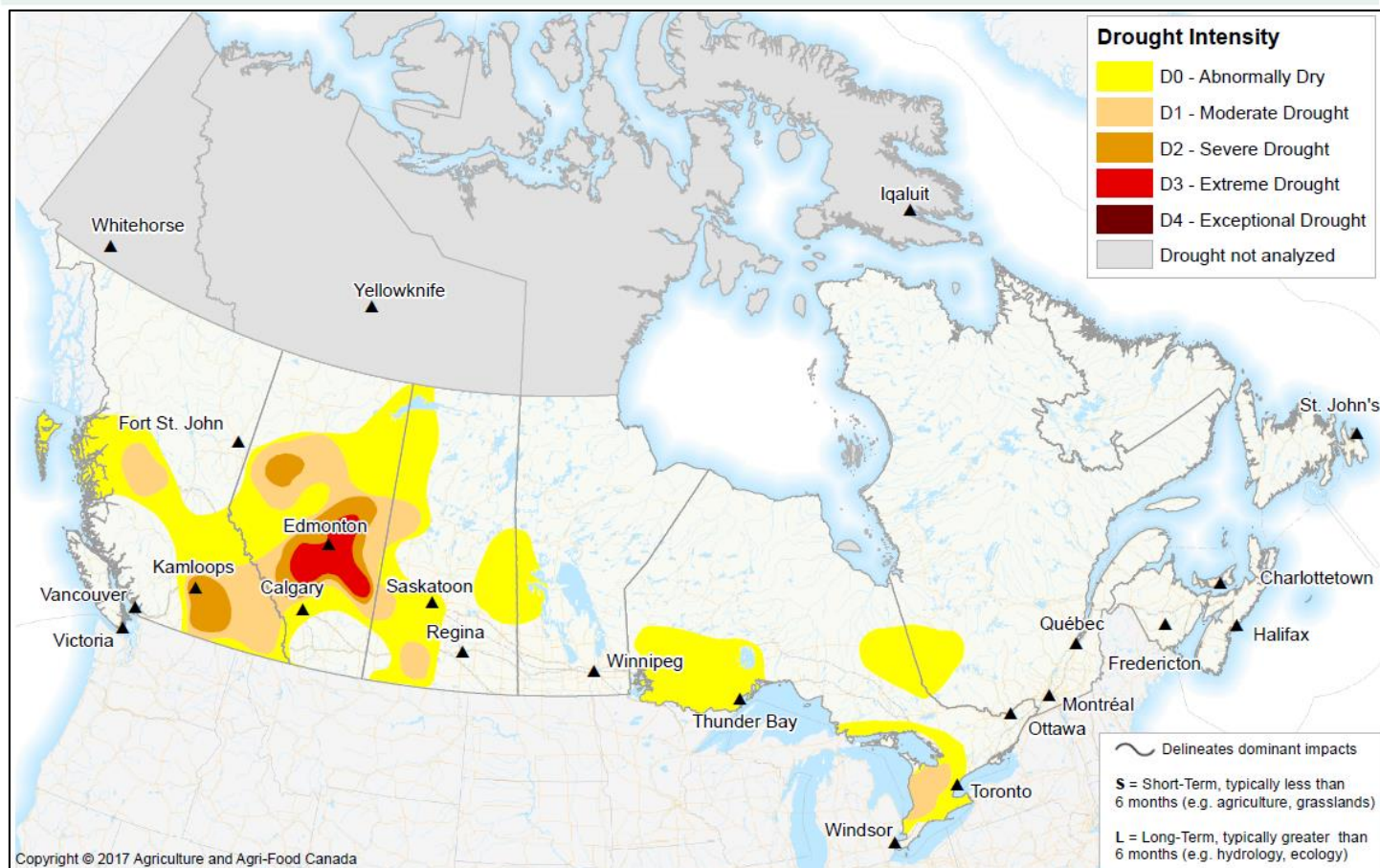


# Canadian Drought Monitor

Conditions as of January 31, 2010



Drought conditions persist in central and northern Alberta, as well as south-central British Columbia. In these areas, extremely low precipitation in the fall resulted in very low soil moisture. Winter precipitation has been below normal, raising further concerns for low spring runoff and soil moisture. As of January 31, approximately 23% of the land area in Canada (excluding the Arctic regions north of the 60th parallel) was classified as drought or abnormally dry. This was a small decrease from 25% reported in December. The percentage of agricultural area classified as drought or abnormally dry also remained relatively unchanged, decreasing to 46% in January from 50% in December.

In British Columbia, January precipitation in northern areas was below normal, while southern coastal and interior areas were near normal. Alberta received significantly below normal precipitation; less than 40% in many regions. Saskatchewan received upwards of 150% of



normal snowfall in January mainly due to a during a large storm event occurring January 23-25, that covered much of the province. Much of southern Ontario received less than 40% of normal precipitation, Atlantic regions monthly precipitation was slightly below normal with drier than normal conditions persisting in Prince Edward island, central Nova Scotia and western Newfoundland. Snowpack was generally near normal throughout the Rocky Mountains of British Columbia, however some basins in the central interior and the northwest remained below normal. Precipitation for January was near normal Manitoba and Quebec.

Monthly average temperatures were generally above normal across the country, with most regions reporting more than 3.0°C (5.4°F) above normal. The warmer conditions were welcomed across the Prairies, following a near record cold December. In British Columbia above normal temperatures resulted in decreased snow packs in lower elevations and caused concern in the Vancouver region heading into the Winter Olympics. In fact, much of the province reported daily record highs, with Vancouver reporting daily highs of over 10°C (50°F) throughout much of January.

Severe and extreme drought continues throughout central, northern Alberta and portions of western Saskatchewan. Some areas within this region have annual precipitation deficits of more than 250 mm (nearly ten inches); about half of the expected normal. This has resulted in a continuation of the D2 (severe drought) and D3 (extreme drought) classifications. In the Peace River Region of Alberta, the extent of drought remained relatively unchanged, with the region being assessed D2 (severe drought). This area has received less than 60% of normal precipitation over the past six months, which is almost 100 mm (nearly four inches) less than normal. The southwest region of Saskatchewan remained in a D1 (moderate drought) due to less than 60% of normal precipitation over the past three months, and less than 70% since January 2009.

With soil moisture at extreme lows throughout much of the the region, cattle producers are becoming increasingly concerned as they near the end of their winter feed supplies. Even with higher than normal spring precipitation, agricultural producers should prepare for lower hay and pasture yields. Drought has lasting impacts on livestock producers because of the immediate impacts on forage production, and often prolonged effects on rangeland productivity. Producers in the drought region are faced with pasture conditions that do not have sufficient grass for cattle to graze. Depending upon the severity of the drought, spring moisture, pasture type and condition, pasture re-growth this year will likely be insufficient for cattle production.

Drought persists in the southern interior of British Columbia. Mountain snow pack in the Okanagan, Similkameen, and Nicola remained below normal. Low and mid elevation level snow pack are well below normal following the unseasonably warm January. This resulted in a continuation of the D1 (moderate drought) and D2 (severe drought) classifications. Typically, by the end of January, about two-thirds of the mountain snow pack in British Columbia has accumulated. Therefore, there is a greater potential for water-supply challenges to develop in these areas in the coming summer, as experienced in 2009. Last summers drought conditions

resulted in very low river and lake levels, and depleted groundwater storage in the southern interior. For this reason, well above normal snowpack and expected runoff is needed by April 1st to fully replenish the diminished groundwater and reservoir storage across most of the region. In west-central British Columbia, areas remained under 60% of normal precipitation accumulation over the past six months, resulting in a continuation of the D1 (moderate drought) classification. Snowpack is generally under 70% of average.

In southern Ontario, an emergence of a D1 (moderate drought) classification was added due to low stream flow advisories issued by the Ontario Ministry of Natural Resources as well as low precipitation throughout the winter. A D0 (abnormally dry) also emerged along the Ontario-Quebec border, where precipitation since November 1st has been less than 60% of normal. The D0 (abnormally dry) classification along the Saskatchewan-Manitoba border was reduced slightly from the above average snowfall and reports of normal stream flows. Abnormally dry (D0) areas remain in both northwestern and southwestern Ontario, as both regions have received less than 60% of normal precipitation over the past three months.