

## Provincial Spring Runoff Advisory

Over the coming week, temperatures across the province are expected to be at or above normal seasonal values for an extended period of time. During this time, daytime temperatures are expected to be well above zero, with some locations seeing temperatures in the **double digits**. Currently, this advisory reflects conditions expected in areas of the Province south of the cities of Peace River and Fort McMurray, as these areas have the greatest plains snowpack as well as the most elevated temperatures. Areas in the north of the Province either have an average snowpack, or the temperatures are not expected to be elevated enough to cause concern at this time.

The generally cool spring conditions combined with the heavy snowfalls across the plains during the winter months has resulted in a plains snowpack that is much above average in the central, southern, and Peace regions of the province, that has not had the opportunity to melt gradually. Typical snow melt in Alberta occurs with gradually warming air temperatures, as opposed to the sudden and sustained increases in temperatures that are expected over the **next week**.

A rapid melt caused by the quick change to normal and above normal temperatures combined with the existing much above average snowpack in the plains may cause localized overland flooding as the water makes its way into streams. In low-lying areas where water does not have a direct route to stream channels localized ponding can be expected. Over the next several days water levels will rise in the smaller creeks with a possibility of flooding in adjacent low-lying areas. No significant water level rises are expected in the major rivers. **The mountain snowpack is generally average to above average, although the resulting melt from the mountains is not expected to negatively impact water courses at this time.**

Plains snow course data and historical rankings can be viewed at:

<http://www.environment.alberta.ca/forecasting/data/snow/Mar2014/plainsscdatarank.html>

A map showing Spring Runoff Potential for the plains can be viewed at:

<http://www.environment.alberta.ca/forecasting/data/snow/Mar2014/PROfig1.pdf>

Mountain snow course data and historical ranking can be viewed at:

<http://www.environment.alberta.ca/forecasting/data/snow/Mar2014/mountainsscdatarank.html>

Additional near-real-time mountain snow accumulation is monitored using snow pillows. Snow pillow information can be viewed by choosing any mountainous river basin and selected the snow data parameter in the two drop down menus at:

<http://www.environment.alberta.ca/apps/basins/default.aspx>

There have been reports of overland flooding in the Medicine Hat/Cypress Hills due to the rapid melt over the weekend. In some cases this flooding has been exacerbated by blocked or frozen culverts, which are not able to properly convey the melt waters.

People are advised to contact their local municipality of any blocked or frozen culverts that are observed which are currently causing drainage issues or may cause issues in the near future, or with any flooding conditions which may be of concern.

Anyone who is situated close to affected creeks, or in areas that have experienced overland flooding in the past, is advised to be cautious of rising water levels over the coming week.

Alberta Environment and Sustainable Resource Development is monitoring river levels closely throughout Alberta. This advisory will be updated if the situation changes and will remain in effect until **Monday March 17, 2014** unless otherwise noted.

Information in addition to this advisory may be found at:

<http://www.environment.alberta.ca/forecasting/forecasterscomments>

<http://www.environment.alberta.ca/apps/basins>