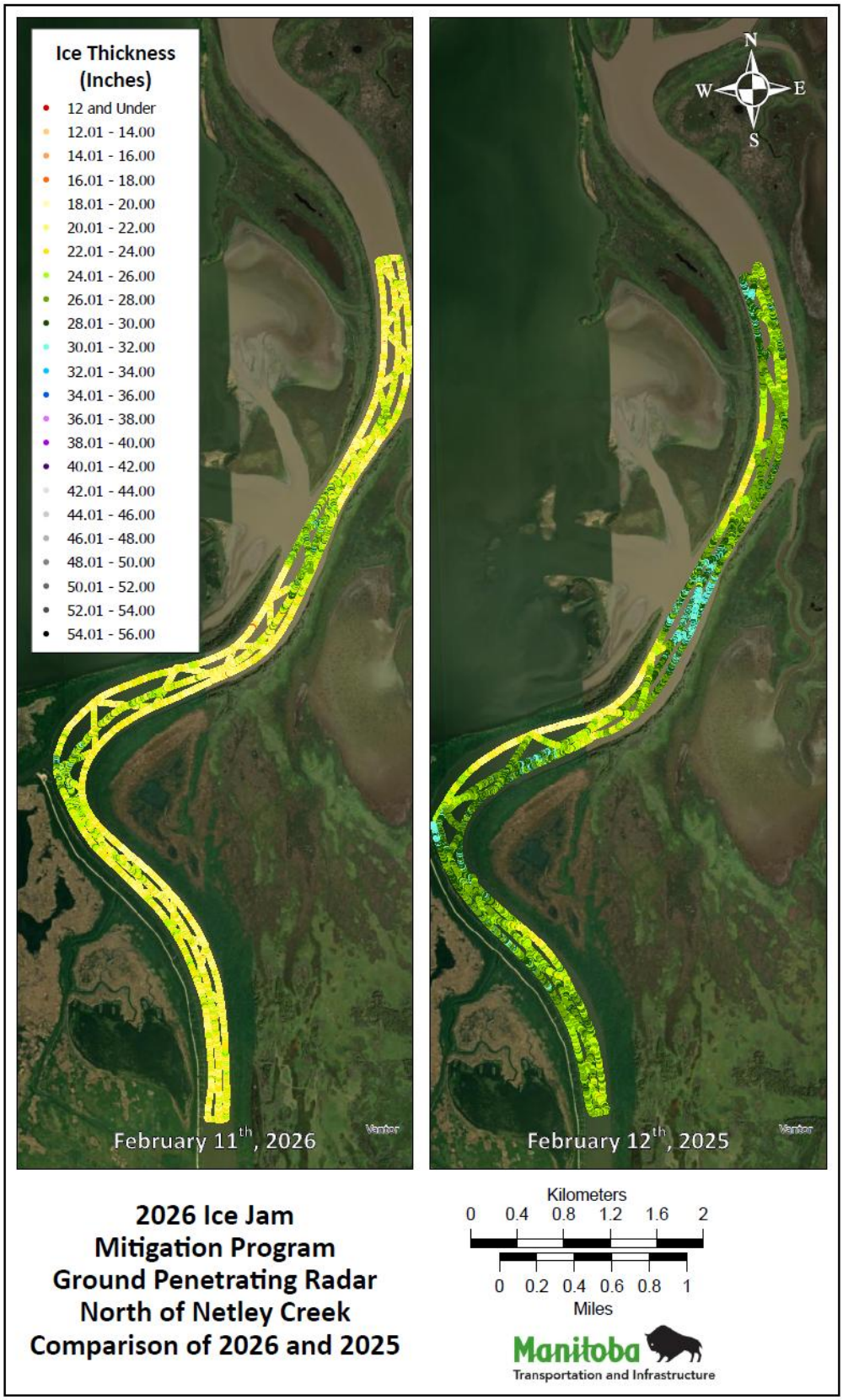
Ice Thickness
(Inches)
12 and Under
12.01 - 14.00
14.01 - 16.00
16.01 - 18.00
18.01 - 20.00
20.01 - 22.00
22.01 - 24.00
24.01 - 26.00
26.01 - 28.00
28.01 - 30.00
30.01 - 32.00
32.01 - 34.00
34.01 - 36.00
36.01 - 38.00
38.01 - 40.00
40.01 - 42.00
42.01 - 44.00
44.01 - 46.00
46.01 - 48.00
48.01 - 50.00
50.01 - 52.00
52.01 - 54.00
54.01 - 56.00
N
W
E
S
February 11th, 2026
February 12th, 2025
2026 Ice Jam
Mitigation Program
Ground Penetrating Radar
North of Netley Creek
Comparison of 2026 and 2025
Kilometers
0 0.4 0.8 1.2 1.6 2
0 0.2 0.4 0.6 0.8 1
Miles
Manitoba
Transportation and Infrastructure

**Figure 134 – Ice Thickness Measurements (inches) based on Ground Penetrating Radar: Red River (2026 vs. 2025).**

## Flood Outlook[2]

Spring flood outlooks provide estimates of peak river flows and lake water levels that are based on current basin conditions, and three possible future weather scenarios: favourable, normal, and unfavourable. These scenarios correspond to three probabilities of occurrence: lower decile, median, and upper decile, respectively. Provincial planning and preparedness activities are based on the unfavourable (upper decile) future weather conditions. Additional details are provided in Appendix A: Definitions.

The risk of spring flooding is defined by three categories: major spring flooding risk, moderate spring flooding risk, and low (minor) spring flooding risk. Major spring flooding risk is associated with the probability that forecasted flows and levels exceed the bankfull capacity and cause flooding for near normal future weather conditions. Moderate spring flooding risk is associated with the probability that forecasted flows and levels exceed bankfull capacity for the unfavourable future weather conditions but forecasted flows and levels are below the bankfull capacity for normal future weather conditions. Minor (low) spring flooding risk is associated with the probability that forecasted flows and levels will remain below the bankfull capacity even for the unfavourable future weather conditions.

A number of uncertainties exist with respect to the flood outlook. These include, but are not limited to, the following:

- future weather uncertainties (snowfall and spring rainfall);
- timing and speed of the snow melt;
- uncertainty in meteorological and hydrometric data collected to date;
- timing of the peak flows;
- frost depth at the time of spring melt; and
- hydrologic model prediction uncertainties.

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[2] See Appendix A for ‘Flood Outlook’, ‘Weather Scenarios’, ‘Favourable Weather’, ‘Normal Weather’, and ‘Unfavourable Weather’ definitions

[7] See Appendix A for ‘Minor/Moderate/Major’ Flood risk definitions

## *Red River and Its Tributaries*

- The risk of significant spring flooding is low to moderate for the Red River and its tributaries. Water levels may exceed the bankfull capacity at some locations with unfavourable future weather conditions.
- The risk of significant flooding is moderate along the main stem of the Red and Pembina Rivers.
- The risk of significant flooding is low for the Red River tributaries, including Rat River and Roseau River.
- The flood protection level of the community dikes and the individual flood protection works within the Red River basin are higher than the predicted peak levels, even in the unfavourable weather scenario.

**Red River Floodway**

- The Red River Floodway has been operated in 36 out of the 57 years since it was constructed for the purpose of providing flood protection to the City of Winnipeg.
- The Red River Floodway is not expected to be operated under normal or favourable weather conditions during the 2026 spring melt.
- The Red River Floodway is expected to be operated under unfavourable weather conditions to reduce levels within the City of Winnipeg.
- Open water peak estimated levels at James Avenue are:
    - Favourable weather: 3.4 m (11.2 ft)
    - Normal weather: 5.2 m (16.9 ft)
    - Unfavourable weather: 5.8 m (18.9 ft)

## *Assiniboine River and Its Tributaries*

- The risk of significant spring flooding along the Assiniboine River and its tributaries, including the Souris River and Qu'Appelle River, is low to moderate this spring.
- The risk of significant flooding is moderate along the main stem of the Assiniboine, Souris, and Qu'Appelle Rivers.
- The risk of significant flooding is low for other Assiniboine River tributaries.
- The Assiniboine River and its tributaries are expected to remain within their banks for normal to favourable future weather scenarios.

- Some locations along the Assiniboine may exceed the bankfull capacity with unfavourable future weather.
- The flood protection level of the community dikes in the City of Brandon and in towns of Melita, Souris, Wawanesa, and St. Lazare are at elevations which are high enough to protect against expected spring water levels.

### *Portage Diversion*

- The Portage Diversion has been operated 42 out of the 56 years since it was constructed for the purpose of preventing ice jamming on the Assiniboine River east of Portage la Prairie and to provide flood protection for areas along the Assiniboine River downstream of Portage la Prairie, including the City of Winnipeg. Based on the runoff potential in the Assiniboine and Souris basins, the Portage Diversion is expected to be operated under unfavourable weather conditions. Under normal and favourable weather conditions, the Portage Diversion may be operated to reduce ice jam related levels downstream of the diversion.

### *Shellmouth Dam*

- The forecasted inflow volumes into the Shellmouth Reservoir for favourable, normal and unfavourable conditions as of February 23 are 213 million cubic meters (173,000 acre-feet), 387 million cubic meters (314,000 acre-feet) and 616 million cubic meters (499,000 acre-feet), respectively.
- The Shellmouth Dam is being operated to provide storage capacity for reservoir inflows in order to reduce flooding downstream as well as to ensure a sufficient reservoir level for recreation and water supply. The reservoir level as of February 23, 2026 is 425.13 m (1394.78 ft).
- The Shellmouth Liaison Committee provides regular input into the dam operations to meet the target level of 427.33 m to 427.94 m (1402 ft to 1404 ft) after the spring runoff. The outflow from the reservoir as of February 23, 2026 is 21.7 cubic metres per second (768 cubic feet per second).

## *Interlake Region*

- The risk of significant flooding within the Interlake region is moderate. Levels will remain below the bankfull levels for favourable and normal future weather conditions. Levels are projected to exceed bankfull capacities for unfavourable future weather conditions.
- As in most years, there is a risk of ice jam induced flooding for the Icelandic and Fisher Rivers.

## *Fairford River Water Control Structure*

- The Fairford River Water Control Structure is set for normal discharge, which is between 50% and 60% of its full capacity. It will remain at this setting until the Lake Manitoba water level goes outside its desired range of 810.5 ft to 812.5 ft. The current discharge at the Fairford River Water Control Structure is 1,260 cfs, which is approximately 56% of full capacity.

## *Eastern Region*

- The risk of significant spring flooding is low in the eastern region, including the Whiteshell Lakes area and the Winnipeg River basin.

## *Manitoba Lakes*

- Inflows into most major lakes are expected to be below seasonal normals, reflecting generally drier than normal conditions across major contributing river basins.
- Currently, all major lakes are within their operating ranges. Most lakes are expected to be within their normal operating range after the spring runoff. The risk of spring flooding in most Manitoba lakes is low.

**Lake Manitoba**

- Lake Manitoba's current level is 247.16 m (810.9 ft).
- The current level is 0.24 m (0.8 ft) below the normal level for this time of year but within the operating range of 247.04 m to 247.65 m (810.5 ft to 812.5 ft).
- The lake level is expected to remain within the operating range after spring runoff.

**Lake Winnipeg**

- Lake Winnipeg's current level is 217.08 m (712.2 ft).
- The current level is 0.34 m (1.1 ft) below normal for this time of year but within the operating range of 216.71 m to 217.93 m (711 ft to 715 ft).
- The lake level is expected to remain within the operating range after spring runoff.

**Lake St. Martin**

- Lake St. Martin is currently at 243.26 m (798.1 ft).
- The current level is 0.27 m (0.9 ft) below normal for this time of year.
- The lake level is expected to remain within the operating range after spring runoff.

**Lake Winnipegosis**

- Lake Winnipegosis is currently at 253.14 m (830.5 ft).
- The current level is 0.06 m (0.2 ft) below normal for this time of year.
- The lake level is expected to be near normal level after spring runoff.

**Dauphin Lake**

- Dauphin Lake's current level is 260.39 m (854.3 ft).
- The current level is 0.06 m (0.2 ft) above normal for this time of year and is within the operating range of 260.00 m to 260.54 m (853.0 ft to 854.8 ft).
- The lake level may rise above the operating range after spring runoff but will remain below the flood protection level.

## *Northern Manitoba and The Pas Regions*

- The risk of significant spring flooding is low to moderate along the Saskatchewan and Carrot Rivers.
- These levels depend greatly on the outflows and the regulation of Tobin Lake by Saskatchewan. Manitoba continually consults with Saskatchewan regarding operation of the dams located in Saskatchewan including the release of flows into Manitoba rivers.
- The risk of major flooding is low along the Swan River under normal, favourable and unfavourable future weather conditions.
- As in many other years, there is a risk of ice jam induced flooding along the Saskatchewan, Carrot and Swan Rivers.

## Emergency Management Flood Preparations

- The Manitoba government, local authorities and emergency management partners are continuing to prepare for spring flooding. Manitoba Emergency Management Organization (EMO) continues to work with all local authorities and emergency management partners to provide guidance and support for preparedness and response activities in the upcoming hazard season. This includes:
    - review of existing emergency plans;
    - provide overall situational awareness by disseminating relevant up-to-date information;
    - provide education and training opportunities;
    - prepare resources for use in flood response;
    - host conference calls with local authorities and emergency management partners;
    - provide continuous coordination and collaboration with emergency management stakeholders;
    - work with Indigenous Services Canada (ISC) and Municipal and Northern Relations (MNR) on ISC and MNR-led preparedness activities for First Nations and Northern Affairs Communities; and
    - issue emergency alerts as required.
- The ice-jam mitigation program north of Winnipeg has commenced, with ice cutters and ice-breaking equipment deployed along the Red River to break up the ice. Ice cutting and breaking is planned for the Icelandic River, once the work on the Red River north of Winnipeg is completed.

## Future Forecast Information

A second flood outlook, with updated information, will be published in late March once additional precipitation data and other factors are available. Operational flood forecasting, including issuing daily forecasts for flows and levels, will begin when runoff starts.

# Appendix A: Definitions

[1] Ice Jam:

- A blockage of ice on a river/stream which restricts flow, resulting in increased water levels upstream.

- Jams may occur due to changing river channel geometry, bends in the river channel, depth and thickness of ice, rate of water level rise, or a solid section of ice downstream.

[2] Flood Outlook:

- Estimated spring peak water levels and flows provided before spring water flow begins.
- Estimates are based on diverse information, such as soil moisture, winter precipitation, snowpack, topography, current water level, channel capacity, and future weather condition scenarios (precipitation, temperatures, etc.).
- Estimates are provided for three weather scenarios (favourable, normal, and unfavourable) which correspond to three different probabilities of occurrence (lower decile, median and upper decile).

[3] Weather Scenarios:

- Used to account for future weather such as additional snow, melt rates and spring rainfall. These are determined by statistical analysis of the past 30 to 40 years of climate data.
- Three scenarios used:
    - Lower decile (favourable)
        - There is a 10% chance of the weather being ‘favourable’ or better. 90% of the time the weather will be worse than this ‘favourable’ condition.
    - Median (normal)
        - There is a 50% chance of the weather being ‘normal’ or better.
    - Upper decile (unfavourable)
        - There is a 10% chance of the weather being ‘unfavourable’ or worse. 90% of the time the weather will be better than this ‘unfavourable’ condition.
- The Province’s practice is to plan/prepare to the upper decile (i.e., unfavourable) condition.

[3] Favourable Weather:

- Characterized by little additional precipitation and a gradual snow melt.
- The lower decile weather condition.

[3] Normal Weather:

- Characterized by normal rainfall and temperature.
- Typically used to describe historic climate conditions.
- The median weather condition.

[3] Unfavourable Weather:

- Significant wide-spread precipitation with a rapid snowmelt.

- The upper decile weather condition.

[5]Flow/Discharge [expressed in cubic feet per second (cfs) or cubic metres per second (cms)]:

- The volume of water that passes a given location within a given period of time.

[6] FPL – Flood Protection Level:

- Is the water level of the greater of the flood of record or the 1-in-200-yr flood, plus a freeboard allowance for a particular waterway (typically 2 ft) or water body (i.e., the freeboard is site specific).
- It is provided by the Hydrologic Forecasting and Water Management (HFWM) branch of Manitoba Transportation and Infrastructure on a site-specific and structure-specific basis.
- This is formally set by the Water Resources Administration Act for the Red River Designated Flood Areas.
- In non Designated Flood Areas, the province uses the determined FPLs. For other works or developments, the FPL is recommended by the province, but ultimately regulated by the local planning districts and/or municipalities.

[7]Definition for minor/moderate/major risk of flooding:

- Minor Risk of Flooding:
    - Forecasted flows and levels will remain below bankfull capacity even for the unfavourable future weather conditions.

- Moderate Risk of Flooding:
    - Forecasted flows and levels exceed bankfull capacity for the unfavourable future weather conditions but forecasted flows and levels are below bankfull capacity for normal or favourable future weather conditions.

- Major Risk of Flooding:
    - Forecasted flows and levels exceed bankfull capacity and cause flooding for near normal and unfavourable future weather conditions.

Operational Forecasts:

- Estimated future crest water level, flow and date of occurrence provided once active melt and river flow has begun.

- Estimates are modelled based on observed flow, existing conditions (including channel capacity, topography, and remaining snowpack) and normal future weather.

- Observed conditions are monitored throughout the flood and compared against the historic climate data used to generate the forecast.

- Forecasts are updated when weather conditions are outside the range of historical climate data used to generate the forecast.

- A range of forecasted values is provided further in advance of an upcoming forecasted crest because of unknowns in the basin conditions and river flows, and limitations in the modelling procedures.