

Snow Survey and Water Supply Bulletin – January 1st, 2016

The January 1st snow survey is now complete. Data from 84 snow courses and 60 snow pillows around the province and climate data from Environment Canada have been used to form the basis for the following report¹.

Weather

Fall weather was variable across the province. A number of Pacific storm systems impacted coastal BC over the September through early December period, generally bringing warm temperatures and heavy precipitation. The 2015 active storm season was in strong contrast to the decreased storm frequency and relatively dry fall-winter periods that were experienced in 2013 and 2014.

Following storms in early December, the rest of the month was fairly stable, with modest precipitation. A high pressure ridge developed over BC towards the end of December, bringing dry weather into the New Year.

Overall, temperature trends through the October to December period were mixed across the province. October was generally warmer than normal across the province, except in the north-east. November was generally cooler than normal, with much cooler temperatures in the central interior. December transitioned back into warmer than normal throughout the province.

Precipitation patterns have also varied through the fall and into the winter. September was a wet month throughout most of the province. October and November were drier than normal through the north and south-west, with wetter than normal conditions in the south-east. December was wetter than normal in the south half of the province, and drier than normal in the north.

Snowpack

Snow basin indices range from a low of 53 % in the Stikine to a high of 143 % in the Similkameen (Table 1). In general, most of the province has near normal snow pack levels (90-110 %) for January 1st, 2016. A strong south to north gradient of snow pack levels exists, with normal or above normal snow pack in southern BC, lower than normal snow packs beginning in central BC, and extending to well below normal conditions in the north (Figure 1). Snow packs are below normal (70-80%) in the Upper Fraser West, Upper Fraser East, and Nechako basins, and well below normal (<70%) in the Peace, Skeena-Nass, Stikine, and Liard basins. Many individual survey locations in northern BC are observing very low snow water equivalent measurements. Above normal snow pack (>110%) is present in the Okanagan, Similkameen, and Boundary.

January's snow survey schedule features fewer individual snow survey measurements than occur in later survey periods in the year, therefore some January 1st snow basin indices are based on a very limited number of surveys (e.g. 1-2 surveys within the snow basin) (Table 1) making the data interpretation less robust than in survey periods later in the season.

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.

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Table 1 - BC Snow Basin Indices – January 1, 2016

Basin	% of Normal	Basin	% of Normal
Upper Fraser West	77	Boundary	112
Upper Fraser East	77	Similkameen	143*
Nechako	79	South Coast	110
Middle Fraser	92	Vancouver Island	91
Lower Fraser	108	Central Coast	89
North Thompson	97	Skagit	109*
South Thompson	100	Peace	68
Upper Columbia	106	Skeena-Nass	65
West Kootenay	109	Stikine	53*
East Kootenay	105	Liard	54*
Okanagan	125	Northwest	NO DATA

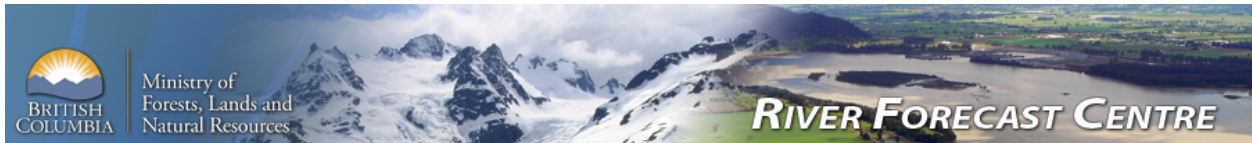
*Note January 1st snow basin index values are based on limited observation points

Outlook

Fall and early-winter has seen the dissipation of warm water in the northern Pacific Ocean (i.e. the “Blob”) which has been present over the past two winter seasons, and was likely the key driver in the very warm winters and extremely low snow packs that occurred in southern BC in 2014-15. Strong El Niño conditions have developed over the equatorial Pacific regions over the past few months. The Climate Prediction Centre (CPC) at the U.S. National Weather Service/NOAA is forecasting a high likelihood of El Niño conditions persisting through until late-spring or early summer 2016.

In general, BC experiences warmer than normal winter and early-spring temperatures during strong El Niño events. Precipitation during historic El Niño events has been highly variable, with no strong trends across BC. Snow packs during El Niño events tend to be below normal across BC, however there has been significant historic variability and regional variation to this general trend. The last similarly strong El Niño event occurred over the winter of 1997-1998, and resulted in seasonal snow packs that were modestly below normal (e.g. provincial average of 94% of normal). Extreme low snow packs, such as those observed in southern BC in 2014-15, are not commonly associated with El Niño events. The effects of El Niño tend to be more pronounced during the mid- to late-winter and into spring.

Seasonal forecasts from Environment Canada are indicating a high likelihood of above-normal temperatures across British Columbia over the January to March period. Seasonal forecasts from NOAA are suggesting a more southern path for the Pacific jet stream through the January-March period, with increased precipitation for California, and decreased precipitation for British Columbia and the Pacific Northwest. Seasonal forecasts from Environment Canada do not indicate the likelihood of any strong seasonal precipitation



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anomalies, with the exception of a moderate likelihood of drier conditions in north-east BC. Seasonal precipitation forecasts tend to have much lower forecast skill than seasonal temperature forecasts, and therefore should be used with caution.

By early January, nearly half of the annual BC snowpack has typically accumulated. At this early stage in the season, there is limited indication that any regions of the province are developing increased seasonal flood risk. One exception is the high snow pack observed in the Similkameen basin, however this is based on limited survey observations for January 1st within the basin and therefore should be interpreted with caution. Currently observed low snow pack in some regions of the province, particularly the northern third of the province, is an early indication of the potential for lower than normal stream flow in the spring and summer this year. However, with three or more months left of snow accumulation, these outlooks could change significantly.

The River Forecast Centre will continue to monitor snow pack conditions and will provide an updated seasonal flood risk forecast in the February 1st 2016 bulletin, which is scheduled for release on February 9th.

BC River Forecast Centre
January 7, 2016

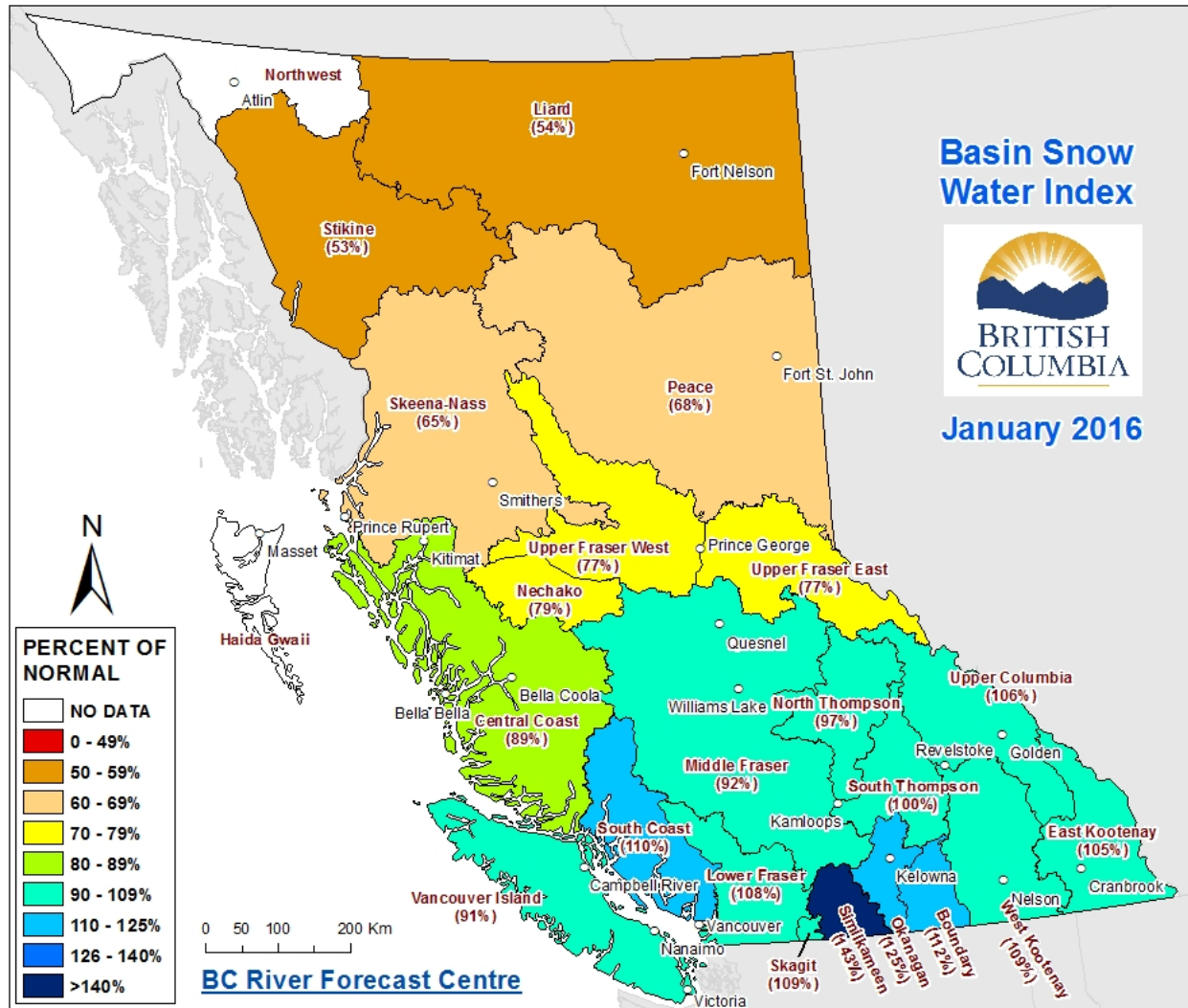


Ministry of
Forests, Lands and
Natural Resources

RIVER FORECAST CENTRE

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Figure 1: Basin Snow Water Index – January 1st, 2016



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2016 Automated Snow Pillow/Manual Snow Survey Data				January					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1A01P	YELLOWHEAD LAKE	Upper Fraser East	1860	2016-01-01	84	254		86%	247	251	184	428	296	19
1A02P	MC BRIDE UPPER	Upper Fraser East	1580	2016-01-01	83	198		100%	245	264	121	387	198	24
1A03P	BARKERVILLE	Upper Fraser East	1520	2016-01-01	56	123		80%	164	197	21	312	154	41
1A05	LONGWORTH (UPPER)	Upper Fraser East	1693	2016-01-02	92	296		72%	422		114	422	411	21
1A06A	HANSARD	Upper Fraser East	622	NS	NS	NS	NS						0	0
1A10	PRINCE GEORGE A	Upper Fraser East	684	2016-01-06	40	81		137%			0	156	59	47
1A11	PACIFIC LAKE	Upper Fraser East	756	2016-01-02	66	165	A	54%	144	577	56	577	303	28
1A12	KAZA LAKE	Upper Fraser West	1247	2016-01-03	61	132		73%	116	232	92	371	182	33
1A12P	KAZA LAKE	Upper Fraser East	1248	2016-01-01	1	136								0
1A14P	HEDRICK LAKE	Upper Fraser East	1100	2016-01-01	99	214		61%	214	718	143	641	348	16
1A15	KNUDSEN LAKE	Upper Fraser East	1598	N	N	N	N		264	664	125	821	427	22
1A16	BURNS LAKE	Upper Fraser West	820	2016-01-06	34	50		70%	80	76	10	192	71	35
1A17P	REVOLUTION CREEK	Upper Fraser East	1690	2016-01-01	148	326		86%	294	635	184	814	377	31
1A19P	DOMO MOUNTAIN	Upper Fraser East	1820	2016-01-01	105	298		80%	337	527	171	581	372	10
1A23	BIRD CREEK	Upper Fraser West	1196	NS	NS	NS	NS			76	72	174	174	3
1B01	MOUNT WELLS	Nechako	1489	NS	NS	NS	NS			256	220	465	465	3
1B01P	MOUNT WELLS	Nechako	1490	2016-01-01	NA	227		72%	307	264	131	516	316	24
1B02	TAHTSA LAKE	Nechako	1319	NS	NS	NS	NS			444	444	1084	1084	3
1B02P	TAHTSA LAKE	Nechako	1300	2016-01-01	NA	464		67%	497	482	369	1168	693	24
1B05	SKINS LAKE	Nechako	877	2015-12-30	34	53		98%	54	0	0	127	54	25
1B06	MOUNT SWANNELL	Nechako	1596	NS	NS	NS	NS			153	134	247	247	3
1B07	NUTLI LAKE	Nechako	1502	NS	NS	NS	NS			173	173	527	527	3
1B08P	MOUNT PONDOSY	Nechako	1400	2016-01-01	NA	363		81%	440	181	204	670	448	24
1C01	BROOKMERE	Middle Fraser	994	NS	NS	NS	NS				22	170	97	11
1C05	MCGILLIVRAY PASS	Middle Fraser	1715	2015-12-31	88	239		87%		143	140	458	274	18
1C06	PAVILION	Middle Fraser	1209	NS	NS	NS	NS				0	80	32	8
1C08	NAZKO	Middle Fraser	1029	2016-01-05	20	31		76%	52	92	0	92	41	26
1C09A	HIGHLAND VALLEY	Middle Fraser	1547	NS	NS	NS	NS				12	104	51	11
1C12P	GREEN MOUNTAIN	Middle Fraser	1780	2016-01-01	NA	429		91%	381	184	268	780	469	22
1C13A	HORSEFLY MOUNTAIN	Middle Fraser	1612	NS	NS	NS	NS						0	0
1C14	BRALORNE	Middle Fraser	1382	2015-12-31	37	77		95%		56	0	158	81	17
1C17	MOUNT TIMOTHY	Middle Fraser	1632	2016-01-01	67	161		101%	104	206	38	350	160	16
1C18P	MISSION RIDGE	Middle Fraser	1850	2016-01-01	NA	237	E	91%	179	205	148	659	261	46
1C19	GNAWED MOUNTAIN	Middle Fraser	1617	NS	NS	NS	NS				24	93	53	5
1C20P	BOSS MOUNTAIN MINE	Middle Fraser	1460	2016-01-01	105	255		79%	255	250	191	495	322	22
1C21	BIG CREEK	Middle Fraser	1130	2015-12-29	22	42		131%	44	68	10	68	32	26
1C22	PUNTZI MOUNTAIN	Middle Fraser	939	2015-12-28	21	22		61%	40	52	0	106	36	36
1C23	PENFOLD CREEK	Middle Fraser	1687	2016-01-02	165	525							0	0
1C25	LAC LE JEUNE (UPPER)	Middle Fraser	1471	2015-12-31	55	119		172%	52	61	10	146	69	38
1C28	DUFFEY LAKE	Middle Fraser	1253	NS	NS	NS	NS						0	0

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1C29	SHOVELNOSE MOUNTAIN	Middle Fraser	1456	NS	NS	NS	NS						0	0
1C32	DEADMAN RIVER	Middle Fraser	1463	NS	NS	NS	NS				30	141	65	6
1C33A	GRANITE MOUNTAIN	Middle Fraser	1175	N	N	N	N		78	124	46	124	93	8
1C37	BRALORNE(UPPER)	Middle Fraser	1980	2015-12-31	99	290		94%			116	504	309	17
1C38	DOWNTON LAKE (UPPER)	Middle Fraser	1884	N	N	N	N				272	690	489	17
1C38P	DOWNTON / LAJOIE UPPER	Middle Fraser	1829	2016-01-01	NA	451								0
1C39	BRIDGE GLACIER (LOWER)	Middle Fraser	1393	2015-12-31	113	300		101%		74	74	466	298	17
1C40	TYAUGHTON CREEK (NORTH)	Middle Fraser	1946	2015-12-31	73	198		81%		180	92	418	244	16
1C40P	NORTH TYAUGHTON	Middle Fraser	1969	2016-01-01	NA	174	E							0
1C41P	YANKS PEAK, EAST	Middle Fraser	1670	2016-01-01	119	365		92%	389	567	207	510	397	19
1C42	CAVERHILL LAKE NEW	Middle Fraser	1400	NS	NS	NS	NS							0
1D06P	TENQUILLE LAKE	Lower Fraser	1680	2016-01-01	187	526		108%	446	221	285	817	485	15
1D08	STAVE LAKE	Lower Fraser	1211	2015-12-31	209	584		101%	159	226	112	976	578	19
1D09	WAHLEACH LAKE	Lower Fraser	1395	2016-01-02	86	224		93%	91	187	46	417	240	21
1D09P	WAHLEACH LAKE	Lower Fraser	1400	2016-01-01	NA	290		66%	214	256	214	650	442	24
1D10	NAHATLATCH RIVER	Lower Fraser	1530	2015-12-31	196	634		108%			219	975	585	20
1D16	DICKSON LAKE	Lower Fraser	1147	2015-12-31	169	466		76%			274	1196	616	17
1D17P	CHILLIWACK RIVER	Lower Fraser	1600	2016-01-01	216	809		123%	353	560	353	1165	658	24
1D19P	SPUZZUM CREEK	Lower Fraser	1180	2016-01-01	192	597		90%	198	236	198	1268	662	17
1E01B	BLUE RIVER	North Thompson	673	2015-12-30	63	160		107%		177	0	263	149	24
1E02P	MOUNT COOK	North Thompson	1550	2016-01-01	218	684		110%	608	503	420	901	621	16
1E03A	TROPHY MOUNTAIN	North Thompson	1907	NS	NS	NS	NS						0	0
1E05	KNOUFF LAKE	North Thompson	1189	NS	NS	NS	NS						0	0
1E07	ADAMS RIVER	North Thompson	1769	NS	NS	NS	NS				205	475	324	12
1E08P	AZURE RIVER	North Thompson	1620	2016-01-01	153	528		89%	607	382	356	780	593	19
1E10P	KOSTAL LAKE	North Thompson	1770	2016-01-01	0	417		93%	388	403	271	615	448	31
1E14P	COOK CREEK	North Thompson	1280	2016-01-01	106	NA								0
1F01A	ABERDEEN LAKE	South Thompson	1262	2015-12-30	48	85		90%	61	71	61	106	94	4
1F02	ANGLEMONT	South Thompson	1168	NS	NS	NS	NS				164	164	164	1
1F03P	PARK MOUNTAIN	North Thompson	1890	2016-01-01	130	379		90%	382	439	256	632	421	31
1F04	ENDERBY	South Thompson	1948	NS	NS	NS	NS				292	742	489	27
1F06P	CELISTA MOUNTAIN	North Thompson	1551	2016-01-01	174	506		108%	388	397	307	577	468	11
2A01A	CANOE RIVER	Upper Columbia	866	NS	NS	NS	NS				29	86	48	4
2A02	GLACIER	Upper Columbia	1249	2015-12-26	112	362		119%	266	307	147	519	304	37
2A03A	FIELD	Upper Columbia	1310	NS	NS	NS	NS				38	127	80	10
2A06P	MOUNT REVELSTOKE	Upper Columbia	1830	2016-01-01	NA	595		101%	450	490	303	861	587	23
2A07	KICKING HORSE	Upper Columbia	1648	2015-12-30	66	160		109%	114	124	66	257	147	33
2A11	BEAVERFOOT	Upper Columbia	1924	2016-01-02	57	148		137%	92	104	52	215	108	27
2A14	MOUNT ABBOT	Upper Columbia	2031	2015-12-27	172	600		103%	517	426	298	1065	584	25
2A16	GOLDSTREAM	Upper Columbia	1914	2016-01-02	164	584		99%		560	355	906	588	27

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2A17	FIDELITY MOUNTAIN	Upper Columbia	1852	2015-12-26	170	590		99%	510	497	331	1228	596	35
2A18	KEYSTONE CREEK	Upper Columbia	1839	2015-12-31	138	414		102%		296	217	577	405	26
2A18P	KEYSTONE CREEK	Upper Columbia	1850	2016-01-01	NA	475								0
2A19	VERMONT CREEK	Upper Columbia	1533	2016-01-01	96	286		138%	122	179	91	328	207	26
2A21P	MOLSON CREEK	Upper Columbia	1980	2016-01-01	NA	481		85%	431	442	286	1072	563	35
2A22	SUNBEAM LAKE	Upper Columbia	2066	2016-01-02	130	469		100%			243	1131	471	27
2A23	BUSH RIVER	Upper Columbia	1982	2016-01-02	134	483		116%			216	940	417	27
2A25	KIRBYVILLE LAKE	Upper Columbia	1739	2016-01-02	198	671		109%	273	517	273	1472	613	28
2A27	DOWNIE SLIDE (LOWER)	Upper Columbia	964	2016-01-03	107	338		113%		372	166	504	298	26
2A29	DOWNIE SLIDE (UPPER)	Upper Columbia	1628	2016-01-02	226	335		47%		520	370	1022	706	26
2A30P	COLPITTI CREEK	Upper Columbia	2131	2016-01-01	NA	403								0
2A31P	CARIBOU CREEK UPPER	Upper Columbia	2201	2016-01-01	NA	465								0
2A32P	WILDCAT CREEK	Upper Columbia	2122	2016-01-01	NA	271								0
2B02A	FARRON	West Kootenay	1229	2016-01-05	85	157		108%	101	115	40	330	146	24
2B05	WHATSHAN (UPPER)	West Kootenay	1476	N	N	N	N		221	351	169	543	323	27
2B06P	BARNES CREEK	Lower Columbia	1620	2016-01-01	NA	272	E	103%	222	247	158	405	265	23
2B07	KOCH CREEK	West Kootenay	1813	2016-01-03	131	415		120%		242	170	473	346	26
2B08P	ST. LEON CREEK	Lower Columbia	1800	2016-01-01	NA	536		110%	471	439	221	855	488	23
2B09	RECORD MOUNTAIN	West Kootenay	1906	2016-01-02	137	320		100%		136	134	575	319	25
2C01	SINCLAIR PASS	East Kootenay	1374	NS	NS	NS	NS				25	107	54	11
2C04	SULLIVAN MINE	East Kootenay	1580	2015-12-28	58	114		91%	78	130	29	226	125	28
2C07	FERNIE EAST	East Kootenay	1213	2015-12-31	49	98		74%	111	106	28	330	132	30
2C09Q	MORRISSEY RIDGE	East Kootenay	1800	2016-01-01	NA	308		101%	171		124	706	306	36
2C10P	MOYIE MOUNTAIN	East Kootenay	1930	2016-01-01	63	184		107%	130	171	76	354	172	37
2C11	KIMBERLEY (UPPER) VOR	East Kootenay	2148	NS	NS	NS	NS						0	0
2C12	KIMBERLEY (MIDDLE) VOR	East Kootenay	1692	NS	NS	NS	NS						0	0
2C14P	FLOE LAKE	East Kootenay	2090	2016-01-01	NA	331		94%	317	272	173	503	352	23
2C15	MOUNT ASSINIBOINE	East Kootenay	2230	2016-01-01	93	270		101%		252	111	567	267	27
2C16	MOUNT JOFFRE	East Kootenay	1763	2016-01-01	79	206		124%		184	73	364	166	27
2C17	THUNDER CREEK	East Kootenay	2062	2016-01-01	72	190		151%	138		61	276	126	27
2C20	VERMILLION RIVER NO. 3	East Kootenay	1612	NS	NS	NS	NS				68	184	132	10
2D02	FERGUSON	West Kootenay	929	2015-12-29	105	320		125%	254	269	93	409	256	32
2D03	SANDON	West Kootenay	1072	NS	NS	NS	NS				157	157	157	1
2D04	NELSON	West Kootenay	952	2015-12-30	48	121		72%		100	61	366	167	49
2D05	GRAY CREEK (LOWER)	West Kootenay	1558	NS	NS	NS	NS				69	372	205	22
2D06	CHAR CREEK	West Kootenay	1290	2015-12-30	88	221		92%	163	184	110	480	239	28
2D07A	DUNCAN LAKE NO. 2	West Kootenay	662	NS	NS	NS	NS						0	0
2D08P	EAST CREEK	West Kootenay	2030	2016-01-01	NA	525		119%	374	271	206	858	442	35
2D09	MOUNT TEMPLEMAN	West Kootenay	1879	2016-01-01	153	520		105%			277	902	496	28
2D10	GRAY CREEK (UPPER)	West Kootenay	1926	NS	NS	NS	NS				222	612	358	15

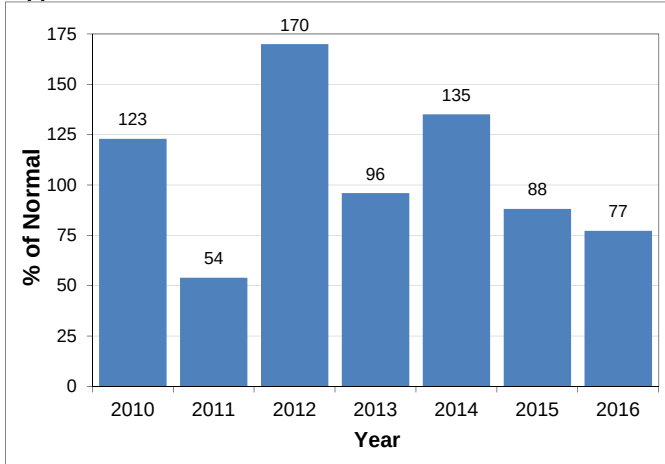
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2D14P	REDFISH CREEK	West Kootenay	2104	2016-01-01	186	751		146%	686	473	401	742	514	14
2E01	MONASHEE PASS	Boundary	1387	2016-01-03	63	165		101%	95	226	84	239	163	32
2E02	CARMI	Boundary	1254	NS	NS	NS	NS				86	102	0	2
2E03	BIG WHITE MOUNTAIN	Boundary	1672	NS	NS	NS	NS				112	326	235	16
2E07P	GRANO CREEK	Kettle	1860	2016-01-01	98	285		127%	179	228	143	315	225	18
2F01A	TROUT CREEK (WEST)	Okanagan	1430	2015-12-30	49	93			68		68	140	0	2
2F02	SUMMERLAND RESERVOIR	Okanagan	1304	2016-01-05	67	172		172%		121	42	198	100	46
2F03	MC CULLOCH	Okanagan	1266	NS	NS	NS	NS				28	144	78	27
2F04	GRAYSTOKE LAKE	Okanagan	1818	2016-01-04	69	168		114%			96	282	147	11
2F05P	MISSION CREEK	Okanagan	1780	2016-01-01	88	242		107%	181	281	104	398	227	46
2F07	POSTILL LAKE	Okanagan	1358	NS	NS	NS	NS						0	0
2F08	GRAYBACK RESERVOIR	Okanagan	1548	2016-01-01	66	111		105%	118	163	56	181	106	25
2F09	WHITEROCKS MOUNTAIN	Okanagan	1789	NS	NS	NS	NS				122	447	271	19
2F10P	SILVER STAR MOUNTAIN	Okanagan	1839	2016-01-01	145	344								0
2F11	ISINTOK LAKE	Okanagan	1651	2016-01-06	42	108		157%		57	16	196	69	46
2F12	MOUNT KOBAN	Okanagan	1817	2015-12-30	77	185		133%	108	65	28	261	139	36
2F13	ESPERON CR (UPPER)	Okanagan	1634	NS	NS	NS	NS						0	0
2F14	ESPERON CR (MIDDLE)	Okanagan	1440	NS	NS	NS	NS						0	0
2F18P	BRENDA MINE	Okanagan	1460	2016-01-01	NA	217		117%	120	125	85	304	185	23
2F19	OYAMA LAKE	Okanagan	1365	NS	NS	NS	NS						0	0
2F20	VASEUX CREEK	Okanagan	1403	NS	NS	NS	NS				32	117	56	18
2F21	BOULEAU LAKE	Okanagan	1405	NS	NS	NS	NS				160	351	0	1
2F23	MACDONALD LAKE	Okanagan	1742	NS	NS	NS	NS				81	328	189	15
2F24	ISLAHT LAKE	Okanagan	1492	NS	NS	NS	NS						0	0
2F25	POSTILL LAKE (UPPER)	Okanagan	1500	NS	NS	NS	NS							0
2G03P	BLACKWALL PEAK	Similkameen	1940	2016-01-01	159	488		129%	357	302	108	923	379	48
2G04	LOST HORSE MOUNTAIN	Similkameen	1988	NS	NS	NS	NS				54	120	93	6
2G05	MISSEZULA MOUNTAIN	Similkameen	1602	NS	NS	NS	NS				21	197	96	14
2G06	HAMILTON HILL	Similkameen	1477	NS	NS	NS	NS				55	313	168	14
3A01	GROUSE MOUNTAIN	South Coast	1126	2015-12-29	213	596		123%	96	140	24	878	485	27
3A02	POWELL RIVER (UPPER)	South Coast	1002	NS	NS	NS	NS						0	0
3A05	POWELL RIVER (LOWER)	South Coast	882	NS	NS	NS	NS						0	0
3A09	PALISADE LAKE	South Coast	898	NS	NS	NS	NS			86	86	334	334	2
3A10	DOG MOUNTAIN	South Coast	1007	2015-12-30	196	586		120%	78	134	78	879	488	22
3A19	ORCHID LAKE	South Coast	1178	2015-12-29	269	832		113%	180	224	180	1360	739	25
3A20	CALLAGHAN CREEK	South Coast	1009	NS	NS	NS	NS				100	638	289	12
3A22P	NOSTETUKO RIVER	South Coast	1500	2016-01-01	83	268		104%	217	99	32	544	258	27
3A24P	UPPER MOSLEY CREEK	South Coast	1650	2016-01-01	50	159		82%	187	135	85	491	194	27
3A25P	UPPER SQUAMISH RIVER	South Coast	1340	2016-01-01	156	726		98%	391	289	391	1160	742	26
3B01	FORBIDDEN PLATEAU	Vancouver Island	1110	2015-12-31	215	660		106%	219	112	0	1287	621	29

2016 Automated Snow Pillow/Manual Snow Survey Data				January					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
3B02A	MT. COKELY	Vancouver Island	1267	NS	NS	NS	NS						0	0
3B04	ELK RIVER	Vancouver Island	270	2015-12-31	14	40		82%	0	0	0	264	49	28
3B10	UPPER THELWOOD LAKE	Vancouver Island	1014	NS	NS	NS	NS				546	734	587	4
3B13	HEATHER MOUNTAIN	Vancouver Island	1170	NS	NS	NS	NS							1
3B17P	WOLF RIVER	Vancouver Island	1490	2016-01-01	NA	582		105%	292	141	43	1057	555	34
3B18	WOLF RIVER (MIDDLE)	Vancouver Island	1050	2015-12-31	90	230		88%	116	0	0	774	262	22
3B19	WOLF RIVER (LOWER)	Vancouver Island	615	2015-12-31	64	160		99%	40	0	0	388	161	22
3B23P	JUMP CREEK	Vancouver Island	1160	2016-01-01	148	287		63%	63	6	63	1025	459	20
3B24P	HEATHER MOUNTAIN UPPER	Vancouver Island	1190	2016-01-01	47	647								0
3B25P	NORTH RD LAB	Vancouver Island	35	2016-01-01	6	0								0
3C07	WEDEENE RIVER SOUTH	Central Coast	196	NS	NS	NS	NS				242	242	242	1
3C08P	BURNT BRIDGE CREEK	North Coast	1330	2016-01-01	124	382		89%	398	336	139	702	429	18
3D01C	SUMALLO RIVER WEST	Skagit	801	2016-01-02	41	82				47	47	47	0	1
3D02	LIGHTNING LAKE	Skagit	1254	NS	NS	NS	NS						0	0
3D03A	KLESILKWA	Skagit	1134	2016-01-02	54	134		109%		23	0	386	123	19
4A02P	PINE PASS	Peace	1400	2016-01-01	1	363		66%	311	677	241	1016	549	27
4A03	WARE (UPPER)	Peace	1563	2016-01-04	45	90		60%	99	145	64	248	151	27
4A04	WARE (LOWER)	Peace	969	2016-01-04	43	89		81%	92	152	52	240	110	25
4A05	GERMANSEN (UPPER)	Peace	1489	2016-01-03	68	156		84%	173	180	93	364	186	34
4A06	TUTIZZI LAKE	Peace	1043	2016-01-03	53	106		75%	92	171	72	223	142	26
4A07	LADY LAURIER LAKE	Peace	1446	2016-01-05	76	194		66%	225	283	140	472	295	33
4A09	PULPIT LAKE	Peace	1331	2016-01-04	68	152		65%	174	307	130	398	235	27
4A09P	PULPIT LAKE	Peace	1310	2016-01-01	1	133		53%	163	292	138	344	250	26
4A10	FREDRICKSON LAKE	Peace	1323	2016-01-04	47	93		73%	106	197	54	250	128	27
4A11	TRYGVE LAKE	Peace	1409	2016-01-03	57	119		57%		190	126	299	207	31
4A12	TSAYDAYCHI LAKE	Peace	1173	2016-01-03	74	166		76%	154	222	128	393	217	34
4A13	PHILIP LAKE	Peace	1013	2016-01-03	61	137		89%	119	138	48	288	154	34
4A16	MORFEE MOUNTAIN	Peace	1427	2016-01-02	101	265		62%	303	637	199	710	425	27
4A18	MOUNT SHEBA	Peace	1480	2016-01-02	117	369		84%	269	628	106	793	438	22
4A20	MONKMAN CREEK	Peace	1566	2016-01-02	68	190		69%	158	386	107	546	277	22
4A21	MOUNT STEARNS	Peace	1514	2016-01-04	25	41		50%	73	89	14	151	82	27
4A25	FORT ST. JOHN AIRPORT	Peace	692	2016-01-06	27	34	A	65%			0	134	52	31
4A30P	AIKEN LAKE	Peace	1040	2016-01-01	40	90		65%	88	168	71	262	138	31
4A31P	CRYING GIRL PRAIRIE	Peace	1358	2016-01-01	NA	86								0
4A33P	MUSKWA-KECHIKA	Peace	1196	2016-01-01	NA	23								0
4B01	KIDPRICE LAKE	Skeena-Nass	1415	NS	NS	NS	NS			369	369	894	894	3
4B02	JOHANSON LAKE	Skeena-Nass	1480	2016-01-03	55	108		65%		185	84	282	167	31
4B03A	HUDSON BAY MTN	Skeena-Nass	1452	2016-01-04	67	168	Z	64%		275	135	470	264	33
4B04	CHAPMAN LAKE	Skeena-Nass	1485	NS	NS	NS	NS						0	0
4B06	TACHEK CREEK	Skeena-Nass	1133	NS	NS	NS	NS						0	0

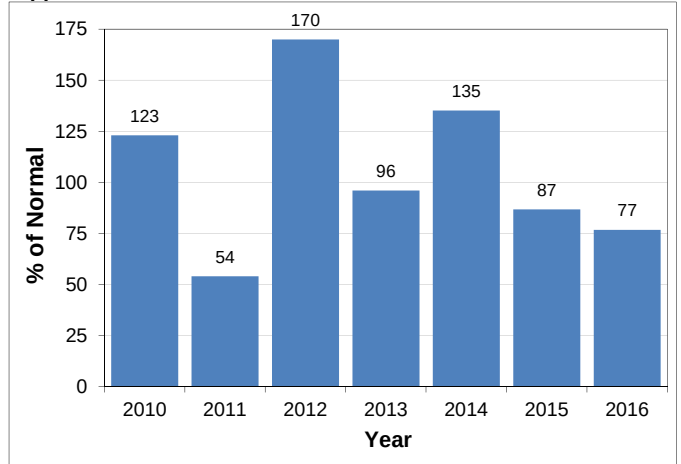
2016 Automated Snow Pillow/Manual Snow Survey Data				January					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
4B07	MCKENDRICK CREEK	Skeena-Nass	1048	NS	NS	NS	NS						0	0
4B08	MOUNT CRONIN	Skeena-Nass	1491	NS	NS	NS	NS						0	0
4B10	NINGUNSAW PASS	Skeena-Nass	647	NS	NS	NS	NS				277	277	0	1
4B11A	BEAR PASS	Skeena-Nass	437	NS	NS	NS	NS						0	0
4B13A	TERRACE AIRPORT	Skeena-Nass	219	2015-12-30	34	68		93%		58	0	264	73	30
4B14	EQUITY MINE	Skeena-Nass	1434	NS	NS	NS	NS				118	228	166	10
4B15	LU LAKE	Skeena-Nass	1296	NS	NS	NS	NS				96	182	130	10
4B15P	LU LAKE	Skeena/Nass	1300	2016-01-01	40	119		84%	174	144	41	291	141	18
4B16P	SHEDIN CREEK	Skeena/Nass	1480	2016-01-01	78	195		46%	206	391	206	598	425	20
4B17P	TSAI CREEK	Skeena/Nass	1360	2016-01-01	111	302		50%	475	413	401	983	599	18
4B18P	CEDAR - KITEEN	Skeena/Nass	885	2016-01-01	64	178		58%	167	513	83	568	307	15
4C01	SIKANNI LAKE	Liard	1390	2016-01-04	40	78		54%			44	257	145	32
4C02	SUMMIT LAKE	Liard	1291	NS	NS	NS	NS				58	58	0	2
4C03	DEASE LAKE	Liard	805	N	N	N	N			168	20	168	68	37
4C05	FORT NELSON A	Liard	368	2015-12-31	21	38		67%	42	49	15	112	57	44
4C15	JADE CITY	Liard	943	NS	NS	NS	NS						0	0
4D01	TELEGRAPH CREEK	Stikine	490	NS	NS	NS	NS						0	0
4D02	ISKUT	Stikine	931	NS	NS	NS	NS				76	76	0	1
4D11P	KINASKAN LAKE	Stikine/Taku	1020	2016-01-01	37	71		35%	97		97	97	202	20
4E02B	ATLIN LAKE	Northwest	730	NS	NS	NS	NS		0					0
Code	Description													
A	Sampling problems were encountered													
B	Early or late sampling													
C	Early or late sampling w/problems encountered													
E	Estimate													
N	Scheduled, but not sampled													
NA	Sampled, but not available													
NS	Not scheduled													
SD	Snow Depth													
SWE	Snow Water Equivalent													
T	Trace Amount													

Snow Basin Index Graphs - January 1, 2016

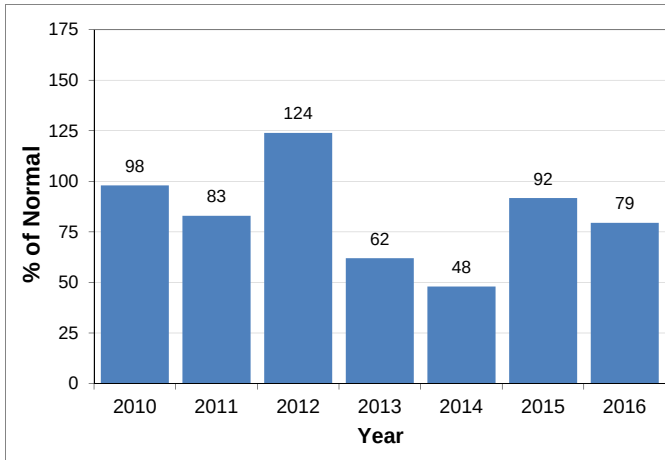
Upper Fraser West



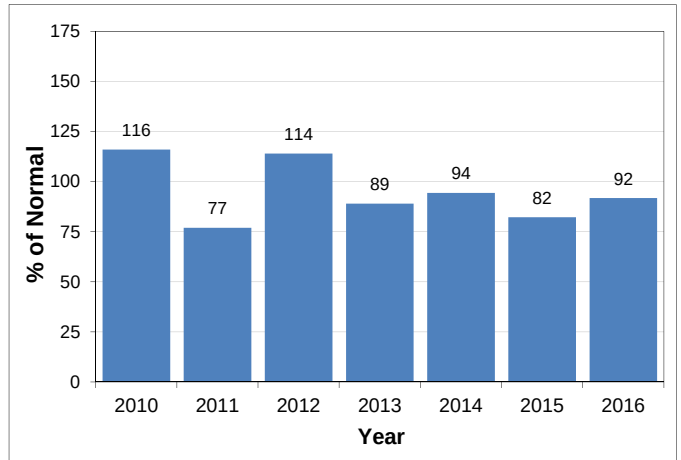
Upper Fraser East



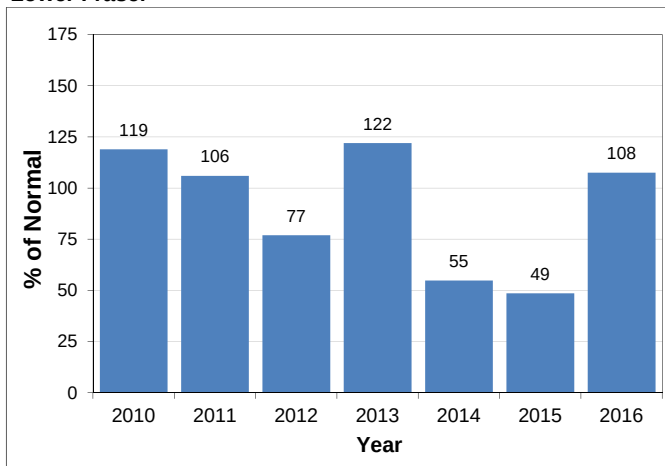
Nechako



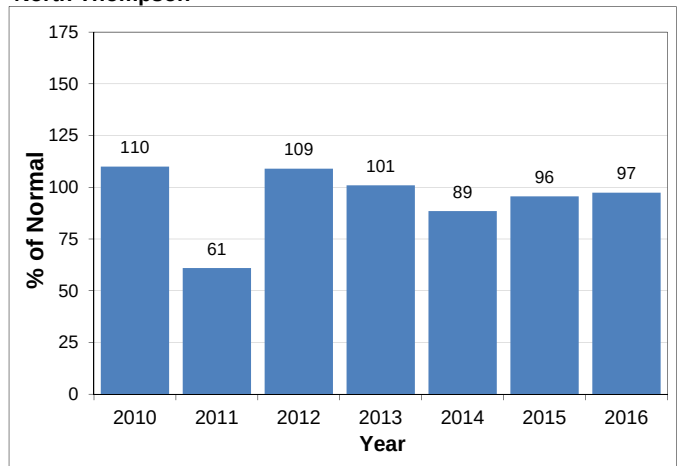
Middle Fraser



Lower Fraser

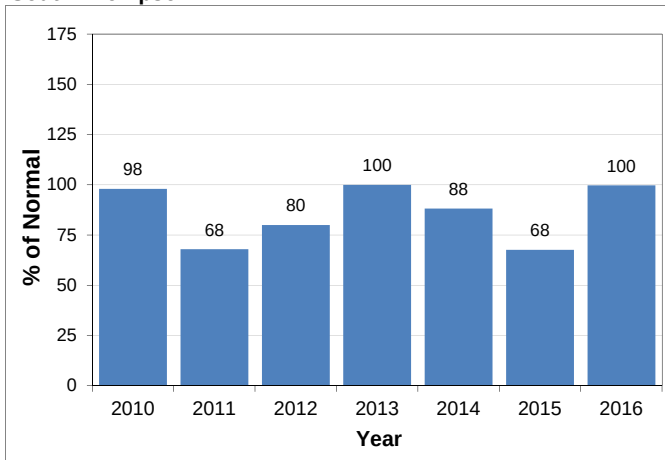


North Thompson

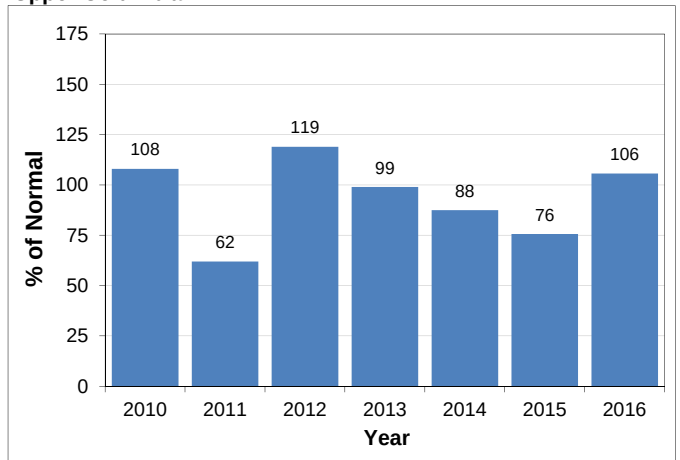


Snow Basin Index Graphs - January 1, 2016

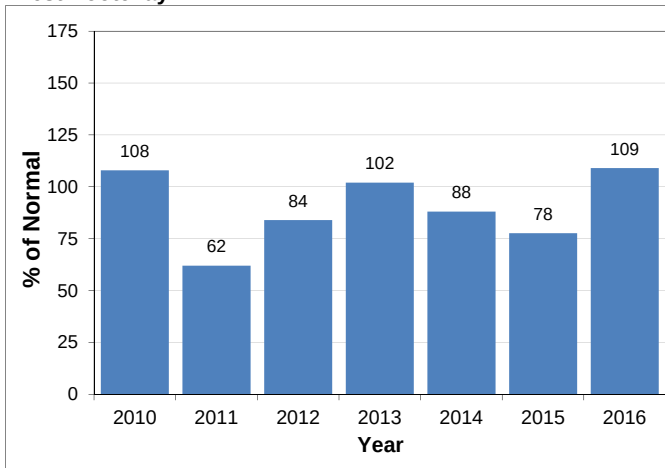
South Thompson



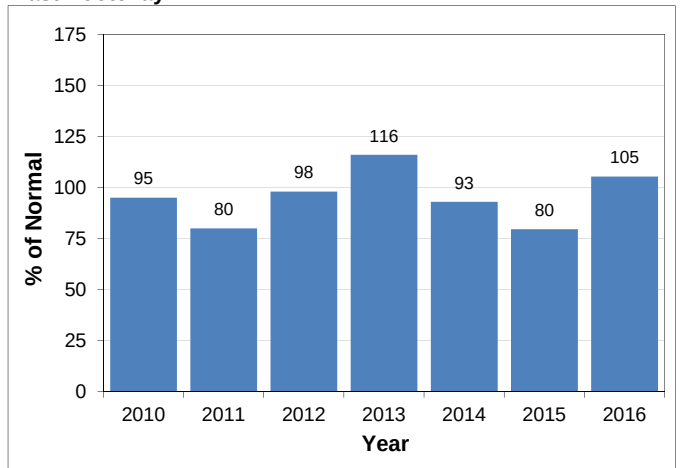
Upper Columbia



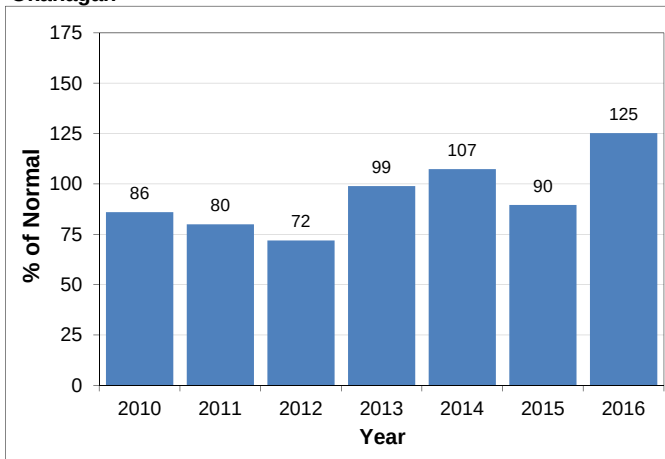
West Kootenay



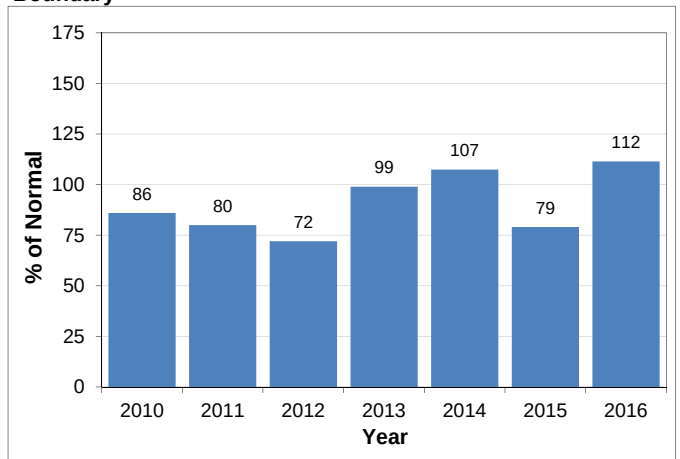
East Kootenay



Okanagan

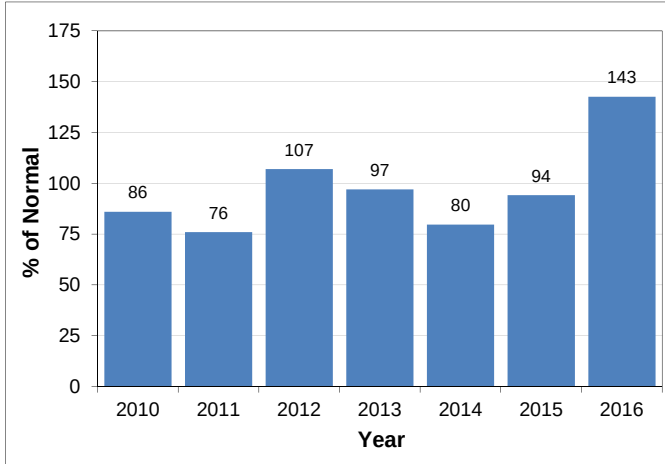


Boundary

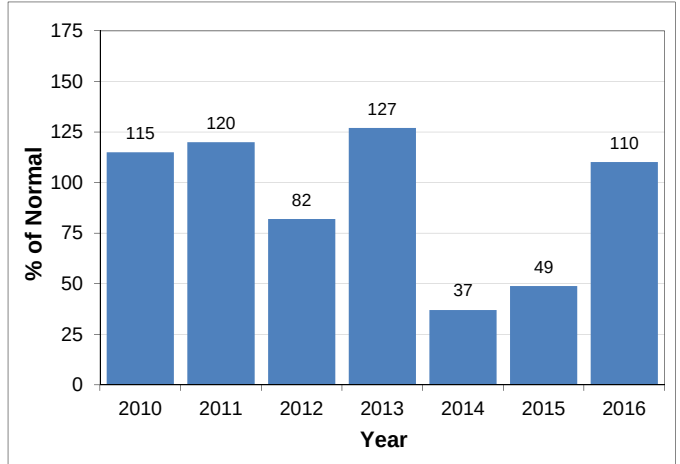


Snow Basin Index Graphs - January 1, 2016

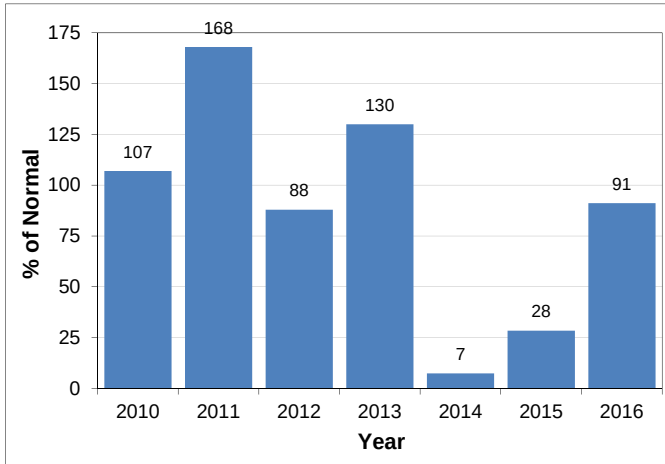
Similkameen



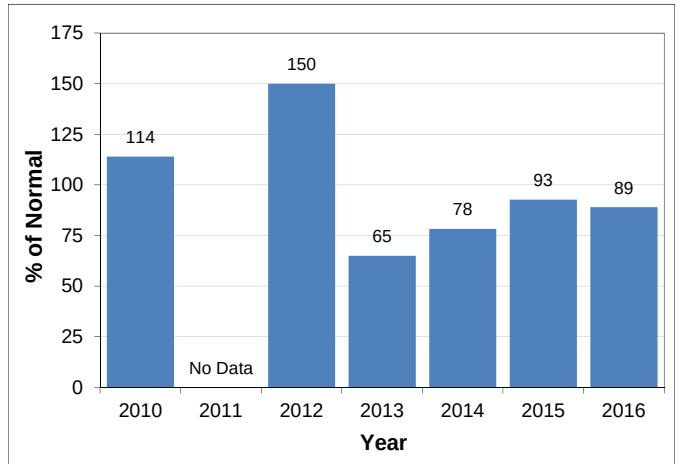
South Coast



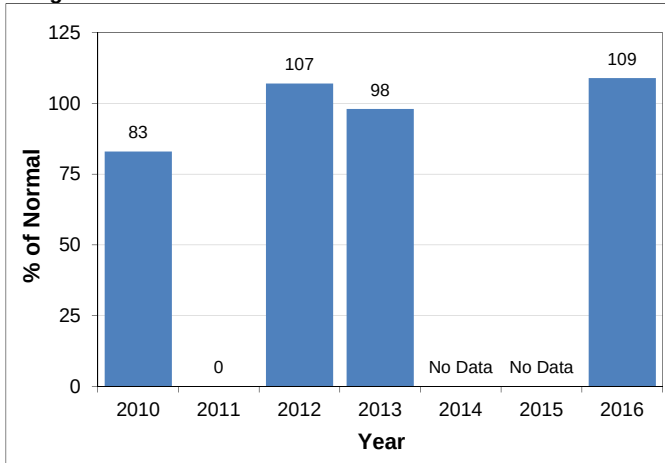
Vancouver Island



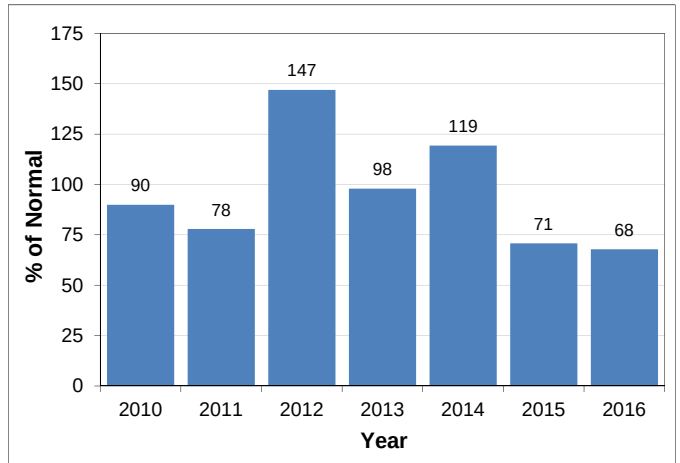
Central Coast



Skagit

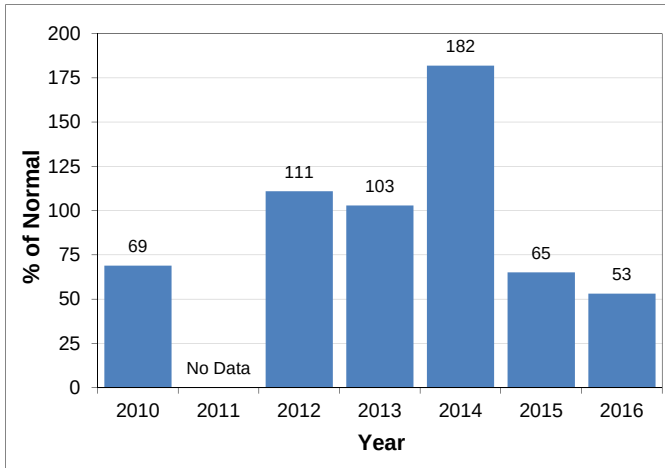


Peace

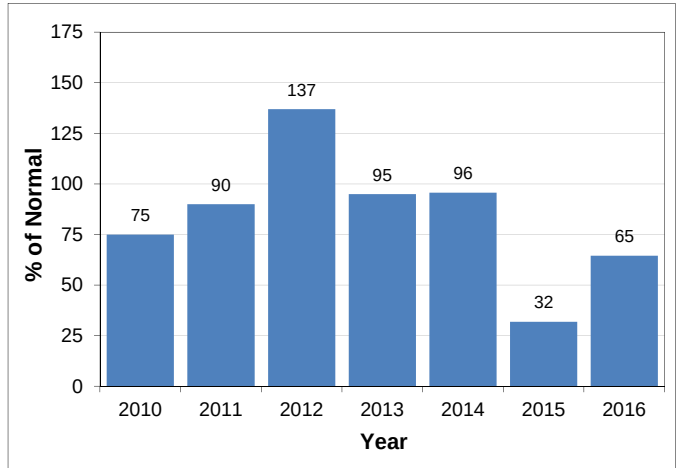


Snow Basin Index Graphs - January 1, 2016

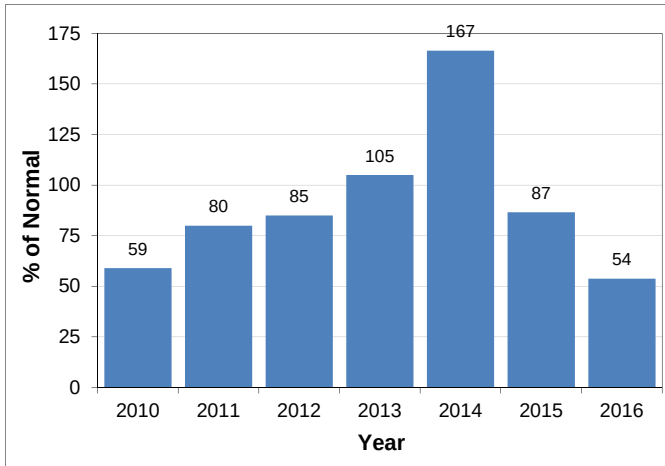
Stikine



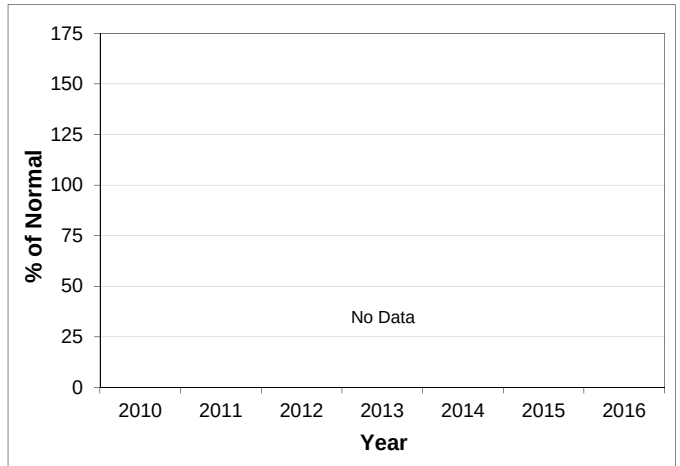
Skeena-Nass



Liard



Northwest



Snow Survey and Water Supply Bulletin – February 1st, 2016

The February 1st snow survey is now complete. Data from 118 snow courses and 56 automated snow stations around the province and climate data from Environment Canada have been used to form the basis for the following report¹.

Weather

Weather through January was mixed, with dry periods, particularly in the beginning of the month, interspersed between more active storm cycles in the second half of the month. Overall, January temperatures were above normal across the province, with daily minimum temperatures being 3-5°C above normal for many areas in south-east, central and northern BC. Temperatures in south-west BC were closer to normal, or slightly above normal.

January precipitation patterns have also varied across the province. South-west BC experienced near-normal to below-normal precipitation. Much of the rest of southern BC, including the southern Interior, Okanagan, Kootenay and Columbia, experienced above normal January precipitation. Central and northern BC experienced below to well-below normal precipitation.

Snowpack

Snow basin indices range from a low of 56% in the Stikine to a high of 122% in the Okanagan (Table 1). In general, most of the province has near normal or slightly below normal (80-110%) snow packs for February 1st, 2016, with a provincial average of 91% from all survey locations. A strong south to north gradient of snow pack levels exists, with normal or above normal snow pack in southern BC, lower than normal snow packs beginning in central BC, and extending to well below normal conditions in the north (Figure 1). Snow packs are below normal (70-80%) in the Upper Fraser West, Upper Fraser East, Nechako and Central Coast basins, and well below normal (<70%) in the Peace, Skeena-Nass, Stikine, and Liard basins. Above normal snow pack (>110%) is present in the Okanagan and Boundary.

Table 1: BC Snow Basin Indices – February 1, 2016

Basin	% of Normal	Basin	% of Normal
Upper Fraser West	79	Boundary	114
Upper Fraser East	70	Similkameen	103
Nechako	80	South Coast	93
Middle Fraser	94	Vancouver Island	85
Lower Fraser	92	Central Coast	80
North Thompson	105	Skagit	64
South Thompson	102	Peace	66
Upper Columbia	102	Skeena-Nass	62
West Kootenay	101	Stikine	56
East Kootenay	99	Liard	64
Okanagan	122	Northwest	NO DATA

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 – February 1st, 2016

Outlook

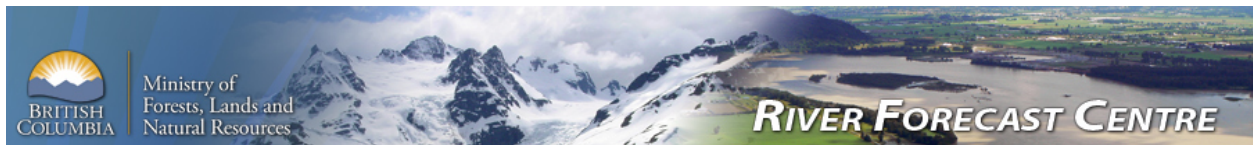
Fall and early-winter has seen the dissipation of warm water in the northern Pacific Ocean (i.e. the “Blob”) which has been present over the past two winter seasons, and was likely the key driver in the very warm winters and extremely low snow packs that occurred in southern BC in 2014-15. Strong El Niño conditions that developed over the equatorial Pacific regions over the past few months have likely peaked, and are now declining. The Climate Prediction Centre (CPC) at the U.S. National Weather Service/NOAA is forecasting a high likelihood of El Niño conditions persisting through until late-spring or early summer 2016.

In general, BC experiences warmer than normal winter and early-spring temperatures during strong El Niño events. Precipitation during historic El Niño events has been highly variable, with no strong trends across BC. Snow packs during El Niño events tend to be slightly below normal across BC, however there has been significant historic variability and regional variation to this general trend. The effects of El Niño tend to be more pronounced during the mid- to late-winter and into spring. Snow and weather conditions so far this season have been typical for an El Niño year, with the exception of northern BC, which is experiencing lower snow pack than is typical. In southern BC, snow packs are much better developed than the extremely low conditions that were experienced last year.

Seasonal forecasts from Environment Canada are indicating a high likelihood of above-normal temperatures across British Columbia over the February to April period, and an increased chance of warmer than normal temperatures through the extended forecast period into the summer months. Seasonal forecasts from NOAA are suggesting a more southern path for the Pacific jet stream through the February-April period, with increased precipitation for California, and decreased precipitation for British Columbia and the Pacific Northwest. Seasonal precipitation forecasts tend to have much lower forecast skill than seasonal temperature forecasts, and therefore should be used with caution.

Seasonal volume runoff forecasts (see below) are near normal for most basins across the province. Below normal seasonal runoff is forecast in the Kalamalka-Wood basin, and well above normal in the Nicola River and Similkameen River systems.

By early February, nearly two-thirds of the annual BC snowpack has typically accumulated. At this stage in the season, there are two emerging snow pack trends of note. First is the higher than normal snow packs that are being observed in the Okanagan which are trending towards the potential for elevated seasonal flood risk. Localized areas with high snow pack, such as locations in the Nicola River system, may also be following this trend. The second trend is in well below normal snow packs in northern BC (Peace, Skeena, Stikine, Liard and to a lesser extent Upper Fraser basins). With these low snow packs, combined with the increased likelihood of a warmer than normal spring melt season, there is an increased chance of below normal stream flow, particularly in the late-spring and into summer.



Snow Survey and Water Supply Bulletin – February 1st, 2016

For both spring flood risk and summer low flows, snow pack is just one of the important elements that determine whether or not extreme conditions will emerge. Weather, through the remaining portion of the snow accumulation season, the melt season, and into the summer, is also a key driver on whether or not flooding or low streamflows will occur.

The River Forecast Centre will continue to monitor snow pack conditions and will provide an updated seasonal flood risk and stream flow forecast in the March 1st 2016 bulletin, which is scheduled for release on March 8th.

BC River Forecast Centre
February 9, 2016

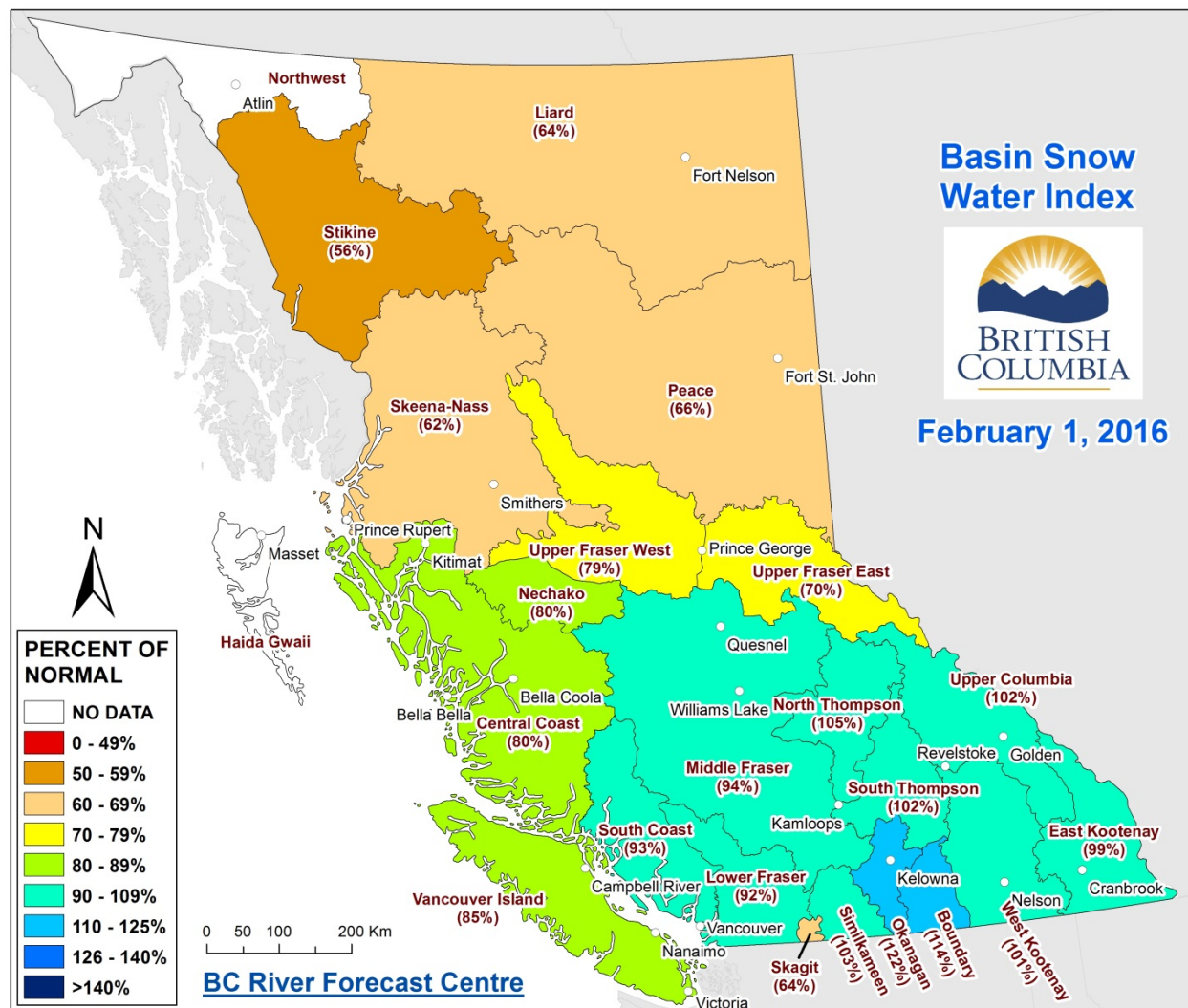


Ministry of
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Natural Resources

RIVER FORECAST CENTRE

Snow Survey and Water Supply Bulletin – February 1st, 2016

Figure 1: Basin Snow Water Index – February 1st, 2016



2016 Automated Snow Pillow/Manual Snow Survey Data				February					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1A01P	YELLOWHEAD LAKE	Upper Fraser East	1860	2016-02-01	108	322		81%	337	359	233	596	396	19
1A02P	MC BRIDE UPPER	Upper Fraser East	1580	2016-02-01	108	248		81%	368	394	195	522	306	24
1A03P	BARKERVILLE	Upper Fraser East	1520	2016-02-01	70	173		81%	245	285	116	368	214	41
1A05	LONGWORTH (UPPER)	Upper Fraser East	1693	2016-01-30	132	426		76%		1042	236	1042	559	44
1A06A	HANSARD	Upper Fraser East	622	NS	NS	NS	NS				112	326	180	19
1A10	PRINCE GEORGE A	Upper Fraser East	684	2016-01-27	42	106		110%	124	147	0	224	96	54
1A11	PACIFIC LAKE	Upper Fraser East	756	2016-01-30	79	221		51%	307	679	179	679	430	48
1A12	KAZA LAKE	Upper Fraser West	1247	2016-01-29	75	161		67%	217	266	125	440	240	48
1A12P	KAZA LAKE	Upper Fraser East	1248	2016-02-01	1	164								0
1A14P	HEDRICK LAKE	Upper Fraser East	1100	2016-02-01	125	282		54%	414	911	356	934	524	16
1A15	KNUDSEN LAKE	Upper Fraser East	1598	2016-01-30	117	362		65%	523	818	284	899	554	45
1A16	BURNS LAKE	Upper Fraser West	820	2016-02-03	33	70		63%	156	86	44	232	111	46
1A17P	REVOLUTION CREEK	Upper Fraser East	1690	2016-02-01	190	461		80%	532	871	295	1042	574	31
1A19P	DOME MOUNTAIN	Upper Fraser East	1820	2016-02-01	132	378		75%	519	699	364	853	501	10
1A23	BIRD CREEK	Upper Fraser West	1196	2016-02-03	51	108		105%	220	104	56	220	103	26
1B01	MOUNT WELLS	Nechako	1489	2016-02-02	102	267		73%	466	344	188	606	365	32
1B01P	MOUNT WELLS	Nechako	1490	2016-02-01	NA	290	E	71%	484	386	210	656	411	24
1B02	TAHTSA LAKE	Nechako	1319	2016-02-01	189	612		72%	773	585	508	1442	853	64
1B02P	TAHTSA LAKE	Nechako	1300	2016-02-01	NA	789		85%	730.4	630	564	1532	929	24
1B05	SKINS LAKE	Nechako	877	2016-02-01	41	89		107%	146	55	35	224	83	49
1B06	MOUNT SWANNELL	Nechako	1596	2016-02-03	73	178		84%	353	210	88	353	211	27
1B07	NUTLI LAKE	Nechako	1502	2016-02-02	101	262		69%	404	262	218	729	378	25
1B08P	MOUNT PONDOSY	Nechako	1400	2016-02-01	NA	460		80%	689	273	273	877	578	24
1C01	BROOKMERE	Middle Fraser	994	NS	NS	NS	NS				41	297	142	45
1C05	MCGILLIVRAY PASS	Middle Fraser	1715	2016-01-25	101	280		71%	269	205	150	645	397	64
1C06	PAVILION	Middle Fraser	1209	NS	NS	NS	NS		40		0	130	49	37
1C08	NAZKO	Middle Fraser	1029	2016-02-05	27	51		89%	103	100	6	132	57	39
1C09A	HIGHLAND VALLEY	Middle Fraser	1547	NS	NS	NS	NS				20	188	67	25
1C12P	GREEN MOUNTAIN	Middle Fraser	1780	2016-02-01	NA	603	E	97%	466	278	278	985	620	22
1C13A	HORSEFLY MOUNTAIN	Middle Fraser	1612	NS	NS	NS	NS				204	475	310	11
1C14	BRALORNE	Middle Fraser	1382	2016-01-25	51	190		152%	73	84	0	338	125	45
1C17	MOUNT TIMOTHY	Middle Fraser	1632	2016-02-01	94	244		110%	175	315	92	384	221	54
1C18P	MISSION RIDGE	Middle Fraser	1850	2016-02-01	NA	300	E	75%	237	290	185	794	398	46
1C19	GNAWED MOUNTAIN	Middle Fraser	1617	NS	NS	NS	NS				18	198	76	24
1C20P	BOSS MOUNTAIN MINE	Middle Fraser	1460	2016-02-01	146	414		101%	388	383	281	611	411	22
1C21	BIG CREEK	Middle Fraser	1130	2016-01-29	27	54		110%	80	72	0	94	49	44
1C22	PUNTZI MOUNTAIN	Middle Fraser	939	2016-01-31	26	44		85%	84	64	0	126	52	45
1C23	PENFOLD CREEK	Middle Fraser	1687	NS	NS	NS	NS				663	663	663	2
1C25	LAC LE JEUNE (UPPER)	Middle Fraser	1471	2016-01-29	58	154		157%	86	73	13	177	98	43
1C28	DUFFEY LAKE	Middle Fraser	1253	NS	NS	NS	NS						0	0

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1C29	SHOVELNOSE MOUNTAIN	Middle Fraser	1456	2016-01-30	64	163		96%	146	121	48	307	169	35
1C32	DEADMAN RIVER	Middle Fraser	1463	NS	NS	NS	NS				50	130	81	7
1C33A	GRANITE MOUNTAIN	Middle Fraser	1175	2016-02-01	53	140		101%	157	173	97	175	139	10
1C37	BRALORNE(UPPER)	Middle Fraser	1980	N	N	N	N		372	250	178	724	434	21
1C38	DOWNTON LAKE (UPPER)	Middle Fraser	1884	2016-02-02	203	650		101%	564	208	208	980	646	21
1C38P	DOWNTON / LAJOIE UPPER	Middle Fraser	1829	2016-02-01	NA	616								0
1C39	BRIDGE GLACIER (LOWER)	Middle Fraser	1393	2016-01-25	157	422		95%	346	164	112	688	444	21
1C40	TYAUGHTON CREEK (NORTH)	Middle Fraser	1946	2016-01-25	86	230		69%	254	224	128	654	331	20
1C40P	NORTH TYAUGHTON	Middle Fraser	1969	2016-02-01	NA	221								0
1C41P	YANKS PEAK, EAST	Middle Fraser	1670	2016-02-01	154	493		87%	591	787	312	803	565	19
1C42	CAVERHILL LAKE NEW	Middle Fraser	1400	NS	NS	NS	NS							0
1D06P	TENQUILLE LAKE	Lower Fraser	1680	2016-02-01	385	735		104%	584	344	344	1092	708	15
1D08	STAVE LAKE	Lower Fraser	1211	2016-02-01	208	715	A	81%	261	418	163	2010	881	47
1D09	WAHLEACH LAKE	Lower Fraser	1395	2016-02-02	90	271		74%	38	243	33	665	364	49
1D09P	WAHLEACH LAKE	Lower Fraser	1400	2016-02-01	NA	401		62%	246	325	246	1061	644	24
1D10	NAHATLATCH RIVER	Lower Fraser	1530	2016-02-02	215	794	A	95%	387		262	1359	833	44
1D16	DICKSON LAKE	Lower Fraser	1147	2016-02-02	158	576		63%	122	472	122	1538	918	23
1D17P	CHILLIWACK RIVER	Lower Fraser	1600	2016-02-01	245	991		100%	550	1001	368	1659	992	24
1D18	DISAPPOINTMENT LAKE	Lower Fraser	1050	2016-02-02	213	794								
1D19P	SPUZZUM CREEK	Lower Fraser	1180	2016-02-01	201	832		77%	328	544	300	1902	1074	17
1E01B	BLUE RIVER	North Thompson	673	2016-01-28	83	230		94%	216	332	98	380	245	31
1E02P	MOUNT COOK	North Thompson	1550	2016-02-01	272	942		106%	840	784	713	1098	890	16
1E03A	TROPHY MOUNTAIN	North Thompson	1907	NS	NS	NS	NS						0	0
1E05	KNOUFF LAKE	North Thompson	1189	2016-02-02	44	105		96%	122	123	38	229	109	60
1E07	ADAMS RIVER	North Thompson	1769	2016-01-28	164	580		127%	291	468	285	654	457	35
1E08P	AZURE RIVER	North Thompson	1620	2016-02-01	200	730		90%	801	607	506	1043	814	19
1E10P	KOSTAL LAKE	North Thompson	1770	2016-02-01	288	593		97%	567	572	417	790	611	31
1E14P	COOK CREEK	North Thompson	1280	2016-02-01	136	NA								0
1F01A	ABERDEEN LAKE	South Thompson	1262	2016-01-27	65	151		141%	180	123	48	193	107	59
1F02	ANGLEMONT	South Thompson	1168	2016-02-01	80	217	A	80%	254	346	130	483	272	57
1F03P	PARK MOUNTAIN	North Thompson	1890	2016-02-01	162	532		90%	537	607	331	867	593	31
1F04	ENDERBY	South Thompson	1948	N	N	N	N		761	707	348	932	688	51
1F06P	CELISTA MOUNTAIN	North Thompson	1551	2016-02-01	206	679		106%	584	533	533	788	643	11
2A01A	CANOE RIVER	Upper Columbia	866	2016-02-01	44	128		173%	124	120	17	140	74	41
2A02	GLACIER	Upper Columbia	1249	2016-01-30	150	467		100%	419	480	241	828	468	75
2A03A	FIELD	Upper Columbia	1310	2016-01-28	62	119		97%	144	130	46	233	123	76
2A06P	MOUNT REVELSTOKE	Upper Columbia	1830	2016-02-01	NA	810		99%	687	677	464	1190	819	23
2A07	KICKING HORSE	Upper Columbia	1648	2016-01-28	85	178		78%	201	222	102	384	227	69
2A11	BEAVERFOOT	Upper Columbia	1924	2016-02-01	70	170		120%	142	148	78	244	142	66
2A14	MOUNT ABBOT	Upper Columbia	2031	2016-01-31	240	810		99%	684	685	396	1209	822	57

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2A16	GOLDSTREAM	Upper Columbia	1914	2016-01-31	228	736		90%	816	709	460	1136	816	49
2A17	FIDELITY MOUNTAIN	Upper Columbia	1852	2016-01-30	230	733		86%	705	736	430	1376	854	53
2A18	KEYSTONE CREEK	Upper Columbia	1839	2016-01-31	169	534		97%	548	396	290	866	548	49
2A18P	KEYSTONE CREEK	Upper Columbia	1850	2016-02-01	NA	638								0
2A19	VERMONT CREEK	Upper Columbia	1533	2016-02-01	122	350		122%	216	229	102	574	287	49
2A21P	MOLSON CREEK	Upper Columbia	1980	2016-02-01	NA	632		83%	604	645	417	1155	759	35
2A22	SUNBEAM LAKE	Upper Columbia	2066	2016-01-31	175	541		86%	613	551	348	886	629	49
2A23	BUSH RIVER	Upper Columbia	1982	N	N	N	N		528	418	292	902	577	48
2A25	KIRBYVILLE LAKE	Upper Columbia	1739	2016-01-31	249	844		102%	843	639	381	1472	827	44
2A27	DOWNIE SLIDE (LOWER)	Upper Columbia	964	2016-01-31	161	480		96%		480	256	740	501	39
2A29	DOWNIE SLIDE (UPPER)	Upper Columbia	1628	N	N	N	N			726	466	1422	965	38
2A30P	COLPITTI CREEK	Upper Columbia	2131	2016-02-01	NA	515								0
2A31P	CARIBOU CREEK UPPER	Upper Columbia	2201	2016-02-01	NA	619								0
2A32P	WILDCAT CREEK	Upper Columbia	2122	2016-02-01	NA	334								0
2B02A	FARRON	West Kootenay	1229	2016-02-02	103	275		126%	174	182	63	346	219	43
2B05	WHATSHAN (UPPER)	West Kootenay	1476	2016-02-02	152	428	A	90%		445	249	759	475	47
2B06P	BARNES CREEK	Lower Columbia	1620	2016-02-01	NA	377		102%	348	366	195	566	369	23
2B07	KOCH CREEK	West Kootenay	1813	2016-02-02	183	569		114%			203	708	497	55
2B08P	ST. LEON CREEK	Lower Columbia	1800	2016-02-01	NA	738		96%	692	653	311	1130	767	23
2B09	RECORD MOUNTAIN	West Kootenay	1906	2016-02-02	209	585		122%	306	236	117	802	481	40
2C01	SINCLAIR PASS	East Kootenay	1374	NS	NS	NS	NS				33	208	77	44
2C04	SULLIVAN MINE	East Kootenay	1580	2016-01-28	80	192		103%	108	188	46	397	187	70
2C07	FERNIE EAST	East Kootenay	1213	2016-01-29	60	156		74%	166	184	51	467	212	64
2C09Q	MORRISSEY RIDGE	East Kootenay	1800	2016-02-01	NA	439		95%	280	399	173	886	463	36
2C10P	MOYIE MOUNTAIN	East Kootenay	1930	2016-02-01	89	285		100%	192	286	104	518	286	37
2C11	KIMBERLEY (UPPER) VOR	East Kootenay	2148	NS	NS	NS	NS				114	571	290	23
2C12	KIMBERLEY (MIDDLE) VOR	East Kootenay	1692	NS	NS	NS	NS				81	356	174	23
2C14P	FLOE LAKE	East Kootenay	2090	2016-02-01	NA	434		92%	409	408	221	746	471	23
2C15	MOUNT ASSINIBOINE	East Kootenay	2230	2016-02-01	118	325		93%	371		140	592	351	47
2C16	MOUNT JOFFRE	East Kootenay	1763	2016-02-01	94	257		107%	215	223	96	439	240	46
2C17	THUNDER CREEK	East Kootenay	2062	2016-02-01	87	232		133%	137	193	69	335	175	45
2C20	VERMILLION RIVER NO. 3	East Kootenay	1612	NS	NS	NS	NS				130	363	188	15
2D02	FERGUSON	West Kootenay	929	2016-01-26	170	440		108%	397	360	237	616	407	43
2D03	SANDON	West Kootenay	1072	NS	NS	NS	NS				328	328	0	2
2D04	NELSON	West Kootenay	952	2016-01-27	73	208		79%	167	160	79	508	264	78
2D05	GRAY CREEK (LOWER)	West Kootenay	1558	2016-02-03	122	310	A	102%	231	345	127	511	304	67
2D06	CHAR CREEK	West Kootenay	1290	2016-01-27	119	317		85%	222	256	117	650	371	50
2D07A	DUNCAN LAKE NO. 2	West Kootenay	662	2016-01-30	25	68		52%	140	104	60	283	132	25
2D08P	EAST CREEK	West Kootenay	2030	2016-02-01	NA	692		112%	522	471	274	1012	616	35
2D09	MOUNT TEMPLEMAN	West Kootenay	1879	N	N	N	N			528	409	1115	701	48

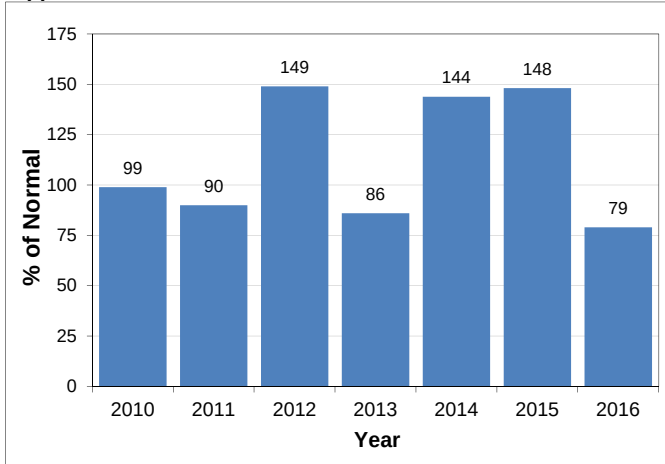
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2D10	GRAY CREEK (UPPER)	West Kootenay	1926	2016-02-03	163	514		103%	411	500	268	792	497	47
2D14P	REDFISH CREEK	West Kootenay	2104	2016-02-01	246	990		121%	869	713	667	1067	821	14
2E01	MONASHEE PASS	Boundary	1387	2016-02-02	94	238		101%		292	122	364	236	56
2E02	CARMI	Boundary	1254	NS	NS	NS	NS				51	196	97	28
2E03	BIG WHITE MOUNTAIN	Boundary	1672	2016-02-01	157	379		118%	280	301	178	483	322	48
2E07P	GRANO CREEK	Kettle	1860	2016-02-01	145	414		125%	274	156	156	476	330	18
2F01A	TROUT CREEK (WEST)	Okanagan	1430	2016-01-27	54	153		104%	145	184	145	212	147	6
2F02	SUMMERLAND RESERVOIR	Okanagan	1304	2016-01-27	80	196		126%	189	120	65	307	156	52
2F03	MC CULLOCH	Okanagan	1266	2016-01-29	69	91		78%	144	166	63	196	117	79
2F04	GRAYSTOKE LAKE	Okanagan	1818	2016-02-05	100	268		122%		308	128	324	219	16
2F05P	MISSION CREEK	Okanagan	1780	2016-02-01	124	353		110%	287	403	164	503	320	46
2F07	POSTILL LAKE	Okanagan	1358	2016-02-01	77	174		126%	140	122	73	243	138	66
2F08	GRAYBACK RESERVOIR	Okanagan	1548	2016-01-30	75	190		121%	175	195	60	269	157	44
2F09	WHITEROCKS MOUNTAIN	Okanagan	1789	2016-01-31	175	539		147%	275	248	135	693	366	44
2F10P	SILVER STAR MOUNTAIN	Okanagan	1839	2016-02-01	186	483								0
2F11	ISINTOK LAKE	Okanagan	1651	2016-01-28	53	110		101%	127	80	26	307	109	50
2F12	MOUNT KOBAU	Okanagan	1817	2016-01-30	103	295		151%	181	84	43	400	196	49
2F13	ESPERON CR (UPPER)	Okanagan	1634	NS	NS	NS	NS				156	457	156	5
2F14	ESPERON CR (MIDDLE)	Okanagan	1440	NS	NS	NS	NS				146	399	208	11
2F18P	BRENDA MINE	Okanagan	1460	2016-02-01	NA	312		125%	207	171	148	368	249	23
2F19	OYAMA LAKE	Okanagan	1365	2016-01-29	67	131	U	110%	90	44	31	193	119	47
2F20	VASEUX CREEK	Okanagan	1403	2016-01-31	49	140		161%	104	110	44	208	87	28
2F21	BOULEAU LAKE	Okanagan	1405	NS	NS	NS	NS				168	396	216	9
2F23	MACDONALD LAKE	Okanagan	1742	2016-01-29	133	408	U	149%			132	411	273	17
2F24	ISLAHT LAKE	Okanagan	1492	2016-01-29	119	180		80%	182	123	123	364	225	33
2F25	POSTILL LAKE (UPPER)	Okanagan	1500	N	N	N	N		139	153	120	160		4
2G03P	BLACKWALL PEAK	Similkameen	1940	2016-02-01	193	624		113%	471	466	158	1076	553	48
2G04	LOST HORSE MOUNTAIN	Similkameen	1988	2016-01-27	76	183		132%	176	150	70	335	139	55
2G05	MISSEZULA MOUNTAIN	Similkameen	1602	2016-01-27	64	149		103%	131	133	60	284	144	54
2G06	HAMILTON HILL	Similkameen	1477	2016-01-28	59	144		68%	174	106	91	411	213	56
3A01	GROUSE MOUNTAIN	South Coast	1126	2016-01-28	147	648		85%	90	250	50	1530	761	66
3A02	POWELL RIVER (UPPER)	South Coast	1002	NS	NS	NS	NS						0	0
3A05	POWELL RIVER (LOWER)	South Coast	882	NS	NS	NS	NS				620	620	620	2
3A09	PALISADE LAKE	South Coast	898	NS	NS	NS	NS				318	914	616	3
3A10	DOG MOUNTAIN	South Coast	1007	2016-01-28	124	598		84%	77	280	77	1243	715	32
3A19	ORCHID LAKE	South Coast	1178	2016-02-02	260	1000		90%	273	470	273	1855	1114	38
3A20	CALLAGHAN CREEK	South Coast	1009	2016-01-31	166	570		105%	160	234	50	1040	542	33
3A22P	NOSTETUKO RIVER	South Coast	1500	2016-02-01	100	393		107%	264	160	120	780	368	27
3A24P	UPPER MOSLEY CREEK	South Coast	1650	2016-02-01	62	190		79%	237	162	106	509	242	27
3A25P	UPPER SQUAMISH RIVER	South Coast	1340	2016-02-01	226	1016		93%	566	503	503	1543	1087	26

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3B01	FORBIDDEN PLATEAU	Vancouver Island	1110	2016-02-01	224	944		102%	231	253	42	1640	922	62
3B02A	MT. COKELY	Vancouver Island	1267	NS	NS	NS	NS				234	1050	586	6
3B04	ELK RIVER	Vancouver Island	270	2016-02-01	0	0		0%	0	0	0	544	61	60
3B10	UPPER THELWOOD LAKE	Vancouver Island	1014	NS	NS	NS	NS				28	1534	285	23
3B13	HEATHER MOUNTAIN	Vancouver Island	1170	NS	NS	NS	NS				0	864	362	7
3B17P	WOLF RIVER	Vancouver Island	1490	2016-02-01	NA	803		94%	350	252	162	1383	858	34
3B18	WOLF RIVER (MIDDLE)	Vancouver Island	1050	2016-02-01	92	298		75%	41	0	0	742	400	45
3B19	WOLF RIVER (LOWER)	Vancouver Island	615	2016-02-01	58	208		85%	0	0	0	572	244	45
3B23P	JUMP CREEK	Vancouver Island	1160	2016-02-01	126	366		59%	0	113	0	1367	616	20
3B24P	HEATHER MOUNTAIN UPPER	Vancouver Island	1190	2016-02-01	156	859								0
3B25P	NORTH RD LAB	Vancouver Island	35	2016-02-01										0
3C07	WEDEENE RIVER SOUTH	Central Coast	196	NS	NS	NS	NS				105	497	304	13
3C08P	BURNT BRIDGE CREEK	North Coast	1330	2016-02-01	137	460		80%	663	526	248	1124	577	18
3D01C	SUMALLO RIVER WEST	Skagit	801	2016-01-26	26	80		50%	29	57	0	368	161	24
3D02	LIGHTNING LAKE	Skagit	1254	NS	NS	NS	NS				67	242	154	4
3D03A	KLESILKWA	Skagit	1134	2016-02-01	47	140		78%	10	60	0	508	180	68
4A02P	PINE PASS	Peace	1400	2016-02-01	2	529		71%	555	839	469	1250	745	27
4A03	WARE (UPPER)	Peace	1563	2016-01-28	58	114		62%	152	166	108	289	184	53
4A04	WARE (LOWER)	Peace	969	2016-01-28	62	122		85%	146	186	63	286	143	53
4A05	GERMANSEN (UPPER)	Peace	1489	2016-01-29	77	189		80%	252	235	140	371	237	49
4A06	TUTIZZI LAKE	Peace	1043	2016-01-29	70	122		66%	174	192	109	348	186	48
4A07	LADY LAURIER LAKE	Peace	1446	2016-01-28	93	224		61%	325	343	226	679	369	48
4A09	PULPIT LAKE	Peace	1331	2016-01-28	98	231		74%	263	361	190	530	312	48
4A09P	PULPIT LAKE	Peace	1310	2016-02-01	1	182		56%	274	350	232	405	324	26
4A10	FREDRICKSON LAKE	Peace	1323	2016-01-28	62	105		59%	196	233	110	309	179	48
4A11	TRYGVE LAKE	Peace	1409	2016-01-28	75	160		61%		224	183	434	264	48
4A12	TSAYDAYCHI LAKE	Peace	1173	2016-01-29	91	217		78%		271	146	507	277	49
4A13	PHILIP LAKE	Peace	1013	2016-01-29	73	173		87%		166	118	355	199	49
4A16	MORFEE MOUNTAIN	Peace	1427	2016-01-29	134	385		64%		736	323	952	597	48
4A18	MOUNT SHEBA	Peace	1480	2016-01-30	140	423		75%		759	299	932	566	47
4A20	MONKMAN CREEK	Peace	1566	2016-01-30	82	220		59%		482	163	775	376	40
4A21	MOUNT STEARNS	Peace	1514	2016-01-28	29	46	A	45%		100	40	196	103	42
4A25	FORT ST. JOHN AIRPORT	Peace	692	2016-02-02	34	58		73%		132	22	154	80	41
4A30P	AIKEN LAKE	Peace	1040	2016-02-01	46	109	E	56%	172	194	116	330	193	31
4A31P	CRYING GIRL PRAIRIE	Peace	1358	2016-02-01	NA	100								0
4A33P	MUSKWA-KECHIKA	Peace	1196	2016-02-01	NA	23								0
4B01	KIDPRICE LAKE	Skeena-Nass	1415	2016-02-02	138	403		61%		512	420	1220	664	62
4B02	JOHANSON LAKE	Skeena-Nass	1480	2016-01-29	71	130		62%		214	115	355	211	48
4B03A	HUDSON BAY MTN	Skeena-Nass	1452	2016-02-02	83	210		58%		340	221	665	361	44
4B04	CHAPMAN LAKE	Skeena-Nass	1485	NS	NS	NS	NS						0	0

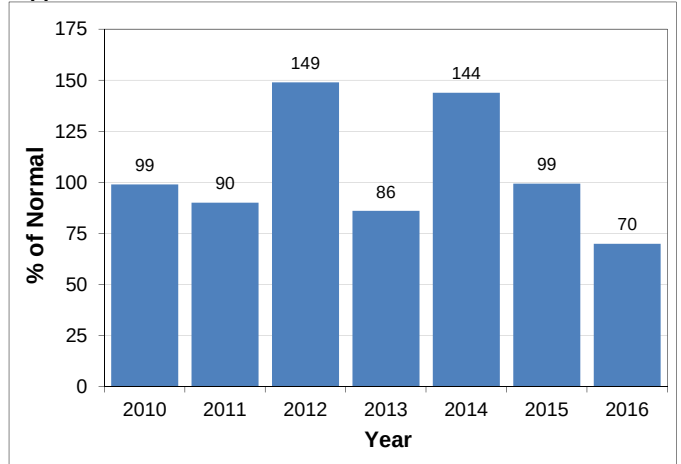
2016 Automated Snow Pillow/Manual Snow Survey Data				February					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
4B06	TACHEK CREEK	Skeena-Nass	1133	N	N	N	N			170	99	298	156	18
4B07	MCKENDRICK CREEK	Skeena-Nass	1048	NS	NS	NS	NS				264	264	0	1
4B08	MOUNT CRONIN	Skeena-Nass	1491	NS	NS	NS	NS						0	0
4B10	NINGUNSAW PASS	Skeena-Nass	647	N	N	N	N			245	171	603	312	40
4B11A	BEAR PASS	Skeena-Nass	437	N	N	N	N				192	821	455	29
4B13A	TERRACE AIRPORT	Skeena-Nass	219	2016-01-28	34	84		66%		18	0	330	128	35
4B14	EQUITY MINE	Skeena-Nass	1434	NS	NS	NS	NS				174	444	265	14
4B15	LU LAKE	Skeena-Nass	1296	NS	NS	NS	NS				134	352	214	14
4B15P	LU LAKE	Skeena/Nass	1300	2016-02-01	57	163		85%	322	214	90	351	192	18
4B16P	SHEDIN CREEK	Skeena/Nass	1480	2016-02-01	104	262		42%	382	499	382	878	617	20
4B17P	TSAI CREEK	Skeena/Nass	1360	2016-02-01	137	423		51%	769	561	561	1489	827	18
4B18P	CEDAR - KITEEN	Skeena/Nass	885	2016-02-01	77	233		48%	342	613	254	856	486	15
4C01	SIKANNI LAKE	Liard	1390	2016-01-28	61	106	A	55%		256	81	325	193	48
4C02	SUMMIT LAKE	Liard	1291	2016-02-01	30	61		67%			36	146	91	19
4C03	DEASE LAKE	Liard	805	N	N	N	N			218	36	218	101	50
4C05	FORT NELSON A	Liard	368	2016-02-01	25	54		71%		94	35	128	76	49
4C15	JADE CITY	Liard	943	2016-01-28	54	106		64%	144	260	102	260	165	13
4D01	TELEGRAPH CREEK	Stikine	490	NS	NS	NS	NS				51	244	110	21
4D02	ISKUT	Stikine	931	N	N	N	N			90	30	162	82	40
4D11P	KINASKAN LAKE	Stikine/Taku	1020	2016-02-01	53	NA			194		194	194	288	20
4E02B	ATLIN LAKE	Northwest	730	NS	NS	NS	NS							0
Code	Description													
A	Sampling problems were encountered													
B	Early or late sampling													
C	Early or late sampling w/problems encountered													
E	Estimate													
N	Scheduled, but not sampled													
NA	Not available													
NS	Not scheduled													
SD	Snow Depth													
SWE	Snow Water Equivalent													
T	Trace Amount													

Snow Basin Index Graphs - February 1, 2016

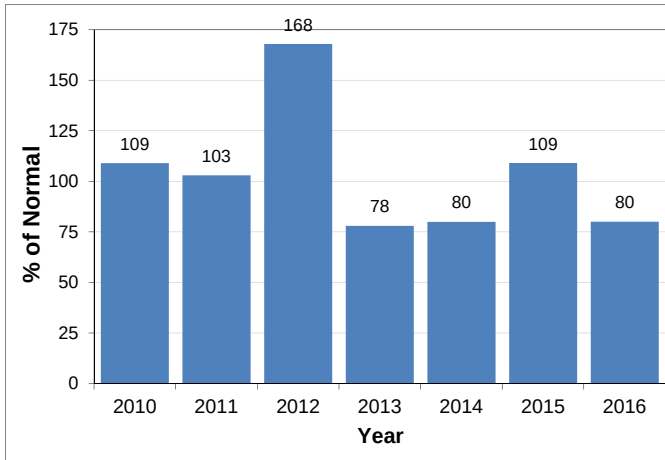
Upper Fraser West



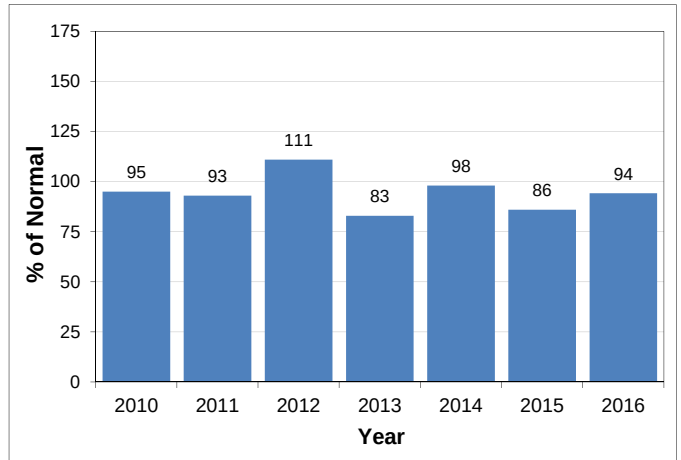
Upper Fraser East



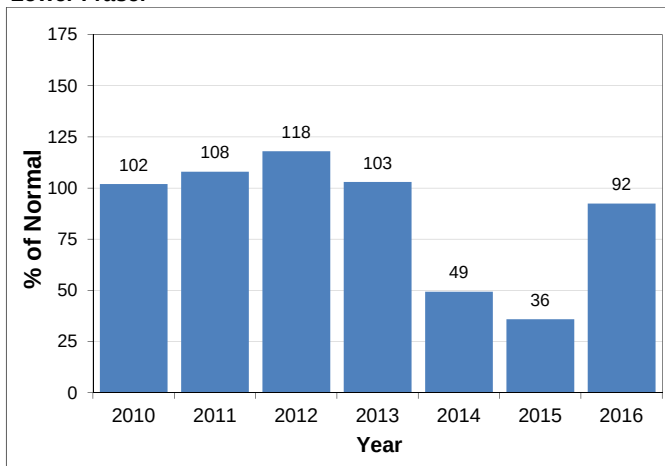
Nechako



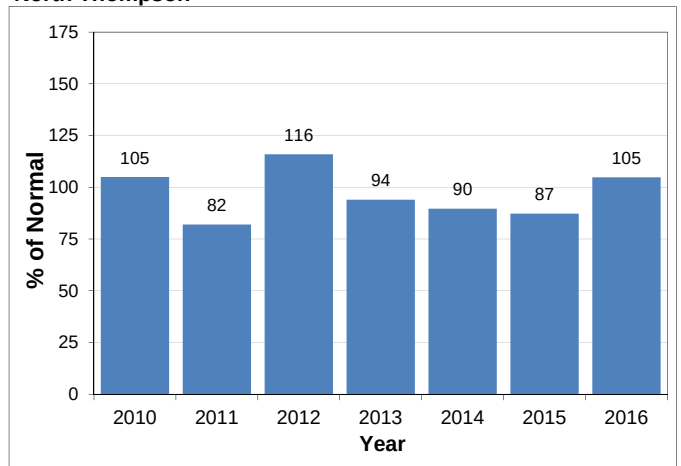
Middle Fraser



Lower Fraser

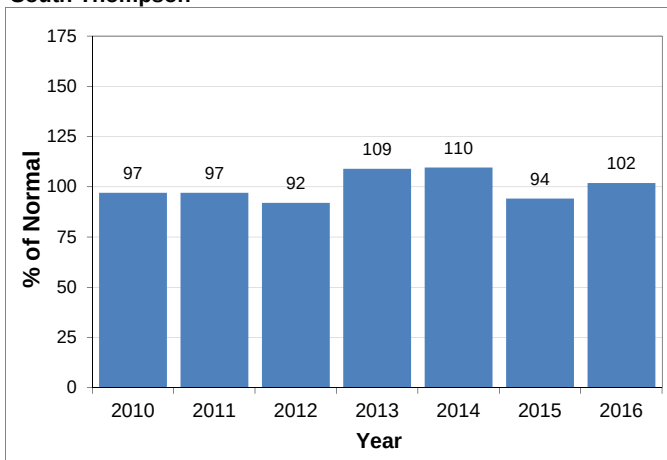


North Thompson

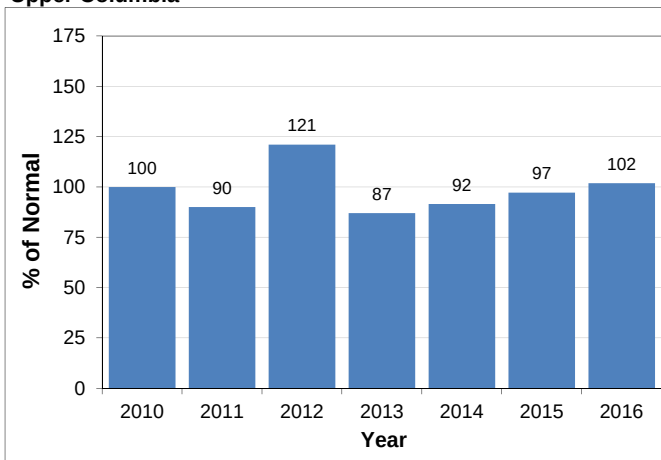


Snow Basin Index Graphs - February 1, 2016

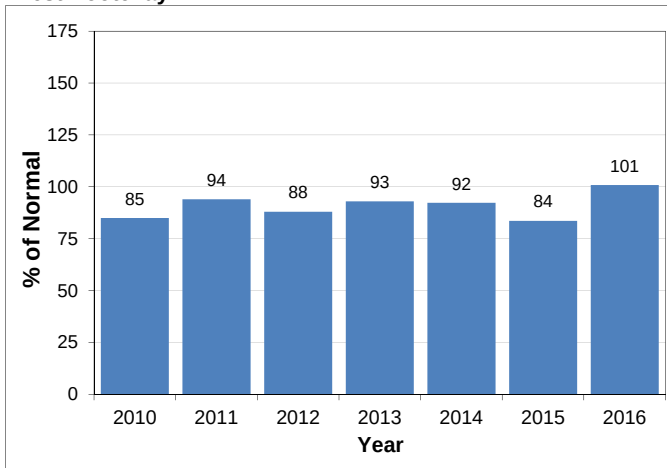
South Thompson



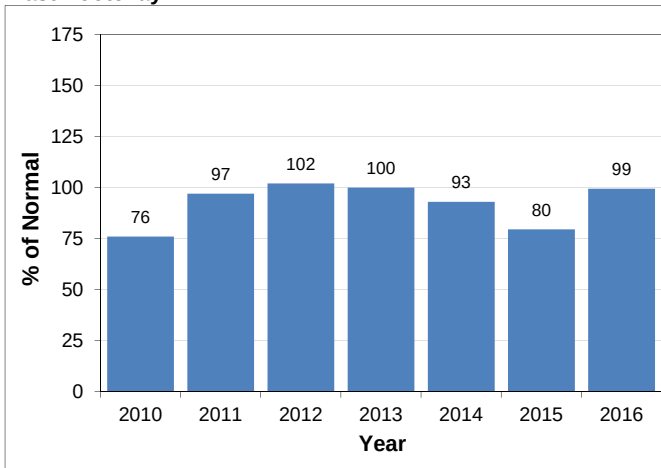
Upper Columbia



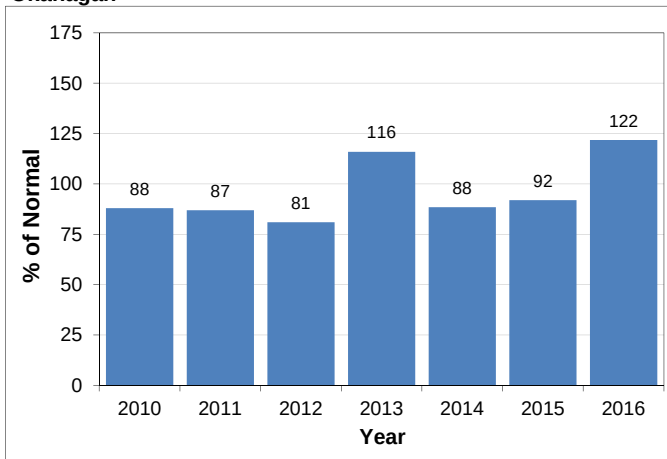
West Kootenay



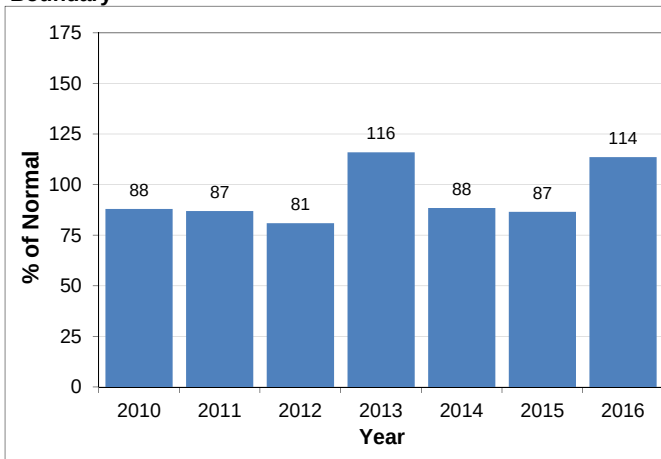
East Kootenay



Okanagan

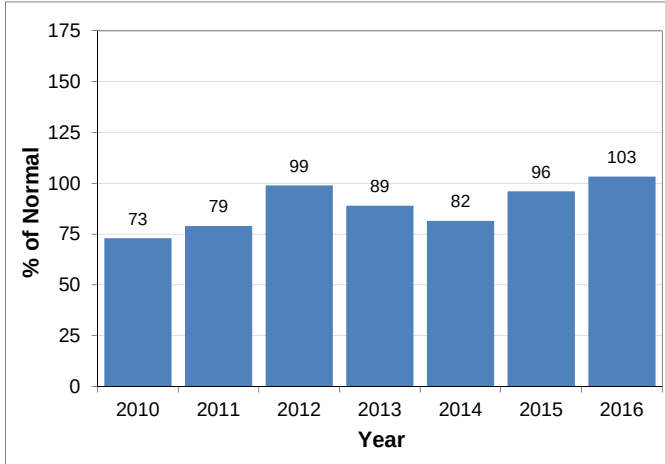


Boundary

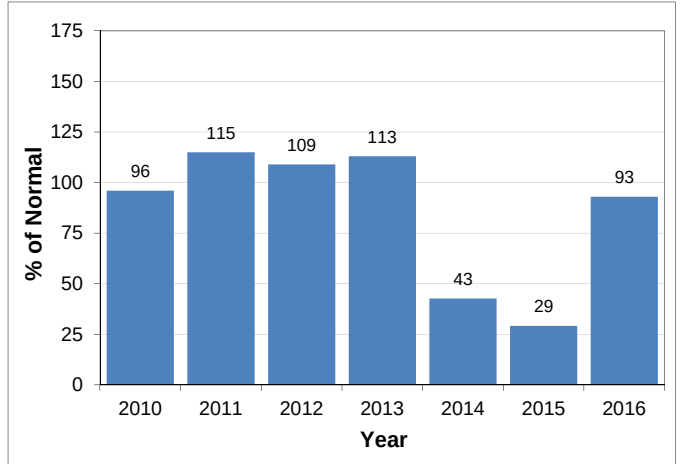


Snow Basin Index Graphs - February 1, 2016

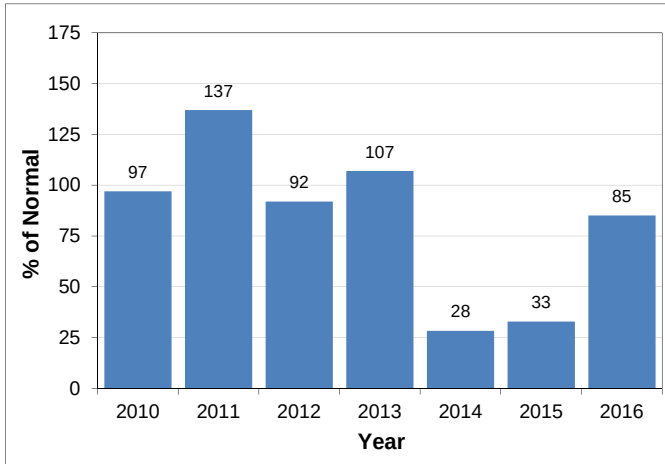
Similkameen



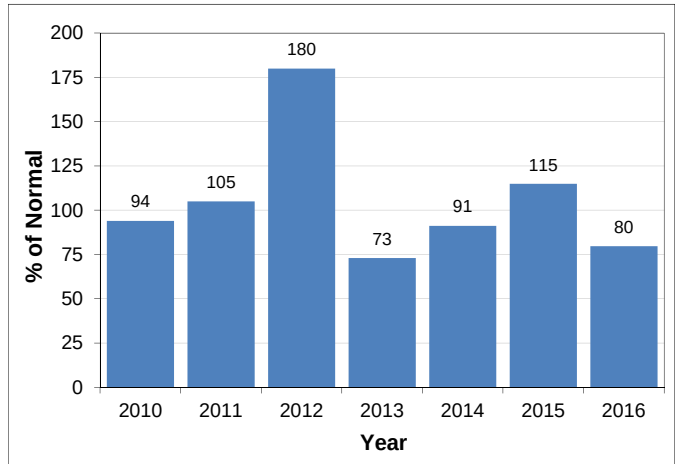
South Coast



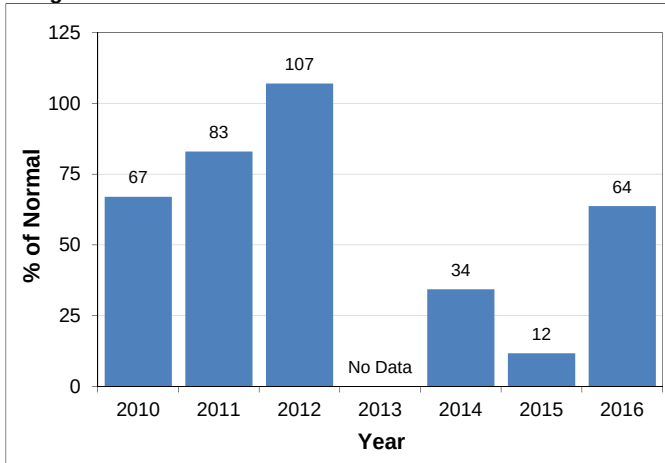
Vancouver Island



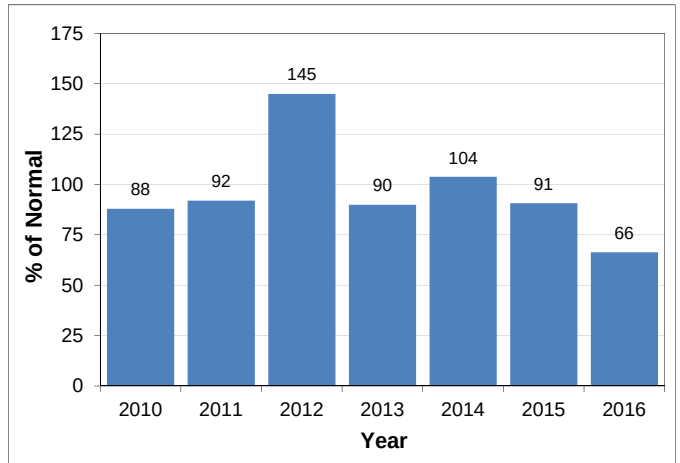
Central Coast



Skagit

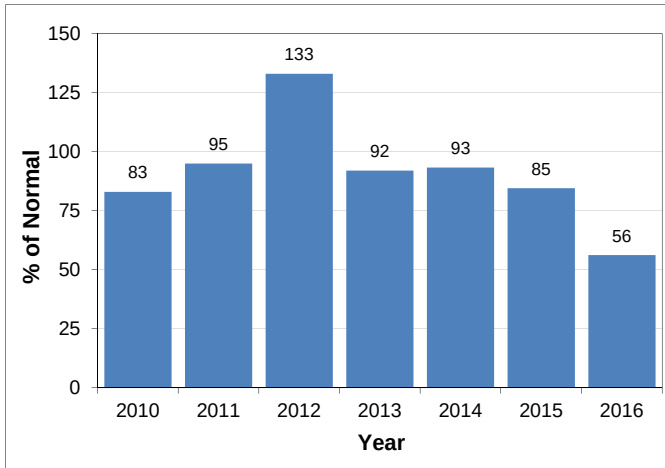


Peace

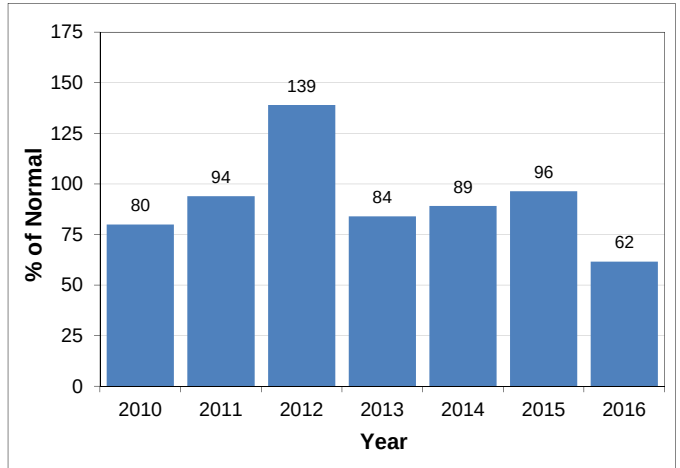


Snow Basin Index Graphs - February 1, 2016

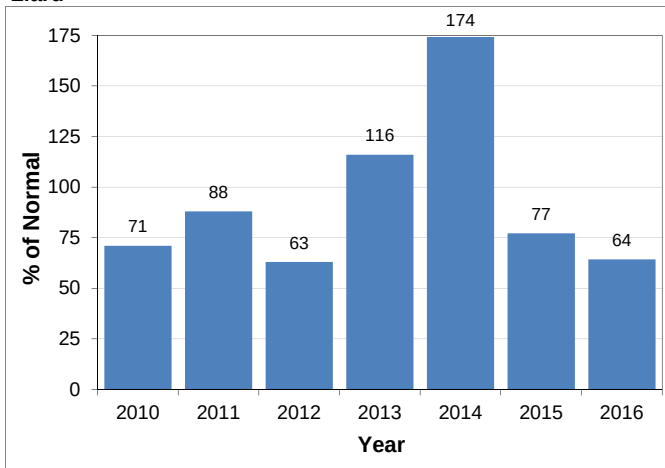
Stikine



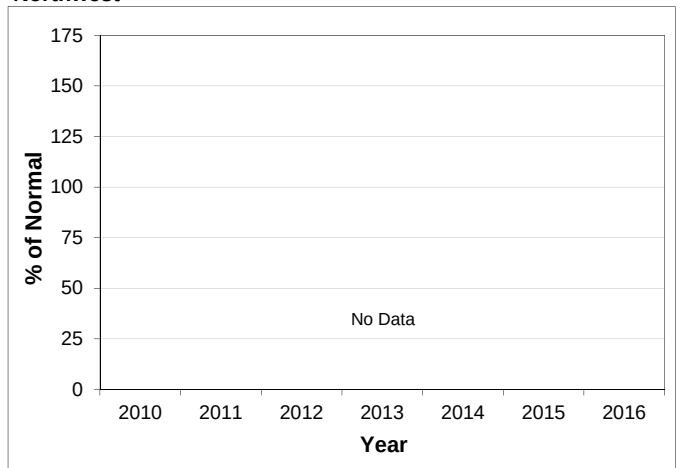
Skeena-Nass



Liard



Northwest



Ministry of Forests, Lands and Natural Resource Operations
River Forecast Centre
Volume Runoff Forecast February 2016

Location		Feb - Jun Runoff				Feb - Jul Runoff				Feb - Sep Runoff			
		Forecast (kdam ³)	Normal (1981-2010) (kdam ³)	% of Normal	Std. Error (kdam ³)	Forecast (kdam ³)	Normal (1981-2010) (kdam ³)	% of Normal	Std. Error (kdam ³)	Forecast (kdam ³)	Normal (1981-2010) (kdam ³)	% of Normal	Std. Error (kdam ³)
Upper Fraser Basin	Fraser at McBride					3710	3858	96	333	5186	5325	97	396
	McGregor at Lower Canyon					3460	4185	83	553	4476	5231	86	672
	Fraser at Shelley					14117	16786	84	1716	17929	20845	86	2033
Middle Fraser Basin	Quesnel River at Quesnel					4607	4930	93	551	5911	6261	94	661
Thompson Basin	N. Thompson at McLure					9412	9411	100	710	11159	11580	96	925
	S. Thompson at Chase					6174	6389	97	650	7743	7956	97	940
	Thompson at Spences Bridge					16057	16353	98	1381	19791	20333	97	1775
Bulkley and Skeena	Bulkley at Quick					1990	2784	71	1655	2485	3381	74	2173
	Skeena at Usk					16367	19604	83	1553	19910	23948	83	2123
Nicola Lake	Inflows	142	131	108	33	174	148	118	38				
Nicola River	at Spences Bridge	814	549	148	100	943	616	153	123				
Okanagan and Kalamalka- Wood Lake	Okanagan Lake with Greyback (2F08)	468	488	96	99	490	515	95	120				
	Kalamalka-Wood Lake	21.4	33.1	65	12.8	21.2	34.5	61	15.1				
Similkameen River	at Nighthawk	1692	1391	122	166					2091	1701	123	196
	at Hedley	1358	1080	126	139					1619	1268	128	148

Note: 1 kdam³=1,000,000 m³

Note that missing values reflect that forecasts were not made for that time interval

Disclaimer: Seasonal forecasts were developed using a Principle Component Analysis of snow pack, climate and streamflow data.

There is inherent uncertainty in runoff forecasts including potential errors in data and the unpredictable nature of seasonal weather

Use at your own risk

Snow Survey and Water Supply Bulletin – March 1st, 2016

The March 1st snow survey is now complete. Data from 140 snow courses and 60 automated snow stations around the province and climate data from Environment Canada have been used to form the basis for the following report¹.

Weather

Temperatures across British Columbia continued to be well above normal through the month of February, with daily temperatures being 1-3°C above normal through southern BC, and 3-5°C above normal through the Kootenays, central, and northern BC. These warm temperatures have persisted throughout the 2015-16 winter (December, January, February), with temperature departures being 1-4°C above normal across the province over the three month period.

February was generally a wet month, with a few heavier storm cycles mixed with drier and unsettled periods with lighter precipitation. Precipitation was above normal, with typical precipitation amounts in the range of 130-200% of normal across most of the province.

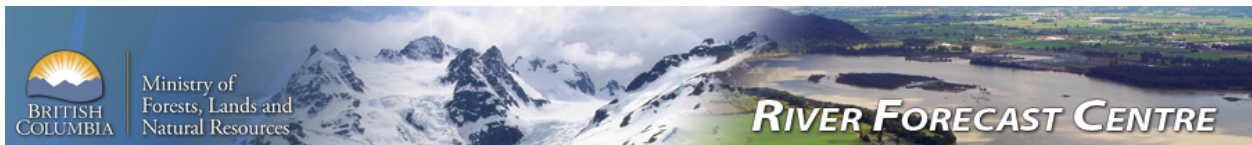
Snowpack

Wet weather through February led to increased snow packs across the province, and most regions of the province experienced an upswing of 5% to 10% in snow basin index values since last month. Snow basin indices range from a low of 55% in the Liard to a high of 123% in the Okanagan (Table 1). In general, most of the province has near normal or slightly below normal (80-110%) snow packs for March 1st, 2016, with a provincial average of 93% from all survey locations. A south to north gradient still exists across the province, however very low snow packs observed earlier in the season in northern BC have generally moderated. Below normal snow packs (65-80%) are present in the Upper Fraser East, Nechako, Central Coast, Skagit, Skeena-Nass, Stikine, and North-west, and well below normal (<65%) in the Liard. Above normal snow pack (>110%) is present in the Okanagan and Boundary.

Table 1: BC Snow Basin Indices – March 1, 2016

Basin	% of Normal	Basin	% of Normal
Upper Fraser West	85	Boundary	115
Upper Fraser East	77	Similkameen	100
Nechako	73	South Coast	99
Middle Fraser	105	Vancouver Island	86
Lower Fraser	97	Central Coast	78
North Thompson	115	Skagit	67
South Thompson	111	Peace	81
Upper Columbia	104	Skeena-Nass	73
West Kootenay	106	Stikine	72
East Kootenay	98	Liard	55
Okanagan	123	Northwest	74

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 – March 1st, 2016

In low and mid-elevations, warm temperatures through the winter led to an increase in the proportion of precipitation falling as rain rather than snow as well as mid-season snow melt. While melt does not typically occur until April, a few survey locations experienced a decrease in snow water equivalent values since the February survey. While the average for all snow survey locations across the province is 93% of normal, the average for locations below 1000 m elevation is just 67% of normal. Since the majority of the surveys taken across the province are higher elevation sites, diminished snow packs at low to mid-elevation may not be well reflected in the snow basin index values.

Streamflow

With warm temperatures, mid-season melt, and precipitation as rain, most rivers across British Columbia have experienced well above normal runoff (150% to 200% of median value) over the past one to two months. Snow melt runoff that typically flows later in the season has already passed through their watersheds. This advance in runoff timing may lead to an earlier freshet this season, both in terms of timing of peak flows and the recession to the low-flow season.

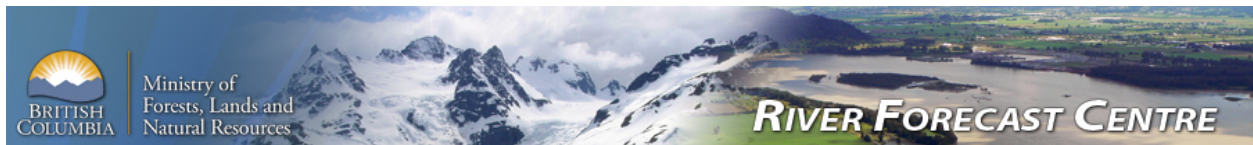
Outlook

Strong El Niño conditions that developed over the equatorial Pacific regions over the past few months peaked earlier in the winter and are expected to continue to decline into the spring. The Climate Prediction Centre (CPC) at the U.S. National Weather Service/NOAA is forecasting a high likelihood of El Niño conditions persisting through until late-spring or early summer 2016.

In general, BC experiences warmer than normal winter and early-spring temperatures during strong El Niño events. Precipitation during historic El Niño events has been highly variable, with no strong trends across BC. Snow packs during El Niño events tend to be slightly below normal across BC. However there has been significant historic variability and regional variation to this general trend. Snow and weather conditions so far this season have been typical for an El Niño year, with the exception of northern BC, which is experiencing lower snow pack than is typical. In southern BC, snow packs are much better developed than the extremely low conditions that were experienced last year.

Seasonal forecasts from Environment Canada are indicating a high likelihood of above-normal temperatures across British Columbia over the March to May period, and an increased chance of warmer than normal temperatures through the extended forecast period into the summer months.

Seasonal volume runoff forecasts (see table below) are near normal for most basins across the province. Above normal seasonal runoff is forecast for the Nicola River, Similkameen and Okanagan. Below normal seasonal runoff is forecast in the Cowichan River and Bulkley River systems.



Snow Survey and Water Supply Bulletin – March 1st, 2016

By early March, 80% of the annual BC snowpack has typically accumulated, with another one to two months remaining in the snow accumulation season. High snow pack in the Okanagan basin is an early indication of the potential for elevated seasonal flood risk in the region. Below normal snow pack, particularly in the Liard, and to a lesser extent the Upper Fraser, Nechako, Central Coast, Skeena-Nass, Stikine and Northwest, indicate an increased potential for low flows in the late-spring and summer.

The forecast of warmer weather through the spring, combined with warm temperatures already experienced this winter, is likely to be an important factor in this year's freshet season. With the advanced melt of some low to mid-elevation snow that has already occurred, continued warmer than normal temperatures would bring an earlier shift in the timing of the rise, peak and recession to summer flows of this year's freshet. While snow conditions were much different last year, late winter warm weather contributed to a 2 to 4 week advance in the timing of freshet flows in 2015.

For both spring flood risk and summer low flows, snow pack is just one of the important elements that determine whether or not extreme conditions will emerge. Weather, through the remaining portion of the snow accumulation season, the melt season, and into the summer, is also a key driver on whether or not flooding or low stream flows will occur.

The River Forecast Centre will continue to monitor snow pack conditions and will provide an updated seasonal flood risk and stream flow forecast in the April 1st 2016 bulletin, which is scheduled for release on April 7th.

BC River Forecast Centre
March 8, 2016

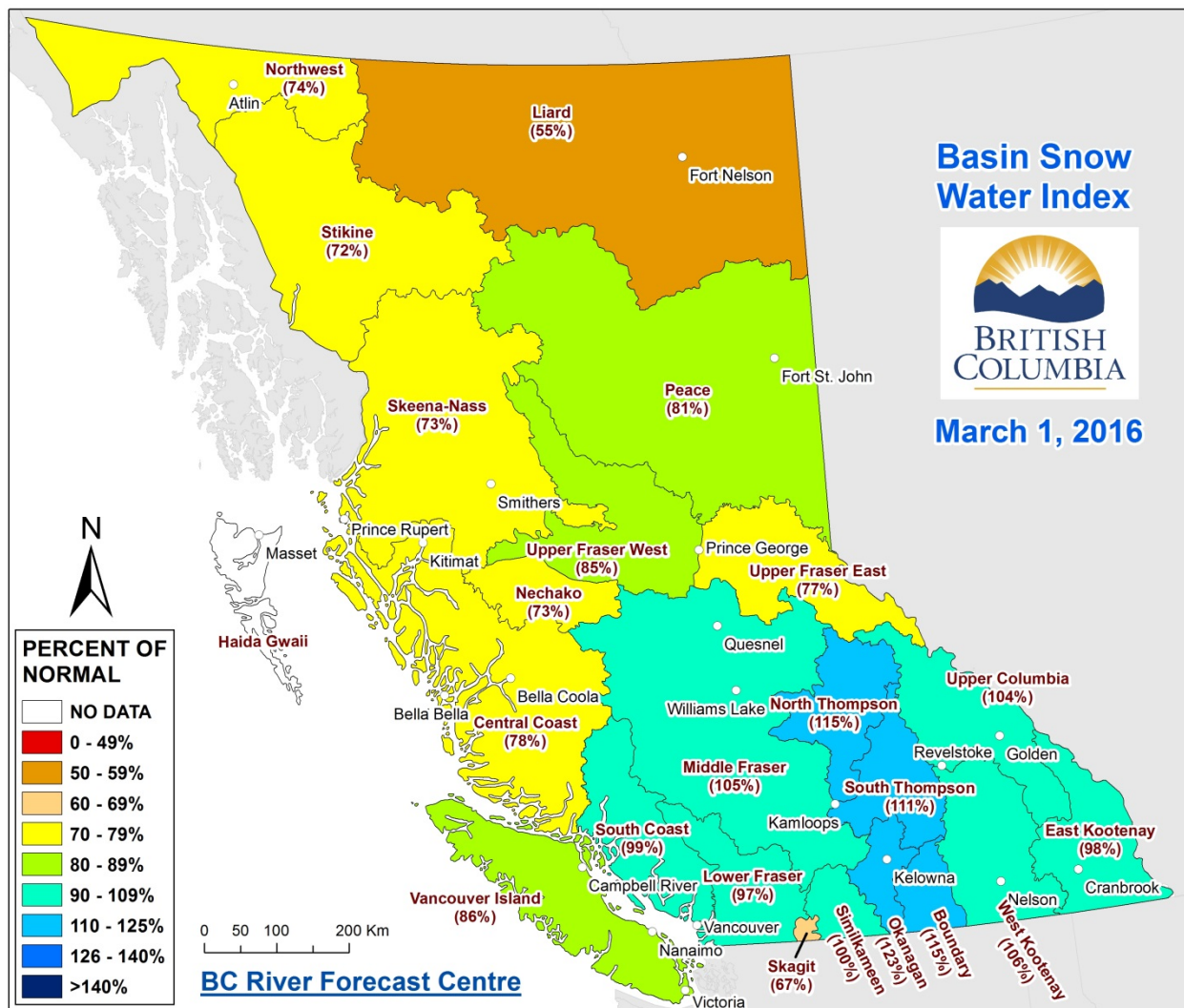


Ministry of
Forests, Lands and
Natural Resources

RIVER FORECAST CENTRE

Snow Survey and Water Supply Bulletin – March 1st, 2016

Figure 1: Basin Snow Water Index – March 1st, 2016



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2016 Automated Snow Pillow/Manual Snow Survey Data				March					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1A01P	YELLOWHEAD LAKE	Upper Fraser East	1860	2016-03-01	122	398		89%	428	347	266	720	445	19
1A02P	MC BRIDE UPPER	Upper Fraser East	1580	2016-03-01	131	338		91%	414	311	257	562	372	24
1A03P	BARKERVILLE	Upper Fraser East	1520	2016-03-01	84	218		75%	274	287	150	479	292	41
1A05	LONGWORTH (UPPER)	Upper Fraser East	1693	N	N	N	N		858	804	307	1104	676	62
1A06A	HANSARD	Upper Fraser East	622	2016-02-26	23	64		38%	218	357	44	396	170	43
1A10	PRINCE GEORGE A	Upper Fraser East	684	2016-02-25	30	83		71%	124	140	0	296	117	54
1A11	PACIFIC LAKE	Upper Fraser East	756	2016-03-02	94	321		59%	392	732	277	866	546	53
1A12	KAZA LAKE	Upper Fraser West	1247	2016-02-29	106	257		87%	299	308	186	478	295	52
1A12P	KAZA LAKE	Upper Fraser East	1248	2016-03-01	1	257								0
1A14P	HEDRICK LAKE	Upper Fraser East	1100	2016-03-01	156	366		56%	526	971	386	1066	654	16
1A15	KNUDSEN LAKE	Upper Fraser East	1598	2016-03-02	170	531		77%	627	735	404	1098	692	46
1A16	BURNS LAKE	Upper Fraser West	820	2016-02-26	37	98		75%	194	110	60	250	130	46
1A17P	REVOLUTION CREEK	Upper Fraser East	1690	2016-03-01	231	621		92%	608	804	336	1133	674	31
1A19P	DOMA MOUNTAIN	Upper Fraser East	1820	2016-03-01	159	502		82%	615	643	450	912	611	10
1A23	BIRD CREEK	Upper Fraser West	1196	2016-03-01	57	126		96%	231	160	72	232	131	26
1B01	MOUNT WELLS	Nechako	1489	2016-02-29	114	323		71%	533	354	244	954	452	64
1B01P	MOUNT WELLS	Nechako	1490	2016-03-01	NA	362		77%	585	341	244	739	470	24
1B02	TAHTSA LAKE	Nechako	1319	2016-02-29	232	866		84%	1017	875	571	1777	1034	64
1B02P	TAHTSA LAKE	Nechako	1300	2016-03-01	NA	960		87%	999	776	661	1725	1108	24
1B05	SKINS LAKE	Nechako	877	2016-02-29	38	88		85%		92	54	226	103	51
1B06	MOUNT SWANNELL	Nechako	1596	N	N	N	N		359	231	132	446	252	27
1B07	NUTLI LAKE	Nechako	1502	2016-03-01	116	342		74%	439	317	229	779	460	25
1B08P	MOUNT PONDOSY	Nechako	1400	2016-03-01	NA	593		86%	798	442	363	995	686	24
1C01	BROOKMERE	Middle Fraser	994	2016-03-02	49	148		89%	135	172	53	351	167	71
1C05	MCGILLIVRAY PASS	Middle Fraser	1715	2016-02-24	137	406		83%	320		222	1016	492	64
1C06	PAVILION	Middle Fraser	1209	2016-02-29	19	60		103%		66	0	168	58	59
1C08	NAZKO	Middle Fraser	1029	2016-03-02	26	63		98%	132	75	0	142	64	41
1C09A	HIGHLAND VALLEY	Middle Fraser	1547	2016-03-03	36	106		138%	86	108	25	229	77	49
1C12P	GREEN MOUNTAIN	Middle Fraser	1780	2016-03-01	NA	758		101%	591	527	445	1265	751	22
1C13A	HORSEFLY MOUNTAIN	Middle Fraser	1612	2016-02-29	153	444		104%	412	534	238	624	428	45
1C14	BRALORNE	Middle Fraser	1382	2016-02-24	55	80		54%	54	158	0	363	149	52
1C17	MOUNT TIMOTHY	Middle Fraser	1632	2016-03-01	124	360		135%	201	285	141	468	266	55
1C18P	MISSION RIDGE	Middle Fraser	1850	2016-03-01	NA	375		79%	316	383	160	866	475	46
1C19	GNAWED MOUNTAIN	Middle Fraser	1617	2016-03-03	23	111		116%	90	122	15	259	96	48
1C20P	BOSS MOUNTAIN MINE	Middle Fraser	1460	2016-03-01	181	572		117%	456	475	308	739	487	22
1C21	BIG CREEK	Middle Fraser	1130	2016-02-28	20	46		96%	74	54	0	112	48	45
1C22	PUNTZI MOUNTAIN	Middle Fraser	939	2016-02-28	19	44		80%	84	60	0	128	55	46
1C23	PENFOLD CREEK	Middle Fraser	1687	2016-02-25	228	778		96%	674		453	1132	807	41
1C25	LAC LE JEUNE (UPPER)	Middle Fraser	1471	2016-02-29	62	178		148%	110	147	13	213	120	43

2016 Automated Snow Pillow/Manual Snow Survey Data				March					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1C28	DUFFEY LAKE	Middle Fraser	1253	2016-03-01	124	434		101%	273	390	194	762	428	38
1C29	SHOVELNOSE MOUNTAIN	Middle Fraser	1456	2016-02-27	57	188		87%	121	197	100	398	216	35
1C32	DEADMAN RIVER	Middle Fraser	1463	2016-03-01	57	170		170%	110	150	44	220	100	32
1C33A	GRANITE MOUNTAIN	Middle Fraser	1175	2016-02-26	56	154		89%	156	181	132	211	173	10
1C37	BRALORNE(UPPER)	Middle Fraser	1980	2016-02-24	157	560		103%	448		268	944	543	21
1C38	DOWNTON LAKE (UPPER)	Middle Fraser	1884	2016-02-24	207	782		106%	690		302	1250	737	21
1C38P	DOWNTON / LAJOIE UPPER	Middle Fraser	1829	2016-03-01	NA	685								0
1C39	BRIDGE GLACIER (LOWER)	Middle Fraser	1393	2016-02-24	174	584		115%	412	430	146	954	508	21
1C40	TYAUGHTON CREEK (NORTH)	Middle Fraser	1946	N	N	N	N		300	138	138	916	399	21
1C40P	NORTH TYAUGHTON	Middle Fraser	1969	2016-03-01	NA	267								0
1C41P	YANKS PEAK, EAST	Middle Fraser	1670	2016-03-01	185	661		101%	684	728	406	904	655	19
1C42	CAVERHILL LAKE NEW	Middle Fraser	1400	2016-02-29	91	246			184	60	60	270		11
1D06P	TENQUILLE LAKE	Lower Fraser	1680	2016-03-01	276	945		117%	727	727	518	1227	810	15
1D08	STAVE LAKE	Lower Fraser	1211	2016-02-24	235	1026		87%	120		120	2500	1178	49
1D09	WAHLEACH LAKE	Lower Fraser	1395	2016-02-24	104	374		80%	37	652	37	1072	468	49
1D09P	WAHLEACH LAKE	Lower Fraser	1400	2016-03-01	NA	565		67%	251	812	251	1320	846	24
1D10	NAHATLATCH RIVER	Lower Fraser	1530	2016-02-24	247	1028		94%	426		400	2380	1092	47
1D16	DICKSON LAKE	Lower Fraser	1147	2016-02-24	207	824		69%	22	1810	22	1814	1186	25
1D17P	CHILLIWACK RIVER	Lower Fraser	1600	2016-03-01	275	1307		108%	607	1422	506	2353	1208	24
1D18	DISAPPOINTMENT LAKE	Lower Fraser	1050	N	N	N	N							
1D19P	SPUZZUM CREEK	Lower Fraser	1180	2016-03-01	222	1106		84%	265	1583	265	2615	1312	17
1E01B	BLUE RIVER	North Thompson	673	2016-02-28	80	284		101%	267	252	179	411	280	32
1E02P	MOUNT COOK	North Thompson	1550	2016-03-01	341	1260		123%	988	1012	821	1319	1028	16
1E03A	TROPHY MOUNTAIN	North Thompson	1907	2016-02-27	152	442		98%	273	432	216	778	452	42
1E05	KNOUFF LAKE	North Thompson	1189	2016-02-26	48	126		102%	121	150	36	284	124	59
1E07	ADAMS RIVER	North Thompson	1769	2016-02-28	205	728		130%	504	570	262	892	560	45
1E08P	AZURE RIVER	North Thompson	1620	2016-03-01	241	931		100%	982	999	548	1339	934	19
1E10P	KOSTAL LAKE	North Thompson	1770	2016-03-01	288	755		106%	654	710	477	1023	712	31
1E14P	COOK CREEK	North Thompson	1280	2016-03-01	147	0								0
1F01A	ABERDEEN LAKE	South Thompson	1262	2016-02-24	58	171		129%	160	140	51	231	133	59
1F02	ANGLEMONT	South Thompson	1168	2016-03-01	72	299		93%		304	160	635	323	58
1F03P	PARK MOUNTAIN	North Thompson	1890	2016-03-01	221	729		102%	646	756	383	1021	714	31
1F04	ENDERBY	South Thompson	1948	2016-02-28	268	957		114%	806	1030	440	1200	840	49
1F06P	CELISTA MOUNTAIN	North Thompson	1551	2016-03-01	249	908		123%	699	782	596	923	739	11
2A01A	CANOE RIVER	Upper Columbia	866	2016-02-29	41	132		148%	120	132	19	251	89	75
2A02	GLACIER	Upper Columbia	1249	2016-02-27	162	578		99%	490	542	251	952	585	78
2A03A	FIELD	Upper Columbia	1310	2016-02-25	62	162		110%	157	82	53	248	147	76
2A06P	MOUNT REVELSTOKE	Upper Columbia	1830	2016-03-01	NA	1059		107%	851	985	537	1487	992	23
2A07	KICKING HORSE	Upper Columbia	1648	2016-02-26	98	296		106%	218	241	140	462	279	69

2016 Automated Snow Pillow/Manual Snow Survey Data				March					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2A11	BEAVERFOOT	Upper Columbia	1924	2016-02-26	73	194		116%	150	156	80	333	167	67
2A14	MOUNT ABBOT	Upper Columbia	2031	2016-02-25	248	882		88%	784	960	508	1448	1000	57
2A16	GOLDSTREAM	Upper Columbia	1914	2016-02-25	263	920		96%	937	1006	553	1351	954	53
2A17	FIDELITY MOUNTAIN	Upper Columbia	1852	2016-02-24	271	976		94%	877	963	534	1703	1043	53
2A18	KEYSTONE CREEK	Upper Columbia	1839	2016-02-25	189	679		101%	630	720	357	1277	671	50
2A18P	KEYSTONE CREEK	Upper Columbia	1850	2016-03-01	NA	779								0
2A19	VERMONT CREEK	Upper Columbia	1533	2016-02-26	135	434		122%	266	360	152	643	356	50
2A21P	MOLSON CREEK	Upper Columbia	1980	2016-03-01	NA	800		90%	773	851	437	1215	887	35
2A22	SUNBEAM LAKE	Upper Columbia	2066	2016-02-26	200	683		91%	699	814	389	1117	751	49
2A23	BUSH RIVER	Upper Columbia	1982	2016-02-26	192	684		100%	624		281	1078	682	48
2A25	KIRBYVILLE LAKE	Upper Columbia	1739	2016-02-25	292	1072		108%	965	1138	526	1476	990	44
2A27	DOWNIE SLIDE (LOWER)	Upper Columbia	964	2016-02-25	190	626		101%		620	378	1018	618	39
2A29	DOWNIE SLIDE (UPPER)	Upper Columbia	1628	2016-02-25	310	1108		97%	938	1240	614	2120	1146	38
2A30P	COLPITTI CREEK	Upper Columbia	2131	2016-03-01	NA	651								0
2A31P	CARIBOU CREEK UPPER	Upper Columbia	2201	2016-03-01	NA	779								0
2A32P	WILDCAT CREEK	Upper Columbia	2122	2016-03-01	NA	446								0
2B02A	FARRON	West Kootenay	1229	2016-02-23	100	320		116%	166	253	79	450	276	43
2B05	WHATSHAN (UPPER)	West Kootenay	1476	2016-02-24	180	558		98%	460	516	285	918	570	55
2B06P	BARNES CREEK	Lower Columbia	1620	2016-03-01	NA	513		117%	393	439	229	690	437	23
2B07	KOCH CREEK	West Kootenay	1813	2016-02-24	208	704		117%	488	714	269	996	601	55
2B08P	ST. LEON CREEK	Lower Columbia	1800	2016-03-01	NA	960		107%	858	864	416	1392	900	23
2B09	RECORD MOUNTAIN	West Kootenay	1906	2016-03-02	236	845		141%	416	745	147	1136	601	41
2C01	SINCLAIR PASS	East Kootenay	1374	2016-02-26	46	114		111%	80	60	44	262	103	68
2C04	SULLIVAN MINE	East Kootenay	1580	2016-02-26	77	206		88%	138	214	53	465	235	70
2C07	FERNIE EAST	East Kootenay	1213	2016-02-27	59	192		71%	120	225	61	584	270	65
2C09Q	MORRISSEY RIDGE	East Kootenay	1800	2016-03-01	NA	574	E	101%	372	488	233	1074	571	36
2C10P	MOYIE MOUNTAIN	East Kootenay	1930	2016-03-01	97	357		107%	216	299	149	653	333	37
2C14P	FLOE LAKE	East Kootenay	2090	2016-03-01	NA	529		91%	553	589	257	889	581	23
2C15	MOUNT ASSINIBOINE	East Kootenay	2230	2016-02-28	130	401		95%			185	680	421	47
2C16	MOUNT JOFFRE	East Kootenay	1763	2016-02-28	100	283	A	97%	292	363	122	551	291	47
2C17	THUNDER CREEK	East Kootenay	2062	2016-02-28	90	266		124%	165	274	91	378	214	47
2C20	VERMILLION RIVER NO. 3	East Kootenay	1612	NS	NS	NS	NS				142	493	243	17
2D02	FERGUSON	West Kootenay	929	2016-03-04	164	612		122%	488	470	283	796	502	62
2D03	SANDON	West Kootenay	1072	N	N	N	N		245	265	196	475	319	36
2D04	NELSON	West Kootenay	952	2016-02-29	54	197		60%	118	194	118	558	328	76
2D05	GRAY CREEK (LOWER)	West Kootenay	1558	2016-02-25	126	385		102%	258	368	201	663	378	67
2D06	CHAR CREEK	West Kootenay	1290	2016-02-24	126	400		89%	258	425	231	754	447	50
2D07A	DUNCAN LAKE NO. 2	West Kootenay	662	2016-02-24	22	82		57%	148	52	52	322	144	24
2D08P	EAST CREEK	West Kootenay	2030	2016-03-01	NA	865		118%	694	768	312	1167	732	35

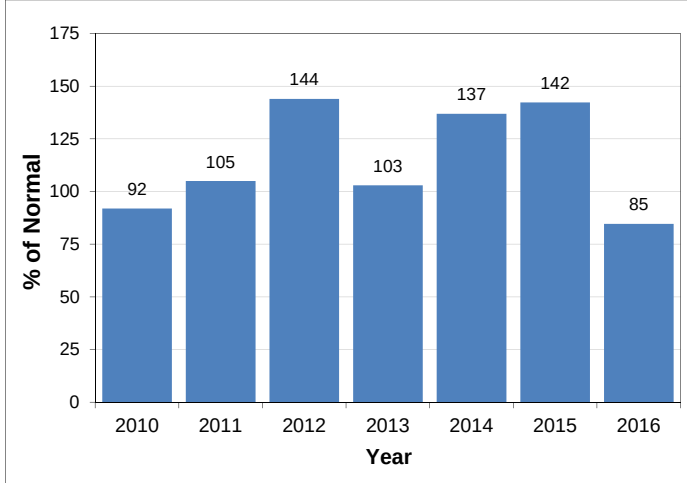
2016 Automated Snow Pillow/Manual Snow Survey Data				March					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2D09	MOUNT TEMPLEMAN	West Kootenay	1879	N	N	N	N		806		490	1534	859	49
2D10	GRAY CREEK (UPPER)	West Kootenay	1926	2016-02-25	271	645		106%	511	659	343	955	607	47
2D14P	REDFISH CREEK	West Kootenay	2104	2016-03-01	305	1296		136%	1162	1067	772	1256	954	14
2E01	MONASHEE PASS	Boundary	1387	2016-02-24	101	300		106%	251	285	149	442	282	57
2E02	CARMI	Boundary	1254	2016-02-29	44	120		92%	68	132	56	274	130	53
2E03	BIG WHITE MOUNTAIN	Boundary	1672	2016-02-29	159	495		123%	305	428	213	676	402	50
2E07P	GRANO CREEK	Kettle	1860	2016-03-01	148	524		127%	323	387	206	679	411	18
2F01A	TROUT CREEK (WEST)	Okanagan	1430	2016-02-25	62	211		108%	139	169	139	229	196	5
2F02	SUMMERLAND RESERVOIR	Okanagan	1304	2016-02-29	83	235		124%	207	181	97	381	190	55
2F03	MC CULLOCH	Okanagan	1266	2016-03-01	76	224		153%	108	179	71	249	146	76
2F04	GRAYSTOKE LAKE	Okanagan	1818	2016-03-01	120	336		118%		290	128	605	285	33
2F05P	MISSION CREEK	Okanagan	1780	2016-03-01	146	486		124%	332	458	208	608	392	46
2F07	POSTILL LAKE	Okanagan	1358	2016-02-29	67	190		110%	133	169	98	274	173	66
2F08	GRAYBACK RESERVOIR	Okanagan	1548	2016-02-25	92	265		141%	186	218	91	312	188	52
2F09	WHITEROCKS MOUNTAIN	Okanagan	1789	2016-02-28	186	677		150%	355	487	180	809	450	61
2F10P	SILVER STAR MOUNTAIN	Okanagan	1839	2016-03-01	0	622								0
2F11	ISINTOK LAKE	Okanagan	1651	2016-02-25	60	131		99%	145	151	53	358	132	51
2F12	MOUNT KOBAN	Okanagan	1817	2016-02-28	184	333		132%	194	447	61	488	253	50
2F13	ESPERON CR (UPPER)	Okanagan	1634	2016-02-27	120	398		121%	218	354	157	635	330	47
2F14	ESPERON CR (MIDDLE)	Okanagan	1440	NS	NS	NS	NS				132	513	287	24
2F18P	BRENDA MINE	Okanagan	1460	2016-03-01	NA	373		118%	243	258	184	431	315	23
2F19	OYAMA LAKE	Okanagan	1365	2016-02-29	67	174		121%	76	110	73	241	144	47
2F20	VASEUX CREEK	Okanagan	1403	2016-02-27	54	132		117%	88	114	52	284	113	44
2F21	BOULEAU LAKE	Okanagan	1405	2016-02-27	100	288		108%	202	276	165	432	267	45
2F23	MACDONALD LAKE	Okanagan	1742	2016-02-26	143	475		129%	305	323	170	583	368	39
2F24	ISLAHT LAKE	Okanagan	1492	2016-02-29	126	305		107%	207	286	161	497	285	34
2F25	POSTILL LAKE (UPPER)	Okanagan	1500	2016-02-29	82	242			112	217	112	217		6
2G03P	BLACKWALL PEAK	Similkameen	1940	2016-03-01	205	736		111%	542	593	228	1323	665	48
2G04	LOST HORSE MOUNTAIN	Similkameen	1988	2016-02-26	82	220		124%	205	218	92	508	178	56
2G05	MISSEZULA MOUNTAIN	Similkameen	1602	2016-02-26	67	178		98%	142	142	76	363	182	55
2G06	HAMILTON HILL	Similkameen	1477	2016-02-25	66	190		71%	167	211	102	676	267	54
3A01	GROUSE MOUNTAIN	South Coast	1126	2016-02-24	205	920		95%	0	1640	0	2320	966	66
3A02	POWELL RIVER (UPPER)	South Coast	1002	NS	NS	NS	NS				868	868	868	1
3A05	POWELL RIVER (LOWER)	South Coast	882	NS	NS	NS	NS				588	588	588	1
3A09	PALISADE LAKE	South Coast	898	N	N	N	N		0	1455	0	3150	1106	64
3A10	DOG MOUNTAIN	South Coast	1007	2016-02-24	174	792		83%	0	1440	0	2146	952	32
3A19	ORCHID LAKE	South Coast	1178	N	N	N	N		190	1770	190	2960	1467	42
3A20	CALLAGHAN CREEK	South Coast	1009	2016-02-28	195	772		110%	40	734	40	1260	702	39
3A22P	NOSTETUKO RIVER	South Coast	1500	2016-03-01	106	475		103%	268	354	165	876	462	27

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3A24P	UPPER MOSLEY CREEK	South Coast	1650	2016-03-01	67	204		77%	268	127	98	555	266	27
3A25P	UPPER SQUAMISH RIVER	South Coast	1340	2016-03-01	NA	1337		103%	558	1353	558	2301	1303	26
3B01	FORBIDDEN PLATEAU	Vancouver Island	1110	2016-02-26	264	1168		97%	119	1417	101	2730	1203	61
3B02A	MT. COKELY	Vancouver Island	1267	N	N	N	N		14		14	1034	662	33
3B04	ELK RIVER	Vancouver Island	270	2016-02-26	0	0		0%	0	0	0	546	58	60
3B10	UPPER THELWOOD LAKE	Vancouver Island	1014	2016-02-26	215	880		78%	0	1588	0	2440	1128	58
3B17P	WOLF RIVER	Vancouver Island	1490	2016-03-01	NA	1022		94%	358	1070	195	2085	1085	34
3B18	WOLF RIVER (MIDDLE)	Vancouver Island	1050	2016-02-26	90	342		67%	0	696	0	1344	509	46
3B19	WOLF RIVER (LOWER)	Vancouver Island	615	2016-02-26	42	178		59%	0	438	0	1064	301	46
3B23P	JUMP CREEK	Vancouver Island	1160	2016-03-01	151	564		66%	20	1243	20	2228	849	20
3B24P	HEATHER MOUNTAIN UPPER	Vancouver Island	1190	2016-03-01	187	1062								0
3C07	WEDEENE RIVER SOUTH	Central Coast	196	2016-02-25	82	288		69%	330	417	45	945	418	29
3C08P	BURNT BRIDGE CREEK	North Coast	1330	2016-03-01	155	598		87%	737	583	282	1245	691	18
3D01C	SUMALO RIVER WEST	Skagit	801	2016-02-24	20	63		29%	0	246	0	442	218	24
3D02	LIGHTNING LAKE	Skagit	1254	2016-02-24	93	296		118%	200	244	36	497	250	43
3D03A	KLESILKWA	Skagit	1134	2016-02-24	33	124		54%	0	268	0	759	228	68
4A02P	PINE PASS	Peace	1400	2016-03-01	2	773		88%	705	878	600	1485	880	27
4A03	WARE (UPPER)	Peace	1563	2016-02-27	64	138		63%	202	247	114	360	220	55
4A04	WARE (LOWER)	Peace	969	N	N	N	N		188	171	97	246	167	55
4A05	GERMANSEN (UPPER)	Peace	1489	2016-02-29	101	259		88%	310	274	174	520	293	55
4A06	TUTIZZI LAKE	Peace	1043	2016-02-29	81	176		77%	232	229	140	386	230	52
4A07	LADY LAURIER LAKE	Peace	1446	2016-02-26	117	329		73%	407	379	255	662	452	53
4A09	PULPIT LAKE	Peace	1331	2016-02-27	115	308		83%	344	426	233	531	372	52
4A09P	PULPIT LAKE	Peace	1310	2016-03-01	1	268		70%	331	388	271	471	381	26
4A10	FREDRICKSON LAKE	Peace	1323	2016-02-27	72	156		73%	239	189	129	315	213	52
4A11	TRYGVE LAKE	Peace	1409	2016-02-27	86	230		72%	306	312	211	453	319	52
4A12	TSAYDAYCHI LAKE	Peace	1173	2016-02-29	113	307		90%	341	322	166	540	340	52
4A13	PHILIP LAKE	Peace	1013	2016-02-29	89	226		93%	235	244	138	400	242	52
4A16	MORFEE MOUNTAIN	Peace	1427	2016-03-01	174	572		79%	685	696	312	1166	725	48
4A18	MOUNT SHEBA	Peace	1480	2016-03-02	180	601		84%	687		394	1123	712	47
4A20	MONKMAN CREEK	Peace	1566	N	N	N	N		455	539	211	925	472	41
4A21	MOUNT STEARNS	Peace	1514	2016-02-26	33	40	A	32%	143	136	56	227	124	42
4A25	FORT ST. JOHN AIRPORT	Peace	692	2016-03-07	49	79		80%	131	129	38	191	99	41
4A30P	AIKEN LAKE	Peace	1040	2016-03-01	67	181		78%	217	180	150	363	232	31
4A31P	CRYING GIRL PRAIRIE	Peace	1358	2016-03-01	NA	124								0
4A33P	MUSKWA-KECHIKA	Peace	1196	2016-03-01	NA	33								0
4B01	KIDPRICE LAKE	Skeena-Nass	1415	2016-02-29	159	528		65%	800	636	429	1320	817	64
4B02	JOHANSON LAKE	Skeena-Nass	1480	2016-02-29	97	227		90%	256	237	148	368	253	52
4B03A	HUDSON BAY MTN	Skeena-Nass	1452	2016-02-24	107	308		70%	490	356	287	719	443	44

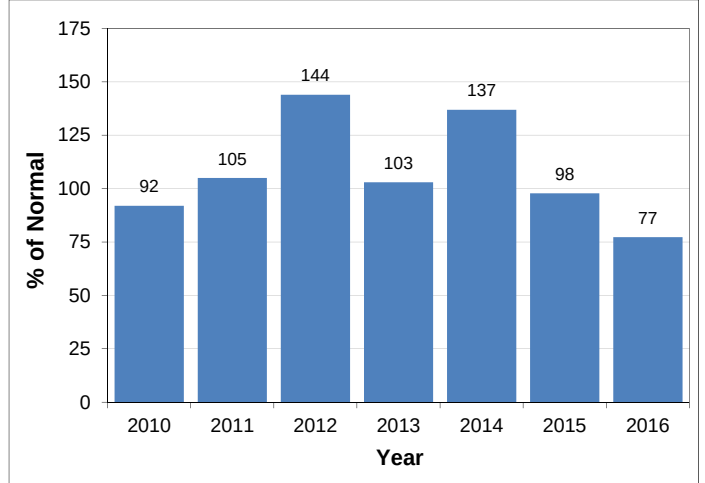
2016 Automated Snow Pillow/Manual Snow Survey Data				March					Historic Snow Water Equivalent (mm)					
			Elevation					SWE %						
Station ID	Name	Basin	(masl)	Survey Date	SD	SWE	Code	1981-2010	2015	2014	Minimum	Maximum	1981-2010	Years
				YYYY-MM-DD	(cm)	(mm)		Normal	SWE	SWE	(mm)	(mm)	Normal	of
									(mm)	(mm)			(mm)	Record
4B04	CHAPMAN LAKE	Skeena-Nass	1485	2016-02-29	106	276		68%	404	364	266	691	407	50
4B06	TACHEK CREEK	Skeena-Nass	1133	2016-02-25	64	172		88%	212	184	117	332	195	47
4B07	MCKENDRICK CREEK	Skeena-Nass	1048	2016-02-29	68	190		77%	274	226	155	391	246	46
4B08	MOUNT CRONIN	Skeena-Nass	1491	2016-02-29	120	363		73%	456	454	345	869	498	46
4B10	NINGUNSAW PASS	Skeena-Nass	647	2016-03-01	86	289		73%	210	330	210	629	397	41
4B11A	BEAR PASS	Skeena-Nass	437	2016-02-24	108	393		68%		510	87	824	574	30
4B13A	TERRACE AIRPORT	Skeena-Nass	219	2016-02-25	14	42		30%	106	0	0	407	141	34
4B14	EQUITY MINE	Skeena-Nass	1434	2016-02-26	112	264		79%	426	274	190	546	333	38
4B15	LU LAKE	Skeena-Nass	1296	2016-02-26	72	184		72%	334	210	122	412	254	38
4B15P	LU LAKE	Skeena/Nass	1300	2016-03-01	69	208		94%	388	218	116	405	221	18
4B16P	SHEDIN CREEK	Skeena/Nass	1480	2016-03-01	154	423		59%	475	619	475	957	723	20
4B17P	TSAI CREEK	Skeena/Nass	1360	2016-03-01	184	606		63%	921	810	701	1618	969	18
4B18P	CEDAR - KITEEN	Skeena/Nass	885	2016-03-01	98	375		64%	416	477	280	956	582	15
4C01	SIKANNI LAKE	Liard	1390	2016-02-27	70	142		60%	212	215	107	335	238	52
4C02	SUMMIT LAKE	Liard	1291	2016-03-04	30	61		55%		166	0	190	111	51
4C03	DEASE LAKE	Liard	805	2016-02-27	41	63		51%	96	153	45	229	124	51
4C05	FORT NELSON A	Liard	368	2016-03-04	33	64		70%		135	40	177	92	48
4C15	JADE CITY	Liard	943	2016-02-24	64	146		71%	156	224	128	310	206	14
4D01	TELEGRAPH CREEK	Stikine	490	2016-02-24	28	46		32%	82	116	53	345	144	41
4D02	ISKUT	Stikine	931	2016-02-27	23	35		33%	70	86	33	176	105	41
4D11P	KINASKAN LAKE	Stikine/Taku	1020	2016-03-01	79	215		62%	236		236	236	346	20
4E02B	ATLIN LAKE	Northwest	730	2016-03-01	40	87			68	106	68	166		10
Code	Description													
A	Sampling problems were encountered													
B	Early or late sampling													
C	Early or late sampling w/problems encountered													
E	Estimate													
N	Scheduled, but not sampled													
NA	Not available													
NS	Not scheduled													
SD	Snow Depth													
SWE	Snow Water Equivalent													
T	Trace Amount													

Snow Basin Index Graphs - March 1, 2016

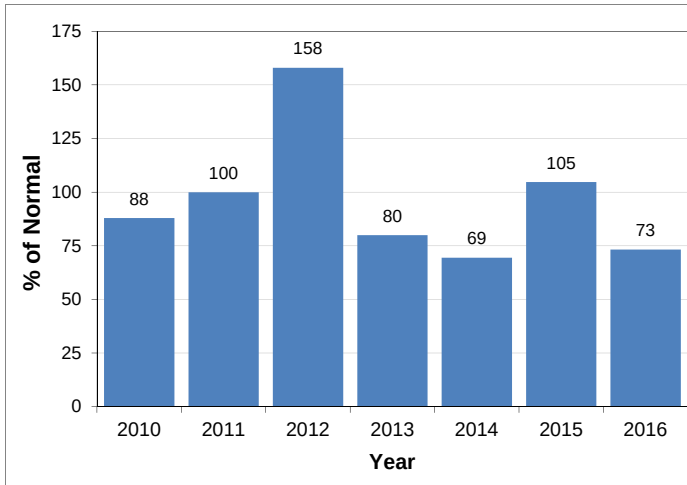
Upper Fraser West



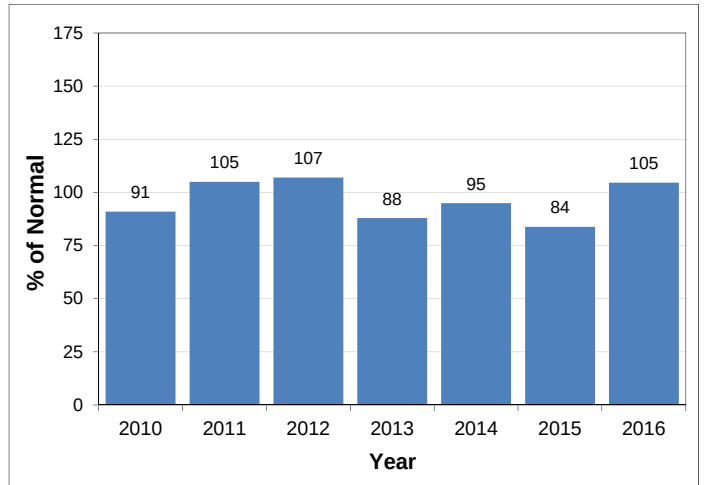
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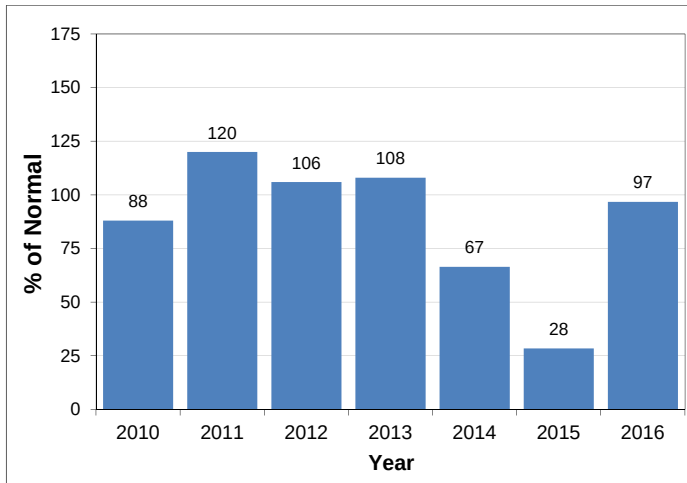
Nechako



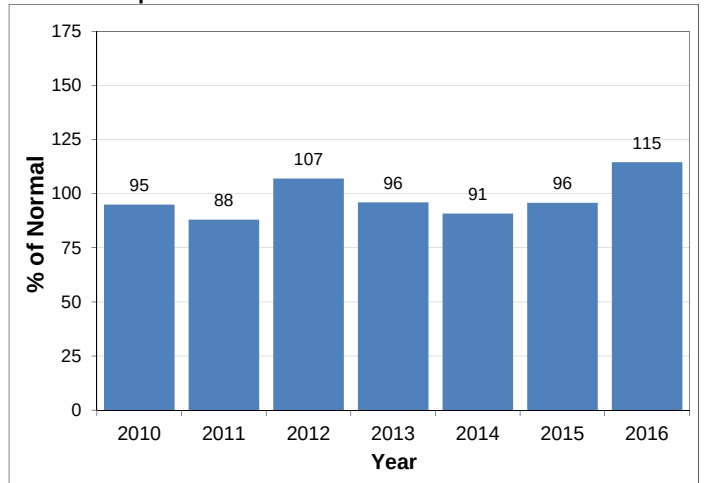
Middle Fraser



Lower Fraser

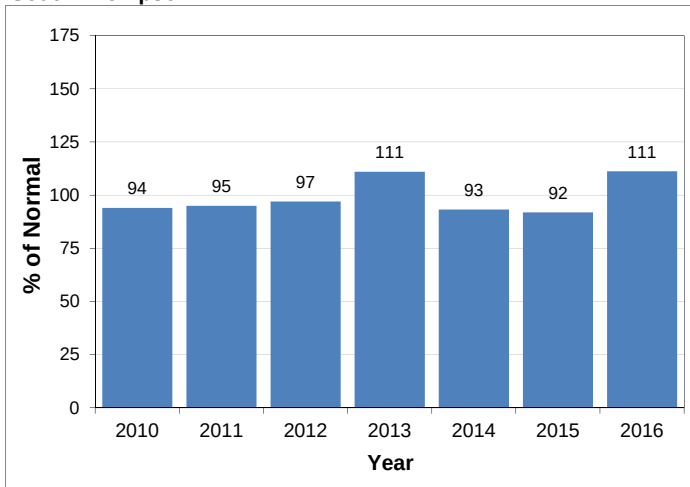


North Thompson

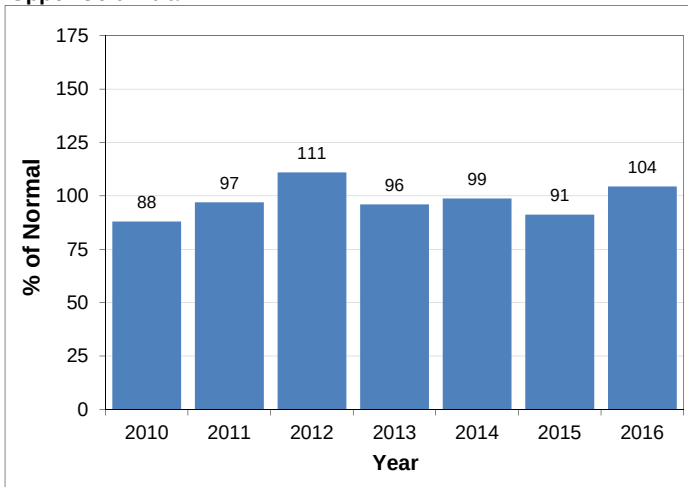


Snow Basin Index Graphs - March 1, 2016

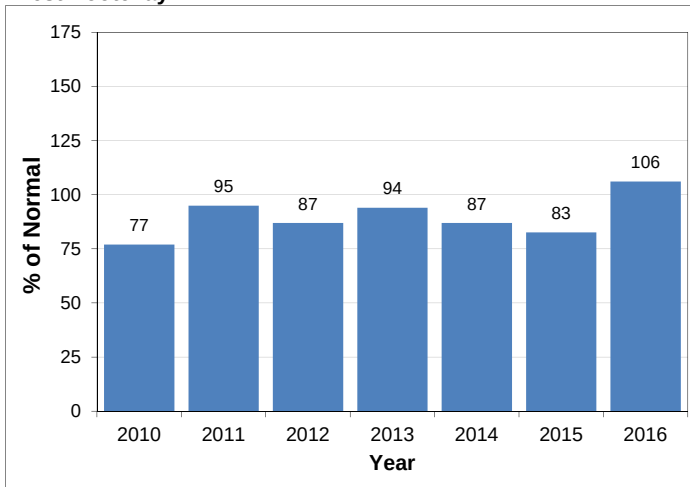
South Thompson



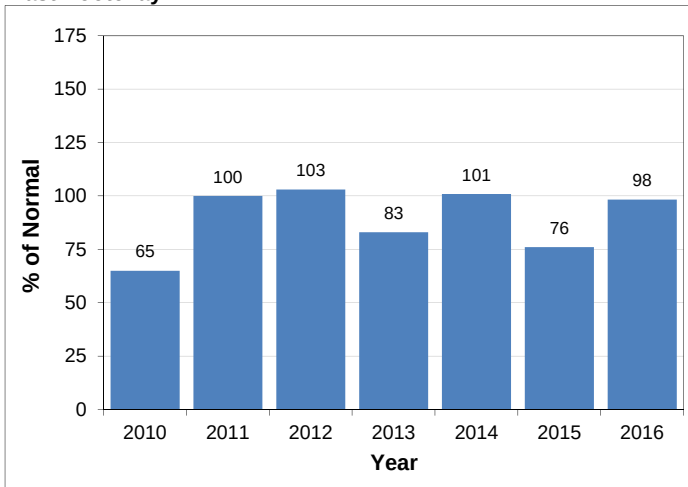
Upper Columbia



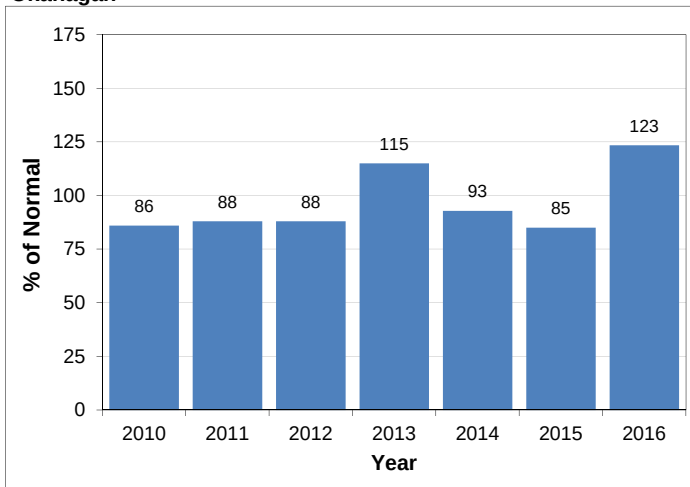
West Kootenay



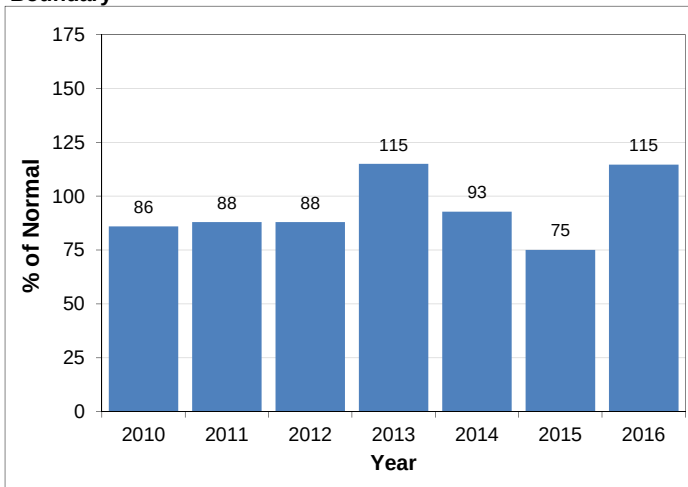
East Kootenay



Okanagan

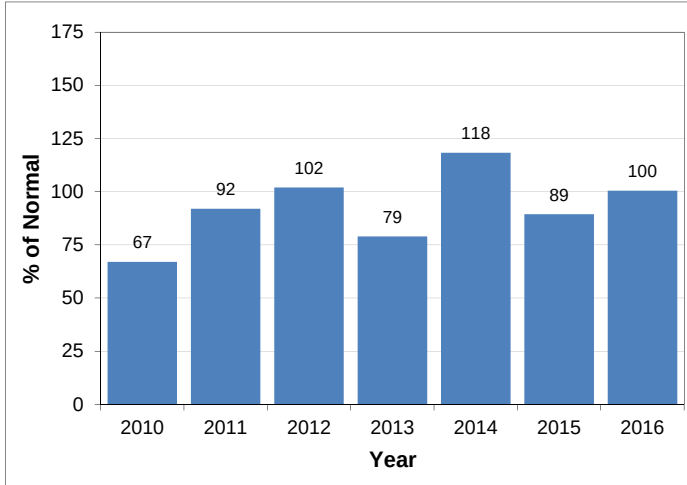


Boundary

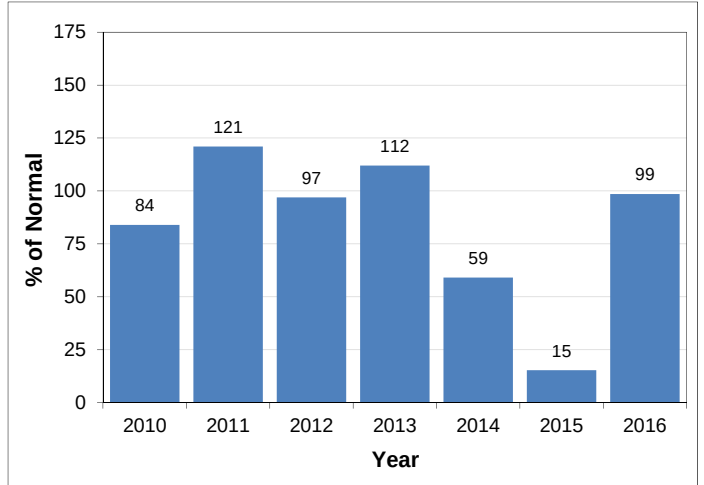


Snow Basin Index Graphs - March 1, 2016

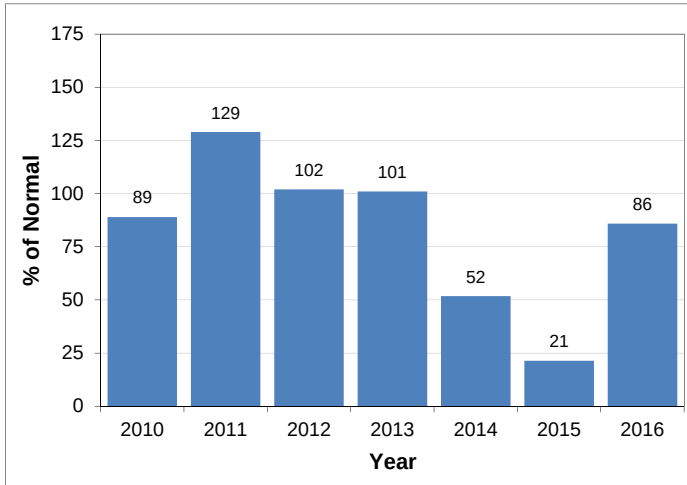
Similkameen



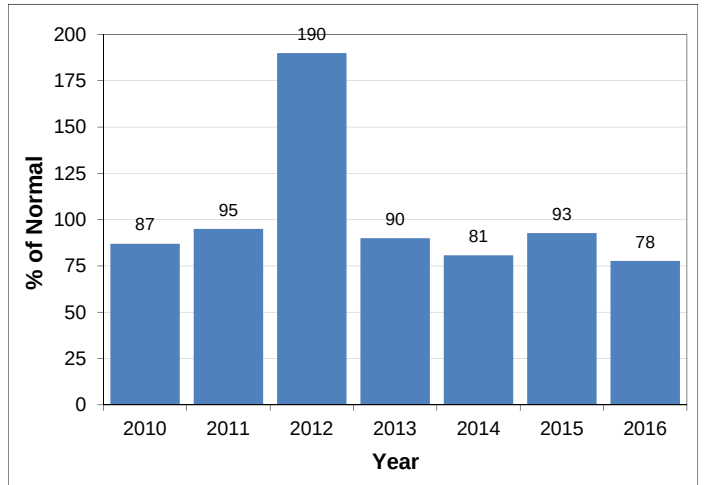
South Coast



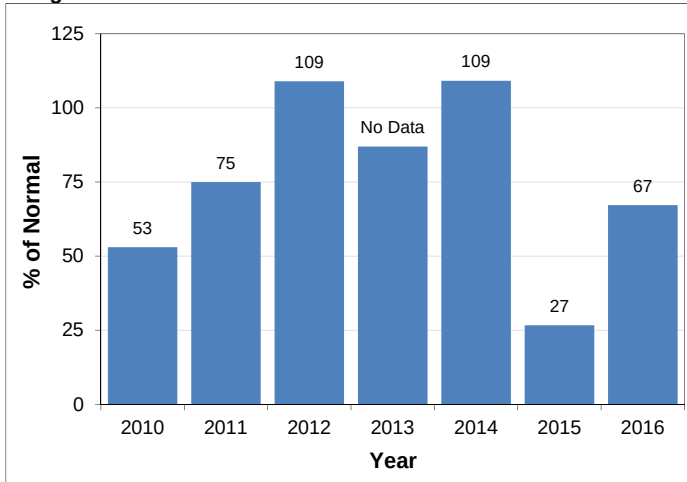
Vancouver Island



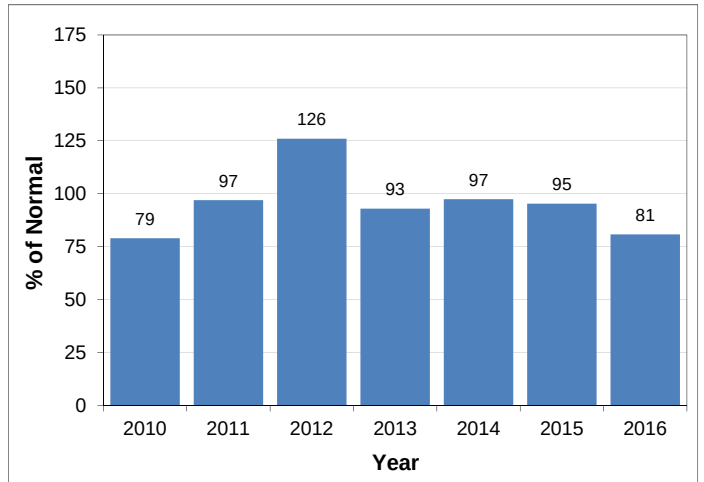
Central Coast



Skagit

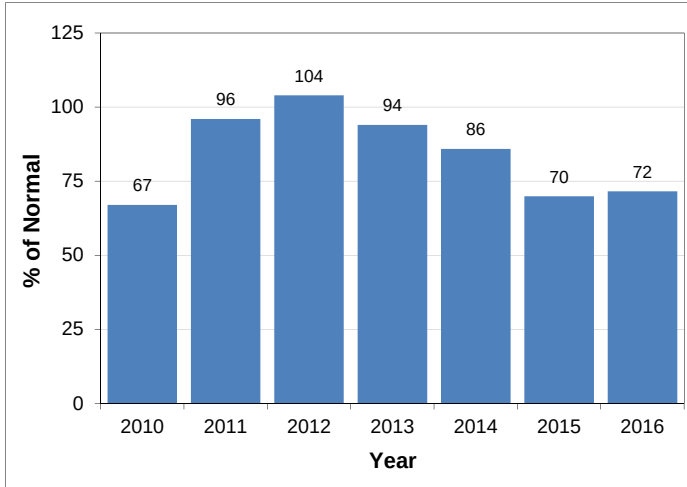


Peace

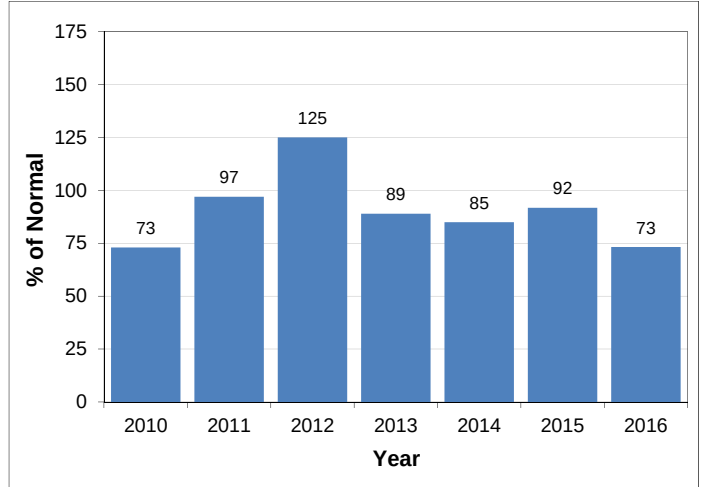


Snow Basin Index Graphs - March 1, 2016

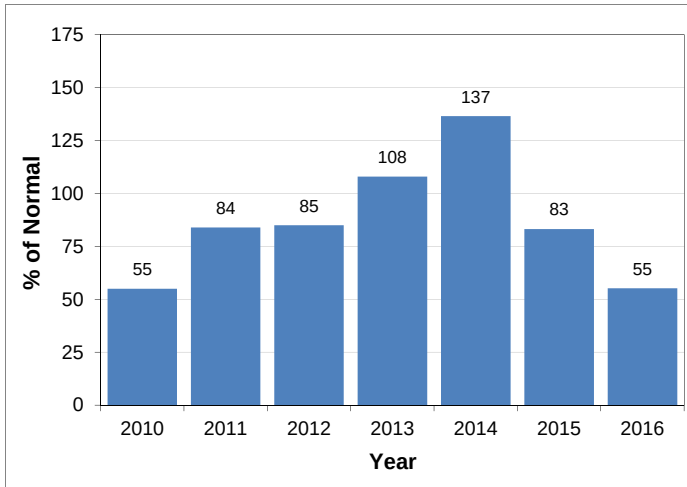
Stikine



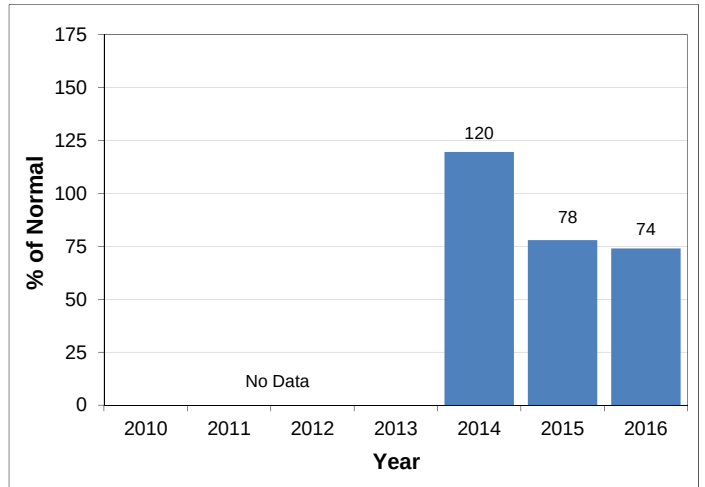
Skeena-Nass



Liard



Northwest



River Forecast Centre
Ministry of Forests, Lands and Natural Resource Operations
Volume Runoff Forecast March 2016

Location		Mar - Jun Runoff				Mar - Jul Runoff				Mar - Sep Runoff			
		Forecast (kdam ³)	Normal (1981- 2010) (kdam ³)	% of Normal	Std. Error (kdam ³)	Forecast (kdam ³)	Normal (1981- 2010) (kdam ³)	% of Normal	Std. Error (kdam ³)	Forecast (kdam ³)	Normal (1981- 2010) (kdam ³)	% of Normal	Std. Error (kdam ³)
Upper Fraser Basin	Fraser at McBride					3683	3786	97	331	5203	5252	99	390
	McGregor at Lower Canyon					3466	4087	85	490	4522	5132	88	639
	Fraser at Shelley					14035	16310	86	1494	18056	20369	89	1832
Middle Fraser Basin	Quesnel River at Quesnel					4406	4747	93	510	5693	6078	94	670
Thompson Basin	N. Thompson at McLure					9313	9190	101	536	11637	11359	102	826
	S. Thompson at Chase					6431	6111	105	566	8154	7678	106	832
	Thompson at Spences Bridge					16703	15775	106	1174	21196	19755	107	1814
Bulkley and Skeena	Bulkley at Quick					2071	2709	76	1361	2604	3306	79	1939
	Skeena at Usk					16738	19187	87	1335	21026	23531	89	1809
Nicola Lake	Inflows	138	126	110	31	157	143	110	35				
Nicola River	at Spences Bridge	670	523	128	82	772	591	131	103				
Similkameen River	at Nighthawk	1494	1342	111	158					1843	1652	112	184
	at Hedley	1223	1045	117	134					1441	1233	117	151
Okanagan and Kalamalka- Wood Lake	Okanagan Lake Inflow	676	470	144	89	731	497	147	110				
	Kalamalka-Wood Lake Inflow	35	31	114	12	37	33	115	15				
Cowichan River	Cowichan Lake Inflows	328	423	79%	74					364	467	79%	70

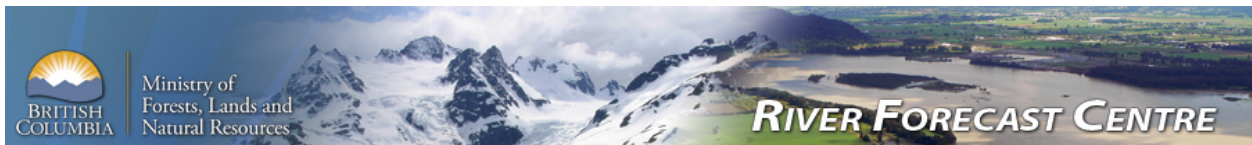
Note: 1 kdam³=1,000,000 m³

Note that missing values reflect that forecasts were not made for that time interval

Disclaimer: Seasonal forecasts were developed using a Principle Component Analysis of snow pack, climate and streamflow data.

There is inherent uncertainty in runoff forecasts including potential errors in data and the unpredictable nature of seasonal weather

Use at your own risk



Snow Survey and Water Supply Bulletin – April 1st, 2016

The April 1st snow survey is now complete. Data from 146 snow courses and 63 automated snow stations around the province and climate data from Environment Canada have been used to form the basis for the following report¹.

Weather

Temperatures across British Columbia continued to be well above normal through the month of March, with daily temperatures being 1-3°C above normal through southern BC, and 2-4°C above normal through the Kootenays, Central, and Northern BC. These warm temperatures have persisted throughout the 2015-16 winter.

March was generally a wet month, with a few heavier storm cycles mixed with drier and unsettled periods with lighter precipitation. A high pressure system with dry and very warm weather dominated the end of the month. Precipitation in March was above normal across most of the province, with typical precipitation amounts in the range of 130-200%. In the Central Interior, precipitation was closer to normal, and the Central Coast, North Coast and North-West were drier than normal.

Snowpack

Despite the warmer weather, wet conditions led to seasonal snow pack growth across most of the province through March. In Northern BC, many basins experienced a drop in basin index values since last month, and in the Okanagan and Boundary, basin index values increased. In general, snow basin indices are near normal (80-120%) across the province, with a provincial average of 91%. Below normal indices (65-80%) are present in the Upper Fraser West, Upper Fraser East, Nechako, and Skeena-Nass, and well below normal (<65%) in the Central Coast, Stikine, North-west, Liard and Skagit. Well above normal snow packs (>120%) are present in the Okanagan. Lower snowpack in the Upper Fraser is offset by slightly higher than normal snow packs in the Thompson River basin, and the overall Fraser River basin index is 96%.

Due to warm weather throughout the winter, low to mid elevation snow packs across the province are greatly diminished this season. While the provincial average for all April 1st surveys is 91% of normal, the average for sites below 1200 m elevation is 62% of normal, and just 44% of normal for sites below 1000m.

Warm weather towards the end of March and in early April has led to the onset of the melt season across the province. All of the provincial automated snow weather stations have recorded melt over the past week, as well as a number of manual surveys which experienced a loss of snow water equivalent between the March 1st and April 1st surveys. The transition from snow accumulation to snow melt is two to three weeks earlier than usual this season.

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 – April 1st, 2016

Table 1: BC Snow Basin Indices – April 1, 2016

Basin	% of Normal	Basin	% of Normal
Upper Fraser West	75	Okanagan	131
Upper Fraser East	76	Boundary	106
Nechako	79	Similkameen	104
Middle Fraser	102	South Coast	101
Lower Fraser	107	Vancouver Island	99
North Thompson	112	Central Coast	59
South Thompson	113	Skagit	59
Nicola	113	Peace	82
Fraser River (all)	96	Skeena-Nass	69
Upper Columbia	99	Stikine	57
West Kootenay	107	Liard	51
East Kootenay	99	Northwest	68

Streamflow

With warm temperatures, mid-season melt, and precipitation as rain, most rivers across British Columbia have experienced well above normal streamflow (150% to 200% of median value) over the past several months. Snow melt runoff that typically flows later in the season has already passed through their watersheds. As of early April, virtually all of the rivers in the province were flowing well above normal for the time of year. This advance in runoff timing is expected to continue to lead to an earlier freshet this season, both in terms of timing of peak flows and the recession to the low-flow season.

Outlook

Strong El Niño conditions that developed over the equatorial Pacific regions over the past few months peaked earlier in the winter and are declining. The Climate Prediction Centre (CPC) at the U.S. National Weather Service/NOAA is forecasting a high likelihood of El Niño conditions persisting through until late-spring or early summer 2016.

Seasonal forecasts from Environment Canada are indicating a high likelihood of above-normal temperatures across British Columbia over the April to June period, and an increased chance of warmer than normal temperatures through the extended forecast period into the summer months.

Seasonal volume runoff forecasts (see table below) are near normal for most basins across the province; above normal seasonal runoff (>120%) is forecast for the Nicola River, Similkameen and Okanagan and below normal seasonal runoff (<80%) is forecast for the Cowichan River.

High snow pack in the Okanagan basin indicates elevated seasonal flood risk in the region. Near-normal snow pack elsewhere in the province is an indication of normal seasonal flood

Snow Survey and Water Supply Bulletin – April 1st, 2016

risk. Below normal snow packs in the north and west indicate below normal seasonal risk, and watersheds in these areas would need to experience extreme weather conditions to develop flooding conditions this season. With a basin-wide index of 96% for the Fraser River, seasonal risk to lower Fraser River from Hope downstream is normal. The expected peak flow for the Fraser River at Hope is 8000-9000 m³/s; higher or lower flows are possible depending on weather conditions.

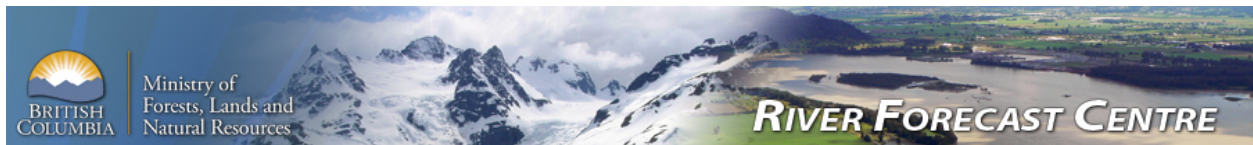
The forecast of warmer weather through the spring, combined with warm temperatures already experienced this winter, is likely to be an important factor in this year's freshet season. With the advanced melt of low to mid-elevation snow that has already occurred, continued warmer than normal temperatures are expected to continue to drive an advance in the freshet season. Typically peak flows in most snow-dominated rivers in the province reach their peak from mid-May through late-June. With the advance in melt already observed, and forecast for ongoing warm weather, the peak season is likely to be advanced to the late-April to early-June period for most rivers in the province.

Current weather forecasts for the next two weeks suggest on-going warm weather. Snow melt rates are expected to increase across the province, as snow packs ripen. River levels are expected to see significant rises over the next few weeks. In the short-term (through mid-April), flows are not expected to reach flood potential level. The River Forecast Centre is modelling streamflow across the province. Information regarding freshet conditions, including hydrologic model forecasts, is available on the [Freshet page](#) on the RFC website.

An advanced freshet is expected to put pressure on summer low flows in snow-melt dominated rivers across the province. With very low snow packs in the Central Coast, Skagit, Stikine and Liard, and low snow packs in the Upper Fraser, Nechako, Skeena and Northwest the risk for low flows this summer are elevated. Elsewhere in the province, limited seasonal snow pack at low to mid elevations will also add pressure to low flows later in the season, even in basins with normal snow basin indices.

For both spring flood risk and summer low flows, snow pack is just one of the important elements that determine whether or not extreme conditions will emerge. Weather, through the spring and summer, is also a key driver on whether or not flooding or low stream flows will occur. May and June are climatologically the wet season for the BC Interior. While indicators, like El Niño, have stronger linkages to seasonal temperature, precipitation is difficult to forecast beyond a one to two week horizon. Extreme wet or dry weather can significantly impact risks for peak flows and low flows.

The River Forecast Centre will continue to monitor snow pack conditions and will provide an updated seasonal flood risk and stream flow forecast in the May 1st 2016 bulletin, which is scheduled for release on May 9th.



Snow Survey and Water Supply Bulletin – April 1st, 2016

BC River Forecast Centre

April 7, 2016

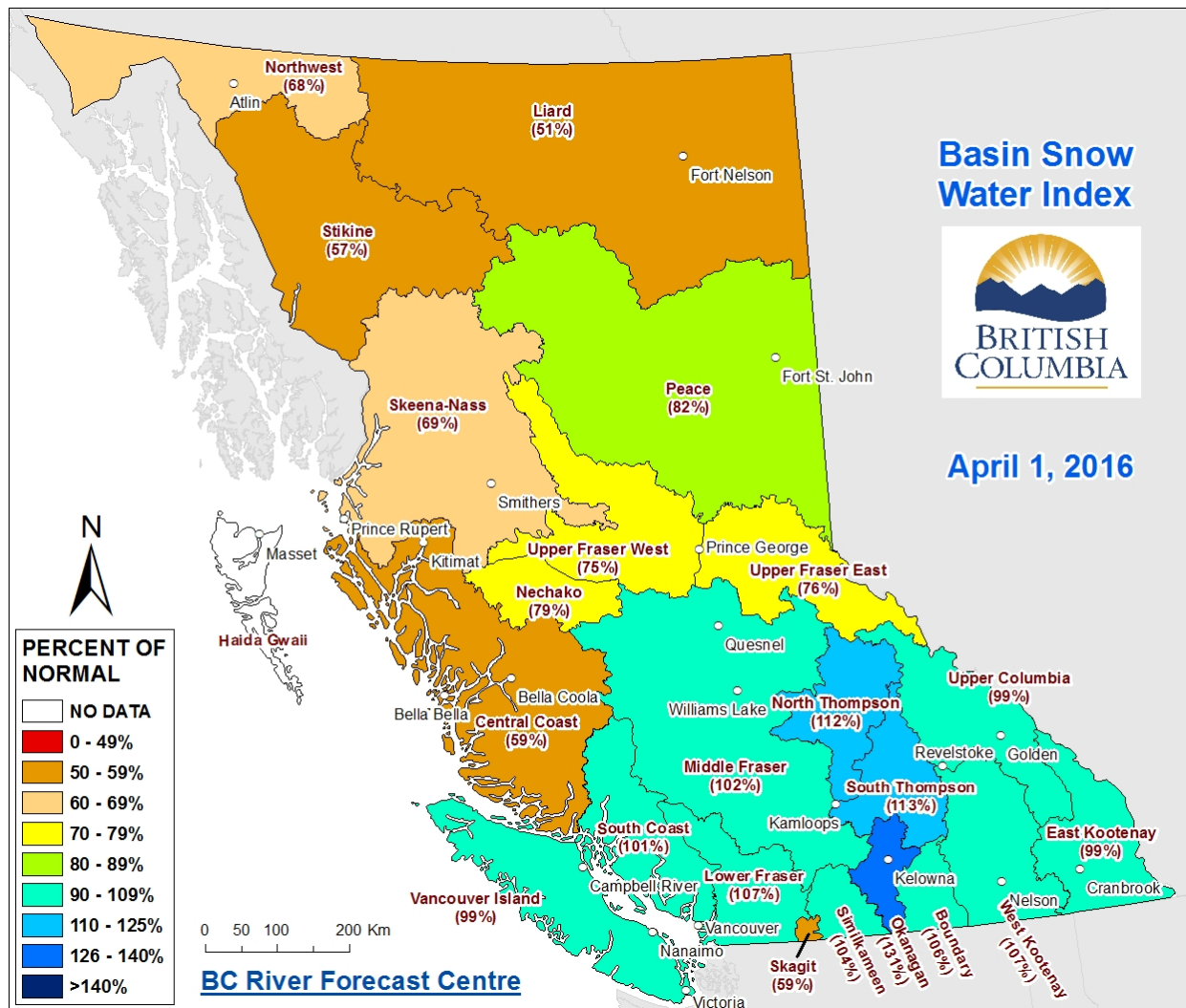


Ministry of
Forests, Lands and
Natural Resources

RIVER FORECAST CENTRE

Snow Survey and Water Supply Bulletin – April 1st, 2016

Figure 1: Basin Snow Water Index – April 1st, 2016



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2016 Automated Snow Pillow/Manual Snow Survey Data				April					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1A01P	YELLOWHEAD LAKE	Upper Fraser East	1860	2016-04-01	117	485		90%	510	473	349	784	541	19
1A02P	MC BRIDE UPPER	Upper Fraser East	1580	2016-04-01	100	393		89%	485	436	297	693	442	24
1A03P	BARKERVILLE	Upper Fraser East	1520	2016-04-01	75	251		69%	274	375	221	524	364	41
1A05	LONGWORTH (UPPER)	Upper Fraser East	1693	2016-04-01	163	632		82%		1220	467	1234	768	62
1A06A	HANSARD	Upper Fraser East	622	NS	NS	NS	NS				72	442	176	19
1A10	PRINCE GEORGE A	Upper Fraser East	684	2016-03-30	0	0	T	0%	0	175	0	313	98	54
1A11	PACIFIC LAKE	Upper Fraser East	756	2016-04-01	82	297		49%	391	920	290	1060	608	53
1A12	KAZA LAKE	Upper Fraser West	1247	2016-03-31	95	270		79%	345	346	220	476	341	53
1A12P	KAZA LAKE	Upper Fraser East	1248	2016-04-01	107	290								0
1A14P	HEDRICK LAKE	Upper Fraser East	1100	2016-04-01	159	407		51%	538	1177	538	1288	801	16
1A15	KNUDSEN LAKE	Upper Fraser East	1598	N	N	N	N		817	941	506	1346	801	49
1A16	BURNS LAKE	Upper Fraser West	820	2016-04-04	9	26		22%	128	112	0	264	119	46
1A17P	REVOLUTION CREEK	Upper Fraser East	1690	2016-04-01	188	699		89%	763	960	453	1292	783	31
1A19P	DOMES MOUNTAIN	Upper Fraser East	1820	2016-04-01	165	591		81%	761	825	503	1069	732	10
1A23	BIRD CREEK	Upper Fraser West	1196	2016-03-31	50	146		104%	210	168	84	270	140	26
1B01	MOUNT WELLS	Nechako	1489	2016-03-30	120	381		78%	602	409	273	690	490	61
1B01P	MOUNT WELLS	Nechako	1490	2016-04-01	NA	427		77%	722	421	347	869	557	24
1B02	TAHTSA LAKE	Nechako	1319	2016-03-31	245	1026		85%	1175	920	775	1972	1202	63
1B02P	TAHTSA LAKE	Nechako	1300	2016-04-01	NA	1166		91%	1202	884	860	2227	1278	24
1B05	SKINS LAKE	Nechako	877	2016-03-31	13	42		47%	107	100	0	203	90	52
1B06	MOUNT SWANNELL	Nechako	1596	2016-03-31	85	249		88%	378	269	148	490	282	27
1B07	NUTLI LAKE	Nechako	1502	2016-03-31	117	414		80%	523	316	301	834	518	25
1B08P	MOUNT PONDOSY	Nechako	1400	2016-04-01	NA	732		93%	968	530	527	1152	790	24
1C01	BROOKMERE	Middle Fraser	994	2016-03-29	43	138		81%	45	143	45	399	171	71
1C05	MCGILLIVRAY PASS	Middle Fraser	1715	2016-03-29	155	544		95%	381	462	322	1118	572	64
1C06	PAVILION	Middle Fraser	1209	NS	NS	NS	NS			0	0	147	22	59
1C08	NAZKO	Middle Fraser	1029	2016-03-31	0	0		0%	13	23	0	142	46	58
1C09A	HIGHLAND VALLEY	Middle Fraser	1547	2016-04-05	19	70		84%	230	128	3	249	83	49
1C12P	GREEN MOUNTAIN	Middle Fraser	1780	2016-04-01	NA	968		110%	694	619	616	1408	878	22
1C13A	HORSEFLY MOUNTAIN	Middle Fraser	1612	2016-03-28	143	518		111%	446	584	282	716	466	46
1C14	BRALORNE	Middle Fraser	1382	2016-03-29	54	158		103%	0	151	0	389	153	53
1C17	MOUNT TIMOTHY	Middle Fraser	1632	2016-03-31	110	373		126%	219	364	186	533	296	55
1C18P	MISSION RIDGE	Middle Fraser	1850	2016-04-01	NA	451		82%	385	498	157	1012	550	46
1C19	GNAWED MOUNTAIN	Middle Fraser	1617	2016-04-05	22	88		83%	140	146	21	307	106	49
1C20P	BOSS MOUNTAIN MINE	Middle Fraser	1460	2016-04-01	152	672		115%	525	595	424	866	585	22
1C21	BIG CREEK	Middle Fraser	1130	2016-03-28	0	0		0%	0	6	0	119	14	46
1C22	PUNTZI MOUNTAIN	Middle Fraser	939	2016-03-28	0	0		0%	0	40	0	91	19	46
1C23	PENFOLD CREEK	Middle Fraser	1687	N	N	N	N		749	1055	641	1285	979	44
1C25	LAC LE JEUNE (UPPER)	Middle Fraser	1471	2016-04-05	54	171		135%	0	174	0	228	127	43

2016 Automated Snow Pillow/Manual Snow Survey Data				April					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1C28	DUFFEY LAKE	Middle Fraser	1253	2016-04-01	134	522		109%	212	536	212	866	480	38
1C29	SHOVELNOSE MOUNTAIN	Middle Fraser	1456	2016-03-29	65	239		108%	16	237	16	442	222	37
1C32	DEADMAN RIVER	Middle Fraser	1463	2016-04-01	42	100		96%	54	120	30	196	104	32
1C33A	GRANITE MOUNTAIN	Middle Fraser	1175	2016-03-31	47	177		94%	93	205	93	272	188	10
1C37	BRALORNE(UPPER)	Middle Fraser	1980	2016-03-29	183	684		103%	504		328	1010	665	21
1C38	DOWNTON LAKE (UPPER)	Middle Fraser	1884	2016-03-29	238	942		111%	780	678	422	1416	847	21
1C38P	DOWNTON / LAJOIE UPPER	Middle Fraser	1829	2016-04-01	NA	781								0
1C39	BRIDGE GLACIER (LOWER)	Middle Fraser	1393	2016-03-29	200	736		127%	460	468	240	1086	580	21
1C40	TYAUGHTON CREEK (NORTH)	Middle Fraser	1946	2016-03-29	133	430		98%	328	350	264	844	440	21
1C40P	NORTH TYAUGHTON	Middle Fraser	1969	2016-04-01	NA	375								0
1C41P	YANKS PEAK, EAST	Middle Fraser	1670	2016-04-01	172	754		95%	826	884	532	1013	794	19
1C42	CAVERHILL LAKE NEW	Middle Fraser	1400	2016-03-30	84	286			186	276	174	284		11
1D06P	TENQUILLE LAKE	Lower Fraser	1680	2016-04-01	288	1220		120%	857	915	713	1587	1014	15
1D08	STAVE LAKE	Lower Fraser	1211	2016-03-28	319	1453		100%	98	1615	98	2750	1448	48
1D09	WAHLEACH LAKE	Lower Fraser	1395	2016-03-28	135	488		83%	33	779	33	1270	588	48
1D09P	WAHLEACH LAKE	Lower Fraser	1400	2016-04-01	NA	702		68%	265	985	265	1640	1026	24
1D10	NAHATLATCH RIVER	Lower Fraser	1530	2016-03-28	336	1476		114%	468	1351	468	2410	1296	48
1D16	DICKSON LAKE	Lower Fraser	1147	2016-03-28	273	1276		85%	56	2106	56	2990	1497	23
1D17P	CHILLIWACK RIVER	Lower Fraser	1600	2016-04-01	295	1461		102%	666	1825	590	2418	1435	24
1D18	DISAPPOINTMENT LAKE	Lower Fraser	1050	2016-03-30	303	1300								
1D19P	SPUZZUM CREEK	Lower Fraser	1180	2016-04-01	530	1471		92%	166	1783	166	2745	1600	17
1E01B	BLUE RIVER	North Thompson	673	2016-03-25	63	260		96%	189	300	154	425	272	33
1E02P	MOUNT COOK	North Thompson	1550	2016-04-01	349	1515		125%	1156	1258	998	1480	1209	16
1E03A	TROPHY MOUNTAIN	North Thompson	1907	2016-03-25	166	540		101%	492	568	332	888	537	41
1E05	KNOUFF LAKE	North Thompson	1189	2016-04-01	34	120		90%	0	174	0	274	134	61
1E07	ADAMS RIVER	North Thompson	1769	2016-03-28	229	810		120%	566	769	435	1069	673	46
1E08P	AZURE RIVER	North Thompson	1620	2016-04-01	244	1126		99%	1249	1222	716	1538	1135	19
1E10P	KOSTAL LAKE	North Thompson	1770	2016-04-01	NA	881		104%	793	893	618	1169	850	31
1E14P	COOK CREEK	North Thompson	1280	2016-04-01	128	0								0
1F01A	ABERDEEN LAKE	South Thompson	1262	2016-03-31	40	138		111%	101	143	6	259	124	74
1F02	ANGLEMONT	South Thompson	1168	2016-03-31	68	272		85%		334	142	561	321	59
1F03P	PARK MOUNTAIN	North Thompson	1890	2016-04-01	240	919		108%	797	948	549	1207	852	31
1F04	ENDERBY	South Thompson	1948	N	N	N	N		980	1171	610	1501	1002	53
1F06P	CELISTA MOUNTAIN	North Thompson	1551	2016-04-01	252	1132		131%	827	935	720	1117	867	11
2A01A	CANOE RIVER	Upper Columbia	866	2016-03-30	0	0		0%	0		0	262	65	74
2A02	GLACIER	Upper Columbia	1249	2016-03-29	162	659		98%	480	660	376	1161	670	79
2A03A	FIELD	Upper Columbia	1310	2016-03-31	40	112		82%	49	71	8	251	137	77
2A06P	MOUNT REVELSTOKE	Upper Columbia	1830	2016-04-01	NA	1288		106%	1003	1223	709	1686	1210	23
2A07	KICKING HORSE	Upper Columbia	1648	2016-03-31	96	312		98%	236	280	185	589	317	68

2016 Automated Snow Pillow/Manual Snow Survey Data				April					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2A11	BEAVERFOOT	Upper Columbia	1924	2016-03-28	79	242	A	127%	126	196	105	460	191	68
2A14	MOUNT ABBOT	Upper Columbia	2031	2016-03-27	309	1239		103%	963	1282	698	1849	1199	57
2A16	GOLDSTREAM	Upper Columbia	1914	2016-03-29	288	1164		103%	1074	1236	785	1638	1133	53
2A17	FIDELITY MOUNTAIN	Upper Columbia	1852	2016-03-27	292	1200		99%	1021	1269	730	1951	1210	53
2A18	KEYSTONE CREEK	Upper Columbia	1839	2016-03-29	222	844		107%	667	856	485	1388	788	50
2A18P	KEYSTONE CREEK	Upper Columbia	1850	2016-04-01	NA	966								0
2A19	VERMONT CREEK	Upper Columbia	1533	2016-03-28	135	500		126%	219	425	190	843	397	50
2A21P	MOLSON CREEK	Upper Columbia	1980	2016-04-01	NA	945		92%	965	1079	651	1551	1029	35
2A22	SUNBEAM LAKE	Upper Columbia	2066	2016-03-29	216	831		94%	819	983	590	1384	885	49
2A23	BUSH RIVER	Upper Columbia	1982	2016-03-29	194	753		93%	715	862	455	1331	809	49
2A25	KIRBYVILLE LAKE	Upper Columbia	1739	2016-03-29	325	1333		115%	1105	1324	701	1816	1163	44
2A27	DOWNIE SLIDE (LOWER)	Upper Columbia	964	2016-03-29	165	682		103%		624	448	1032	664	38
2A29	DOWNIE SLIDE (UPPER)	Upper Columbia	1628	2016-03-29	368	1474		110%	1066	1332	858	2360	1334	38
2A30P	COLPITTI CREEK	Upper Columbia	2131	2016-04-01	NA	803								0
2A31P	CARIBOU CREEK UPPER	Upper Columbia	2201	2016-04-01	NA	946								0
2A32P	WILDCAT CREEK	Upper Columbia	2122	2016-04-01	NA	523								0
2B02A	FARRON	West Kootenay	1229	2016-03-29	94	347		116%	127	258	127	480	300	43
2B05	WHATSHAN (UPPER)	West Kootenay	1476	2016-03-30	174	678		106%	457	524	350	964	638	58
2B06P	BARNES CREEK	Lower Columbia	1620	2016-04-01	NA	629		119%	498	548	323	773	530	23
2B07	KOCH CREEK	West Kootenay	1813	2016-03-30	241	907		126%		748	397	1156	722	56
2B08P	ST. LEON CREEK	Lower Columbia	1800	2016-04-01	NA	1148		107%	1079	1166	581	1553	1072	23
2B09	RECORD MOUNTAIN	West Kootenay	1906	2016-03-30	259	895		126%	388	780	315	1307	708	41
2C01	SINCLAIR PASS	East Kootenay	1374	2016-03-30	41	116		106%	45	73	36	262	109	79
2C04	SULLIVAN MINE	East Kootenay	1580	2016-03-28	87	264		97%	174	242	134	538	272	70
2C07	FERNIE EAST	East Kootenay	1213	2016-03-30	56	205		72%	24	246	24	605	286	65
2C09Q	MORRISSEY RIDGE	East Kootenay	1800	2016-04-01	NA	719		102%	488	595	360	1224	704	36
2C10P	MOYIE MOUNTAIN	East Kootenay	1930	2016-04-01	84	398		97%	263	351	216	679	412	37
2C14P	FLOE LAKE	East Kootenay	2090	2016-04-01	NA	650		94%	648	757	364	983	695	23
2C15	MOUNT ASSINIBOINE	East Kootenay	2230	2016-03-28	154	528		103%	512	592	252	816	514	47
2C16	MOUNT JOFFRE	East Kootenay	1763	2016-03-28	123	366		105%	308	428	179	711	349	47
2C17	THUNDER CREEK	East Kootenay	2062	2016-03-28	112	330		127%	214	377	140	475	259	47
2C20	VERMILLION RIVER NO. 3	East Kootenay	1612	NS	NS	NS	NS				175	401	264	16
2D02	FERGUSON	West Kootenay	929	2016-03-28	152	611		111%	414	498	142	881	550	78
2D03	SANDON	West Kootenay	1072	2016-03-31	67	241		73%	154	249	71	585	330	73
2D04	NELSON	West Kootenay	952	2016-03-31	39	156		47%	5	210	5	622	334	78
2D05	GRAY CREEK (LOWER)	West Kootenay	1558	2016-03-30	141	498		113%	276	413	276	688	440	68
2D06	CHAR CREEK	West Kootenay	1290	2016-03-28	140	488		93%	241	445	214	940	525	50
2D07A	DUNCAN LAKE NO. 2	West Kootenay	662	NS	NS	NS	NS			0	0	223	83	24
2D08P	EAST CREEK	West Kootenay	2030	2016-04-01	NA	999		116%	871	971	442	1245	863	35

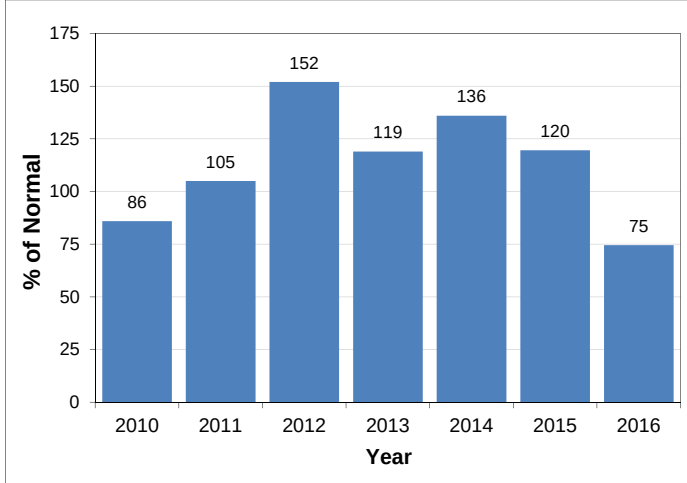
2016 Automated Snow Pillow/Manual Snow Survey Data				April					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2D09	MOUNT TEMPLEMAN	West Kootenay	1879	2016-03-28	281	1078		106%		1086	688	1608	1013	45
2D10	GRAY CREEK (UPPER)	West Kootenay	1926	2016-03-30	228	855		118%	599	785	492	1123	722	47
2D14P	REDFISH CREEK	West Kootenay	2104	2016-04-01	377	1596		134%	1427	1377	994	1755	1188	14
2E01	MONASHEE PASS	Boundary	1387	2016-03-30	102	356		110%	258	291	188	517	324	67
2E02	CARMI	Boundary	1254	2016-04-04	9	31		27%	0	72	0	290	115	53
2E03	BIG WHITE MOUNTAIN	Boundary	1672	2016-04-04	175	608		128%	319	450	319	762	476	50
2E07P	GRANO CREEK	Kettle	1860	2016-04-01	177	703		136%	400	482	334	791	516	18
2F01A	TROUT CREEK (WEST)	Okanagan	1430	2016-03-26	66	211		108%	132	210	132	272	196	6
2F02	SUMMERLAND RESERVOIR	Okanagan	1304	2016-03-30	87	290		147%	171	224	96	389	197	80
2F03	MC CULLOCH	Okanagan	1266	2016-04-01	45	168		127%	6	165	6	249	132	81
2F04	GRAYSTOKE LAKE	Okanagan	1818	2016-04-04	118	390		115%			196	828	339	42
2F05P	MISSION CREEK	Okanagan	1780	2016-04-01	175	627		131%	396	546	276	728	478	46
2F07	POSTILL LAKE	Okanagan	1358	2016-03-30	82	239		118%	90	190	90	348	202	66
2F08	GRAYBACK RESERVOIR	Okanagan	1548	2016-03-28	123	343		154%	193	253	114	351	223	62
2F09	WHITEROCKS MOUNTAIN	Okanagan	1789	2016-03-26	201	785		151%	389	601	318	1021	521	63
2F10P	SILVER STAR MOUNTAIN	Okanagan	1839	2016-04-01	NA	786	E							0
2F11	ISINTOK LAKE	Okanagan	1651	2016-03-31	65	144		97%	114	176	66	340	148	51
2F12	MOUNT KOBAN	Okanagan	1817	2016-03-28	143	481		158%	229	496	105	602	304	50
2F13	ESPERON CR (UPPER)	Okanagan	1634	2016-03-29	151	524		137%	260	410	244	805	383	50
2F14	ESPERON CR (MIDDLE)	Okanagan	1440	2016-03-29	132	516		157%	224	342	196	607	328	50
2F18P	BRENDA MINE	Okanagan	1460	2016-04-01	NA	436		126%	190	274	190	497	345	23
2F19	OYAMA LAKE	Okanagan	1365	2016-04-01	63	188		122%		136	61	255	154	46
2F20	VASEUX CREEK	Okanagan	1403	2016-03-28	60	176		133%	44	104	40	239	132	45
2F21	BOULEAU LAKE	Okanagan	1405	2016-03-25	115	344		112%	160	324	160	564	306	45
2F23	MACDONALD LAKE	Okanagan	1742	2016-04-01	159	596		139%	307	428	257	677	428	38
2F24	ISLAHT LAKE	Okanagan	1492	2016-03-31	135	480		155%	145	259	145	501	309	34
2F25	POSTILL LAKE (UPPER)	Okanagan	1500	2016-03-30	100	281			38	231	38	274		6
2G03P	BLACKWALL PEAK	Similkameen	1940	2016-04-01	220	893		116%	636	712	403	1497	770	48
2G04	LOST HORSE MOUNTAIN	Similkameen	1988	2016-03-29	98	268		124%	242	248	138	533	216	55
2G05	MISSEZULA MOUNTAIN	Similkameen	1602	2016-03-29	80	215		109%	100	166	90	361	197	55
2G06	HAMILTON HILL	Similkameen	1477	2016-03-28	78	220		76%	119	213	83	851	291	56
3A01	GROUSE MOUNTAIN	South Coast	1126	2016-03-31	238	1150		99%	0	1650	0	2670	1160	80
3A02	POWELL RIVER (UPPER)	South Coast	1002	2016-03-29	188	826		85%	15	888	15	1813	969	64
3A05	POWELL RIVER (LOWER)	South Coast	882	2016-03-29	79	344		53%	8	1138	8	1554	651	57
3A09	PALISADE LAKE	South Coast	898	2016-03-30	224	1106		84%	0	1610	0	3560	1322	69
3A10	DOG MOUNTAIN	South Coast	1007	2016-03-31	200	1008		89%	0	1540	0	2720	1137	71
3A19	ORCHID LAKE	South Coast	1178	2016-03-30	312	1402		79%	90	1953	90	3770	1769	43
3A20	CALLAGHAN CREEK	South Coast	1009	2016-03-31	206	1040		127%	24	882	24	1604	820	39
3A22P	NOSTETUKO RIVER	South Coast	1500	2016-04-01	131	593		104%	287	428	233	1074	568	27

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3A24P	UPPER MOSLEY CREEK	South Coast	1650	2016-04-01	67	238		83%	334	161	147	567	288	27
3A25P	UPPER SQUAMISH RIVER	South Coast	1340	2016-04-01	NA	1725		109%	715	1574	715	2760	1584	26
3B01	FORBIDDEN PLATEAU	Vancouver Island	1110	2016-03-31	355	1667		112%	30	1529	30	3550	1485	61
3B02A	MT. COKELY	Vancouver Island	1267	2016-04-05	172	790		95%	0	1086	0	2100	831	35
3B04	ELK RIVER	Vancouver Island	270	2016-03-31	0	0		0%	0	0	0	607	34	60
3B10	UPPER THELWOOD LAKE	Vancouver Island	1014	2016-03-31	280	1384		95%	0	1634	0	3200	1455	58
3B17P	WOLF RIVER	Vancouver Island	1490	2016-04-01	NA	1473		112%	382	1220	305	2600	1320	34
3B18	WOLF RIVER (MIDDLE)	Vancouver Island	1050	2016-03-31	137	612		99%	0	640	0	1706	618	46
3B19	WOLF RIVER (LOWER)	Vancouver Island	615	2016-03-31	33	150		48%	0	326	0	1198	315	46
3B23P	JUMP CREEK	Vancouver Island	1160	2016-04-01	175	811		75%	0	1267	0	3040	1088	20
3B24P	HEATHER MOUNTAIN UPPER	Vancouver Island	1190	2016-04-01	235	1429								0
3C07	WEDEENE RIVER SOUTH	Central Coast	196	2016-03-30	32	140		37%	208	482	96	981	383	30
3C08P	BURNT BRIDGE CREEK	North Coast	1330	2016-04-01	140	649		81%	847	725	427	1402	802	18
3D01C	SUMALLO RIVER WEST	Skagit	801	2016-03-28	0	0		0%	0	239	0	461	191	24
3D02	LIGHTNING LAKE	Skagit	1254	2016-03-28	105	360		129%	190	276	60	622	278	69
3D03A	KLESILKWA	Skagit	1134	2016-03-28	27	110		48%	0	303	0	792	231	68
4A02P	PINE PASS	Peace	1400	2016-04-01	251	945		92%	877	965	844	1550	1026	27
4A03	WARE (UPPER)	Peace	1563	2016-03-30	67	162		63%	233	266	157	390	258	54
4A04	WARE (LOWER)	Peace	969	2016-03-30	65	167		86%	180	190	118	316	194	54
4A05	GERMANSEN (UPPER)	Peace	1489	2016-03-31	104	318		91%	352	326	261	523	348	55
4A06	TUTIZZI LAKE	Peace	1043	2016-03-31	68	175		68%	213	231	166	406	259	53
4A07	LADY LAURIER LAKE	Peace	1446	2016-03-29	134	436		82%	509	414	384	854	529	53
4A09	PULPIT LAKE	Peace	1331	2016-03-30	105	353		83%	420	439	297	618	425	53
4A09P	PULPIT LAKE	Peace	1310	2016-04-01	83	297		68%	380	438	344	620	439	26
4A10	FREDRICKSON LAKE	Peace	1323	2016-03-30	69	165		67%	256	221	163	351	247	53
4A11	TRYGVE LAKE	Peace	1409	2016-03-30	86	253		68%	374	328	257	511	370	53
4A12	TSAYDAYCHI LAKE	Peace	1173	2016-03-31	104	346		87%	393	363	277	639	398	53
4A13	PHILIP LAKE	Peace	1013	2016-03-31	79	251		90%	221	322	176	449	279	53
4A16	MORFEE MOUNTAIN	Peace	1427	2016-04-01	181	685		82%		863	555	1158	833	47
4A18	MOUNT SHEBA	Peace	1480	2016-04-01	175	676		82%	839	1010	495	1294	823	47
4A20	MONKMAN CREEK	Peace	1566	2016-04-01	114	398		74%	567	717	313	1067	540	42
4A21	MOUNT STEARNS	Peace	1514	2016-03-29	43	81		55%	156	151	59	239	147	42
4A25	FORT ST. JOHN AIRPORT	Peace	692	NS	NS	NS	NS		129	154	0	226	97	41
4A30P	AIKEN LAKE	Peace	1040	2016-04-01	54	208		78%	249	201	197	371	268	31
4A31P	CRYING GIRL PRAIRIE	Peace	1358	2016-04-01	NA	173								0
4A33P	MUSKWA-KECHIKA	Peace	1196	2016-04-01	NA	46	E							0
4B01	KIDPRICE LAKE	Skeena-Nass	1415	2016-03-30	185	685		74%	915	694	622	1781	931	62
4B02	JOHANSON LAKE	Skeena-Nass	1480	2016-03-31	91	270		90%	306	272	173	417	301	53
4B03A	HUDSON BAY MTN	Skeena-Nass	1452	2016-03-29	112	392		79%	536	392	356	846	499	44

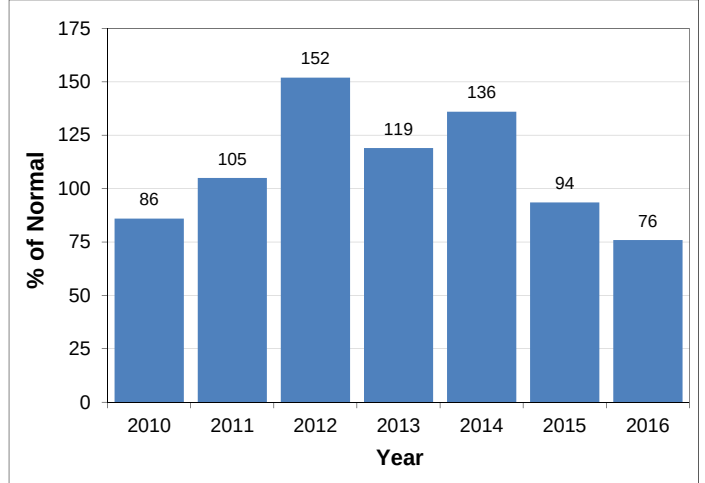
2016 Automated Snow Pillow/Manual Snow Survey Data				April					Historic Snow Water Equivalent (mm)					
			Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
Station ID	Name	Basin												
4B04	CHAPMAN LAKE	Skeena-Nass	1485	2016-03-30	118	375		82%	425	404	315	762	457	51
4B06	TACHEK CREEK	Skeena-Nass	1133	2016-03-29	69	208		93%	244	242	112	362	223	48
4B07	MCKENDRICK CREEK	Skeena-Nass	1048	2016-03-30	68	222		82%	276	265	183	427	271	48
4B08	MOUNT CRONIN	Skeena-Nass	1491	2016-03-30	142	460		81%	496	512	433	1097	570	47
4B10	NINGUNSAW PASS	Skeena-Nass	647	2016-04-05	52	199		46%	220	324	220	730	434	41
4B11A	BEAR PASS	Skeena-Nass	437	2016-03-27	82	322		50%		544	330	1013	642	29
4B13A	TERRACE AIRPORT	Skeena-Nass	219	2016-03-30	0	0		0%	0	13	0	333	84	36
4B14	EQUITY MINE	Skeena-Nass	1434	2016-03-29	110	364		95%	468	332	258	640	385	39
4B15	LU LAKE	Skeena-Nass	1296	2016-03-29	86	250		86%	360	272	162	504	291	39
4B15P	LU LAKE	Skeena/Nass	1300	2016-04-01	68	259		98%	436	263	154	478	264	18
4B16P	SHEDIN CREEK	Skeena/Nass	1480	2016-04-01	144	469		52%	582	684	582	1096	896	20
4B17P	TSAI CREEK	Skeena/Nass	1360	2016-04-01	188	808		69%	1088	936	929	1825	1165	18
4B18P	CEDAR - KITEEN	Skeena/Nass	885	2016-04-01	77	365		51%	411	530	349	1126	712	15
4C01	SIKANNI LAKE	Liard	1390	2016-03-30	68	158		57%	287	231	194	380	276	53
4C02	SUMMIT LAKE	Liard	1291	2016-04-01	17	54		48%	124	75	0	240	113	52
4C03	DEASE LAKE	Liard	805	2016-04-01	28	58		44%		160	50	259	132	49
4C05	FORT NELSON A	Liard	368	2016-04-01	16	66		70%	60	108	23	198	94	49
4C15	JADE CITY	Liard	943	2016-03-28	62	150		63%	156	238	156	340	238	14
4D01	TELEGRAPH CREEK	Stikine	490	2016-03-31	9	14	A	10%	85	121	37	343	146	39
4D02	ISKUT	Stikine	931	2016-04-01	0	0		0%		94	0	180	98	40
4D11P	KINASKAN LAKE	Stikine/Taku	1020	2016-04-01	63	237		59%	323		323	323	405	20
4E02B	ATLIN LAKE	Northwest	730	2016-03-31	23	46				104	76	243		10
Code	Description													
A	Sampling problems were encountered													
B	Early or late sampling													
C	Early or late sampling w/problems encountered													
E	Estimate													
N	Scheduled, but not sampled													
NA	Not available													
NS	Not scheduled													
SD	Snow Depth													
SWE	Snow Water Equivalent													
T	Trace Amount													

Snow Basin Index Graphs - April 1, 2016

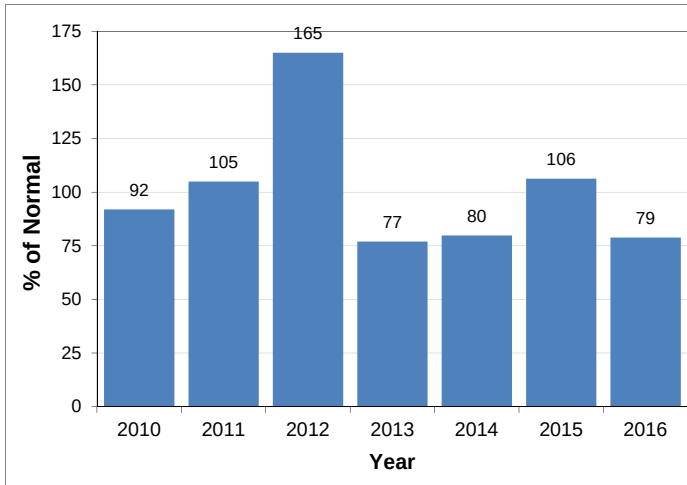
Upper Fraser West



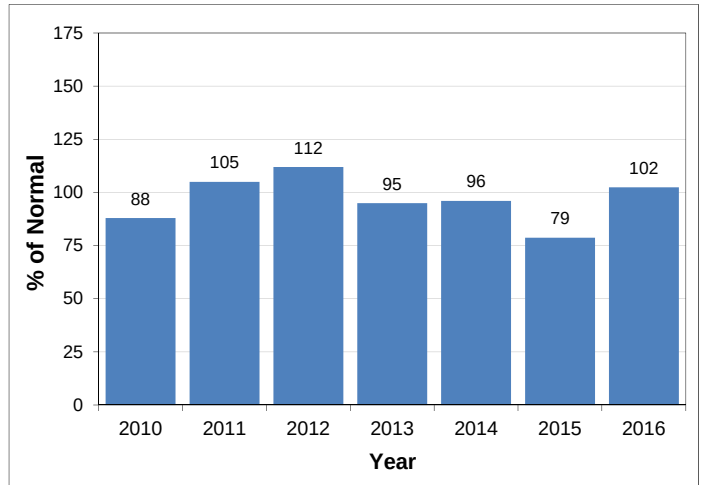
Upper Fraser East



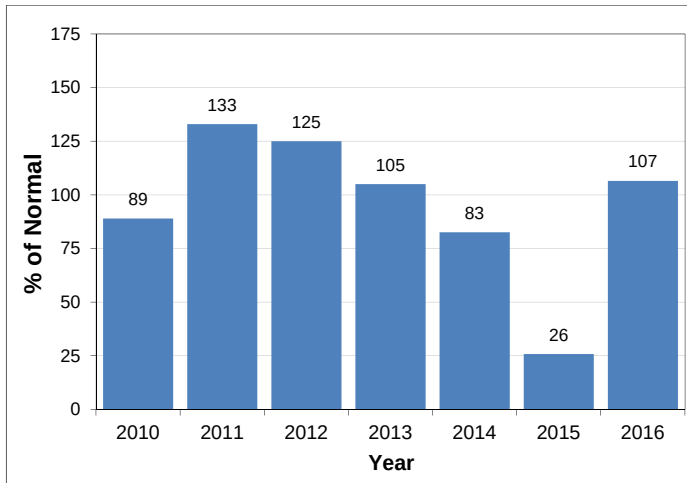
Nechako



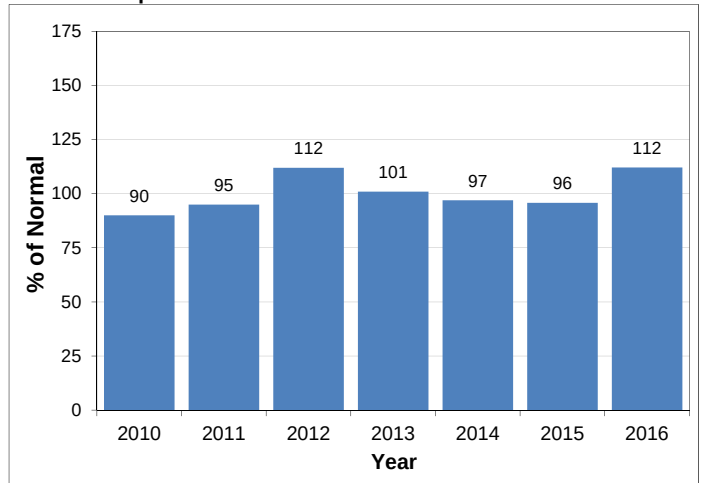
Middle Fraser



Lower Fraser

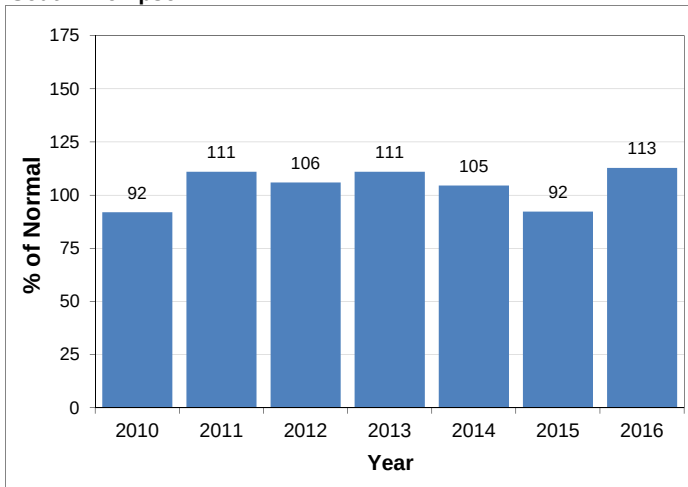


North Thompson

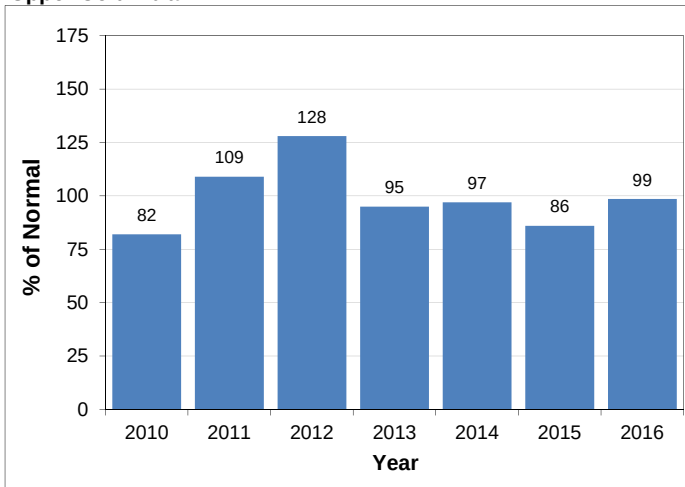


Snow Basin Index Graphs - April 1, 2016

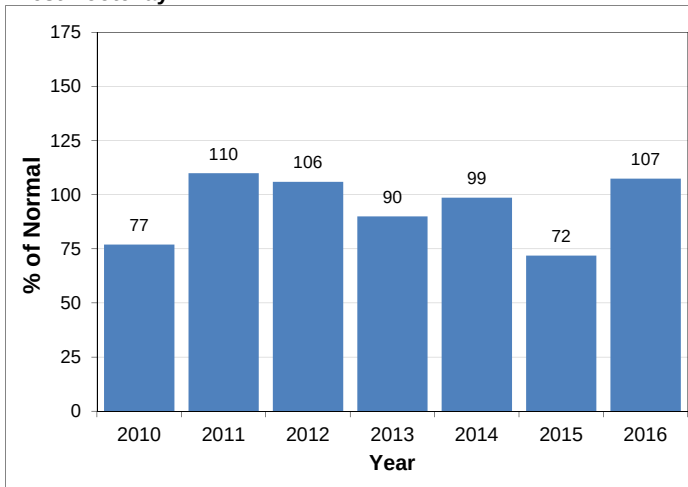
South Thompson



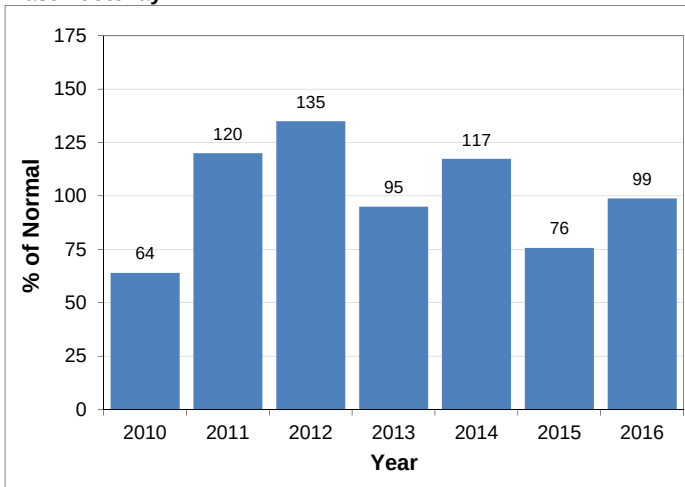
Upper Columbia



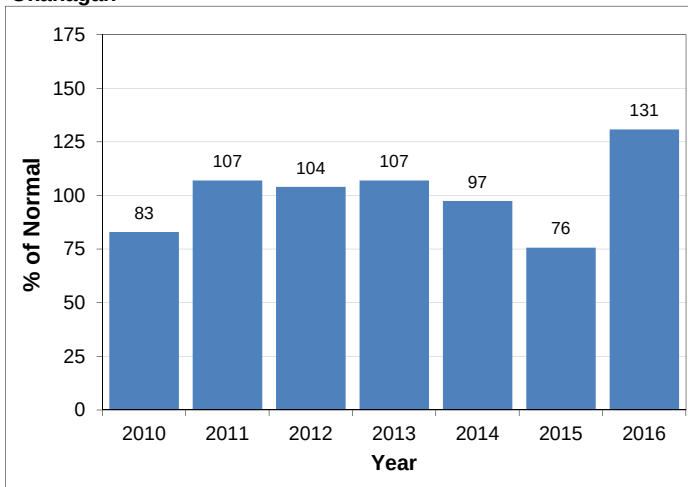
West Kootenay



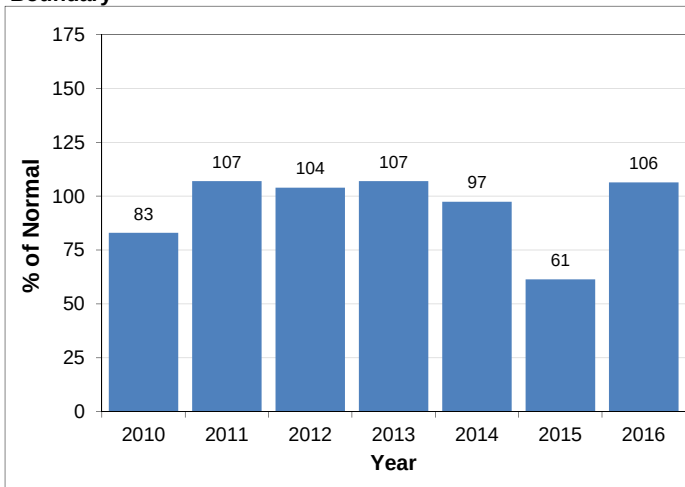
East Kootenay



Okanagan

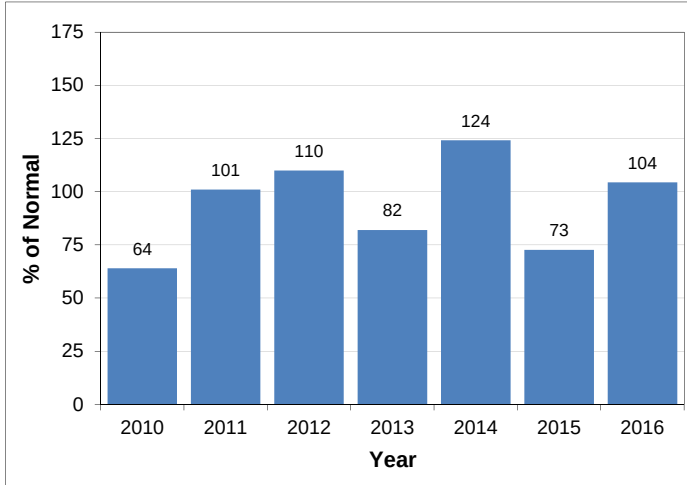


Boundary

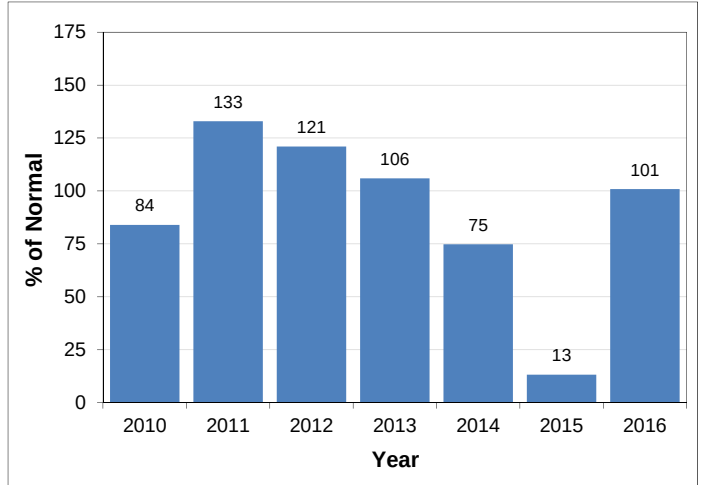


Snow Basin Index Graphs - April 1, 2016

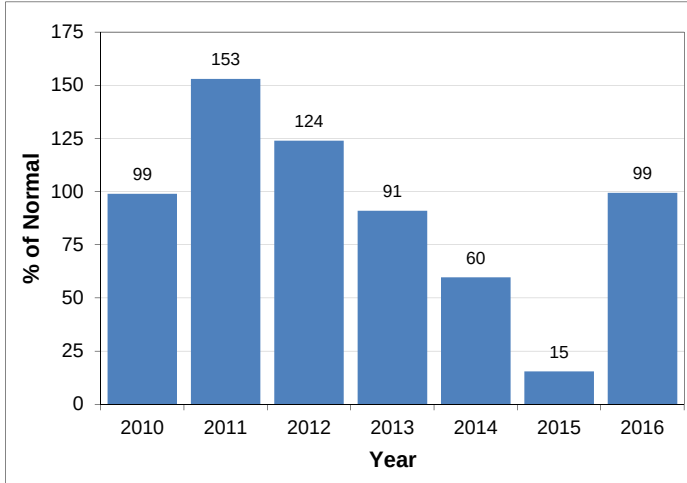
Similkameen



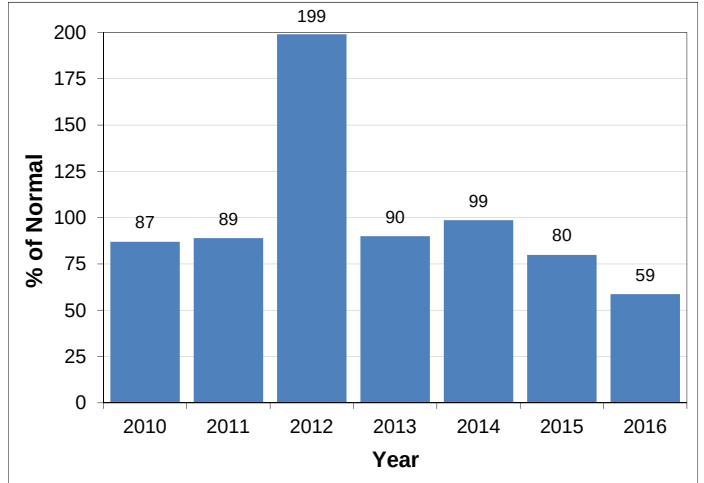
South Coast



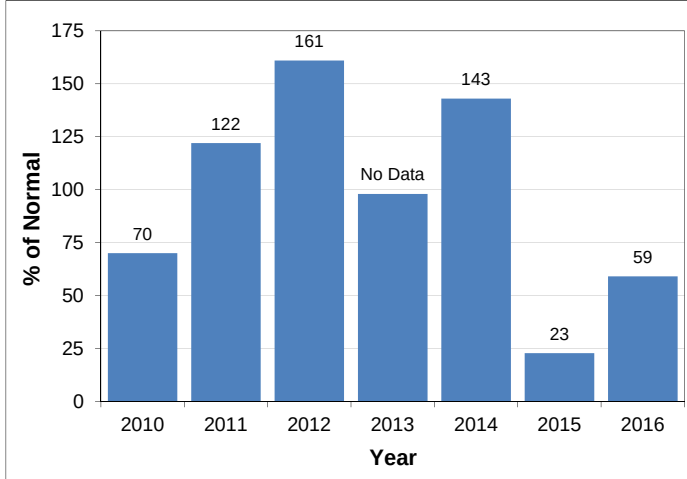
Vancouver Island



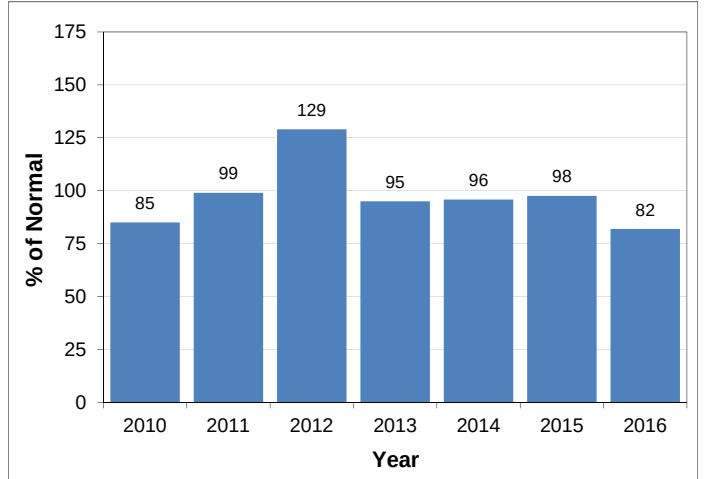
Central Coast



Skagit

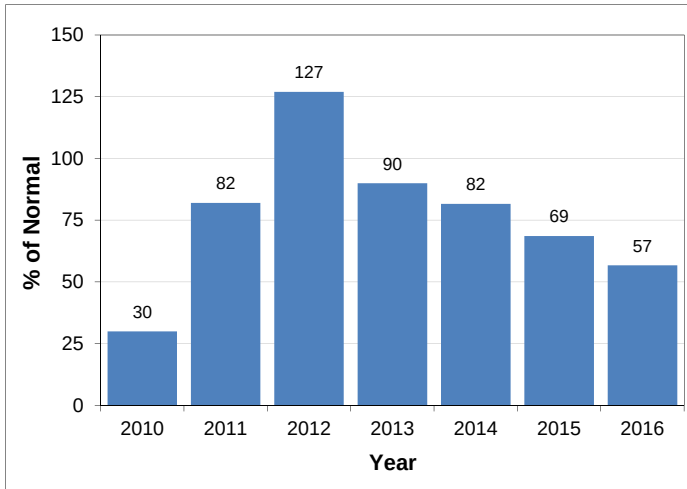


Peace

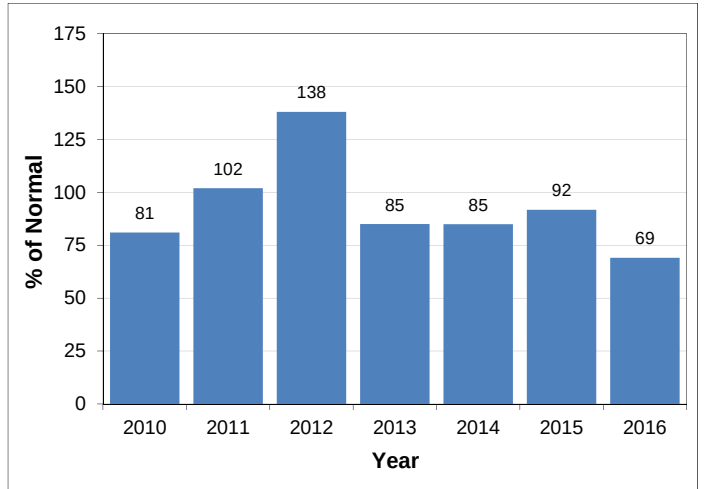


Snow Basin Index Graphs - April 1, 2016

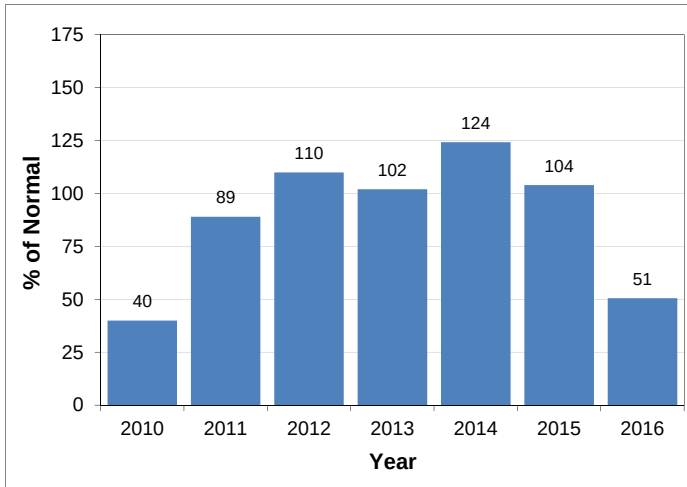
Stikine



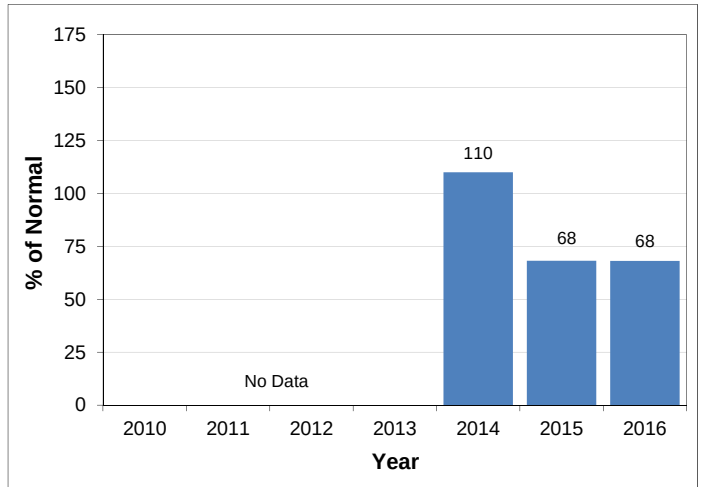
Skeena-Nass



Liard



Northwest



Ministry of Forests, Lands and Natural Resource Operations
River Forecast Centre
Volume Runoff Forecast April 2016

Location		Apr - Jun Runoff				Apr - Jul Runoff				Apr - Sep Runoff			
		Forecast (kdam ³)	Normal (1981-2010) (kdam ³)	% of Normal	Std. Error (kdam ³)	Forecast (kdam ³)	Normal (1981-2010) (kdam ³)	% of Normal	Std. Error (kdam ³)	Forecast (kdam ³)	Normal (1981-2010) (kdam ³)	% of Normal	Std. Error (kdam ³)
Upper Fraser Basin	Fraser at McBride					3401	3699	92%	307	4835	5166	94%	381
	McGregor at Lower Canyon					3195	3964	81%	428	4210	5010	84%	564
	Fraser at Shelley					12898	15670	82%	1179	16823	19730	85%	1562
Middle Fraser Basin	Quesnel River at Quesnel					3963	4541	87%	418	5178	5872	88%	568
Thompson Basin	N. Thompson at McLure					9152	8916	103%	481	11497	11085	104%	753
	S. Thompson at Chase					6397	5792	110%	448	8205	7359	111%	686
	Thompson at Spences Bridge					16314	15114	108%	973	20918	19094	110%	1560
Bulkley and Skeena	Bulkley at Quick					2168	2625	83%	236	2723	3222	85%	272
	Skeena at Usk					15935	18673	85%	1173	19995	23017	87%	1698
Nicola Lake	Inflows	179	121	149%	30	203	138	147%	35				
Nicola River	at Spences Bridge	643	486	132%	82	747	554	135%	101				
Okanagan and Kalamalka-Wood Lake	Okanagan Lake Inflow	692	440	157%	88	752	465	162%	108				
	Kalamalka-Wood Lake Inflow	40	28	142%	11	47	29	161%	13				
Similkameen River	Similkameen at Nighthawk	1509	1273	119%	128					1899	1583	120%	156
	Similkameen at Hedley	1197	989	121%	96					1449	1177	123%	96
Cowichan River	Cowichan Lake Inflows	178	236	75%	57					212	273	78%	57

1 kdam³=1,000,000 m³

Note that missing values reflect that forecasts were not made for that time interval

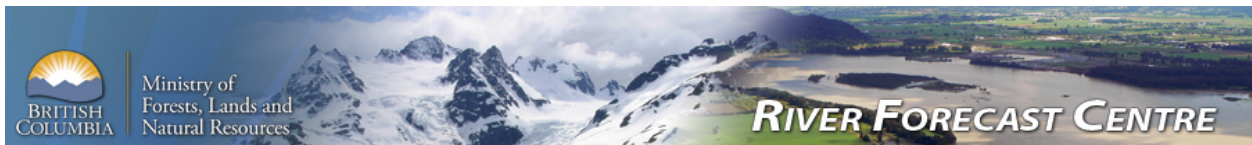
Disclaimer: Seasonal forecasts were developed using a Principle Component Analysis of snow pack, climate and streamflow data.

Cowichan Lake Inflows are based on a multi-variate regression analysis and reflects a normal scenario for summer weather conditions

The Standard Error in the Cowichan forecast reflects model error, and does not capture uncertainty over seasonal weather

There is inherent uncertainty in runoff forecasts including potential errors in data and the unpredictable nature of seasonal weather

Use at your own risk



Snow Survey and Water Supply Bulletin – May 1st, 2016

The May 1st snow survey is now complete. Data from 121 snow courses and 61 automated snow stations around the province, collected by the Ministry of Environment Snow Survey Program and partners, and climate data from Environment Canada have been used to form the basis of the following report¹.

Weather

Warm temperatures have persisted throughout the 2015-16 winter and spring. April weather was generally warm and dry, dominated by stable high pressure, and included an extended period of record heat in the third week of the month. Temperatures continued to be well above normal through the month of April with daily temperatures being 2-4°C above normal across most of the province, except in the northwest, where temperatures were closer to normal. A few weather systems brought some precipitation, particularly to northern BC. Precipitation in southern BC was well below normal for April, with precipitation amounts typically in the 20-50% of normal range. In central and north-west BC, precipitation was closer to normal to above normal. In north-east BC, precipitation was 60-90% of normal.

Snowpack

The extremely warm periods in April led to significant and rapid melt of the provincial snow pack. May 1st snow basin indices ranged from 12% to 100% of normal, with a provincial average of 53%. The provincial average saw a decline of 38% from the April 1st value of 91%. The 2016 May 1st provincial average basin index is a new record low (measured since 1980), and is 13% below the previous low of 66%, observed in 1980. Of the 183 snow survey measurements made for the May 1st period, 33 stations, or 18%, observed new record lows, with many locations having 40 to 50 years of record. Low and mid-elevation snow is largely gone for all areas of the province with snow remaining only at high elevation.

Variability in snow pack conditions exists across the province. Snow packs are well below normal (<50%) through most the north half of the province and extending into the Cariboo and Central Coast, and in the Skagit, Similkameen and East Kootenay. In the Okanagan, Boundary, West Kootenay, Peace, Nechako, Vancouver Island, Lower Fraser and Upper Columbia, snow packs are low (60-75%). Snow pack is normal in the North Thompson and South Thompson.

May 1st snow conditions are more typical of those observed in a normal June 1st period, indicating that snow melt this season is three to four weeks ahead of normal.

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 – May 1st, 2016

Table 1: BC Snow Basin Indices – May 1, 2016

Basin	% of Normal	Basin	% of Normal
Upper Fraser West	28	Okanagan	75
Upper Fraser East	44	Boundary	63
Nechako	62	Similkameen	25
Middle Fraser	48	South Coast	78
Lower Fraser	72	Vancouver Island	70
North Thompson	100	Central Coast	25
South Thompson	99	Skagit	23
Nicola	55	Peace	68
Fraser River (all)	69	Skeena-Nass	47
Upper Columbia	75	Stikine	22
West Kootenay	69	Liard	17
East Kootenay	42	Northwest	12

Streamflow

With warm temperatures and rapid snow melt, most rivers across British Columbia experienced well above normal streamflow through April. Snow melt runoff that typically flows later in the season has already passed through their watersheds. As of early May, snow melt driven rivers in the province continue to flow well above normal for the time of year. In rivers with limited snow melt contribution to streamflow, such as Vancouver Island, the early melt and dry spring has led to below normal streamflow as of early-May. Also, in north-east BC, some rivers are seeing flows decline to below normal for this time of year, as the influence from this season's snow melt runoff is waning.

The advance in runoff timing is expected to continue to lead to earlier timing of peak flows and recession to the low-flow season across the province. The shift in timing echoes the pattern in snow melt, with many rivers experiencing flow conditions that are 3-4 weeks or more ahead of normal.

Outlook

Strong El Niño conditions that developed over the equatorial Pacific regions over the past few months peaked in the winter and are declining. The Climate Prediction Centre (CPC) at the U.S. National Weather Service/NOAA is forecasting El Niño (ENSO) conditions to transition into neutral conditions by late-spring/early summer 2016, and an increasing likelihood of moving towards La Niña conditions into the fall/winter of 2016. In the northern Pacific Ocean, below normal sea surface temperature anomalies have replaced the “blob” of warm water that persisted last year. However, near-shore water along the BC, Washington and Oregon coasts remains warmer than average, with warm-phase Pacific Decadal Oscillation (PDO) patterns being observed.

Snow Survey and Water Supply Bulletin – May 1st, 2016

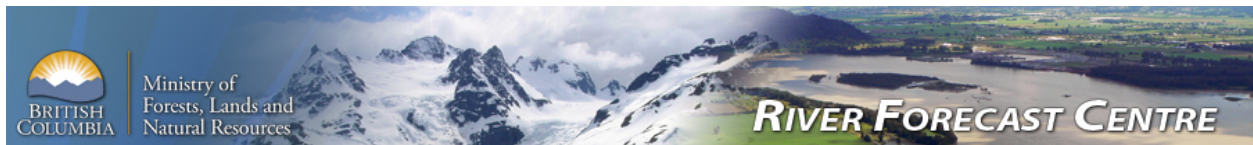
Seasonal forecasts from Environment Canada are indicating an increased likelihood of above-normal temperatures across British Columbia over the May to July period, and into the extended forecast period of the late summer months. The warmer than average seasonal forecast is consistent with historic weather typically observed during positive in-phase ENSO and PDO conditions.

Seasonal volume runoff forecasts (see table below) are below normal for most basins across the province. The exceptions are above normal seasonal runoff (>115%) forecast for the Nicola River and Okanagan. Seasonal runoff models are influenced by antecedent runoff volumes and calibrated based on historic observed conditions, including the seasonal distribution of flows. In years like this, where spring runoff is much earlier than has typically been observed in the historic record, there is increased uncertainty over the accuracy and performance of the forecast models.

With significant snow melt already occurring, many river basins are approaching, or have passed, the peak of the freshet season. In mid-sized watersheds with limited high elevation terrain in the south and central interior, the peak of the freshet season may already have occurred. This includes the Similkameen River, tributaries in the Okanagan basin, Salmon River, Nicola River upstream of Nicola Lake, and similar surrounding rivers. In the larger river systems of the province, and rivers that drain higher elevation alpine terrain, the peak flow season is expected to continue to be 3-4 weeks earlier than normal, but have not yet occurred. For the North Thompson River the peak season may extend until mid-May, mid-to-late May for the Fraser River, Skeena River and tributaries, and early to mid-June for the South Thompson River and tributaries, again all 3-4 weeks earlier than normal. With a May 1st snow basin index of 69% of normal, the Fraser River at Hope has a revised forecasted peak flow of 6500-7000 m³/s.

The advanced freshet is expected to put pressure on summer low flows in snow-melt dominated rivers across the province. With the current very low snow packs remaining in the Upper Fraser, Middle Fraser, Nechako, Similkameen, East Kootenay, Central Coast, Stikine, Skeena, Liard, and Northwest, the risk for low flows this summer are elevated. Elsewhere in the province, the early shift in the snow melt season will also add pressure to low flows later in the season, even in basins with normal snow basin indices (e.g. North and South Thompson). In the northeast and in lower elevation coastal watersheds, summer rainfall is particularly important for sustaining summer flows, and will be a big determinant of the flows that will be experienced through this summer.

For both spring flood risk and summer low flows, snow pack is just one of the important elements that determine whether or not extreme conditions will emerge. Weather through the spring and summer is also a key driver in determining if flooding or low stream flows will occur. May and June are climatologically the wet season for the BC Interior. However precipitation is difficult to forecast beyond about a week and longer term trend forecasting is not reliable. Extreme wet or dry weather can significantly impact the likelihood of peak



Snow Survey and Water Supply Bulletin – May 1st, 2016

and low flows, so although snow packs around the province are low, late spring and summer precipitation will play an important role in determining streamflows.

Current weather forecasts for the next two weeks suggest cooler temperatures with rainfall in some locations through the short-term, and warm weather emerging through the middle of the month. River levels are expected to remain fairly stable through this period. The River Forecast Centre is modelling streamflow across the province. Information regarding freshet conditions, including hydrologic model forecasts, is available on the [Freshet page](#) on the RFC website.

The River Forecast Centre will continue to monitor snow pack conditions and will provide an updated seasonal flood risk and stream flow forecast in the May 15th 2016 bulletin, which is scheduled for release on May 24th.

BC River Forecast Centre
May 9, 2016

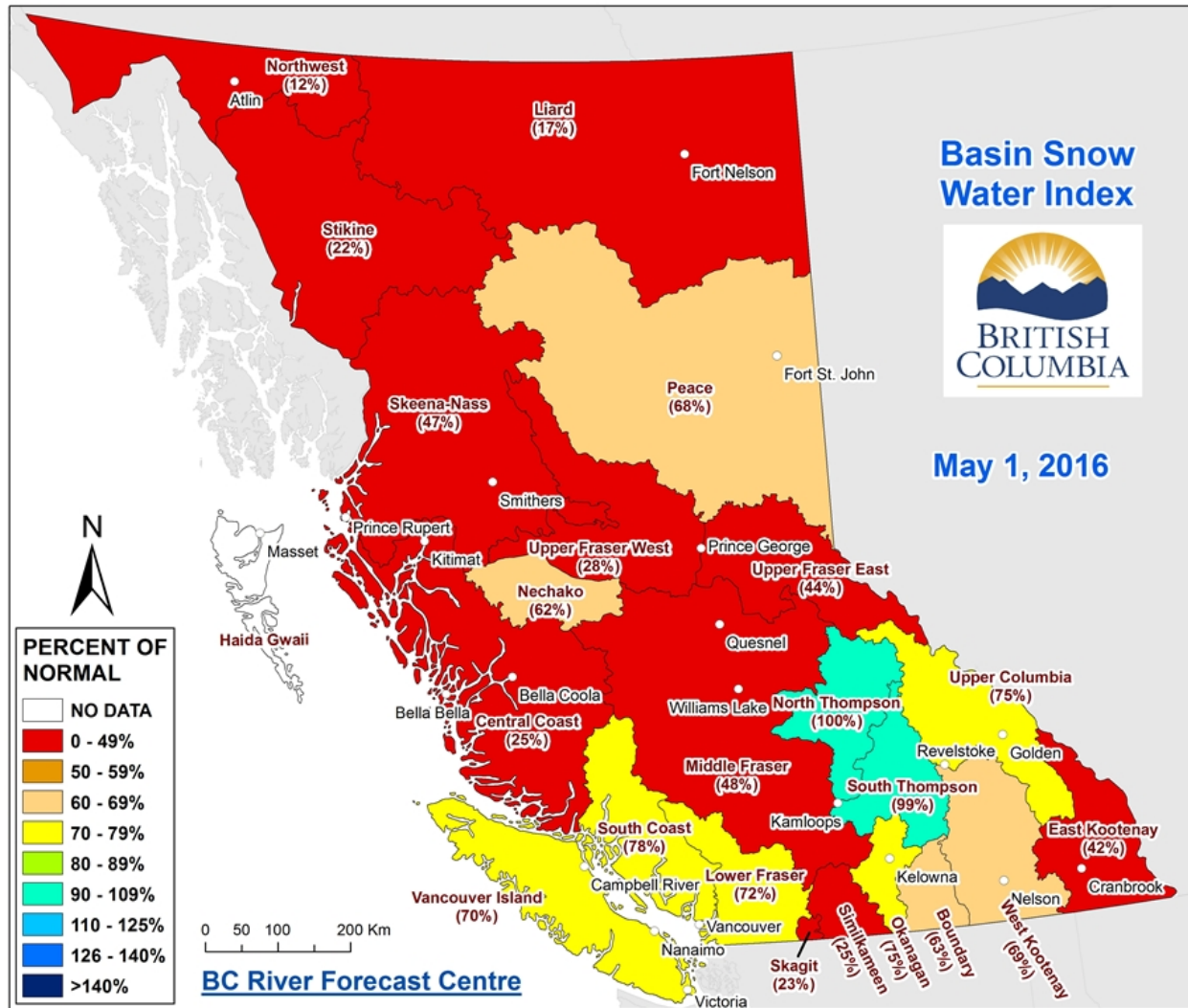


Ministry of
Forests, Lands and
Natural Resources

RIVER FORECAST CENTRE

Snow Survey and Water Supply Bulletin – May 1st, 2016

Figure 1: Basin Snow Water Index – May 1st, 2016



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2016 Automated Snow Pillow/Manual Snow Survey Data				May 1					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1A01P	YELLOWHEAD LAKE	Upper Fraser East	1860	2016-05-01	57	386		68%	537	606	364	833	565	19
1A02P	MC BRIDE UPPER	Upper Fraser East	1580	2016-05-01	37	203		44%	503	611	239	749	462	24
1A03P	BARKERVILLE	Upper Fraser East	1520	2016-05-01	2	2		1%	200	473	165	604	346	41
1A05	LONGWORTH (UPPER)	Upper Fraser East	1693	2016-04-30	96	462		56%		1252	391	1370	830	62
1A06A	HANSARD	Upper Fraser East	622	NS	NS	NS	NS			100			0	1
1A10	PRINCE GEORGE A	Upper Fraser East	684	NS	NS	NS	NS				0	216	10	40
1A11	PACIFIC LAKE	Upper Fraser East	756	2016-04-30	0	0	T	0%	207	840	93	976	507	53
1A12	KAZA LAKE	Upper Fraser West	1247	2016-04-29	58	200		61%	328	411	166	481	328	53
1A12P	KAZA LAKE	Upper Fraser East	1248	2016-05-01	57	193								0
1A14P	HEDRICK LAKE	Upper Fraser East	1100	2016-05-01	98	248		30%	531	1438	531	1279	820	16
1A15	KNUDSEN LAKE	Upper Fraser East	1598	N	N	N	N			1114	501	1346	868	48
1A16	BURNS LAKE	Upper Fraser West	820	2016-05-01	0	0		0%	8	6	0	148	26	38
1A17P	REVOLUTION CREEK	Upper Fraser East	1690	2016-05-01	131	517		64%	837	1353	486	1349	804	31
1A19P	DOMM MOUNTAIN	Upper Fraser East	1820	2016-05-01	121	535		66%	831	1068	570	1163	810	10
1A23	BIRD CREEK	Upper Fraser West	1196	2016-04-28	0	0		0%	130		0	204	39	25
1B01	MOUNT WELLS	Nechako	1489	2016-04-28	63	255		52%	663		201	958	487	62
1B01P	MOUNT WELLS	Nechako	1490	2016-05-01	NA	325		57%	805	602	311	919	569	24
1B02	TAHTSA LAKE	Nechako	1319	2016-04-28	188	877		70%	1323		701	2073	1256	63
1B02P	TAHTSA LAKE	Nechako	1300	2016-05-01	NA	1012		74%	1351	1017	826	2348	1362	24
1B05	SKINS LAKE	Nechako	877	2016-04-28	0	0		0%			0	100	3	45
1B06	MOUNT SWANNELL	Nechako	1596	2016-04-28	4	15		5%	377		109	499	287	26
1B07	NUTLI LAKE	Nechako	1502	2016-04-28	52	227		44%	547		250	870	513	24
1B08P	MOUNT PONDOSY	Nechako	1400	2016-05-01	NA	527		66%	1014	489	399	1277	794	24
1C01	BROOKMERE	Middle Fraser	994	2016-04-29	0	0	T	0%	0	42	0	419	65	70
1C05	MCGILLIVRAY PASS	Middle Fraser	1715	2016-04-28	72	321	A	56%	362	381	270	1118	573	64
1C06	PAVILION	Middle Fraser	1209	NS	NS	NS	NS				0	0	0	15
1C08	NAZKO	Middle Fraser	1029	NS	NS	NS	NS				0	46	3	24
1C09A	HIGHLAND VALLEY	Middle Fraser	1547	2016-05-05	0	0		0%			0	142	20	47
1C12P	GREEN MOUNTAIN	Middle Fraser	1780	2016-05-01	NA	736		81%	711	628	579	1373	909	22
1C13A	HORSEFLY MOUNTAIN	Middle Fraser	1612	2016-04-28	63	282		69%	372	690	136	676	408	46
1C14	BRALORNE	Middle Fraser	1382	2016-04-28	0	0		0%		98	0	255	58	52
1C17	MOUNT TIMOTHY	Middle Fraser	1632	2016-05-01	25	90		35%	142	351	118	536	257	55
1C18P	MISSION RIDGE	Middle Fraser	1850	2016-05-01	NA	238		48%	341	447	147	1028	496	46
1C19	GNAWED MOUNTAIN	Middle Fraser	1617	2016-05-05	0	0		0%			0	241	54	46
1C20P	BOSS MOUNTAIN MINE	Middle Fraser	1460	2016-05-01	81	394		66%	425	565	394	821	597	22
1C21	BIG CREEK	Middle Fraser	1130	NS	NS	NS	NS			0	0	48	12	5
1C22	PUNTZI MOUNTAIN	Middle Fraser	939	NS	NS	NS	NS				0	0	0	10
1C23	PENFOLD CREEK	Middle Fraser	1687	2016-05-03	164	829		78%	915	1103	710	1420	1064	46
1C25	LAC LE JEUNE (UPPER)	Middle Fraser	1471	2016-04-29	0	0		0%	0	95	0	168	30	43

2016 Automated Snow Pillow/Manual Snow Survey Data				May 1					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1C28	DUFFEY LAKE	Middle Fraser	1253	NS	NS	NS	NS				206	624	377	13
1C29	SHOVELNOSE MOUNTAIN	Middle Fraser	1456	2016-04-29	0	0		0%	0	84	0	305	82	35
1C32	DEADMAN RIVER	Middle Fraser	1463	2016-04-29	0	0		0%	0	0	0	194	32	32
1C33A	GRANITE MOUNTAIN	Middle Fraser	1175	2016-05-02	0	0		0%	0	110	0	221	89	10
1C37	BRALORNE(UPPER)	Middle Fraser	1980	2016-04-28	113	513	A	76%	638	496	364	1092	676	21
1C38	DOWNTON LAKE (UPPER)	Middle Fraser	1884	2016-04-28	171	852		100%	878	554	450	1340	856	21
1C38P	DOWNTON / LAJOIE UPPER	Middle Fraser	1829	2016-05-01	NA	807								0
1C39	BRIDGE GLACIER (LOWER)	Middle Fraser	1393	2016-04-28	139	640		107%	526	392	244	1018	600	21
1C40	TYAUGHTON CREEK (NORTH)	Middle Fraser	1946	2016-04-28	60	258	A	58%	396	304	268	806	443	21
1C40P	NORTH TYAUGHTON	Middle Fraser	1969	2016-05-01	NA	180								0
1C41P	YANKS PEAK, EAST	Middle Fraser	1670	2016-05-01	108	619		75%	863	1192	548	1058	825	19
1C42	CAVERHILL LAKE NEW	Middle Fraser	1400	NS	NS	NS	NS				172	172		1
1D06P	TENQUILLE LAKE	Lower Fraser	1680	2016-05-01	208	953		91%	912	801	653	1705	1047	15
1D08	STAVE LAKE	Lower Fraser	1211	2016-04-26	226	1210		80%	62	1291	62	3120	1513	49
1D09	WAHLEACH LAKE	Lower Fraser	1395	2016-04-26	48	236	A	38%	4	709	4	709	615	49
1D09P	WAHLEACH LAKE	Lower Fraser	1400	2016-05-01	NA	595		57%	344	1009	344	1757	1043	24
1D10	NAHATLATCH RIVER	Lower Fraser	1530	2016-04-26	229	1196		88%	468	1225	468	2720	1361	47
1D16	DICKSON LAKE	Lower Fraser	1147	2016-04-26	169	876		56%	4	1516	4	3180	1553	25
1D17P	CHILLIWACK RIVER	Lower Fraser	1600	2016-05-01	215	1253		83%	675	2245	675	2436	1513	24
1D18	DISAPPOINTMENT LAKE	Lower Fraser	1050	2016-04-28	226	1190								
1D19P	SPUZZUM CREEK	Lower Fraser	1180	2016-05-01	189	1119		68%	162	1613	162	2930	1635	17
1E01B	BLUE RIVER	North Thompson	673	2016-04-25	0	0		0%	0	233	0	265	29	32
1E02P	MOUNT COOK	North Thompson	1550	2016-05-01	269	1527		113%	1184	1389	998	1665	1346	16
1E03A	TROPHY MOUNTAIN	North Thompson	1907	N	N	N	N			685	417	960	607	41
1E05	KNOUFF LAKE	North Thompson	1189	NS	NS	NS	NS				0	142	45	9
1E07	ADAMS RIVER	North Thompson	1769	2016-04-30	148	740		102%	561	778	396	1173	726	45
1E08P	AZURE RIVER	North Thompson	1620	2016-05-01	153	1010		83%	1312	1122	773	1635	1214	19
1E10P	KOSTAL LAKE	North Thompson	1770	2016-05-01	NA	903		101%	813	952	641	1268	891	31
1E14P	COOK CREEK	North Thompson	1280	2016-05-01	23	NA								0
1F01A	ABERDEEN LAKE	South Thompson	1262	N	N	N	N				0	165	19	59
1F02	ANGLEMONT	South Thompson	1168	2016-04-28	0	0		0%			0	496	160	57
1F03P	PARK MOUNTAIN	North Thompson	1890	2016-05-01	172	890		93%	854	1158	570	1343	955	31
1F04	ENDERBY	South Thompson	1948	N	N	N	N				700	1430	1079	50
1F06P	CELISTA MOUNTAIN	North Thompson	1551	2016-05-01	157	1013		111%	847	1030	746	1187	914	11
2A01A	CANOE RIVER	Upper Columbia	866	NS	NS	NS	NS				0	147	5	25
2A02	GLACIER	Upper Columbia	1249	2016-04-28	106	481		75%	497	809	320	1247	643	70
2A03A	FIELD	Upper Columbia	1310	NS	NS	NS	NS			110	0	178	20	51
2A06P	MOUNT REVELSTOKE	Upper Columbia	1830	2016-05-01	NA	1117		88%	1063	1268	874	1625	1265	23
2A07	KICKING HORSE	Upper Columbia	1648	2016-04-28	30	120		41%	185	469	63	589	296	66

2016 Automated Snow Pillow/Manual Snow Survey Data				May 1					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2A11	BEAVERFOOT	Upper Columbia	1924	2016-04-27	13	44		26%	0	270	0	495	170	67
2A14	MOUNT ABBOT	Upper Columbia	2031	2016-04-27	187	1063		79%	1156	1366	853	1885	1345	57
2A16	GOLDSTREAM	Upper Columbia	1914	2016-04-28	203	1039		87%	1156	1331	850	1781	1200	53
2A17	FIDELITY MOUNTAIN	Upper Columbia	1852	2016-04-25	207	1108		85%	1181	1522	817	1986	1306	53
2A18	KEYSTONE CREEK	Upper Columbia	1839	2016-04-28	146	705		86%	734		514	1421	823	49
2A18P	KEYSTONE CREEK	Upper Columbia	1850	2016-05-01	NA	744								0
2A19	VERMONT CREEK	Upper Columbia	1533	2016-04-25	42	180		55%	0	383	0	1026	327	50
2A21P	MOLSON CREEK	Upper Columbia	1980	2016-05-01	NA	886		81%	1054	1104	645	1678	1100	35
2A22	SUNBEAM LAKE	Upper Columbia	2066	2016-04-28	155	762		81%	922	999	611	1562	939	49
2A23	BUSH RIVER	Upper Columbia	1982	2016-04-28	140	677		81%	728	834	492	1392	834	49
2A25	KIRBYVILLE LAKE	Upper Columbia	1739	2016-04-28	222	1162		93%	1134	1331	865	1797	1243	44
2A27	DOWNIE SLIDE (LOWER)	Upper Columbia	964	2016-04-28	75	348		67%		682	0	910	517	38
2A29	DOWNIE SLIDE (UPPER)	Upper Columbia	1628	2016-04-29	254	1320		94%	1112	1344	802	2242	1402	38
2A30P	COLPITTI CREEK	Upper Columbia	2131	2016-05-01	NA	602								0
2A31P	CARIBOU CREEK UPPER	Upper Columbia	2201	2016-05-01	NA	795								0
2A32P	WILDCAT CREEK	Upper Columbia	2122	2016-05-01	NA	442								0
2B02A	FARRON	West Kootenay	1229	2016-04-28	16	66		36%	0	158	0	406	183	43
2B05	WHATSHAN (UPPER)	West Kootenay	1476	2016-04-29	80	374		67%	405	707	255	983	557	55
2B06P	BARNES CREEK	Lower Columbia	1620	2016-05-01	NA	550		102%	487	681	360	821	541	23
2B07	KOCH CREEK	West Kootenay	1813	2016-04-29	150	701		90%	615	685	391	1201	778	56
2B08P	ST. LEON CREEK	Lower Columbia	1800	2016-05-01	NA	949		85%	1023	1345	701	1501	1113	23
2B09	RECORD MOUNTAIN	West Kootenay	1906	2016-05-04	100	520		72%	214	455	157	1278	727	41
2C01	SINCLAIR PASS	East Kootenay	1374	2016-04-26	0	0		0%	0	98	0	246	37	70
2C04	SULLIVAN MINE	East Kootenay	1580	2016-04-27	18	54		30%		304	0	518	182	69
2C07	FERNIE EAST	East Kootenay	1213	2016-04-25	0	0		0%	0	257	0	541	136	65
2C09Q	MORRISSEY RIDGE	East Kootenay	1800	2016-05-01	NA	325		49%	337	949	317	1332	670	36
2C10P	MOYIE MOUNTAIN	East Kootenay	1930	2016-05-01	2	0		0%	110	544	18	689	338	37
2C14P	FLOE LAKE	East Kootenay	2090	2016-05-01	NA	528		69%	690	868	491	1188	767	23
2C15	MOUNT ASSINIBOINE	East Kootenay	2230	2016-04-25	110	434		77%		607	339	930	566	46
2C16	MOUNT JOFFRE	East Kootenay	1763	2016-04-25	58	216		62%	36	491	36	772	346	47
2C17	THUNDER CREEK	East Kootenay	2062	2016-04-25	53	189		70%	197		163	556	271	47
2C20	VERMILLION RIVER NO. 3	East Kootenay	1612	NS	NS	NS	NS				71	422	196	16
2D02	FERGUSON	West Kootenay	929	2016-05-02	64	313		73%	333		160	773	429	69
2D03	SANDON	West Kootenay	1072	2016-05-01	0	0		0%	0	79	0	399	45	66
2D04	NELSON	West Kootenay	952	2016-04-28	0	0		0%		66	0	508	143	58
2D05	GRAY CREEK (LOWER)	West Kootenay	1558	2016-04-27	71	305		71%	269	592	229	726	429	67
2D06	CHAR CREEK	West Kootenay	1290	2016-04-27	62	287		64%	134	488	79	838	449	50
2D07A	DUNCAN LAKE NO. 2	West Kootenay	662	NS	NS	NS	NS				0	42	14	4
2D08P	EAST CREEK	West Kootenay	2030	2016-05-01	NA	794		87%	933	1167	480	1346	910	35

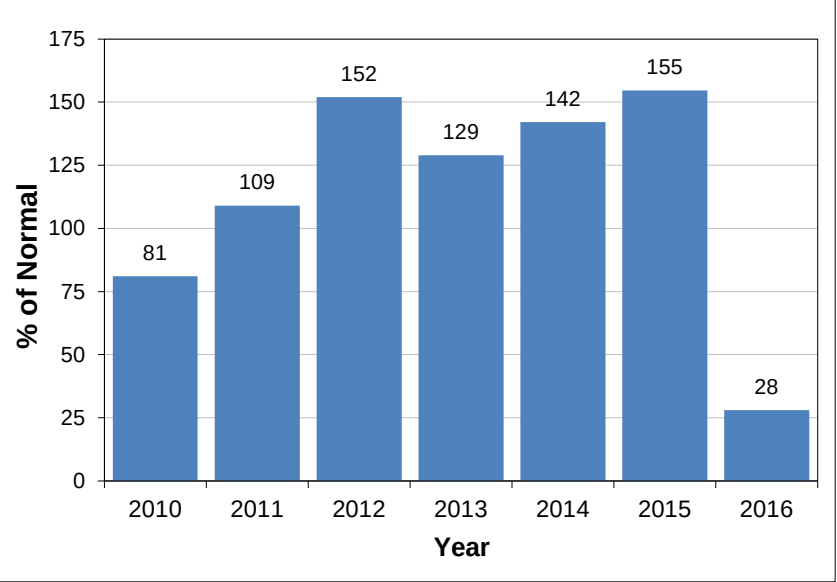
2016 Automated Snow Pillow/Manual Snow Survey Data				May 1					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2D09	MOUNT TEMPLEMAN	West Kootenay	1879	2016-04-29	181	903		84%	958	1182	731	1679	1075	49
2D10	GRAY CREEK (UPPER)	West Kootenay	1926	2016-04-27	139	648		84%	657	922	505	1300	767	46
2D14P	REDFISH CREEK	West Kootenay	2104	2016-05-01	272	1494		115%	1409	1496	1035	1863	1298	14
2E01	MONASHEE PASS	Boundary	1387	2016-04-29	34	114		43%	193	393	67	505	266	58
2E02	CARMI	Boundary	1254	2016-05-02	0	0		0%	0	0	0	173	12	52
2E03	BIG WHITE MOUNTAIN	Boundary	1672	2016-05-02	79	340		75%	249	516	237	762	451	50
2E07P	GRANO CREEK	Kettle	1860	2016-05-01	113	546	E	97%	424	614	420	814	561	18
2F01A	TROUT CREEK (WEST)	Okanagan	1430	2016-04-28	7	30		27%		207	112	292	112	5
2F02	SUMMERLAND RESERVOIR	Okanagan	1304	2016-05-02	0	0		0%	0	0	0	368	84	51
2F03	MC CULLOCH	Okanagan	1266	2016-05-02	0	0		0%		0	0	188	12	68
2F04	GRAYSTOKE LAKE	Okanagan	1818	2016-05-04	55	232		68%			120	940	343	42
2F05P	MISSION CREEK	Okanagan	1780	2016-05-01	99	471		98%	407	716	141	784	481	46
2F07	POSTILL LAKE	Okanagan	1358	2016-05-05	0	0		0%	50	176	0	282	121	64
2F08	GRAYBACK RESERVOIR	Okanagan	1548	2016-04-29	37	138		87%	171	282	0	386	158	43
2F09	WHITEROCKS MOUNTAIN	Okanagan	1789	2016-05-01	96	456		97%	339	508	175	1013	470	45
2F10P	SILVER STAR MOUNTAIN	Okanagan	1839	2016-05-01	183	784								0
2F11	ISINTOK LAKE	Okanagan	1651	2016-05-03	0	0		0%	0	190	0	437	98	51
2F12	MOUNT KOBAN	Okanagan	1817	2016-04-30	64	300		97%	204	226	53	597	309	50
2F13	ESPERON CR (UPPER)	Okanagan	1634	2016-04-30	74	346		100%	228	364	119	805	346	46
2F14	ESPERON CR (MIDDLE)	Okanagan	1440	NS	NS	NS	NS				0	551	216	30
2F18P	BRENDA MINE	Okanagan	1460	2016-05-01	NA	7		5%	0	177	0	342	128	23
2F19	OYAMA LAKE	Okanagan	1365	2016-04-29	0	0		0%		233	0	185	55	46
2F20	VASEUX CREEK	Okanagan	1403	2016-05-05	0	0		0%	0	195	0	192	41	44
2F21	BOULEAU LAKE	Okanagan	1405	2016-05-07	7	16		6%	80	238	40	488	251	45
2F23	MACDONALD LAKE	Okanagan	1742	2016-05-03	86	420		100%		421	198	650	421	38
2F24	ISLAHT LAKE	Okanagan	1492	2016-04-29	42	189		81%	76		64	433	234	34
2F25	POSTILL LAKE (UPPER)	Okanagan	1500	2016-05-05	0	0	T				71	71		2
2G03P	BLACKWALL PEAK	Similkameen	1940	2016-05-01	137	663		86%	593	968	375	1569	768	48
2G04	LOST HORSE MOUNTAIN	Similkameen	1988	2016-04-28	26	84		39%	235	309	64	554	215	56
2G05	MISSEZULA MOUNTAIN	Similkameen	1602	2016-04-28	0	0		0%	0	269	0	323	102	56
2G06	HAMILTON HILL	Similkameen	1477	2016-04-30	0	0		0%	0	251	0	838	190	56
3A01	GROUSE MOUNTAIN	South Coast	1126	2016-04-26	142	752		64%	0	800	0	2870	1170	66
3A02	POWELL RIVER (UPPER)	South Coast	1002	NS	NS	NS	NS				533	1712	783	8
3A05	POWELL RIVER (LOWER)	South Coast	882	NS	NS	NS	NS				181	426	349	6
3A09	PALISADE LAKE	South Coast	898	2016-04-28	124	670		52%	0	700	0	3600	1291	66
3A10	DOG MOUNTAIN	South Coast	1007	2016-04-25	127	662		58%	0	710	0	2760	1137	32
3A19	ORCHID LAKE	South Coast	1178	2016-04-28	281	1453		78%	100	1550	100	3845	1866	44
3A20	CALLAGHAN CREEK	South Coast	1009	2016-04-30	114	598		84%	0	662	0	1568	711	39
3A22P	NOSTETUKO RIVER	South Coast	1500	2016-05-01	62	355		65%	201	399	201	1053	542	27

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3A24P	UPPER MOSLEY CREEK	South Coast	1650	2016-05-01	1	19		7%	309	227	143	532	254	27
3A25P	UPPER SQUAMISH RIVER	South Coast	1340	2016-05-01	NA	1459		91%	695	1282	695	2910	1597	26
3B01	FORBIDDEN PLATEAU	Vancouver Island	1110	2016-04-28	254	1386		92%	0	929	0	3500	1507	59
3B02A	MT. COKELY	Vancouver Island	1267	2016-04-26	46	100		12%	0		0	2062	813	34
3B04	ELK RIVER	Vancouver Island	270	2016-04-28	0	0			0		0	0	0	32
3B10	UPPER THELWOOD LAKE	Vancouver Island	1014	2016-04-28	210	1136		77%	0	934	0	3560	1484	58
3B17P	WOLF RIVER	Vancouver Island	1490	2016-05-01	NA	1112		82%	374	924	374	2691	1356	34
3B18	WOLF RIVER (MIDDLE)	Vancouver Island	1050	2016-04-28	28	120		22%	0	290	0	1652	546	46
3B19	WOLF RIVER (LOWER)	Vancouver Island	615	2016-04-28	0	0		0%	0	0	0	1118	134	46
3B23P	JUMP CREEK	Vancouver Island	1160	2016-05-01	73	426		36%	0	758	0	3485	1180	20
3B24P	HEATHER MOUNTAIN UPPER	Vancouver Island	1190	2016-05-01	170	1248								0
3C07	WEDEENE RIVER SOUTH	Central Coast	196	2016-04-29	0	0		0%	0	46	0	749	136	28
3C08P	BURNT BRIDGE CREEK	North Coast	1330	2016-05-01	71	392		51%	791	786	454	1464	776	18
3D01C	SUMALLO RIVER WEST	Skagit	801	2016-04-26	0	0		0%	0	118	0	371	66	23
3D02	LIGHTNING LAKE	Skagit	1254	2016-04-30	39	155		70%	92	278	7	599	223	44
3D03A	KLESILKWA	Skagit	1134	2016-04-26	0	0		0%	0	144	0	752	103	43
4A02P	PINE PASS	Peace	1400	2016-05-01	188	956		89%	977	1192	898	1704	1072	27
4A03	WARE (UPPER)	Peace	1563	2016-04-28	49	149		54%	237	319	141	402	274	55
4A04	WARE (LOWER)	Peace	969	2016-04-28	5	13		10%	92	176	0	229	124	54
4A05	GERMANSEN (UPPER)	Peace	1489	2016-04-29	74	259		73%	220	388	181	597	355	55
4A06	TUTIZZI LAKE	Peace	1043	2016-04-29	0	0 T		0%	104	194	0	325	155	53
4A07	LADY LAURIER LAKE	Peace	1446	2016-04-27	104	425		77%	545	557	305	926	555	53
4A09	PULPIT LAKE	Peace	1331	2016-04-28	67	270		65%	429	519	287	623	418	53
4A09P	PULPIT LAKE	Peace	1310	2016-05-01	40	183		45%	384	455	288	633	407	26
4A10	FREDRICKSON LAKE	Peace	1323	2016-04-29	27	87		38%	226	308	107	358	231	53
4A11	TRYGVE LAKE	Peace	1409	2016-04-28	65	220		58%	418	384	272	599	381	53
4A12	TSAYDAYCHI LAKE	Peace	1173	2016-04-29	60	250		65%	316	415	168	700	386	53
4A13	PHILIP LAKE	Peace	1013	2016-04-29	13	52		27%	81	203	0	406	196	53
4A16	MORFEE MOUNTAIN	Peace	1427	2016-04-30	122	597		74%	803	973	410	1181	812	47
4A18	MOUNT SHEBA	Peace	1480	2016-05-02	126	591		66%	867	1091	503	1371	891	47
4A20	MONKMAN CREEK	Peace	1566	2016-04-30	84	337		58%	653	709	329	1042	580	42
4A21	MOUNT STEARNS	Peace	1514	2016-05-04	6	17		12%	157	196	0	271	146	42
4A25	FORT ST. JOHN AIRPORT	Peace	692	NS	NS	NS	NS				0	56	0	26
4A30P	AIKEN LAKE	Peace	1040	2016-05-01	0	17		9%	167	233	71	313	181	31
4A31P	CRYING GIRL PRAIRIE	Peace	1358	2016-05-01	NA	0								0
4A33P	MUSKWA-KECHIKA	Peace	1196	2016-05-01	NA	0 E								0
4B01	KIDPRICE LAKE	Skeena-Nass	1415	2016-04-28	128	593		62%	1076		551	1591	951	63
4B02	JOHANSON LAKE	Skeena-Nass	1480	2016-04-29	61	200		66%	291	368	143	433	301	53
4B03A	HUDSON BAY MTN	Skeena-Nass	1452	2016-04-28	68	272		53%	548	518	343	795	509	44

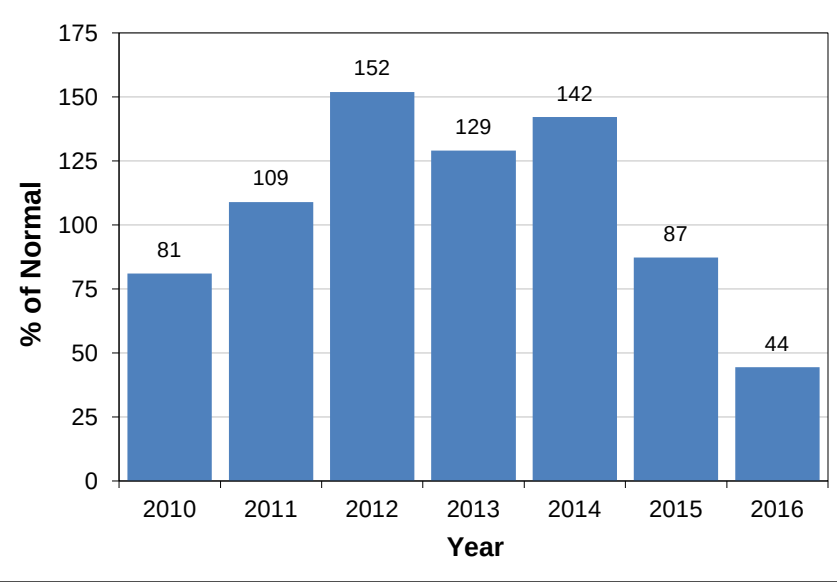
2016 Automated Snow Pillow/Manual Snow Survey Data				May 1					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
4B04	CHAPMAN LAKE	Skeena-Nass	1485	2016-04-28	72	286		60%	484	428	308	749	473	49
4B06	TACHEK CREEK	Skeena-Nass	1133	2016-04-28	20	58		33%	240		55	363	175	47
4B07	MCKENDRICK CREEK	Skeena-Nass	1048	2016-04-28	22	72		32%	266	242	80	422	223	48
4B08	MOUNT CRONIN	Skeena-Nass	1491	2016-04-28	106	429		70%	560	495	422	1125	616	47
4B10	NINGUNSAW PASS	Skeena-Nass	647	2016-05-02	0	0		0%		276	0	676	263	38
4B11A	BEAR PASS	Skeena-Nass	437	2016-05-02	0	0		0%			256	860	541	24
4B13A	TERRACE AIRPORT	Skeena-Nass	219	NS	NS	NS	NS			1115	0	58	14	6
4B14	EQUITY MINE	Skeena-Nass	1434	2016-04-27	62	220		59%	535		212	690	373	39
4B15	LU LAKE	Skeena-Nass	1296	2016-04-27	40	132		49%	390	404	144	528	267	38
4B15P	LU LAKE	Skeena/Nass	1300	2016-05-01	12	106		47%	455	300	79	517	227	18
4B16P	SHEDIN CREEK	Skeena/Nass	1480	2016-05-01	97	487		50%	1310	311	650	1310	972	20
4B17P	TSAI CREEK	Skeena/Nass	1360	2016-05-01	149	834		64%	1310	597	975	2081	1307	18
4B18P	CEDAR - KITEEN	Skeena/Nass	885	2016-05-01	4	11		2%	325	1050	210	1075	612	15
4C01	SIKANNI LAKE	Liard	1390	2016-04-28	22	88		33%	278	710	115	404	266	53
4C02	SUMMIT LAKE	Liard	1291	2016-05-05	0	0		0%	72	355	0	200	44	51
4C03	DEASE LAKE	Liard	805	2016-05-04	0	0	B	0%			0	178	38	49
4C05	FORT NELSON A	Liard	368	NS	NS	NS	NS			192	0	103	12	31
4C15	JADE CITY	Liard	943	2016-04-24	0	0		0%	136		28	350	189	14
4D01	TELEGRAPH CREEK	Stikine	490	2016-05-04	0	0	B	0%	0	302	0	163	23	41
4D02	ISKUT	Stikine	931	NS	NS	NS	NS				0	146	18	24
4D11P	KINASKAN LAKE	Stikine/Taku	1020	2016-05-01	22	114		32%	305	0	0	305	352	20
4E02B	ATLIN LAKE	Northwest	730	2016-05-01	0	0			0	0	0	140		10
Code	Description													
A	Sampling problems were encountered													
B	Early or late sampling													
C	Early or late sampling w/problems encountered													
E	Estimate													
N	Scheduled, but not sampled													
NA	Not available													
NS	Not scheduled													
SD	Snow Depth													
SWE	Snow Water Equivalent													
T	Trace Amount													

Snow Basin Index Graphs - May 1, 2016

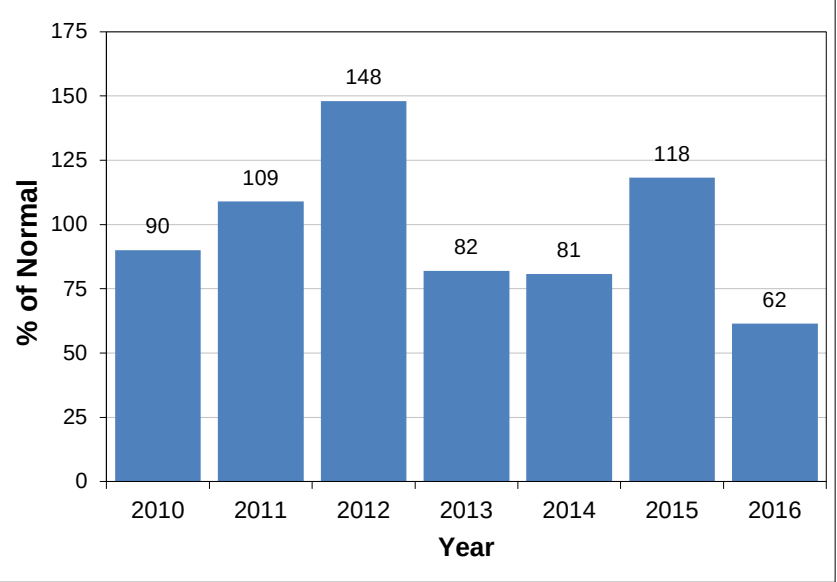
Upper Fraser West



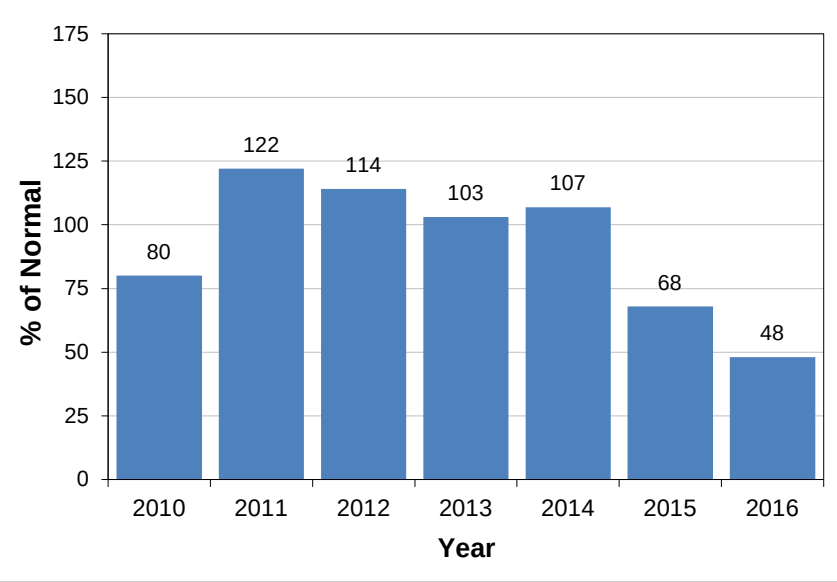
Upper Fraser East



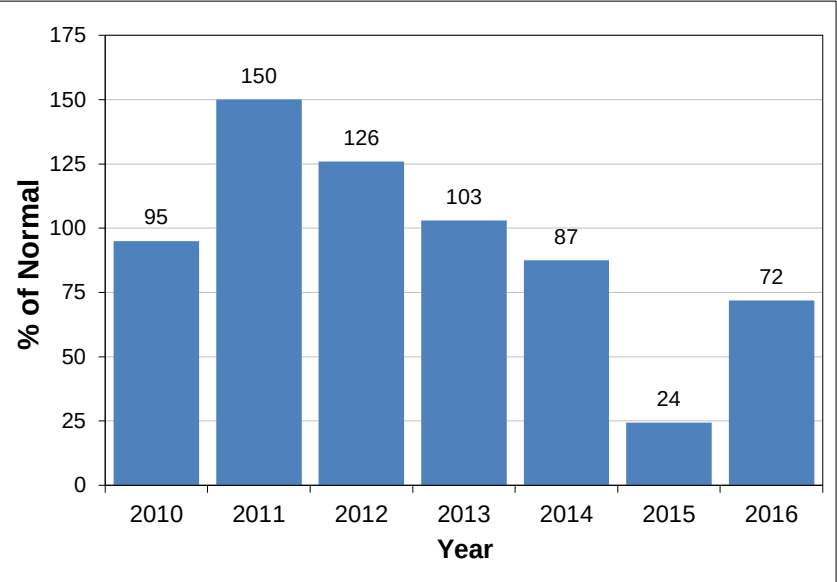
Nechako



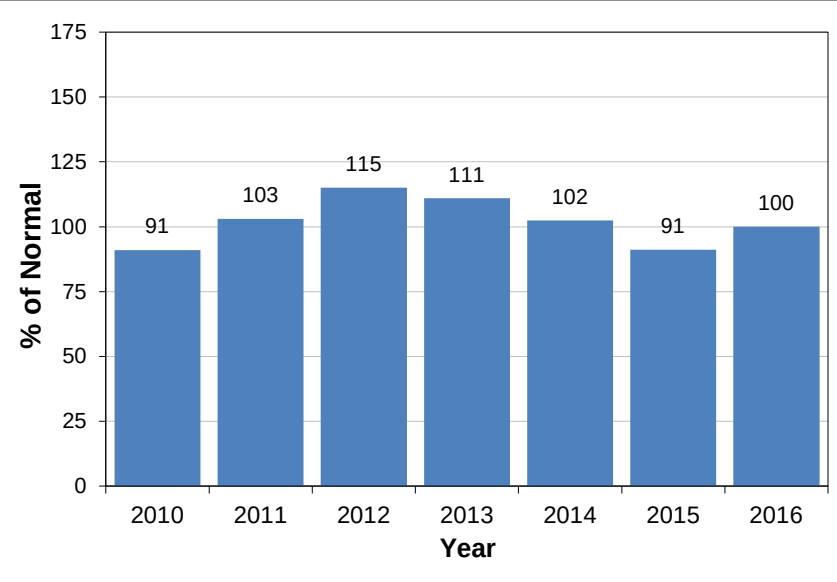
Middle Fraser



Lower Fraser

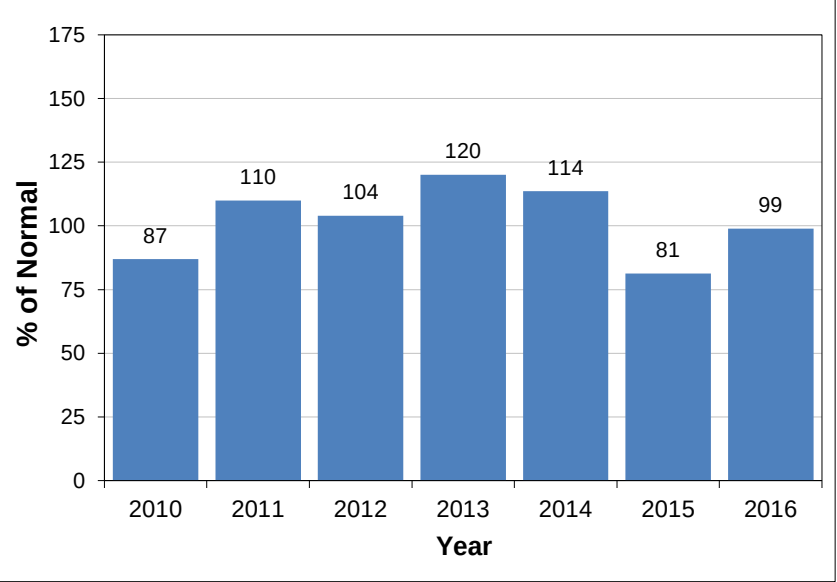


North Thompson

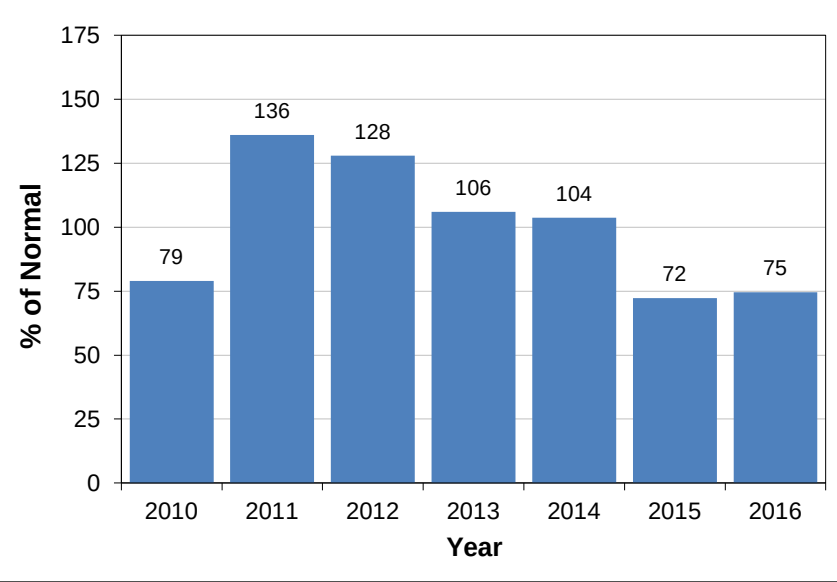


Snow Basin Index Graphs - May 1, 2016

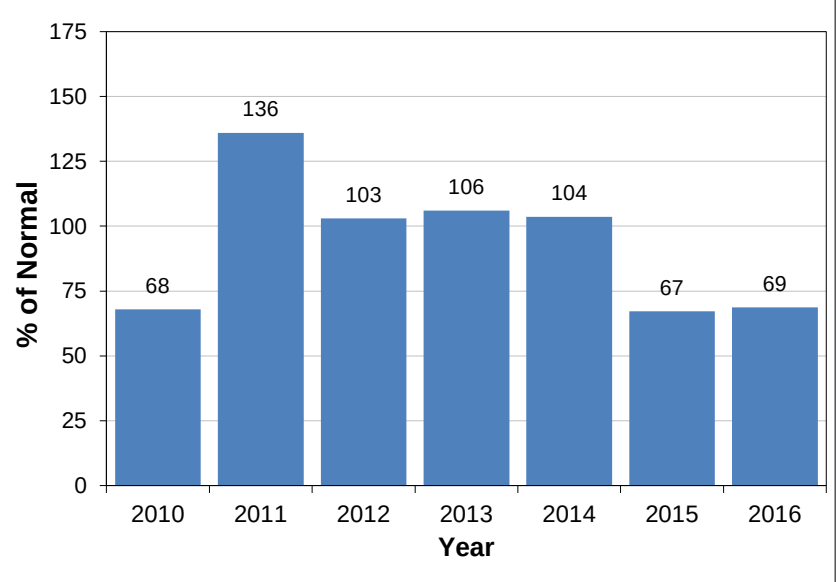
South Thompson



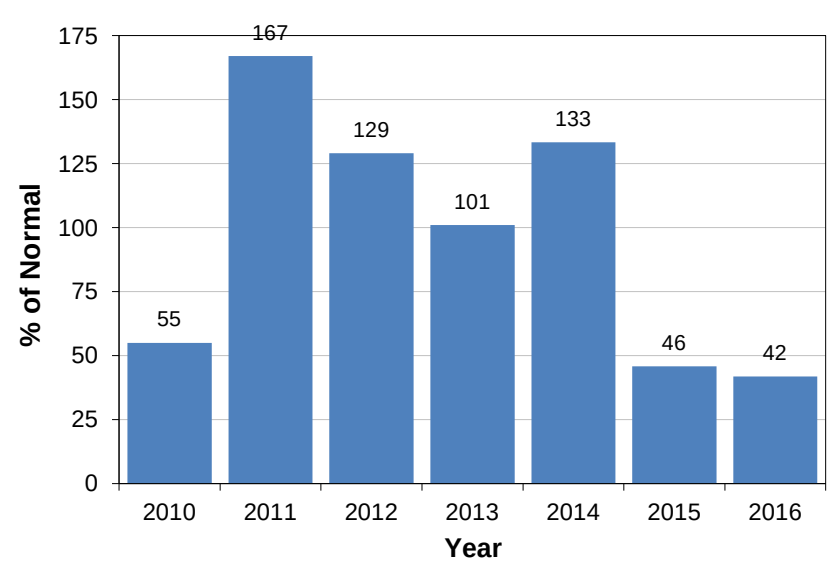
Upper Columbia



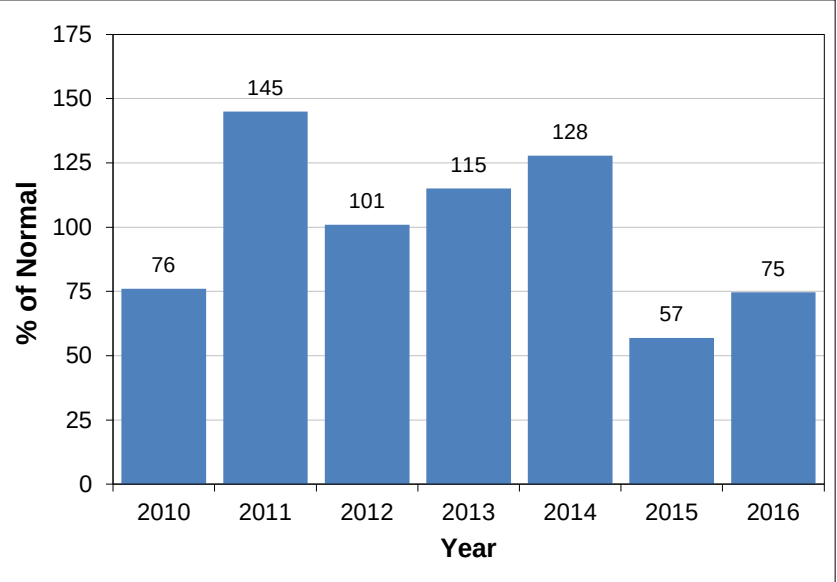
West Kootenay



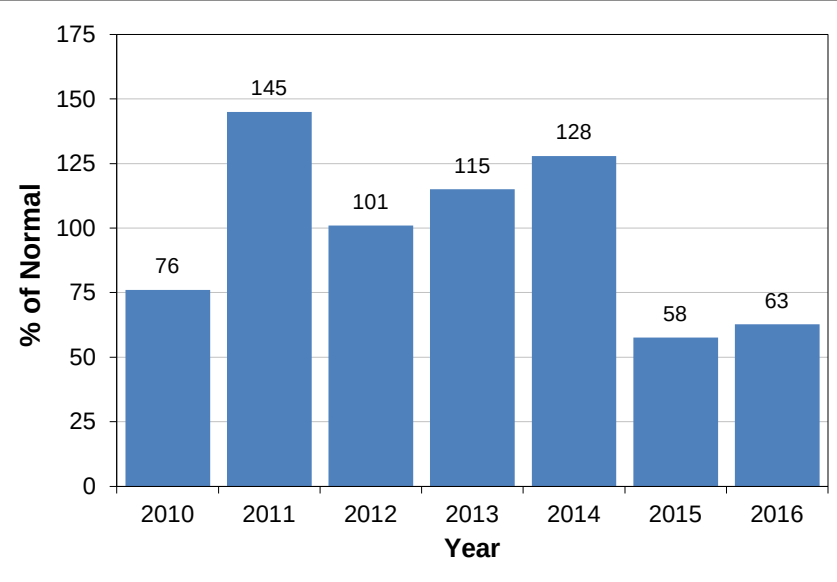
East Kootenay



Okanagan

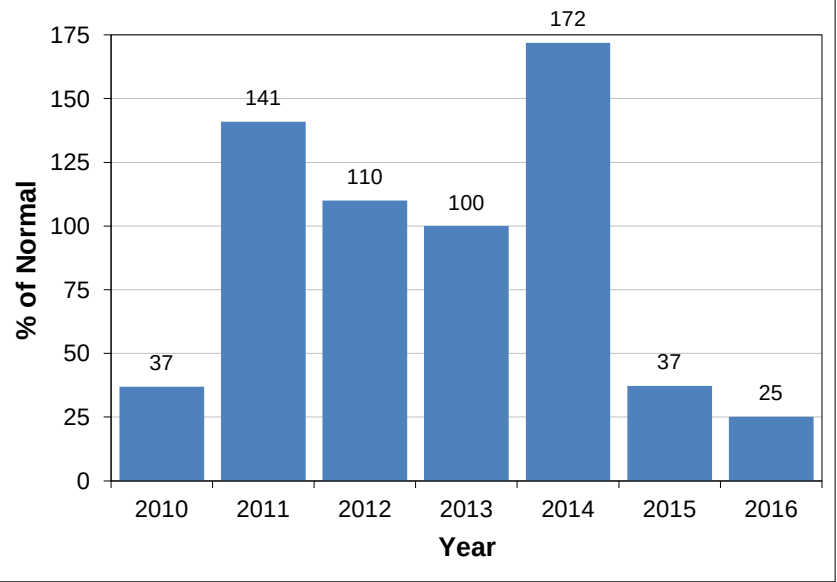


Boundary

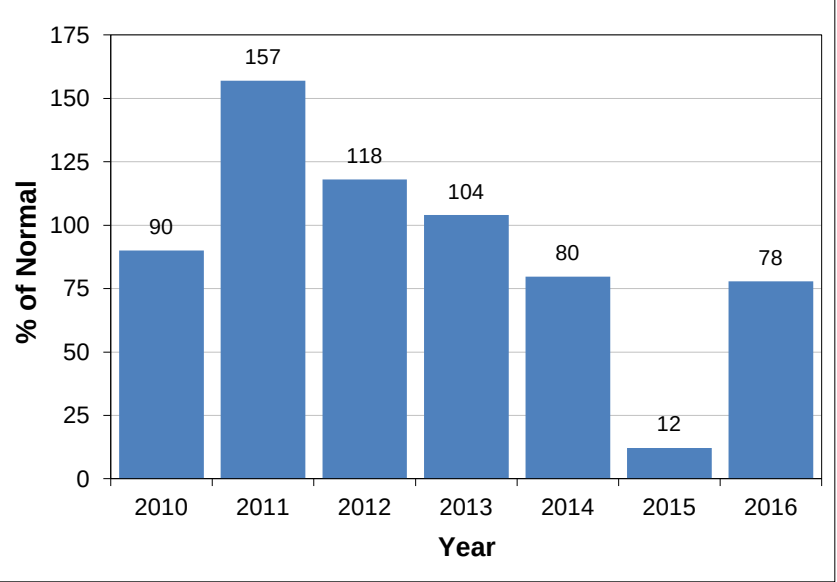


Snow Basin Index Graphs - May 1, 2016

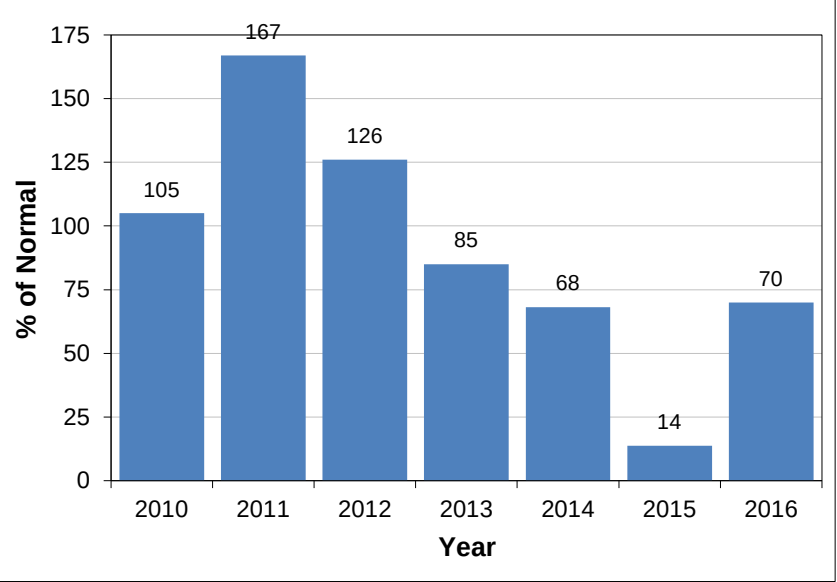
Similkameen



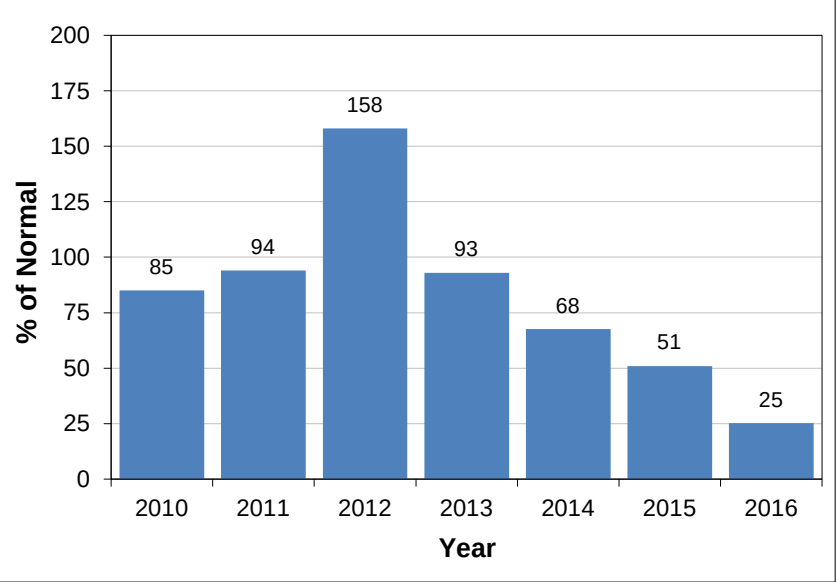
South Coast



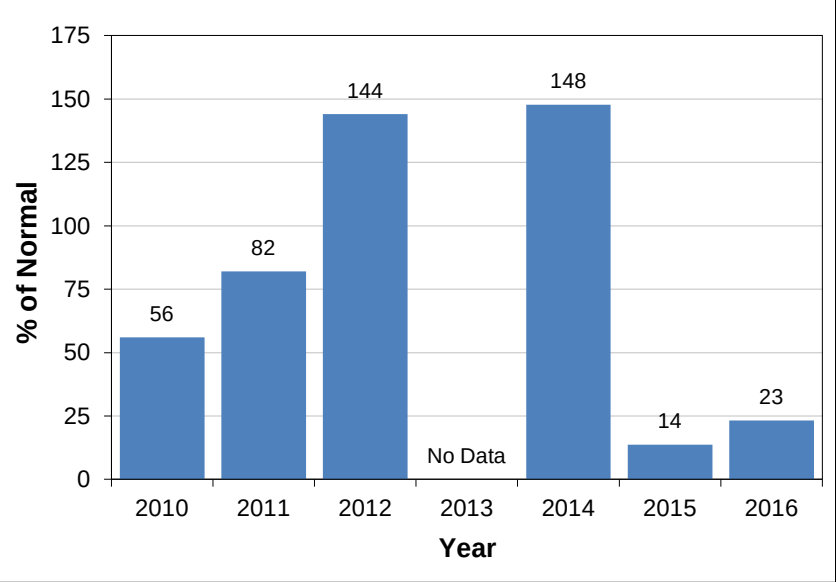
Vancouver Island



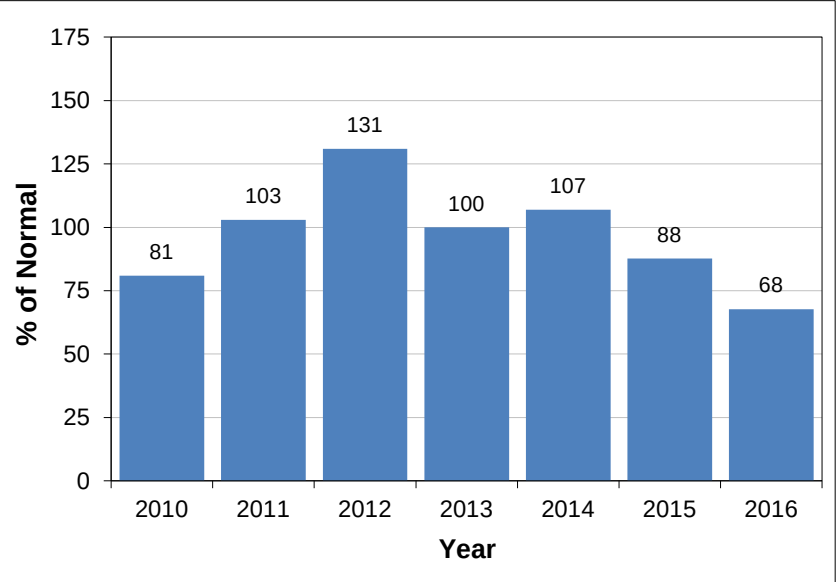
Central Coast



Skagit

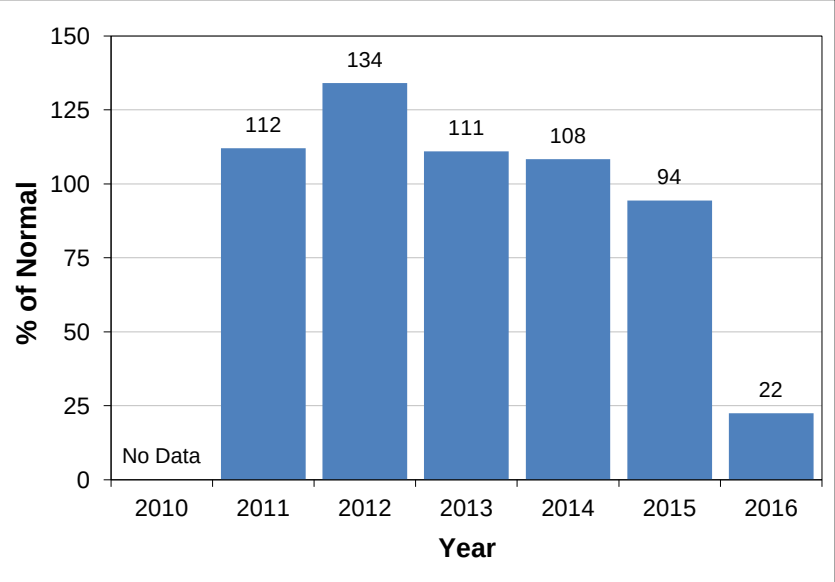


Peace

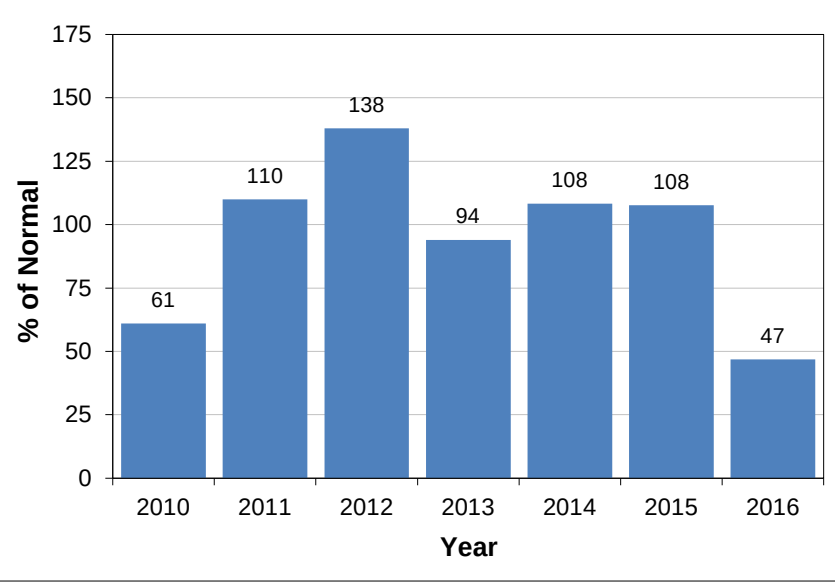


Snow Basin Index Graphs - May 1, 2016

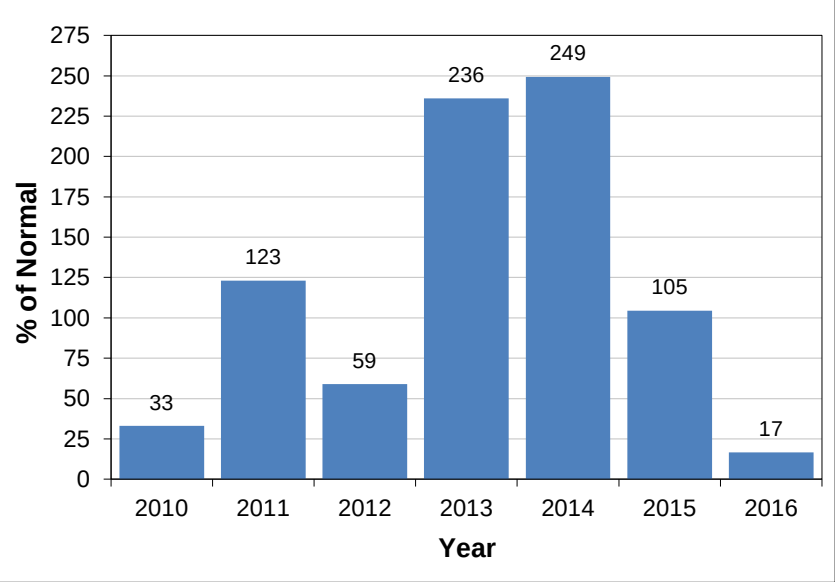
Stikine



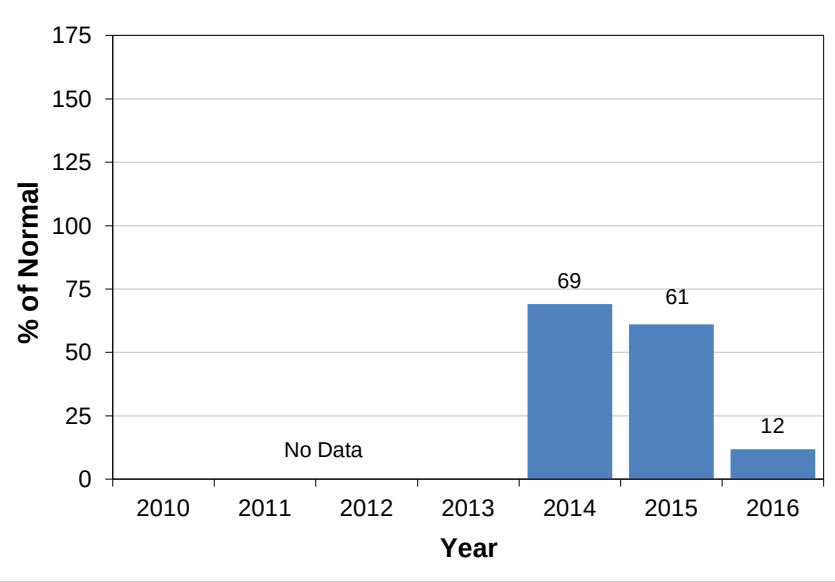
Skeena-Nass



Liard



Northwest



Ministry of Forests, Lands and Natural Resource Operations
River Forecast Centre
Volume Runoff Forecast May 2016

Location		May - Jun Runoff				May - Jul Runoff				May - Sep Runoff			
		Forecast (kdam ³)	Normal (1981-2010) (kdam ³)	% of Normal	Std. Error (kdam ³)	Forecast (kdam ³)	Normal (1981-2010) (kdam ³)	% of Normal	Std. Error (kdam ³)	Forecast (kdam ³)	Normal (1981-2010) (kdam ³)	% of Normal	Std. Error (kdam ³)
Upper Fraser Basin	Fraser at McBride					2897	3534	82%	297	4341	5000	87%	373
	McGregor at Lower Canyon					2326	3552	65%	376	3318	4598	72%	563
	Fraser at Shelley					8880	13672	65%	1070	12404	17732	70%	1657
Middle Fraser Basin	Quesnel River at Quesnel					2907	4117	71%	396	3984	5448	73%	574
Thompson Basin	N. Thompson at McLure					7817	8209	95%	425	10003	10379	96%	785
	S. Thompson at Chase					4929	5298	93%	403	6402	6865	93%	659
	Thompson at Spences Bridge					13496	13923	97%	825	17518	17903	98%	1510
Bulkley and Skeena	Bulkley at Quick					1550	2383	65%	185	2067	2980	79%	220
	Skeena at Usk					13665	17317	79%	964	17242	21661	80%	1463
Nicola Lake	Inflows	139	105	133%	28	177	122	145%	33				
Nicola River	at Spences Bridge	471	409	115%	76	555	476	116%	98				
Okanagan and Kalamalka-Wood Lake	Okanagan Lake Inflow	449	349	129%	81	492	376	131%	103				
	Kalamalka-Wood Lake Inflow	22	19	117%	8	24	20	119%	11				
Similkameen River	Similkameen at Nighthawk	861	1101	78%	152					1072	1411	76%	193
	Similkameen at Hedley	694	827	84%	91					835	1015	82%	105
Cowichan River	Cowichan Lake Inflows	73	130	56%	45					111	174	64%	45

1 kdam³=1,000,000 m³

Note that missing values reflect that forecasts were not made for that time interval

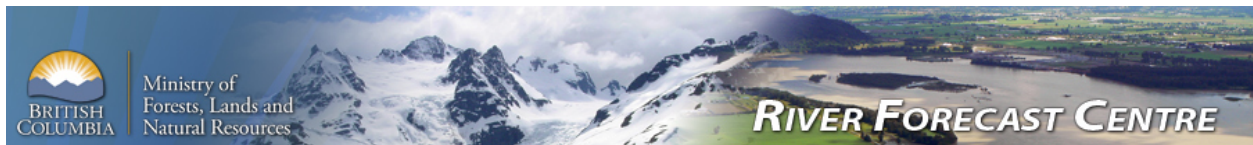
Disclaimer: Seasonal forecasts were developed using a Principle Component Analysis of snow pack, climate and streamflow data.

Cowichan Lake Inflows are based on a multi-variate regression analysis and reflects a normal scenario for summer weather conditions

The Standard Error in the Cowichan forecast reflects model error, and does not capture uncertainty over seasonal weather

There is inherent uncertainty in runoff forecasts including potential errors in data and the unpredictable nature of seasonal weather

Use at your own risk



Snow Survey and Water Supply Bulletin – May 15th, 2016

The May 15th snow survey is now complete. Data from 26 snow courses and 62 automated snow stations around the province, collected by the Ministry of Environment Snow Survey Program and partners, and climate data from Environment Canada have been used to form the basis of the following report¹.

Weather

Weather through the first half of May has been generally warm and dry across British Columbia, with periods of atmospheric instability and showers. Temperatures have continued to be warmer than normal, with extremely warm weather early in the month. Precipitation across the province has been below normal, with some areas in northern BC experiencing wetter than normal conditions.

Snowpack

The provincial snow pack has continued to melt at a rapid rate. Most snow survey locations experienced 100-300mm of snow water equivalent loss over the May 1st to May 15th period, with current melt rates of 10-20mm per day being observed at most Automated Snow Weather Stations.

May 15th snow basin indices have declined since the May 1st indices, with the provincial average dropping from 53% to 39% over the period. The 2016 May 15th provincial average basin index is a new record low (measured since 1980). May 15th indices are extremely low (<60%) across the province, except in the North Thompson, South Thompson, and Upper Columbia, where indices are in the 70-86% of normal range for this time of year.

The low May 15th snow basin indices reflect the accelerated melt of the snow pack this season due to the extremely warm spring, rather than a lack of seasonal accumulation. May 15th snow packs this year are more typical of mid-June conditions, indicating that snow melt this season continues to progress about four weeks ahead of normal.

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 – May 15th, 2016

Table 1: BC Snow Basin Indices – May 15, 2016

Basin	% of Normal	Basin	% of Normal
Upper Fraser West	NO DATA ¹	Boundary	55
Upper Fraser East	23	Similkameen	12
Nechako	45	South Coast	57
Middle Fraser	21	Vancouver Island	35
Lower Fraser	49	Central Coast	21
North Thompson	80	Skagit	NO DATA
South Thompson	86	Peace	38
Upper Columbia	70	Skeena-Nass	25
West Kootenay	44	Stikine	1
East Kootenay	12	Liard	NO DATA
Okanagan	35	Northwest	NO DATA

1. 'No Data' indicates that no snow surveys were conducted within the basin during this survey period

Streamflow

Freshet runoff echoes the pattern in snow melt, with many rivers experiencing flow conditions that are 3-4 weeks or more ahead of normal conditions. Since May 1st many rivers have experienced a transition from well-above normal flows, to near-normal or below-normal flows as of mid-May.

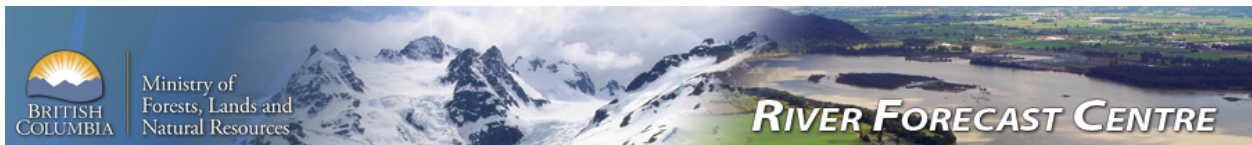
Outlook

Strong El Niño-Southern Oscillation (ENSO) conditions that developed over the equatorial Pacific regions over the past winter are now rapidly declining, and are expected to reach neutral conditions over the next couple of months. The Climate Prediction Centre at the U.S. National Weather Service/NOAA has issued a "La Niña Watch" as modelling is indicating a high likelihood of La Niña conditions developing through the summer and fall of 2016. In the northern Pacific Ocean, temperature anomalies continue to decline offshore, and increase near-shore to British Columbia, indicating a potential warm-phase Pacific Decadal Oscillation (PDO) pattern.

Seasonal forecasts from Environment Canada are indicating an increased likelihood of above-normal temperatures across British Columbia over the May to July period, and into the extended forecast period of the late summer months. The warmer than average seasonal forecast is consistent with historic weather typically observed during positive in-phase ENSO and PDO conditions.

Most rivers have likely experienced their peak flow level for this season, and freshet flows are now receding. In rivers with a large proportion of high-elevation terrain, including the South Thompson River and upper Columbia River, the peak of the freshet is expected over the next few weeks. Seasonal flood risk due to snow melt is now limited across the province, however flooding could still occur from significant rainfall events.

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Snow Survey and Water Supply Bulletin – May 15th, 2016

The advanced freshet is expected to put pressure on summer low flows in snow-melt dominated rivers across the province. In many of the smaller and low- to mid-elevation watersheds of the province (e.g. in Central Interior and South Interior), the transition to seasonally lower than normal flows has begun, and the trend is expected to expand to larger watersheds over the next few weeks. The influence of the snowmelt season occurring about a month early this year is expected to continue through the summer. While the volume of runoff is expected to be near normal throughout this year's freshet in most areas, the majority of this volume will occur through April and May, rather than May and June, as normally occurs. While the impact of this will vary from river to river across the province, the proportion of flows in June, July and August that are derived from snow melt will be greatly reduced. In the northeast and in lower elevation coastal watersheds, snow melt usually plays a minor role in summer flows, and rainfall is particularly important for determining the flows that are experienced through the summer.

For both spring flood risk and summer low flows, snow pack is just one of the important elements that determine whether or not extreme conditions will emerge. Extreme wet or dry weather can significantly impact the likelihood of peak and low flows. If the remainder of the spring and summer has near normal precipitation, below normal flows are likely throughout the province over the summer.

Current forecasts for the week suggest cool and unsettled weather. Significant rainfall is not expected to either pose localized flood risk, or ease the trend towards earlier low flows. The River Forecast Centre is modelling streamflow across the province. Information regarding freshet conditions, including hydrologic model forecasts, is available on the [Freshet page](#) on the RFC website. Seasonal information on drought and drought levels is available on the [BC Drought Information Portal](#).

The River Forecast Centre will continue to monitor snow pack conditions and will provide an updated seasonal flood risk and stream flow forecast in the June 1st 2016 bulletin, which is scheduled for release on June 8th.

BC River Forecast Centre
May 24, 2016

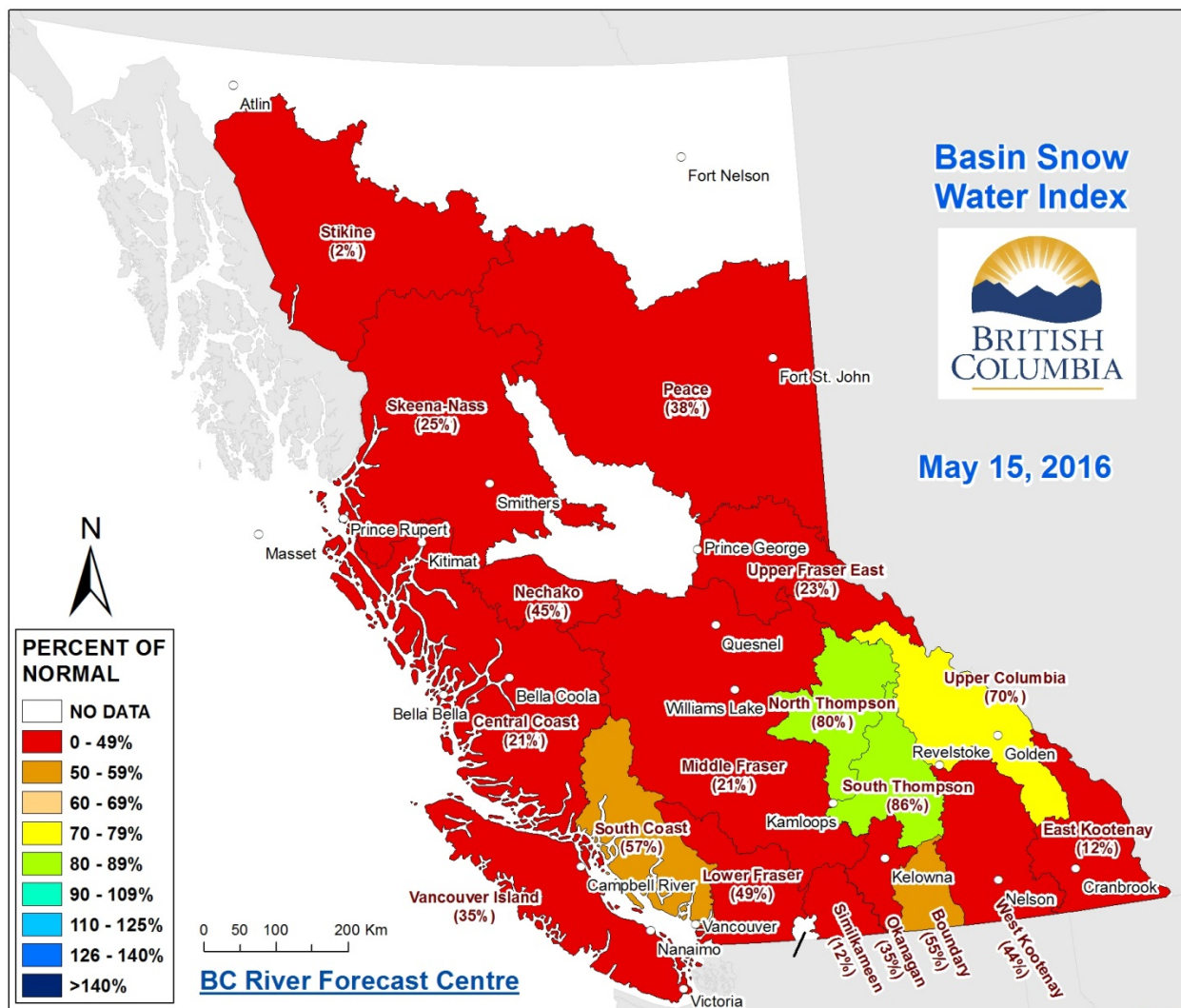


Ministry of
Forests, Lands and
Natural Resources

RIVER FORECAST CENTRE

Snow Survey and Water Supply Bulletin – May 15th, 2016

Figure 1: Basin Snow Water Index – May 15th, 2016. The low May 15th snow basin indices reflect the accelerated melt of the snow pack this season due to the extremely warm spring, rather than a lack of total seasonal snow accumulation.



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2016 Automated Snow Pillow/Manual Snow Survey Data				May 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1A01P	YELLOWHEAD LAKE	Upper Fraser East	1860	2016-05-15	6	159		30%	481	586	143	833	522	19
1A02P	MC BRIDE UPPER	Upper Fraser East	1580	2016-05-15	0	7		2%	428	536	65	656	403	24
1A03P	BARKERVILLE	Upper Fraser East	1520	2016-05-15	3	1		0%	12	363	0	503	213	41
1A05	LONGWORTH (UPPER)	Upper Fraser East	1693	NS	NS	NS	NS				292	1219	798	55
1A06A	HANSARD	Upper Fraser East	622	NS	NS	NS	NS						0	0
1A10	PRINCE GEORGE A	Upper Fraser East	684	NS	NS	NS	NS				0	76	5	24
1A11	PACIFIC LAKE	Upper Fraser East	756	NS	NS	NS	NS				0	728	339	36
1A12	KAZA LAKE	Upper Fraser West	1247	NS	NS	NS	NS				212	212	212	2
1A12P	KAZA LAKE	Upper Fraser East	1248	2016-05-15	4	0								0
1A14P	HEDRICK LAKE	Upper Fraser East	1100	2016-05-15	46	117		16%	338	1307	338	1277	754	16
1A15	KNUDSEN LAKE	Upper Fraser East	1598	NS	NS	NS	NS				359	1271	836	35
1A16	BURNS LAKE	Upper Fraser West	820	NS	NS	NS	NS				0	0	0	17
1A17P	REVOLUTION CREEK	Upper Fraser East	1690	2016-05-15	82	311		43%	785	1247	228	1307	716	31
1A19P	DOMM MOUNTAIN	Upper Fraser East	1820	2016-05-15	95	459		55%	810	1039	555	1215	828	10
1A23	BIRD CREEK	Upper Fraser West	1196	NS	NS	NS	NS				0	0	0	1
1B01	MOUNT WELLS	Nechako	1489	NS	NS	NS	NS				164	869	280	7
1B01P	MOUNT WELLS	Nechako	1490	2016-05-15	NA	155		32%	696	418	171	946	491	24
1B02	TAHTSA LAKE	Nechako	1319	NS	NS	NS	NS				924	1687	924	6
1B02P	TAHTSA LAKE	Nechako	1300	2016-05-15	NA	760		59%	1217	818	674	2340	1287	24
1B05	SKINS LAKE	Nechako	877	NS	NS	NS	NS				0	0	0	2
1B06	MOUNT SWANNELL	Nechako	1596	NS	NS	NS	NS				0	331	166	2
1B07	NUTLI LAKE	Nechako	1502	NS	NS	NS	NS				197	197	197	2
1B08P	MOUNT PONDOSY	Nechako	1400	2016-05-15	NA	279		44%	815	314	216	1198	628	24
1C01	BROOKMERE	Middle Fraser	994	NS	NS	NS	NS				0	208	22	28
1C05	MCGILLIVRAY PASS	Middle Fraser	1715	NS	NS	NS	NS				184	965	455	20
1C06	PAVILION	Middle Fraser	1209	NS	NS	NS	NS				0	0	0	6
1C08	NAZKO	Middle Fraser	1029	NS	NS	NS	NS						0	0
1C09A	HIGHLAND VALLEY	Middle Fraser	1547	NS	NS	NS	NS				0	30	3	25
1C12P	GREEN MOUNTAIN	Middle Fraser	1780	2016-05-15	NA	479		60%	583	536	424	1369	803	22
1C13A	HORSEFLY MOUNTAIN	Middle Fraser	1612	NS	NS	NS	NS				655	655	0	1
1C14	BRALORNE	Middle Fraser	1382	NS	NS	NS	NS				0	80	11	20
1C17	MOUNT TIMOTHY	Middle Fraser	1632	2016-05-11	0	0	T	0%			0	466	181	49
1C18P	MISSION RIDGE	Middle Fraser	1850	2016-05-15	NA	0		0%	124	330	0	972	336	46
1C19	GNAWED MOUNTAIN	Middle Fraser	1617	NS	NS	NS	NS				0	157	23	23
1C20P	BOSS MOUNTAIN MINE	Middle Fraser	1460	2016-05-15	21	147		32%	215	417	176	746	455	22
1C21	BIG CREEK	Middle Fraser	1130	NS	NS	NS	NS						0	0
1C22	PUNTZI MOUNTAIN	Middle Fraser	939	NS	NS	NS	NS				0	0	0	2
1C23	PENFOLD CREEK	Middle Fraser	1687	NS	NS	NS	NS				585	1400	1022	44
1C25	LAC LE JEUNE (UPPER)	Middle Fraser	1471	NS	NS	NS	NS				0	67	22	5

2016 Automated Snow Pillow/Manual Snow Survey Data				May 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1C28	DUFFEY LAKE	Middle Fraser	1253	NS	NS	NS	NS						0	0
1C29	SHOVELNOSE MOUNTAIN	Middle Fraser	1456	NS	NS	NS	NS						0	0
1C32	DEADMAN RIVER	Middle Fraser	1463	NS	NS	NS	NS						0	0
1C33A	GRANITE MOUNTAIN	Middle Fraser	1175	NS	NS	NS	NS						0	0
1C37	BRALORNE(UPPER)	Middle Fraser	1980	NS	NS	NS	NS						0	0
1C38	DOWNTON LAKE (UPPER)	Middle Fraser	1884	NS	NS	NS	NS						0	0
1C38P	DOWNTON / LAJOIE UPPER	Middle Fraser	1829	2016-05-15	NA	700								0
1C39	BRIDGE GLACIER (LOWER)	Middle Fraser	1393	NS	NS	NS	NS						0	0
1C40	TYAUGHTON CREEK (NORTH)	Middle Fraser	1946	NS	NS	NS	NS						0	0
1C40P	NORTH TYAUGHTON	Middle Fraser	1969	2016-05-15	NA	0								0
1C41P	YANKS PEAK, EAST	Middle Fraser	1670	2016-05-15	68	421		54%	750	1183	386	1129	774	19
1C42	CAVERHILL LAKE NEW	Middle Fraser	1400	NS	NS	NS	NS							0
1D06P	TENQUILLE LAKE	Lower Fraser	1680	2016-05-15	146	683		70%	727	692	469	1693	973	15
1D08	STAVE LAKE	Lower Fraser	1211	NS	NS	NS	NS				2438	2438	0	1
1D09	WAHLEACH LAKE	Lower Fraser	1395	NS	NS	NS	NS				102	656	428	11
1D09P	WAHLEACH LAKE	Lower Fraser	1400	2016-05-15	NA	421		42%	300	940	300	1793	1001	24
1D10	NAHATLATCH RIVER	Lower Fraser	1530	NS	NS	NS	NS				1202	2423	1467	5
1D16	DICKSON LAKE	Lower Fraser	1147	NS	NS	NS	NS				2070	2070	2070	1
1D17P	CHILLIWACK RIVER	Lower Fraser	1600	2016-05-15	140	923		66%	529	2200	405	2540	1398	24
1D18	DISAPPOINTMENT LAKE	Lower Fraser	1050	2016-05-13	138	704								
1D19P	SPUZZUM CREEK	Lower Fraser	1180	2016-05-15	120	736		48%	0	1434	0	2900	1533	17
1E01B	BLUE RIVER	North Thompson	673	NS	NS	NS	NS				0	213	0	10
1E02P	MOUNT COOK	North Thompson	1550	2016-05-15	209	1277		96%	1096	1328	855	1793	1334	16
1E03A	TROPHY MOUNTAIN	North Thompson	1907	2016-05-18	82	410		66%		697	301	1114	618	33
1E05	KNOUFF LAKE	North Thompson	1189	NS	NS	NS	NS						0	0
1E07	ADAMS RIVER	North Thompson	1769	2016-05-13	109	590		86%	451	785	280	1158	690	44
1E08P	AZURE RIVER	North Thompson	1620	2016-05-15	113	784		68%	1274	1006	746	1684	1152	19
1E10P	KOSTAL LAKE	North Thompson	1770	2016-05-15	NA	601	E	69%	754	883	569	1358	870	31
1E14P	COOK CREEK	North Thompson	1280	2016-05-15	0	0								0
1F01A	ABERDEEN LAKE	South Thompson	1262	NS	NS	NS	NS				0	28	14	13
1F02	ANGLEMONT	South Thompson	1168	NS	NS	NS	NS			113	0	361	99	20
1F03P	PARK MOUNTAIN	North Thompson	1890	2016-05-15	126	723		78%	827	1145	315	1358	929	31
1F04	ENDERBY	South Thompson	1948	N	N	N	N			1247	662	1499	1072	51
1F06P	CELISTA MOUNTAIN	North Thompson	1551	2016-05-15	99	589		70%	659	1044	420	1163	841	11
2A01A	CANOE RIVER	Upper Columbia	866	NS	NS	NS	NS				0	0	0	5
2A02	GLACIER	Upper Columbia	1249	NS	NS	NS	NS				114	1034	498	47
2A03A	FIELD	Upper Columbia	1310	NS	NS	NS	NS				0	0	0	3
2A06P	MOUNT REVELSTOKE	Upper Columbia	1830	2016-05-15	NA	891		72%	968	1177	700	1777	1235	23
2A07	KICKING HORSE	Upper Columbia	1648	NS	NS	NS	NS				0	521	229	50

2016 Automated Snow Pillow/Manual Snow Survey Data				May 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2A11	BEAVERFOOT	Upper Columbia	1924	NS	NS	NS	NS				0	399	0	4
2A14	MOUNT ABBOT	Upper Columbia	2031	NS	NS	NS	NS				837	1944	1319	37
2A16	GOLDSTREAM	Upper Columbia	1914	NS	NS	NS	NS				1055	1055	1055	1
2A17	FIDELITY MOUNTAIN	Upper Columbia	1852	NS	NS	NS	NS				837	1950	1271	33
2A18	KEYSTONE CREEK	Upper Columbia	1839	NS	NS	NS	NS				683	683	683	1
2A18P	KEYSTONE CREEK	Upper Columbia	1850	2016-05-15	NA	552								0
2A19	VERMONT CREEK	Upper Columbia	1533	NS	NS	NS	NS				225	813	225	2
2A21P	MOLSON CREEK	Upper Columbia	1980	2016-05-15	NA	742		68%	1009	1091	602	1707	1085	35
2A22	SUNBEAM LAKE	Upper Columbia	2066	NS	NS	NS	NS				863	863	863	1
2A23	BUSH RIVER	Upper Columbia	1982	NS	NS	NS	NS				766	766	766	1
2A25	KIRBYVILLE LAKE	Upper Columbia	1739	NS	NS	NS	NS				1130	1257	1194	2
2A27	DOWNIE SLIDE (LOWER)	Upper Columbia	964	NS	NS	NS	NS				0	522	297	10
2A29	DOWNIE SLIDE (UPPER)	Upper Columbia	1628	NS	NS	NS	NS				582	1425	1284	9
2A30P	COLPITTI CREEK	Upper Columbia	2131	2016-05-15	NA	467								0
2A31P	CARIBOU CREEK UPPER	Upper Columbia	2201	2016-05-15	NA	656								0
2A32P	WILDCAT CREEK	Upper Columbia	2122	2016-05-15	NA	346								0
2B02A	FARRON	West Kootenay	1229	2016-05-13	0	0		0%	0	25	0	222	63	36
2B05	WHATSHAN (UPPER)	West Kootenay	1476	NS	NS	NS	NS				164	737	164	3
2B06P	BARNES CREEK	Lower Columbia	1620	2016-05-15	NA	181		41%	321	630	98	758	438	23
2B07	KOCH CREEK	West Kootenay	1813	NS	NS	NS	NS				675	1148	675	2
2B08P	ST. LEON CREEK	Lower Columbia	1800	2016-05-15	NA	661		66%	879	1292	639	1568	1004	23
2B09	RECORD MOUNTAIN	West Kootenay	1906	2016-05-14	49	242		38%	114	550	83	1367	645	41
2C01	SINCLAIR PASS	East Kootenay	1374	NS	NS	NS	NS				0	107	0	32
2C04	SULLIVAN MINE	East Kootenay	1580	2016-05-15	0	0	T	0%	0	248	0	457	80	67
2C07	FERNIE EAST	East Kootenay	1213	2016-05-20	0	0		0%	0	62	0	298	34	61
2C09Q	MORRISSEY RIDGE	East Kootenay	1800	2016-05-15	NA	0		0%	95	1079	0	1102	484	36
2C10P	MOYIE MOUNTAIN	East Kootenay	1930	2016-05-15	2	0		0%	0	458	0	678	225	37
2C14P	FLOE LAKE	East Kootenay	2090	2016-05-15	NA	375		50%	588	923	304	1101	752	23
2C15	MOUNT ASSINIBOINE	East Kootenay	2230	NS	NS	NS	NS				534	534	534	1
2C16	MOUNT JOFFRE	East Kootenay	1763	NS	NS	NS	NS				338	338	338	1
2C17	THUNDER CREEK	East Kootenay	2062	NS	NS	NS	NS				220	220	220	1
2C20	VERMILLION RIVER NO. 3	East Kootenay	1612	NS	NS	NS	NS				0	381	0	7
2D02	FERGUSON	West Kootenay	929	NS	NS	NS	NS				20	640	302	38
2D03	SANDON	West Kootenay	1072	NS	NS	NS	NS				0	218	0	10
2D04	NELSON	West Kootenay	952	NS	NS	NS	NS				0	243	46	41
2D05	GRAY CREEK (LOWER)	West Kootenay	1558	NS	NS	NS	NS				0	709	330	54
2D06	CHAR CREEK	West Kootenay	1290	2016-05-13	0	0		0%	0	378			272	48
2D07A	DUNCAN LAKE NO. 2	West Kootenay	662	NS	NS	NS	NS						0	0
2D08P	EAST CREEK	West Kootenay	2030	2016-05-15	NA	624		71%	865	952	461	1387	874	35

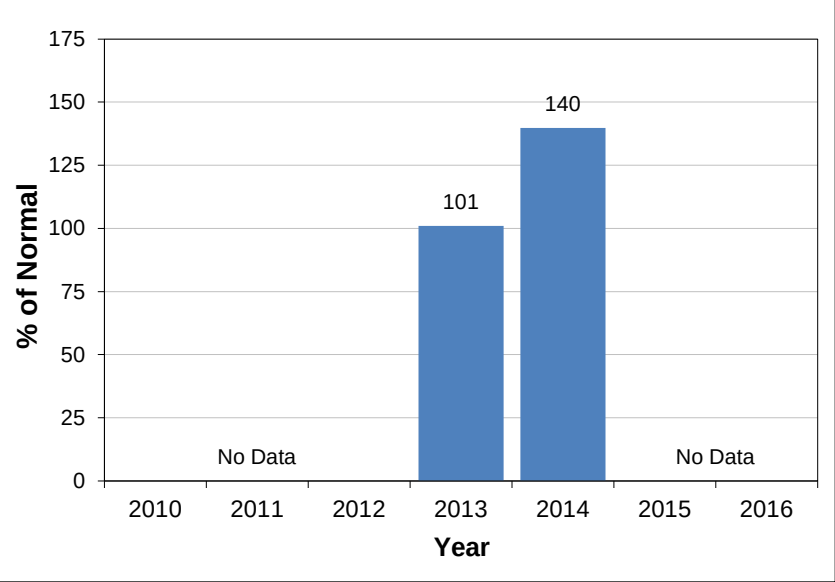
2016 Automated Snow Pillow/Manual Snow Survey Data				May 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2D09	MOUNT TEMPLEMAN	West Kootenay	1879	NS	NS	NS	NS				978	978	978	1
2D10	GRAY CREEK (UPPER)	West Kootenay	1926	NS	NS	NS	NS				311	1194	709	34
2D14P	REDFISH CREEK	West Kootenay	2104	2016-05-15	208	1168		89%	1374	1497	1024	1771	1309	14
2E01	MONASHEE PASS	Boundary	1387	NS	NS	NS	NS				0	363	206	28
2E02	CARMI	Boundary	1254	NS	NS	NS	NS				0	0	0	14
2E03	BIG WHITE MOUNTAIN	Boundary	1672	2016-05-17	25	80		22%		421	0	732	366	49
2E07P	GRANO CREEK	Kettle	1860	2016-05-15	62	405		78%	333	582	290	881	520	18
2F01A	TROUT CREEK (WEST)	Okanagan	1430	2016-05-13	0	0		0%	0	60	0	243	58	6
2F02	SUMMERLAND RESERVOIR	Okanagan	1304	2016-05-24	0	0		0%	0		0	218	13	49
2F03	MC CULLOCH	Okanagan	1266	NS	NS	NS	NS				0	102	0	39
2F04	GRAYSTOKE LAKE	Okanagan	1818	NS	NS	NS	NS				0	742	360	17
2F05P	MISSION CREEK	Okanagan	1780	2016-05-15	56	255		66%	293	679	0	829	386	46
2F07	POSTILL LAKE	Okanagan	1358	NS	NS	NS	NS				71	180	143	7
2F08	GRAYBACK RESERVOIR	Okanagan	1548	2016-05-14	0	0		0%	55	225	0	323	79	44
2F09	WHITEROCKS MOUNTAIN	Okanagan	1789	2016-05-14	46	219		61%	167	375	0	968	357	45
2F10P	SILVER STAR MOUNTAIN	Okanagan	1839	2016-05-15	138	645	E							0
2F11	ISINTOK LAKE	Okanagan	1651	2016-05-20	0	0		0%	0	0	0	386	46	50
2F12	MOUNT KOBAN	Okanagan	1817	2016-05-15	13	56		22%	74	163	0	516	253	50
2F13	ESPERON CR (UPPER)	Okanagan	1634	2016-05-12	42	186		61%	174		66	625	306	13
2F14	ESPERON CR (MIDDLE)	Okanagan	1440	2016-05-12	25	122		74%	62		0	380	164	14
2F18P	BRENDA MINE	Okanagan	1460	2016-05-15	NA	1		5%	0	0	0	208	20	23
2F19	OYAMA LAKE	Okanagan	1365	NS	NS	NS	NS				97	97	0	2
2F20	VASEUX CREEK	Okanagan	1403	2016-05-15	0	0		0%	0	0	0	80	7	43
2F21	BOULEAU LAKE	Okanagan	1405	NS	NS	NS	NS				173	328	328	4
2F23	MACDONALD LAKE	Okanagan	1742	NS	NS	NS	NS		180		0	652	334	20
2F24	ISLAHT LAKE	Okanagan	1492	2016-05-17	1	3		1%		115	0	352	221	7
2F25	POSTILL LAKE (UPPER)	Okanagan	1500	NS	NS	NS	NS							0
2G03P	BLACKWALL PEAK	Similkameen	1940	2016-05-15	0	416	E	62%	469	844	208	1481	671	48
2G04	LOST HORSE MOUNTAIN	Similkameen	1988	2016-05-12	0	0		0%	126	285	0	577	169	54
2G05	MISSEZULA MOUNTAIN	Similkameen	1602	2016-05-12	0	0		0%	0	138	0	218	32	56
2G06	HAMILTON HILL	Similkameen	1477	2016-05-20	0	0		0%	0		0	434	110	37
3A01	GROUSE MOUNTAIN	South Coast	1126	NS	NS	NS	NS				528	1714	0	5
3A02	POWELL RIVER (UPPER)	South Coast	1002	NS	NS	NS	NS				816	816	816	1
3A05	POWELL RIVER (LOWER)	South Coast	882	NS	NS	NS	NS				378	378	378	1
3A09	PALISADE LAKE	South Coast	898	NS	NS	NS	NS				336	3600	1968	4
3A10	DOG MOUNTAIN	South Coast	1007	2016-05-13	49	284		27%	0		0	2920	1041	30
3A19	ORCHID LAKE	South Coast	1178	2016-05-13	201	1131		65%	0		0	3730	1729	36
3A20	CALLAGHAN CREEK	South Coast	1009	NS	NS	NS	NS				55	1311	444	16
3A22P	NOSTETUKO RIVER	South Coast	1500	2016-05-15	96	34		10%	0	229	0	939	355	27

2016 Automated Snow Pillow/Manual Snow Survey Data				May 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
3A24P	UPPER MOSLEY CREEK	South Coast	1650	2016-05-15	0	0		0%	98	135	0	467	149	27
3A25P	UPPER SQUAMISH RIVER	South Coast	1340	2016-05-15	NA	1163		78%	474	984	474	2980	1486	26
3B01	FORBIDDEN PLATEAU	Vancouver Island	1110	NS	NS	NS	NS				345	2631	1576	33
3B02A	MT. COKELY	Vancouver Island	1267	NS	NS	NS	NS						0	0
3B04	ELK RIVER	Vancouver Island	270	NS	NS	NS	NS						0	0
3B10	UPPER THELWOOD LAKE	Vancouver Island	1014	NS	NS	NS	NS				1364	2697	1731	9
3B17P	WOLF RIVER	Vancouver Island	1490	2016-05-15	NA	767		62%	137	681	137	2719	1229	34
3B18	WOLF RIVER (MIDDLE)	Vancouver Island	1050	NS	NS	NS	NS				0	1148	481	15
3B19	WOLF RIVER (LOWER)	Vancouver Island	615	NS	NS	NS	NS				0	549	78	15
3B23P	JUMP CREEK	Vancouver Island	1160	2016-05-15	12	78		7%	0	440	0	3500	1097	20
3B24P	HEATHER MOUNTAIN UPPER	Vancouver Island	1190	2016-05-15	112	933								0
3C07	WEDEENE RIVER SOUTH	Central Coast	196	NS	NS	NS	NS				232	232	232	1
3C08P	BURNT BRIDGE CREEK	North Coast	1330	2016-05-15	20	130		21%	526	586	184	1438	634	18
3D01C	SUMALLO RIVER WEST	Skagit	801	NS	NS	NS	NS						0	0
3D02	LIGHTNING LAKE	Skagit	1254	NS	NS	NS	NS				544	544	0	1
3D03A	KLESILKWA	Skagit	1134	NS	NS	NS	NS				0	490	11	4
4A02P	PINE PASS	Peace	1400	2016-05-15	140	740		74%	923	1030	813	1654	999	27
4A03	WARE (UPPER)	Peace	1563	NS	NS	NS	NS				114	114	114	1
4A04	WARE (LOWER)	Peace	969	NS	NS	NS	NS				0	0	0	1
4A05	GERMANSEN (UPPER)	Peace	1489	NS	NS	NS	NS				272	414	272	6
4A06	TUTIZZI LAKE	Peace	1043	NS	NS	NS	NS				0	0	0	1
4A07	LADY LAURIER LAKE	Peace	1446	NS	NS	NS	NS				420	420	420	1
4A09	PULPIT LAKE	Peace	1331	NS	NS	NS	NS				230	293	262	2
4A09P	PULPIT LAKE	Peace	1310	2016-05-15	1	4		1%	188	256	14	562	267	26
4A10	FREDRICKSON LAKE	Peace	1323	NS	NS	NS	NS				74	74	74	1
4A11	TRYGVE LAKE	Peace	1409	NS	NS	NS	NS				269	269	269	1
4A12	TSAYDAYCHI LAKE	Peace	1173	NS	NS	NS	NS				302	302	302	1
4A13	PHILIP LAKE	Peace	1013	NS	NS	NS	NS				128	128	128	1
4A16	MORFEE MOUNTAIN	Peace	1427	NS	NS	NS	NS				343	1072	535	16
4A18	MOUNT SHEBA	Peace	1480	NS	NS	NS	NS				340	1179	794	12
4A20	MONKMAN CREEK	Peace	1566	NS	NS	NS	NS				0	912	478	12
4A21	MOUNT STEARNS	Peace	1514	NS	NS	NS	NS				45	45	45	1
4A25	FORT ST. JOHN AIRPORT	Peace	692	NS	NS	NS	NS				0	0	0	4
4A30P	AIKEN LAKE	Peace	1040	2016-05-15	0	13		24%	3	68	0	206	55	31
4A31P	CRYING GIRL PRAIRIE	Peace	1358	2016-05-15	NA	0								0
4A33P	MUSKWA-KECHIKA	Peace	1196	2016-05-15	NA	0	E							0
4B01	KIDPRICE LAKE	Skeena-Nass	1415	NS	NS	NS	NS				534	1278	534	5
4B02	JOHANSON LAKE	Skeena-Nass	1480	NS	NS	NS	NS				178	178	178	2
4B03A	HUDSON BAY MTN	Skeena-Nass	1452	2016-05-12	25	108		25%	384	381	160	822	424	43

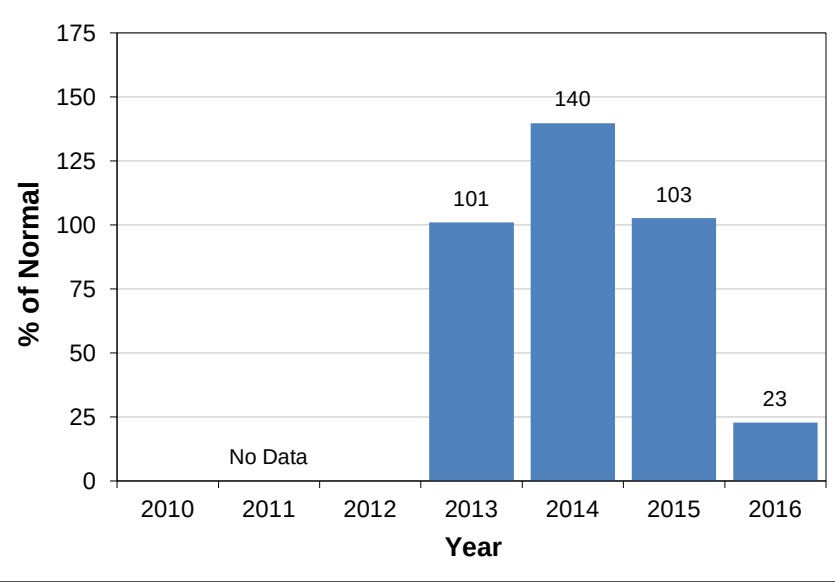
2016 Automated Snow Pillow/Manual Snow Survey Data				May 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
4B04	CHAPMAN LAKE	Skeena-Nass	1485	NS	NS	NS	NS		344		238	689	461	8
4B06	TACHEK CREEK	Skeena-Nass	1133	NS	NS	NS	NS				18	152	0	4
4B07	MCKENDRICK CREEK	Skeena-Nass	1048	NS	NS	NS	NS		0		0	320	127	21
4B08	MOUNT CRONIN	Skeena-Nass	1491	NS	NS	NS	NS		538		481	927	660	14
4B10	NINGUNSAW PASS	Skeena-Nass	647	NS	NS	NS	NS				0	208	27	15
4B11A	BEAR PASS	Skeena-Nass	437	NS	NS	NS	NS				80	488	290	8
4B13A	TERRACE AIRPORT	Skeena-Nass	219	NS	NS	NS	NS			992	0	0	0	1
4B14	EQUITY MINE	Skeena-Nass	1434	NS	NS	NS	NS				0	396	274	14
4B15	LU LAKE	Skeena-Nass	1296	NS	NS	NS	NS				0	330	191	16
4B15P	LU LAKE	Skeena/Nass	1300	2016-05-15	0	11		8%	248		0	489	144	18
4B16P	SHEDIN CREEK	Skeena/Nass	1480	2016-05-15	47	252		27%	593	85	574	1280	940	20
4B17P	TSAI CREEK	Skeena/Nass	1360	2016-05-15	108	667		52%	1332	498	810	2135	1275	18
4B18P	CEDAR - KITEEN	Skeena/Nass	885	2016-05-15	2	11		3%	12	950	12	968	422	15
4C01	SIKANNI LAKE	Liard	1390	NS	NS	NS	NS			429	130	130	130	1
4C02	SUMMIT LAKE	Liard	1291	NS	NS	NS	NS				0	160	42	7
4C03	DEASE LAKE	Liard	805	NS	NS	NS	NS				0	0	0	6
4C05	FORT NELSON A	Liard	368	NS	NS	NS	NS				0	16	1	13
4C15	JADE CITY	Liard	943	NS	NS	NS	NS				162	162	162	1
4D01	TELEGRAPH CREEK	Stikine	490	NS	NS	NS	NS				0	0	0	1
4D02	ISKUT	Stikine	931	NS	NS	NS	NS				0	0	0	15
4D11P	KINASKAN LAKE	Stikine/Taku	1020	2016-05-15	3	0		0%	119		119	119	210	20
4E02B	ATLIN LAKE	Northwest	730	NS	NS	NS	NS							0
Code	Description													
A	Sampling problems were encountered													
B	Early or late sampling													
C	Early or late sampling w/problems encountered													
E	Estimate													
N	Scheduled, but not sampled													
NA	Not available													
NS	Not scheduled													
SD	Snow Depth													
SWE	Snow Water Equivalent													
T	Trace Amount													

Snow Basin Index Graphs - May 15, 2016

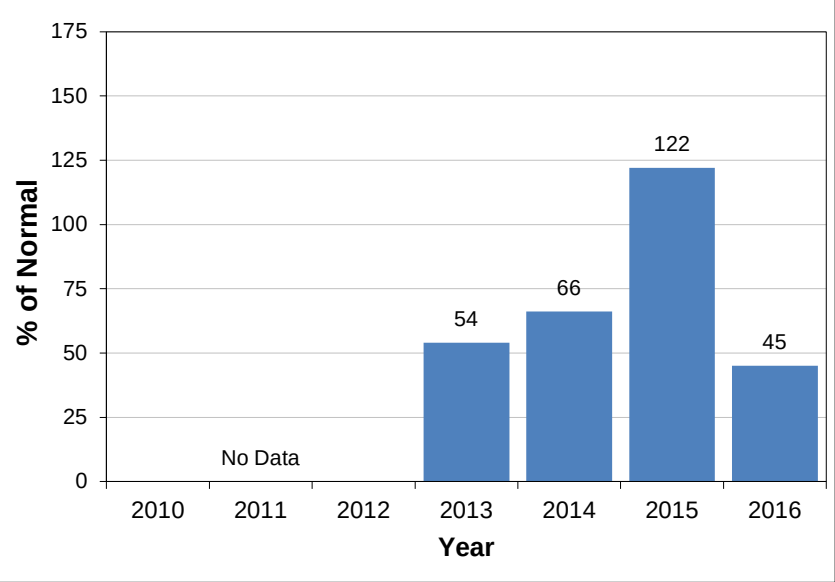
Upper Fraser West



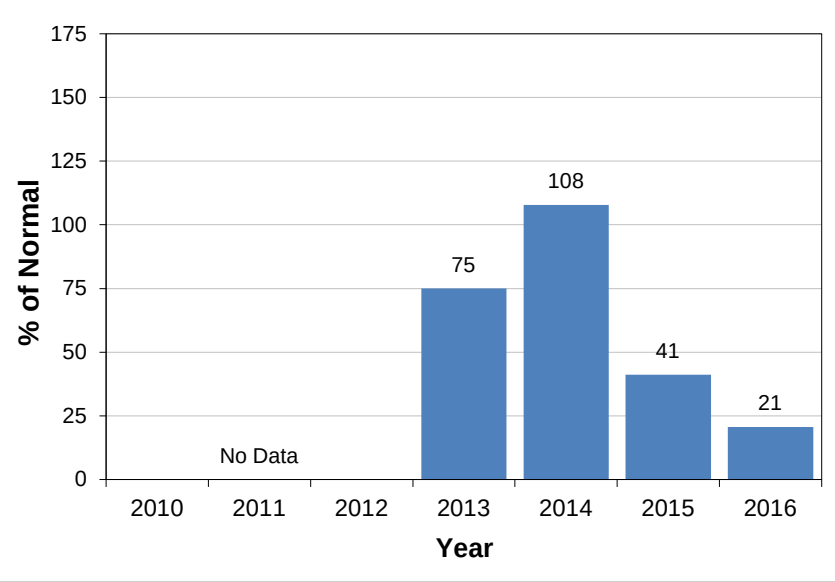
Upper Fraser East



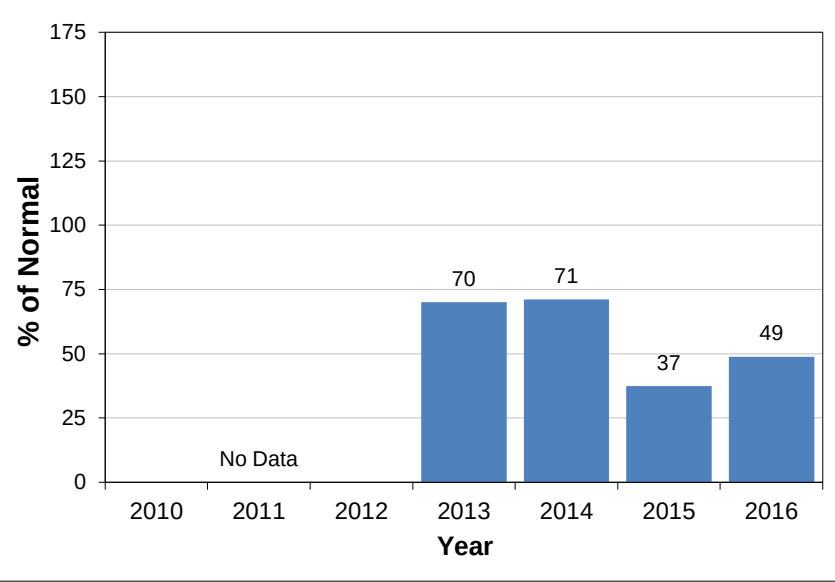
Nechako



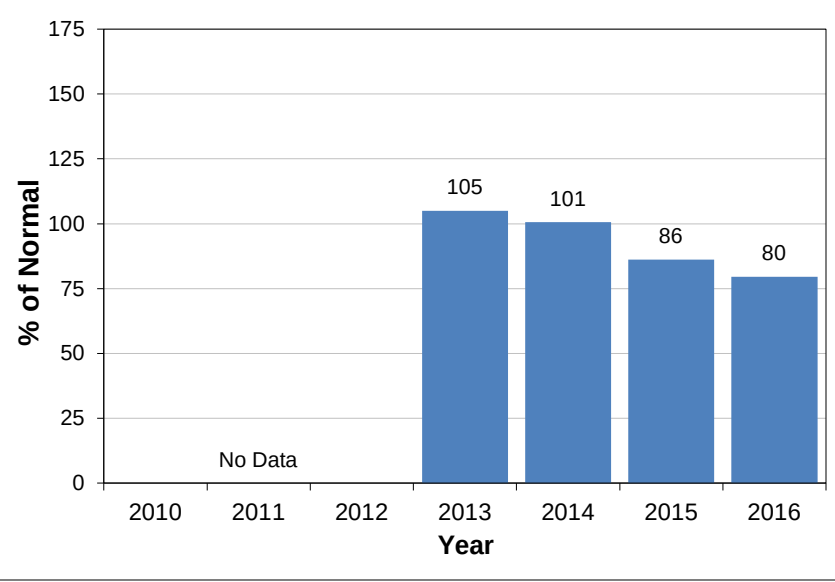
Middle Fraser



Lower Fraser

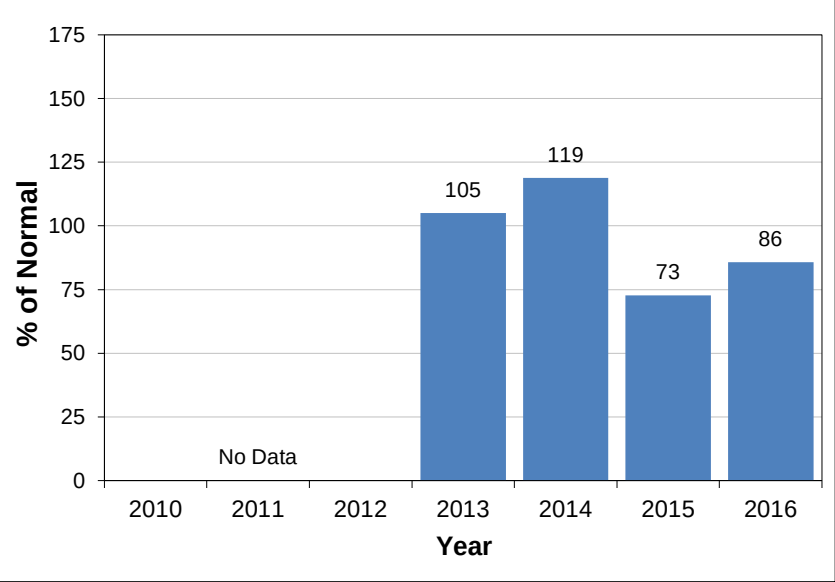


North Thompson

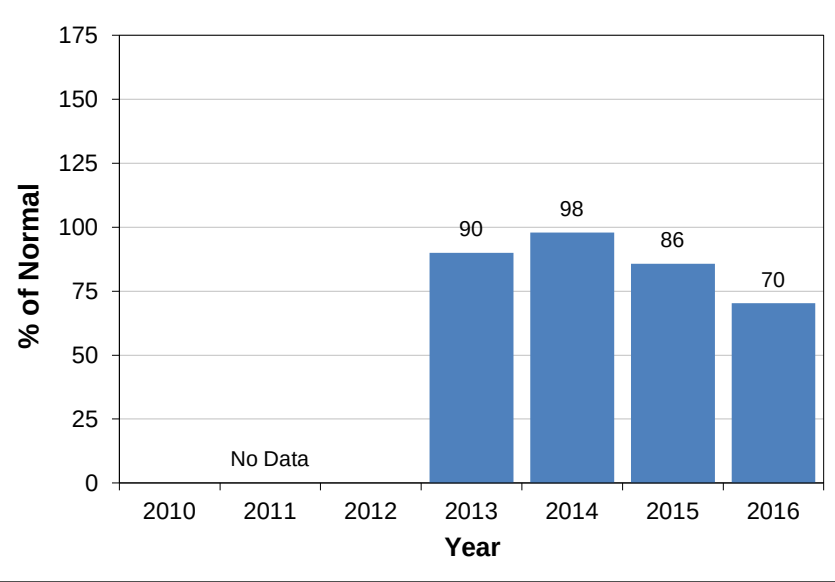


Snow Basin Index Graphs - May 15, 2016

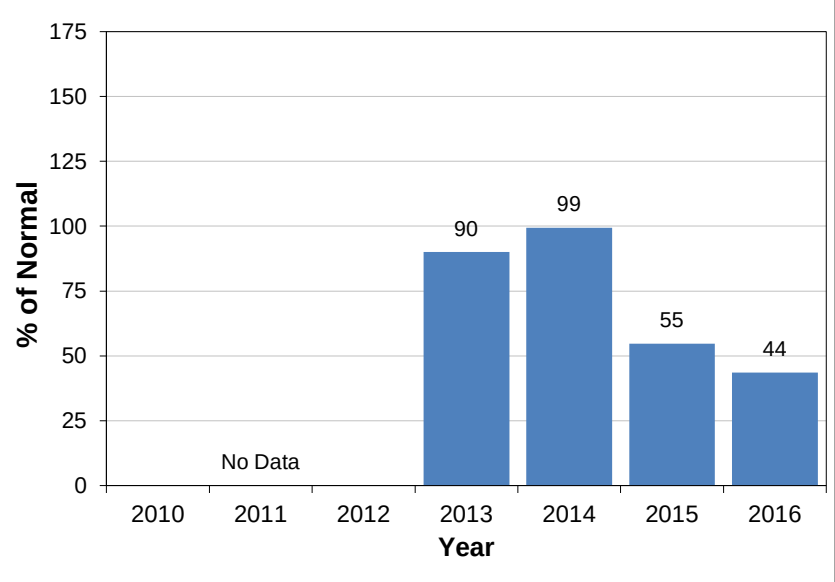
South Thompson



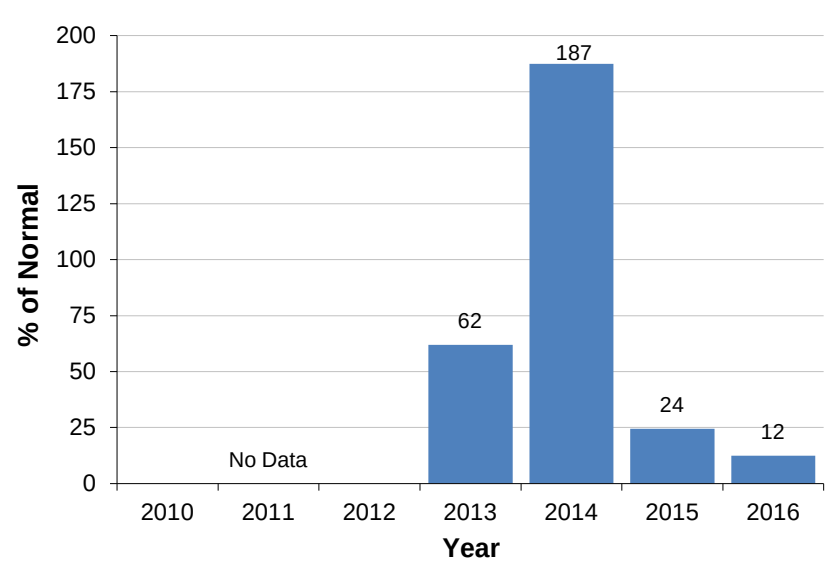
Upper Columbia



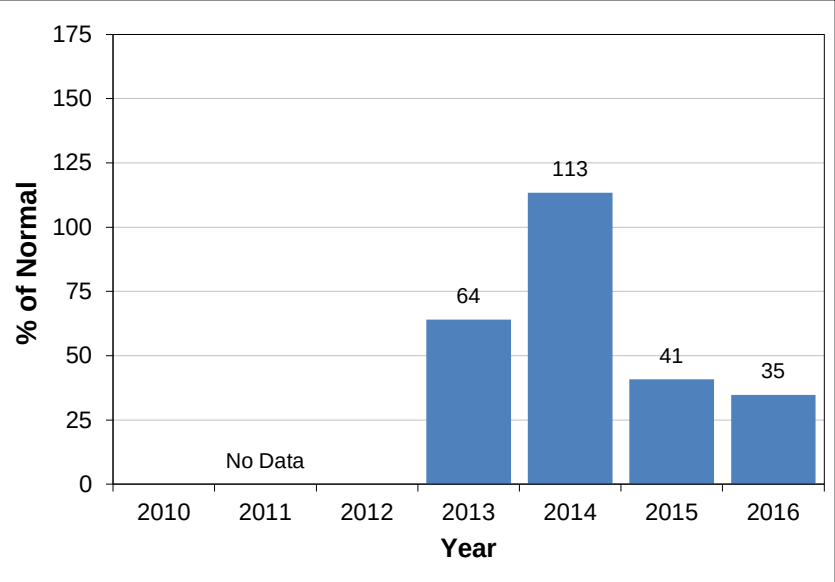
West Kootenay



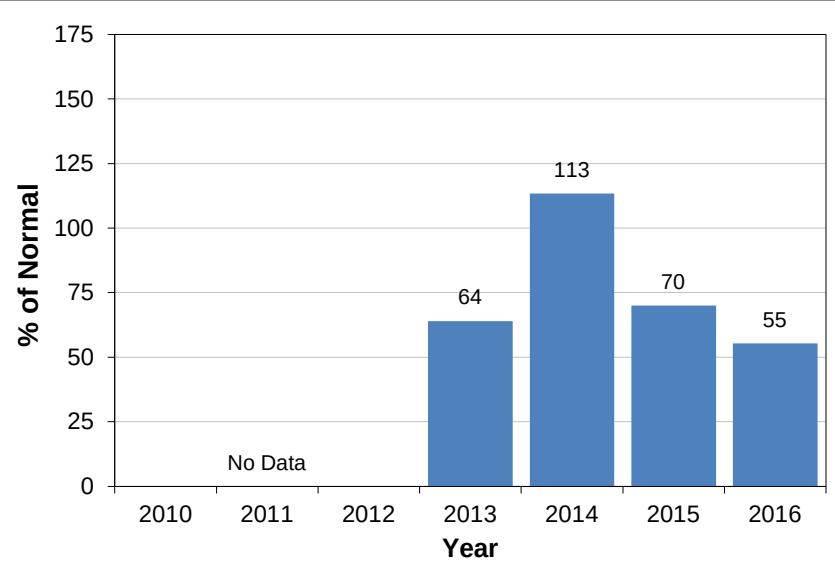
East Kootenay



Okanagan

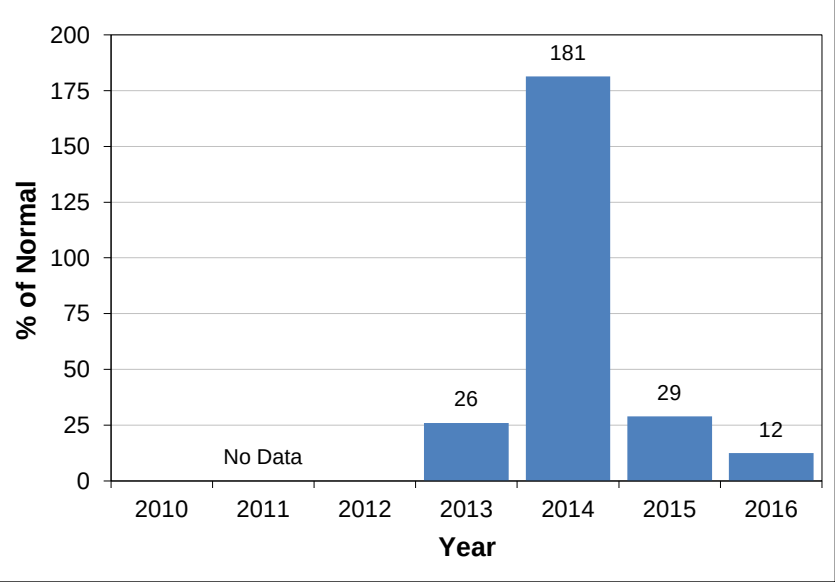


Boundary

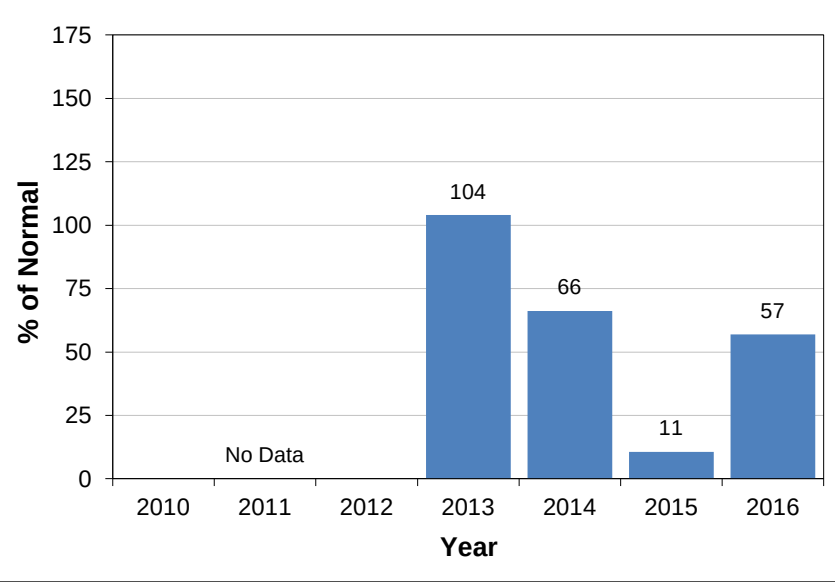


Snow Basin Index Graphs - May 15, 2016

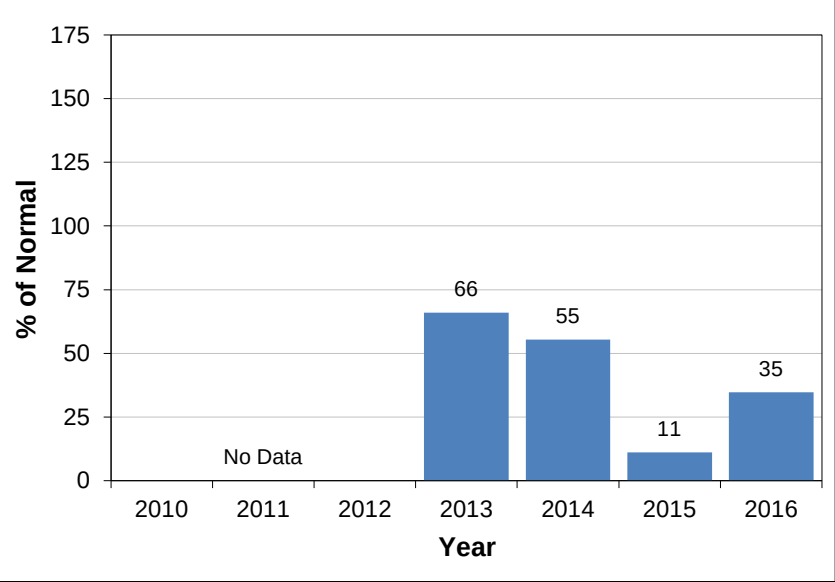
Similkameen



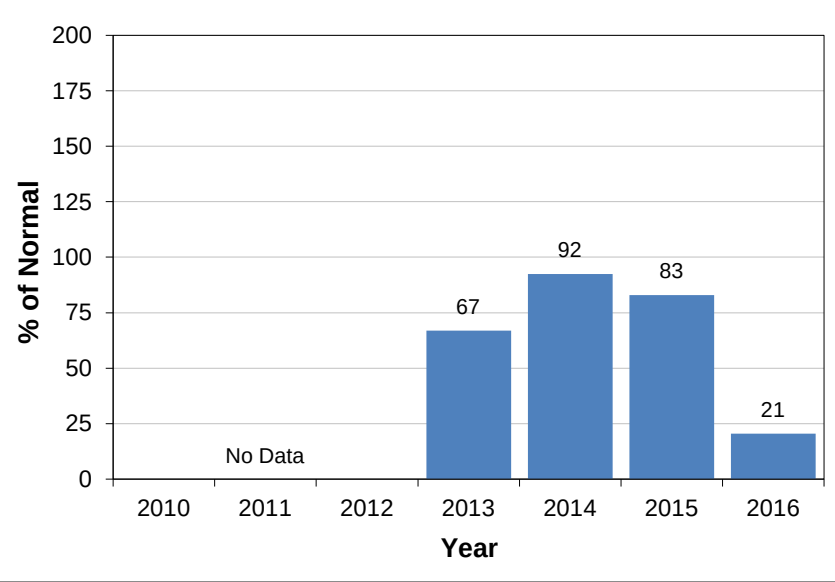
South Coast



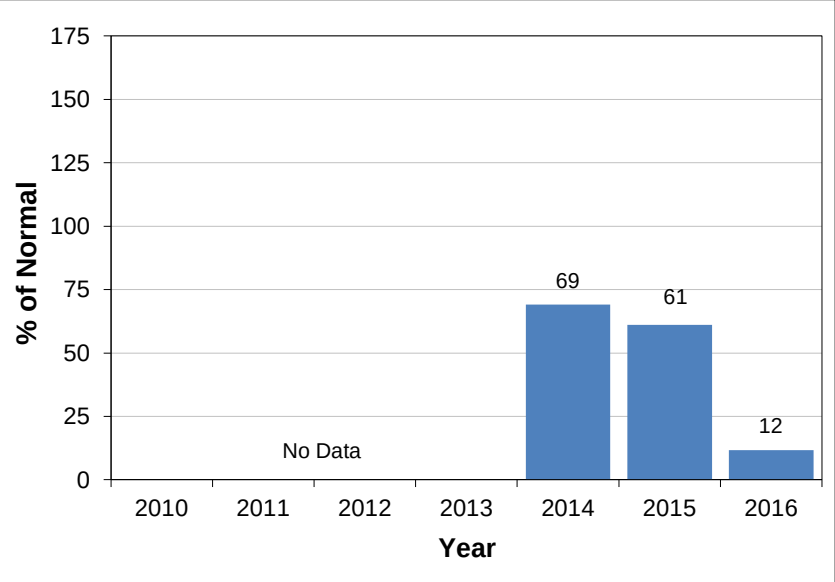
Vancouver Island



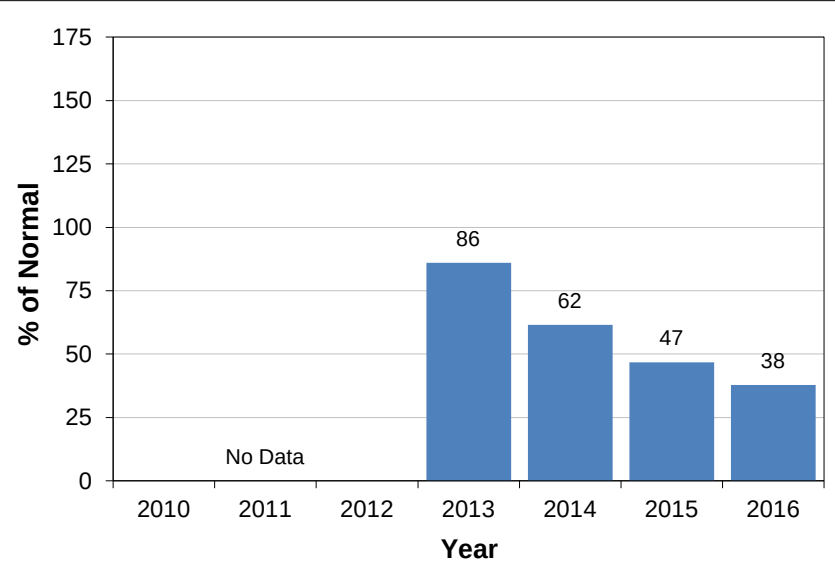
Central Coast



Northwest

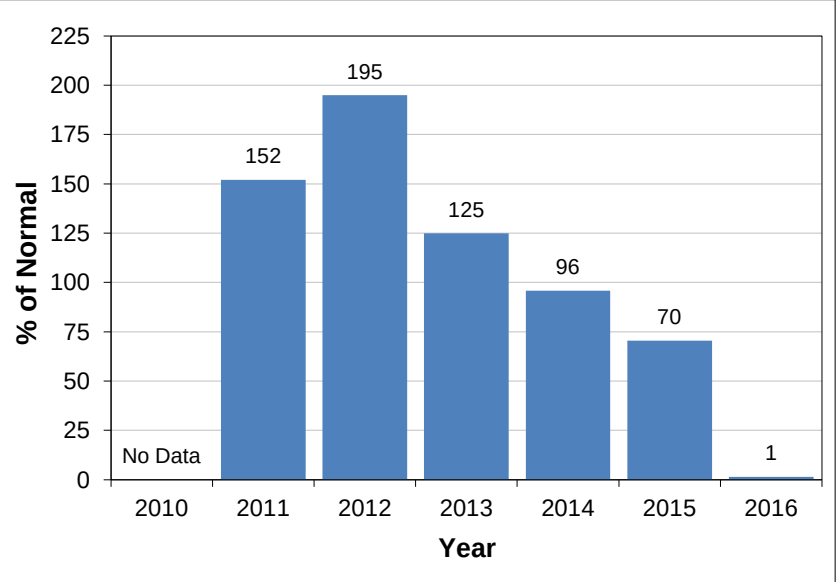


Peace

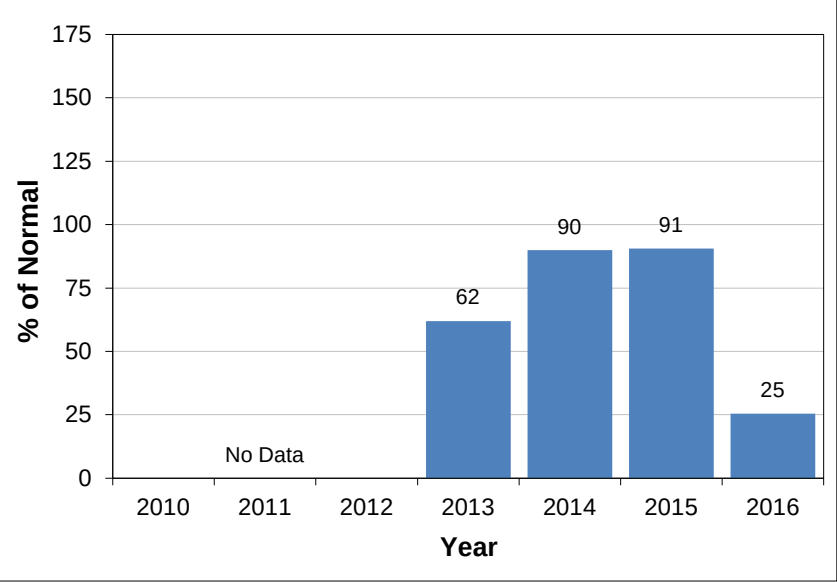


Snow Basin Index Graphs - May 15, 2016

Stikine



Skeena-Nass



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The June 1st snow survey is now complete. Data from 29 snow courses and 62 automated snow weather stations around the province, collected by the Ministry of Environment Snow Survey Program and partners, and climate data from Environment Canada have been used to form the basis of the following report¹.

Weather

Weather through the first half of May was generally warm and dry across British Columbia, with periods of atmospheric instability and showers. The second half of the month transitioned into cooler and wetter weather. May temperatures were generally 1-2 °C above normal across the province. Precipitation patterns were varied, with below normal precipitation in the south-west and west central BC, above normal precipitation in the north-east, and near normal precipitation elsewhere in the province.

Snowpack

The provincial snow pack has continued to melt at a rapid rate. Most snow survey locations experienced 150-300 mm of snow water equivalent loss over the May 15th to June 1st period. With the heat spell over the past several days, snow melt rates observed at automated snow weather stations have been in the 35 to 75 mm/day range.

Snow basin indices continue to decline relative to normal values, reflecting the extremely early melt this season. June 1st snow basin indices range from 2% to 69% (Table 1). Snow basin indices are extremely low (<50%) for most regions in the province, except in the North Thompson, South Thompson and Upper Columbia which are at 60-70% of normal.

Table 1: BC Snow Basin Indices – June 1, 2016

Basin	% of Normal	Basin	% of Normal
Upper Fraser West	0	Boundary	16
Upper Fraser East	5	Similkameen	8
Nechako	12	South Coast	32
Middle Fraser	12	Vancouver Island	28
Lower Fraser	21	Central Coast	0
North Thompson	69	Skagit	No Data
South Thompson	68	Peace	26
Upper Columbia	63	Skeena-Nass	2
West Kootenay	35	Stikine	2
East Kootenay	8	Liard	No Data
Okanagan	26	Northwest	No Data

1. 'No Data' indicates that no snow surveys were conducted within the basin during this survey period

The provincial average index for June 1st is 23%, and is a record low for this time of year (based on records to 1980). Nearly half of all observations from June 1st recorded little or no snow (<10 mm snow water equivalent). The low June 1st snow basin indices reflect the

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.

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accelerated melt of the snow pack this season due to the extremely warm spring, rather than a lack of seasonal accumulation. Current snow conditions are more typical of late-June or early-July.

Streamflow

Freshet runoff echoes the pattern in snow melt, with many rivers experiencing flow conditions that are 3-4 weeks or more ahead of normal conditions. While April runoff was generally well above normal across the province, flows eased to near normal for May as rivers transitioned to the declining limb of the snow melt runoff cycle. Rivers across the Interior of BC are expected to see lower than normal runoff through the rest of the season, particularly in June-July when runoff is usually still strongly influenced by snowmelt.

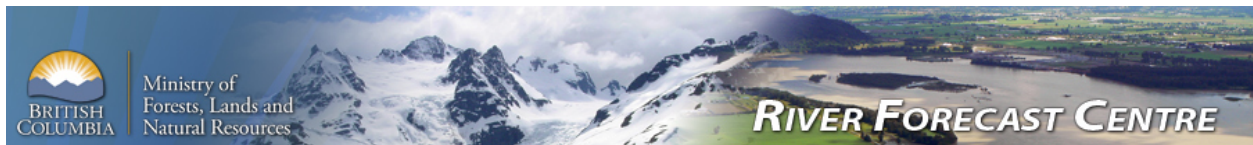
Most rivers have likely experienced their peak levels for the year, unless an extreme rainfall event occurs in June or early-July. Preliminary data from the Fraser River at Hope (Water Survey of Canada gauge 08MF005) suggests the river reached a peak flow of 6130 m³/s on May 8th. This is the earliest date in the season that the river has reached its maximum level, and is the second lowest peak flow on record (from 1912 to present). Typically the Fraser River at Hope peaks in the middle of June.

Outlook

The El Niño-Southern Oscillation (ENSO) conditions that have been prevalent over the past winter are diminishing, with declining temperature anomalies in the equatorial Pacific Ocean. Modelling from the Climate Prediction Centre at the U.S. National Weather Service/NOAA is indicating that neutral ENSO conditions are expected over the May to July period, and a “La Niña Watch” has been issued as La Niña conditions are favoured to develop through the summer and fall of 2016.

Seasonal forecasts from Environment Canada are indicating an increased likelihood of above-normal temperatures across British Columbia over the June to August period. Most rivers in the province have likely experienced their peak flow for this season, and freshet flows are now receding. Seasonal flood risk due to snow melt is now limited across the province, however flooding could still occur from significant rainfall events.

The advanced freshet is expected to put pressure on summer low flows in snow-melt dominated rivers across the province. In many of the smaller and low- to mid-elevation watersheds of the province (e.g. in Central Interior and South Interior), the transition to seasonally lower than normal flows has begun, and the trend is expected to expand to larger watersheds over the next few weeks. The influence of the snowmelt season occurring about a month early this year is expected to continue through the summer. While the total volume of runoff is expected to be near normal throughout this year's freshet in most areas, the majority of this volume has occurred through April and May, rather than May and June, as normally occurs. While the impact of this will vary from river to river across the province, the proportion of flows in June, July and August that are derived from snow melt will be



Snow Survey and Water Supply Bulletin – June 1st, 2016

greatly reduced. In the northeast and in lower elevation coastal watersheds, snow melt usually plays a minor role in summer flows, and rainfall is particularly important for determining the flows that are experienced through the summer.

For both spring flood risk and summer low flows, snow pack is just one of the important elements that determine whether or not extreme conditions will emerge. Extreme wet or dry weather can significantly impact the likelihood of peak and low flows. If the remainder of the spring and summer has near normal precipitation, below normal flows are likely throughout the province over the summer.

Current forecasts for the week suggest a transition out of the hot spell experienced last weekend as a cold low moves across the province. This is expected to bring cooler temperatures and moderate rainfall.

The River Forecast Centre is modelling streamflows across the province. Information regarding freshet conditions, including hydrologic model forecasts, is available on the [Freshet page](#) on the RFC website. Seasonal information on drought and drought levels is available on the [BC Drought Information Portal](#).

The River Forecast Centre will continue to monitor snow pack conditions and will provide an updated seasonal flood risk and stream flow forecast in the June 15th 2016 bulletin, which is the final snow bulletin for the season, scheduled for release on June 23rd.

BC River Forecast Centre
June 8, 2016

2016 Automated Snow Pillow/Manual Snow Survey Data				June 1					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1A01P	YELLOWHEAD LAKE	Upper Fraser East	1860	2016-06-01	0	35		10%	79	366	0	857	354	19
1A02P	MC BRIDE UPPER	Upper Fraser East	1580	2016-06-01	0	0		0%	47	268	11	412	155	24
1A03P	BARKERVILLE	Upper Fraser East	1520	2016-06-01	1	1		2%	1	63	0	291	46	41
1A05	LONGWORTH (UPPER)	Upper Fraser East	1693	NS	NS	NS	NS			910	0	1194	613	53
1A06A	HANSARD	Upper Fraser East	622	NS	NS	NS	NS						0	0
1A10	PRINCE GEORGE A	Upper Fraser East	684	NS	NS	NS	NS						0	2
1A11	PACIFIC LAKE	Upper Fraser East	756	NS	NS	NS	NS						96	34
1A12	KAZA LAKE	Upper Fraser West	1247	NS	NS	NS	NS						0	0
1A12P	KAZA LAKE	Upper Fraser East	1248	2016-06-01	5	0								0
1A14P	HEDRICK LAKE	Upper Fraser East	1100	2016-06-01	6	10		3%	8	936	0	1038	365	16
1A15	KNUDSEN LAKE	Upper Fraser East	1598	NS	NS	NS	NS			668	0	1113	652	35
1A16	BURNS LAKE	Upper Fraser West	820	NS	NS	NS	NS						0	12
1A17P	REVOLUTION CREEK	Upper Fraser East	1690	2016-06-01	29	36		8%	405	948	0	1127	478	31
1A19P	DOMES MOUNTAIN	Upper Fraser East	1820	2016-06-01	57	283		44%	449	823	255	1080	639	10
1A23	BIRD CREEK	Upper Fraser West	1196	2016-05-31	0	0			0	0	0	0	0	19
1B01	MOUNT WELLS	Nechako	1489	2016-05-31	0	0		0%	201	0	0	529	217	35
1B01P	MOUNT WELLS	Nechako	1490	2016-06-01	NA	1		0%	266	14	0	716	231	24
1B02	TAHTSA LAKE	Nechako	1319	2016-05-31	71	309		31%	845	463	406	1829	982	37
1B02P	TAHTSA LAKE	Nechako	1300	2016-06-01	NA	401		40%	736	427	277	2157	992	24
1B05	SKINS LAKE	Nechako	877	2016-05-31	0	0			0	0	0	0	0	21
1B06	MOUNT SWANNELL	Nechako	1596	2016-05-31	0	0		0%	0	0	0	350	110	26
1B07	NUTLI LAKE	Nechako	1502	2016-05-31	0	0		0%	0	0	0	618	241	23
1B08P	MOUNT PONDOSY	Nechako	1400	2016-06-01	NA	4		1%	253	8	0	951	320	24
1C01	BROOKMERE	Middle Fraser	994	NS	NS	NS	NS						0	5
1C05	MCGILLIVRAY PASS	Middle Fraser	1715	NS	NS	NS	NS						264	22
1C06	PAVILION	Middle Fraser	1209	NS	NS	NS	NS						0	0
1C08	NAZKO	Middle Fraser	1029	NS	NS	NS	NS						0	0
1C09A	HIGHLAND VALLEY	Middle Fraser	1547	NS	NS	NS	NS						0	8
1C12P	GREEN MOUNTAIN	Middle Fraser	1780	2016-06-01	NA	235		44%	148	274	140	1186	537	22
1C13A	HORSEFLY MOUNTAIN	Middle Fraser	1612	NS	NS	NS	NS						0	1
1C14	BRALORNE	Middle Fraser	1382	NS	NS	NS	NS						0	0
1C17	MOUNT TIMOTHY	Middle Fraser	1632	2016-05-30	0	0		0%	0	0	0	332	52	49
1C18P	MISSION RIDGE	Middle Fraser	1850	2016-06-01	NA	0		0%	0	0	0	709	98	46
1C19	GNAWED MOUNTAIN	Middle Fraser	1617	NS	NS	NS	NS						0	2
1C20P	BOSS MOUNTAIN MINE	Middle Fraser	1460	2016-06-01	0	1		1%	0	68	0	401	126	22
1C21	BIG CREEK	Middle Fraser	1130	NS	NS	NS	NS						0	0
1C22	PUNTZI MOUNTAIN	Middle Fraser	939	NS	NS	NS	NS						0	2
1C23	PENFOLD CREEK	Middle Fraser	1687	NS	NS	NS	NS			834	353	1354	841	44
1C25	LAC LE JEUNE (UPPER)	Middle Fraser	1471	NS	NS	NS	NS						0	0

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1C28	DUFFEY LAKE	Middle Fraser	1253	NS	NS	NS	NS						0	0
1C29	SHOVELNOSE MOUNTAIN	Middle Fraser	1456	NS	NS	NS	NS						0	0
1C32	DEADMAN RIVER	Middle Fraser	1463	NS	NS	NS	NS						0	0
1C33A	GRANITE MOUNTAIN	Middle Fraser	1175	NS	NS	NS	NS						0	0
1C37	BRALORNE(UPPER)	Middle Fraser	1980	NS	NS	NS	NS						0	0
1C38	DOWNTON LAKE (UPPER)	Middle Fraser	1884	NS	NS	NS	NS						0	0
1C38P	DOWNTON / LAJOIE UPPER	Middle Fraser	1829	2016-06-01	NA	603								0
1C39	BRIDGE GLACIER (LOWER)	Middle Fraser	1393	NS	NS	NS	NS						0	0
1C40	TYAUGHTON CREEK (NORTH)	Middle Fraser	1946	NS	NS	NS	NS						0	0
1C40P	NORTH TYAUGHTON	Middle Fraser	1969	2016-06-01	NA	0								0
1C41P	YANKS PEAK, EAST	Middle Fraser	1670	2016-06-01	17	122		26%	285	877	128	979	475	19
1C42	CAVERHILL LAKE NEW	Middle Fraser	1400	NS	NS	NS	NS							0
1D06P	TENQUILLE LAKE	Lower Fraser	1680	2016-06-01	86	399		55%	204	408	204	1414	719	15
1D08	STAVE LAKE	Lower Fraser	1211	NS	NS	NS	NS						1872	6
1D09	WAHLEACH LAKE	Lower Fraser	1395	NS	NS	NS	NS						266	11
1D09P	WAHLEACH LAKE	Lower Fraser	1400	2016-06-01	NA	239		33%	11	810	0	1525	720	24
1D10	NAHATLATCH RIVER	Lower Fraser	1530	NS	NS	NS	NS						1497	10
1D16	DICKSON LAKE	Lower Fraser	1147	NS	NS	NS	NS						0	0
1D17P	CHILLIWACK RIVER	Lower Fraser	1600	2016-06-01	88	563		52%	0	1873	0	2186	1082	24
1D18	DISAPPOINTMENT LAKE	Lower Fraser	1050	2016-05-31	62	320								
1D19P	SPUZZUM CREEK	Lower Fraser	1180	2016-06-01	52	328		26%	0	1084	0	2650	1248	17
1E01B	BLUE RIVER	North Thompson	673	NS	NS	NS	NS						0	5
1E02P	MOUNT COOK	North Thompson	1550	2016-06-01	150	1031		96%	670	1092	593	1579	1071	16
1E03A	TROPHY MOUNTAIN	North Thompson	1907	NS	NS	NS	NS						0	1
1E05	KNOUFF LAKE	North Thompson	1189	NS	NS	NS	NS						0	0
1E07	ADAMS RIVER	North Thompson	1769	2016-05-27	76	370		69%	220	548	0	1155	540	43
1E08P	AZURE RIVER	North Thompson	1620	2016-06-01	54	430		48%	712	729	473	1729	902	19
1E10P	KOSTAL LAKE	North Thompson	1770	2016-06-01	NA	427		63%	314	818	155	1386	683	31
1E14P	COOK CREEK	North Thompson	1280	2016-06-01	1	0								0
1F01A	ABERDEEN LAKE	South Thompson	1262	NS	NS	NS	NS						0	1
1F02	ANGLEMONT	South Thompson	1168	NS	NS	NS	NS						8	11
1F03P	PARK MOUNTAIN	North Thompson	1890	2016-06-01	95	573		77%	474	1129	0	1269	740	31
1F04	ENDERBY	South Thompson	1948	N	N	N	N			1097	430	1422	919	50
1F06P	CELISTA MOUNTAIN	North Thompson	1551	2016-06-01	43	267		54%	96	685	53	894	495	11
2A01A	CANOE RIVER	Upper Columbia	866	NS	NS	NS	NS						0	0
2A02	GLACIER	Upper Columbia	1249	NS	NS	NS	NS						263	46
2A03A	FIELD	Upper Columbia	1310	NS	NS	NS	NS						0	2
2A06P	MOUNT REVELSTOKE	Upper Columbia	1830	2016-06-01	NA	663		65%	497	1132	240	2063	1025	23
2A07	KICKING HORSE	Upper Columbia	1648	NS	NS	NS	NS						66	37

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2A11	BEAVERFOOT	Upper Columbia	1924	NS	NS	NS	NS						0	1
2A14	MOUNT ABBOT	Upper Columbia	2031	NS	NS	NS	NS						1162	34
2A16	GOLDSTREAM	Upper Columbia	1914	NS	NS	NS	NS						0	0
2A17	FIDELITY MOUNTAIN	Upper Columbia	1852	NS	NS	NS	NS						1121	35
2A18	KEYSTONE CREEK	Upper Columbia	1839	NS	NS	NS	NS						0	0
2A18P	KEYSTONE CREEK	Upper Columbia	1850	2016-06-01	NA	432								0
2A19	VERMONT CREEK	Upper Columbia	1533	NS	NS	NS	NS						0	1
2A21P	MOLSON CREEK	Upper Columbia	1980	2016-06-01	NA	525		62%	562	900	82	1462	849	35
2A22	SUNBEAM LAKE	Upper Columbia	2066	NS	NS	NS	NS						0	0
2A23	BUSH RIVER	Upper Columbia	1982	NS	NS	NS	NS						0	0
2A25	KIRBYVILLE LAKE	Upper Columbia	1739	NS	NS	NS	NS						969	1
2A27	DOWNIE SLIDE (LOWER)	Upper Columbia	964	NS	NS	NS	NS						99	8
2A29	DOWNIE SLIDE (UPPER)	Upper Columbia	1628	NS	NS	NS	NS						1130	7
2A30P	COLPITTI CREEK	Upper Columbia	2131	2016-06-01	NA	218								0
2A31P	CARIBOU CREEK UPPER	Upper Columbia	2201	2016-06-01	NA	440								0
2A32P	WILDCAT CREEK	Upper Columbia	2122	2016-06-01	NA	172								0
2B02A	FARRON	West Kootenay	1229	NS	NS	NS	NS						3	18
2B05	WHATSHAN (UPPER)	West Kootenay	1476	NS	NS	NS	NS						0	9
2B06P	BARNES CREEK	Lower Columbia	1620	2016-06-01	NA	3		2%	1	362	0	627	157	23
2B07	KOCH CREEK	West Kootenay	1813	NS	NS	NS	NS						0	2
2B08P	ST. LEON CREEK	Lower Columbia	1800	2016-06-01	NA	404		49%	431	1162	225	1560	830	23
2B09	RECORD MOUNTAIN	West Kootenay	1906	2016-05-31	12	94		24%	0	196	0	1073	384	41
2C01	SINCLAIR PASS	East Kootenay	1374	NS	NS	NS	NS						0	12
2C04	SULLIVAN MINE	East Kootenay	1580	2016-05-30	0	0		0%	0	0	0	137	6	33
2C07	FERNIE EAST	East Kootenay	1213	NS	NS	NS	NS						4	16
2C09Q	MORRISSEY RIDGE	East Kootenay	1800	2016-06-01	NA	0		0%	0	518	0	874	171	36
2C10P	MOYIE MOUNTAIN	East Kootenay	1930	2016-06-01	1	0		0%	1	4	0	466	30	37
2C14P	FLOE LAKE	East Kootenay	2090	2016-06-01	NA	192		34%	197	703	94	979	565	23
2C15	MOUNT ASSINIBOINE	East Kootenay	2230	NS	NS	NS	NS						0	0
2C16	MOUNT JOFFRE	East Kootenay	1763	NS	NS	NS	NS						0	0
2C17	THUNDER CREEK	East Kootenay	2062	NS	NS	NS	NS						0	0
2C20	VERMILLION RIVER NO. 3	East Kootenay	1612	NS	NS	NS	NS						0	4
2D02	FERGUSON	West Kootenay	929	NS	NS	NS	NS						65	13
2D03	SANDON	West Kootenay	1072	NS	NS	NS	NS						0	2
2D04	NELSON	West Kootenay	952	NS	NS	NS	NS						1	17
2D05	GRAY CREEK (LOWER)	West Kootenay	1558	2016-05-30	0	0		0%	0	303	0	551	148	64
2D06	CHAR CREEK	West Kootenay	1290	2016-05-30	0	0		0%	0	68	0	362	82	42
2D07A	DUNCAN LAKE NO. 2	West Kootenay	662	NS	NS	NS	NS						0	0
2D08P	EAST CREEK	West Kootenay	2030	2016-06-01	NA	378		53%	445	707	111	1256	713	35

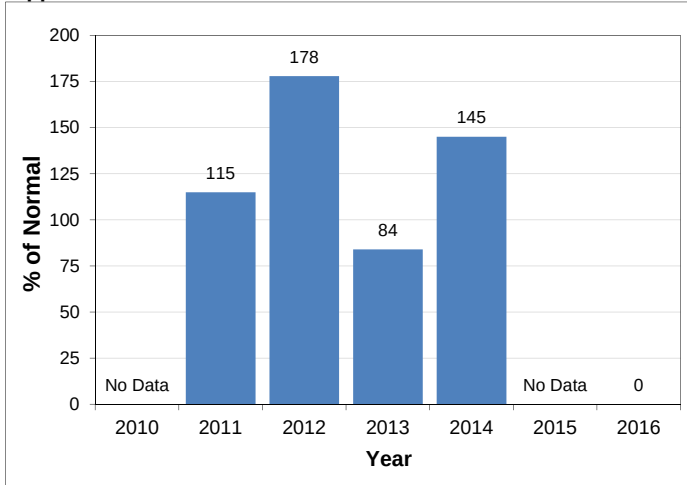
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2D09	MOUNT TEMPLEMAN	West Kootenay	1879	NS	NS	NS	NS						0	0
2D10	GRAY CREEK (UPPER)	West Kootenay	1926	2016-05-30	62	305		65%	199	652	0	1120	470	44
2D14P	REDFISH CREEK	West Kootenay	2104	2016-06-01	166	979		87%	899	1421	878	1822	1127	14
2E01	MONASHEE PASS	Boundary	1387	NS	NS	NS	NS						62	27
2E02	CARMI	Boundary	1254	NS	NS	NS	NS						0	4
2E03	BIG WHITE MOUNTAIN	Boundary	1672	2016-06-01	0	0		0%					151	49
2E07P	GRANO CREEK	Kettle	1860	2016-06-01	6	56		20%	9	451	0	750	287	18
2F01A	TROUT CREEK (WEST)	Okanagan	1430	NS	NS	NS	NS						0	0
2F02	SUMMERLAND RESERVOIR	Okanagan	1304	NS	NS	NS	NS						0	8
2F03	MC CULLOCH	Okanagan	1266	NS	NS	NS	NS						0	0
2F04	GRAYSTOKE LAKE	Okanagan	1818	NS	NS	NS	NS						236	13
2F05P	MISSION CREEK	Okanagan	1780	2016-06-01	16	50		30%	1	532	0	641	168	46
2F07	POSTILL LAKE	Okanagan	1358	NS	NS	NS	NS						0	1
2F08	GRAYBACK RESERVOIR	Okanagan	1548	NS	NS	NS	NS						11	25
2F09	WHITEROCKS MOUNTAIN	Okanagan	1789	2016-05-27	10	61		48%	0	57	0	848	128	44
2F10P	SILVER STAR MOUNTAIN	Okanagan	1839	2016-06-01	85	271	E							0
2F11	ISINTOK LAKE	Okanagan	1651	NS	NS	NS	NS						1	21
2F12	MOUNT KOBAL	Okanagan	1817	2016-05-28	0	0		0%	0	0	0	488	121	50
2F13	ESPERON CR (UPPER)	Okanagan	1634	2016-05-27	0	0		0%	0				173	11
2F14	ESPERON CR (MIDDLE)	Okanagan	1440	2016-05-27	0	0		0%	0				27	11
2F18P	BRENDA MINE	Okanagan	1460	2016-06-01	NA	2		67%	0	0	0	9	3	23
2F19	OYAMA LAKE	Okanagan	1365	NS	NS	NS	NS						391	3
2F20	VASEUX CREEK	Okanagan	1403	NS	NS	NS	NS						0	8
2F21	BOULEAU LAKE	Okanagan	1405	NS	NS	NS	NS						0	3
2F23	MACDONALD LAKE	Okanagan	1742	NS	NS	NS	NS						172	17
2F24	ISLAHT LAKE	Okanagan	1492	NS	NS	NS	NS						0	0
2F25	POSTILL LAKE (UPPER)	Okanagan	1500	NS	NS	NS	NS							0
2G03P	BLACKWALL PEAK	Similkameen	1940	2016-06-01	26	131		33%	100	671	0	1253	403	48
2G04	LOST HORSE MOUNTAIN	Similkameen	1988	NS	NS	NS	NS						106	36
2G05	MISSEZULA MOUNTAIN	Similkameen	1602	NS	NS	NS	NS						0	20
2G06	HAMILTON HILL	Similkameen	1477	NS	NS	NS	NS						2	23
3A01	GROUSE MOUNTAIN	South Coast	1126	NS	NS	NS	NS						0	1
3A02	POWELL RIVER (UPPER)	South Coast	1002	NS	NS	NS	NS						0	0
3A05	POWELL RIVER (LOWER)	South Coast	882	NS	NS	NS	NS						0	0
3A09	PALISADE LAKE	South Coast	898	NS	NS	NS	NS						350	1
3A10	DOG MOUNTAIN	South Coast	1007	2016-05-30	10	55		8%	0	210	0	2480	714	30
3A19	ORCHID LAKE	South Coast	1178	2016-05-31	134	756		54%	0	820	0	3648	1409	37
3A20	CALLAGHAN CREEK	South Coast	1009	2016-06-02	0	0		0%	0	50	0	1228	233	31
3A22P	NOSTETUKO RIVER	South Coast	1500	2016-06-01	NA	0		0%	0	0	0	675	102	27

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3A24P	UPPER MOSLEY CREEK	South Coast	1650	2016-06-01	0	0		0%	0	0	0	236	27	27
3A25P	UPPER SQUAMISH RIVER	South Coast	1340	2016-06-01	NA	788		67%	0	796	0	2800	1184	26
3B01	FORBIDDEN PLATEAU	Vancouver Island	1110	NS	NS	NS	NS						1222	29
3B02A	MT. COKELY	Vancouver Island	1267	NS	NS	NS	NS						0	0
3B04	ELK RIVER	Vancouver Island	270	NS	NS	NS	NS						0	0
3B10	UPPER THELWOOD LAKE	Vancouver Island	1014	NS	NS	NS	NS						995	13
3B17P	WOLF RIVER	Vancouver Island	1490	2016-06-01	NA	462		47%	33	341	33	2466	981	34
3B18	WOLF RIVER (MIDDLE)	Vancouver Island	1050	NS	NS	NS	NS						237	16
3B19	WOLF RIVER (LOWER)	Vancouver Island	615	NS	NS	NS	NS						0	16
3B23P	JUMP CREEK	Vancouver Island	1160	2016-06-01	11	68		10%	0	5	0	3142	694	20
3B24P	HEATHER MOUNTAIN UPPER	Vancouver Island	1190	2016-06-01	47	513								0
3C07	WEDEENE RIVER SOUTH	Central Coast	196	NS	NS	NS	NS						0	0
3C08P	BURNT BRIDGE CREEK	North Coast	1330	2016-06-01	0	0		0%	0	104	0	1116	304	18
3D01C	SUMALLO RIVER WEST	Skagit	801	NS	NS	NS	NS						0	0
3D02	LIGHTNING LAKE	Skagit	1254	NS	NS	NS	NS						0	1
3D03A	KLESILKWA	Skagit	1134	NS	NS	NS	NS						0	2
4A02P	PINE PASS	Peace	1400	2016-06-01	81	351		49%	388	800	183	1658	713	27
4A03	WARE (UPPER)	Peace	1563	NS	NS	NS	NS						0	0
4A04	WARE (LOWER)	Peace	969	NS	NS	NS	NS						0	0
4A05	GERMANSEN (UPPER)	Peace	1489	NS	NS	NS	NS						0	1
4A06	TUTIZZI LAKE	Peace	1043	NS	NS	NS	NS						0	0
4A07	LADY LAURIER LAKE	Peace	1446	2016-06-01	11	49							0	0
4A09	PULPIT LAKE	Peace	1331	NS	NS	NS	NS						0	0
4A09P	PULPIT LAKE	Peace	1310	2016-06-01	1	1		2%	0	0	0	225	43	26
4A10	FREDRICKSON LAKE	Peace	1323	NS	NS	NS	NS						0	0
4A11	TRYGVE LAKE	Peace	1409	NS	NS	NS	NS						0	0
4A12	TSAYDAYCHI LAKE	Peace	1173	NS	NS	NS	NS						0	0
4A13	PHILIP LAKE	Peace	1013	NS	NS	NS	NS						0	0
4A16	MORFEE MOUNTAIN	Peace	1427	2016-06-01	0	0		0%					249	14
4A18	MOUNT SHEBA	Peace	1480	NS	NS	NS	NS						663	11
4A20	MONKMAN CREEK	Peace	1566	2016-06-02	8	32		7%					491	11
4A21	MOUNT STEARNS	Peace	1514	2016-05-31	6	7							0	0
4A25	FORT ST. JOHN AIRPORT	Peace	692	NS	NS	NS	NS						0	1
4A30P	AIKEN LAKE	Peace	1040	2016-06-01	0	0	E	0%	2	4	0	8	5	31
4A31P	CRYING GIRL PRAIRIE	Peace	1358	2016-06-01	NA	0								0
4A33P	MUSKWA-KECHIKA	Peace	1196	2016-06-01	NA	0	E							0
4B01	KIDPRICE LAKE	Skeena-Nass	1415	2016-05-27	4	24		4%	429	0	0	1359	630	38
4B02	JOHANSON LAKE	Skeena-Nass	1480	NS	NS	NS	NS						0	0
4B03A	HUDSON BAY MTN	Skeena-Nass	1452	2016-06-06	0	0		0%	47	84	0	729	259	44

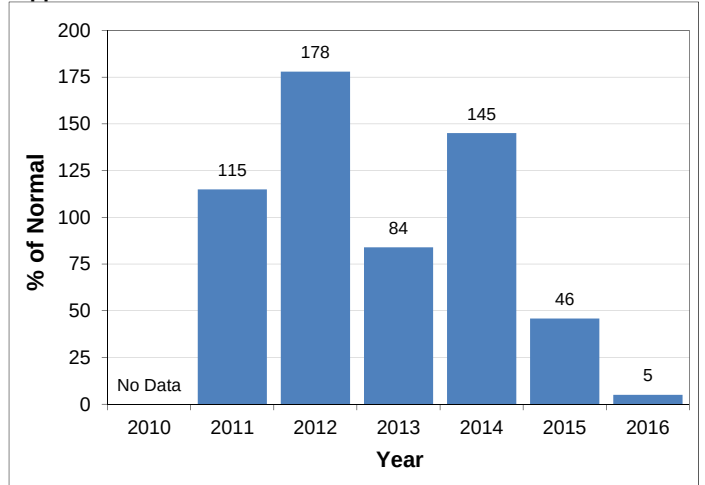
2016 Automated Snow Pillow/Manual Snow Survey Data				June 1					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
4B04	CHAPMAN LAKE	Skeena-Nass	1485	NS	NS	NS	NS						455	7
4B06	TACHEK CREEK	Skeena-Nass	1133	NS	NS	NS	NS						0	0
4B07	MCKENDRICK CREEK	Skeena-Nass	1048	NS	NS	NS	NS						22	15
4B08	MOUNT CRONIN	Skeena-Nass	1491	NS	NS	NS	NS						646	10
4B10	NINGUNSAW PASS	Skeena-Nass	647	NS	NS	NS	NS						0	4
4B11A	BEAR PASS	Skeena-Nass	437	NS	NS	NS	NS						33	5
4B13A	TERRACE AIRPORT	Skeena-Nass	219	NS	NS	NS	NS						0	0
4B14	EQUITY MINE	Skeena-Nass	1434	NS	NS	NS	NS						81	13
4B15	LU LAKE	Skeena-Nass	1296	NS	NS	NS	NS						28	13
4B15P	LU LAKE	Skeena/Nass	1300	2016-06-01	0	11	E	46%	15	1	0	180	24	18
4B16P	SHEDIN CREEK	Skeena/Nass	1480	2016-06-01	0	4		1%	218	338	98	1261	703	20
4B17P	TSAI CREEK	Skeena/Nass	1360	2016-06-01	60	289		28%	931	593	371	2103	1028	18
4B18P	CEDAR - KITEEN	Skeena/Nass	885	2016-06-01	0	7	E	4%	9	0	0	640	166	15
4C01	SIKANNI LAKE	Liard	1390	2016-05-31	0	0							0	0
4C02	SUMMIT LAKE	Liard	1291	NS	NS	NS	NS						0	0
4C03	DEASE LAKE	Liard	805	NS	NS	NS	NS						0	10
4C05	FORT NELSON A	Liard	368	NS	NS	NS	NS						0	0
4C15	JADE CITY	Liard	943	NS	NS	NS	NS						0	1
4D01	TELEGRAPH CREEK	Stikine	490	NS	NS	NS	NS						0	1
4D02	ISKUT	Stikine	931	NS	NS	NS	NS						0	4
4D11P	KINASKAN LAKE	Stikine/Taku	1020	2016-06-01	2	0		0%	0				28	20
4E02B	ATLIN LAKE	Northwest	730	NS	NS	NS	NS							0
Code	Description													
A	Sampling problems were encountered													
B	Early or late sampling													
C	Early or late sampling w/problems encountered													
E	Estimate													
N	Scheduled, but not sampled													
NA	Not available													
NS	Not scheduled													
SD	Snow Depth													
SWE	Snow Water Equivalent													
T	Trace Amount													

Snow Basin Index Graphs - June 1, 2016

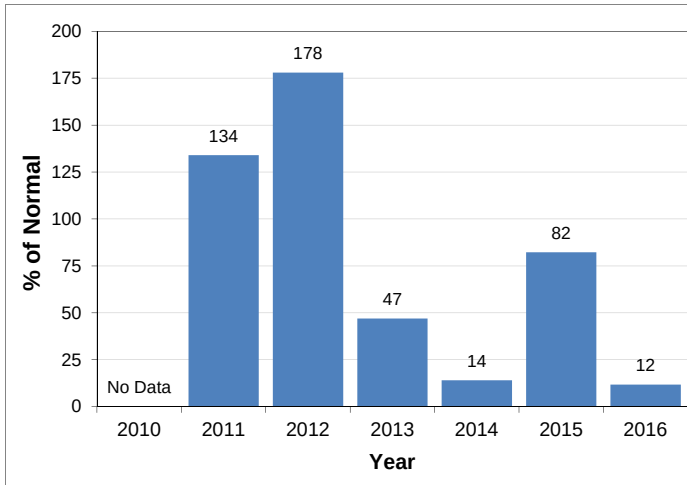
Upper Fraser West



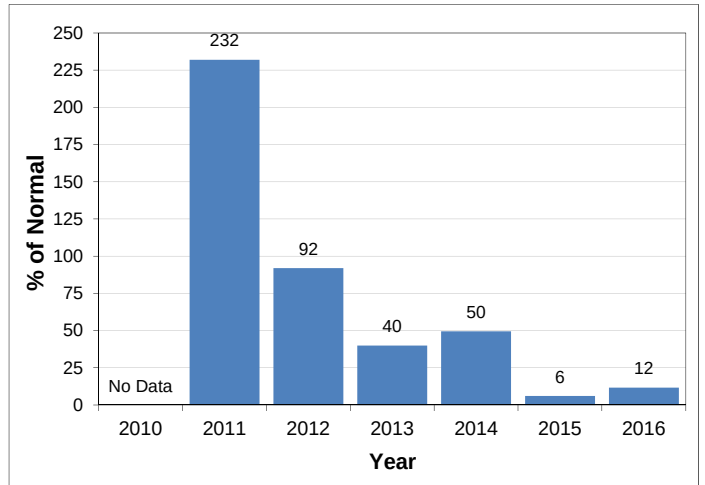
Upper Fraser East



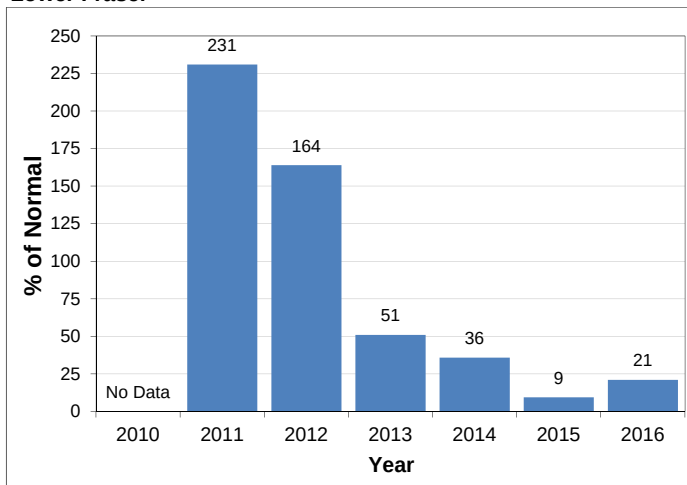
Nechako



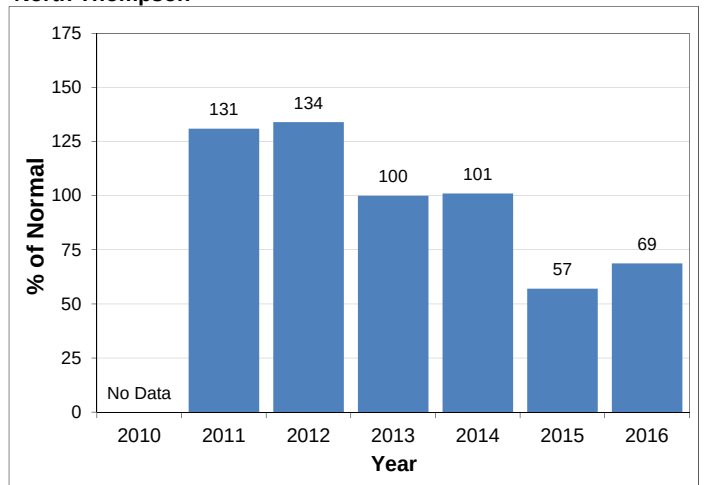
Middle Fraser



Lower Fraser

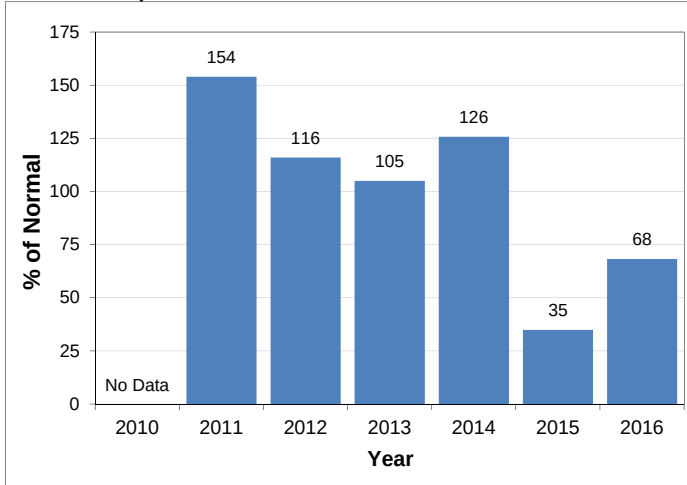


North Thompson

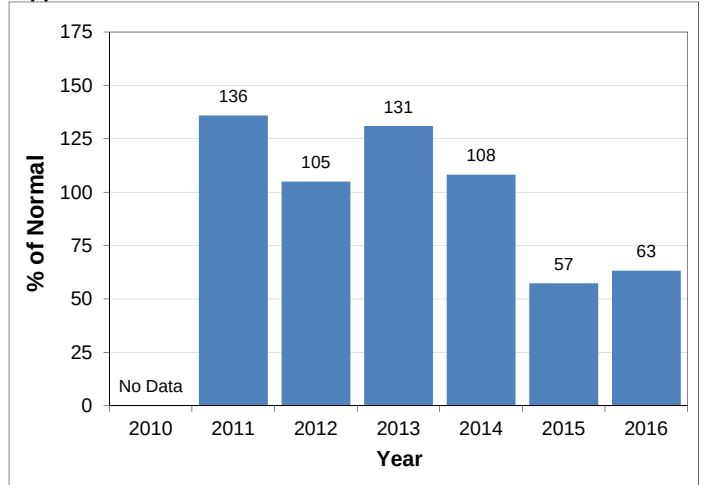


Snow Basin Index Graphs - June 1, 2016

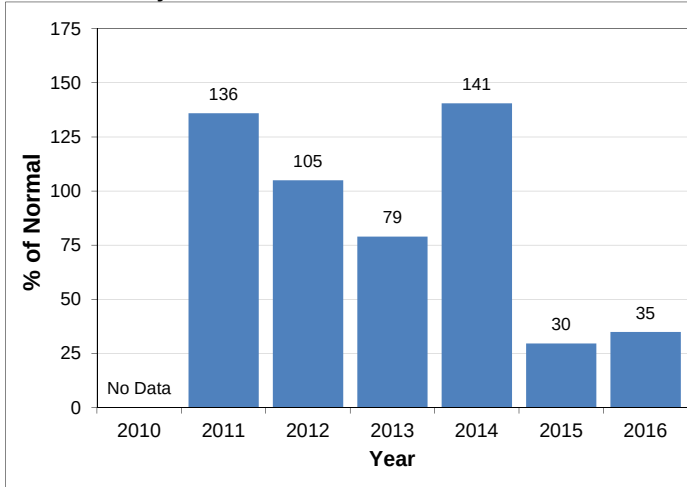
South Thompson



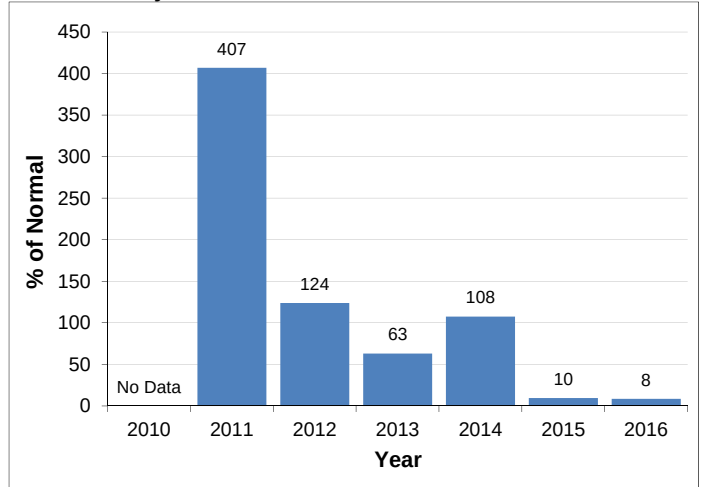
Upper Columbia



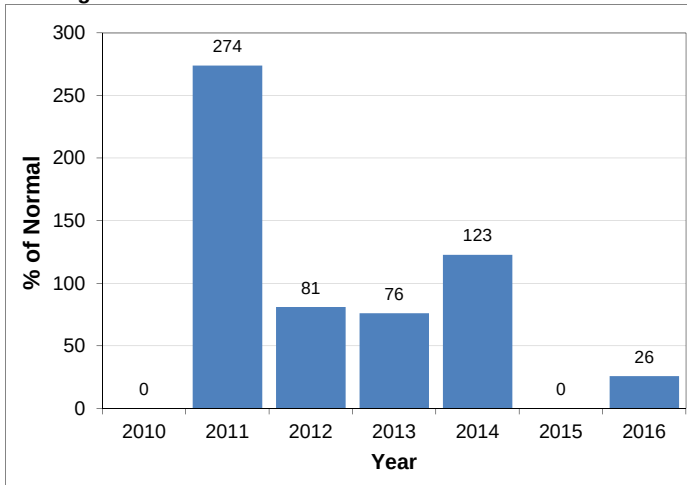
West Kootenay



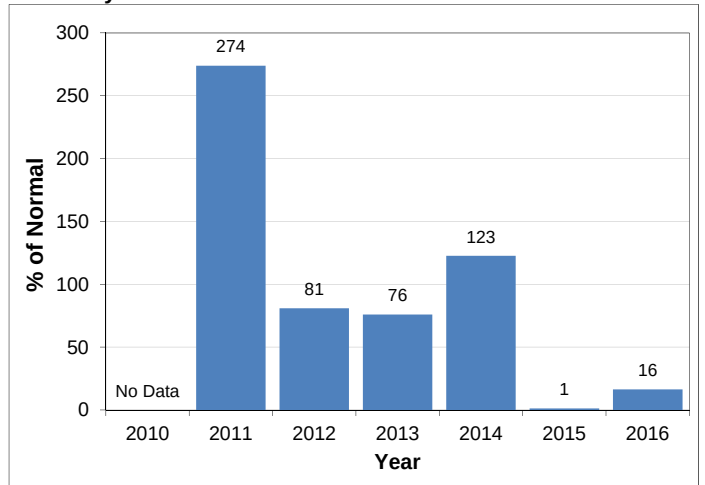
East Kootenay



Okanagan

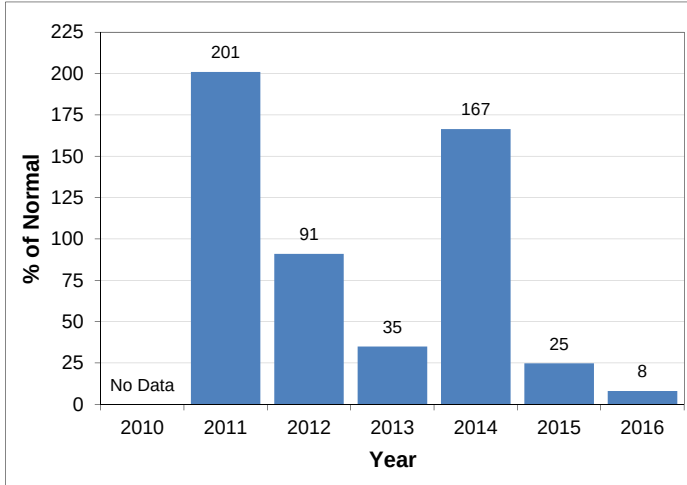


Boundary

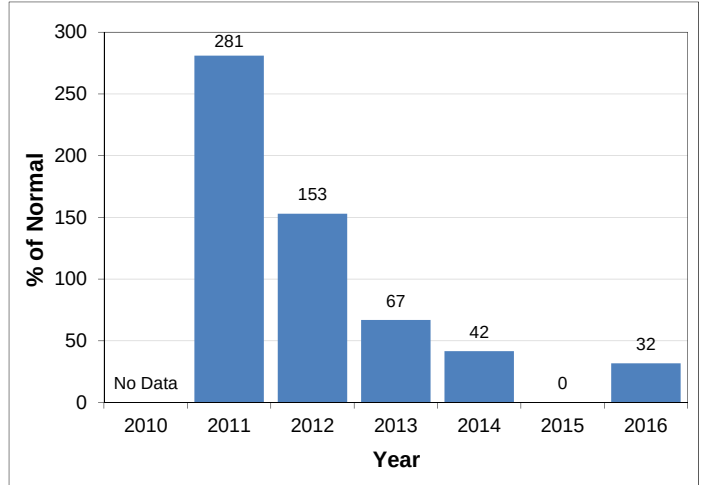


Snow Basin Index Graphs - June 1, 2016

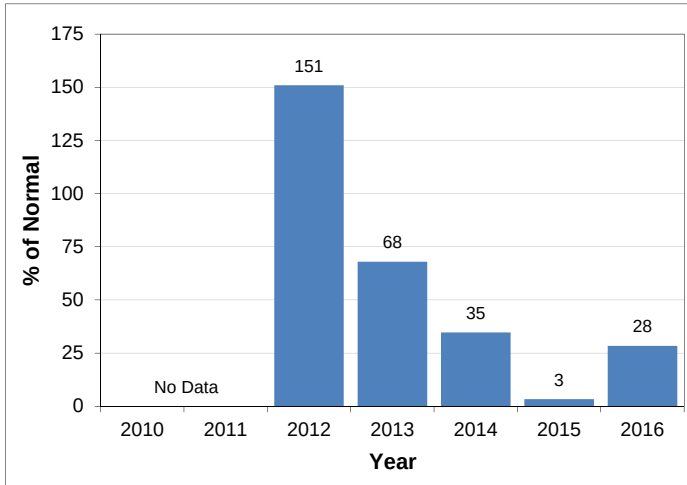
Similkameen



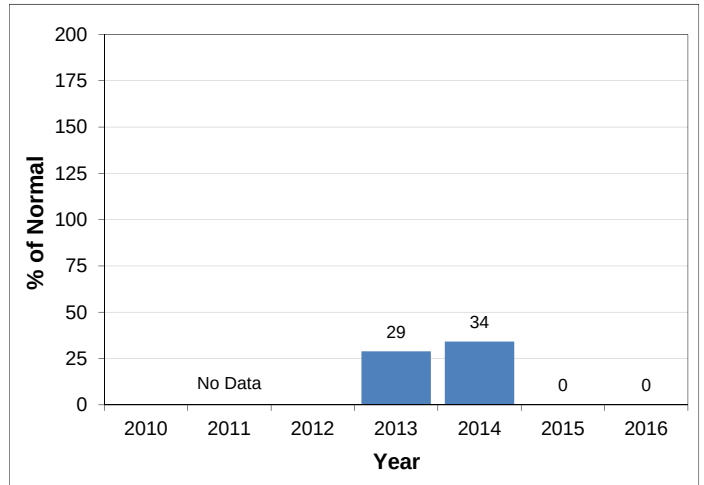
South Coast



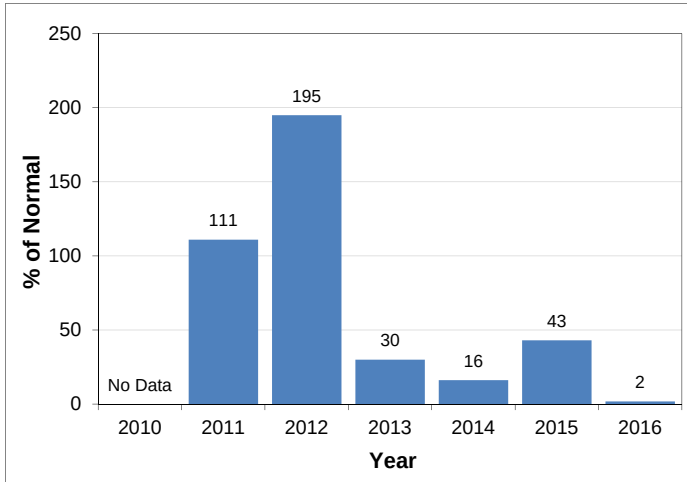
Vancouver Island



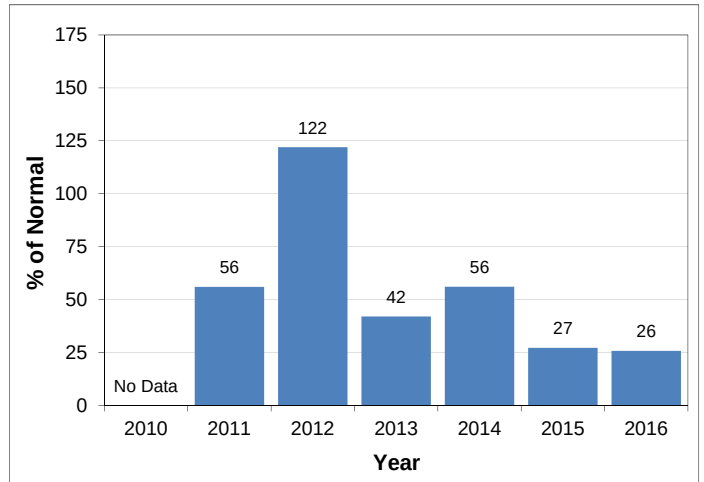
Central Coast



Skeena-Nass



Peace



Snow Survey and Water Supply Bulletin – June 15th, 2016

The June 15th snow survey is now complete. Data from 5 snow courses and 62 automated snow weather stations around the province, collected by the Ministry of Environment Snow Survey Program and partners, and climate data from Environment Canada have been used to form the basis of the following report¹.

Weather

Weather through the first half of June has generally been seasonable, with periods of unsettled weather and showers across the province. A high pressure system in early-June brought hot temperatures through southern BC. Since early-June a number of cold low systems have swept across the province, bringing cooler temperatures and wetter weather. Precipitation through the first part of June has been variable across the province, with below normal rainfall in western and southwestern BC, and above normal precipitation in central BC and the north-east.

Snowpack

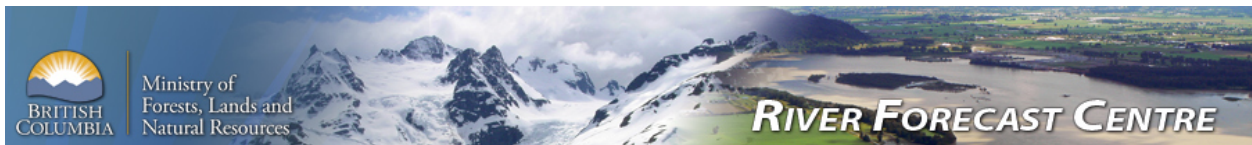
Snow packs are generally depleted at snow monitoring locations across the province as of June 15th, with only 12 of the 62 automated snow weather stations recording more than 50 mm of snow water equivalent. Where snow packs were sufficient to support melt, observed melt over the June 1st to June 15th period was typically in the 200 to 400 mm range.

Snow basin indices are extremely low for the June 15th period. Since very few manual snow surveys are collected on June 15th (historically and for the 2016 survey period), snow conditions are largely interpreted from automated snow weather station data. As a result, many basins have limited data to assess snow basin index values.

Table 1: BC Snow Basin Indices – June 15, 2016

Basin	% of Normal	Basin	% of Normal
Upper Fraser West	NO DATA	Boundary	5
Upper Fraser East	5	Similkameen	1
Nechako	NO DATA	South Coast	26
Middle Fraser	17	Vancouver Island	6
Lower Fraser	18	Central Coast	0
North Thompson	33	Skagit	NO DATA
South Thompson	43	Peace	7
Upper Columbia	29	Skeena-Nass	NO DATA
West Kootenay	20	Stikine	0
East Kootenay	1	Liard	NO DATA
Okanagan	0	Northwest	NO DATA

1. 'No Data' indicates that no basin index snow surveys were conducted within the basin during this survey period.



Snow Survey and Water Supply Bulletin – June 15th, 2016

Low snow basin indices for June 15th reflect the early season melt that happened this spring. Based on historic automated snow weather station data, conditions this year on June 15th are more typical of early-July conditions, indicating that this season's melt continues to be 3-4 weeks ahead of normal.

Streamflow

Freshet runoff echoes the pattern in snow melt, with many rivers experiencing flow conditions that are 3-4 weeks or more ahead of normal conditions. While April runoff was generally well above normal across the province, flows eased as rivers have transitioned to the declining limb of the snow melt runoff cycle. Rivers across the Interior of BC are generally at 25% to 75% of normal flow levels for this time of year. These represent flows generally in the 5th to 15th percentile range. The exception to this is in the central Interior and in north-east BC, where flows are closer to normal, or even above normal, as the result of wet weather over the past few weeks. On Vancouver Island and smaller, non-glaciated drainage basins in south-west BC, river levels are extremely low for this time of year as the result of drier weather and early snow melt, with current flows typically in the 1st to 5th percentile range.

Outlook

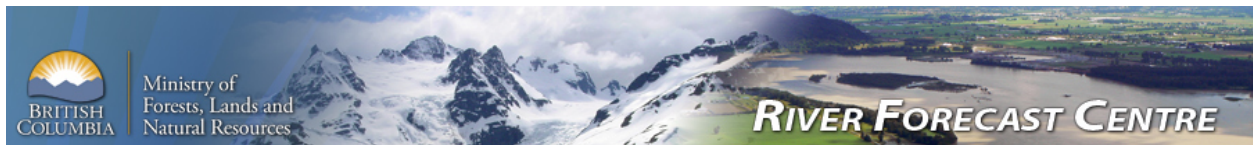
The Climate Prediction Centre at the U.S. National Weather Service/NOAA has ended their El Niño Advisory as sea surface temperature anomalies in the equatorial Pacific Ocean have declined to neutral levels. A “La Niña Watch” has been issued as modelling is indicating that La Niña conditions are favoured to develop by the fall-winter of this year. Seasonal forecasts from Environment Canada indicate an increased likelihood of above-normal temperatures across British Columbia over the June to August period.

Most rivers have experienced their peak levels for the year, unless an extreme rainfall event occurs in late-June or early-July.

The advanced freshet is expected to put pressure on summer low flows in snow melt-dominated rivers across the province. Through most of the province, the transition to seasonally lower than normal flows occurred. The influence of the snow melt season occurring about a month early this year is expected to continue through the summer, with the largest departures from normal flows occurring in late-June and through July. By August and into September, rainfall is an important factor in determining streamflow as the influence from snow melt diminishes. While the impact of this will vary from river to river across the province, the proportion of flows in June, July and August that are derived from snow melt will be greatly reduced. In the northeast and in lower elevation coastal watersheds, snow melt usually plays a minor role in summer flows, and rainfall is particularly important for determining the flows that are experienced through the summer.

This is the final Snow Survey and Water Supply Bulletin for the 2016 season. The River Forecast Centre will continue to monitor streamflow and weather across the province, and

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, 2016

issue Water Supply and Streamflow Bulletins throughout the summer as conditions warrant. Seasonal information on drought and drought levels is available on the [BC Drought Information Portal](#).

BC River Forecast Centre
June 23, 2016

2016 Automated Snow Pillow/Manual Snow Survey Data				June 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1A01P	YELLOWHEAD LAKE	Upper Fraser East	1860	2016-06-15	0	25		19%	23	122	0	641	135	19
1A02P	MC BRIDE UPPER	Upper Fraser East	1580	2016-06-15	0	0		0%	0	18	0	159	1	24
1A03P	BARKERVILLE	Upper Fraser East	1520	2016-06-15	1	1		33%	1	0	0	37	3	41
1A05	LONGWORTH (UPPER)	Upper Fraser East	1693	NS	NS	NS	NS						388	5
1A06A	HANSARD	Upper Fraser East	622	NS	NS	NS	NS						0	0
1A10	PRINCE GEORGE A	Upper Fraser East	684	NS	NS	NS	NS						0	0
1A11	PACIFIC LAKE	Upper Fraser East	756	NS	NS	NS	NS						0	5
1A12	KAZA LAKE	Upper Fraser West	1247	NS	NS	NS	NS						0	0
1A12P	KAZA LAKE	Upper Fraser East	1248	2016-06-15	5	0								0
1A14P	HEDRICK LAKE	Upper Fraser East	1100	2016-06-15	0	0	E	0%	9	624	0	587	38	16
1A15	KNUDSEN LAKE	Upper Fraser East	1598	NS	NS	NS	NS						714	7
1A16	BURNS LAKE	Upper Fraser West	820	NS	NS	NS	NS						0	0
1A17P	REVOLUTION CREEK	Upper Fraser East	1690	2016-06-15	8	2		1%	26	727	0	927	223	31
1A19P	DOMA MOUNTAIN	Upper Fraser East	1820	2016-06-15	1	0		0%	84	612	0	925	367	10
1A23	BIRD CREEK	Upper Fraser West	1196	NS	NS	NS	NS						0	0
1B01	MOUNT WELLS	Nechako	1489	NS	NS	NS	NS						0	0
1B01P	MOUNT WELLS	Nechako	1490	2016-06-15	NA	0		0%	0	0	0	321	44	24
1B02	TAHTSA LAKE	Nechako	1319	NS	NS	NS	NS						0	1
1B02P	TAHTSA LAKE	Nechako	1300	2016-06-15	NA	75		12%	264	29	0	1870	617	24
1B05	SKINS LAKE	Nechako	877	NS	NS	NS	NS						0	0
1B06	MOUNT SWANNELL	Nechako	1596	NS	NS	NS	NS						0	0
1B07	NUTLI LAKE	Nechako	1502	NS	NS	NS	NS						0	0
1B08P	MOUNT PONDOSY	Nechako	1400	2016-06-15	NA	3		4%	7	7	0	520	75	24
1C01	BROOKMERE	Middle Fraser	994	NS	NS	NS	NS						0	0
1C05	MCGILLIVRAY PASS	Middle Fraser	1715	NS	NS	NS	NS						0	3
1C06	PAVILION	Middle Fraser	1209	NS	NS	NS	NS						0	0
1C08	NAZKO	Middle Fraser	1029	NS	NS	NS	NS						0	0
1C09A	HIGHLAND VALLEY	Middle Fraser	1547	NS	NS	NS	NS						0	0
1C12P	GREEN MOUNTAIN	Middle Fraser	1780	2016-06-15	NA	26		10%	2	2	0	887	272	22
1C13A	HORSEFLY MOUNTAIN	Middle Fraser	1612	NS	NS	NS	NS						0	0
1C14	BRALORNE	Middle Fraser	1382	NS	NS	NS	NS						0	0
1C17	MOUNT TIMOTHY	Middle Fraser	1632	NS	NS	NS	NS						126	4
1C18P	MISSION RIDGE	Middle Fraser	1850	2016-06-15	NA	0		0%	0	0	0	387	15	46
1C19	GNAWED MOUNTAIN	Middle Fraser	1617	NS	NS	NS	NS						0	0
1C20P	BOSS MOUNTAIN MINE	Middle Fraser	1460	2016-06-15	0	0		0%	0	0	0	83	6	22
1C21	BIG CREEK	Middle Fraser	1130	NS	NS	NS	NS						0	0
1C22	PUNTZI MOUNTAIN	Middle Fraser	939	NS	NS	NS	NS						0	0
1C23	PENFOLD CREEK	Middle Fraser	1687	NS	NS	NS	NS						643	5
1C25	LAC LE JEUNE (UPPER)	Middle Fraser	1471	NS	NS	NS	NS						0	0

2016 Automated Snow Pillow/Manual Snow Survey Data				June 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
1C28	DUFFEY LAKE	Middle Fraser	1253	NS	NS	NS	NS						0	0
1C29	SHOVELNOSE MOUNTAIN	Middle Fraser	1456	NS	NS	NS	NS						0	0
1C32	DEADMAN RIVER	Middle Fraser	1463	NS	NS	NS	NS						0	0
1C33A	GRANITE MOUNTAIN	Middle Fraser	1175	NS	NS	NS	NS						0	0
1C37	BRALORNE(UPPER)	Middle Fraser	1980	NS	NS	NS	NS						0	0
1C38	DOWNTON LAKE (UPPER)	Middle Fraser	1884	NS	NS	NS	NS						0	0
1C38P	DOWNTON / LAJOIE UPPER	Middle Fraser	1829	2016-06-15	NA	512								0
1C39	BRIDGE GLACIER (LOWER)	Middle Fraser	1393	NS	NS	NS	NS						0	0
1C40	TYAUGHTON CREEK (NORTH)	Middle Fraser	1946	NS	NS	NS	NS						0	0
1C40P	NORTH TYAUGHTON	Middle Fraser	1969	2016-06-15	NA	0								0
1C41P	YANKS PEAK, EAST	Middle Fraser	1670	2016-06-15	1	0		0%	0	577	0	698	191	19
1C42	CAVERHILL LAKE NEW	Middle Fraser	1400	NS	NS	NS	NS							0
1D06P	TENQUILLE LAKE	Lower Fraser	1680	2016-06-15	23	153		35%	0	1	0	1177	434	15
1D08	STAVE LAKE	Lower Fraser	1211	NS	NS	NS	NS						0	1
1D09	WAHLEACH LAKE	Lower Fraser	1395	NS	NS	NS	NS						71	6
1D09P	WAHLEACH LAKE	Lower Fraser	1400	2016-06-15	NA	8		1%	8	620	0	1281	643	24
1D10	NAHATLATCH RIVER	Lower Fraser	1530	NS	NS	NS	NS						697	2
1D16	DICKSON LAKE	Lower Fraser	1147	NS	NS	NS	NS						0	0
1D17P	CHILLIWACK RIVER	Lower Fraser	1600	2016-06-15	0	14		2%	0	1424	0	2022	797	24
1D18	DISAPPOINTMENT LAKE	Lower Fraser	1050	2016-06-17	0	0								
1D19P	SPUZZUM CREEK	Lower Fraser	1180	2016-06-15	0	0		0%	0	632	0	2320	886	17
1E01B	BLUE RIVER	North Thompson	673	NS	NS	NS	NS						0	0
1E02P	MOUNT COOK	North Thompson	1550	2016-06-15	86	625		92%	206	866	206	1155	681	16
1E03A	TROPHY MOUNTAIN	North Thompson	1907	NS	NS	NS	NS						0	1
1E05	KNOUFF LAKE	North Thompson	1189	NS	NS	NS	NS						0	0
1E07	ADAMS RIVER	North Thompson	1769	NS	NS	NS	NS						255	21
1E08P	AZURE RIVER	North Thompson	1620	2016-06-15	0	38		8%	150	405	75	1500	499	19
1E10P	KOSTAL LAKE	North Thompson	1770	2016-06-15	NA	3		1%	1	563	0	1248	351	31
1E14P	COOK CREEK	North Thompson	1280	2016-06-15	1	0								0
1F01A	ABERDEEN LAKE	South Thompson	1262	NS	NS	NS	NS						0	0
1F02	ANGLEMONT	South Thompson	1168	NS	NS	NS	NS						0	0
1F03P	PARK MOUNTAIN	North Thompson	1890	2016-06-15	42	198		43%	31	751	0	1095	458	31
1F04	ENDERBY	South Thompson	1948	N	N	N	N						684	33
1F06P	CELISTA MOUNTAIN	North Thompson	1551	2016-06-15	0	2		1%	7	284	0	573	179	11
2A01A	CANOE RIVER	Upper Columbia	866	NS	NS	NS	NS						0	0
2A02	GLACIER	Upper Columbia	1249	NS	NS	NS	NS						47	24
2A03A	FIELD	Upper Columbia	1310	NS	NS	NS	NS						0	0
2A06P	MOUNT REVELSTOKE	Upper Columbia	1830	2016-06-15	NA	265		38%	0	808	0	1801	700	23
2A07	KICKING HORSE	Upper Columbia	1648	NS	NS	NS	NS						0	5

2016 Automated Snow Pillow/Manual Snow Survey Data				June 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2A11	BEAVERFOOT	Upper Columbia	1924	NS	NS	NS	NS						0	0
2A14	MOUNT ABBOT	Upper Columbia	2031	NS	NS	NS	NS						841	14
2A16	GOLDSTREAM	Upper Columbia	1914	NS	NS	NS	NS						0	0
2A17	FIDELITY MOUNTAIN	Upper Columbia	1852	NS	NS	NS	NS						816	25
2A18	KEYSTONE CREEK	Upper Columbia	1839	NS	NS	NS	NS						0	0
2A18P	KEYSTONE CREEK	Upper Columbia	1850	2016-06-15	NA	81								0
2A19	VERMONT CREEK	Upper Columbia	1533	NS	NS	NS	NS						0	0
2A21P	MOLSON CREEK	Upper Columbia	1980	2016-06-15	NA	114		20%	53	683	0	1136	575	35
2A22	SUNBEAM LAKE	Upper Columbia	2066	NS	NS	NS	NS						0	0
2A23	BUSH RIVER	Upper Columbia	1982	NS	NS	NS	NS						0	0
2A25	KIRBYVILLE LAKE	Upper Columbia	1739	NS	NS	NS	NS						0	1
2A27	DOWNIE SLIDE (LOWER)	Upper Columbia	964	NS	NS	NS	NS						0	1
2A29	DOWNIE SLIDE (UPPER)	Upper Columbia	1628	NS	NS	NS	NS						540	2
2A30P	COLPITTI CREEK	Upper Columbia	2131	2016-06-15	NA	0								0
2A31P	CARIBOU CREEK UPPER	Upper Columbia	2201	2016-06-15	NA	40								0
2A32P	WILDCAT CREEK	Upper Columbia	2122	2016-06-15	NA	0								0
2B02A	FARRON	West Kootenay	1229	NS	NS	NS	NS						0	0
2B05	WHATSHAN (UPPER)	West Kootenay	1476	NS	NS	NS	NS						0	1
2B06P	BARNES CREEK	Lower Columbia	1620	2016-06-15	NA	2		20%	0	0	0	211	10	23
2B07	KOCH CREEK	West Kootenay	1813	NS	NS	NS	NS						0	1
2B08P	ST. LEON CREEK	Lower Columbia	1800	2016-06-15	NA	65		13%	48	874	0	1336	509	23
2B09	RECORD MOUNTAIN	West Kootenay	1906	2016-06-15	0	0		0%	0		0	0	127	30
2C01	SINCLAIR PASS	East Kootenay	1374	NS	NS	NS	NS						0	0
2C04	SULLIVAN MINE	East Kootenay	1580	NS	NS	NS	NS						0	1
2C07	FERNIE EAST	East Kootenay	1213	NS	NS	NS	NS						0	0
2C09Q	MORRISSEY RIDGE	East Kootenay	1800	2016-06-15	NA	0		0%	0	21	0	458	34	36
2C10P	MOYIE MOUNTAIN	East Kootenay	1930	2016-06-15	0	0	E	0%	0	0	0	69	1	37
2C14P	FLOE LAKE	East Kootenay	2090	2016-06-15	NA	8		2%	6	484	0	866	334	23
2C15	MOUNT ASSINIBOINE	East Kootenay	2230	NS	NS	NS	NS						0	0
2C16	MOUNT JOFFRE	East Kootenay	1763	NS	NS	NS	NS						0	0
2C17	THUNDER CREEK	East Kootenay	2062	NS	NS	NS	NS						0	0
2C20	VERMILLION RIVER NO. 3	East Kootenay	1612	NS	NS	NS	NS						0	0
2D02	FERGUSON	West Kootenay	929	NS	NS	NS	NS						30	3
2D03	SANDON	West Kootenay	1072	NS	NS	NS	NS						0	0
2D04	NELSON	West Kootenay	952	NS	NS	NS	NS						0	0
2D05	GRAY CREEK (LOWER)	West Kootenay	1558	NS	NS	NS	NS						28	21
2D06	CHAR CREEK	West Kootenay	1290	NS	NS	NS	NS						32	7
2D07A	DUNCAN LAKE NO. 2	West Kootenay	662	NS	NS	NS	NS						0	0
2D08P	EAST CREEK	West Kootenay	2030	2016-06-15	NA	4		1%	42	634	0	1163	464	35

2016 Automated Snow Pillow/Manual Snow Survey Data				June 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
2D09	MOUNT TEMPLEMAN	West Kootenay	1879	NS	NS	NS	NS						0	0
2D10	GRAY CREEK (UPPER)	West Kootenay	1926	NS	NS	NS	NS						201	19
2D14P	REDFISH CREEK	West Kootenay	2104	2016-06-15	94	533		64%	292	996	292	1722	831	14
2E01	MONASHEE PASS	Boundary	1387	NS	NS	NS	NS						0	2
2E02	CARMI	Boundary	1254	NS	NS	NS	NS						0	0
2E03	BIG WHITE MOUNTAIN	Boundary	1672	NS	NS	NS	NS						46	21
2E07P	GRANO CREEK	Kettle	1860	2016-06-15	6	8		10%	5	179	0	509	84	18
2F01A	TROUT CREEK (WEST)	Okanagan	1430	NS	NS	NS	NS						0	0
2F02	SUMMERLAND RESERVOIR	Okanagan	1304	NS	NS	NS	NS						0	1
2F03	MC CULLOCH	Okanagan	1266	NS	NS	NS	NS						0	0
2F04	GRAYSTOKE LAKE	Okanagan	1818	NS	NS	NS	NS						78	3
2F05P	MISSION CREEK	Okanagan	1780	2016-06-15	0	0	E	0%	0	225	0	424	53	46
2F07	POSTILL LAKE	Okanagan	1358	NS	NS	NS	NS						0	0
2F08	GRAYBACK RESERVOIR	Okanagan	1548	NS	NS	NS	NS						0	1
2F09	WHITEROCKS MOUNTAIN	Okanagan	1789	NS	NS	NS	NS						26	22
2F10P	SILVER STAR MOUNTAIN	Okanagan	1839	2016-06-15	0	0	E							0
2F11	ISINTOK LAKE	Okanagan	1651	NS	NS	NS	NS						0	2
2F12	MOUNT KOBAN	Okanagan	1817	NS	NS	NS	NS						72	7
2F13	ESPERON CR (UPPER)	Okanagan	1634	NS	NS	NS	NS						0	1
2F14	ESPERON CR (MIDDLE)	Okanagan	1440	NS	NS	NS	NS						0	1
2F18P	BRENDA MINE	Okanagan	1460	2016-06-15	NA	0	E	0%	0	0	0	8	3	23
2F19	OYAMA LAKE	Okanagan	1365	NS	NS	NS	NS						0	0
2F20	VASEUX CREEK	Okanagan	1403	NS	NS	NS	NS						0	0
2F21	BOULEAU LAKE	Okanagan	1405	NS	NS	NS	NS						0	0
2F23	MACDONALD LAKE	Okanagan	1742	NS	NS	NS	NS						0	0
2F24	ISLAHT LAKE	Okanagan	1492	NS	NS	NS	NS						0	0
2F25	POSTILL LAKE (UPPER)	Okanagan	1500	NS	NS	NS	NS							0
2G03P	BLACKWALL PEAK	Similkameen	1940	2016-06-15	0	3		1%	0	438	0	1031	218	48
2G04	LOST HORSE MOUNTAIN	Similkameen	1988	NS	NS	NS	NS						25	13
2G05	MISSEZULA MOUNTAIN	Similkameen	1602	NS	NS	NS	NS						0	0
2G06	HAMILTON HILL	Similkameen	1477	NS	NS	NS	NS						0	0
3A01	GROUSE MOUNTAIN	South Coast	1126	NS	NS	NS	NS						0	0
3A02	POWELL RIVER (UPPER)	South Coast	1002	NS	NS	NS	NS						0	0
3A05	POWELL RIVER (LOWER)	South Coast	882	NS	NS	NS	NS						0	0
3A09	PALISADE LAKE	South Coast	898	NS	NS	NS	NS						0	0
3A10	DOG MOUNTAIN	South Coast	1007	2016-06-15	0	0		0%					399	27
3A19	ORCHID LAKE	South Coast	1178	2016-06-17	53	300		30%					1002	33
3A20	CALLAGHAN CREEK	South Coast	1009	NS	NS	NS	NS						0	8
3A22P	NOSTETUKO RIVER	South Coast	1500	2016-06-15	NA	0		0%	0	0	0	266	20	27

2016 Automated Snow Pillow/Manual Snow Survey Data				June 15					Historic Snow Water Equivalent (mm)					
Station ID	Name	Basin	Elevation (masl)	Survey Date YYYY-MM-DD	SD (cm)	SWE (mm)	Code	SWE % 1981-2010 Normal	2015 SWE (mm)	2014 SWE (mm)	Minimum (mm)	Maximum (mm)	1981-2010 Normal (mm)	Years of Record
3A24P	UPPER MOSLEY CREEK	South Coast	1650	2016-06-15	0	0	E	0%	0	0	0	0	1	27
3A25P	UPPER SQUAMISH RIVER	South Coast	1340	2016-06-15	NA	374		48%	0	10.76	0	2505	786	26
3B01	FORBIDDEN PLATEAU	Vancouver Island	1110	NS	NS	NS	NS						830	10
3B02A	MT. COKELY	Vancouver Island	1267	NS	NS	NS	NS						0	0
3B04	ELK RIVER	Vancouver Island	270	NS	NS	NS	NS						0	0
3B10	UPPER THELWOOD LAKE	Vancouver Island	1014	NS	NS	NS	NS						0	4
3B17P	WOLF RIVER	Vancouver Island	1490	2016-06-15	NA	75		12%	0	1	0	2183	609	34
3B18	WOLF RIVER (MIDDLE)	Vancouver Island	1050	NS	NS	NS	NS						0	0
3B19	WOLF RIVER (LOWER)	Vancouver Island	615	NS	NS	NS	NS						0	0
3B23P	JUMP CREEK	Vancouver Island	1160	2016-06-15	0	0		0%	0	2	0	2700	337	20
3B24P	HEATHER MOUNTAIN UPPER	Vancouver Island	1190	2016-06-15	5	0								0
3C07	WEDEENE RIVER SOUTH	Central Coast	196	NS	NS	NS	NS						0	0
3C08P	BURNT BRIDGE CREEK	North Coast	1330	2016-06-15	0	0	E	0%	0	0	0	739	99	18
3D01C	SUMALLO RIVER WEST	Skagit	801	NS	NS	NS	NS						0	0
3D02	LIGHTNING LAKE	Skagit	1254	NS	NS	NS	NS						0	0
3D03A	KLESILKWA	Skagit	1134	NS	NS	NS	NS						0	0
4A02P	PINE PASS	Peace	1400	2016-06-15	18	45		14%	3	601	0	1142	324	27
4A03	WARE (UPPER)	Peace	1563	NS	NS	NS	NS						0	0
4A04	WARE (LOWER)	Peace	969	NS	NS	NS	NS						0	0
4A05	GERMANSEN (UPPER)	Peace	1489	NS	NS	NS	NS						0	0
4A06	TUTIZZI LAKE	Peace	1043	NS	NS	NS	NS						0	0
4A07	LADY LAURIER LAKE	Peace	1446	NS	NS	NS	NS						0	0
4A09	PULPIT LAKE	Peace	1331	NS	NS	NS	NS						0	0
4A09P	PULPIT LAKE	Peace	1310	2016-06-15	1	0		0%	0	0	0	0	2	26
4A10	FREDRICKSON LAKE	Peace	1323	NS	NS	NS	NS						0	0
4A11	TRYGVE LAKE	Peace	1409	NS	NS	NS	NS						0	0
4A12	TSAYDAYCHI LAKE	Peace	1173	NS	NS	NS	NS						0	0
4A13	PHILIP LAKE	Peace	1013	NS	NS	NS	NS						0	0
4A16	MORFEE MOUNTAIN	Peace	1427	NS	NS	NS	NS						0	1
4A18	MOUNT SHEBA	Peace	1480	NS	NS	NS	NS						0	1
4A20	MONKMAN CREEK	Peace	1566	NS	NS	NS	NS						0	1
4A21	MOUNT STEARNS	Peace	1514	NS	NS	NS	NS						0	0
4A25	FORT ST. JOHN AIRPORT	Peace	692	NS	NS	NS	NS						0	0
4A30P	AIKEN LAKE	Peace	1040	2016-06-15	0	0	E	0%	2	4	0	8	5	31
4A31P	CRYING GIRL PRAIRIE	Peace	1358	2016-06-15	NA	0								0
4A33P	MUSKWA-KECHIKA	Peace	1196	2016-06-15	NA	0	E							0
4B01	KIDPRICE LAKE	Skeena-Nass	1415	NS	NS	NS	NS						0	1
4B02	JOHANSON LAKE	Skeena-Nass	1480	NS	NS	NS	NS						0	0
4B03A	HUDSON BAY MTN	Skeena-Nass	1452	N	N	N	N		0	0	0	0	96	35

2016 Automated Snow Pillow/Manual Snow Survey Data				June 15					Historic Snow Water Equivalent (mm)					
			Elevation					SWE %						
Station ID	Name	Basin	(masl)	Survey Date	SD	SWE	Code	1981-2010	2015	2014	Minimum	Maximum	1981-2010	Years
				YYYY-MM-DD	(cm)	(mm)		Normal	SWE	SWE	(mm)	(mm)	Normal	of
									(mm)	(mm)			(mm)	Record
4B04	CHAPMAN LAKE	Skeena-Nass	1485	NS	NS	NS	NS						0	2
4B06	TACHEK CREEK	Skeena-Nass	1133	NS	NS	NS	NS						0	0
4B07	MCKENDRICK CREEK	Skeena-Nass	1048	NS	NS	NS	NS						0	1
4B08	MOUNT CRONIN	Skeena-Nass	1491	NS	NS	NS	NS						0	5
4B10	NINGUNSAW PASS	Skeena-Nass	647	NS	NS	NS	NS						0	0
4B11A	BEAR PASS	Skeena-Nass	437	NS	NS	NS	NS						0	0
4B13A	TERRACE AIRPORT	Skeena-Nass	219	NS	NS	NS	NS						0	0
4B14	EQUITY MINE	Skeena-Nass	1434	NS	NS	NS	NS						0	0
4B15	LU LAKE	Skeena-Nass	1296	NS	NS	NS	NS						0	0
4B15P	LU LAKE	Skeena/Nass	1300	2016-06-15	0	13			14	0	0	14	0	18
4B16P	SHEDIN CREEK	Skeena/Nass	1480	2016-06-15	0	4		1%	4	7	0	916	340	20
4B17P	TSAI CREEK	Skeena/Nass	1360	2016-06-15	10	0		0%	384	158	0	1772	612	18
4B18P	CEDAR - KITEEN	Skeena/Nass	885	2016-06-15	0	0	E	0%	11	0	0	154	7	15
4C01	SIKANNI LAKE	Liard	1390	NS	NS	NS	NS						0	0
4C02	SUMMIT LAKE	Liard	1291	NS	NS	NS	NS						0	0
4C03	DEASE LAKE	Liard	805	NS	NS	NS	NS						0	0
4C05	FORT NELSON A	Liard	368	NS	NS	NS	NS						0	0
4C15	JADE CITY	Liard	943	NS	NS	NS	NS						0	0
4D01	TELEGRAPH CREEK	Stikine	490	NS	NS	NS	NS						0	0
4D02	ISKUT	Stikine	931	NS	NS	NS	NS						0	0
4D11P	KINASKAN LAKE	Stikine/Taku	1020	2016-06-15	0	0			0		0	0	0	20
4E02B	ATLIN LAKE	Northwest	730	NS	NS	NS	NS							0
Code	Description													
A	Sampling problems were encountered													
B	Early or late sampling													
C	Early or late sampling w/problems encountered													
E	Estimate													
N	Scheduled, but not sampled													
NA	Not available													
NS	Not scheduled													
SD	Snow Depth													
SWE	Snow Water Equivalent													
T	Trace Amount													