Water Availability and Drought Conditions Report

JUNE 2025

Executive Summary

- This Water Availability and Drought Conditions Report provides an update on conditions throughout Manitoba for June 2025.
- Precipitation conditions over the past month, three-month, and twelve-month periods are as follows:
  - During June 2025, most of Manitoba was moderately to severely dry, with some areas in southern Manitoba extremely dry and some areas in northern Manitoba normal to above normal.
  - Over the past three months (April, May, June), most of Manitoba was moderately to extremely dry, with the northwest corner of Manitoba having normal to above normal precipitation conditions.
  - Over the past 12 months, Manitoba observed mostly moderately dry precipitation conditions, with small areas of severely dry or normal precipitation conditions.
- As of June 30, 2025, water levels in rivers and lakes across Manitoba ranged from much below normal (<10th percentile) to normal (25th – 75th percentile). Continued below normal precipitation has led to hydrological drought with some rivers and lakes below their normal range for this time of year. Precipitation will be needed to prevent hydrological drought from continuing to develop.
- The May 31, 2025 Canadian Drought Monitor assessment classified most of Manitoba as abnormally dry (D0) to severe drought (D2). Continued warm and dry conditions in June could lead to further degradation of the classification for the end of June 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 for this time of year in most parts of the province. Manitoba Agriculture's soil moisture map for June 29, 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. Soil moisture in most areas decreased compared to the end of May. Some crops are beginning to show signs of moisture stress, especially in the Interlake region. Precipitation is also needed to improve on-farm water supplies and to prevent agricultural drought impacts.
- Manitoba's wildfire situation improved in June. The Manitoba government rescinded the provincial state of emergency June 23, 2025 (declared May 28, 2025) and many evacuees have returned home. Although conditions have improved, there is an elevated fire danger in the southern half 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.

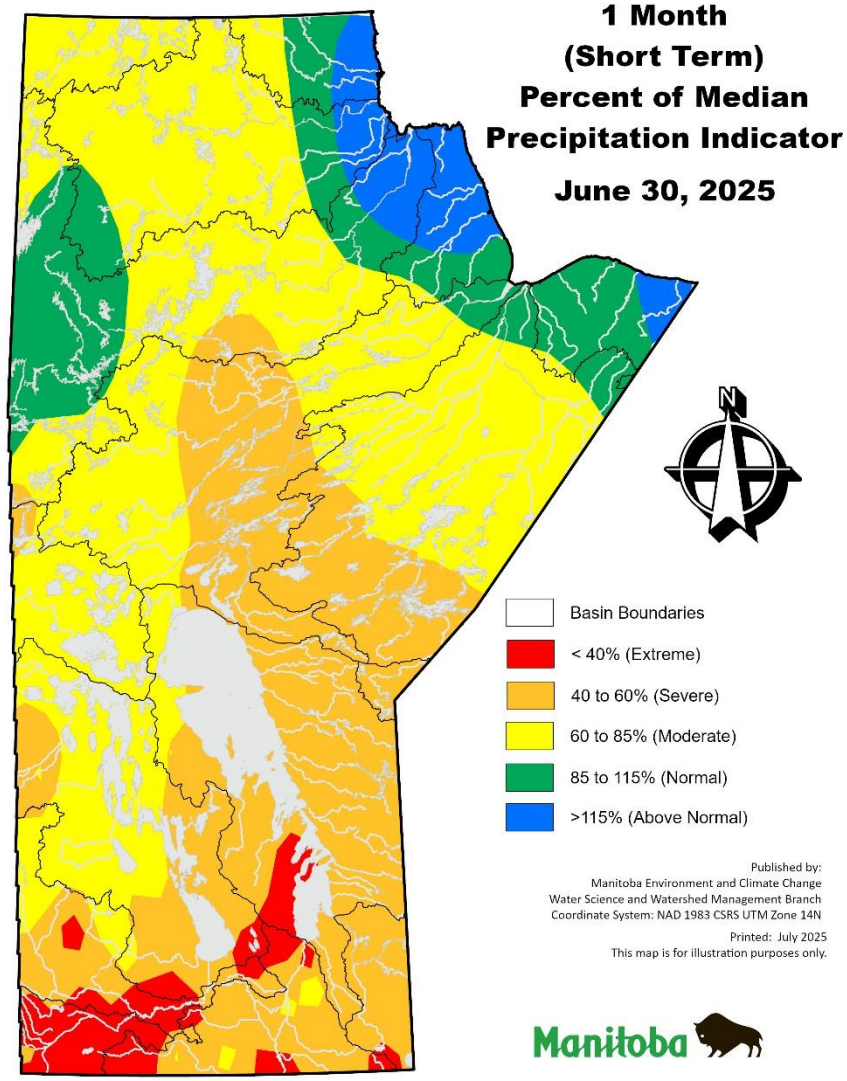

Figure 1: One month (short term) per cent of median precipitation indicator.

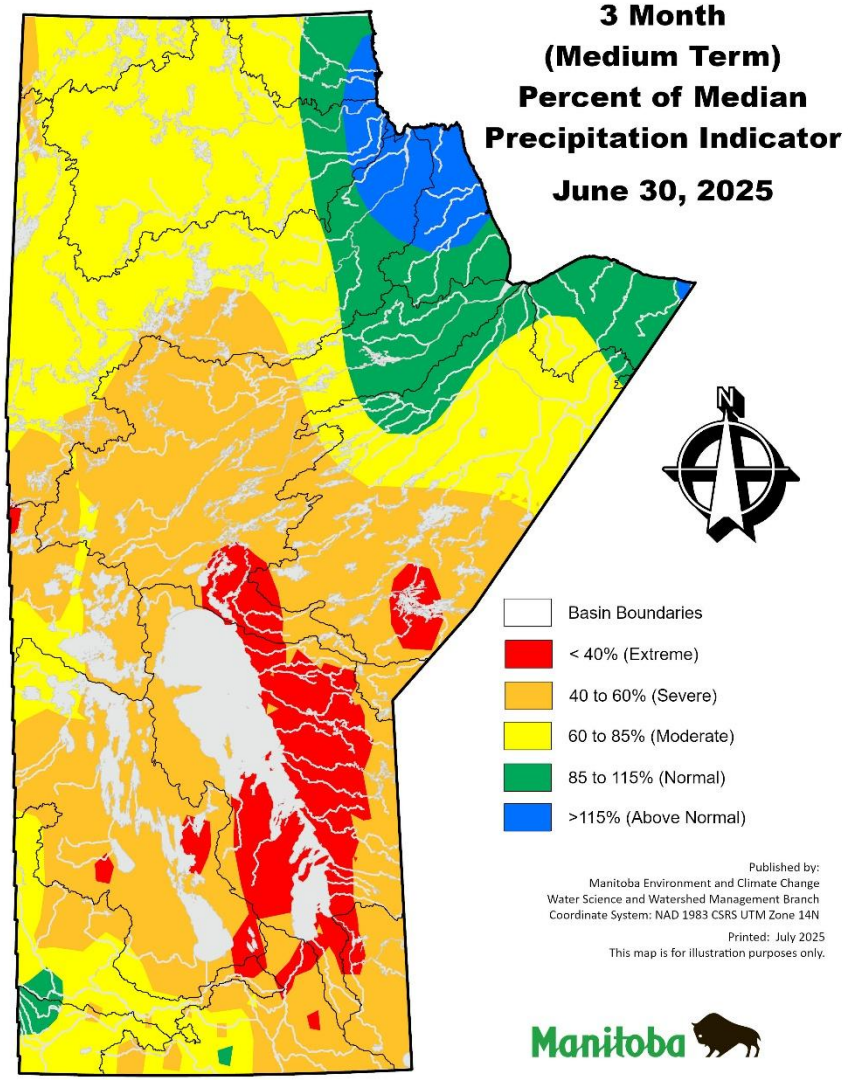

Figure 2: Three month (medium term) per cent of median precipitation indicator.

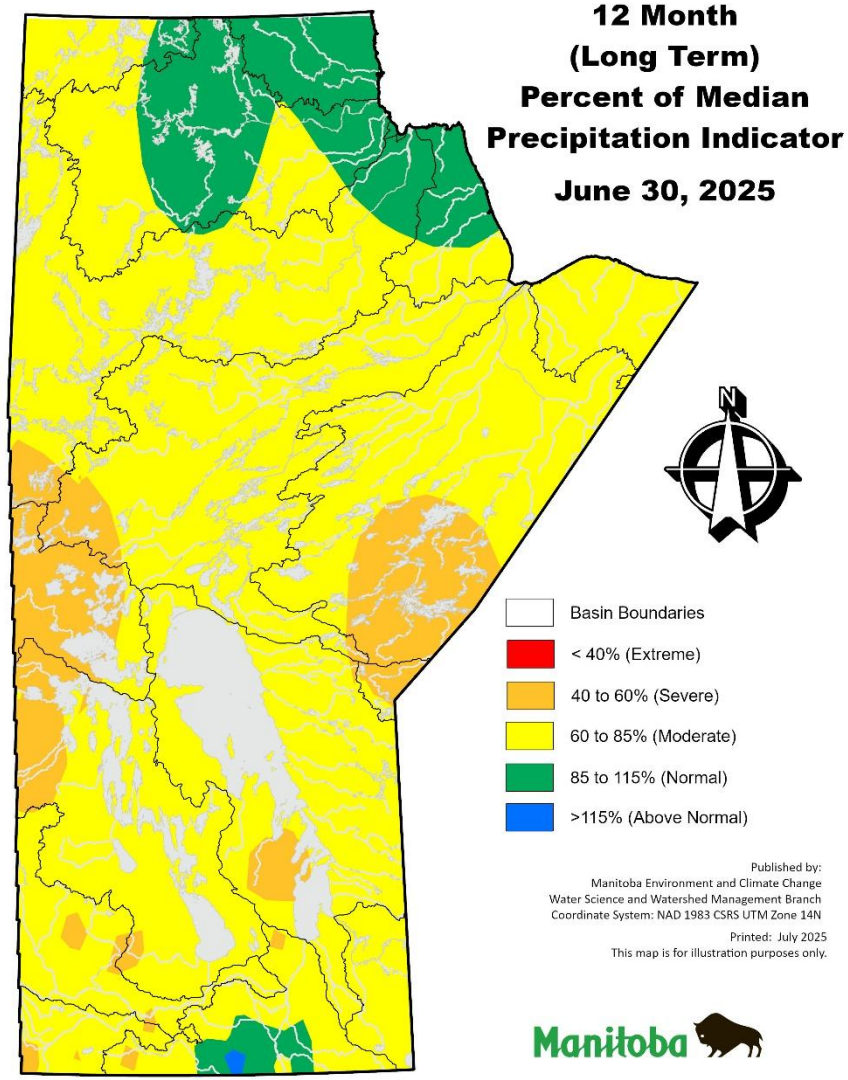

Figure 3: Twelve month (long term) per cent of median precipitation indicator.

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 May 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.

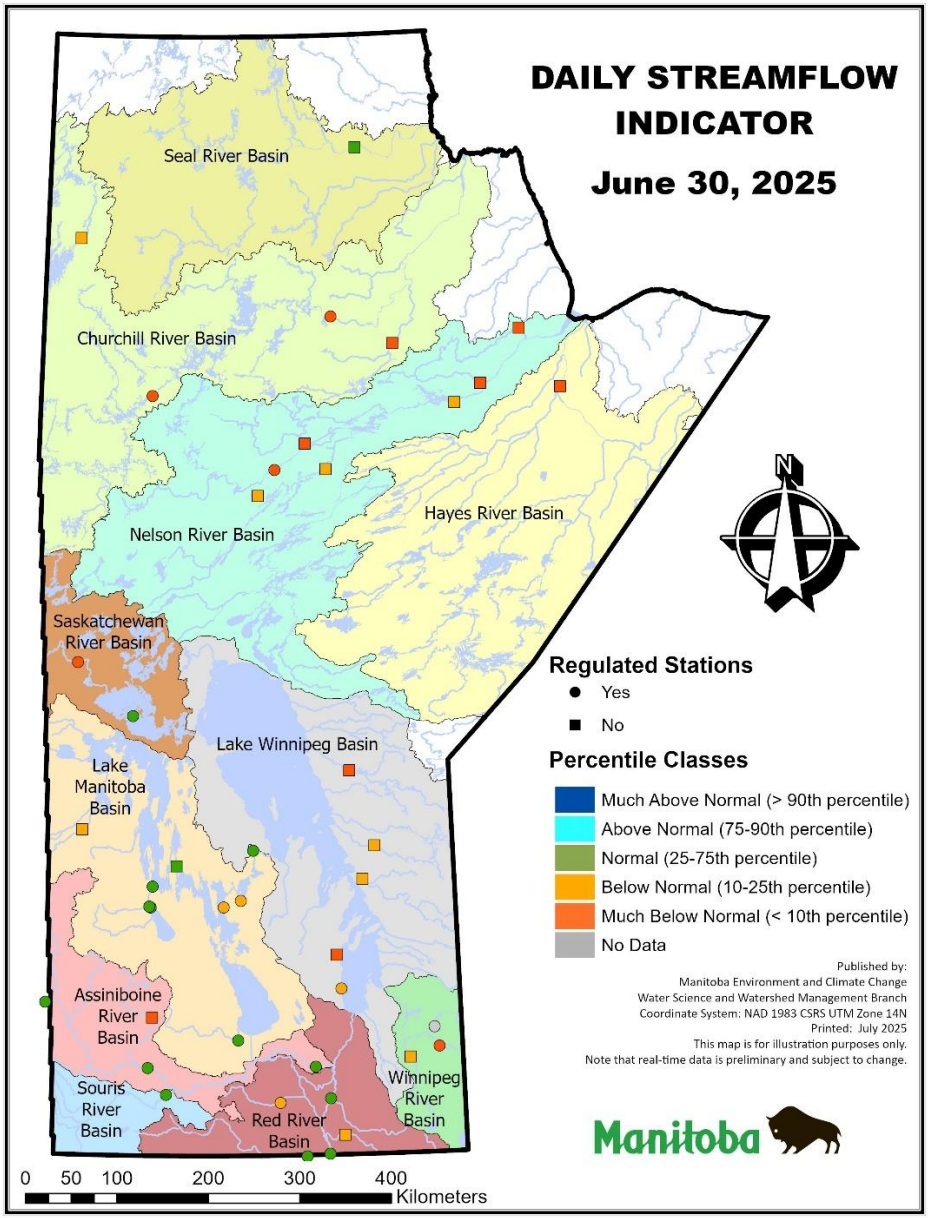

Figure 4: Daily streamflow and lake level indicator for June 30, 2025.

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).

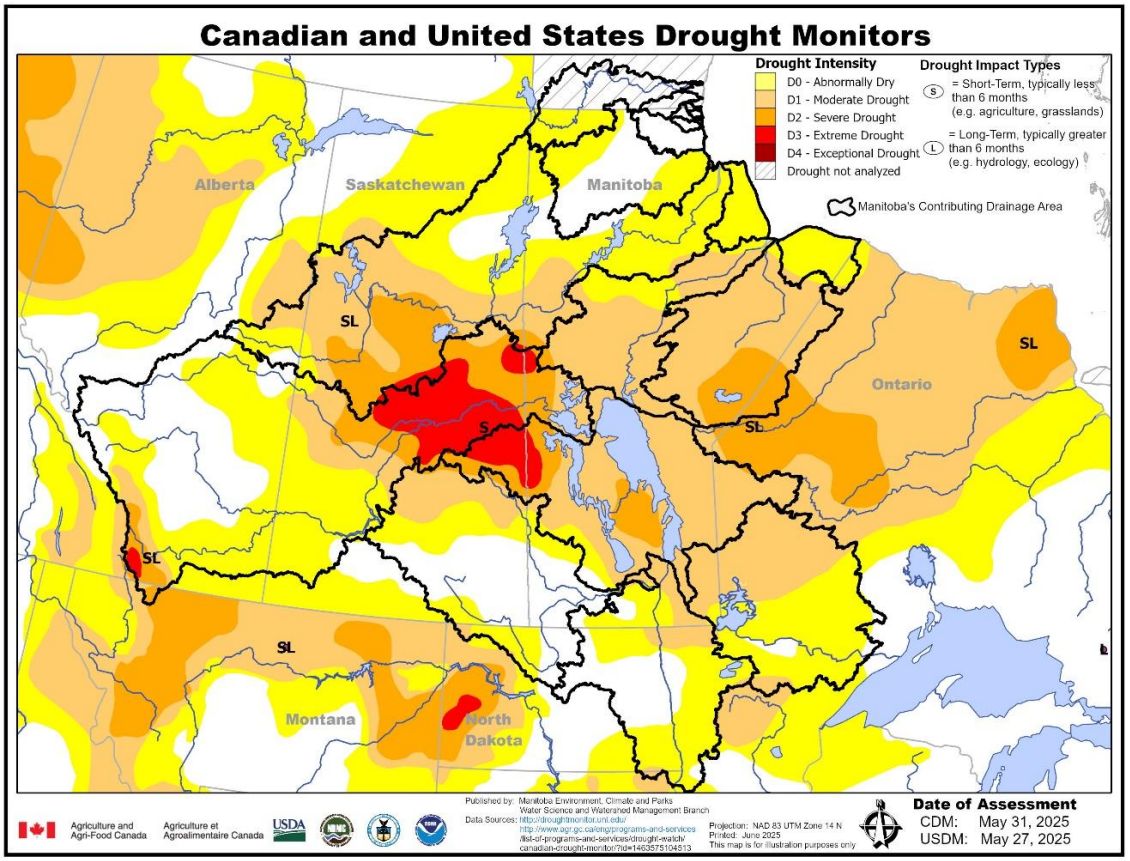

Figure 5: Canadian and United States Drought Monitors' classification of short-term (S) and long-term (L) drought conditions assessed as of May 31, 2025.

Water Availability

Reservoir Conditions

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

Water Supply Reservoir Levels and Storages - June 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	1403.00	June 30, 2025	+0.50	300,000	306,006	102%
Lake Wahtopanah (Rivers)*	Rivers	1,536.0	1536.33	June 30, 2025	+0.33	24,500	25,244	103%
Minnewasta (Morden)*	Morden	1,082.0	1082.08	June 30, 2025	+0.08	3,150	3,160	100%
Stephenfield*	Carman, Pembina Valley Water Co-op	972.0	971.53	June 30, 2025	-0.47	3,810	3,591	94%
Vermilion*	Dauphin	1,274.0	1274.06	June 30, 2025	+0.06	2,600	2,614	101%
Goudney (Pilot Mound)*		1,482.0	1482.19	June 30, 2025	+0.19	450	459	102%
Jackson Lake*		1,174.0	1172.94	June 30, 2025	-1.06	2,990	2,723	91%
Manitou (Mary Jane)*		1,537.0	1536.78	June 30, 2025	-0.22	1,150	1,130	98%
Turtlehead (Deloraine)*	Deloraine	1,772.0	1770.83	June 30, 2025	-1.17	1,400	1,340	96%
Lake Irwin*		1,178.0	1178.57	June 30, 2025	+0.57	3,800	4,174	110%
Minnedosa*[1]		1,681.5	1682.18	June 30, 2025	+0.68	1,558	1,735	111%
Boissevain*	Boissevain	1,697.0	1698.24	June 30, 2025	+1.24	505	610	121%
Elgin*		1,532.0	1531.79	June 30, 2025	-0.21	520	505	97%
St. Malo*		840.0	840.30	June 30, 2025	+0.30	1,770	1,820	103%
Kenton Reservoir		1,448.0	1447.75	June 30, 2025	-0.25	600	581	97%
Killarney Lake		1,615.0	1615.20	June 30, 2025	+0.20	7,360	7,452	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 9 (June 24, 2025) are as follows:

- Dugouts are low for this time of year in most parts of the province.

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.

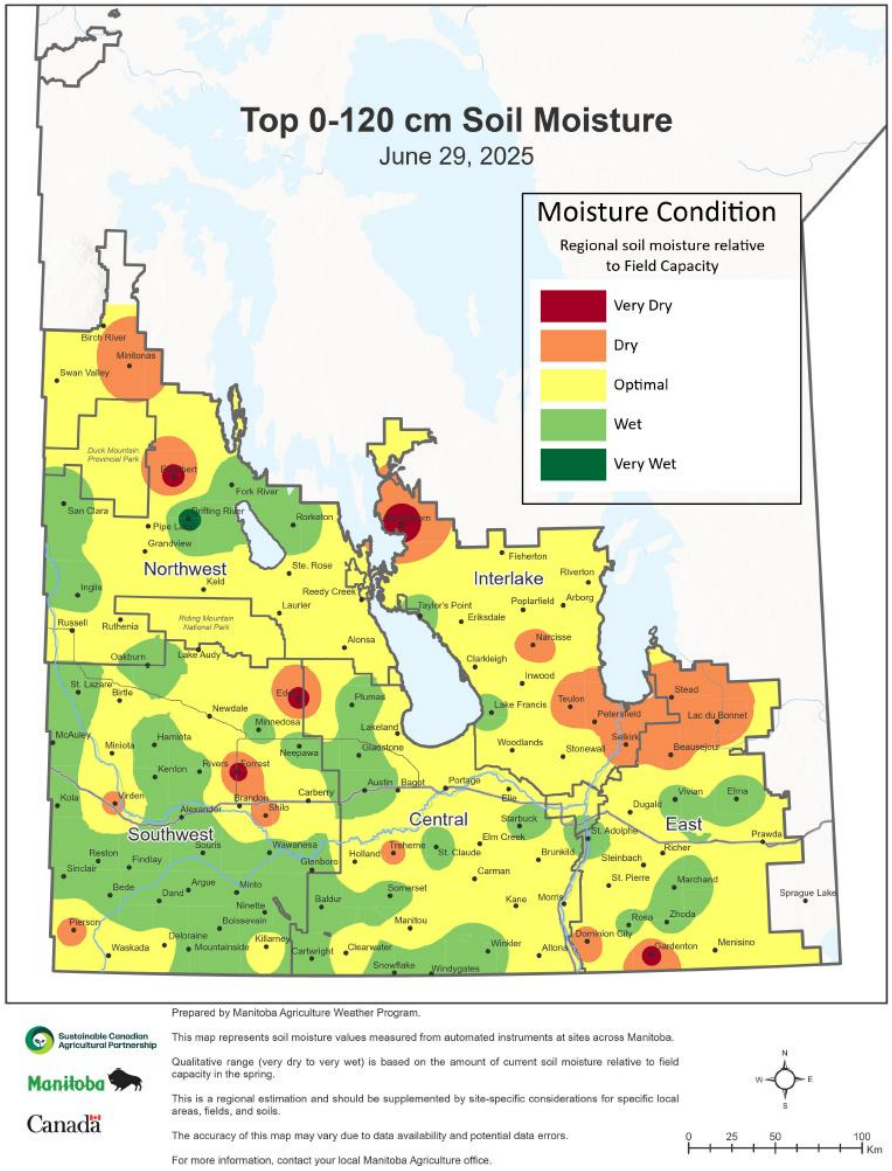

Figure 6: Manitoba Agriculture's June 29, 2025 mapping of soil moisture conditions in the top 0 – 120 cm.

Wildfires

Manitoba's wildfire situation improved in June. As of June 15, the Canadian Red Cross had registered more than 21,500 people from more than 9,000 households evacuated due to the wildfires in Manitoba. The Manitoba government rescinded the provincial state of emergency June 23, 2025 (declared May 28, 2025). Many evacuees have returned home. Although the fire danger has improved, there is an elevated fire danger in the southern half 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. As of June 30, 2025 the fire danger level produced by Natural Resources Canada is low except for areas in southern Manitoba (Figure 7). Manitobans and visitors are urged to exercise caution and comply with all posted restrictions to prevent wildfires.

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.

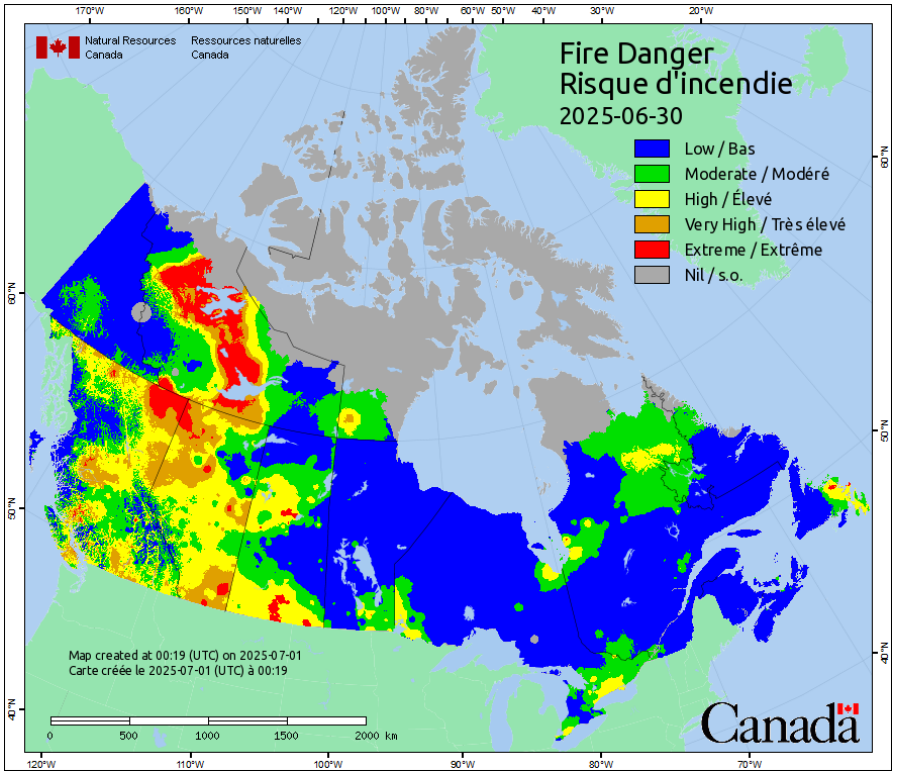

Figure 7: Fire Danger mapping by Natural Resources Canada.

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.

Below normal precipitation is leading to the onset of hydrological drought and some 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.

The warm dry weather has provided good seeding conditions for agricultural producers. However, 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 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/