Water Availability and Drought Conditions Report

JULY 2025

Executive Summary

- This Water Availability and Drought Conditions Report provides an update on conditions throughout Manitoba for July 2025.
- Precipitation conditions over the past month, three-month, and twelve-month periods are as follows:
  - During July 2025, most of Manitoba was severely to extremely dry, except the area along the USA border had normal to above normal precipitation conditions.
  - Over the past three months (May, June, July), most of Manitoba was moderately to extremely dry, with the northern area of Manitoba and a few areas along the USA border having normal to above normal precipitation conditions.
  - Over the past 12 months, Manitoba observed mostly moderately to severely dry precipitation conditions, with small areas of extremely dry or normal precipitation conditions.
- As of July 31, 2025, water levels in rivers and lakes across northern and eastern Manitoba ranged from below normal (25th – 75th percentile) to much below normal (<10th percentile). Southern Manitoba is a mix of much below normal (<10th percentile) to normal (25th – 75th percentile) conditions. Continued below normal precipitation has led to hydrological drought with some rivers and lakes below their normal range for this time of year.
- The June 30, 2025 Canadian Drought Monitor assessment classified all of Manitoba as abnormally dry (D0) to severe drought (D2) with a few areas along the Saskatchewan border classified as extreme drought (D3). The continued warm and dry conditions in July could lead to further degradation of the classification for the end of July assessment.
- There are currently no concerns over reservoir water supplies. Provincial water supply reservoirs are near full supply levels or at typical levels for the time of year.
- Dugouts are low in many areas due to limited moisture, though they remain sufficient for now. However, concerns about water quality are beginning to surface. Some producers have begun hauling fresh clean water to pastures.
- Manitoba Agriculture's soil moisture map for July 27, 2025 shows moisture across southern Manitoba at the 0 - 120 cm depth is a mix of optimal to wet conditions, with pockets of dry or very dry conditions. Soils moisture in the parkland and Interlake areas has deteriorated and is dry to very dry. Some crops, especially those in lighter soils, are showing signs of moisture stress. Precipitation is needed to improve on-farm water supplies and to prevent additional agricultural drought impacts.
- After Manitoba's wildfire situation showed improvement in June, it deteriorated in July. The Manitoba government reinstated the provincial state of emergency on July 10. There is an elevated fire danger in central and northern parts of the province and several fires continue to burn across the province. Refer to the fire and travel restriction maps found at: www.gov.mb.ca/conservation_fire/Restrictions/index.html. Several municipalities continue to implement burning restrictions. Visit www.manitoba.ca/wildfire/burn_conditions.html to view current burning restrictions.
- For further information on the Manitoba Wildfire Service, situation updates, restrictions and other important wildfire links, go to www.gov.mb.ca/wildfire or follow the Manitoba government on X (formerly Twitter) at https://twitter.com/mbgov.

Drought Indicators

Precipitation Indicator

Precipitation is assessed to determine the severity of meteorological dryness and is an indirect measurement of agricultural dryness.

Three precipitation indicators are calculated to represent short term (one month; Figure 1), medium term (three months; Figure 2) and long term (12 months; Figure 3) conditions. The indicators compare current monthly precipitation totals to historical data to calculate the per cent of median precipitation that occurred over the past one, three or twelve months. Historical medians are computed from 45 years of data (1971 – 2015).

Due to large distances between meteorological stations in northern Manitoba, the interpolated contours in this region are based on limited observations and should be interpreted with caution.

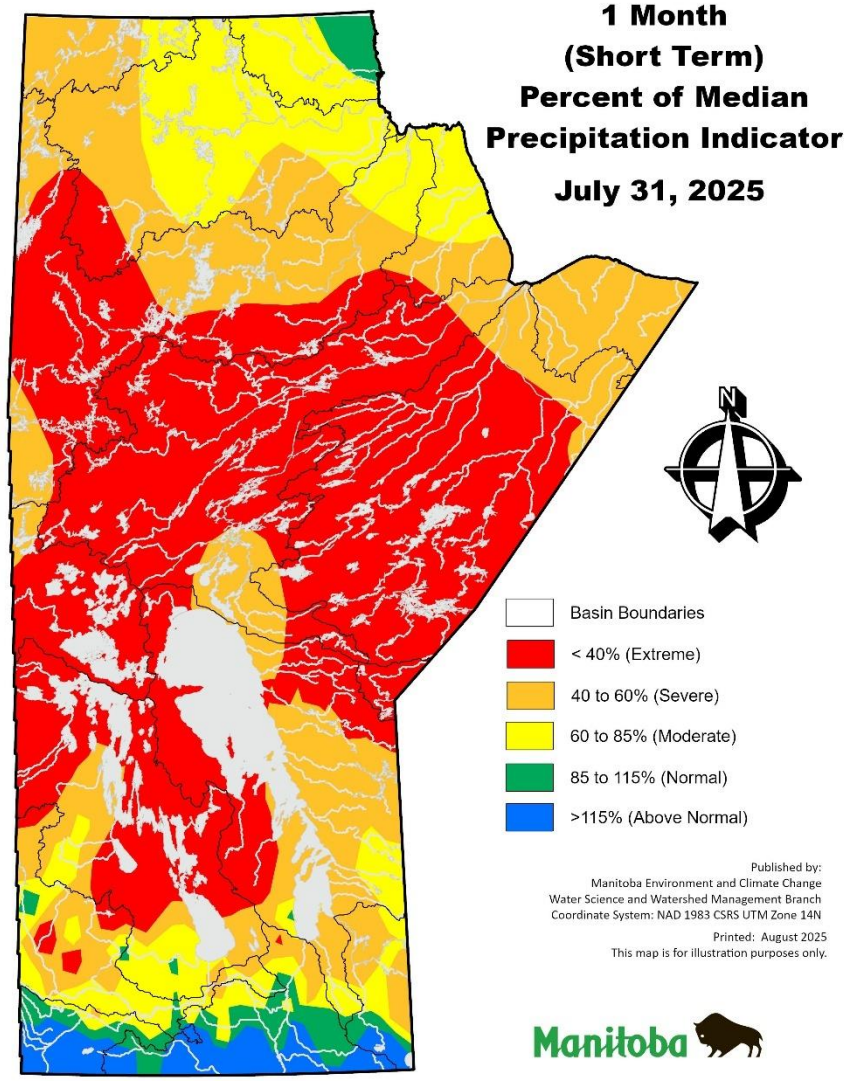

Figure 1: One month (short term) per cent of median precipitation indicator.

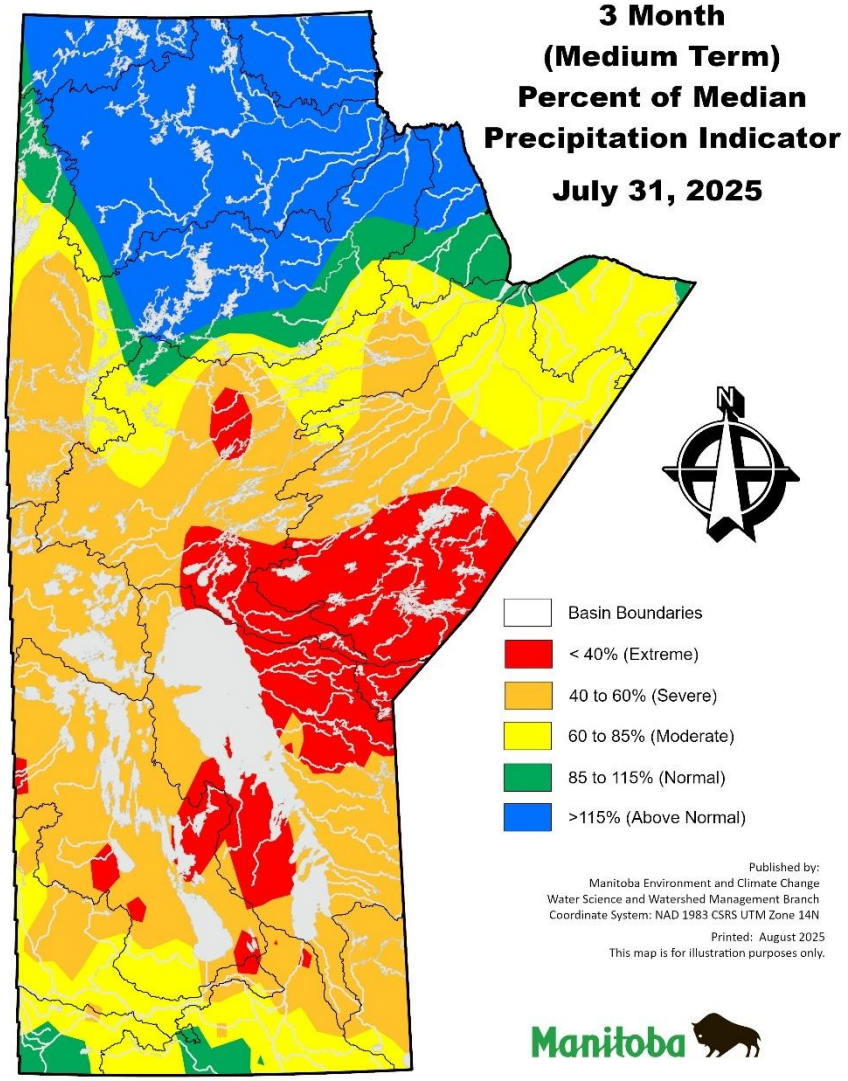

Figure 2: Three month (medium term) per cent of median precipitation indicator.

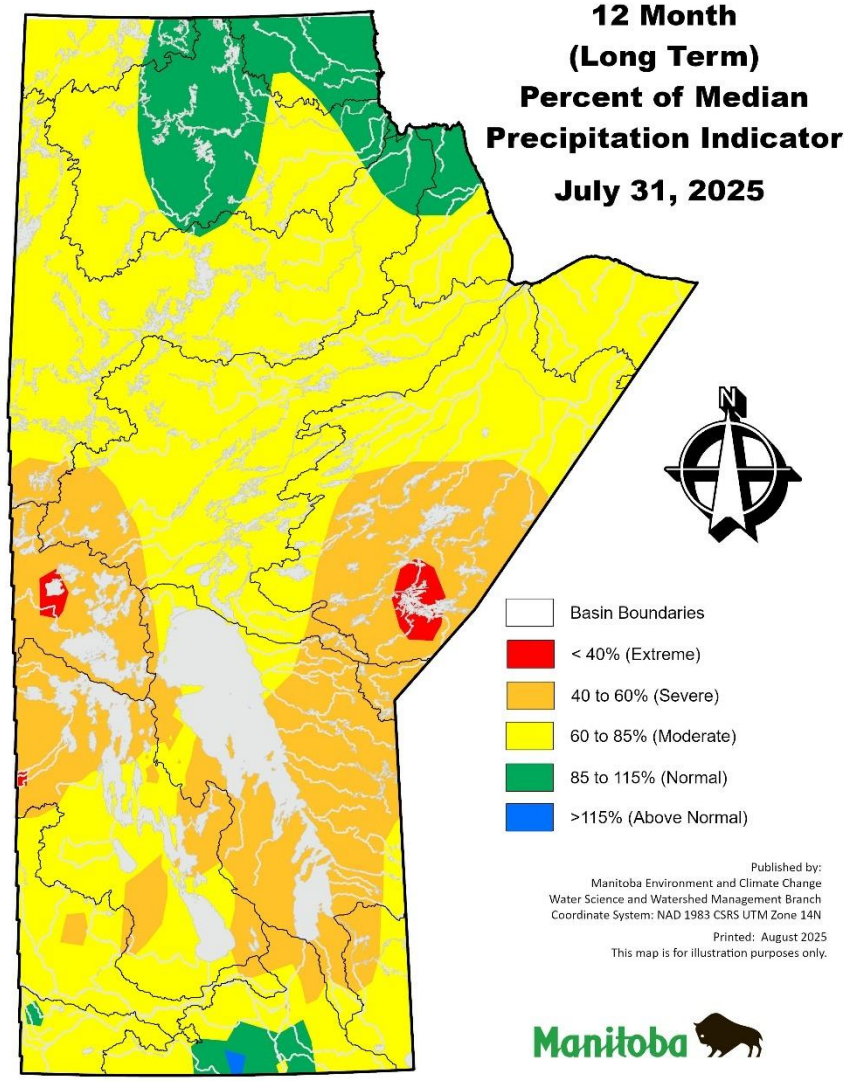

Figure 3: Twelve month (long term) per cent of median precipitation indicator.

Streamflow & Lake Level Indicator

The streamflow and lake level indicator is based on average daily flows and levels compared to historical values for that particular day.

This indicator is used to determine the severity of hydrological dryness in a watershed and is summarized on Figure 4, representing hydrological conditions for July 31, 2025.

Streamflow and lake level percentile plots for all of the rivers and lakes included on Figure 4 are available on the Manitoba Drought Monitor website under the *Drought Indicator Map* tab.

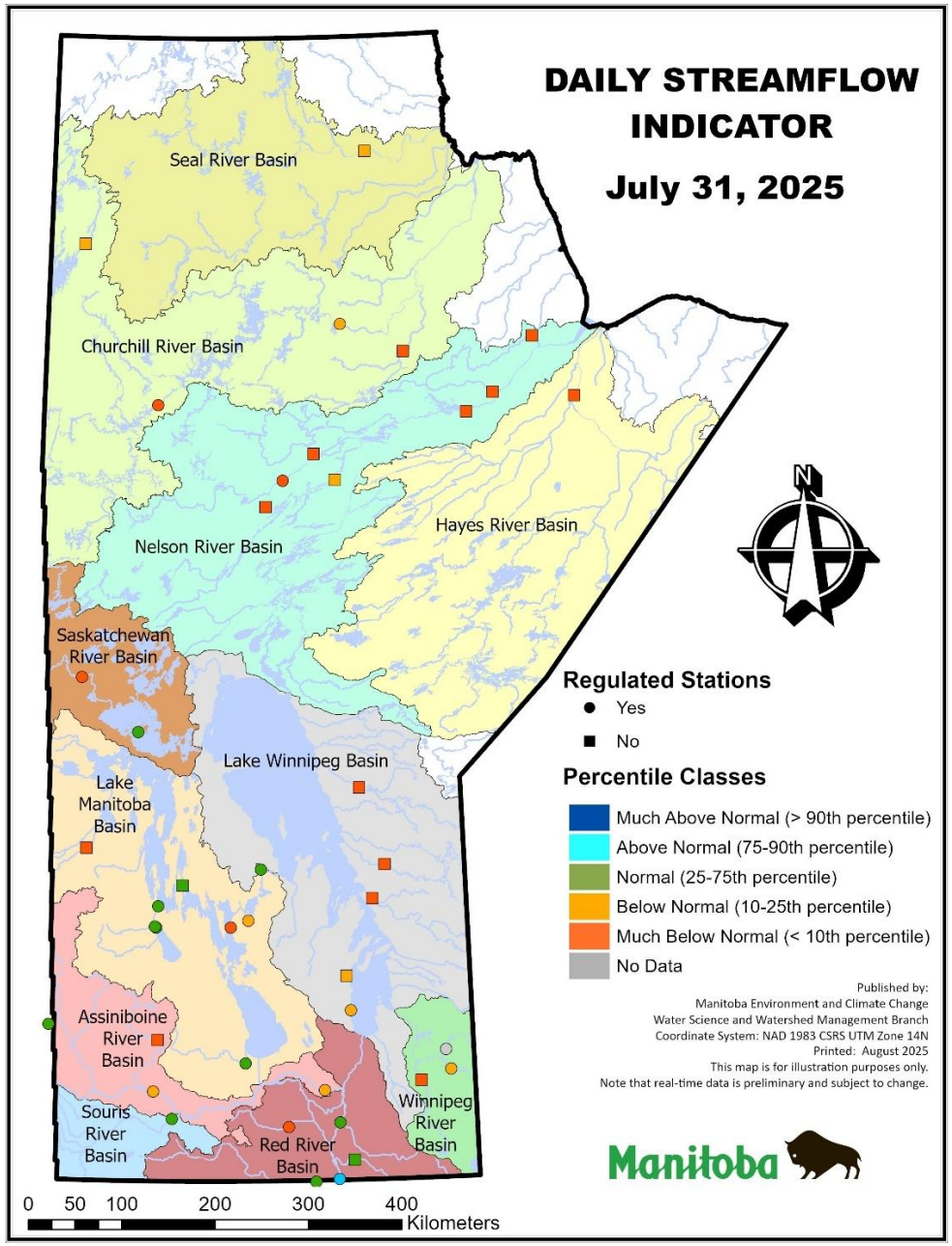

Figure 4: Daily streamflow and lake level indicator for July 31, 2025.

Canada and United States Drought Monitors

The Canadian Drought Monitor and the United States Drought Monitor map the extent and intensity of drought conditions across Canada and the continental U.S.A.

Drought Monitor assessments are based on a suite of drought indicators, impacts data and local reports as interpreted by federal, provincial/state and academic scientists.

The Canadian and United States Drought Monitor maps use the following classification system:

- D0 (Abnormally Dry) – represents an event that occurs every three to five years;
- D1 (Moderate Drought) – five to 10 year event;
- D2 (Severe Drought) – 10 to 20 year event;
- D3 (Extreme Drought) – 20 to 50 year event; and
- D4 (Exceptional Drought) – 50+ year event.

Additionally, the map indicates the duration of drought as either short-term (S; less than six months) or long-term (L; more than six months) (Figure 5).

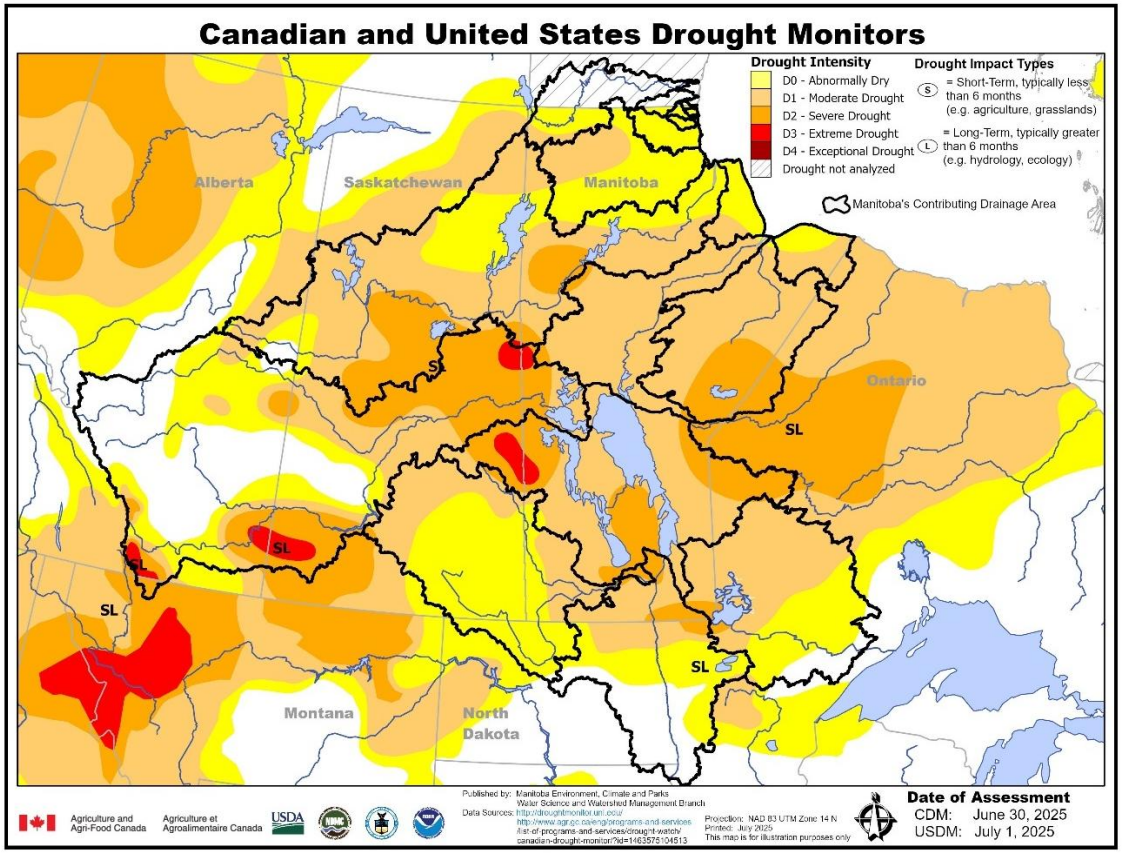

Figure 5: Canadian and United States Drought Monitors' classification of short-term (S) and long-term (L) drought conditions assessed as of June 30, 2025.

Water Availability

Reservoir Conditions

Table 1: Water Supply Reservoir Levels and Storages – July 31, 2025 (Southern and Western Manitoba).

Water Supply Reservoir Levels and Storages - July 31, 2025								
Lake or Reservoir	**Community Supplied**	**Target Level (feet)**	**Latest Observed Level (feet)**	**Observed date**	**Supply Status (Recent - Target) (feet)**	**Storage at Target Level (acre-feet)**	**Storage at Observed Level (acre-feet)**	**Supply Status (observed storage/target storage) (%)**
Lake of the Prairies (Shellmouth)*[1]	Brandon, Portage, Cartier Regional Water Co-op	1,402.5	1403.18	July 31, 2025	+0.68	300,000	308,670	103%
Lake Wahtopanah (Rivers)*	Rivers	1,536.0	1535.79	July 31, 2025	-0.21	24,500	24,270	99%
Minnewasta (Morden)*	Morden	1,082.0	1082.09	July 31, 2025	+0.09	3,150	3,163	100%
Stephenfield*	Carman, Pembina Valley Water Co-op	972.0	970.18	July 31, 2025	-1.82	3,810	2,965	78%
Vermilion*	Dauphin	1,274.0	1274.02	July 31, 2025	+0.02	2,600	2,604	100%
Goudney (Pilot Mound)*		1,482.0	1482.20	July 31, 2025	+0.20	450	460	102%
Jackson Lake*		1,174.0	1171.66	July 31, 2025	-2.34	2,990	2,410	81%
Manitou (Mary Jane)*		1,537.0	1536.67	July 31, 2025	-0.33	1,150	1,120	97%
Turtlehead (Deloraine)*	Deloraine	1,772.0	1770.68	July 31, 2025	-1.32	1,400	1,331	95%
Lake Irwin*		1,178.0	1178.14	July 31, 2025	+0.14	3,800	3,891	102%
Minnedosa*[1]		1,681.5	1681.95	July 31, 2025	+0.45	1,558	1,676	108%
Boissevain*	Boissevain	1,697.0	1697.94	July 31, 2025	+0.94	505	585	116%
Elgin*		1,532.0	1532.02	July 31, 2025	+0.02	520	521	100%
St. Malo*		840.0	840.20	July 31, 2025	+0.20	1,770	1,803	102%
Kenton Reservoir		1,448.0	1447.34	July 31, 2025	-0.66	600	550	92%
Killarney Lake		1,615.0	1615.13	July 31, 2025	+0.13	7,360	7,418	101%

[1] Summer target level and storage
* Real-time water level gauge

On-Farm Water Supply

On-farm water supply updates from Manitoba Agriculture's Crop Report Issue 14 (July 29, 2025) are as follows:

- Dugout water levels are low in many areas due to limited moisture, though they remain sufficient for now. However, concerns about water quality are beginning to surface, as Manitoba Agriculture has received inquiries about testing and treatment options for blue-green algae and duckweed. Some producers have begun hauling fresh clean water to pastures.

Soil Moisture

A regional representation of soil moisture conditions for the top 120 cm relative to the field capacity is shown on Figure 6.

The colours on the map represent measured soil moisture values from automated instruments at sites across Manitoba. Qualitative range (very dry to very wet) is based on the amount of current soil moisture relative to field capacity. Field Capacity is defined as the maximum amount of moisture the soil can hold when drainage due to gravity stops.

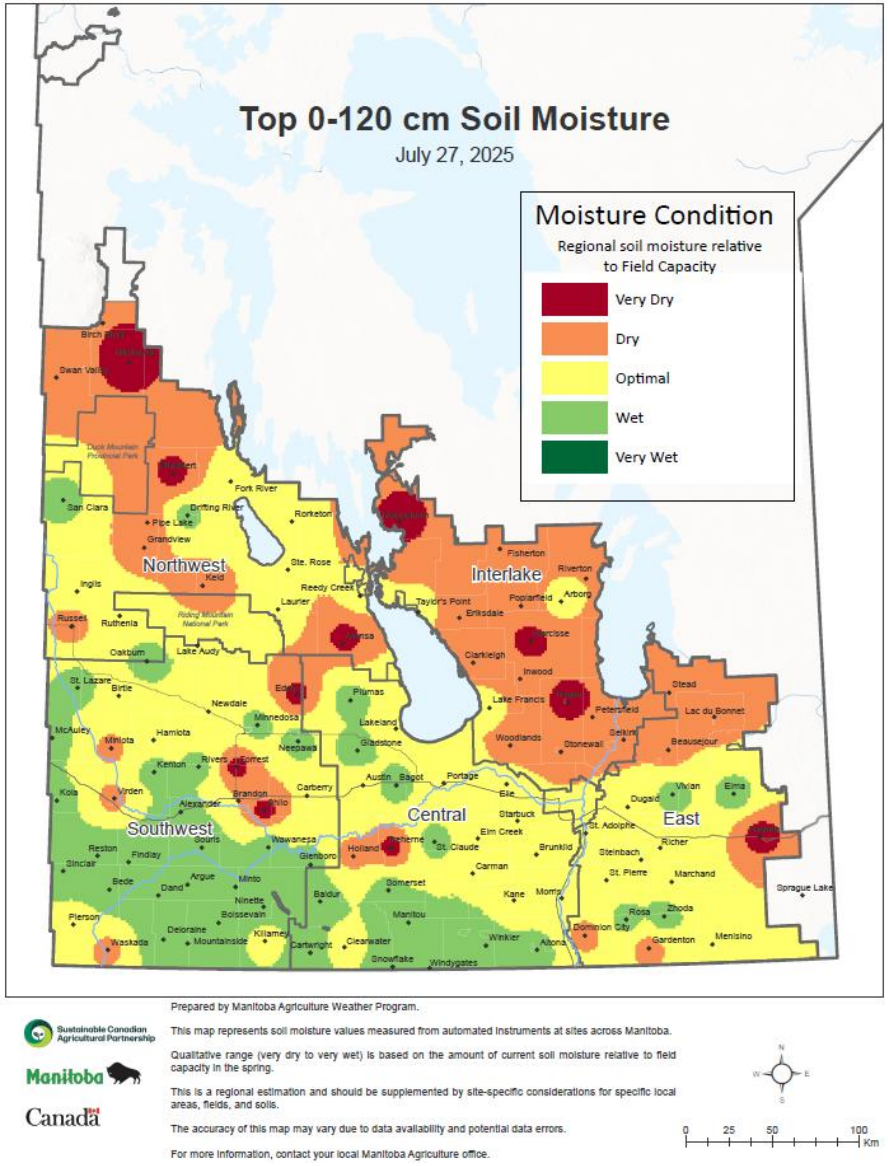

Figure 6: Manitoba Agriculture's July 27, 2025 mapping of soil moisture conditions in the top 0 – 120 cm.

Wildfires

After Manitoba's wildfire situation showed improvement in June, it deteriorated in July. The Manitoba government reinstated the provincial state of emergency on July 10.

As of the end of July, the Canadian Red Cross had registered approximately 29,000 people evacuated due to the 2025 wildfires in Manitoba. Although 16,000 evacuees have returned home, many remain evacuated and new communities continue to require evacuation.

As of July 31, 2025 the fire weather risk produced by Natural Resources Canada is high to very high across most of Manitoba (Figure 7). Manitobans and visitors are urged to exercise caution and comply with all posted restrictions to prevent wildfires.

Refer to the fire and travel restriction maps found at: www.gov.mb.ca/conservation_fire/Restrictions/index.html. Several municipalities continue to implement burning restrictions. Visit www.manitoba.ca/wildfire/burn_conditions.html to view current burning restrictions.

For further information on the Manitoba Wildfire Service, situation updates, restrictions and other important wildfire links, go to www.gov.mb.ca/wildfire or follow the Manitoba government on X (formerly Twitter) at https://twitter.com/mbgov.

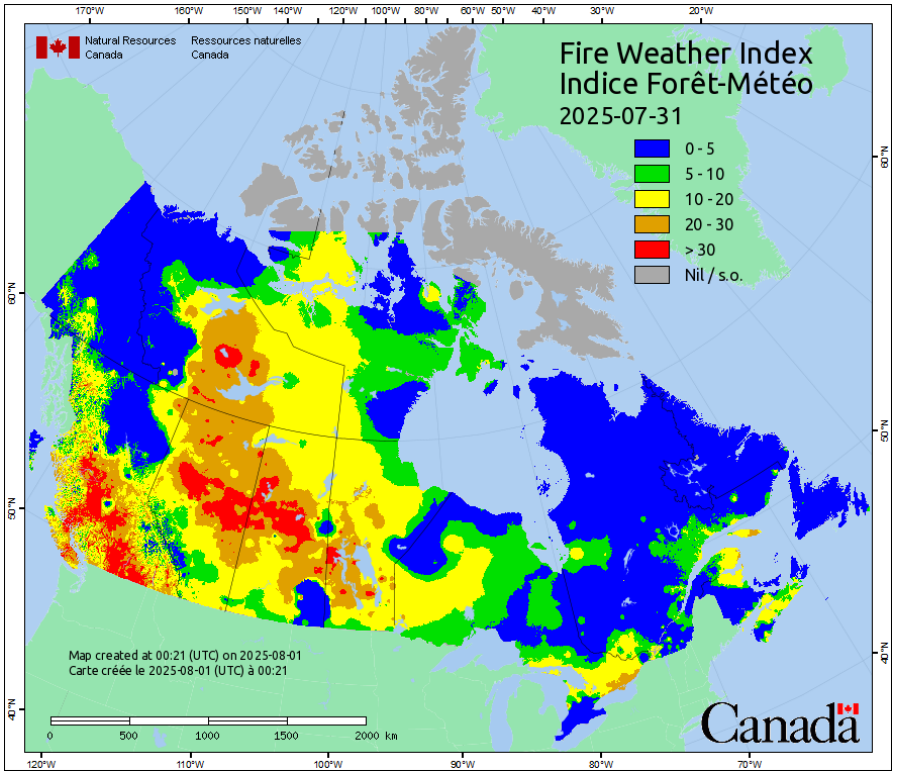

Figure 7: Fire Weather Index mapping by Natural Resources Canada.

Impacts due to Dry Conditions

The most significant impact due to meteorological drought conditions is severe wildfire risk and active fires across much of Manitoba. Wildfire risk will remain high until relieved by precipitation.

Hydrological drought is present in eastern, central and northern areas where rivers and lakes have fallen below their normal range for this time of year. Precipitation will be needed to prevent hydrological drought from developing further.

Crops in many areas across Manitoba have shown signs of drought stress, especially in areas that have been missed by summer storms and/or are on lighter soils. Precipitation is also needed to maintain or improve on-farm water supplies and to prevent further agricultural drought impacts.

Past reports, drought mapping and other information and resources are available on the Manitoba Drought Monitor website.

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Acknowledgements

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Manitoba Transportation and Infrastructure:
Reservoir level information:
https://www.gov.mb.ca/mit/floodinfo/index.html

Manitoba Wildfire Service:
https://www.gov.mb.ca/sd/fire/

Manitoba Agriculture:
Crop Reports:
http://www.gov.mb.ca/agriculture/crops/seasonal-reports/crop-report-archive/index.html

Topsoil moisture conditions:
https://www.gov.mb.ca/agriculture/weather/weather-conditions-and-reports.html

Environment and Climate Change Canada:
Flow and lake level information:
http://www.wateroffice.ec.gc.ca/index_e.html

Agriculture and Agri-Food Canada:
Canadian Drought Monitor:
https://agriculture.canada.ca/en/agriculture-and-environment/drought-watch-and-agroclimate/canadian-drought-monitor

United States Drought Monitor:
https://droughtmonitor.unl.edu/