## Synopsis:

Many of Alberta's agricultural lands experience heavy killing frosts last night and into this morning (see map 1) in the wake of a major weather system that brought moderate amounts of precipitation to much of the Central and North West regions (see map 2), during the last few days.

Frost occurred on roughly 40% of agricultural lands throughout the province last night, with the heaviest frosts <-3°C occurring across much of the northeast, through most to the south-half of the Peace Region and along a large area from the M.D of Provost down to the southern parts of Special Area 2. Some of these areas experienced over ten hours of below freezing temperatures. During this time many other large areas experienced temperatures dipping to below -1°C, in several cases for upwards of ten hours. Even some areas that saw light frosts, hovering just below the zero mark, had freezing temperatures persisting for several hours.

The historical probabilities of having a -3°C frost on or before September 15, run from about once in four years through the hard hit areas of the North East and central Peace Region, to once in five-years through the Special Areas. In comparison, frosts of less than -1°C occur on average by September 15<sup>th</sup> about once in three-years in Lethbridge, and about 50% of the time in Red Deer, Lloydminster and Grande Prairie.

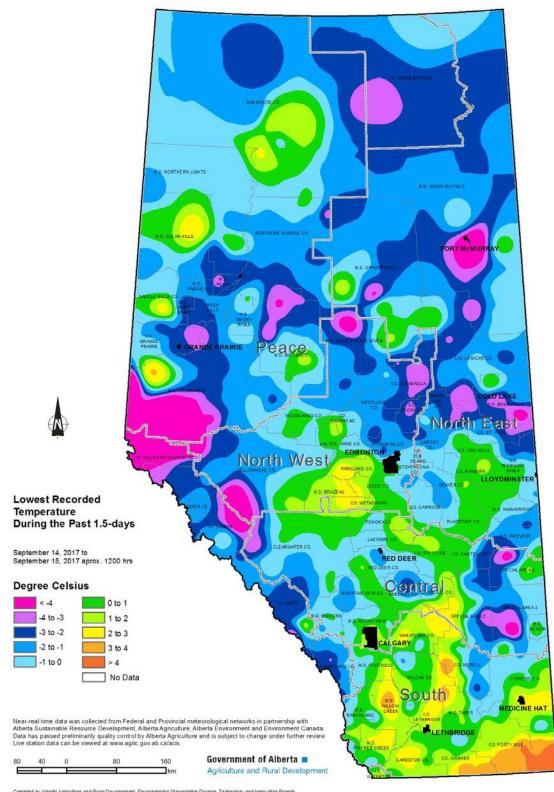
Over the past few days, Central Alberta received the greatest accumulations of precipitation, with upwards of 35-40 mm measured through a relatively large area situated, west of Wetaskiwin. At least 10 mm fell across a large area stretching north to south from Edmonton to Calgary and east to west from the Saskatchewan border to the Continental Divide. Elsewhere, through the Peace Region and through most of southern Alberta between 1 to 5 mm was recorded.

**Near-real-time hourly station** data can be viewed/downloaded at <a href="https://www.agriculture.alberta.ca/stations">www.agriculture.alberta.ca/stations</a>

Note: Data has about a two hour lag and is displayed in MST.

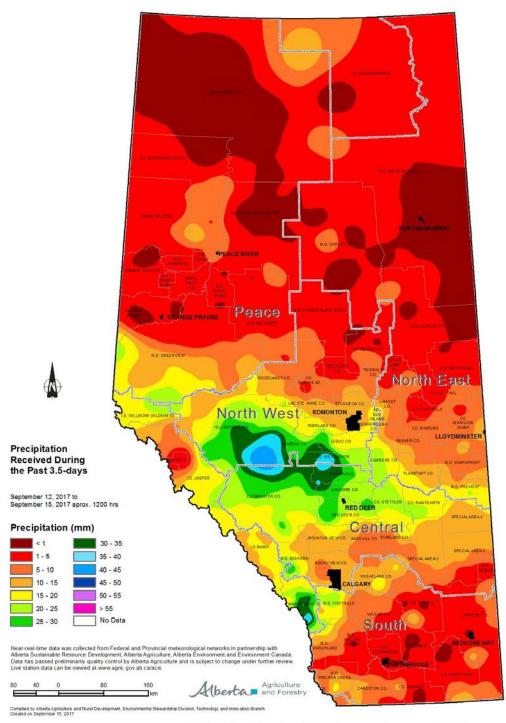
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Map 1



Compiled by Alberta Agriculture and Rural Development, Environmental Stewardship Division, Technology and Innovation Branch Created on September 15, 2017

## Map 2



Visit weatherdata.ca for additional maps and meteorological data