

## Moisture Situation Update – December 10, 2018

### Synopsis:

So far this winter Alberta has been relatively mild, with near normal snowfall packs developing across most of the province (**see map 1**). Areas with above normal snowfall accumulations are generally confined to lands north of the Yellowhead Highway, with one in six-year highs found through a large expanse extending from High Prairie all the way eastward towards Lac La Biche. In contrast, snowfall accumulations are below normal across much of the northern Peace Region, as well as throughout the foothills between Edson and the U.S. border.

With the warmer weather of late, most areas south of Calgary are becoming snow free (**see map 2**). Within the agricultural areas the deepest snowpack's can be found in and around High Prairie, where more than 70 mm of water is estimated to be residing in the snowpack. This is equivalent to more moisture than what is normally received during an average May (approx. 50 mm).

Looking back over the past 2-years, cumulative precipitation deficits are highly variable across the province with many agricultural areas receiving below the long term normal (**see map 3**). The greatest deficits (at least one in twelve year lows), can be found across many lands ranging from Red Deer down to the US border, and across much of the north-half of the Peace Region. Larger deficits (at least one in 25-year lows) are found in through the Calgary area, along a wide band that stretches down through to the extreme south east corner of the province. Similarly, most of the north-half of the Peace Region is dry with several lands experiencing at least once in 12-year lows.

Since crop growth is highly dependent on the reception of timely in-season moisture, long term deficits are not likely to reflect annual crop growth potential. Instead, they may highlight those areas that have diminished local surface water supplies and impact the vigor of perennial crops and native vegetation. Currently, these areas are more vulnerable if much drier than normal conditions prevail over the coming growing season.

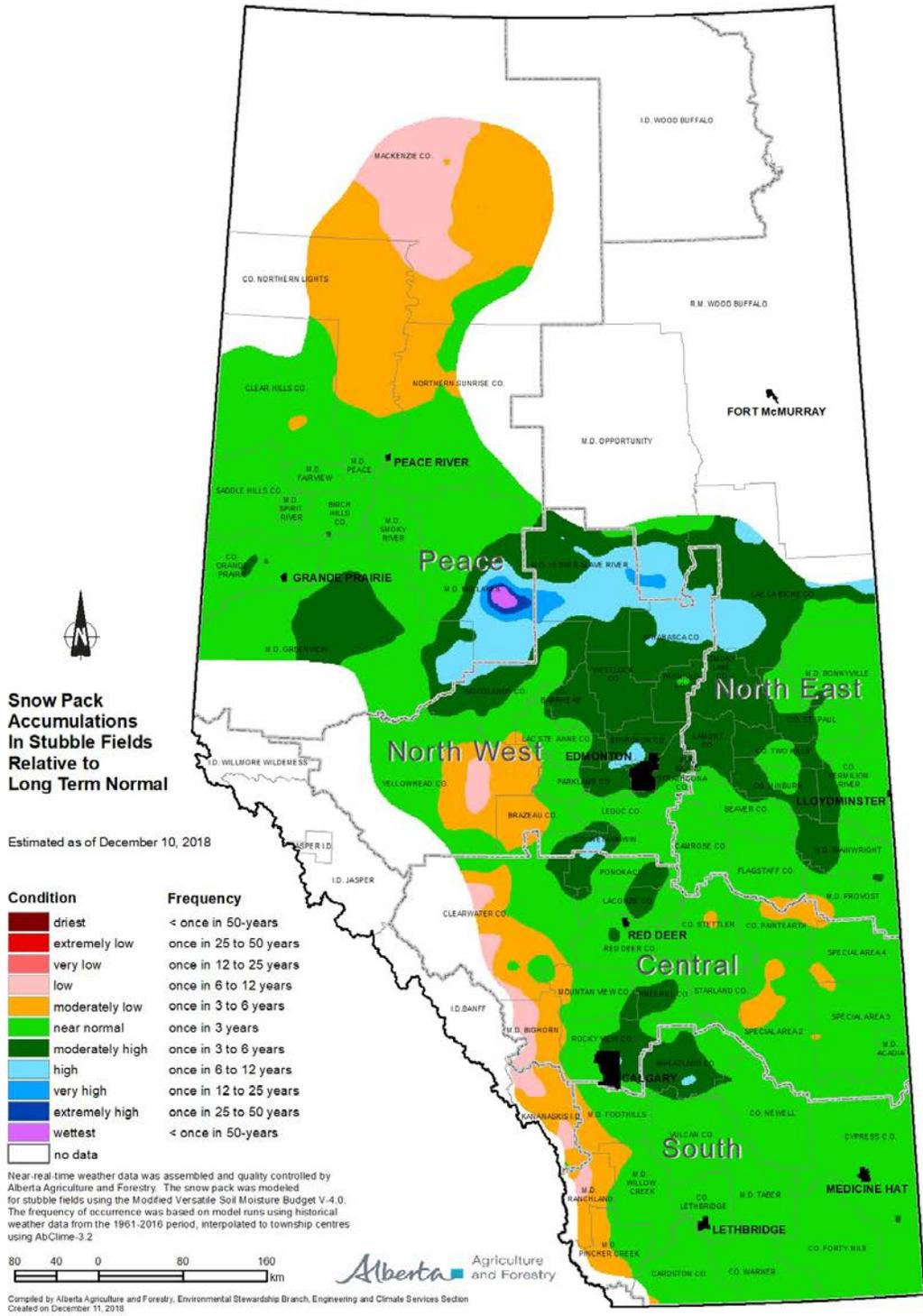
**Near-real-time hourly station** data can be viewed/downloaded at [www.agriculture.alberta.ca/stations](http://www.agriculture.alberta.ca/stations)

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

Ralph Wright  
Manager, Agro-meteorological Applications and Modelling Section  
Alberta Agriculture and Forestry  
Phone: 780-446-6831

# Moisture Situation Update – December 10, 2018

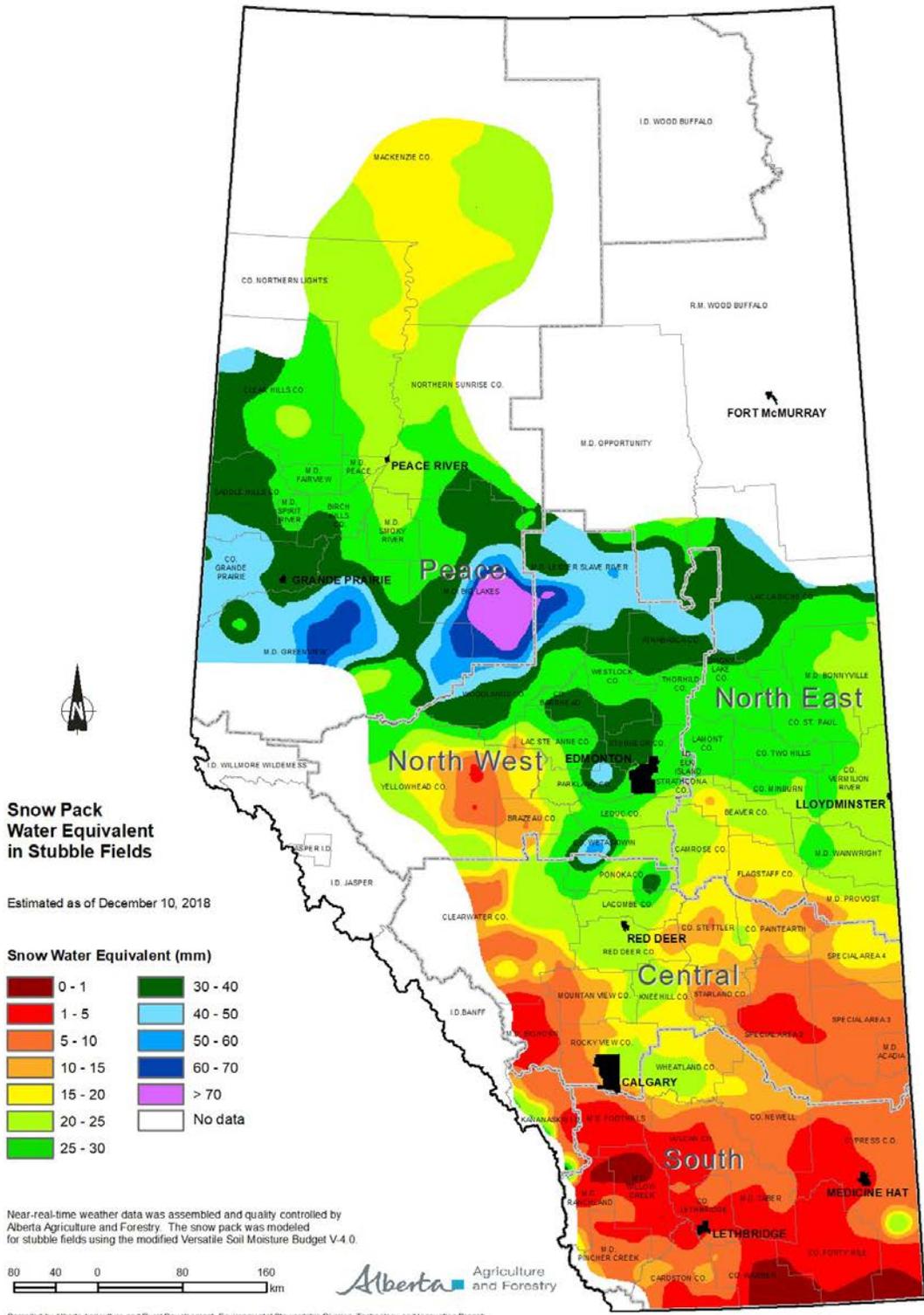
## Map 1



Visit [weatherdata.ca](http://weatherdata.ca) for additional maps and meteorological data

# Moisture Situation Update – December 10, 2018

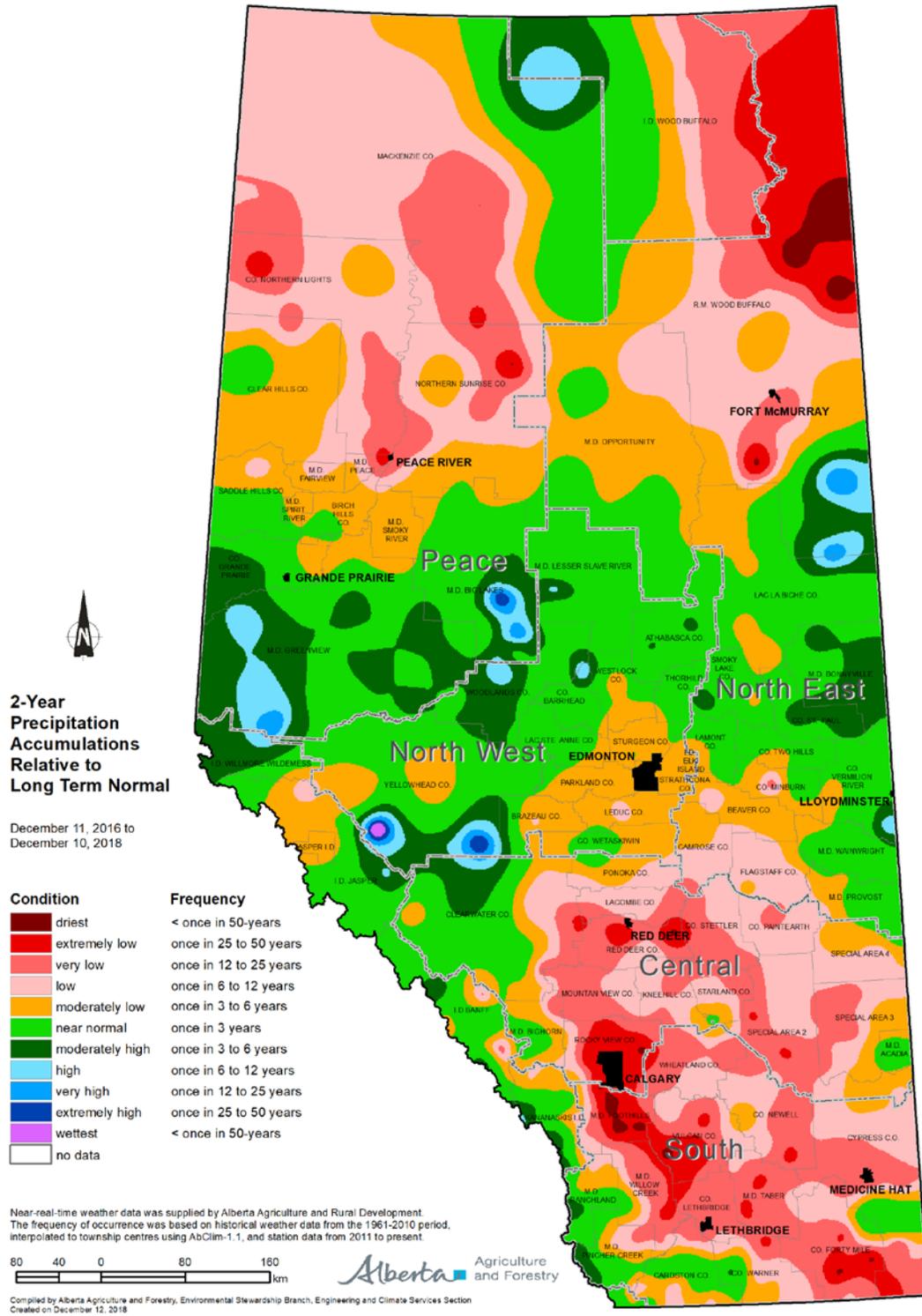
## Map 2



Visit [weatherdata.ca](http://weatherdata.ca) for additional maps and meteorological data

# Moisture Situation Update – December 10, 2018

## Map 3



Visit [weatherdata.ca](http://weatherdata.ca) for additional maps and meteorological data