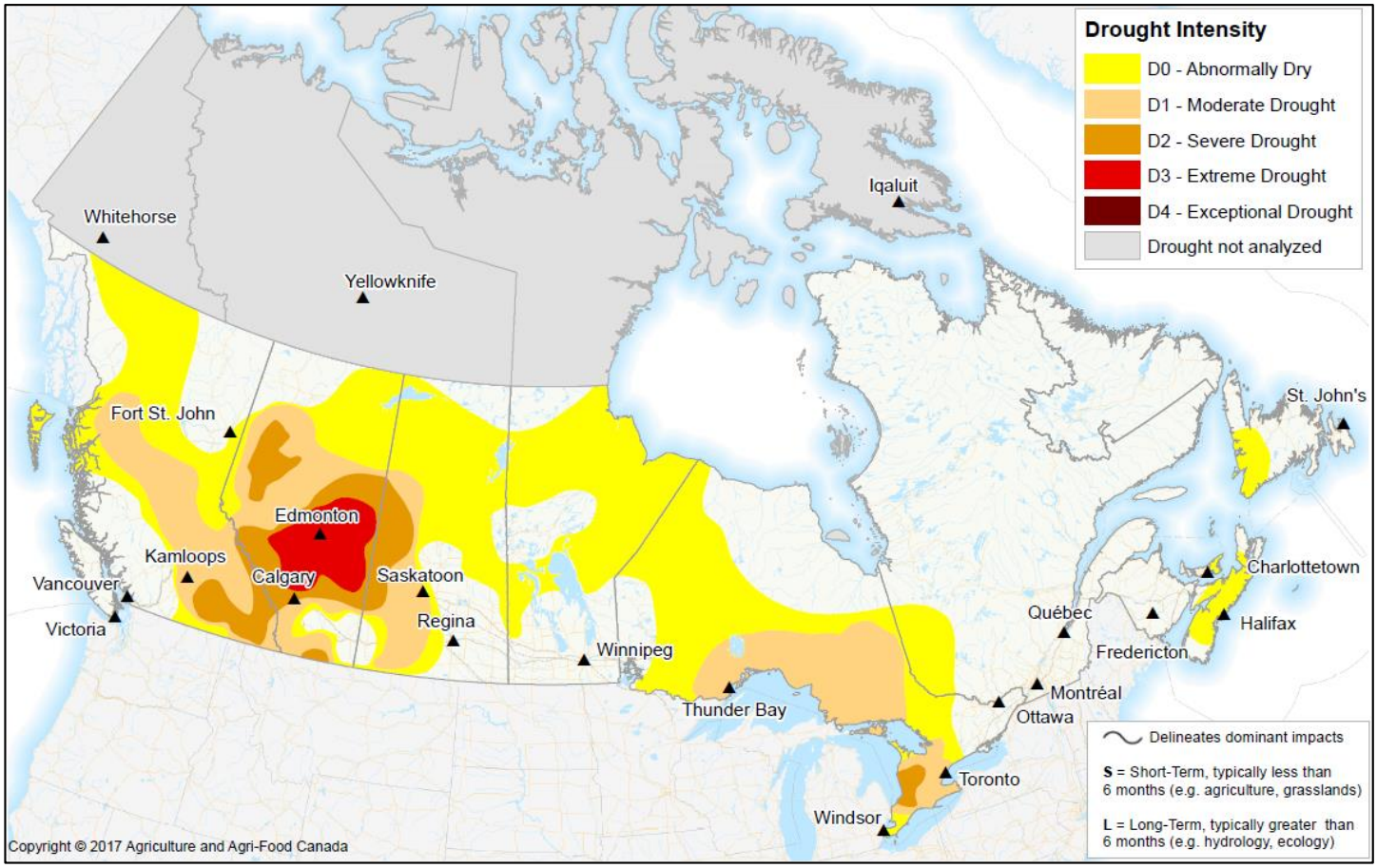
Canadian Drought Monitor

Conditions as of March 31, 2010



According to Environment Canada, the winter was one of the driest on record. With well below normal snowpack and little to no runoff reported in many regions, drought conditions have intensified. The most significant areas of concern remain in western Canada, with Alberta, British Columbia, and parts of western Saskatchewan being the most affected. In the east, portions of Ontario are experiencing low streamflow advisories, and will be monitored closely going forward. At the end of March, 51% of the country (excluding Arctic regions above 60ºN) was classified D0 or greater. This has more than doubled since January 31, with gains of 13% and 14% during February and March, respectively. Approximately 58% of Canada's agricultural area was rated D0 or higher, an increase of 4% from last month. March precipitation was below average in northern British Columbia, the southern Prairies, Ontario and Quebec. Prince Edward Island, northern Nova Scotia, and western Newfoundland all remained below average. The most severe drought areas in southern British Columbia, central Alberta and western

Saskatchewan all received less than 40% of average in March. In the Prairie region, most surface water supplies rely on spring runoff to recharge, and with the limited snow pack, water supplies remain strained. Average temperatures were well above normal across the country, with the majority reporting more than 5ºC (9ºF) warmer than normal. Some places across northern Manitoba and Ontario were more than 8ºC (12.8ºF) above normal, welcoming spring a bit earlier than usual. The only region near normal was along the West Coast. Warmer temperatures were a welcome departure from the record breaking cold of last year, which hindered pasture emergence and forced producers to continue feeding livestock much later than normal.

Pacific Region (BC)

The Southern Interior of British Columbia remains dry with well below normal snowpack and resultant low streamflows. Precipitation deficits of about 300 mm (nearly twelve inches) since November 2009 remain in southeast British Columbia; resulting in a continuation of the D2 (Severe Drought) and D1 (Moderate Drought) classifications. As of April 1, most river basins were near normal, with the exception of the Kootenay and Similkameen at 70% and 64%, respectively. Low and mid-elevation snow is generally absent or well below normal, following the unusually warm and dry weather from January to March. In central British Columbia, precipitation has been well below average at 60% of average, so the D1 (Moderate Drought) classification was expanded. Below normal snowpack in the interior means limited runoff, so water supply challenges are likely to develop by summer, similar to those of 2009. Impacts included lower than normal reservoir levels, below normal groundwater aquifers, and water use restrictions.

Prairie Region (AB, SK, MB)

Across the Prairie region, winter precipitation has been well below normal at 60%. Although winter precipitation only accounts for 25% of the annual moisture, the drier than normal winter will only exacerbate the severe drought conditions already being experienced in central and northern Alberta, and western Saskatchewan. Parts of Alberta are the driest they have been in nearly 25 years, and have been labelled the driest back-to-back drought on record since the 1880's. Some areas are even suffering from a three year precipitation deficit of over 600 mm (almost 36 inches); essentially an entire year's worth in a region that normally receives 600-700 mm (24-27.5 inches) annually. This has meant an expansion of the D2 (Severe Drought) and a continued D3 (Extreme Drought) classification for much of the province. The expansion of this D2 has also meant that it occupies a larger portion of western Saskatchewan, partly due to the less than 40% of normal precipitation over the winter. In the Peace River Region of northern Alberta, there has been an expansion of the D1 (Moderate Drought) and a continuation of the D2 (Severe Drought) classifications as a result of less than 60% of normal precipitation since March 2009.

For some of these above regions affected by significant drought in 2009, particularly central and northern Alberta and western Saskatchewan, perennial forage crops will take some time to recover. This is a result of a dry growing season and fall, low soil moisture before freeze up, combined with minimal snowfall and low runoff experienced this past winter. Although conditions are not favourable for drought recovery in these regions at this time, it is still too early to accurately predict what might occur this spring and summer. Current moisture is welcome; however continued spring moisture is required to make up the precipitation deficits, to even partially recover from 2009, and to recharge surface water supplies. In the interim, drought is expected to persist across this region.

In southwest Saskatchewan, although spring runoff was complete by late March, many reservoirs did not fill because of low snowpack. Because last growing season was drier than normal, and current precipitation deficits range near 120 mm (4.7 inches) since April 2009, these conditions warranted an expansion of the D1 (Moderate Drought) classification.

Central Region (ON, QC)

In southern Ontario, precipitation deficits are over 300 mm (nearly twelve inches) since April 2009, about 70% of normal. In addition, low streamflow advisories were issued by the Ontario Ministry of Natural Resources. As a result, the D2 (Severe Drought) classification was added. The D1 (Moderate Drought) area was expanded over northern Ontario, where precipitation has been about 60% of average over the past six months. Conditions in the Thunder Bay region are extremely dry; several winter systems had tracked across the northern States, just missing Ontario and creating a sharp transition from conditions further south.
Abnormally Dry (D0) areas have emerged or expanded across northern regions of British Columbia, the Prairies, northern Ontario, and small portions of Nova Scotia, Prince Edward Island, and Newfoundland. Many of these areas have had reported less than 60% of normal winter precipitation since November 2009.