North American Drought Monitor – April 2007

CANADA: Conditions remained relatively unchanged from the previous month. Drought is still a concern for the southern Prairies and northwestern Ontario. Slight improvements have been seen in northern British Columbia and Alberta, and parts of Atlantic Canada. At the same time, some regions have seen minor deterioration due to below average precipitation in April. These regions include parts of southern British Columbia and Alberta, and portions of northwestern Ontario.

British Columbia (B.C.): Well above-normal snowpacks exist over much of the province, including record snowpacks in the Peace, Skeena/Nass, Bulkley, and Nechako basins. There are no major river basins with below normal snowpacks. Because of these record levels of winter precipitation, well above normal spring runoff is expected in many river basins in May and June, including all the major Interior basins (the Fraser, Nechako, Thompson, Skeena, Bulkley, Nass, Peace, and others), with a high risk of flooding in some areas. There is no longer a concern for drought in the Dawson Creek and Fort St. John area as previously identified last month. A small D0 condition exists in the southern interior around Nelson due to below-average precipitation over the last number of months.

Alberta: Conditions continued to improve as much of Alberta received well-above normal precipitation in April. The northern Alberta Peace District, which had been dry for some time, has improved after good snow accumulation and recent spring precipitation. This has recharged groundwater and filled streams and dugouts. Areas in Central Alberta that were previously dry received large amounts of precipitation causing seeding to be delayed for a couple of weeks. With the exception of a dry pocket in the southwest, southern Alberta has adequate moisture.

Saskatchewan: Conditions throughout southern Saskatchewan continue to improve. Southern areas remain abnormally dry; however, snow accumulations and spring showers improved soil moisture and runoff, filling or partially filling the majority of the dugouts in this region. There are no concerns in the Central or Northern areas at this time.

Manitoba: Conditions throughout Manitoba continue to improve. Most of southern Manitoba has good autumn soil moisture levels and has received adequate winter precipitation. This moisture along with above average winter snow accumulations has resulted in significant improvements in the condition of this region, although the southeast is still classified as a D0 and D1.

Ontario: Northwestern Ontario continues to receive below-normal precipitation resulting in poor soil moisture conditions and reduced river flows. As a result the Ontario Ministry of Natural Resources classified the watersheds of Dryden, Fort Frances and Lakehead with a low water flow advisory. Without well-above-average precipitation over the next couple months, forage and water supply prospects will not be favourable for the 2007 season. In direct contrast, Southern Ontario has received adequate precipitation and the

start of the growing season looks positive with no concerns as reservoirs and ponds are filled and groundwater is recharged

Quebec: In Quebec, There are no concerns for drought at this time as winter and spring precipitation was above-average and stream levels are higher than normal for this time of year.

Atlantic Canada: Throughout much of Atlantic Canada, soil moisture conditions are normal for this time of year with the exception still being parts of central and northeastern Nova Scotia and Prince Edward Island. Although these regions were previously classified as a D0 due to drier than normal conditions, there are no significant impacts at this time and therefore have been upgraded to average.

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Natural Resources Canada – Canadian Forest Service
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United States: Drought continued or worsened over California, the Southwest, and the Great Basin, while heavy rains, often accompanied by severe weather, reduced or eliminated drought in the Great Plains and created excessively wet conditions from the Plains into the Midwest. Drought intensified over much of the Southeast.

In terms of impacts to agriculture, temperatures may have played a more important role than moisture this month, as an historical cold wave on April 7-8 damaged crops from the Plains states to the Southeast. Temperatures plummeting to levels far below freezing following abnormally mild weather in March and early April hit wheat, orchards, and other crops during their sensitive growth stages, entirely wiping out crops in some counties.

In the Southeast, drought added to the problems caused by the frigid weather. Monthly rainfall less than one-half of normal over parts of Mississippi, Alabama, Georgia, and Florida resulted in D3 expanding across northern Alabama and D3 developing over southern Georgia, extreme northern Florida, as well as parts of southern Florida. The drought contributed to enormous fires in Georgia. By May 8, two huge wildfires in southern Georgia had scorched some 40,000 hectares (100,000 acres) of land. Concern

for water supplies increased in Florida, as Lake Okeechobee levels approached the record levels seen during the drought in 2001. Despite some heavy rains in southern Alabama in April, that state, along with Tennessee and Mississippi, measured the driest February-April in more than a century of record-keeping, based on preliminary data.

In the West, spotty precipitation did little to change the drought situation, which ranged from D3 in southern California to D2 to D1 into eastern Oregon, Nevada, Utah and western Colorado. Downtown Los Angeles remained on track for the driest season since records began in 1877 even though April 20 brought the first day of the season with at least 12 mm (one-half inch) of rain.

Drought eased in Montana and Wyoming, as monthly precipitation totals exceeded 150% of normal from northern Wyoming across much of Montana.

In Hawaii, most stations reported less than 70% of normal rainfall in April, allowing D0 to persist over leeward areas of the islands. In Alaska, precipitation totals less than 70% of normal over the interior allowed D0 to continue there as well. Heavy rains in Puerto Rico ended the drought affecting southern parts of the island.

Mexico: April was 15% drier than normal with an average temperature (22.1°C, 71.8°F) warmer than normal (20.7°C, 69.3°F). The National Meteorological Service reported a national precipitation average of 16.0 mm (0.63 in.), compared with an historical (1941-2005) average of 18.8 mm (0.74 in.).

Severe drought conditions (D2 and D3) continued along the Pacific Coastal Zone, mainly in the northwestern region of Mexico due to below-normal precipitation since the middle of February 2007, following beneficial humidity at the end of the ENSO event, but dry winter conditions were registered in the states of Sonora, Sinaloa and Nayarit. In the central region of the Pacific Coast, a moderate drought extends from Jalisco to Chiapas States and the Peninsula de Yucatán. Above-normal temperatures have aggravated drought conditions in western Mexico during the past few months.

The passage of eight cold fronts during April brought rain to most regions on the Gulf of Mexico, resulting in above-normal early spring rains over northeastern and central regions of Mexico. The unusual April rains, which occurred during a month that is usually the second driest of the year for central-east Mexico, eased drought over a broad area south of Tamaulipas and San Luis Potosi. Opposite conditions occurred in Chiapas and Tabasco States where, despite a wet January, a moderate to severe drought (D1 and D2) developed by April.

Other areas where dryness or drought has persisted (D0 and D1) include the leeward dry valleys of Mexico, from north of Puebla to Tlaxcala and western Hidalgo States. This drought intensity has changed due to moderate rainfall in April, but the exceptional drought conditions from last autumn are still resulting in low humidity across the region.