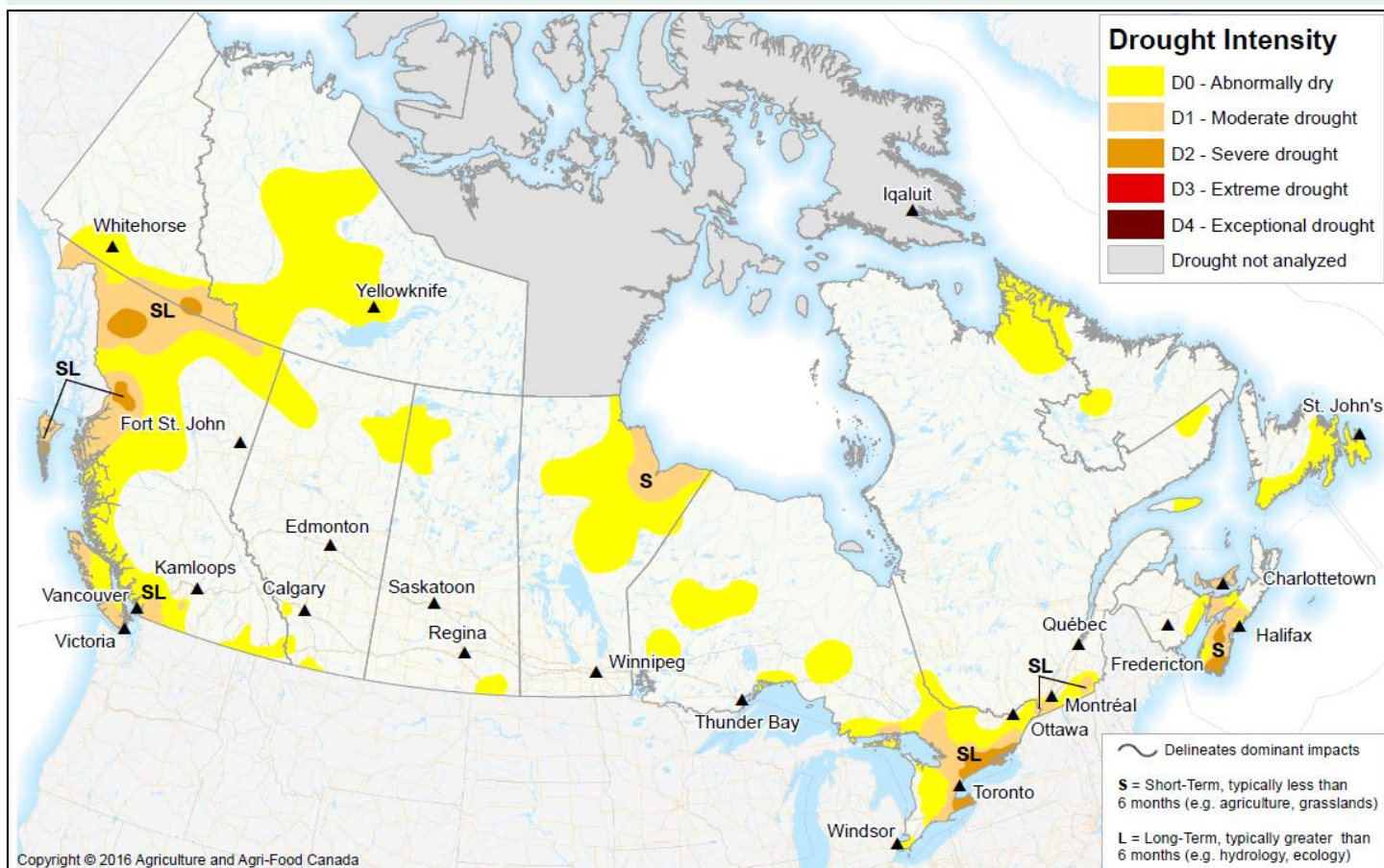


# Canadian Drought Monitor

Conditions as of August 31, 2016



The month of August brought with it some much needed precipitation across parts of Canada, specifically southern and eastern Ontario and southern Québec. Precipitation in Ontario and Québec improved soil moisture conditions, but long-standing precipitation deficits and above normal temperatures for much of August resulted in continued drought. Water supplies and crop yields remained substantially below normal; these, along with crop quality have been negatively impacted. The Prairie region also received abundant rainfall eliminating all concern for drought leaving only two small regions of abnormally dry conditions. Parts of the Pacific region also experienced deteriorating conditions due to inadequate precipitation, warm temperatures and declining streamflow. As for August 31, only 7.5% of the Agricultural area in Canada had received below the 20<sup>th</sup> percentile precipitation for the growing season (April 1 to August 31).



## **Pacific Region (BC)**

Precipitation across the province of British Columbia for the month of August was variable, with abnormally low precipitation occurring in the southwestern, southern interior and northern coastal regions. This was especially the case for the north coast, where Canadian Forestry Services Drought Code indicated significant dryness, leading to the emergence of Severe Drought (D2) throughout the region. This developing dry pocket extended south, thus expanding the area of Abnormally Dry (D0) conditions all along the western coast towards Vancouver. Satellite-derived data and provincial hydrological drought indicator analysis also indicated anomalously dry conditions in northern parts of Vancouver Island, where the patch of Moderate Drought (D1) was extended to.

## **Prairie Region (AB, SK, MB)**

Across the Prairies, the main concern was the overabundance of precipitation throughout the month, leading to some places experiencing excessive moisture. A particularly large rain event occurred mid-month around the Edmonton region in Alberta, where upwards of 100-125 mm of rain fell. This event alleviated short-term dryness concerns, leading to the deletion of both Abnormally Dry (D0) and Moderate Drought (D1) conditions in the area. Across parts of southern Alberta, where previous drought-impacted areas existed, normal to above-normal precipitation amounts over the last 30 days helped to also alleviate most drought concerns; only a few pockets of D0 remain. However, a small patch in southeastern Saskatchewan began to appear as short-term dryness, experiencing between 40 to 85% of normal precipitation over the past 2 months. Given these short-term conditions, a small pocket of D0 was created. Northern areas of the Prairies experienced minimal change, with some added dryness in northwestern parts of Alberta and northern Manitoba, but some improvement throughout northern Saskatchewan.

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

Although conditions have improved slightly over the past month across Central Canada with recent precipitation, the concern of significant drought still remained. Much of Ontario continued to experience above average temperatures and large moisture deficits in eastern portions of southern Ontario as well as eastern Ontario. Unfortunately, while a large precipitation event stretching from London towards North Bay and Cornwall brought upwards of 100-200 mm of rain, other parts of southern Ontario missed much of the precipitation and thus remained in drought conditions. Low precipitation throughout eastern Ontario significantly reduced crop yields and forced farmers to purchase hay and water for their livestock as well as sell off cattle they couldn't afford to keep. The hardest hit areas stretched from Kawartha Lakes through Peterborough and Northumberland counties to Hastings and

Prince Edward counties. Water supplies remained a problem throughout these areas with water wells running dry. The Lower Trent Conservation District labelled an area east of Trenton towards the Québec border as low water response Level 3 for the first time in the program's history in Ontario; this signified severe drought conditions and a water supply that no longer met demands. Given these implications, areas in D0, D1 and D2 north of Lake Ontario stayed similar to the previous month's assessment. This significant dryness still extended into Québec, but to a lesser extent than previous analyses. Due to adequate precipitation surrounding Montréal and area, this has led to the pull back of D0 in this region. Across northern parts of Ontario and Québec, additional pockets of dry conditions emerged, given low precipitation based on Canadian Precipitation Analysis data and Canadian Forestry Service Drought Code levels.

## **Atlantic Region (NS, NB, PE, NL)**

In Atlantic Canada, areas previously showing dry conditions in Nova Scotia and Prince Edward Island in July's assessment have since deteriorated. Precipitation across the area was reported at 40-85% of normal, with the southernmost tip of Nova Scotia indicating below 40% of normal precipitation over the past 3 months. Crop conditions across Atlantic Canada in late August were extremely variable, ranging from nearly normal to almost drought-stricken. Pastures in New Brunswick and Nova Scotia were in poor condition, despite recent rains resulting in farmers having to start to feed their livestock earlier than usual. These dry conditions have resulted in the expansion of D1 conditions further south, as well as the emergence of a couple pockets of D2 in the hardest hit areas. Some of this dryness was also problematic further north across the south coast of Newfoundland, where a pocket of D0 was placed.

## **Northern Region (YT, NT)**

Drought conditions across northern parts of the country deteriorated slightly throughout August. The pre-existing Abnormally Dry (D0) pockets have amalgamated together, stretching from the Yukon Territory past Great Bear Lake in the Northwest Territories, due to low Canadian Forestry Service Drought Code as well as low streamflow levels. In addition to these dry conditions, more significant precipitation deficits were reported across southern parts of the Yukon, where a D1 was extended and D2 was created.