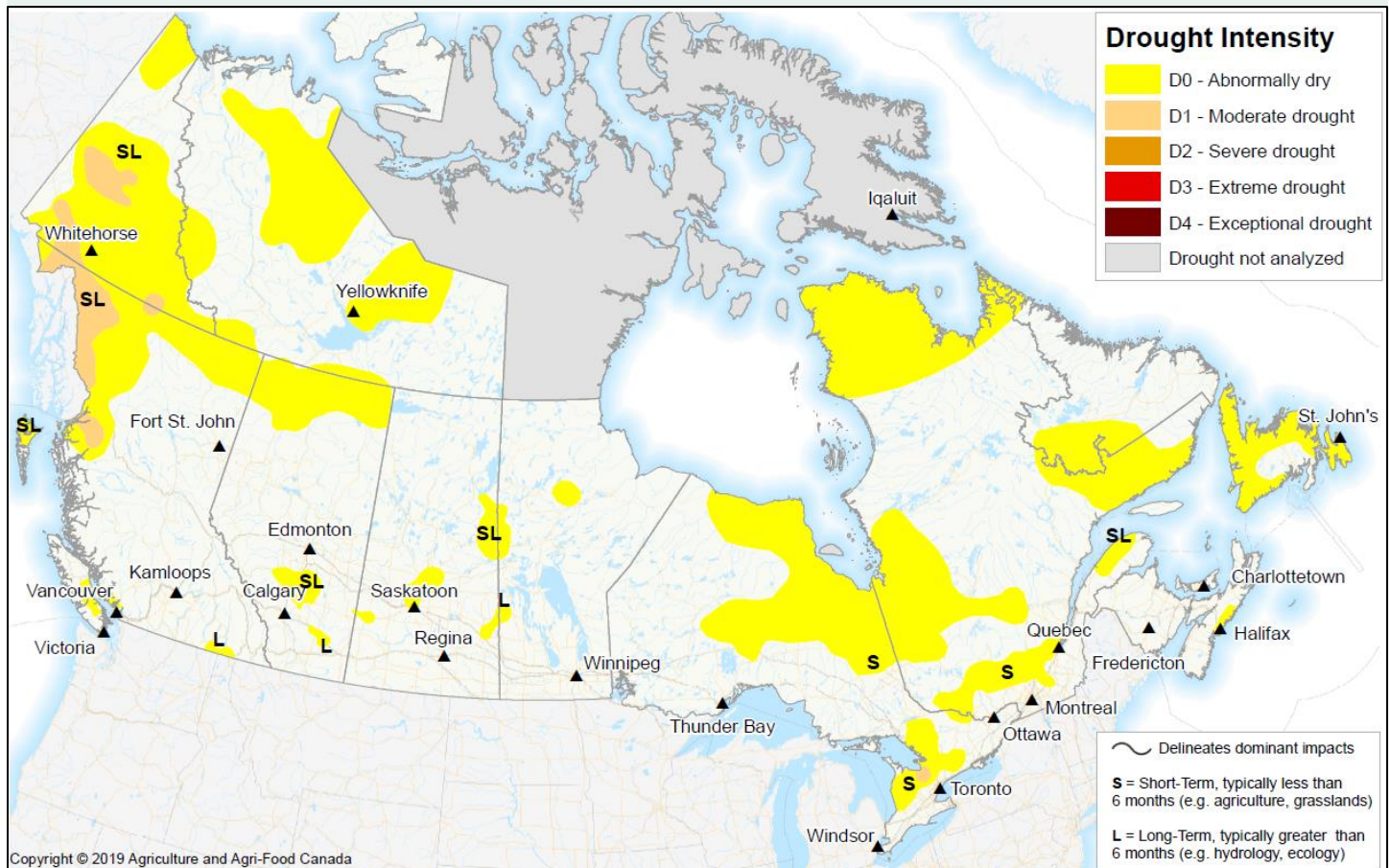


# Canadian Drought Monitor

Conditions as of October 31, 2019



Drought conditions generally improved across Canada by the end of October. Northwestern British Columbia and the Yukon are the only large regions of drought remaining, however, this region continues to improve. Small pockets of Moderate Drought (D1) exist in central Alberta, southern Ontario, and southeastern Quebec. Abnormally Dry (D0) conditions continued to improve in most regions throughout the month of October, with the exception of the Atlantic region and the region between Quebec City and Montreal where Abnormally Dry (D0) conditions expanded slightly. The most significant improvement this month was in Southern Ontario, where significant rainfall late in the month replenished soil moisture and water supplies. Over 125 mm of precipitation in October resulted in the removal of Severe Drought (D2), and considerable retreated of Moderate Drought (D1) and Abnormally Dry (D0) conditions in large portions of southern Ontario and southern Quebec. Severe Drought (D2) conditions in Ontario were eliminated. However, Moderate Drought (D1) persisted southwest of Barrie.



Southern parts of British Columbia received above normal precipitation in October which improved soil moisture, stream flows, and local drought conditions. Multiple storm systems brought substantial precipitation to southern Manitoba resulting in excess soil moisture and localized flooding. The province has opened the Winnipeg Floodway to divert floodwaters around the city while local reservoirs are lowered to accommodate spring runoff. Alberta and Saskatchewan received below normal precipitation however, due to previous rainfall and stored moisture there are only localized concerns. Moderate Drought (D1) developed around Red Deer and Abnormally Dry (D0) pockets remain across the region due to long-term precipitation deficits. In the Atlantic region, Abnormally Dry (D0) areas expanded in Newfoundland and persisted northeast of Halifax due to short-term deficits. At the end of October 2019, drought (D1-D4) affected only 1.7 percent of land area in Canada.

## **Pacific Region (BC)**

Despite the improvement in the southern interior, significant long-term deficits still persisted in localized areas. Above normal October precipitation, and above normal streamflow improved long-term drought conditions across Vancouver Island and the Sunshine Coast. Long-term Moderate Drought (D1) pockets were eliminated around the Courtenay area and along the coast from Denman Island to Parksville. Long-term drought conditions were also alleviated in British Columbia's interior with above normal fall precipitation. Conditions in southern and central areas improved, leaving only a small pocket of Abnormally Dry (D0) conditions in the Creston and Castlegar areas as a result of long-term moisture deficits. Despite the slight improvement in drought conditions, long-term Abnormally Dry (D0) and Moderate Drought (D1) persisted in the northwest with a small reduction. In addition, Abnormally Dry (D0) conditions expanded to the northeastern border. There was some improvement in the central region of the province, including in the area between Smithers and Prince George. Overall, above average growing season precipitation in southern British Columbia improved long-term deficits. At the end of the month, Moderate Drought (D1) conditions have affected 7.5 percent of land area and 0.5 percent of the population of British Columbia.

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

The Prairies continued to show improved drought conditions in October. Recent storm systems have replenished soil moisture, improved stream flows and in some areas has resulted in excessively wet conditions. Small pockets of Abnormally Dry (D0) remain due to long-term moisture deficits. Southern Alberta's Abnormally Dry (D0) conditions, caused by long-term deficits, improved slightly as a result of average or above normal fall precipitation. Abnormally Dry (D0) conditions were eliminated around Grande Prairie and reduced significantly around Brooks. Abnormally Dry (D0) designations expanded in Red Deer in central Alberta due to long-term precipitation deficits. In addition, Abnormally Dry (D0) areas were reduced in northwestern Alberta and expanded across the northeast. Saskatchewan received average to below normal precipitation during October, with accumulated precipitation ranging from 5 to 20 mm. Recent precipitation improved conditions in Saskatchewan resulting in the reduction of

Abnormally Dry (D0) pockets in areas north of Yorkton and the elimination around Uranium City and west of Meadow Lake, where 15 to 30 mm of precipitation was received. Abnormally Dry (D0) conditions developed west of Kindersley and were eliminated southeast of Kindersley. Abnormally Dry (D0) pockets persisted north of Saskatoon and expanded around Flin Flon. Southern Manitoba received exceptionally high precipitation, exceeding 300 mm for the growing season, resulting in excessive moisture in the Interlake region. The long-term Moderate Drought (D1) pockets were removed around Arborg in the Interlake region. Abnormally Dry (D0) areas have been eliminated across much of the Interlake region but remain around Swan River and expanded north of Thompson. There are ongoing excess moisture concerns in this region as going into winter with saturated soils significantly increases the risk of spring flooding in southern Manitoba. Overall, near to above normal precipitation in the Prairies replenished soil moisture and water supplies in October. Overall, there are no drought (D1-D4) conditions remaining in the Prairie region.

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

In central Canada, significant precipitation late in October improved drought conditions and alleviated large portions of the Abnormally Dry (D0) extent. Severe Drought (D2) conditions were eliminated northwest of Ottawa and southwest of Barrie. In addition, Moderate Drought (D1) pockets were removed around Timmins in northeastern Ontario, southwest of Ottawa, and around Repentigny and Drummondville north of Montreal due to improved soil moisture and above normal streamflow. Long-term Moderate Drought (D1) in the Murdochville area was removed with Abnormally Dry (D0) conditions remaining. Adequate precipitation and improved streamflow also eliminated Abnormally Dry (D0) areas south of Lake Nipigon, Sault Ste. Marie, and across much of southern Ontario and Quebec. Moderate Drought (D1) conditions remain southwest of Barrie as a result of short-term precipitation deficits, well below normal soil moisture, and poor streamflow levels. Abnormally Dry (D0) areas continued to expand across southern and eastern Quebec due to below normal monthly precipitation and streamflow. Although drought conditions developed in various regions, warm conditions in October have helped crops mature and allowed producers to catch up on harvest delays. Moderate Drought (D1) conditions affected 0.1 percent of land area and 1.3 percent of the population of the Central Region.

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

Most of Atlantic Canada received near normal precipitation, during the past 30 days with the exception of Newfoundland and Labrador where below normal precipitation ranging from 25 to 60 mm of rain was received. Abnormally Dry (D0) conditions expanded on the Avalon Peninsula in Newfoundland as a result of low precipitation and declining streamflow levels throughout October. In Nova Scotia, Abnormally Dry (D0) designations remained in areas northeast of Halifax due to below normal precipitation and streamflow levels this fall.

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

Conditions in Northern Canada improved only slightly over the month of October as a result of well below normal precipitation and stream flows throughout summer and fall seasons. Moderate Drought (D1) conditions were eliminated along the border of Yukon and the Northwest Territories with adequate precipitation and improved stream flows. In addition, Abnormally Dry (D0) designations diminished in southwestern regions of the Northwest Territories. Despite receiving near to above normal precipitation which improved stream flows, October precipitation was inadequate to relieve long-term moisture deficits. Moderate Drought (D1) pockets persisted in central and southern Yukon. Abnormally Dry (D0) conditions remained relatively consistent in southern and northwestern Yukon along the Alaska border, as well as, central and northern regions of the Northwest Territories due to long-term precipitation deficits. Moderate Drought (D1) conditions affected 3.1 percent of land area in the Yukon and Northwest Territories.