



Snow Survey and Water Supply Bulletin June 15th, 2014

The June 15th snow survey is now complete. Data from 2 snow courses and 51 snow pillows around the province and climate data from Environment Canada form the basis for the following report¹.

Weather

June weather has featured episodes of cold upper low systems, which have delivered periods of wet weather, particularly through southern British Columbia. Despite this, precipitation over the first half of June has been below normal to normal across most of the province. Temperatures have been near normal through most areas.

Snowpack

The first two weeks of June has seen on-going melt of the season's snow pack with 200 mm to 400 mm of snow water equivalent of melt observed at most snow pillows around the province. At high elevation sites (>1500m-1600m), particularly in the Upper Fraser, North Thompson, South Thompson, Columbia, Kootenay, Okanagan, Similkameen and Peace, snow packs are generally above normal. High elevation snow pillows have 20%-60% of the season's snow pack remaining. In mid-elevation sites, the season's snow pack has largely melted. This includes the Nechako, Middle Fraser, Lower Fraser, Columbia, Okanagan, South Coast, Vancouver Island, Peace, Skeena and Stikine.

Streamflow Conditions

On the major river systems of the province (Fraser, Thompson, Skeena), approximately 50-60% of the forecasted seasonal runoff volume (April-September) has passed. In May, many rivers had above-normal flow due to warm weather. In the first half of June, depletion of mid-elevation snow packs has led to river levels dropping to near normal levels for the time of year. In the Peace, stream flow in many tributaries has dropped to below normal (50-80%). On Vancouver Island, stream flows have dropped to below or well-below normal levels (20-80% of normal).

Outlook

Snow packs have now diminished to the level that flood risk due to snow melt is now unlikely across the province. Flood risk due to extreme rainfall remains a possibility.

In areas with depleted snow packs, stream flows have transitioned, or are expected to transition into lower than normal flow. This is particularly the case on Vancouver Island, South Coast, Middle Fraser, Lower Fraser, Central Coast, Nechako, Skeena, and Peace. These regions are at increased risk for potential low flows this year. With very low snow packs on Vancouver Island this year, watersheds are particularly vulnerable to low flows from hot and dry summer weather.

Seasonal forecasts from Environment Canada continue to indicate an increased likelihood of above normal temperatures across British Columbia, particularly through the south and south-west parts of the province.

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.



Snow Survey and Water Supply Bulletin June 15th, 2014

This is the last Snow Survey and Water Supply Bulletin of the year. The River Forecast Centre continues to monitor snow pack, weather and stream flow conditions across the province. Updates on stream flow conditions will be made in the Water Supply and Stream flow Bulletins which will be released through the summer as conditions warrant. Low flow advisories will be issued if required.

Produced by: BC River Forecast Centre
June 23, 2014

2014 Automated Snow Pillow/Manual Snow Survey Data				June 15th					Historic Snow Water Equivalent					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2013 SWE (mm)	2012 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1A01P	YELLOWHEAD LAKE	Upper Fraser	1847	2014-06-15	8	122		90%	29	410	0	641	135	16
1A02P	MC BRIDE (UPPER)	Upper Fraser	1608	2014-06-15	9	18		1800%	0	141	0	159	1	21
1A03P	BARKERVILLE	Upper Fraser	1483	2014-06-15	3	0		0%	1	0	0	37	3	38
1A14P	HEDRICK LAKE	Upper Fraser	1118	2014-06-15	76	624		1642%	375	557	0	587	38	13
1A17P	REVOLUTION CREEK	Upper Fraser	1676	2014-06-15	140	727		326%	436	901	0	927	223	28
1A19P	DOMO MOUNTAIN	Upper Fraser	1768	2014-06-15	103	612		167%	388	901	0	925	367	7
1B01P	MOUNT WELLS	Nechako	1489	2014-06-15	N/A	0		0%	0	258	0	321	44	21
1B02P	TAHTSA LAKE	Nechako	1319	2014-06-15	N/A	29		5%	44	1335	0	1870	617	21
1B08P	MOUNT PONDOSY	Nechako	1413	2014-06-15	N/A	7		9%	0	496	0	520	75	21
1C12P	GREEN MOUNTAIN	Middle Fraser	1766	2014-06-15	N/A	2		1%	14	600	0	887	272	19
1C18P	MISSION RIDGE	Middle Fraser	1903	2014-06-15	N/A	0		0%	0	0	0	387	15	43
1C20P	BOSS MOUNTAIN MINE	Middle Fraser	1477	2014-06-15	0	0		0%	0	0	0	83	6	19
1C41P	YANKS PEAK, EAST	Middle Fraser	1683	2014-06-15	91	577		302%	211	422	0	698	191	16
1D06P	TENQUILLE LAKE	Lower Fraser	1669	2014-06-15	15	1		0%	181	893	0	1177	434	12
1D09P	WAHLEACH LAKE	Lower Fraser	1408	2014-06-15	N/A	620		96%	751	994	0	1281	643	21
1D17P	CHILLIWACK RIVER	Lower Fraser	1621	2014-06-15	443	1424.481	E	179%	1263	1908	0	2022	797	21
1D18P	DISAPPOINTMENT LAKE	Lower Fraser	932	2014-06-15	N/A	424	E	80%	656	1316	0	1919	532	13
1D19P	SPUZZUM CREEK	Lower Fraser	1197	2014-06-15	93	632		71%	764	1660	0	2320	886	14
1E02P	MOUNT COOK	North Thompson	1574	2014-06-15	139	866		127%	892	1096	281	1155	681	13
1E08P	AZURE RIVER	North Thompson	1625	2014-06-15	56	405		81%	583	962	75	1500	499	16
1E10P	KOSTAL LAKE	North Thompson	1760	2014-06-15	98	563		160%	539	840	0	1248	351	28
1F03P	PARK MOUNTAIN	South Thompson	1857	2014-06-15	126	751		164%	591	753	0	1095	458	28
1F06P	CELISTA MOUNTAIN	South Thompson	1533	2014-06-15	284	284		159%	143	545	0	573	179	8
2A06P	MOUNT REVELSTOKE	Upper Columbia	1770	2014-06-15	N/A	808		115%	679	1120	0	1801	700	20
2A21P	MOLSON CREEK	Upper Columbia	1930	2014-06-15	N/A	683		119%	740	1091	0	1136	575	32
2B06P	BARNES CREEK	Lower Columbia	1595	2014-06-15	N/A	0		0%	0	4	0	211	10	20
2B08P	ST. LEON CREEK	Lower Columbia	1822	2014-06-15	N/A	874		172%	597	911	0	1336	509	20
2B09	RECORD MOUNTAIN	Lower Columbia	1906	2014-06-14	0	#N/A			36	185	N/A	N/A	127	
2C09Q	MORRISSEY RIDGE	East Kootenay	1966	2014-06-15	N/A	21		62%	0	41	0	458	34	33
2C10P	MOYIE MOUNTAIN	East Kootenay	1840	2014-06-15	1	0		0%	0	0	0	69	1	34
2C14P	FLOE LAKE	East Kootenay	2110	2014-06-15	N/A	484		145%	470	795	0	866	334	20
2D08P	EAST CREEK	West Kootenay	2004	2014-06-15	N/A	634	E	137%	351	705	0	1163	464	32
2D14P	REDFISH CREEK	West Kootenay	2086	2014-06-15	167	996		120%	991	1702	645	1722	831	11
2E07P	GRANO CREEK	Kettle	1874	2014-06-15	5	179	E	213%	61	325	0	509	84	15
2F05P	MISSION CREEK	Okanagan	1794	2014-06-15	44	225		425%	0	311	0	424	53	43
2F18P	BRENDA MINE	Okanagan	1453	2014-06-15	N/A	0		0%	8	0	0	8	3	20
2G03P	BLACKWALL PEAK	Similkameen	1934	2014-06-15	85	438		201%	175	667	0	1031	218	45
3A22P	NOSTETUKO RIVER	South Coast	1457	2014-06-15	0	0		0%	0	0	0	266	20	24
3A24P	UPPER MOSLEY CREEK	South Coast	1655	2014-06-15	0	0		0%	0	0	0	0	1	24
3A25P	SQUAMISH RIVER (UPPER)	South Coast	1387	2014-06-15	48	11	E	1%	732	1431	131	2505	786	23
3B17P	WOLF RIVER	Vancouver Island	1422	2014-06-15	N/A	1		0%	346	1194	0	2183	609	31
3B23P	JUMP CREEK	Vancouver Island	1134	2014-06-15	7	2		1%	3	768	0	2700	337	17
3C08P	BURNT BRIDGE CREEK	North Coast	1329	2014-06-15	0	0		0%	0	701	0	739	99	15

4A02P	PINE PASS	Peace	1386	2014-06-15	N/A	601		185%	237	1114	0	1142	324	24
4A09P	PULPIT LAKE	Peace	1331	2014-06-15	N/A	0		0%	0	0	0	0	2	23
4A27P	KWADACHA RIVER	Peace	1695	2014-06-15	N/A	0	E	0%	0	0	0	224	33	16
4A30P	AIKEN LAKE	Peace	1061	2014-06-15	N/A	4		80%	8	0	0	8	5	28
4B03A	HUDSON BAY MTN	Skeena	1452	2014-06-13	0	0		0%	0	412	N/A	N/A	96	
4B12P	GRANDUC MINE	Skeena	790	2014-06-15		104		17%	339	1313	339	1389	626	10
4B15P	LU LAKE	Skeena	1308	2014-06-15	5	0			0	0	0	7	0	15
4B16P	SHEDIN CREEK	Skeena	1320	2014-06-15	10	7		2%	41	905	0	916	340	17
4B17P	TSAI CREEK	Skeena	1369	2014-06-15	25	158		26%	121	1697	0	1772	612	15
4B18P	CEDAR - KITEEN	Skeena	912	2014-06-15	0	0		0%	7	126	0	154	7	12

Code	Description		
A	Sampling problems were encountered		
ASP	Automated Snow Pillow		
B	Early or late sample		
C	Combination of A and B		
E	Estimate		
MSS	Manual Snow Survey		
N	Scheduled, but not measured		
NS	Not Sampled		
SD	Snow Depth		
SWE	Snow Water Equivalent		
T	Trace Amount		