



Snow Survey and Water Supply Bulletin – May 15th, 2013

The May 15th snow survey is now complete. Data from 21 snow courses and 47 snow pillows around the province (including some out-of-province sampling locations), and climate data from Environment Canada, have been used to form the basis for the following reports¹.

Weather

The month of May began with widespread, unseasonably warm temperatures and dry conditions that persisted for 8-9 days due to the establishment of a stable high pressure ridge over BC. Weather deteriorated around May 11th towards more unstable and wet conditions.

Snowpack

Snowmelt has quickly progressed since the May 1st survey. Unseasonably warm conditions for a prolonged period at the beginning of May led to rapid snowmelt across the province. This widespread snowmelt translated to a large overall reduction in snow basin indices. Snowmelt was prominent at low to mid-elevations, particularly in the Southern Interior (Okanagan, Kettle and Boundary), Nechako and Kootenays. Snow basin indices in these areas reflect the rapid snowmelt and are below normal (<90%) for this time of year.

Snow basin indices are normal (90-110%) in the North and South Thompson, Upper Fraser and South Coast, and moderately elevated (110-130%) in the Stikine. Snow packs in other areas of the province are below normal (<90%).

Snow water-equivalent data is currently being estimated at four automated snow pillow sites (Table 2). Detailed Snow Survey Data are available at <http://bcrcfc.env.gov.bc.ca/data/survey/>.

Table 1: BC Snow Basin Indices – May 15, 2013

Basin	% of Normal	Basin	% of Normal
Upper Fraser	101%	Okanagan-Kettle	64%
Nechako	54%	Similkameen	26%
Middle Fraser	75%	South Coast	104%
Lower Fraser	70%	Vancouver Island	66%
North Thompson	105%	Peace	86%
South Thompson	105%	Skeena-Nass	62%
Columbia	90%	Stikine	125%
Kootenay	62%		

1. Every effort is made to ensure that data reported on these pages are accurate. However, in order to update the graphs and indices as quickly as possible, some data may have been estimated. Please note that data provided on these pages are preliminary and subject to revision upon review.



Ministry of
Forests, Lands and
Natural Resources

A wide banner image showing a landscape with snow-capped mountains on the left and a wide river valley on the right. The text "RIVER FORECAST CENTRE" is overlaid in a large, white, serif font on the right side of the banner.

RIVER FORECAST CENTRE

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Outlook

Snow melt has been rapid through the early part of May. In particular, low and mid-elevation snow packs have largely been exhausted. Flood risk from snow melt alone in mid-sized, mid-elevation rivers throughout most of the province is now subsiding. This includes most rivers through the Interior (e.g. Baker Creek, Willow River, Salmon River near Prince George), the Thompson Region (e.g. the Nicola River, Bonaparte River, Coldstream River, Salmon River), the Similkameen River, and the Okanagan (e.g. tributaries into Okanagan Lake). While risk from snow melt alone is diminishing in these systems, flood conditions are possible if areas receive significant rainfall.

Seasonal flood risk is still present in the larger rivers of the province, including the Fraser River and Thompson River, and in rivers draining from higher elevation terrain, including the Kootenay and Columbia regions, and the mainstem and tributaries of the North and South Thompson River. On the Fraser River, typically the peak of the freshet season occurs when 40% of the seasonal volume of flow has runoff. Currently 29% of the forecasted seasonal volume has passed through the Fraser River at Hope, with an additional 1% per day passing. At current rates of snow melt, the next 2 or 3 weeks remain the critical period for on-going flood potential from snow melt for the Fraser River. A similar time frame for on-going flood risk is also present on the Skeena River and Kootenay River. On the North Thompson River, the peak of the melt season is expected over the next 1 to 2 weeks. On the South Thompson River and upper Columbia River (e.g. at Donald and upstream), the peak typically occurs later in the season, therefore there may be 3 or 4 weeks of on-going risk on these systems. Flooding beyond those periods is possible if regions receive heavy rainfall.

With below normal snow packs, and an earlier snow melt in many regions for this time of year, summer low flow periods may occur earlier than normal. In particular this includes the Nechako, Middle Fraser, Lower Fraser, Columbia, Kootenay, Okanagan, Similkameen Peace, Skeena-Nass and Vancouver Island. Lower summer flows are expected in these regions if spring and summer weather is near normal or drier/hotter than normal.

The next snow bulletin will be released on June 7th, 2013.

Produced by: BC River Forecast Centre
May 22, 2013



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Map 1: Basin Snow Water Index - May 15th, 2013

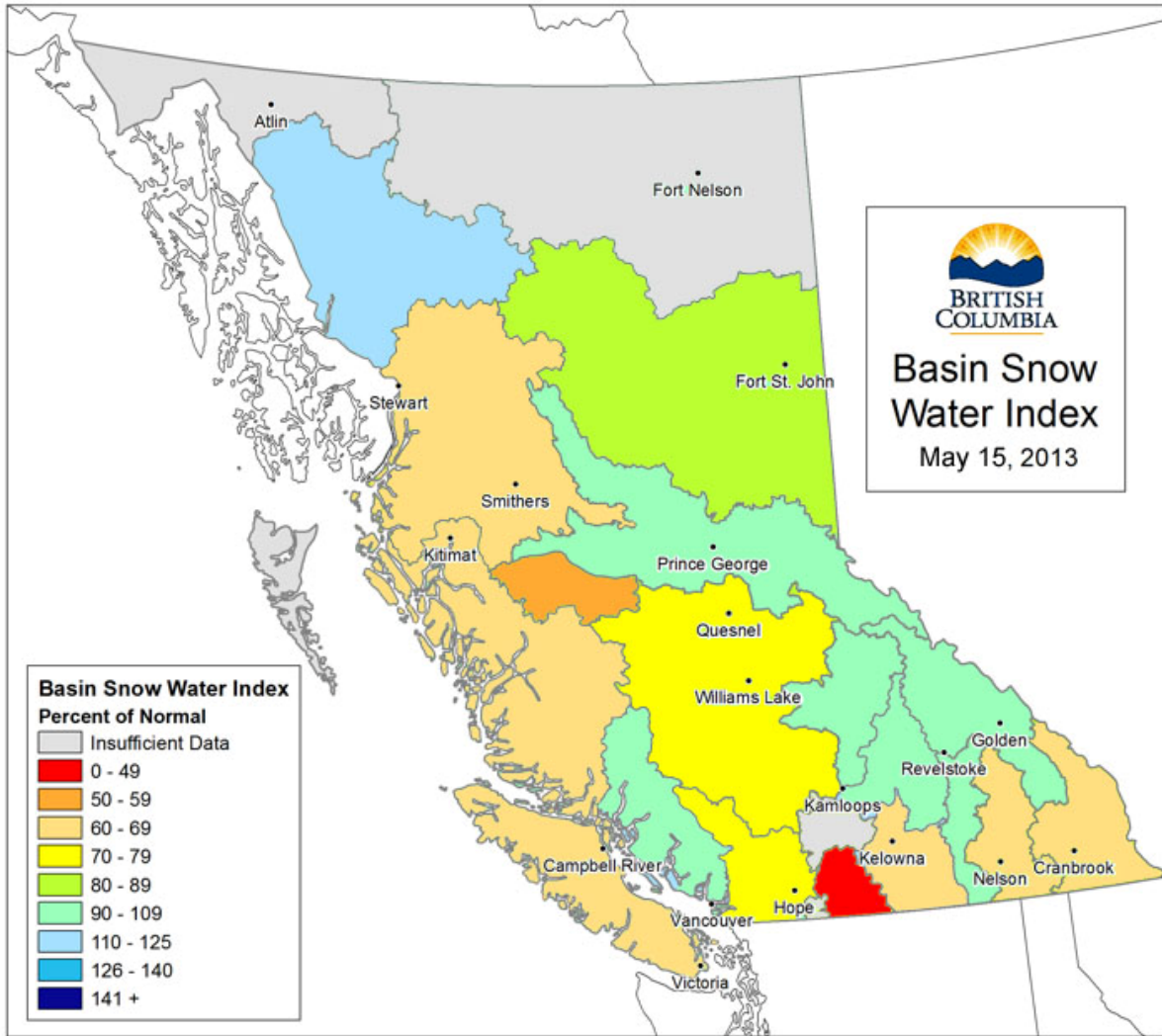


Table 2: May 15th Automated Snow Pillow Estimates

SNOW PILLOW ID	SNOW PILLOW NAME	OBSERVATION DATE	ESTIMATED Snow Water Equivalent (mm)
1A14P	HEDRICK LAKE	15-May	1139
1E02P	MOUNT COOK	15-May	1353
2C09Q	MORRISSEY RIDGE	15-May	93
2D08P	EAST CREEK	15-May	533

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