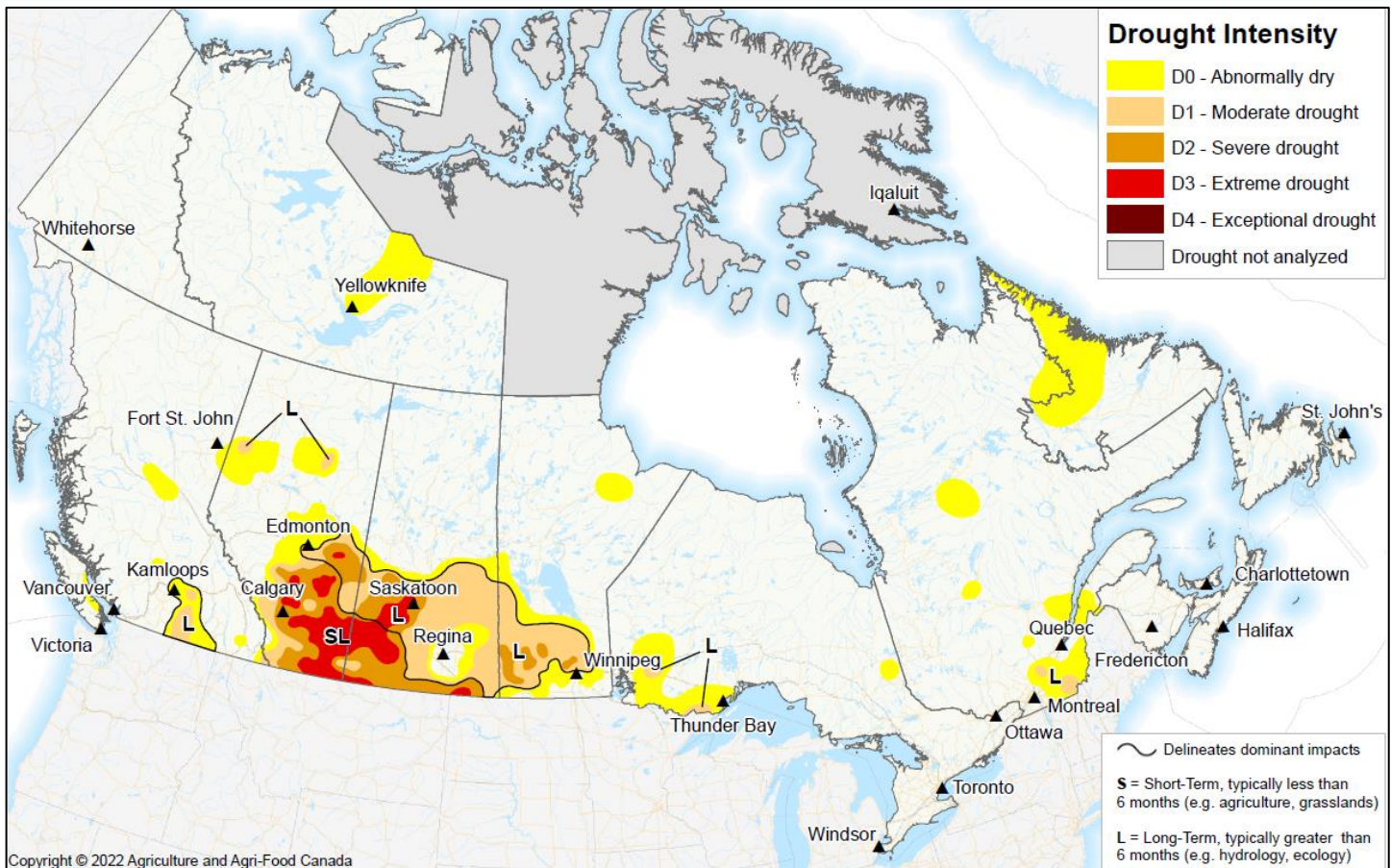


Canadian Drought Monitor

Conditions as of March 31, 2022



Spring melt is well underway throughout Canada with near-normal or above-normal temperatures in March for the majority of Canada. British Columbia, the Atlantic region, and the central Prairies, received above-normal winter precipitation. The southern Prairies received below-normal winter precipitation, resulting in widespread and significant drought conditions to continue. Minimal changes to drought were seen across Central Canada as long-term trends indicated continued dryness. Atlantic Canada remained drought free due to significant moisture in the last 3 to 6 months. Conditions degraded slightly in parts of Northern Canada this month. Overall, drought continued to dominate much of the Prairie region, however the extent and severity has been reduced in many areas.



While there have been substantial improvements to drought conditions across Western Canada since last summer (particularly in British Columbia, southern Manitoba and the northern agricultural regions of Saskatchewan and Alberta), many of these areas remain extremely vulnerable to drought going forward, as a result of low soil moisture reserves and depleted water supplies. An extended dry period this spring or summer would impact crops and pastures quicker and more severely as a result.

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

Pacific Region (BC)

During March, near-normal temperatures were reported across the region with warmer conditions in the southeastern corner. Abnormally Dry (D0) conditions remained in the southern half of the province as long-term blends continued to indicate below-normal moisture. Low snowpack and Below Normal to Moderately Low precipitation in the last 3 months led to the Moderate Drought (D1) persisting in the Okanagan near Penticton and Salmon Arm. A small pocket of D0 was also placed on Vancouver Island given a similar scenario, with both low snowpack and limited short-term moisture. In addition, both short- and long-term blends indicated below-normal precipitation northwest of Prince George, which led to a small expansion of D0. Despite these deteriorations, improvements were made to D0 conditions across the Peace region as 110 to 150 percent of normal precipitation fell in the past 90 days. Abnormally Dry (D0) conditions were also alleviated along the southern border of the province as near- to above-normal precipitation occurred over the past 6 months.

At the end of the month, six percent of the Pacific region was considered Abnormally Dry (D0) or in Moderate Drought (D1), including twenty-eight percent of the region's agricultural landscape.

Prairie Region (AB, SK, MB)

A large swath of the Prairies continued to experience long-term precipitation deficits, with a smaller portion also seeing short-term impacts. Although significant amounts of snow fell across northern agricultural areas causing drought conditions to improve, a lack of rainfall across the southern Prairies led to either continued or deteriorating drought conditions. During March, temperatures were near-normal for most of the region except for southwestern

Alberta, which reported temperatures 2 to 4 degrees above normal and southeastern Manitoba which was 2 to 4 degrees below normal.

The main story across the Prairies for March was one of drought improvement, however degradation still took place in a few areas. Much of the expansion of drought occurred in southern Alberta, where precipitation was reported to be Moderately to Extremely Low in the last 365 days. An area stretching north and south of Calgary was also Moderately to Very Low in precipitation in the last 90 days. Long-term precipitation deficits driven by last summer's high heat were also reported in the last year. These factors led to the expansion of Extreme Drought (D3) in the area, including a new pocket of D3 around Airdrie. An additional pocket of D3 was also brought back to Estevan, Saskatchewan as precipitation deficits have re-emerged in the last 9 months. Any remaining areas of Extreme Drought (D3) remained in place from Saskatoon to Swift Current and towards Alberta due to this area only receiving 40 to 60 percent of normal precipitation since March of last year.

Since October 1, 2021, the northern agricultural areas from the Peace Region in B.C. towards the southeastern corner of Manitoba received 115 to 150 percent of normal precipitation, with a few local areas receiving more than 200 percent of normal. As a result of this significant moisture, further improvements to drought took place this month. Abnormally Dry (D0), Moderate Drought (D1) and Severe Drought (D2) were all improved and pulled south away from the northern agricultural areas of this region. Some of this moisture also reached into southcentral Saskatchewan, where Severe Drought (D2) was significantly improved from Melfort towards Saskatoon. The final remaining Exceptional Drought (D4) pocket around Rosetown, Saskatchewan was also removed as conditions were no longer extreme enough to support this designation. Finally, much of southern Manitoba continued to see improved moisture conditions, especially in the last 6 months. Due to above normal precipitation values across southern parts of the province, a significant portion of Severe Drought (D2) was reduced. Conditions were especially improved around Winnipeg, where areas bordering the city remain Abnormally Dry (D0) or with no drought at all. Although moisture deficits have not been fully rectified, seedbed moisture is sufficient, and with the addition of intermittent spring rainfall, will continue to improve.

Although there was concern for low spring runoff and water supplies in southeastern parts of Saskatchewan, this area received enough runoff to alleviate those concerns. However, this region will still be monitored as we enter the growing season as it remains vulnerable to drought development.

At the end of the month, thirty-eight percent of the Prairie Region was classified as Abnormally Dry (D0) or in Moderate to Extreme Drought (D1 to D3), including eighty-five percent of the region's agricultural landscape.

Central Region (ON, QC)

The drought situation in Central Canada remained fairly quiet in March, with only minimal improvements made and limited deterioration of conditions. Much of the region received near- to above-normal moisture this month, except for select areas in northern Quebec. Parts of southcentral Ontario and southern Quebec saw the greatest amount of precipitation, reporting Very High to Exceptionally High values in March. Although moisture in the short-term was adequate for southern Quebec, this area remains dry in the long-term, reporting Moderately Low precipitation in the last 365 days. As a result of long-term deficits and short-term improvements, Moderate Drought (D1) remained but was reduced in size. Parts of northern Ontario and Quebec also lacked sufficient moisture, including in the last 3 and 12 months. The area around Dryden, Ontario only received 60 to 85 percent of normal moisture in the last 90 days, while areas in northern Quebec received only 40 to 60 percent of normal moisture. As such, the Moderate Drought (D1) pocket remained around Dryden and Abnormally Dry (D0) conditions were extended into northern Quebec. A small portion of central Ontario and Quebec was improved from Abnormally Dry (D0) conditions due to sufficient moisture in the last 3 months, roughly equating to 115 to 200 percent of normal precipitation.

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

Atlantic Region (NS, NB, PE, NL)

Minimal changes were seen in the Atlantic Region in March as significant precipitation continued to fall. Nearly the entire region received between Moderately High to Exceptionally High precipitation in the past 30 days; this equates to 115 to more than 200 percent of normal moisture for this month. This, coupled with the significant moisture in the last year, prevented any Abnormally Dry (D0) or drought conditions to form. However, Labrador continued to experience Abnormally Dry (D0) conditions in the northwestern corner as below-normal precipitation was reported in the last 3 months.

At the end of the month, seventeen percent of the Atlantic Region was classified as Abnormally Dry (D0); none of the region's agricultural landscape reported any drought.

Northern Region (YT, NT)

Much of Northern Canada remained drought-free this month, excluding parts of the Northwest Territories. Significant moisture continued to fall across southern Yukon and western Northwest Territories, where Above Normal to Exceptionally High March precipitation fell. This extends further into the long-term as nearly double the average moisture fell in parts of southwestern Yukon since September 1, 2021, from Dawson to Watson Lake. However, because eastern portions of Northwest Territories received Moderately Low precipitation in the last 3 months, Abnormally Dry (D0) conditions were expanded towards Yellowknife.

Only three percent of the Northern Region was classified as Abnormally Dry (D0).