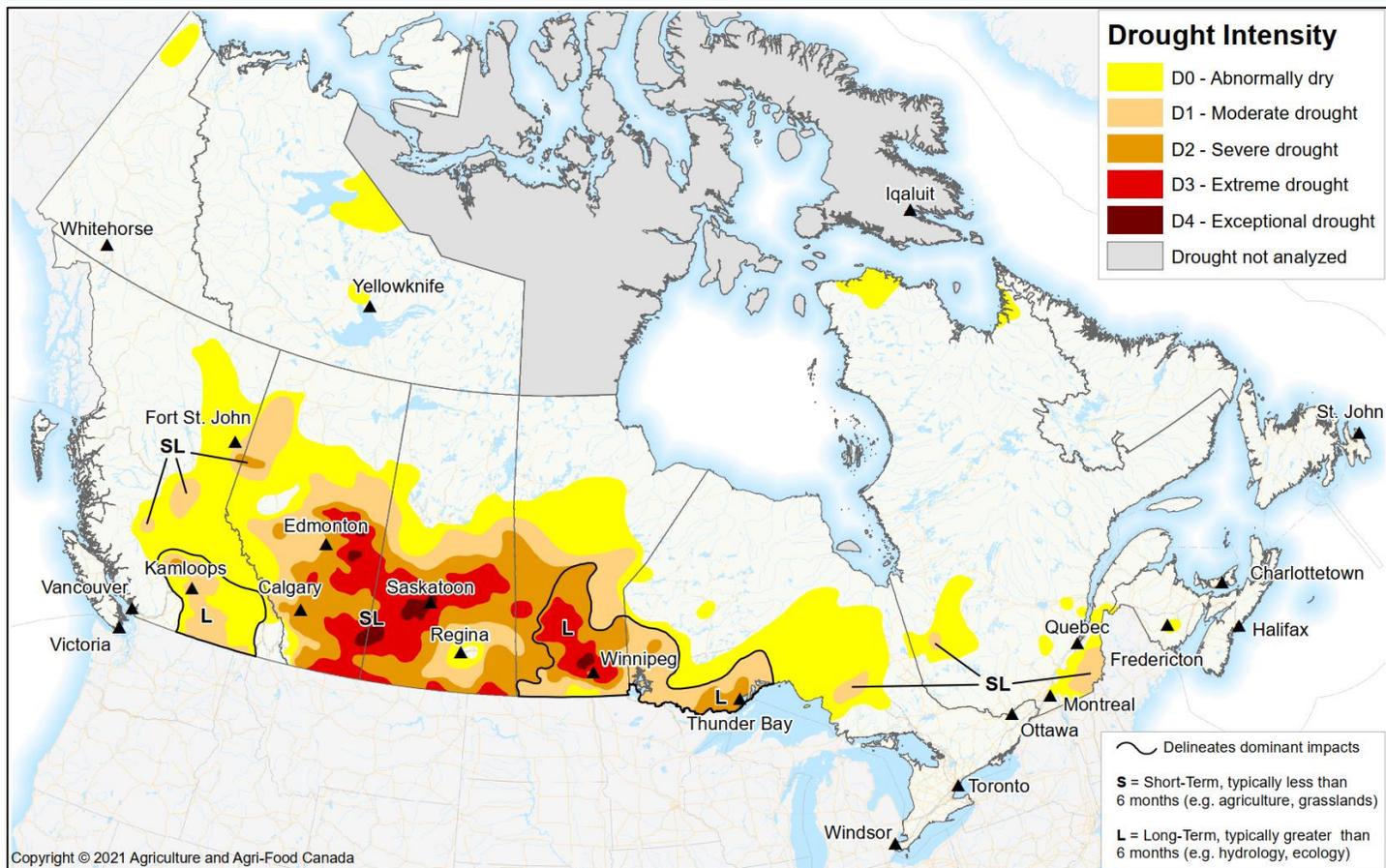


Canadian Drought Monitor

Conditions as of December 31, 2021



In December, much of Canada experienced typical La Niña conditions including above-average precipitation in British Columbia, colder-than-normal temperatures in the Prairies and above-normal precipitation in Ontario and Quebec. Western Canada experienced temperatures greater than 5 degrees Celsius below-normal in December, while Eastern Canada saw temperatures up to 4 degrees Celsius above-normal. Above-normal precipitation was received across much of British Columbia, the northern Prairies and much of Atlantic Canada. Below-normal precipitation was received in much of the southern Prairies, southern Ontario and western portions of Atlantic Canada. As a result of increased precipitation throughout parts of Western Canada, drought conditions continued to gradually improve. However, Severe Drought (D2) conditions continued to dominate the Prairie Region which has experienced 6 month



precipitation deficits of greater than 80 mm in most locations. Minimal adjustments were made to the Northern Region this month.

At the end of the month, twenty-eight percent of the country was classified as Abnormally Dry (D0) or in Moderate to Exceptional Drought (D1 to D4), including seventy-three percent of the country's agricultural landscape..

Pacific Region (BC)

Above-normal precipitation through the southern coast and Interior regions of British Columbia resulted in general improvement in drought conditions. In the last 3 months, much of Vancouver Island, the southern coast, the Fraser Valley and the Okanagan have received between 115 to upwards of 200 percent of normal precipitation. Despite good short-term precipitation through these regions, long-term deficits remain a concern through the Interior. Many of these areas still have a deficit between 100 and 250 mm compared to normal from the last year; as a result, Moderate to Severe Drought (D1 to D2) conditions remained but improved. However, because the Cranbrook area received Exceptionally High precipitation since October, a two-class drought improvement took place. The northwestern region of British Columbia remained Abnormally Dry (D0) with both short- and long-term precipitation deficits.

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

Prairie Region (AB, SK, MB)

As winter conditions settled in the prairies, colder than normal temperatures associated with La Niña conditions resulted. Above-normal precipitation occurred through the northern and central portions of the Prairies, while slightly below-normal precipitation fell in parts of the southern Prairies. While the Prairie region continued a gradual improvement in drought severity and extent, especially for short-term concerns, the amount of precipitation the region received during the fall and winter was far less than required to make up for the large deficits from the past year. Southern Manitoba, in particular, saw significant fall and early winter precipitation, thus removing the concern for short-term drought conditions. Up to 150 percent of normal precipitation fell across this area in the last three months. However, since long-term deficits remain high at nearly 250 mm in the last year and a half, concern for water supplies still exist and Extreme to Exceptional Drought (D3 to D4) remained. The Moose Jaw and Regina

region continued to receive near-normal precipitation through December, and with above-normal late summer and early fall precipitation, the area continued to improve including a small area assessed as no concern.

Annual precipitation statistics highlight how dry the year was as several locations reported in their top 10 driest years recorded. Most notably, North Battleford was the driest year on record, receiving only 180.4 mm of precipitation compared with the normal 374.2 mm; this equates to roughly 48 percent of normal. Saskatoon and Swift Current were the 2nd and 3rd driest on record, respectively. Conditions also rated very dry historically across central and northern Saskatchewan: Prince Albert and Key Lake rated as 6th and 5th driest on record for the year, respectively. These areas received Extremely to Exceptionally Low precipitation in the last year.

At the end of the month, sixty-seven percent of the Prairie Region was classified as Abnormally Dry (D0) or in Moderate to Exceptional Drought (D1 to D4), including ninety-eight percent of the region's agricultural landscape.

Central Region (ON, QC)

Precipitation across the Central Region was not significantly varied for the month of December. Northwestern Ontario, for example, saw less than 40 percent of normal precipitation or up to 200 percent of normal precipitation, depending on the location. In this case, Severe Drought (D2) conditions improved in extent around Thunder Bay, as they received between 150 and 200 percent of normal precipitation, whereas the Severe Drought (D2) pocket remained as a result of low December moisture.

Throughout the remainder of the region, the drought picture remained relatively unchanged from November: southern Ontario, while reporting slightly-below average monthly precipitation, still had ample moisture from 6 months prior, leading to no drought or Abnormally Dry (D0) conditions. Southern Quebec continued to report below-normal precipitation in the last 3 to 6 months, but not significant enough to make drastic changes from the pre-existing Moderate Drought (D1) conditions. However, above-normal moisture from the last 2 months led to the removal of a small Severe Drought (D2) pocket around St-Georges. Minimal adjustments were made to any remaining Abnormally Dry (D0) and Moderate Drought (D1) across the region.

By the end of the month, nineteen percent of the Central Region was considered Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2), including twenty-two percent of the agricultural landscape.

Atlantic Region (NS, NB, PE, NL)

Very few changes were made to the Atlantic Region for the month of December. Most of Nova Scotia and Newfoundland reported above-normal precipitation, whereas parts of eastern Nova Scotia, P.E.I. and southern New Brunswick saw Moderately Low precipitation; this resulted in the formation of a small Abnormally Dry (D0) pocket around Fredericton. Given the near- to above-normal precipitation throughout Newfoundland and Labrador in the last two months, the Abnormally Dry (D0) pockets on the island and in northern Labrador were removed.

By the end of the month, only one percent of the Atlantic Region was classified as Abnormally Dry (D0), including three percent of the agricultural landscape. No drought was reported in the region this month.

Northern Region (YT, NT)

Conditions in the northern regions of Canada remained relatively consistent from last month. Above-normal precipitation fell across much of the Yukon, while below-normal moisture fell throughout the Northwest Territories. As such, small improvements were made around Old Crow, Yukon, while a small area of Abnormally Dry (D0) persisted around Yellowknife as the area reported Moderately to Very Low precipitation in the last 3 months. Much of the region remained drought free given near-normal precipitation through the fall and early winter.

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