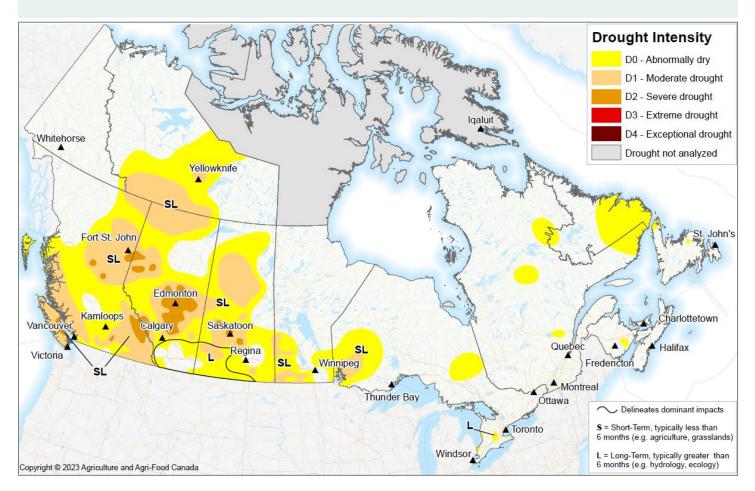
# **Canadian Drought Monitor**

Conditions as of March 31, 2022



Below-normal precipitation dominated Western Canada this month, while near- to abovenormal precipitation fell across central and eastern regions of Canada. Precipitation deficits continued to worsen across parts of the Prairies, while southern Ontario saw significant improvement in drought this month after receiving 115 to 150% of normal precipitation since January. Atlantic and Northern Regions of the country saw little change as precipitation had limited impact on conditions this month.

Temperatures across Western Canada were significantly colder than normal, especially across the southern Prairies resulting in an extremely slow snow melt and practically no runoff at this point. A large portion of this area experienced temperatures more than 5 degrees colder than



normal for the month of March. Alternatively, eastern and northern parts of the country saw warmer than normal temperatures this month, with some northern areas seeing temperatures between 4 and 5 degrees warmer than average.

At the end of the month, 33% of the country was classified as Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2), including 62% of the country's agricultural landscape. There was no Extreme or Exceptional Drought (D3 or D4) reported this month.

## Pacific Region (BC)

Below-normal temperatures and well below-normal precipitation defined much of British Columbia's weather through March. Many areas reported extremely low precipitation amounts this month, including in the southern Interior Region which recorded less than 10% of average March precipitation. Vancouver Island received limited precipitation this month, increasing the precipitation deficit that has been growing since the end of last summer. As a result, Severe Drought (D2) conditions on the island expanded into Nanaimo and Victoria.

On average, snowpack was near normal across the province at the beginning of March. Central and south-central parts of the province measured above-normal snowpack while southeastern and southwestern areas and Vancouver Island reported slightly below-normal snowpack. Snow basins are reportedly lower this year compared to last year.

At the end of the month, 73% of the Pacific Region was considered Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2), including 93% of the region's agricultural landscape.

### Prairie Region (AB, SK, MB)

A large portion of the Prairies received below-normal precipitation in March, with parts of southern Manitoba, central Saskatchewan and central Alberta seeing the lowest amounts. Despite a poor month for precipitation, most agricultural areas have seen some recovery this winter with total winter precipitation being near normal or above normal. A blanket of snow continued to cover most agricultural regions with well below-normal temperatures, providing a slow spring melt. It is yet to be seen whether the moisture contained within the snow pack will melt and benefit soil moisture or runoff into streams and reservoirs.

The main concern across Alberta continued to be in central parts of the province where less than 60% of normal precipitation has fallen since the end of summer. This part of the province went into winter with limited soil moisture reserves which, along with poor winter precipitation, led to soil moisture and water supply concerns going into the spring. As a result, a large swath of Severe Drought (D2) remained in this area this month.

Although little precipitation fell across much of southern Saskatchewan in the past 3 months, drought conditions did not expand in March. Much of this region remains in Abnormally Dry (D0) conditions as winter season precipitation was near normal or slightly below normal. Western parts of the province, from Meadow Lake to Cypress Hills, received near- to above-normal precipitation since November 1, 2022. This led to a slight improvement to Moderate Drought (D1) in these areas, with Severe (D2) and Moderate Drought (D1) remaining around North Battleford, Saskatoon and Kindersley.

Very little precipitation fell across southern Manitoba over the past 3 to 6 months leading to a growing short-term precipitation deficit; this resulted in a slight expansion of Abnormally Dry (D0) and Moderate Drought (D1) conditions. Despite these significant short-term departures, flood-risk remains high going into the spring due to high soil moisture levels at freeze-up and significant snowpack in the northern United States which will make its way into Manitoba via the Red River. Although Winnipeg reported its second driest March on record, this area remained free of drought due to sufficient soil moisture levels and significant long-term precipitation.

At the end of the month, 60% of the Prairie Region was classified as Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2), including 83% of the region's agricultural landscape.

## Central Region (ON, QC)

March precipitation ranged from well above normal in southern Ontario to slightly below normal in southeastern regions of Quebec. Temperatures were generally near to slightly above normal for most of the region. Precipitation accumulations, over 100 mm, were received in the central area of southern Ontario, which reduced the remaining Abnormally Dry (D0) and the drought conditions that dominated this region last summer. In the past 2 months, Southern Ontario received between 150 and 250 mm of precipitation, significantly above normal. Longterm precipitation deficits remained scattered through the province, however moisture conditions continued to improve significantly. While above-normal precipitation continued eastward, providing adequate precipitation to northern agricultural regions of Quebec, southern regions around Sherbrooke and eastern regions along the Gaspé Peninsula received below-normal precipitation. Despite recent precipitation deficits, longer-term precipitation was near to above normal, limiting the concern over soil moisture at this time.

At the end of the month, 10% of the Central Region was classified as Abnormally Dry (D0) or in Moderate Drought (D1), including 5% of the region's agricultural landscape. All Severe Drought (D2) was removed this month.

## Atlantic Region (NS, NB, PE, NL)

The Atlantic region experienced slightly warmer than normal temperatures and below-normal precipitation with only a few precipitation events and no major storms through March. However, consecutive moderate snow events near the end of the month led to an abnormally high snowpack in much of New Brunswick, P.E.I., and the northern region of Nova Scotia. Snow depth at the end of March ranged from 0 to over 170 cm across the region, with the largest snowpacks occurring in northern New Brunswick. By the end of the month, the entire region had normal to well above-normal snowpack except across parts of Newfoundland, southern and central Nova Scotia and a small portion of southern New Brunswick. Despite dry conditions through February and March, the region received adequate moisture in the fall and early winter. As a result, the Atlantic region remained drought-free, with only a few small pockets of Abnormal Dry (D0) conditions heading into spring.

At the end of the month, 23% of the Atlantic Region was classified as Abnormally Dry (D0), including 5% of the region's agricultural landscape.

## Northern Region (YT, NT)

Temperatures throughout southern parts of the Northern Region were slightly below normal for March, while northern areas experienced well above-normal temperatures. A pattern of below-normal precipitation across the Northwest Territories and above-normal precipitation across the Yukon persisted through March, leaving Abnormally Dry (D0) and Moderate Drought (D1) conditions relatively unchanged from last month. Limited improvements occurred north of Fort Simpson as a result of recent snow fall.

At the end of the month, 19% of the Northern Region was classified as Abnormally Dry (D0) or in Moderate Drought (D1).

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