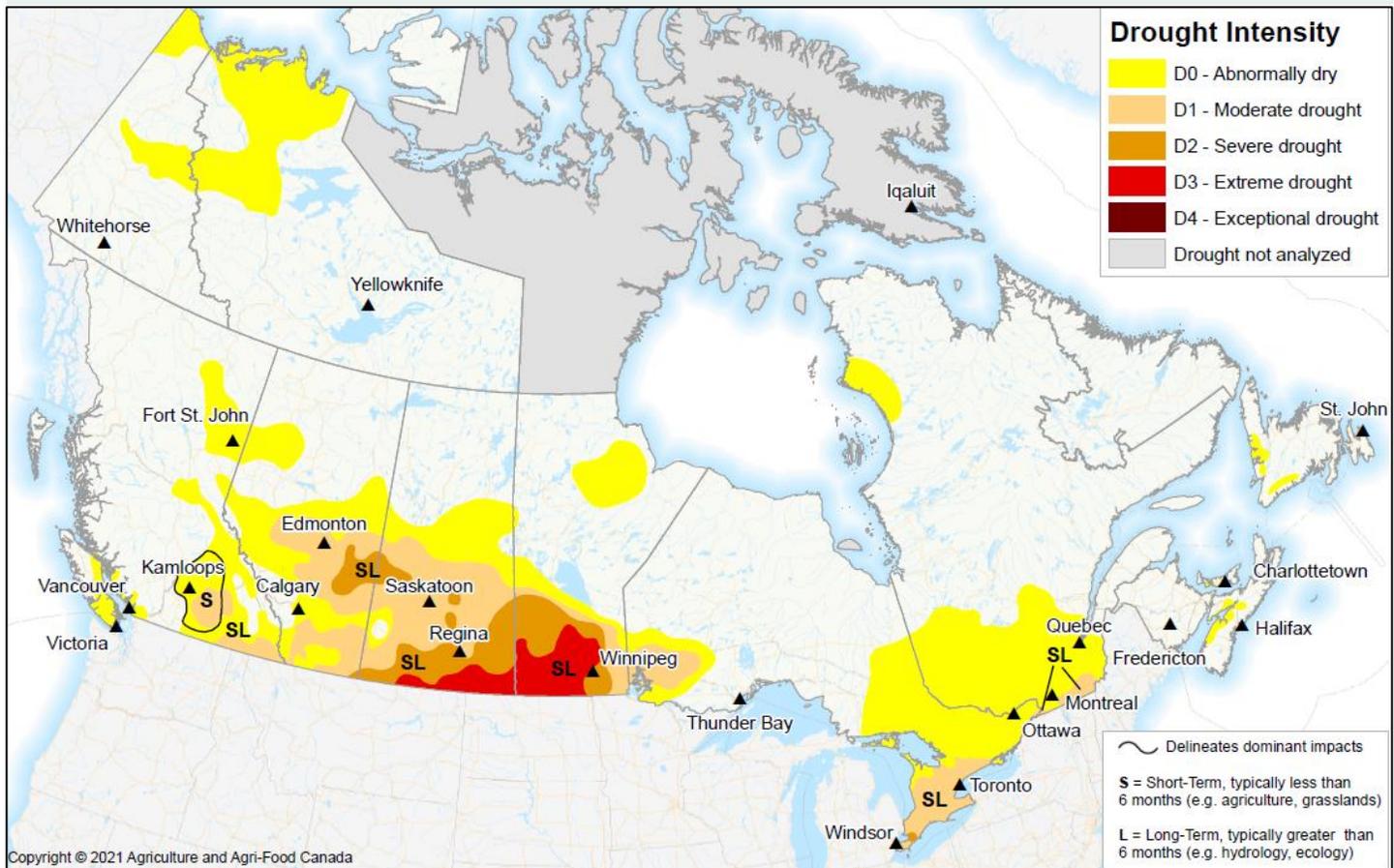


# Canadian Drought Monitor

Conditions as of April 30, 2021



Below-normal precipitation and variable temperatures across Canada through the month of April allowed drought conditions to persist with an increased cause for concern in the Prairie Region. Across the Pacific Region, Abnormally Dry (D0) conditions persisted and expanded, including the emergence of Moderate Drought (D1) conditions in the Interior. The Prairie Region saw the most significant drought concerns amplifying in the southeast, including Saskatchewan and Manitoba. In Central Canada, Abnormally Dry (D0) conditions improved in northwestern Ontario, while Abnormally Dry (D0) conditions and Moderate Drought (D1) expanded throughout southern Ontario. Atlantic Canada and the Northern Region saw minimal changes regarding Abnormally Dry (D0) conditions. By the end of the month, Moderate to Extreme Drought (D1-D3) affected eleven percent of the country.



## **Pacific (BC)**

In British Columbia, conditions deteriorated due to below-normal precipitation throughout April. These conditions created a slight expansion of Abnormally Dry (D0) conditions throughout Vancouver Island. Abnormally dry conditions also expanded to mainland British Columbia; this includes the area stretching east of Vancouver. Across the interior, dry conditions persist as this region received below-normal snowpack throughout the Winter. In addition, mid-elevation snowmelt occurred sooner than normal throughout the Spring. These are both causes for concern, as precipitation in the region has been below-normal in the last 60 days. This dryness extends southeast towards the U.S. and Alberta border, where areas are reported as dry in both the short- and long-term. These areas received less than normal precipitation with some areas receiving 50 to 70 percent below-normal in the past 60 days, and 25 to 50 percent within the last 90 days. These conditions have led to expanded areas of Abnormally Dry (D0) conditions in eastern British Columbia around Golden, as well as the introduction of Moderate Drought (D1) surrounding Salmon Arm, and Kelowna, and along the U.S. border including Nelson and Cranbrook. In the northern part of the province, Abnormally Dry (D0) conditions expanded to surround Fort St. John, resulting in a continuous expanse of D0 stretching east into Alberta, and north towards Fort Nelson. However, D0 conditions were alleviated in the southern Peace River region surrounding Wells and south of Dawson Creek. Nineteen percent of the province was considered Abnormally Dry (D0), while nearly four percent was classified as Moderate Drought (D1); these conditions accounted for fifty-eight percent of the agricultural landscape.

## **Prairies (AB, SK, MB)**

Drought conditions across the Prairies persisted due to extreme dryness across much of the region. Alberta saw a trend of below-normal precipitation across the south of the province. Moderate Drought (D1) conditions were expanded in southern portion of the province, due to moderately Low to Very Low precipitation percentiles over the last 6 months. Recent precipitation across the Rockies, and eastern slopes, caused the removal of Abnormally Dry (D0) conditions. However, although excluded from previous drought assessments, conditions surrounding Calgary worsened to be included as Abnormally Dry (D0). D0 conditions also expanded north and west of Grimshaw to include Manning and Fort St. John, B.C. Abnormally Dry (D0) conditions through the Peace Region of B.C., as well as northern Alberta and Saskatchewan followed a line west to east of 25 to 50 percent below-normal precipitation. Above-normal precipitation over the past 90 days alleviated Abnormally Dry (D0) conditions surrounding Grand Prairie and west over the British Columbia and Alberta border. Upwards of

75 percent below-normal precipitation caused a fairly large expansion of Moderate Drought (D1) across much of east-central Alberta and west-central Saskatchewan, now including Rosetown and Swift Current. These areas have had reports of producers hauling water for dugouts and a lack of moisture for pasture areas. Soil moisture at both shallow and deeper depths are also significantly lacking and will need to see an increase in moisture for crops to progress beyond seeding. A substantial lack of moisture in the last 6 months, along with previously reported dry conditions, has led to an emergence of Severe Drought (D2) conditions surrounding North Battleford and Vegreville. In southeastern Saskatchewan, mid-month precipitation only replenished surface soil moisture, which led to a minimal decrease in conditions around Shaunavon and Gull Lake. This same precipitation event also alleviated D2 conditions surrounding Regina. However, even with this much-needed moisture, Severe Drought (D2) and Extreme Drought (D3) were expanded across southern Saskatchewan given a significant lack of moisture through the winter season and a dry 2020 growing season. This expansion includes D2 conditions persisting southwest Saskatchewan and expanding west to Alberta, and D3 conditions expanding west to include Estevan, and north, including Weyburn. East-central Saskatchewan and west-central Manitoba received adequate precipitation through the month of April, resulting in slight improvements to both D0 and D1 conditions south of Cumberland House, and Grand Rapids. In southern Manitoba, exceptional short- and long-term dryness persisted, which led to an expansion of the previously small pockets of Extreme Drought (D3). This dryness, in combination with snow melt, exposing soils to sunlight, winds and evaporation, led to D3 conditions expanding to the southwest corner of the province including Neepawa to Russell and Virden and the Interlake Region. Seventy-seven percent of the Prairie region was classified as either Abnormally Dry (D0), in Moderate Drought (D1), Severe Drought (D2) or Extreme Drought (D3); this includes nearly ninety-three percent of the region's agricultural landscape.

## **Central (ON, QC)**

The Central Region experienced both an increase and decrease in precipitation, depending on the area of interest. Significant moisture fell across Northwestern Ontario throughout the month which led to significant improvement and the removal of Abnormally Dry (D0) and Moderate Drought (D1) conditions surrounding Thunder Bay. Ample recent moisture seen in the short-term departure from normal precipitation product also led to the removal of Severe Drought (D2) surrounding Sioux Lookout and Dryden, as well as a significant reduction in D0 conditions from Red Lake, east to Osnaburgh House. In southern Ontario, Moderate Drought (D1) conditions were expanded as the area received only 25 to 50 percent of normal precipitation within the past 3 months, along with dry conditions in the past 365 days (as seen in the SPEI); some areas also reported as low as 40 to 60 percent below-normal precipitation

within the last 90 days. The Chatham-Kent region saw a small pocket of Severe Drought (D2) appear due to short-term dryness combined with low moisture levels from the previous agricultural and winter seasons. Conditions along the U.S. border from Cornwall into southern Quebec did not see significant changes from March to April. However, Abnormally Dry (D0) conditions were significantly expanded to include a larger portion further north and west, as this area received 70 to 100 percent below-normal precipitation in the last month, highlighting Sherbrooke, QC., and Cornwall, ON., as being Extremely to Exceptionally Low. Twenty-three percent of the Central region remains Abnormally Dry (D0), in Moderate Drought (D1) or in Severe Drought (D2); including approximately eighty-eight percent of the region's agricultural landscape.

## **Atlantic (NB, NS, PEI, NL)**

Much of the Atlantic Region remained unchanged for the month of April due to near- to above-normal precipitation and limited areas in Abnormally Dry (D0) conditions. Minor changes were made to D0 conditions in Nova Scotia where precipitation improved over the past 30 days. Across Newfoundland, increased precipitation in April slightly improved D0 conditions from Cape Ray to Burgeo, however the majority of conditions remained consistent as slight dryness persisted along the western edge of the island. Only four percent of the Atlantic region is classified as Abnormally Dry (D0); this includes approximately thirteen percent of the region's agricultural landscape.

## **Northern (YT, NWT)**

Minimal changes were made to the expanse of Abnormally Dry (D0) conditions in the Northern region for the month of April, barring a couple areas of improvement. Increased precipitation led to a minimal decrease in D0 conditions east of the U.S./Yukon border, as well as the removal of a D0 pocket in the Northwest Territories that previously surrounded Hay River and a portion of Great Slave Lake. Although the Old Crow station reported below-normal precipitation since September, 170 percent of normal precipitation fell in the region in April, which led to a reduction in D0 surrounding the community. Approximately sixteen percent of the Northern region is classified as Abnormally Dry (D0).