

For Immediate Release: April 4, 2007

Flood risk high in Northern Alberta's plains areas due to record to near record snowpack

As a result of record to near record snowpack, the risk of overland flooding and flooding of smaller streams and rivers in northern Alberta is high. Snowpack in northern parts of the province is similar to that measured in 1974 and 1997, both years which recorded major flooding in plains areas. The severity of flooding this year will depend on when and how fast snowmelt occurs. Delayed spring conditions or a long period of warm sunny weather will cause increased flooding. Snowmelt alone will not flood major rivers such as the Peace, Athabasca, or North Saskatchewan.

Flood risk is very high in the Grande Prairie - Peace River - High Prairie area where nearly half the snowpack measurements broke records by a significant margin and the other half were second highest in generally 35 years of record. Flood risk is also very high across north-central Alberta (Edson - Slave Lake - Cold Lake - Lloydminster area) where two-thirds of the snowpack measurements were among the five highest on record and soil moisture is generally normal or higher.

Flood potential is also high in the remainder of northern Alberta (High Level, Fort McMurray and Fort Chipewyan area), but snowpack in this area is not as extreme, and soil moisture is low.

Alberta Environment is monitoring these areas very closely this spring, and will issue advisories as required.

Plains snowmelt has effectively finished for the season in southern and south-central Alberta.

In the mountains, near record snowpack was measured in the Bow River basin upstream of Banff. Mountain snowpack is much above average in the North Saskatchewan, Athabasca and Peace River basins, above average in the Red Deer and Kananaskis River basins, and average in the Elbow and Highwood River basins. Average to above average natural runoff volumes are forecast for this year, but flooding in these mountain basins is driven by rainstorms. However, flood risk this spring and summer is elevated, as snowmelt, wet ground and higher flowing rivers can more easily enable rainstorms to create floods.

Mountain snowpack in the Oldman River basin is below to much below average, as snowmelt in the area is about three weeks early this year. Preliminary natural runoff volumes were much above average during March due to the early melt. With the snowpack depleted, below average to average natural runoff volumes are forecast for the Oldman and Milk River basins for the remainder of this year.

Other Highlights (as of April 1, 2007):

- Precipitation during March 2007 was generally much above normal in mountain and foothill areas and most areas north of Grande Prairie-Slave Lake, while the remainder of the province generally recorded much below normal precipitation.
- Water storage is above normal in most major irrigation reservoirs of the Oldman River basin.
- Water storage is normal in most major hydroelectric and irrigation reservoirs of the Bow River basin.
- Water storage in the major hydroelectric reservoirs of the North Saskatchewan River basin is normal at the Brazeau Reservoir and above normal at the Bighorn Reservoir. Water Storage in the major reservoir of the Red Deer River basin is above normal.