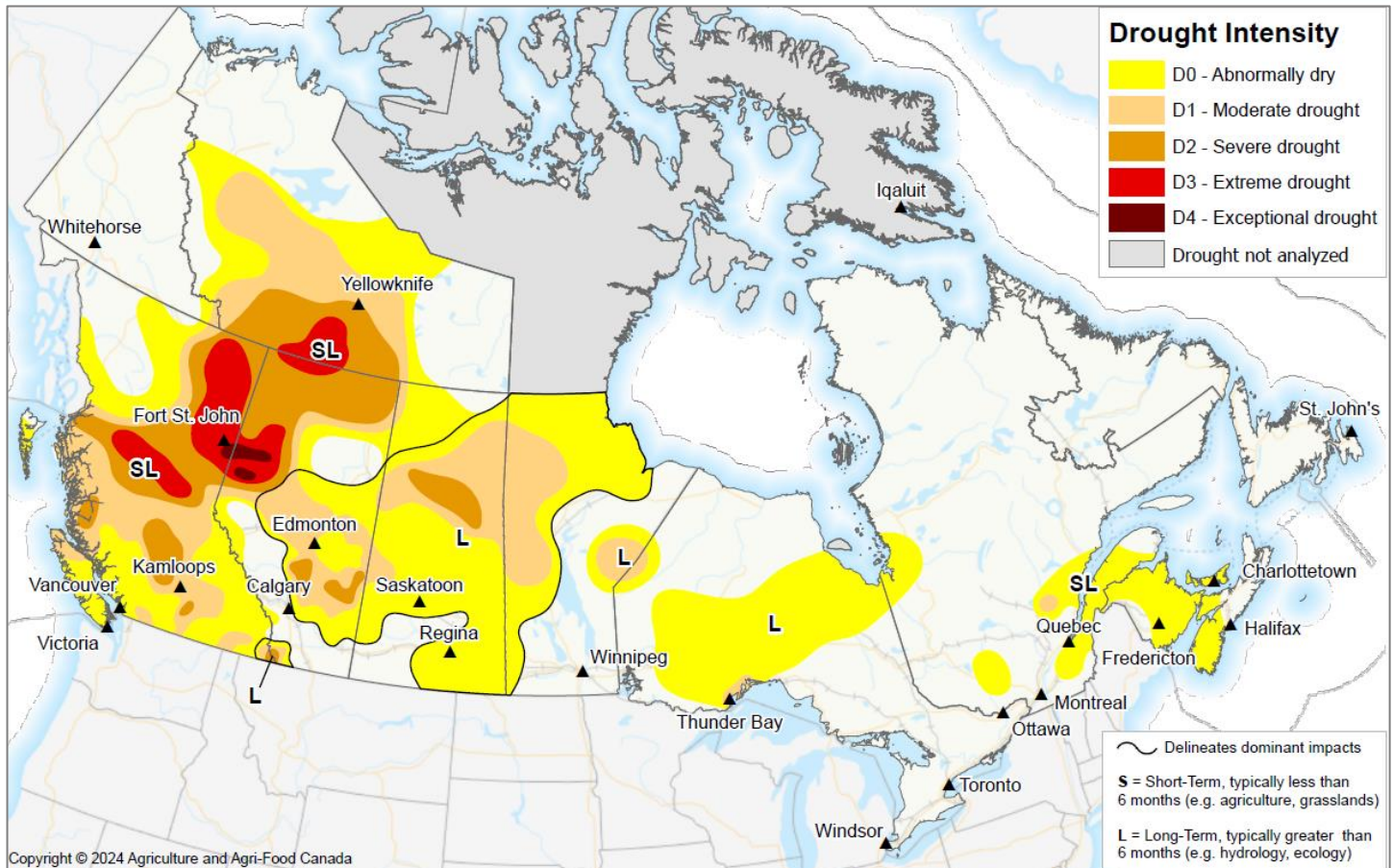


Canadian Drought Monitor

Conditions as of May 31, 2024



Drought conditions improved significantly throughout many regions of Canada with a shift in weather patterns this month. The most significant drought improvements were seen through the southern Prairies where an upper-level low provided cooler and unsettled conditions bringing well above-normal precipitation throughout May. Greater than 200% of normal monthly precipitation was reported in central British Columbia, northern Ontario, as well as northern Quebec and Labrador. This precipitation helped to alleviate a large swath of drought in the Prairies. In the southern and east central regions of Alberta, 2 to 3 drought class improvements took place, where some farmers reported standing water in their fields at the end of May. Moderate to Exceptional Drought (D1 to D4) was reduced by 17% this month across Canada as a result of the significant precipitation. In contrast, short-term deficits

persisted across eastern Quebec and much of the Atlantic Region this month. Temperatures trended cooler across Western Canada this month and warmer than normal across Northern and Central Regions of the country.

At the end of the month, 45% of the country was classified as Abnormally Dry (D0) or in Moderate to Exceptional Drought (D1 to D4), including 59% of the country's agricultural landscape.

Pacific Region (BC)

Overall drought changes across the Pacific Region were mixed in May, with drought conditions improving across southern B.C. and drought slightly degrading across northeastern parts of the province. Precipitation trended near- to above-normal across much of the province, with the exception of central and northeastern corners where less than 40% of normal precipitation fell. Temperatures were reported at near normal this month.

Much of the drought improvement this month took place in the Thompson-Okanagan and Kootenay Boundary regions, in south-central and south-eastern B.C., respectively; these areas saw a reduction to Moderate Drought (D1). An area around Quesnel, in central B.C., also saw a reduction in Severe Drought (D2) due to significant short-term precipitation. The communities of Quesnel and Williams Lake, in the Upper Fraser River Basin, reported 188% and 213% of normal monthly precipitation, respectively. However, surrounding areas remained in Severe Drought (D2) as a result of continued low dugout levels, feed supply shortages and delayed pasture growth.

Recent rains also brought some relief to areas surrounding Prince George as river levels have risen slightly. However, the area continued to receive below-normal precipitation over the past few months, leading to a slower recovery from drought conditions. As a result, Prince George and Fort St. James were removed from Exceptional Drought (D4) but remained in Extreme Drought (D3).

Northern British Columbia continued to experience significant drought conditions with limited precipitation reported. Extreme Drought (D3) conditions were expanded north of Fort Nelson as impacts such as shallower and narrow river levels, active wildfires and growing long-term precipitation deficits persisted. The Peace and Liard River Basins were also dry with Chetwynd recording 59% of normal precipitation, Fort Nelson recording 54% of normal precipitation and Fort St. John - 15%. Exceptional Drought (D4) slightly expanded from Alberta to Dawson Creek in northeastern B.C. this month.

At the end of the month, 87% of the Pacific Region was classified as Abnormally Dry (D0) or in Moderate to Exceptional Drought (D1 to D4), including 99% of the region's agricultural landscape.

Prairie Region (AB, SK, MB)

The Prairies received a significant amount of precipitation of over 50mm this month across nearly the entire region, except the Peace Region in northwestern Alberta. A large area from eastern Alberta into central Saskatchewan and southern Manitoba saw more than 150% of normal precipitation. Highest precipitation amounts were received in southeastern Alberta and southwestern Saskatchewan (100-150 mm), west central Alberta (100-150 mm), northeastern Alberta (100-150 mm) and south-central Manitoba (100-175 mm). Mean monthly temperatures across the Prairie Region were slightly cooler than normal.

The majority of Alberta received above-normal precipitation in May, with the province's northeast, central, and southern regions recording more than 115% of normal precipitation. Significant precipitation since the start of the growing season helped to alleviate drought conditions in central, southern, and northeastern Alberta. In southern Alberta, Medicine Hat recorded its 3rd wettest May on record, after receiving 291% of normal precipitation. Lethbridge reported 211% of normal May precipitation. The water supply situation in southern Alberta showed signs of significant improvement thanks to timely May precipitation. Major reservoirs in the region, including the St. Mary and Oldman Reservoirs, saw their levels rise to 71% and 69% of normal, respectively. This increase in water levels, coupled with precipitation in both April and May, helped to alleviate long-term precipitation deficits and led to the removal of Abnormally Dry (D0) to Severe Drought (D2) conditions throughout the Foothills area towards Calgary and further south near the Canada – USA border. Exceptional (D4) and Extreme Drought (D3) conditions were also removed across southeastern Alberta. However, small pockets of Severe Drought (D2) were maintained around Red Deer and across the Special Areas in east central Alberta, as longer-term deficits were not fully alleviated. Northeastern Alberta recorded above-normal precipitation, with some areas experiencing high-stream flow advisories and flooding. As a result, Moderate (D1) to Extreme Drought (D3) as well as Abnormally Dry (D0) conditions were pulled back in this area. While most regions of the province saw significant drought improvement, northwestern Alberta, particularly in the Peace Region, missed any meaningful precipitation. The Peace Region faced growing precipitation deficits, wildfire concerns and low stream flows. Only minor edits were made to the drought classification in the Peace Region as Extreme (D3) and Exceptional Drought (D4) remained due to growing long-term deficits stemming from the latter half of 2023.

Precipitation across Saskatchewan was near- to above-normal this month, with southwestern and central parts of the province reporting more than 150% of normal precipitation. This rainfall improved topsoil moisture across much of agricultural Saskatchewan with some areas reporting localized standing water in some fields. This precipitation will help with the greening-up of grasslands and allow for shallow seeding, crop germination and emergence across the grain belt. Lake levels in southern Saskatchewan are nearly full or at normal levels for this time of year, rising due to widespread recent precipitation. This includes water levels for Lake Diefenbaker, which was reported at 553m, in between median and upper quartile levels for this time of year. Given the substantial precipitation since the start of the growing season, large regions of drought were reduced or removed across Saskatchewan this month. Severe (D2) and Extreme Drought (D3) were removed across southern parts of the province, in addition to a significant reduction to Moderate Drought (D1) and Abnormally Dry (D0) conditions. Only a small pocket of Moderate Drought (D1) remained around North Battleford as recent precipitation was not sufficient to completely alleviate drought conditions in that area. Despite much of the precipitation reaching into northern Saskatchewan, a small pocket of Severe Drought (D2) remained north of La Ronge. However, surrounding areas were removed from the D2, including Buffalo Narrows and Reindeer Lake.

Manitoba received above- to well above-normal precipitation in May, with much of the province seeing more than 150% of normal monthly precipitation. The province reported most of Manitoba's agricultural areas as having optimal to wet surface soil moisture conditions. These moisture conditions are welcome news despite multiple storm systems leading to moisture surpluses, with standing water accumulating in lowland areas, leaving some farmers with challenges accessing fields. Southern Manitoba saw significant improvement to Severe (D2) and Moderate Drought (D1) and Abnormally Dry (D0) conditions due to recent precipitation improving soil moisture and alleviating long-term deficits across the region. In contrast, northern Manitoba faced wildfires in May, particularly near Flin Flon and the Pas in northwestern Manitoba due to drought, windy conditions and extreme fire activity. Towards the end of May, a few storms passed through northwestern Manitoba, improving moisture levels and surface water, helping nearly all creeks, streams and sloughs refill to capacity. A swath of Moderate Drought (D1) conditions was cut back in north central Manitoba, but the rest of northern Manitoba saw minimal drought changes as long-term precipitation deficits and wildfires remain across the area. It is important to note that Lake Winnipeg continued to experience low water levels, recording its lowest levels for May in 35 years as a result of long-term drought through the prairie region. The Winnipeg and Saskatchewan Rivers, two major inflows into Lake Winnipeg, were flowing well below their average volumes at the end of May.

At the end of the month, 74% of the Prairie Region was classified as Abnormally Dry (D0) or in Moderate to Exceptional Drought (D1 to D4), including 67% of the region's agricultural landscape.

Central Region (ON, QC)

May precipitation varied across much of the Central Region, with northwestern Ontario and northern Quebec receiving above-normal precipitation of more than 150% of normal in many areas. In contrast, central Ontario and southern Quebec received between 40% and 115% of normal precipitation. The Gaspé Peninsula was particularly dry this month, recording less than 40% of normal monthly precipitation. Mean monthly temperatures across the region were generally warmer than normal, especially across parts of Quebec, where temperatures were 3 to 4 degrees above normal.

Overall conditions improved across Ontario, with recent precipitation leading to the removal of Severe Drought (D2) and significant reduction of Moderate Drought (D1) across northwestern parts of the province. However, a small pocket of Moderate Drought (D1) remained across Thunder Bay due to lingering long-term precipitation deficits. Southeastern Quebec remained dry this month, with Abnormally Dry (D0) conditions expanding across much of the Gaspé Peninsula and a small pocket of Moderate Drought (D1) forming west of the St. Lawrence Seaway around Saguenay.

At the end of the month, 20% of the Central Region was classified as Abnormally Dry (D0) or in Moderate (D1), including 20% of the region's agricultural landscape.

Atlantic Region (NS, NB, PE, NL)

Precipitation in May was below normal across western parts of Atlantic Canada, while eastern Nova Scotia as well as Newfoundland and Labrador reported near- to above-normal precipitation. Conditions across the Atlantic Region varied in May, with New Brunswick, P.E.I., and Nova Scotia receiving less than 60% of normal precipitation due to limited storms passing through the region. Parts of New Brunswick, western Nova Scotia and much of P.E.I. received less than 40% of normal precipitation this month, continuing the dry trend that started in April. Due to these significant short-term precipitation deficits, Abnormally Dry (D0) conditions developed across these areas.

In contrast, Newfoundland and Labrador received near- to above-normal precipitation, with the mainland reporting more than 150% of normal precipitation. This continued a trend of above-normal precipitation for the last four months. As a result, D0 and D1 conditions were removed from Labrador and Newfoundland remained drought-free.

At the end of the month, 18% of the Atlantic Region was classified as Abnormally Dry (D0), including 66% of the region's agricultural landscape.

Northern Region (YT, NT)

Temperatures across Northern Canada trended near- to above-normal in May: the Northwest Territories (N.W.T) recorded above-normal temperatures, whereas the Yukon recorded closer to normal temperatures. Precipitation was generally above normal for this month, with only the southeastern corner of the N.W.T. receiving slightly below-normal precipitation. Many stations reported exceptionally high amounts of precipitation this month.

Overall drought changes were minimal, with some areas seeing improvement to Abnormally Dry (D0) conditions. Significant precipitation fell along the eastern edge of Great Slave Lake, which led to a reduction in Extreme Drought (D3). However, Severe Drought (D2) remained in this area as communities continued to face significant impacts such as record-low lake levels. Slight improvements were also made in western Northwest Territories and across the Yukon due to meaningful moisture recovery with adequate short-term precipitation. This led to the removal of Severe Drought (D2) south of Norman Wells and the removal of lingering Abnormally Dry (D0) pockets in the Yukon.

At the end of the month, 32% of the Northern Region was classified as Abnormally Dry (D0) or in Moderate to Extreme Drought (D1 to D3).