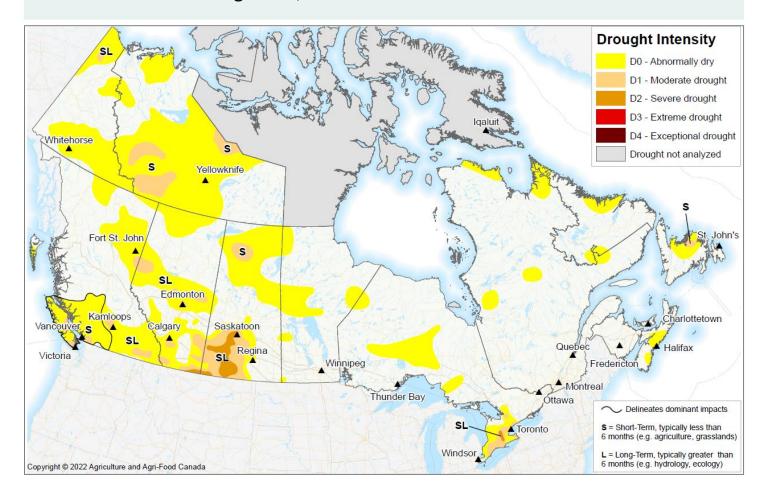
Canadian Drought Monitor

Conditions as of August 31, 2022



Abnormally low precipitation and warm temperatures throughout August resulted in an expansion of drought conditions throughout the Pacific and Prairie Regions. Drought continued to be most severe in western Saskatchewan where Severe Drought (D2) first emerged early last spring. Despite improved precipitation through the spring and early summer of 2022, many regions in Western Canada continued to recover from the 2021 drought, and with a hot dry August, some regions slipped back into drought. In contrast, Central and Atlantic Canada received above-normal monthly precipitation in most regions, resulting in a slight reduction in drought severity and extent. Northern Canada continued to receive limited monthly moisture, resulting in a slight expansion of both Abnormally Dry (D0) conditions and Moderate Drought (D1).

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

Pacific Region (BC)

As the summer drew to an end, the Pacific Region saw higher than average temperatures and low to extremely low precipitation in August. Multiple heat spells were reported across the southern portion of the region, leading to many communities reporting record high temperatures. The high heat also led to concerns for wildfires, with six wildfires of note by midmonth; the southeast reported more than 80 wildfires, the highest in the province. Significant precipitation deficits developed specifically across Vancouver Island and into the Lower Mainland this month, while longer-term deficits remained throughout the rest of southern B.C. as well. Despite the summer months typically receiving the least amount of precipitation, one month rainfall deficits were so significant that Moderate Drought (D1) pockets emerged. As a result of low rainfall and increased temperatures, provincial drought levels were raised across the west coast and in the southeast. These increasing drought conditions and low streamflows led the government to request voluntary water reductions, specifically across Vancouver Island, Haida Gwaii and southeastern B.C.

Overall changes made to the region included an expansion of Abnormally Dry (D0) conditions across much of the south, stretching from the Rocky Mountains towards Vancouver Island. Additional pockets of Moderate Drought (D1) were also added this month in areas where highest temperatures or greatest precipitation deficits were reported including Ashcroft, Nelson and Cranbrook as well as Courtney, Victoria and the Lower Mainland. A stretch of Abnormally Dry (D0) conditions also remained across northeastern B.C. with low to record low streamflows reported.

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

Prairie Region (AB, SK, MB)

Overall conditions across the southern Prairie Region trended dry with low to exceptionally low precipitation throughout the month of August. Central Alberta and western Saskatchewan received less than 40 percent of normal monthly precipitation, with large portions of both provinces receiving less than 15 mm of precipitation all month. Temperatures across the region

were reported above normal, with the highest temperatures reported across Alberta, with some areas reporting more than 5 degrees higher than normal.

Temperatures and precipitation were most extreme across Alberta this month compared to the other Prairie provinces. Although a few storms passed through the province in August, warm and dry weather resulted in extended Abnormally Dry (D0) conditions and Moderate Drought (D1) pockets; these included the areas surrounding Edmonton, Calgary and Medicine Hat as well as further north in the Peace River Region. While much of south and central Alberta received ample precipitation in June and July, both short- and longer-term concerns remained; this was especially the case south of Calgary and along the Rocky Mountains where producers reported pastures going into early dormancy as well as concern for drought. Wildfire risk was also heighted this month within the boreal forest in northern Alberta and along southern parts of the Rockies, leading to fire restrictions in some of these communities.

Saskatchewan maintained an east-west divide of conditions this month, as western portions of the province remained dry while eastern parts continued to receive adequate moisture. Southwestern Saskatchewan received less than 20 mm of precipitation this month, less than half of what is typically expected. As a result of the warm dry conditions in this area, harvest was furthest advanced but with poor yields. Additionally, ongoing drought conditions resulted in significant grasshopper and flea beetle outbreaks in this area. Some producers in southcentral Saskatchewan reported baling weeds and straw for feed as well as dealing with water quality concerns. Given both shorter and longer-term moisture deficits as well as heat impacts, a pocket of Severe Drought (D2) was increased to stretch from Saskatoon towards Leader, Swift Current and Gravelbourg in southwestern Saskatchewan. Nearby Moderate Drought (D1) and Abnormally Dry (D0) conditions also increased across much of this corner of the province. Additionally, Abnormally Dry (D0) and Moderate Drought (D1) conditions remained across northern parts of the province as moisture deficits between 25 to 75 percent below normal were reported in the last three months. For producers in eastern Saskatchewan, harvest is expected to be delayed by two weeks due to late seeding from excess spring moisture.

Manitoba started off the growing season with significant precipitation and continued with adequate moisture throughout the summer. However, short-term impacts from hot dry conditions in August were reported in western Manitoba including the communities of Melita and Swan River; these areas reported premature crop ripening, reduced yields and increased grasshopper populations. As a result of these impacts and a lack of short-term moisture, two small pockets of Abnormally Dry (D0) conditions emerged.

At the end of the month, forty-one percent of the Prairie Region was classified as Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2), including fifty-two percent of the region's agricultural landscape.

Central Region (ON, QC)

Above-normal precipitation fell across much of Southern Ontario in August. However, despite this sufficient monthly precipitation, a large portion of the region did not receive enough rainfall to make up for the moisture deficit accumulated from previous dry months. A large area of Moderate Drought (D1) remained along eastern parts of Southern Ontario, stretching from Chatham-Kent to Oshawa. Within this large Moderate Drought (D1) region, a small pocket of Severe Drought (D2) remained around Kitchener-Waterloo and Brantford. These areas reported significantly reduced or highly variable yield, poor forage production and poor pasture conditions.

In contrast, conditions across central Ontario and much of Quebec remained optimal, with adequate monthly and seasonal precipitation. Ottawa received significant rainfall between August 7th and 9th, when more than 95 mm of rain fell, more than the average total August precipitation. Additional mid-month storm activity brought more precipitation to much of the Central Region and left Montreal without power.

At the end of the month, ten percent of the Central Region was classified as Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2), including ¬¬¬seventeen percent of the region's agricultural landscape.

Atlantic Region (NS, NB, PE, NL)

Conditions across the Atlantic Region were variable once again this month: much of the region including southern New Brunswick, western Prince Edward Island and parts of Nova Scotia received above- to well above-normal monthly precipitation, while portions of central Nova Scotia and Newfoundland received below-normal precipitation. Temperatures were warmer than normal throughout the entire region with substantial portions of Nova Scotia and Newfoundland being 2 to 3 degrees above the monthly normal. As a result, Abnormally Dry (D0) conditions in Nova Scotia shifted eastward towards the Atlantic coast and a small pocket of Moderate Drought (D1) emerged in northeastern Newfoundland.

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

Northern Region (YT, NT)

Much of the northern region received below-normal precipitation throughout August which led to the extent of Abnormally Dry (D0) and Moderate Drought (D1) condition increasing; large

portions of this region have received below-normal precipitation for the past 3 to 4 months. Ongoing drought conditions have resulted in reduced water levels in many lakes and rivers across the Northwest Territories and the Yukon Territory. The amount of land burnt in the Yukon surpassed the 25-year average in early July making 2022 one of the worst fire years on record. In the NWT, the 2022 wildfire season is predicted to be one of the most severe in the past five years, seeing more than double the average area burnt so far this season. As of the end of August, over 235 fires have burned nearly 4,300 square kilometres of land during the 2022 season, compared to a five-year average of around 2,300 square kilometres. At the end of the month, forty-nine percent of the Northern Region was classified as Abnormally Dry (D0) or in Moderate Drought (D1).

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