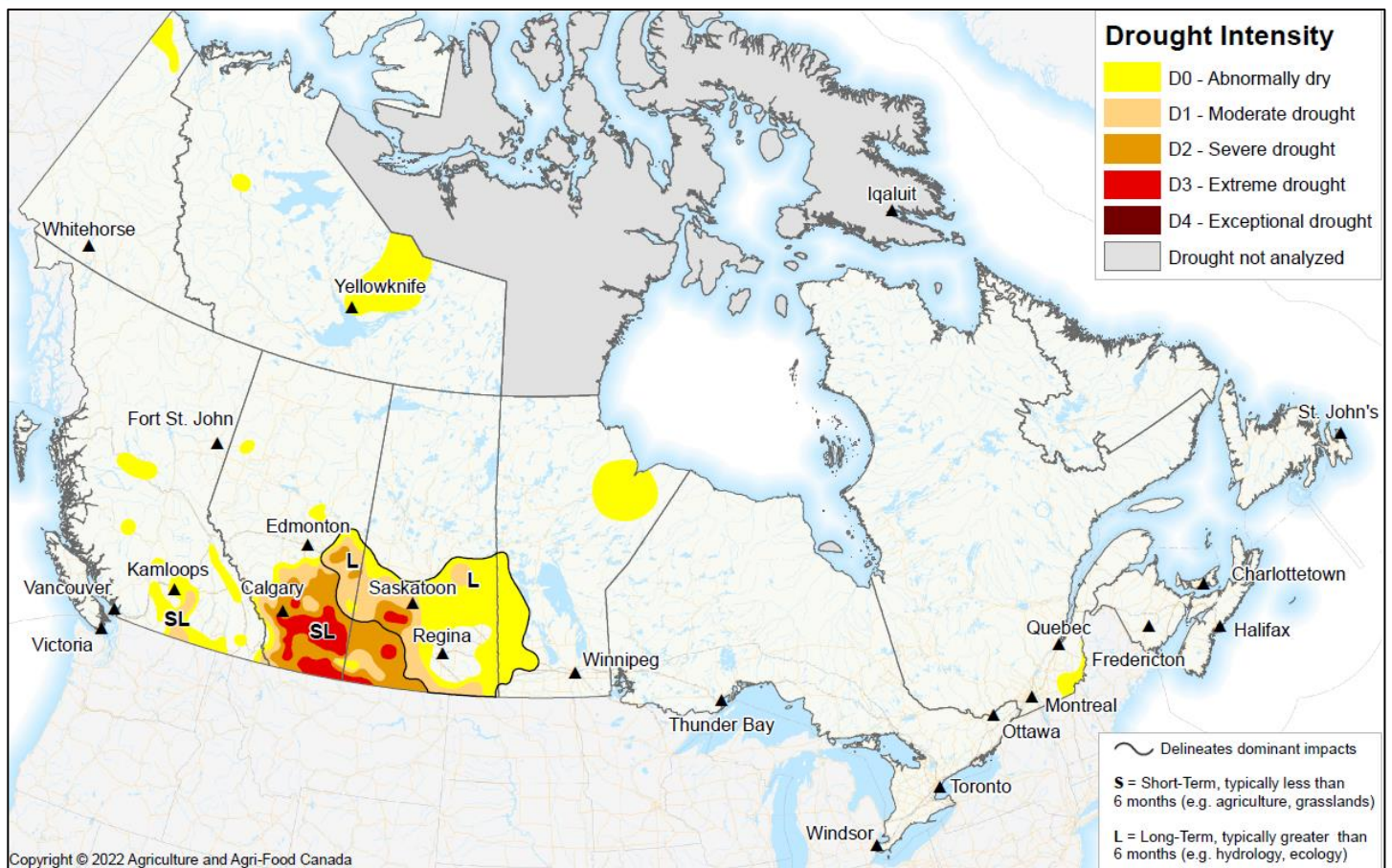


Canadian Drought Monitor

Conditions as of April 30, 2022



The month of April brought with it an overabundance of moisture to parts of the southeastern Prairies and Central Canada as well as both east and west coasts. Many reports of overland flooding and soil erosion came out of southern Manitoba as a result of the two late-month Colorado Lows impacting the region; this led to significant flooding occurring along the Red River south of Winnipeg. These regions experienced gradual drought improvement through the winter, however April brought enough moisture to quickly pull the remaining regions of Manitoba out of drought. The driest area continued to be southern Alberta, where Extreme Drought (D3) persisted - soil moisture was very poor and vegetation has been extremely slow to green up. Saskatchewan experienced a mix of drought in the west and good to excess moisture in eastern regions. Despite significant improvement in moisture conditions through much of the



eastern Prairies, long term impacts from last summer's drought continue to impact vegetation and the agricultural communities. Northern Canada received near- below-normal moisture this month. Temperatures were much below normal for most of the country in April, excluding Atlantic Canada and a small region in Interior B.C where temperatures were above normal.

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

Pacific Region (BC)

Conditions across the Pacific Region were mixed in April: areas along the coast received ample moisture while the Interior continued to experience a drying trend. Much of the province experienced cooler temperatures this month, up to three degrees cooler than normal. Although conditions in the Interior region of the province continued to be dry in April, minimal changes were made to the drought picture. This area received sufficient moisture through the fall, which improved Exceptional Drought (D4) conditions experienced last summer, but short-term dryness re-emerged in the last 3 months. The Interior region received anywhere from 40 to 85 percent of normal precipitation since February, with the driest conditions in the Okanagan. Because of this, and the drought that occurred last summer, Moderate Drought (D1) conditions expanded slightly. Additional pockets of Abnormally Dry (D0) conditions also emerged throughout central B.C. due to limited short-term moisture and reports of low surface water levels.

In contrast, eastern parts of Vancouver Island received Moderately to Very High amounts of moisture in April, roughly equating to 115 to 200 percent of normal precipitation; this led to the removal of the Abnormally Dry (D0) pocket from Campbell River to Nanaimo.

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

Prairie Region (AB, SK, MB)

The Prairie Region experienced both ends of the moisture spectrum in April: Extreme Drought (D3) in the west and flooding and excessive moisture in the east. Record-breaking precipitation fell across southern Manitoba and southeastern Saskatchewan in the last half of April, which

led to further reductions in drought throughout the area. Much of this moisture missed western areas of the Prairies, leading to an expansion of drought conditions, particularly in southern Alberta. Temperatures remained colder than normal across the Prairie Region this month, most notably in Manitoba with temperatures more than 5 degrees cooler than normal. Low temperatures would normally indicate reduced evaporation, however strong winds effectively reduced moisture from exposed soils through the early spring.

Southern Alberta experienced the greatest drought degradation in April. Less than 40 percent of normal precipitation fell this month, exacerbating the already dry conditions experienced over the last six months. Soil moisture conditions at a depth of 120 cm suggested exceptionally dry conditions (less than once in 50-year frequency) along the southern Alberta border with the U.S. as well as near the city of Brooks. Annual precipitation deficits were reported at 110 to 220 mm below normal for southern areas in Alberta. Reported drought impacts for this area include short to very short soil moisture, hay and pastures being slow to emerge or green up, dry and saline lakes, dry sloughs, and extremely limited runoff. Significant winds resulted in further evaporation and soil erosion. As a result, Extreme (D3) and Severe Drought (D2) were both expanded in the southern parts of the province.

Near-normal moisture was recorded for northern agricultural regions of the central Prairies from Alberta towards southwestern Saskatchewan in the last 6 months. However, long-term drought impacts are still being reported throughout much of this area: some dugouts filled but others did not, producers have had to sell off some of their herd and have reported delays to seeding this spring. Drought was reduced due to near-normal short-term moisture, but pockets of Extreme Drought (D3) and Severe Drought (D2) remained in select areas due to the reported long-term impacts.

Two separate Colorado Lows brought significant snow, rain and below-normal temperatures to southeastern Saskatchewan and southern Manitoba over the last 2 weeks of April. These storm systems, along with good winter snow cover resulted in saturated soils and significant flooding in the Red River Valley and parts of the Interlake region. Upwards of 130 to 160 mm of precipitation fell this month across southern Manitoba, roughly 3 to 5 times the 30-year normal. Emerson and Morden, in southern Manitoba south of Winnipeg, both reported their wettest April on record, while Winnipeg reported its second wettest April. Given this considerable moisture, all drought (Moderate and Extreme (D1 to D2)) was removed; only a small stretch of Abnormally Dry (D0) conditions remained along the Manitoba-Saskatchewan border. Although some areas across the southern and eastern Prairies are no longer in drought, they are still recovering from the impacts of last year's drought; this includes continued

agricultural concerns for pasture recovery, feed availability and hay shortages. These areas may in fact be dealing with both flooding and drought impacts this month.

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

Central Region (ON, QC)

The Central Region of Canada continued to see improved moisture conditions this month. Much of the moisture occurred across northwestern Ontario and southern Quebec, while southern Ontario received slightly less than the average April precipitation. Temperatures were also reported to be slightly cooler than normal across the region, with the coldest temperatures reported in northwestern Ontario.

The two major systems that passed through the southeastern Prairies also impacted a good portion of northwestern Ontario. More than 200 percent of normal moisture fell, with some of the largest amounts falling around Thunder Bay – this area received between 150 to 200 mm of moisture, over 110 mm more than the expected precipitation in April. This significant moisture replenished soil moisture and improved streamflow levels, leading to the removal of both Moderate Drought (D1) and Abnormally Dry (D0) conditions from the area.

Southern Ontario received slightly below-normal moisture in April and over the last two months, however soil moisture conditions appear to be near- to above-normal. There were reports of seeding delays for both corn and soybean crops as well as grain crops in the area due to last year's cool, wet fall and this year's late spring; delays in pasture growth were also reported. As a result, no drought or Abnormally Dry (D0) pockets were added to southern Ontario, but this area will be monitored going into the summer.

Finally, southern Quebec as well as central areas of Ontario and Quebec received above-normal moisture in the last 30 days and near-normal precipitation in the last 6 months. This led to the removal of a few pockets of Abnormally Dry (D0) in central areas as well as the removal and reduction of D1 and D0 in southern Quebec.

At the end of the month, less than one percent of the Central Region was classified as Abnormally Dry (D0), including three percent of the region's agricultural landscape. There was no drought reported in the region this month.

Atlantic Region (NS, NB, PE, NL)

Similar to last month, Atlantic Canada continued to receive above-normal moisture in April. Much of this month's moisture fell across New Brunswick and parts of Newfoundland, but the rest of the region still received ample precipitation. Over the past 6 months, much of the Atlantic region received precipitation above the 90th percentile – equal to 115 to 200 percent of average moisture. As a result, the region remained drought-free; this includes the removal of Abnormally Dry (D0) conditions in northern Labrador, given improved moisture in the area.

At the end of the month, there was no drought or Abnormally Dry (D0) conditions present across the Atlantic Region.

Northern Region (YT, NT)

Updates to Northern Canada were not significant this month, but drier conditions were reported in select areas. A pocket of Abnormally Dry (D0) conditions was expanded slightly near Yellowknife as the area reported 25 to 75 percent less moisture than normal in the last three months, as well as pockets near Fort Good Hope and Old Crow, Yukon. Although Old Crow received 89 percent of average precipitation since September, it remains at an Abnormally Dry (D0) designation unless conditions degrade further. Southern Yukon remained drought and Abnormally Dry (D0) free this month as the region has received adequate moisture in the past few months.

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