

Moisture Situation Update – September 14, 2016

Synopsis

Since the start of September, conditions have generally been cool and moderately wet. During this time, two major frost episodes have occurred. The first one (**see Map 1**) occurred between September 4th and 5th, with many areas, north and south of Lloydminster seeing temperatures dip below -2°C. Additionally, most of the Peace Region experienced frost with temperatures in central parts also dipping below -2°C. A second major frost event (**see Map 2**) occurred between September 10th and September 13th. During this time many areas south of Red Deer all the way to the US boarder were affected, with some lands experiencing temperatures that fell below -5°C. Additionally, during this time, frost was recorded across much of the Peace Region, with some areas northwest of Grand Prairie experiencing temperatures in the -4°C range.

Typically, damaging fall frosts are considered to be in the -5°C range or colder, although this year, for the most part, early reports are suggesting that wet weather generally resulted in high moisture loads at the surface and it's possible that this helped to reduce frost damage in many areas. Localized areas where cold air tends to settle and pool likely saw temperatures colder than what is depicted on these maps.

Rainfall during the past 7-days has been highly variable across the province ranging from upwards of 30 mm through parts of southern Alberta to less than 5 mm across large parts of Northern Region (**see Map 3**). Since the start of September, conditions have generally been wet west of Highway 2, affecting many areas from Lethbridge to High level (**see Map 4**), with rain fall totals ranging from 30 to more than 50 mm in some areas. Warm dry weather over the past few days has helped significantly and drying has been rapid allowing many to get on with the job of harvesting.

Forecaster's comments from AF's Fire Weather Section

Warm weather should persist province wide until about Friday. Saturday morning the return of cooler, wetter weather that will persist across most of the province and, persist throughout much of next week. Note that most of the moisture in this system is likely to come as "hit and miss" shower activity. In addition, frost may be a risk for many areas north of Whitecourt starting Sunday morning and persisting over the next few days.

Real Time Radar can be used to track and monitor thunderstorms at:

<http://www.agric.gov.ab.ca/acis/weather-radar.jsp>

Additional maps can be found at www.agriculture.alberta.ca/maps

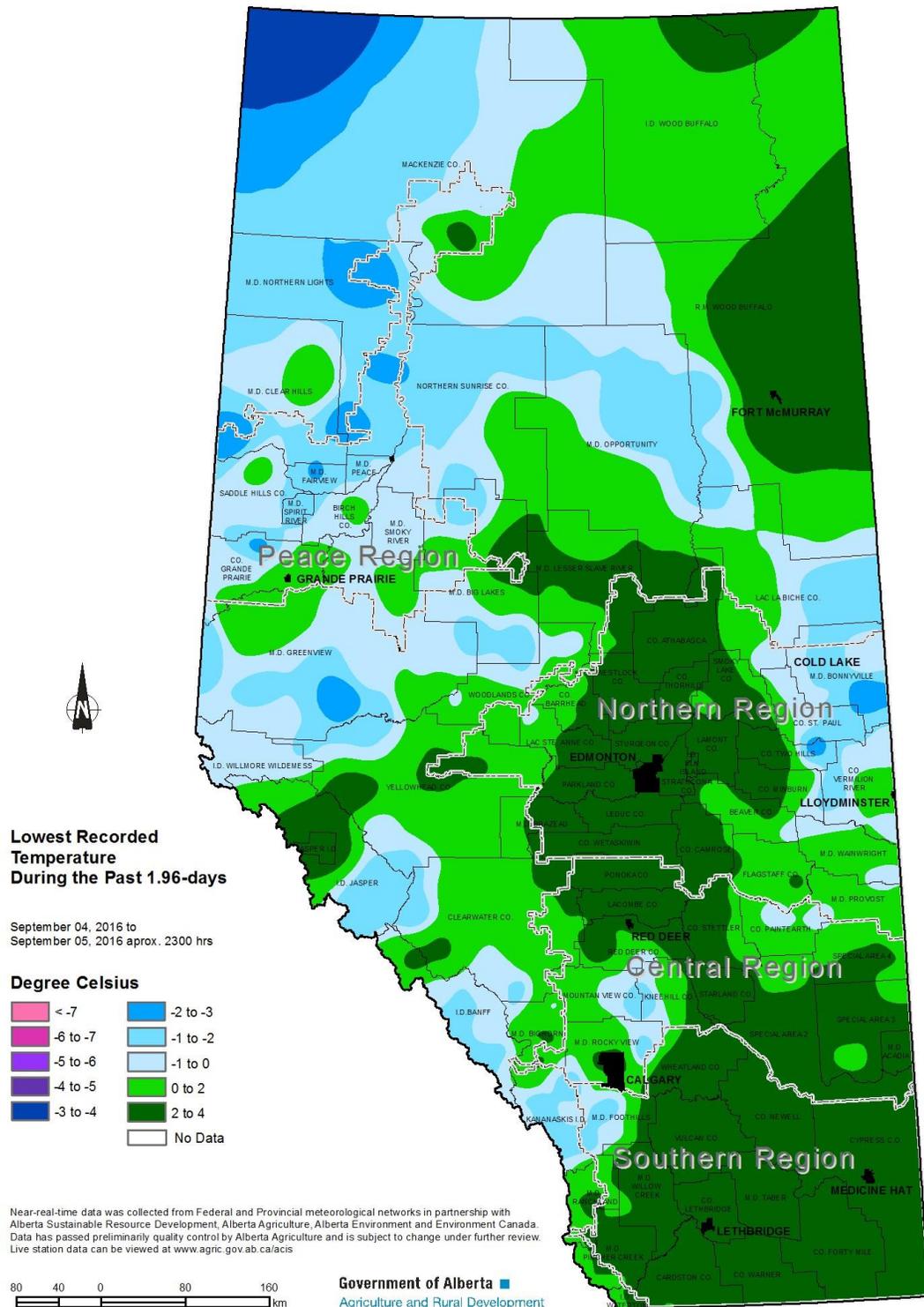
Near-real-time hourly station data can be viewed/downloaded at www.agriculture.alberta.ca/stations

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

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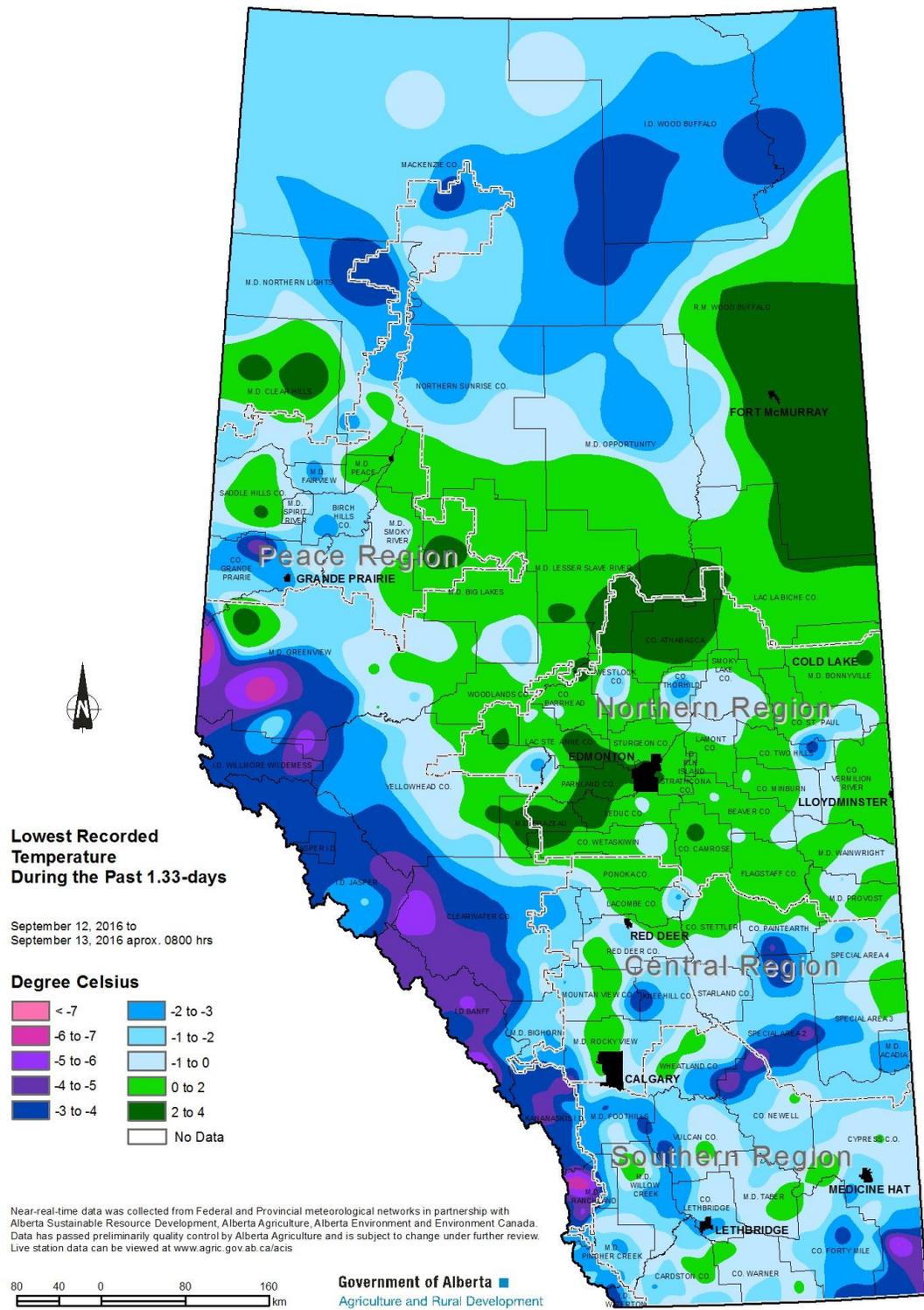
Map 1



Compiled by Alberta Agriculture and Rural Development, Environmental Stewardship Division, Technology and Innovation Branch
 Created on September 13, 2016

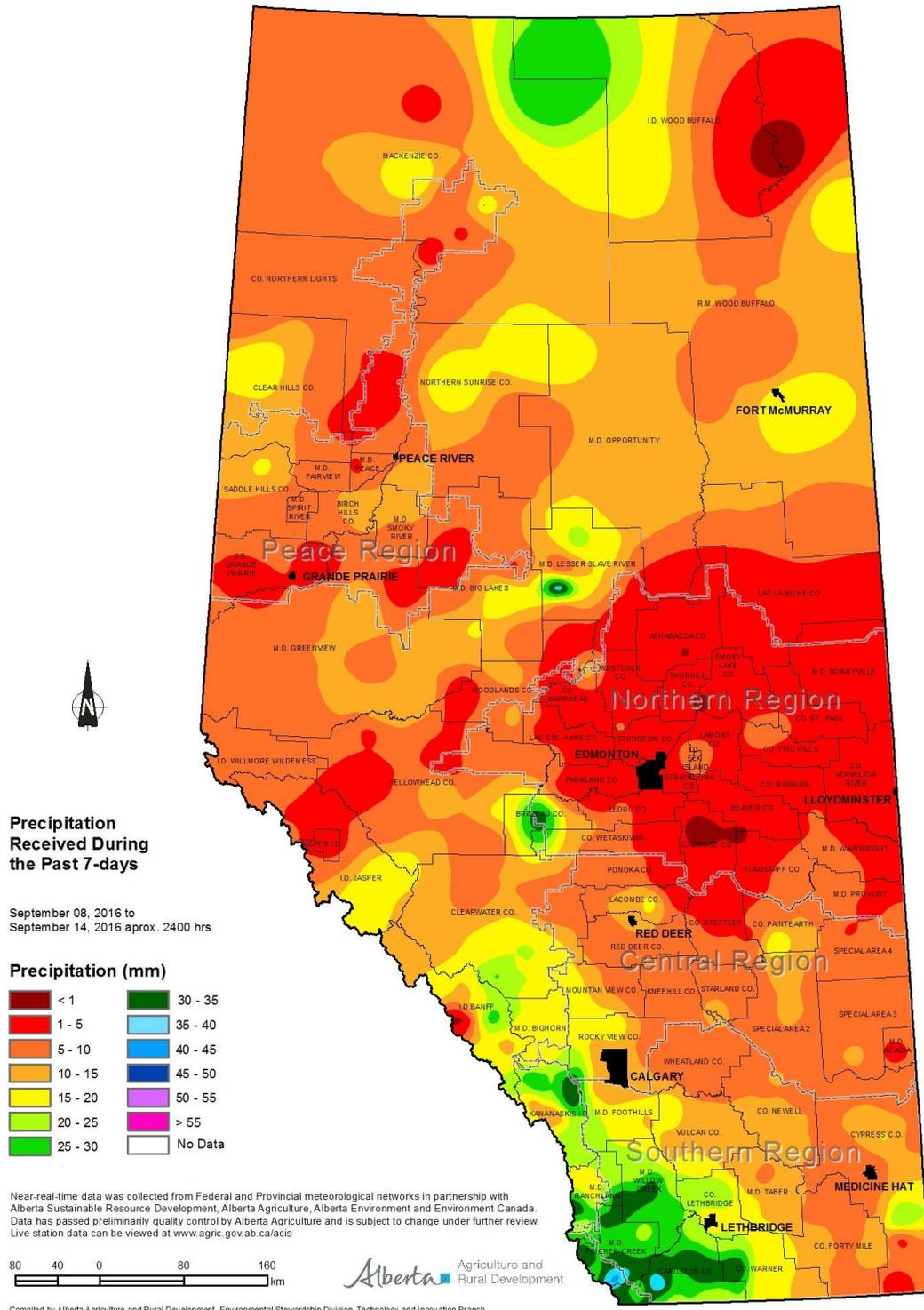
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Map 2



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Map 3



Visit weatherdata.ca for additional maps and meteorological data

Map 4

