

Water Availability and Drought Conditions Report

APRIL 2025

Executive Summary

- This Water Availability and Drought Conditions Report provides an update on conditions throughout Manitoba for April 2025.
- Precipitation conditions over the past month, three-month, and twelve-month periods are as follows:
 - During April 2025, most of central Manitoba including the Interlake region was extremely dry (<40 per cent of median). Most areas of Manitoba were moderately to severely dry. The very southwest and southeast corners, and some northern areas, experienced normal to above normal precipitation conditions.
 - Over the past three months (February, March, April), almost all of Manitoba experienced moderately dry to severely dry precipitation conditions.
 - Over the past 12 months, Manitoba observed moderately dry to mostly normal precipitation conditions.
- As of April 30, 2025, water levels in rivers and lakes across Manitoba ranged from much below normal (<10th percentile) to normal (25th – 75th percentile). Water levels in Lake Winnipeg and Lake Manitoba are below normal (10th – 25th percentile).
- The March 31, 2025 Canadian Drought Monitor assessment classified some areas of Manitoba and upstream drainage basins as having abnormally dry (D0) to moderate drought (D1). Severe drought (D2) was reported in the North Dakota portion of the Souris River Basin. Given the warm and dry conditions in April, expansion of dry conditions is expected across central Manitoba in the end of April drought assessment.
- There are currently no concerns over reservoir water supplies. Provincial water supply reservoirs are at or above full supply levels.
- Soil moisture levels are a concern in eastern and southern agricultural regions of the province where modest snow cover over the winter months contributed to lower spring run-off levels. Accordingly, dugouts may not be fully re-charged in these areas. Manitoba Agriculture's soil moisture map for May 4 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 wet conditions.
- As of April 30, Manitoba provided notice on Level 1 fire and travel restrictions due to extreme winds, above-average temperatures and low humidity levels. Refer to the areas of the fire and travel restriction map found at: www.gov.mb.ca/conservation_fire/Restrictions/index.html. Several municipalities have also implemented burning restrictions. Visit www.manitoba.ca/wildfire/burn_conditions.html to view current burning restrictions. As of April 30, the fire danger level produced by Natural Resources Canada is low to moderate to low across the province, but increasing with warm dry weather.
- Short term but intense meteorological drought conditions in some areas are causing drought impacts early in the 2025 open water season. While the lack of spring precipitation has not led to hydrological drought and most rivers and lakes remain in the normal range for the time of year, precipitation will be needed to prevent hydrological drought from developing. Precipitation is also needed to maintain or improve on-farm water supplies and to prevent agricultural drought impacts.

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.

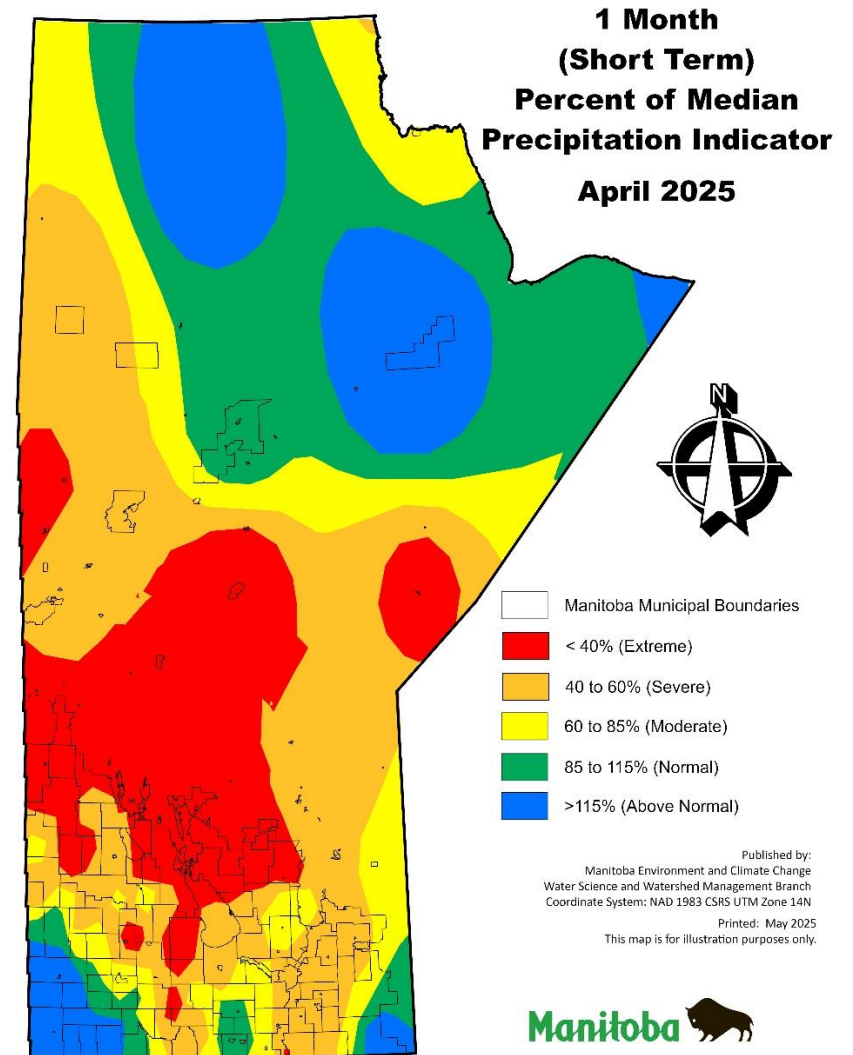


Figure 1: One month (short term) per cent of median precipitation indicator.

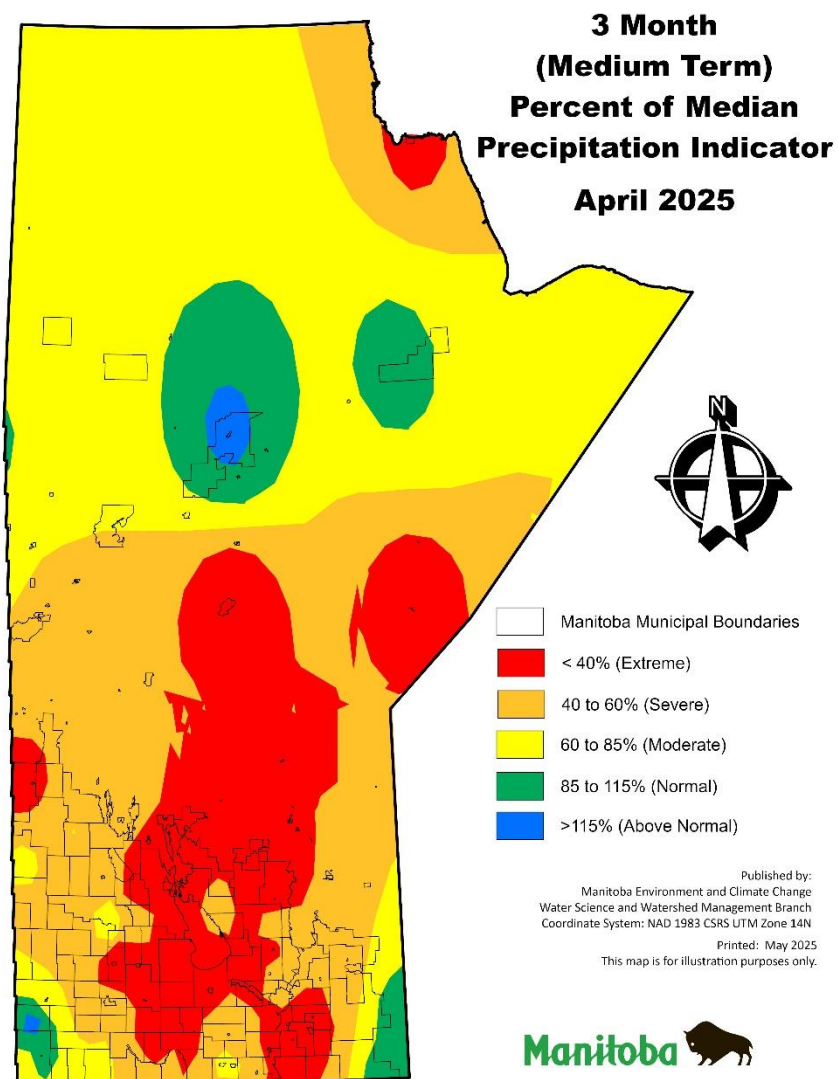


Figure 2: Three month (medium term) per cent of median precipitation indicator.

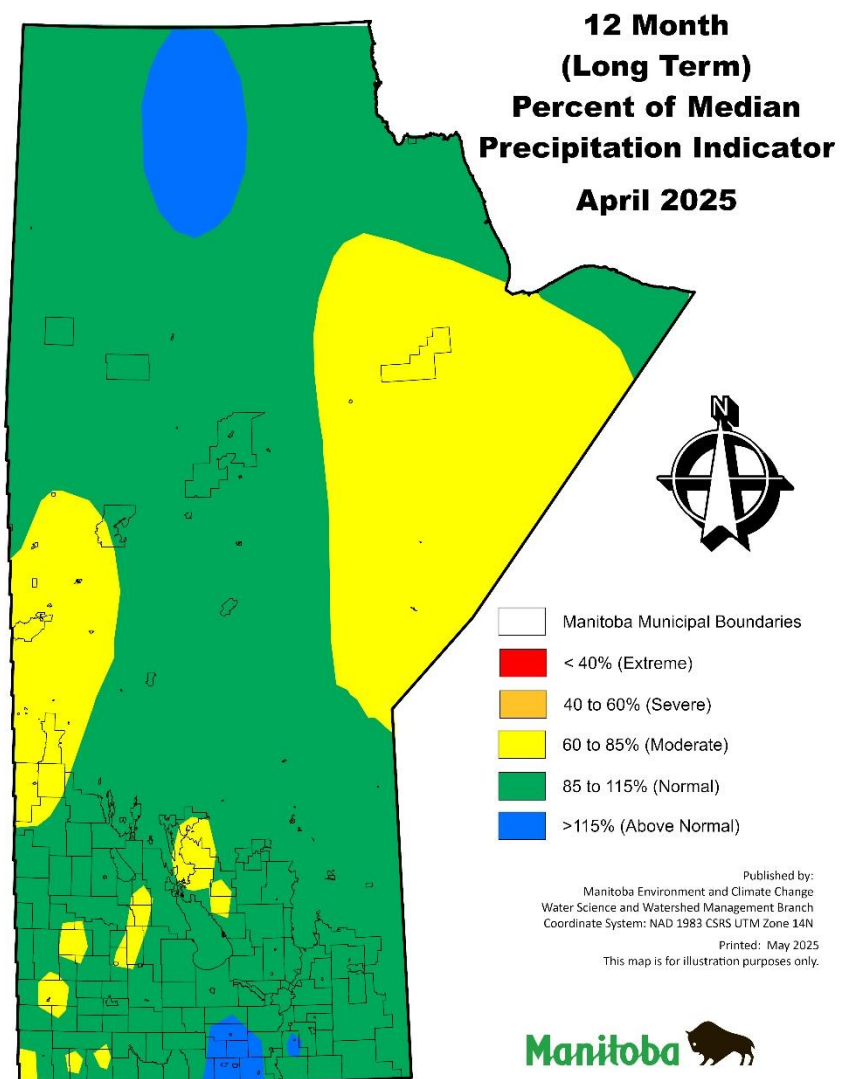


Figure 3: Twelve month (long term) per cent of median precipitation indicator.

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 April 30, 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.

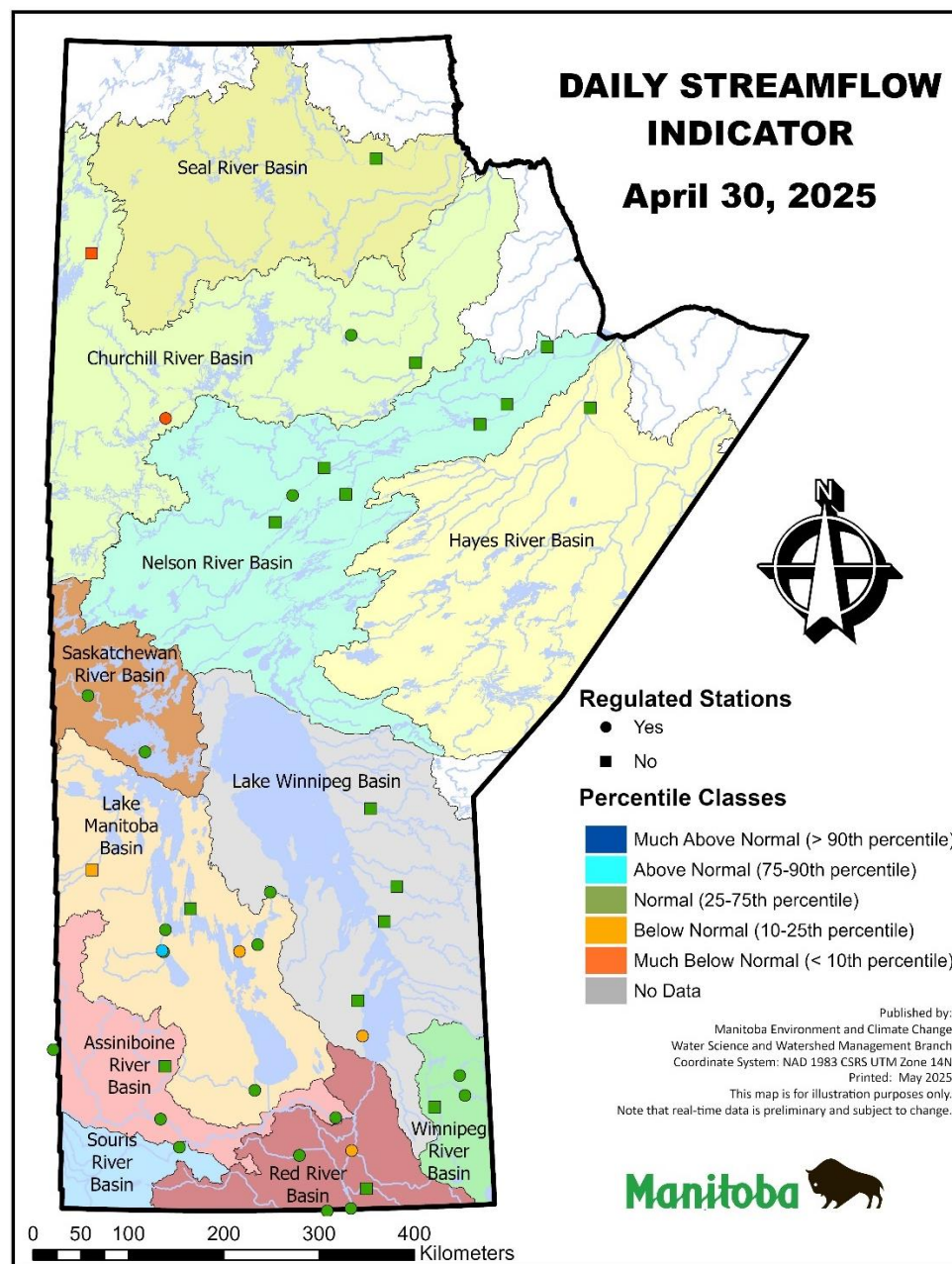


Figure 4: Daily streamflow and lake level indicator for April 30, 2025.

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).

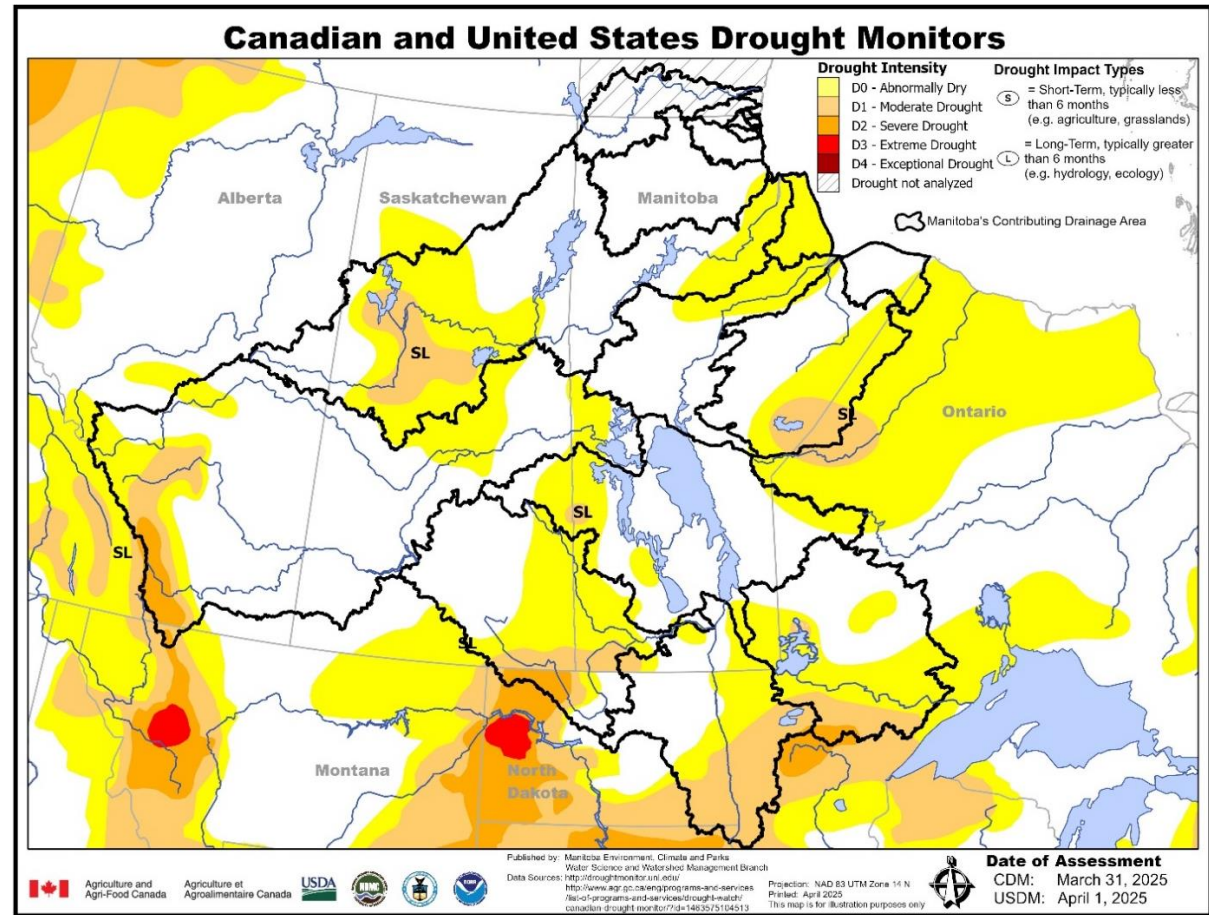


Figure 5: Canadian and United States Drought Monitors' classification of short-term (S) and long-term (L) drought conditions assessed as of March 31, 2025.

Water Availability

Reservoir Conditions

Table 1: Water Supply Reservoir Levels and Storages – April 30, 2025 (Southern and Western Manitoba).

Water Supply Reservoir Levels and Storages - April 30, 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	1399.16	April 30, 2025	-3.34	300,000	258,924	86%
Lake Wahtopanah (Rivers)*	Rivers	1,536.0	1537.42	April 30, 2025	+1.42	24,500	27,702	113%
Minnewasta (Morden)*	Morden	1,082.0	1082.18	April 30, 2025	+0.18	3,150	3,178	101%
Stephenfield*	Carman, Pembina Valley Water Co-op	972.0	972.89	April 30, 2025	+0.89	3,810	4,228	111%
Vermilion*	Dauphin	1,274.0	1275.36	April 30, 2025	+1.36	2,600	2,918	112%
Goudney (Pilot Mound)*		1,482.0	1482.43	April 30, 2025	+0.43	450	472	105%
Jackson Lake*		1,174.0	1174.29	April 30, 2025	+0.29	2,990	3,081	103%
Manitou (Mary Jane)*		1,537.0	1537.07	April 30, 2025	+0.07	1,150	1,152	100%
Turtlehead (Deloraine)*	Deloraine	1,772.0	1770.72	April 30, 2025	-1.28	1,400	1,333	95%
Lake Irwin*		1,178.0	1178.14	April 30, 2025	+0.14	3,800	3,889	102%
Minnedosa* ¹		1,681.5	1681.05	April 30, 2025	-0.45	1,558	1,434	92%
Boissevain*	Boissevain	1,697.0	1698.58	April 30, 2025	+1.58	505	638	126%
Elgin*		1,532.0	1532.13	May 5, 2025	+0.13	520	529	102%
St. Malo*		840.0	840.69	April 30, 2025	+0.69	1,770	1,884	106%
Kenton Reservoir		1,448.0	1447.93	April 30, 2025	-0.07	600	595	99%
Killarney Lake		1,615.0	1615.40	April 30, 2025	+0.40	7,360	7,543	102%
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 1 (April 29, 2025) are as follows:

- Soil moisture conditions are good in the northwest and Interlake areas where snow was more plentiful this winter.
- Soil moisture levels are a concern in eastern and southern regions of the province where modest snow cover over the winter months contributed to lower spring run-off levels. Accordingly, dugouts may not be fully re-charged in these areas.

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.

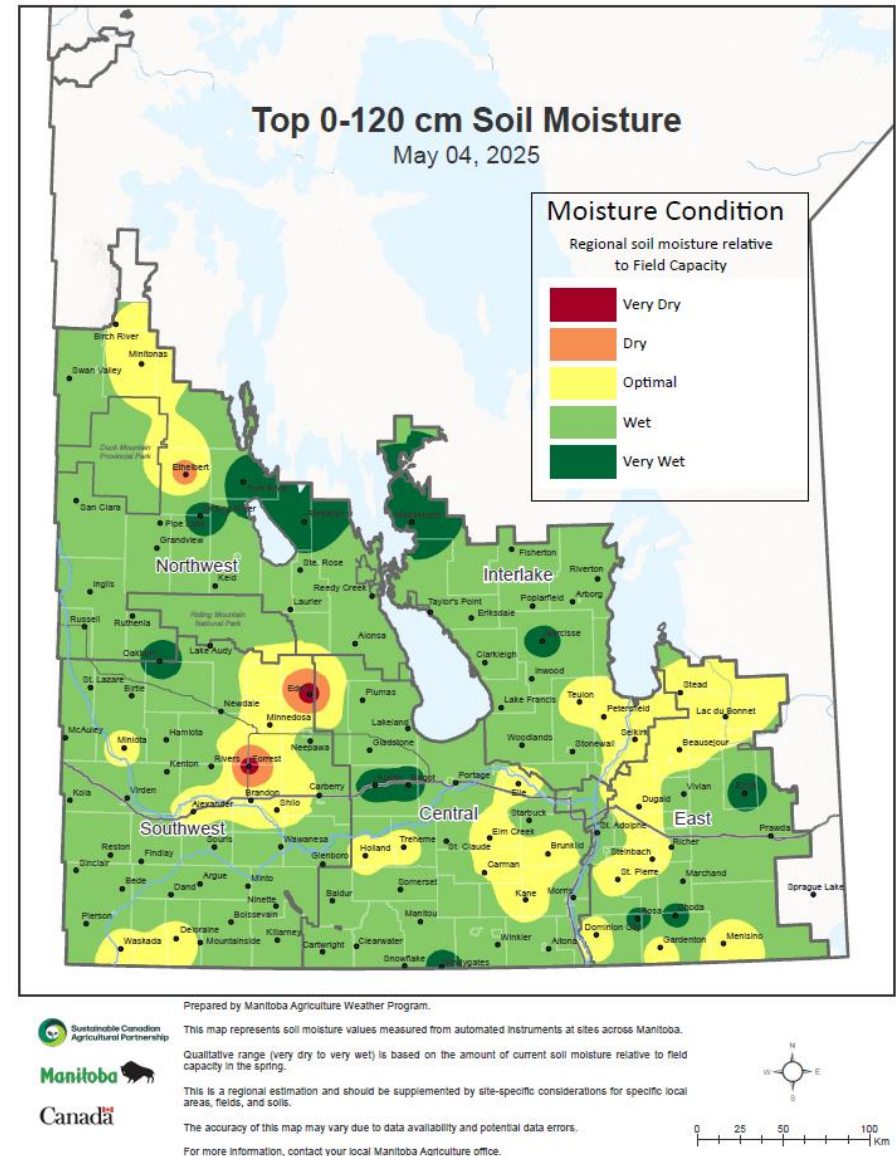


Figure 6: Manitoba Agriculture's May 4, 2025 mapping of soil moisture conditions in the top 0 – 120 cm.

Wildfires

Warm dry weather, especially on the east side of the province, has rapidly increased the wildfire risk. On April 30, the Manitoba Wildfire Service advised Level 1 fire and travel restrictions were implemented on May 2, 2025 due to the high fire danger in the southeast and Interlake regions of the province. Forecasted extreme winds, above-average temperatures, and low humidity levels are driving these restrictions, which will remain in effect until conditions improve.

Refer to the areas of the fire and travel restriction map found at: www.gov.mb.ca/conservation_fire/Restrictions/index.html. Several municipalities have also implemented burning restrictions. Visit www.manitoba.ca/wildfire/burn_conditions.html to view current burning restrictions. As of April 30, 2025 the fire danger level produced by Natural Resources Canada is low to moderate across the province, but increasing with warm, dry weather (Figure 7). Manitobans and visitors are urged to exercise caution and comply with all posted restrictions to prevent wildfires.

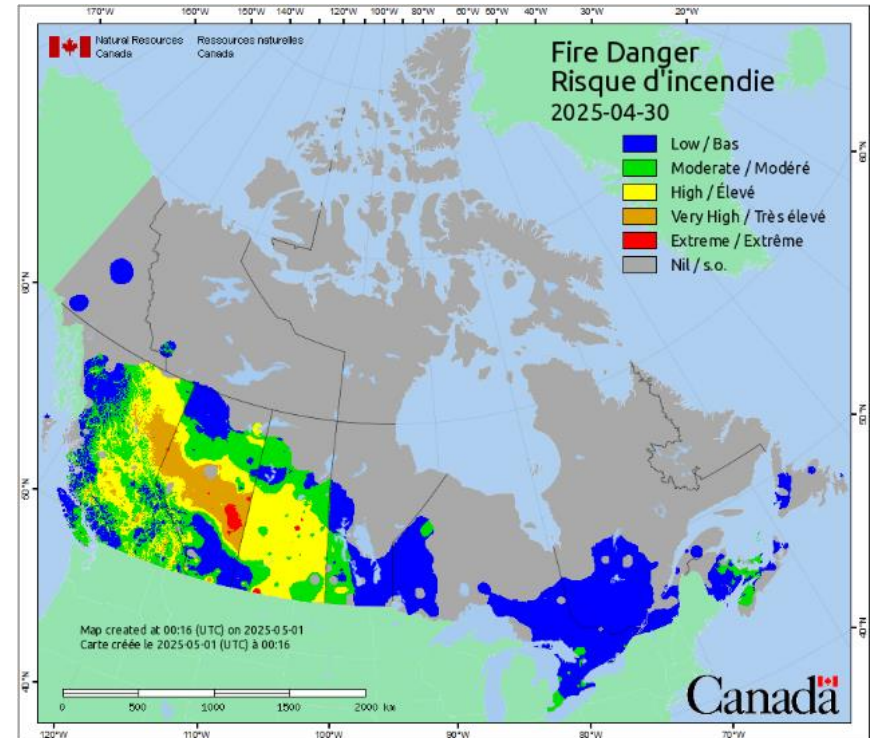


Figure 7: Fire Danger mapping by Natural Resources Canada.

Impacts due to Dry Conditions

Short term but intense meteorological drought conditions in some areas are causing drought impacts early in the 2025 open water season. Wildfire risk has intensified and will remain high until relieved by precipitation and greening of vegetation. While the lack of spring precipitation has not led to hydrological drought and most rivers and lakes remain in the normal range for this time of year, precipitation will be needed to prevent hydrological drought from developing. Precipitation is also needed to maintain or improve on-farm water supplies and to prevent agricultural drought impacts.

Past reports, drought mapping and other information and resources are available on the [Manitoba Drought Monitor](http://ManitobaDroughtMonitor.ca) website.

For further information, please contact:

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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/>