



Water Supply and Snow Survey Bulletin – May 15, 2010

The May 15 snow survey is now complete. This is a small survey. Data from 26 snow courses and 50 snow pillows around the province have been used to form the basis of the following report.

Weather:

Weather during the first two weeks of May has been somewhat cooler than normal. As a result, snowmelt has been proceeding slowly, at a more subdued rate of melt than normal in most areas of the province. In addition, early May brought frontal precipitation to the South Coast and portions of the South Interior. Moderate amounts of rain or snow occurred in some areas, including portions of the Nicola, Okanagan, Kootenay and Thompson basins. Some measurement sites in the Lower Fraser, Thompson, Upper Columbia, and elsewhere in the South Interior, accumulated additional snow water in early May when they would normally lose it to melt.

Current Snowpack:

Freshet snow melt is now proceeding steadily, although at a slower than normal pace due to the cooler than normal weather of the past few weeks. With the exception of high elevation areas on Vancouver Island and the South Coast, snowpacks across B.C. all remain below normal. Snowpacks across BC persist generally in the pattern set over the past few months:

- Snowpacks in the South Interior (Nicola, Okanagan, Similkameen, West Kootenay, East Kootenay, Lower Columbia) remain well below normal. They varied from 37-76 percent of normal at May 1st, but have experienced small increases in some areas as a result of late season snowfall in early May and pockets of convective rain in mid-May.
- Snowpacks in the Skeena and Nass river basins remain well below normal (61 percent of normal at May 1st). Precipitation in the Skeena/Nass has been below normal for the first half of May.
- Much of central B.C. (Fraser, Thompson, Peace) continues with below normal snowpack (80-90% of normal at May 1st). Some late season snowfall occurred in the Upper Fraser in early May, but had no significant change on snowpacks.
- Snowpacks in the Peace River basin remain below normal (81% at May 1st). The Peace has received little precipitation for the first half of May;

Upper Fraser: Based on a limited snow survey, individual snow courses range from 64% of normal (Barkerville) to 102% (Yellowhead). The rate of melt for the first half of May was generally about one-half of normal, as a result of the cool weather.

Nechako: The three automated snow pillows in the Nechako range from 84% to 100% of normal.

Mid Fraser: Snow conditions across the Mid Fraser are variable. Snow courses on the Fraser Plateau are well below normal; the Quesnel Highlands vary between 50% and 85%; while south-western portions (such as the Bridge River – Duffey lake area) appear to range from 100% to 140% of normal.

North Thompson: Based on a limited survey, snow conditions have improved somewhat in the North Thompson, with snow courses in the North Thompson varying from 87% of normal (Kostal Lake) to 110% (Adams River). The Adams River, Kostal lake and Trophy Mountain sites accumulated 37-111 mm of new snow water during the first two weeks of May when they normally lose 20-50 mm

South Thompson: Based on a very limited survey, snow conditions have improved slightly in the South Thompson. The Enderby snow course gained 89 mm of snow water in early May, when it normally loses 17 mm; and the Park Mountain snow pillow gained 23 mm when it normally loses 49 mm.

Nicola: Snowpack in the Nicola was well below normal at May 1st. No surveys were done at May 15th to determine changes in conditions. However, a cold front pushed through the Nicola basin over the May 2-3 period, and there are anecdotal reports of snow accumulations from that storm.

Upper Columbia: The three automated snow pillows in the Upper Columbia vary from 77% to 106% of normal at May 15th.

Lower Columbia: Based on a very limited survey, all snow courses in the Lower Columbia continue to be below normal, ranging from 15% (Farron) to 93% (Record Mountain). Similar to other basins, the rate of snow melt in the Lower Columbia for early May has been subdued.

East Kootenay: The east Kootenay is very dry. Individual snow courses vary from zero (Fernie East, Sullivan Mine) to 94% (Morrissey Ridge). Precipitation in the East Kootenay was below normal for April and the first half of May.

West Kootenay: The West Kootenay is dry. Based on a very limited survey, individual snow courses vary from 82% to 98% of normal. Precipitation in the West Kootenay was below normal for April and early May. The rate of melt has been subdued.

Kettle: The Kettle River basin is dry, with snow courses varying from 15% of normal to 97% (Big White). Similar to other basins, the rate of melt in the Kettle has been slower than normal for the first half of May.

Okanagan: The Okanagan basin is dry. Snow along the west side of the Okanagan valley is particularly poor (Summerland Reservoir - zero; Trout Creek – zero; Brenda Mine - zero). Higher elevations along the east side of the valley are somewhat better, after experiencing slow snow melt and some new snow accumulation. The Mission Creek snow pillow accumulated 52 mm of new snow water during a cold frontal storm in early May, when it typically loses 83 mm. Silver Star Mountain in the north part of the basin is at 93% of normal.

Similkameen: The Similkameen River basin is very dry. Snow has entirely melted off from eastern portions of the Similkameen basin. The high elevation Blackwall Peak snow pillow accumulated a small amount of new snow water in early May (when it normally loses 126 mm), and is currently at 102% for May 15th.

South Coast: High elevation sites are generally near or above normal.

Vancouver Island: There are only two measurements for Vancouver Island. The Jump Creek snow pillow (west of Nanaimo) is 108% of normal, while the Wolf River snow pillow (west of Campbell River) is 147%. At both sites, the rate of melt in early May was well below normal.

Peace: The Peace River basin is dry. The four automated snow pillows in the Peace vary from zero to 79% of normal.

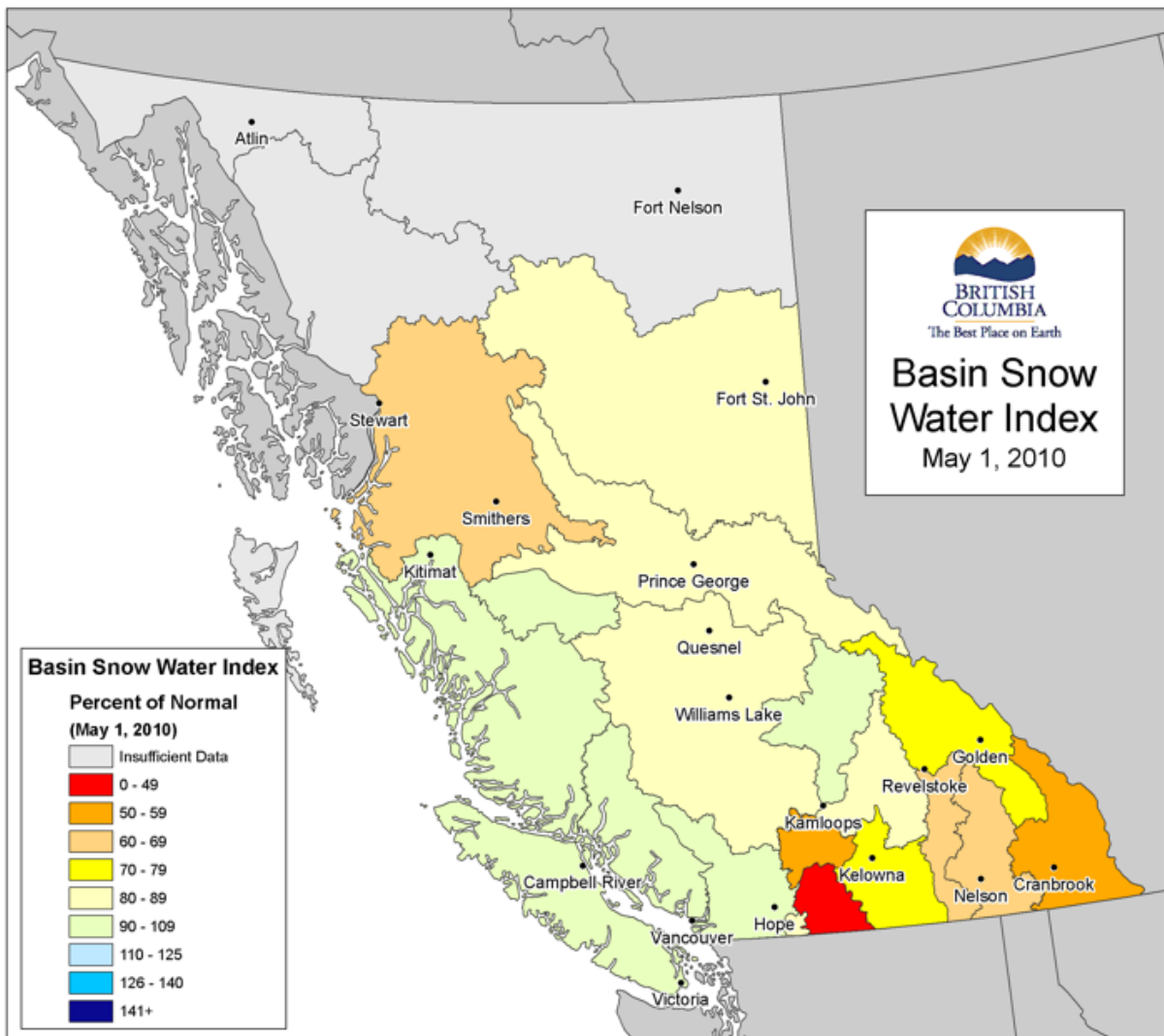
Skeena/Nass: The Skeena and Nass river basins are dry. The four automated snow pillows vary from 2% of normal (Cedar-Kiteen) to 102% (Tsai Creek).

Water Supply Outlook:

As has been reported over the past two months, current snow conditions indicate a likelihood of well below normal freshet runoff during May and June, and low risk for freshet flooding in the major river basins (Fraser, Thompson, Skeena, Bulkley, Nass, Peace, Liard, etc.). Water levels on rivers throughout the province, including all these large rivers, are now rising, and are expected to peak by late May or early June.

The well below normal snowpack conditions across much of the South Interior (Okanagan, Nicola, Kettle, Similkameen, West Kootenay, East Kootenay), along with the Skeena, Nass, and Peace river basins in the north, indicate potential for low stream flows and water-supply challenges to develop during the summer. Spring and early summer weather conditions will now be the determining factor as to whether significant water supply issues develop. Rainfall during the rest of May and June will need to be at or above normal to alleviate water supply concerns.

Due to limited data for the May 15th snow survey, the Basin Index Map is not updated. The May 1st Basin Index Map provides the best indication of end-of-winter snow conditions.



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.

UPPER FRASER Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
HEDRICK LAKE	1A14P	1100	15-May	131	663	89	964	938	1050	435	746*	10
LU LAKE	4B15P	1310	15-May	N/A	113	83	282	173	445	0	136*	11
BARKERVILLE	1A03P	1520	15-May	29	149	64	281	281	503	0	234	32
MC BRIDE (UPPER)	1A02	1580	13-May	80	334	91	433	358	752	24	367	42
MCBRIDE (UPPER)	1A02P	1620	15-May	87	341	65	476	394	660	394	527*	3
REVOLUTION CREEK	1A17P	1690	15-May	148	594	83	967	930	1249	228	713	24
DOME MOUNTAIN	1A19	1820	13-May	161	675	83	958	890	1168	385	813	37
DOME MOUNTAIN	1A19P	1820	15-May	N/A	623	71	919	825	1208	611	881*	4
YELLOWHEAD	1A01P	1860	15-May	117	592	102	465	480	825	139	579	13

NECHAKO Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
TAHTSA LAKE	1B02P	1300	15-May	N/A	1250	100	1064	1234	2347	671	1255	17
MOUNT PONDOSY	1B08P	1400	15-May	N/A	543	84	524	567	1198	207	645	17
MOUNT WELLS	1B01P	1490	15-May	N/A	447	88	732	463	951	171	510	18

MIDDLE FRASER Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
BOSS MOUNTAIN MINE	1C20P	1460	15-May	N/A	396	85	469	615	761	184	464	16
BRENDA MINE	2F18P	1460	15-May	N/A	9	36	16	146	146	0	0	17
BARKERVILLE	1A03P	1520	15-May	29	149	64	281	281	503	0	234	32
MOUNT TIMOTHY	1C17	1660	15-May	37	122	61	240	332	466	0	201	41
YANKS PEAK EAST	1C41P	1670	15-May	98	602	75	1065	1001	1125	398	800	13
PENFOLD CREEK	1C23	1680	13-May	201	950	93	1067	1092	1400	585	1019	40
GREEN MOUNTAIN	1C12P	1780	15-May	N/A	1177	145	485	805	1366	424	845	16
MISSION RIDGE	1C18P	1850	15-May	N/A	451	118	386	438	878	0	382	23

LOWER FRASER Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
DISAPPOINTMENT LAKE	1D18P	1040	15-May	N/A	1396	106			1930P	730P	1317*	5
DOG MOUNTAIN	3A10	1080	13-May	155	786	71	1073	1655	2920Z	0	1100	24
SPUZZUM CREEK	1D19P	1180	15-May	275	1523	107	1001	1913	2093	49	1422*	10
WAHLEACH LAKE	1D09P	1400	15-May	N/A	1000	104	978	1400A	1624	335	960	18
CHILLIWACK RIVER	1D17P	1600	15-May	277	1646	125	1601	1714	2186	405	1312*	15
TENQUILLE LAKE	1D06P	1680	15-May	N/A	1343	136	653	1009	1699	469	990*	9

NORTH THOMPSON Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
BOSS MOUNTAIN MINE	1C20P	1460	15-May	N/A	396	85	469	615	761	184	464	16
MOUNT COOK	1E02P	1550	15-May	239	1358	107						8
AZURE RIVER	1E08P	1620	15-May	176	1136	92	1046	1305	1665	743	1230	13
ADAMS RIVER	1E07	1720	10-May	184	783	110	586	782	1158	280	712	38
KOSTAL LAKE	1E10P	1770	15-May	196	773	87	908	1035	1357	568	887	25
TROPHY MOUNTAIN	1E03A	1860	11-May	170	657	108	592	698	1114	301	608	28

SOUTH THOMPSON Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
CELISTA	1F06P	1500	15-May	161	889	89	765		1155	488	822*	3
ADAMS RIVER	1E07	1720	10-May	184	783	110	586	782	1158	280	712	38
SILVER STAR MOUNTAIN	2F10	1840	16-May	148	613	93	722	772	1054	100	661	51
PARK MOUNTAIN	1F03P	1890	15-May	N/A	802	87	968	1043	1321	474	927	25
ENDERBY	1F04	1900	17-May	220	1015	93	1002	1323	1499	662	1089	47

UPPER COLUMBIA Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
AZURE RIVER	1E08P	1620	15-May	176	1136	92	1046	1305	1665	743	1230	13
MOUNT REVELSTOKE	2A06P	1830	15-May	N/A	998	77	1088	1294	1777	700	1297	17
MOLSON CREEK	2A21P	1980	15-May	N/A	1103	106	1020	1335	1707	602	1040	27

LOWER COLUMBIA Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
FARRON	2B02A	1220	13-May	4	16	15	78	117	222	0	110	30
BARNES CREEK	2B06P	1620	15-May	N/A	379	87	660	675	761	94	438	17
ST. LEON CREEK	2B08P	1800	15-May	N/A	851	79	994	1084	1568	639	1080	16
RECORD MOUNTAIN	2B09	1890	15-May	137	628	93	560	618	1367	83	676	35
EAST CREEK	2D08P	2030	15-May	N/A	754	79	731	1016	1387	461	925	28

EAST KOOTENAY Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
FERNIE EAST	2C07	1250	15-May	0	0	0	0	160A	290	0	46	48
SULLIVAN MINE	2C04	1550	14-May	0	0	0	186	162A	457	0T	105	58
BANFIELD MOUNTAIN	MT05P	1710	15-May	38	140	46	396	417	569	0	305	12
MORRISSEY RIDGE	2C09Q	1800	15-May	N/A	431	94	637	731	1091	0	460	26
MOYIE MOUNTAIN	2C10P	1930	15-May	N/A	130	51	428	435	552	0	255	29
HAWKINS LAKE	MT06P	1970	15-May	137	539	76	742	798	1067	178	706	12
FLOE LAKE	2C14P	2090	15-May	N/A	671	88	698	821	1088	304	765	15

WEST KOOTENAY Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
CHAR CREEK	2D06	1310	15-May	62	257	92	366	511Z	715	0	279	40
BUNCHGRASS MEADOW	WA01P	1520	15-May	125	496	85	640	653	1163	150	582	13
EAST CREEK	2D08P	2030	15-May	N/A	754	79	731	1016	1387	461	925	28
REDFISH CREEK	2D14P	2104	15-May	261	1301	94	972	1523	1748	972	1380*	8

KETTLE Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
FARRON	2B02A	1220	13-May	4	16	15	78	117	222	0	110	30
BIG WHITE MOUNTAIN	2E03	1680	16-May	86	380	97	402	371	732	0	390	44
GRANO CREEK	2E07P	1860	15-May	110	480	91	536	608	855	290	526*	12

OKANAGAN Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
SUMMERLAND RESERVOIR	2F02	1280		Not Sampled		0	0	218	0	32	44	
VASEUX CREEK	2F20	1400		Not Sampled		0	0	80	0	9	37	
TROUT CREEK	2F01	1430	12-May	0	0	0	11	28	307	0	30	57
TROUT CREEK (WEST)	2F01A	1430	12-May	15	58	N/A	<i>No historic record</i>					1
BRENDA MINE	2F18P	1460	15-May	N/A	9	36	16	146	146	0	0	17
GREYBACK RESERVOIR	2F08	1550	13-May	44	146	146	69	137	323	0Z	100	38
ISINTOK LAKE	2F11	1680	13-May	0	0	0	10	87	386	0	78	44
MISSION CREEK	2F05P	1780	15-May	128	491	121	533	581	829	0	407	38
MOUNT KOBAN	2F12	1810	14-May	85	329	130	238	209	516	0	254	43
WHITEROCKS MOUNTAIN	2F09	1830	15-May	97	426	106	315	485	968	0	401	39
SILVER STAR MOUNTAIN	2F10	1840	16-May	148	613	93	722	772	1054	100	661	51

SIMILKAMEEN Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
MISSEZULA MOUNTAIN	2G05	1550	13-May	0	0	0	60	106	218	0	54	46
ISINTOK LAKE	2F11	1680	13-May	0	0	0	10	87	386	0	78	44
LOST HORSE MOUNTAIN	2G04	1920	19-May	25	135	70	222		577	0	192	43
BLACKWALL PEAK	2G03P	1940	15-May	159	720	102	675	844	1481	199	706	42
HARTS PASS	WA09P	1980	15-May	193	728	76	917	1128	1748	345	952	12

SOUTH COASTAL Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
DOG MOUNTAIN	3A10	1080	13-May	155	786	71	1073	1655	2920Z	0	1100	24
ORCHID LAKE	3A19	1190	14-May	350	1726	91	1432	2120A	3730A	774	1900	28
ORCHID LAKE	3A19P	1190	15-May	N/A	1616	91			2804	536	1770*	20
UPPER SQUAMISH RIVER	3A25P	1340	15-May	429	1621	107		1504	1950	709	1515	19
NOSTETUKO RIVER	3A22P	1500	15-May	N/A	653	171		386	908	19	381*	18
UPPER MOSELY CREEK	3A24P	1650	15-May	60	282	187	165	180	480	0	151*	21

VANCOUVER ISLAND Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
JUMP CREEK	3B23P	1160	15-May	220	1049	108	851	1890	1890	0	975	13
WOLF RIVER (UPPER)	3B17P	1490	15-May	N/A	1911	146	881	1405	1726	213	1300	21

NORTH COASTAL Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
TAHTSA LAKE	1B02P	1300	15-May	N/A	1250	100	1064	1234	2347	671	1255	17
BURNT BRIDGE CREEK	3C08P	1330	15-May	N/A	538	81		840	1444	206	661*	12

SKAGIT Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
HARTS PASS	WA09P	1980	15-May	193	728	76	917	1128	1748	345	952	12

PEACE Drainage Basin

Snow Course Name and Number	Elev. metres		May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
AIKEN LAKE	4A30P	1040	15-May	N/A	0	0	113	173	214	0	0	23
PULPIT LAKE	4A09P	1310	15-May	N/A	168	73	460	418	576	49	230	19
PINE PASS	4A02P	1400	15-May	N/A	849	79	1107	1311	1658	813	1073	18
KWADACHA RIVER	4A27P	1620	15-May	N/A	270	79	386	428	468	109	343*	23

SKEENA/NASS Drainage Basin

Snow Course Name and Number	Elev. metres		May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
CEDAR-KITEEN	4B18P	885	15-May	0	9	2	825	550	972	116	454*	9
LU LAKE	4B15P	1310	15-May	N/A	113	83	282	173	445	0	136*	11
TSAI CREEK	4B17P	1360	15-May	N/A	1308	103	1387	1443	2138	810	1271*	12
HUDSON BAY MTN.	4B03A	1480	14-May	98	420	95	540	533	822	160	441	37
SHEDIN CREEK	4B16P	1480	15-May	N/A	568	59	1086		1241	660	964*	12

YUKON Drainage Basin

Snow Course Name and Number	Elev. metres		May 15 2010			Historic, Water Equivalent (mm)					Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal	2008 mm	2008 mm	Max. mm	Min. mm	Normal mm		
LOG CABIN	4E01	880	17-May	40	146	73		265Z	420	0	200	22

A - SAMPLING PROBLEMS WERE ENCOUNTERED

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

* - PERIOD OF RECORD AVERAGE