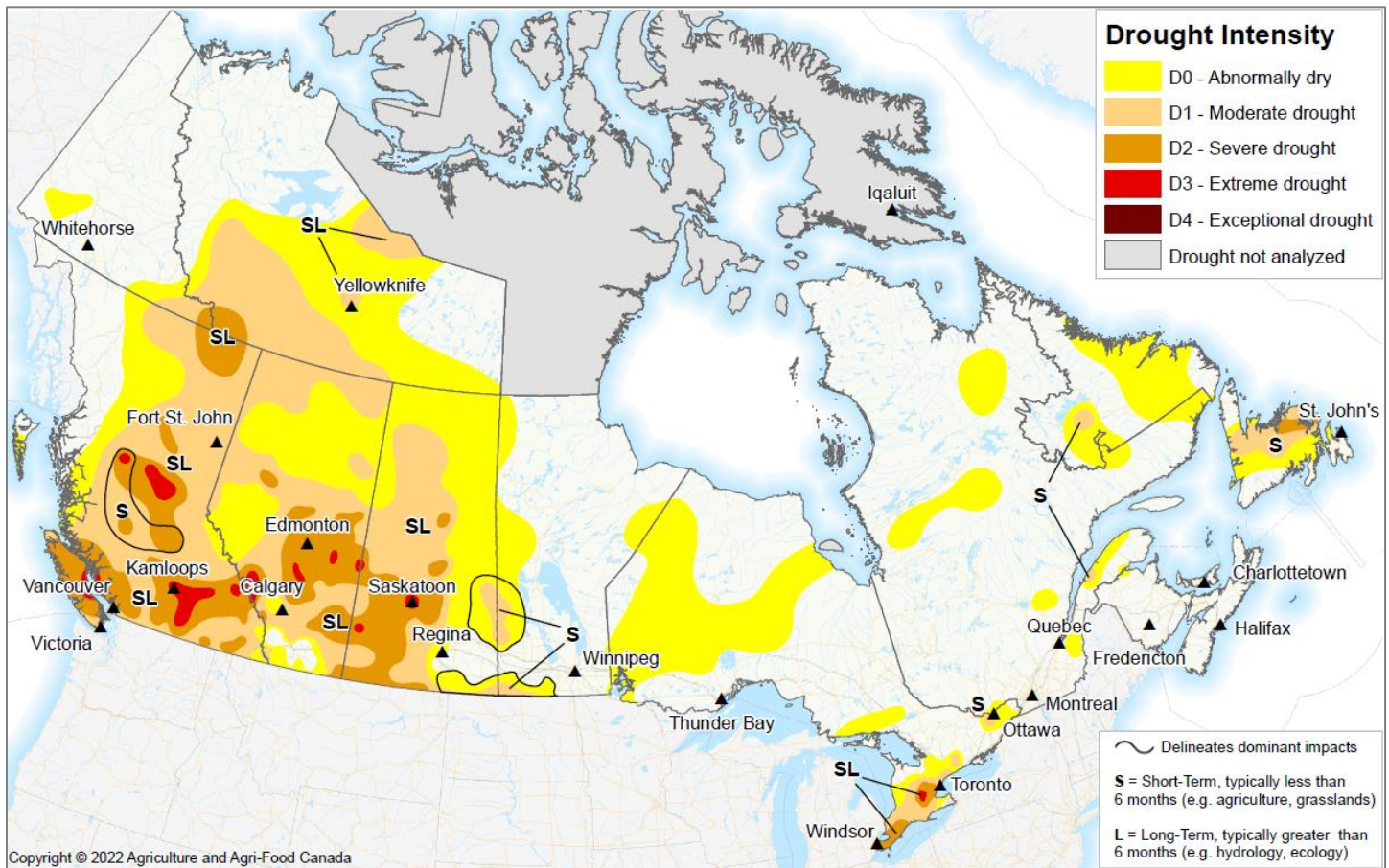


Canadian Drought Monitor

Conditions as of November 30, 2022



Precipitation was variable across the country this month, with the Prairie, Atlantic and Northern regions receiving more precipitation than normal and parts of Pacific and Central Canada seeing less than normal. Despite average to above-average precipitation in some regions this month, the precipitation amount was not adequate to make significant impacts on drought conditions. Drought was slightly expanded along the west coast and in southern B.C. but remained similar to last month across much of the rest of the country. Temperatures were much colder than normal across Western Canada this month, while Eastern Canada had temperatures only slightly above normal. Parts of Northern Canada were more than 5 degrees warmer than normal in November.



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

Pacific Region (BC)

Coastal areas of the Pacific region continued to see below-normal precipitation while Interior B.C. received above-normal precipitation amounts. Monthly temperatures were reported as colder than normal as well, with portions of central B.C. seeing temperatures more than 5 degrees colder than normal.

Below-normal precipitation in Coastal British Columbia through November further degraded the significant drought conditions in the area. Exceptionally low precipitation fell across parts of Vancouver Island and the Sunshine Coast since March 1st, leading to 6-month precipitation deficits of more than 300 mm. As a result of the ongoing lack of rain or snowfall, Severe and Extreme Drought (D2 to D3) slightly expanded this month.

South and central interior parts of the province continued to experience persisting drought conditions in November despite these areas receiving between 115 to 150 percent of normal precipitation in the past 30 days. While the monthly precipitation was above normal, the actual amount of rainfall was minimal and did not result in a significant change in the moisture deficits and did little to alleviate drought conditions; as a result, Moderate, Severe and Extreme Drought (D1, D2 and D3) remained. Only minimal changes were made to northern B.C. as precipitation amounts remained low.

At the end of the month, eighty-two percent of the Pacific Region was considered Abnormally Dry (D0) or in Moderate to Extreme Drought (D1 to D3), including ninety-nine percent of the region's agricultural landscape.

Prairie Region (AB, SK, MB)

Above-normal precipitation fell across much of the Prairie Region this month, with the Peace Region and southern Manitoba receiving slightly below-normal amounts. Despite receiving above-normal precipitation, this only accounted for a very small portion of the overall moisture deficits seen across the region, and thus, the monthly precipitation did little to affect the current drought situation to any significant extent. Temperatures were reported at well below

normal across southern Alberta and southwestern Saskatchewan, while the Peace Region and eastern Manitoba saw temperatures closer to normal.

Most of Alberta received moderately high to very high precipitation in November except for the Peace Region, which received slightly below-normal precipitation. However looking at precipitation since September, much of the province received below-normal precipitation. Although decent precipitation fell throughout the 2022 summer, long-term precipitation deficits remained across much of the south and central regions of the province. Limited precipitation at the end of the growing season also left a significant deficit in the short-term, which was not alleviated from this month's moisture. As a result of both short- and long-term precipitation deficits, significant portions of the province remained in Moderate to Severe Drought (D1 to D2), with small pockets of Extreme Drought (D3) around Red Deer, Vegreville and Lloydminster. A small stretch of Extreme Drought (D3) also slightly expanded across the foothills just west of Banff. Limited adjustments were made to the Peace Region and northern Alberta, with minor shifts to the Moderate Drought (D1).

Similar to Alberta, the province of Saskatchewan received above-normal precipitation for the month of November, however this had limited impact on both short- and long-term drought. Central Saskatchewan received between 150 to more than 200 percent of normal precipitation this month, which unfortunately only accounted for 5 to 25 mm of precipitation given the typical low November precipitation amounts. Long-term precipitation deficits persisted as parts of southwestern and west-central Saskatchewan received between 110 and 140 mm less precipitation than normal in the last year. Although short-term precipitation reduced drought in some areas (including the removal of Extreme Drought (D3) around Swift Current), most of the Moderate to Extreme Drought (D1 to D3) remained in place this month.

Although agricultural regions in Manitoba received below-normal precipitation this month, conditions have normalized in the last 3 to 6 months overall. The only exceptions were dry conditions persisting around Swan River and Melita, where Moderate Drought (D1) remained. Otherwise, only minor adjustments were made throughout the rest of the province this month. As a result, only minor tweaks were made to the Abnormally Dry (D0) and drought areas.

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

Central Region (ON, QC)

Precipitation in November was highly variable for the Central Region of the country as extremely low precipitation was recorded in southern Ontario, while much of Quebec saw very high to extremely high precipitation this month. Monthly mean temperatures trended approximately 0 to 2 degrees above normal throughout the entire region as well.

Southern Ontario continued to see the driest conditions in November as well as in the past 3 to 12 months. The areas surrounding Kitchener-Waterloo and Chatham-Kent both reported very low to extremely low precipitation amounts since August, and Kitchener-Waterloo specifically reported exceptionally low precipitation since February 2022. These extremely low levels of precipitation led to ongoing Severe and Extreme Drought (D2 and D3) to persist in these areas, in addition to a larger pocket of Moderate Drought (D1) across much of southern Ontario. A smaller pocket of Moderate Drought (D1) also formed southwest of Ottawa due to a short-term lack of moisture: roughly 40 to 60 percent of normal over the previous three months. Abnormally Dry (D0) and Moderate Drought (D1) conditions also persisted around the St. Lawrence River region including the Gaspé Peninsula as above-normal monthly precipitation did not alleviate the 3-month precipitation deficits. Similarly, conditions across northern Ontario and Quebec shifted only slightly this month with persisting Abnormally Dry (D0) pockets scattered across the two provinces.

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

Atlantic Region (NS, NB, PE, NL)

Conditions across the Atlantic Region in November were generally wetter and warmer than the monthly average. Northern New Brunswick and western Newfoundland both received between 150 to 200 percent of normal precipitation in the last 30 days, with surrounding areas seeing between 60 to 150 percent of normal precipitation. However, recent precipitation was not enough to make up for the deficits established in the past 3 to 6 months across northeastern parts of Newfoundland. As a result, Moderate Drought (D1) was slightly reduced around Corner Brook, along the western coast of the island, while Severe Drought (D2) remained in place near Gander. Abnormally Dry (D0) conditions continued to stretch across much of Labrador and a small pocket of Moderate Drought (D1) remained near Churchill Falls due to significant short-term precipitation deficits. Only a small pocket of Abnormally Dry (D0) conditions remained on

the northern tip of New Brunswick. No other drought or Abnormally Dry (D0) conditions were reported in the region.

At the end of the month, thirty-seven percent of the Atlantic Region was classified as Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2), including three percent of the region's agricultural landscape.

Northern Region (YT, NT)

Northern Canada saw a reduction in Abnormally Dry (D0) conditions, but Moderate Drought (D1) and Severe Drought (D2) remained. The Yukon received above-normal precipitation which led to improvement to Abnormally Dry (D0) conditions in southern and northern regions. However, D0 pockets remained in southwestern Yukon as 25 to 50 mm less than normal precipitation fell in the last 3 months. Below-normal precipitation in southern areas of the Northwest Territories caused Severe Drought (D2) to persist. Yellowknife also experienced well below-normal snowfall which prevented any improvement to Moderate Drought (D1). Both Abnormally Dry (D0) and Moderate Drought (D1) conditions persisted in the central region of the province due to below-normal precipitation.

At the end of the month, thirty-three percent of the Northern Region was classified as Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2).