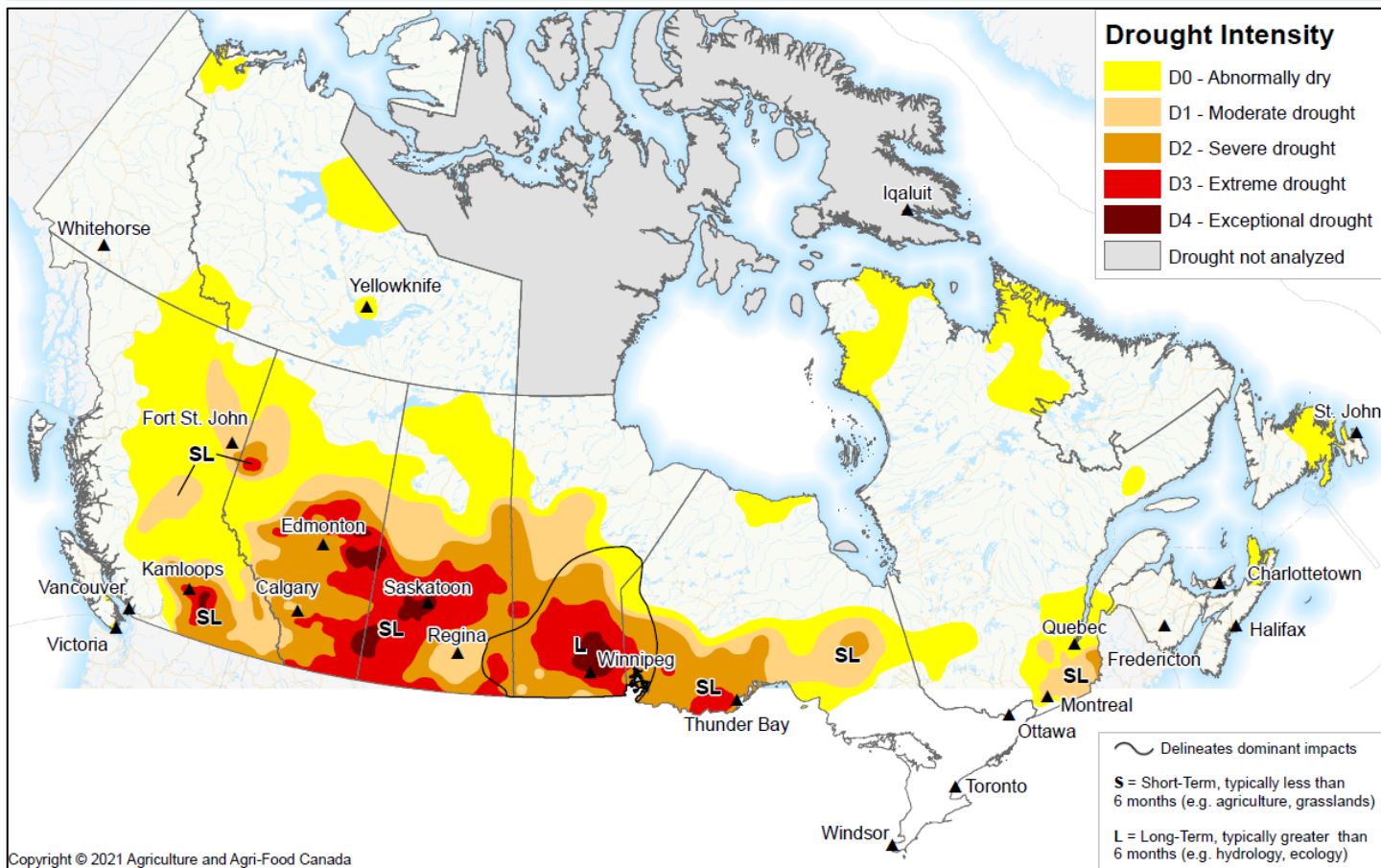


Canadian Drought Monitor

Conditions as of October 31, 2021



Through October, drought conditions improved slightly, though substantial drought persisted across much of Western Canada. Moisture in the Pacific Region allowed for significant improvements in drought across Vancouver Island and onto the mainland in the southern region of British Columbia. In much of the Prairie Region, extremely dry conditions continued to linger with only a few select areas receiving moisture. Some small improvements were seen in southern Manitoba. In the Central Region, many areas across southern Ontario and Quebec received normal to above-normal precipitation in October, allowing the region to remain drought free or see some improvement. The only area of the central region that continued to receive below-normal precipitation was southeastern Quebec, which led to the formation of Severe Drought (D2). Eastern and Northern Regions of Canada remained relatively unchanged,



with dry conditions added along the northern coast of Nova Scotia. More than thirty-eight percent of the country was considered Abnormally Dry (D0) or in Moderate to Exceptional Drought (D1 to D4), which includes nearly eighty percent of the national agricultural landscape.

Pacific Region (BC)

In the month of October, significant rains allowed for continued improvement to drought conditions on Vancouver Island and along the western coast. Over the past 60 days, Vancouver Island received 150 to 600 mm of precipitation, amounts that were moderately to exceptionally high for the season. This accumulation of precipitation allowed for the improvement of Moderate Drought (D1) across the Island and onto the mainland, including the Vancouver area, where a considerable amount of precipitation eased long-term deficits and improved soil moisture. Abnormally Dry (D0) conditions remained on the eastern coast of the Island where longer term, dry conditions existed as well as around Victoria where the area received below-normal precipitation over the past 365 days.

The central region of British Columbia received near- to above-normal precipitation through the month of October allowing for small improvements to pre-existing Severe to Exceptional Drought (D2 to D4), most notably through the Okanagan where Extreme (D3) and Exceptional Drought (D4) conditions were improved. Although this precipitation had minimal impact on forage production, ground water and well levels that were low during the growing season reportedly returned to normal. Severe Drought (D2) conditions also improved along the western edge of the Canadian Rockies as the area saw increased moisture from late-month storm systems passing through. A pocket of Severe Drought (D2) remained given that the area received below-normal precipitation in the long-term. Sixty-two percent of the province was classified as Abnormally Dry (D0) or in Moderate to Exceptional Drought (D1 to D4); this includes approximately ninety-one percent of the agricultural landscape.

Prairies (AB, SK, MB)

Overall, the precipitation received through the month of October did little to improve long-term drought conditions across much of the Prairie Region. The majority of the western Prairies received near-normal to below-normal precipitation which worsened drought conditions, particularly across eastern Alberta and western Saskatchewan, where 40 to 60 percent of normal precipitation fell. Although any precipitation was welcome, it did not accumulate enough moisture to completely alleviate impacts of the significantly dry growing season. Given both longer-term conditions and less than 40 percent of expected precipitation falling in

October, an area of Exceptional Drought (D4) developed east of Edmonton, Alberta and along the Alberta-Saskatchewan border. Extreme to Exceptional Drought (D3 to D4) also remained in place across much of central Alberta and Saskatchewan as well as southern Manitoba as these areas have not yet recovered from the significant moisture deficits of the past 1 to 2 years. These areas reported a deficit of 140 mm of precipitation within the last year, with some as low as 220 mm below-normal. As the 2021 growing season came to a close, many farmers across the Prairies reported some of the worst crop conditions they've ever seen, such as in southern Alberta, where they expect only one third of their normal crop yields. Agricultural producers also experienced poor seed harvests which could lead to seed shortages for the next growing season. Zero sub-surface soil moisture was also reported across many parts of the region, as concern continues to grow for next year's growing season; many are hoping for heavy snowpack and moisture throughout the winter and spring.

Although most areas in the Prairies remained in significant drought, some select locations received above-normal monthly precipitation, leading to small areas of improvement. Much of the precipitation fell in western Alberta, southern Saskatchewan and along the Manitoba-U.S. border; this much-needed moisture helped to improve the drought situation in these areas. Upwards of 25 mm above-normal precipitation fell along the Foothills and towards Lethbridge, which roughly accounted for more than 200 percent of normal precipitation for the month of October. As a result, small improvements were made to Severe to Extreme Drought (D2 to D3) in the area. Similar precipitation fell across parts of southern Saskatchewan and Manitoba; this led to a reduction in Severe Drought (D2) around Regina and Extreme to Exceptional Drought (D3 to D4) across southern Manitoba. Although southern Manitoba previously struggled with adequate moisture levels, this area has received 30 to 60 mm above-normal precipitation since August. Emerson, Manitoba reported their wettest October on record with more than 400 percent of normal precipitation falling.

Altogether, the Prairie provinces have committed to paying \$317 million as a part of the AgriRecovery program, with the most committed in Alberta and Saskatchewan. Thus far: 8,500, 7,500 and 118 claims have been made in Alberta, Saskatchewan and Manitoba, respectively. At the end of the month, seventy-six percent of the Prairie Region was classified as being Abnormally Dry (D0) or in Moderate to Exceptional Drought (D1 to D4), including nearly one-hundred percent of the region's agricultural landscape.

Central Region (ON, QC)

Much of southern Ontario received significant precipitation in the month of October, while portions of northwestern Ontario and southeastern Quebec remained dry. Conditions across the most northwestern portions of Ontario improved as the area received between 115 to 200 percent of normal precipitation, while areas from Thunder Bay to Timmins missed out on significant moisture; as a result, Moderate to Extreme Drought (D1 to D3) remained in place. Southern regions received more than 200 percent of normal precipitation in October, providing ample moisture for the region and staving off any Abnormally Dry (D0) conditions. This extends to 350 to 450 mm of precipitation in the past 3 months, corresponding to very high to exceptionally high precipitation values. Some of the October moisture pushed into parts of southern Quebec, where Moderate Drought (D1) was improved. However, the St-Georges area in southeastern Quebec received roughly 45 to 55 mm less precipitation than what is expected in October, which led to the formation of a Severe Drought (D2) pocket. Northern Quebec remained relatively unchanged in Abnormally Dry (D0) conditions. By the end of the month, thirty percent of the Central Region was classified as Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2), including thirty-four percent of the agricultural landscape.

Atlantic Region (NS, NB, PE, NL)

Through the month of October, the majority of the Atlantic Region received near- to slightly below-normal precipitation which allowed the area to remain unchanged in terms of dry or drought conditions. Soil moisture across New Brunswick and Prince Edward Island was reported at capacity and there were no lingering deficits. Still, a pocket of Abnormally Dry (D0) conditions was added to the northern coast of Nova Scotia as the area received below-normal precipitation in the past 90 days. Moderate Drought (D1) improved across Newfoundland, but Abnormally Dry (D0) conditions remained in place. Minimal changes occurred across Labrador, though small improvements took place along the southwestern corner. By the end of the month, twelve percent of the Atlantic Region was classified as Abnormally Dry (D0), including nine percent of the agricultural landscape. No drought was reported in the region this month.

Northern Region (YT, NT)

The Northern Region saw minimal changes to Abnormally Dry (D0) conditions through the month of October. Although much of the region remained slightly dry in October, many areas reported above-normal precipitation since August; this led to slight reductions in Abnormally Dry (D0) conditions around Old Crow, Yukon and Great Bear Lake in the Northwest Territories.

However, southern portions of both Territories received below-normal precipitation in the past 30 and 60 days, especially along the B.C.-Yukon border, causing the expansion of Abnormally Dry (D0) conditions along the border and north towards Watson Lake. This region reported only 30 percent of average precipitation since September and 19 percent of normal precipitation in October alone. Seven percent of the Northern Region was classified as Abnormally Dry (D0).

© Her Majesty the Queen in Right of Canada, represented by the Minister of Agriculture and Agri-Food (2021).

For more information reach us at www.agr.gc.ca or call us toll-free 1-855-773-0241.