### Agricultural Moisture Situation Update September 10, 2019

## Rainfall since September 5, 2019 (Map 1)

Late last week the weather turned wet again across much of the province, bringing well over 40 mm of rain to large parts of the western-half of the North West region, and through a large swath of land running from near Wetaskiwin all the up through to Cold lake. Some areas here received upwards of 35 mm or rain. Also, most areas south of the TransCanada Highway received over 15 mm of rain, grading to over 35 mm along the foothills in the west. In contrast, most of the north-half of the Peace Region, parts of the Central region and a large swath of the North East saw lesser amounts, generally not exceeding 15 mm.

### Frost areas as of September 10, 2019 (Map 2)

So far this season, most of the agricultural areas have escaped early fall frosts, with only a few areas seeing the temperatures dip below the zero mark. These include the extreme northern Peace region, were overnight lows dipped below zero, over the past 4-days running (September 8-11), with the lowest recorded temperatures just shy of -2°C. In late August, frost touched several widely scattered pockets through all other regions, with most of these areas seeing temperatures dipping just below the -1°C mark. Two stations in Kneehill County, just northeast of Calgary dipped briefly below -1°C during a three hour freeze that occurred in the early morning hours of August 27<sup>th</sup>.

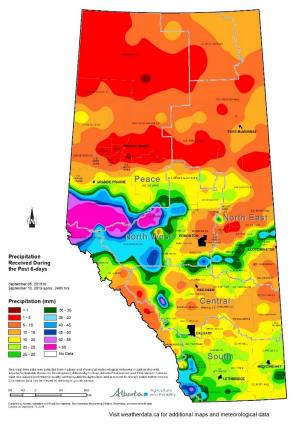
# Growing Degree Day progress as of September 10, 2019 (Map 3)

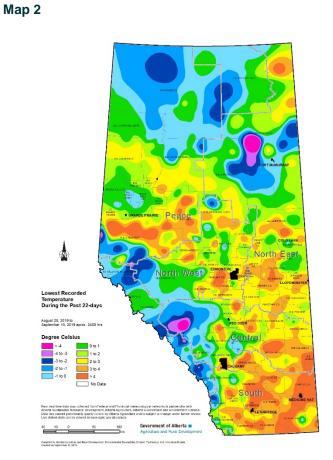
For the most part, throughout a large part of the province, this year's growing season has been characterized by below normal temperatures, including most lands between the TransCanada Highway in the south, extending north all the way to the Swan Hills. Most of these areas are estimated to lag behind normal growth rates by at least a week, with several pockets estimated to be lagging behind by at least 2-weeks. Warm dry weather is needed over the next several weeks to allow harvest to proceed in a timely fashion.

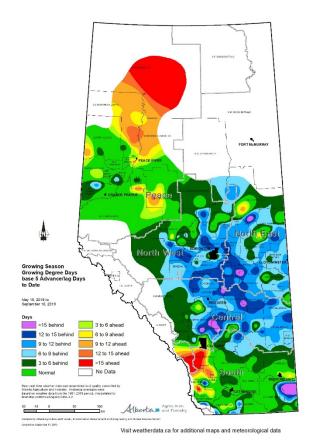
#### Soil moisture reserves relative to normal as of September 10, 2019 (Map 4)

Across most of the province's agricultural areas, soil moisture reserves are at least near normal for this part of the year, with only a few areas where they are below normal. This includes the northern and central Peace Region, a small pocket in the North East, and a relatively large area lying in and around Red Deer. In stark contrast, soil moisture reserves are well above normal throughout much of the southern Peace region, grading to at least one in 12 to 25 year highs, as well as throughout large parts of the North West, and also the North East. Warm dry weather will be needed in many of these areas so that soils may dry enough to allow access to the land with heavy farm machinery.

Map 1 Map 3







Map 4

