

Snow Survey and Water Supply Bulletin – January 1st, 2013

Note: March and June 15th bulletins are not included for this year.

The January 1st snow survey is now complete. Data from 70 snow courses and 53 snow pillows around the province and out-of-province sampling locations, and climate data from Environment Canada, have been used to form the basis for the following reports¹.

Weather

Weather across British Columbia has been variable over the early portion of the snow accumulation season (October to December). With a few exceptions, weather was near normal through most of this period across most of the province. Wetter than normal conditions were present through the latter part of October along the Coast, and above normal temperatures occurred through November across most of the province. The persistence of Arctic air masses in December led to below normal temperatures in northern BC.

Snowpack

Snow conditions are near normal for this time of year across most of the province. Snow basin indices ranged from a low of 62% of normal, to a high of 130%. Wetter weather through December has led to higher than normal snow packs through the south-west parts of the province (South Coast, Lower Fraser, and Vancouver Island). In the Nechako basin, snow packs are well below normal, with a basin index of 62%. While not well reflected in the snow basin index values, areas around the Nechako basin, including the Chilcotin to the south, the North Coast to the west, and the Bulkley River to the north, have a number of individual survey sites which recorded below normal January 1st snow water equivalents.

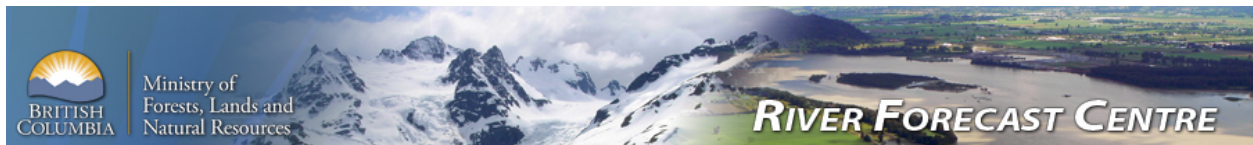
BC Snow Basin Indices – January 1, 2013

Basin	% of Normal	Basin	% of Normal
Upper Fraser	96%	Kootenay	112%
Nechako	62%	Okanagan-Kettle	99%
Middle Fraser	89%	Similkameen	97%
Lower Fraser	122%	South Coast	127%
North Thompson	101%	Vancouver Island	130%
South Thompson	100%	Peace	98%
Columbia	96%	Skeena-Nass	95%

Outlook

In contrast to the La Niña episodes which occurred during the 2010-2011 and 2011-2012 winters, this year has seen neutral conditions favouring neither El Niño or La Niña. Current forecasts from the Climate Prediction Centre with the U.S. National Weather Service (NOAA) favour neutral conditions into the spring of 2013. Current 3-month seasonal forecasts from Environment Canada indicate some increase likelihood of below normal temperatures in southern BC, with normal temperatures more likely in the rest of the province. For

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precipitation, current 3-month forecasts indicate an increased likelihood of drier than normal conditions through the Upper Fraser (Rocky Mountains), North Thompson and Upper Columbia areas, with normal precipitation more likely in the rest of the province.

By this date, generally about one-half of the annual BC snowpack has accumulated. January 1st represents an early snapshot of seasonal snow conditions; the outlook for spring freshet can change significantly over the next three or months. For the most part, snow packs at present are normal across the province and there are no early indications of increased seasonal flood risk. Below normal snow packs in the Nechako and surrounding areas may pose a concern for the potential for decreased seasonal flows during freshet and into the summer. At this point there are no strong indications of a high likelihood of extreme wet or dry seasonal weather through the rest of the accumulation season.

Produced by: BC River Forecast Centre
January 8, 2013

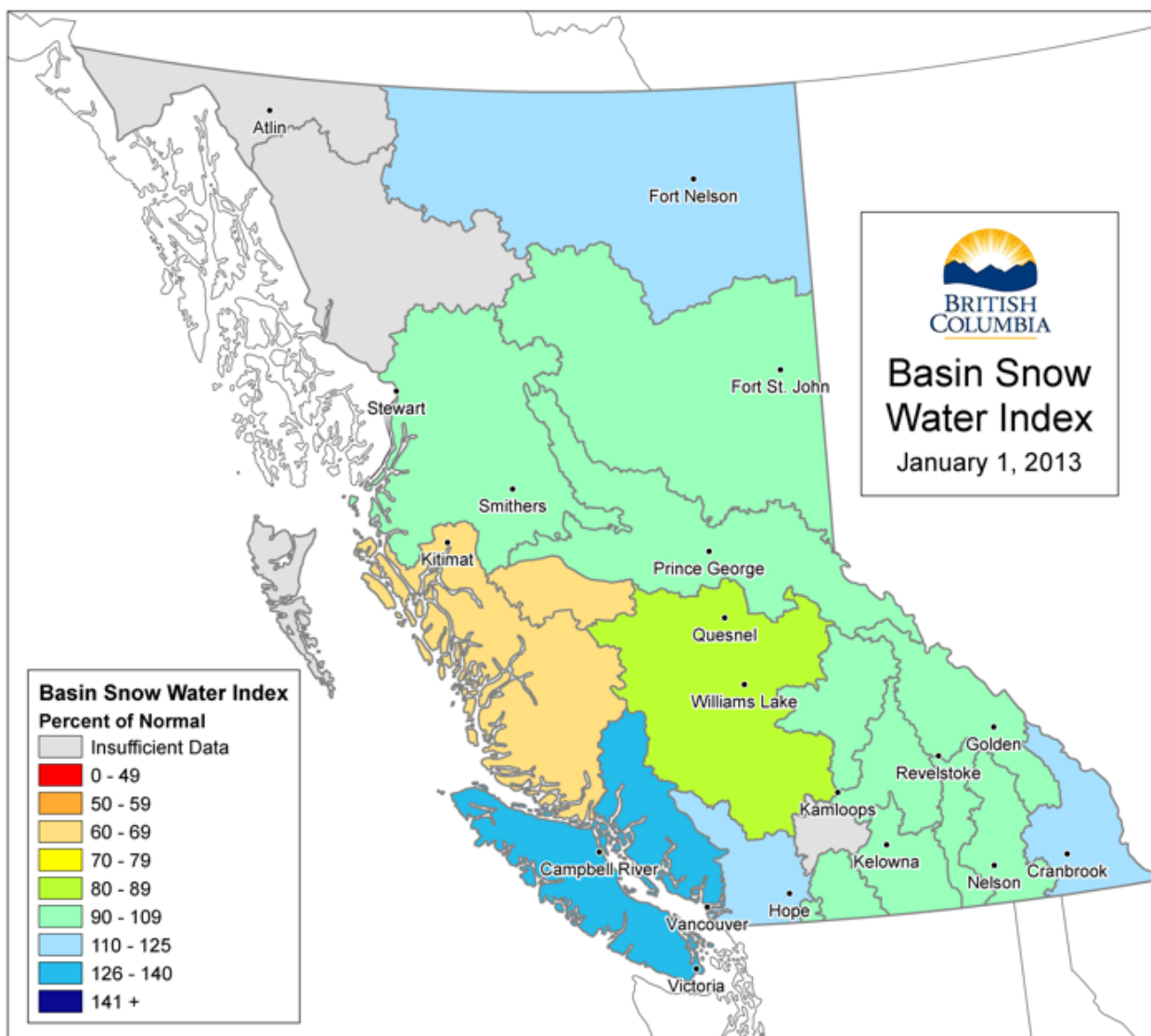


Ministry of
Forests, Lands and
Natural Resources

RIVER FORECAST CENTRE

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Map 1: Basin Snow Water Index-February 1st, 2012



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UPPER FRASER Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record	CMMT
				Snow Depth cm	Water Equiv. mm	% of Normal		
PRINCE GEORGE A	1A10	690	03-Jan	42	86	123	50	
PACIFIC LAKE	1A11	770	05-Jan	122	378	122	28	
BURNS LAKE	1A16	800	07-Jan	46	84	109	37	
PHILIP LAKE	4A13	980	03-Jan	76	217	145	30	
HEDRICK LAKE	1A14	1100	05-Jan	126	408	122	20	
HEDRICK LAKE	1A14P	1100	01-Jan	141	419	132	12	
KAZA LAKE	1A12	1190	03-Jan	84	200	105	27	
LU LAKE	4B15P	1310	01-Jan	56	137	98	15	
MOUNT SHEBA	4A18	1490	05-Jan	146	491	123	23	
BARKERVILLE	1A03P	1520	01-Jan	70	162	96	31	
KNUDSEN LAKE	1A15	1580	05-Jan	108	351	86	20	
MCBRIDE (UPPER)	1A02P	1620	01-Jan	79	173	80	17	
REVOLUTION CREEK	1A17P	1690	01-Jan	161	392	94	27	
LONGWORTH (UPPER)	1A05	1740					22	
DOMM MOUNTAIN	1A19P	1820	01-Jan	111	323	97	6	
YELLOWHEAD	1A01P	1860	01-Jan	N/A	229	67	16	E

NECHAKO Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record	E
				Snow Depth cm	Water Equiv. mm	% of Normal		
SKINS LAKE	1B05	880					27	
TAHTSA LAKE	1B02P	1300	01-Jan	N/A	453	64	20	
KIDPRICE LAKE	4B01	1370					3	
MOUNT PONDOSY	1B08P	1400	01-Jan	N/A	280	62	19	E
MOUNT WELLS	1B01	1490					3	
MOUNT WELLS	1B01P	1490	01-Jan	N/A	193	59	20	
NUTLI LAKE	1B07	1490					3	
MOUNT SWANNELL	1B06	1620					3	

MIDDLE FRASER Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
PUNTZI MOUNTAIN	1C22	940	30-Dec	12	20	50	38
NAZKO	1C08	1070	27-Dec	23	36	65	26
BIG CREEK	1C21	1140	30-Dec	12	15	42	25
GRANITE MOUNTAIN	1C33A	1150	28-Dec	48	102	102	7
BRIDGE GLACIER (LOWER)	1C39	1400	03-Jan	94	280	93	17
BRALORNE	1C14	1450	03-Jan	40	86	96	18
BOSS MOUNTAIN MINE	1C20P	1460	01-Jan	102	268	84	19
LAC LE JEUNE (UPPER)	1C25	1460					39
BRENDA MINE	2F18P	1460	01-Jan	N/A	148	82	17
BARKERVILLE	1A03P	1520	01-Jan	70	162	96	31
MOUNT TIMOTHY	1C17	1660					16
YANKS PEAK EAST	1C41P	1670	01-Jan	65	409	97	16
GREEN MOUNTAIN	1C12P	1780	01-Jan	N/A	357	81	19
MCGILLIVRAY PASS	1C05	1800					18
MISSION RIDGE	1C18P	1850	01-Jan	N/A	229	84	25
DOWNTON LAKE (UPPER)	1C38	1890	03-Jan	116	388	91	16
TYAUGHTON CREEK (NORTH)	1C40	1950	03-Jan	79	226	129	16
BRALORNE(UPPER)	1C37	1980	03-Jan	97	304	83	17

LOWER FRASER Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
DISAPPOINTMENT LAKE	1D18P	932	01-Jan	N/A	834	122	10
DICKSON LAKE	1D16	1070	30-Dec	297	884	113	17
DOG MOUNTAIN	3A10	1080	27-Dec	253	790	165	26
KLESILKWA	3D03A	1130	30-Dec	73	181	98	21
SPUZZUM CREEK	1D19P	1180	01-Jan	244	863	131	14
STAVE LAKE	1D08	1210	30-Dec	288	916	145	21
WAHLEACH LAKE	1D09	1400	30-Dec	119	315	121	23
WAHLEACH LAKE	1D09P	1400	01-Jan	N/A	459	88	20
NAHATLATCH RIVER	1D10	1520	30-Dec	222	679	113	18
CHILLIWACK RIVER	1D17P	1600	01-Jan	220	811	124	20
TENQUILLE LAKE	1D06P	1680	01-Jan	160	458	91	11

NORTH THOMPSON Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
BLUE RIVER	1E01B	670	02-Jan	52	124	78	26
BOSS MOUNTAIN MINE	1C20P	1460	01-Jan	102	268	84	19
MOUNT COOK	1E02P	1550	01-Jan	190	659	107	9
AZURE RIVER	1E08P	1620	01-Jan	192	647	104	16
KOSTAL LAKE	1E10P	1770	01-Jan	133	410	91	28

SOUTH THOMPSON Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
MONASHEE PASS	2E01	1370					30
CELISTA	1F06P	1500	01-Jan	168	459	104	7
KIRBYVILLE LAKE	2A25	1750					28
PARK MOUNTAIN	1F03P	1890	01-Jan	145	429	100	26

UPPER COLUMBIA Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
DOWNIE SLIDE (LOWER)	2A27	980	31-Dec	109	288	90	24
GLACIER	2A02	1250	28-Dec	97	284	87	42
VERMONT CREEK	2A19	1520	30-Dec	92	243	106	26
AZURE RIVER	1E08P	1620	01-Jan	192	647	104	16
DOWNIE SLIDE (UPPER)	2A29	1630	31-Dec	235	792	115	24
KICKING HORSE	2A07	1650	04-Jan	59	157	90	32
KIRBYVILLE LAKE	2A25	1750					28
MOUNT REVELSTOKE	2A06P	1830	01-Jan	N/A	568	95	17
FIDELITY MOUNTAIN	2A17	1870	28-Dec	131	538	87	38
BEAVERFOOT	2A11	1890	30-Dec	50	122	102	28
KEYSTONE CREEK	2A18	1890					28
GOLDSTREAM	2A16	1920	31-Dec	175	585	98	28
BUSH RIVER	2A23	1920	31-Dec	148	480	109	28
MOUNT ABBOT	2A14	1980	30-Dec	182	619	101	28
MOLSON CREEK	2A21P	1980	01-Jan	N/A	540	97	32
SUNBEAM LAKE	2A22	2010	31-Dec	163	522	110	28

LOWER COLUMBIA Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
FERGUSON	2D02	880	28-Dec	67	200	73	33
FARRON	2B02A	1220	02-Jan	55	140	90	28
MONASHEE PASS	2E01	1370					30
WHATSHAN (UPPER)	2B05	1480					22
BARNES CREEK	2B06	1620	03-Jan	80	213	82	24
BARNES CREEK	2B06P	1620	01-Jan	N/A	234	84	19
ST. LEON CREEK	2B08	1800	03-Jan	174	571	93	20
ST. LEON CREEK	2B08P	1800	01-Jan	N/A	492	91	16
KOCH CREEK	2B07	1860	03-Jan	156	473	130	16
RECORD MOUNTAIN	2B09	1890	02-Jan	180	575	180	26
EAST CREEK	2D08P	2030	01-Jan	N/A	460	98	31

EAST KOOTENAY Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
FERNIE EAST	2C07	1250	02-Jan	60	147	104	35
SULLIVAN MINE	2C04	1550	28-Dec	67	176	128	27
MOUNT JOFFRE	2C16	1750	30-Dec	85	253	141	25
MORRISSEY RIDGE	2C09Q	1800	01-Jan	N/A	253	76	29
MOYIE MOUNTAIN	2C10P	1930	01-Jan	60	178	99	33
THUNDER CREEK	2C17	2010	30-Dec	75	196	145	27
FLOE LAKE	2C14	2090	30-Dec	154	494	116	27
FLOE LAKE	2C14P	2090	01-Jan	N/A	429	118	17
MOUNT ASSINIBOINE	2C15	2230					28

WEST KOOTENAY Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
FERGUSON	2D02	880	28-Dec	67	200	73	33
NELSON	2D04	930	03-Jan	47	121	69	53
CHAR CREEK	2D06	1310	01-Jan	118	310	124	29
KOCH CREEK	2B07	1860	03-Jan	156	473	130	16
MOUNT TEMPLEMAN	2D09	1860					19
EAST CREEK	2D08P	2030	01-Jan	N/A	460	98	31
REDFISH CREEK	2D14P	2104	01-Jan	267	712	130	11

KETTLE Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
FARRON	2B02A	1220	02-Jan	55	140	90	28
MONASHEE PASS	2E01	1370					30
GRANO CREEK	2E07P	1860	01-Jan	71	278	124	15

OKANAGAN Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
SUMMERLAND RESERVOIR	2F02	1280	02-Jan	43	97	85	49
TROUT CREEK	2F01	1430					3
TROUT CREEK (WEST)	2F01A	1430					1
BRENDA MINE	2F18P	1460	01-Jan	N/A	148	82	17
GREYBACK RESERVOIR	2F08	1550					28
ISINTOK LAKE	2F11	1680	02-Jan	36	82	95	47
MISSION CREEK	2F05P	1780	01-Jan	81	240	112	42
GRAYSTOKE LAKE	2F04	1810					6
MOUNT KOBAL	2F12	1810					35

SIMILKAMEEN Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
ISINTOK LAKE	2F11	1680	02-Jan	36	82	95	47
BLACKWALL PEAK	2G03P	1940	01-Jan	129	383	99	43

SOUTH COASTAL Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
PALISADE LAKE	3A09P	880	01-Jan	N/A	606	110	12
DOG MOUNTAIN	3A10	1080	27-Dec	253	790	165	26
GROUSE MOUNTAIN	3A01	1100	27-Dec	253	800	167	32
ORCHID LAKE	3A19	1190	02-Jan	294	820	109	28
ORCHID LAKE	3A19P	1178	01-Jan	N/A	N/A	N/A	17
SQUAMISH RIVER (UPPER)	3A25P	1340	01-Jan	228	792	108	21
NOSTETUKO RIVER	3A22P	1500	01-Jan	54	218	84	20
MOSLEY CREEK (UPPER)	3A24P	1650	01-Jan	28	108	56	23

VANCOUVER ISLAND Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
ELK RIVER	3B04	270					27
WOLF RIVER (LOWER)	3B19	640					23
WOLF RIVER (MIDDLE)	3B18	1070					24
FORBIDDEN PLATEAU	3B01	1130					30
JUMP CREEK	3B23P	1160	01-Jan	214	620	145	17
WOLF RIVER (UPPER)	3B17P	1490	01-Jan	N/A	775	130	24

NORTH COASTAL Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
TAHTSA LAKE	1B02P	1300	01-Jan	N/A	453	64	20
BURNT BRIDGE CREEK	3C08P	1330	01-Jan	88	258	66	11

SKAGIT Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	Jan 2013			Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal		
KLESILKWA	3D03A	1130	30-Dec	73	181	98	21

PEACE Drainage Basin

Snow Course Name and Number		Elev. metres	Date of Survey	Jan 2013			Yrs of Record
				Snow Depth cm	Water Equiv. mm	% of Normal	
FORT ST. JOHN A	4A25	690	07-Jan	58	117	205	36
PACIFIC LAKE	1A11	770					28
WARE (LOWER)	4A04	980					22
PHILIP LAKE	4A13	980					30
AIKEN LAKE	4A30P	1040	01-Jan	N/A	128E	94	23
TUTIZZI LAKE	4A06	1070					22
TSAYDAYCHI LAKE	4A12	1160					29
KAZA LAKE	1A12	1190	03-Jan	84	200	105	27
PULPIT LAKE	4A09	1310	04-Jan	106	250	114	24
PULPIT LAKE	4A09P	1310	01-Jan	N/A	250	103	21
FREDRICKSON LAKE	4A10	1310					23
PINE PASS	4A02	1399	02-Jan	170	530	85	28
PINE PASS	4A02P	1400	01-Jan	N/A	475	87	22
TRYGVE LAKE	4A11	1400					24
SIKANNI LAKE	4C01	1400	04-Jan	65	142	98	28
MORFEE MOUNTAIN	4A16	1450	02-Jan	150	446	99	16
LADY LAURIER LAKE	4A07	1460	04-Jan	92	230	85	28
MOUNT SHEBA	4A18	1490	05-Jan	146	491	123	23
GERMANSEN (UPPER)	4A05	1500	03-Jan	76	194	100	29
MOUNT STEARNS	4A21	1500	04-Jan	53	100	125	23
JOHANSON LAKE	4B02	1540					29
MONKMAN CREEK	4A20	1550	05-Jan	103	323	79	17
WARE (UPPER)	4A03	1570	04-Jan	77	189	130	23
KWADACHA RIVER	4A27P	1620	01-Jan	N/A	161	94	26

E

LIARD Drainage Basin

Snow Course Name and Number	Elev. metres	Date of Survey	Jan 2013			Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal		
FORT NELSON A	4C05	380	31-Dec	50	91	154	44
DEASE LAKE	4C03	820	02-Jan	48	79	111	44
SIKANNI LAKE	4C01	1400	04-Jan	65	142	98	28

SKEENA/NASS Drainage Basin

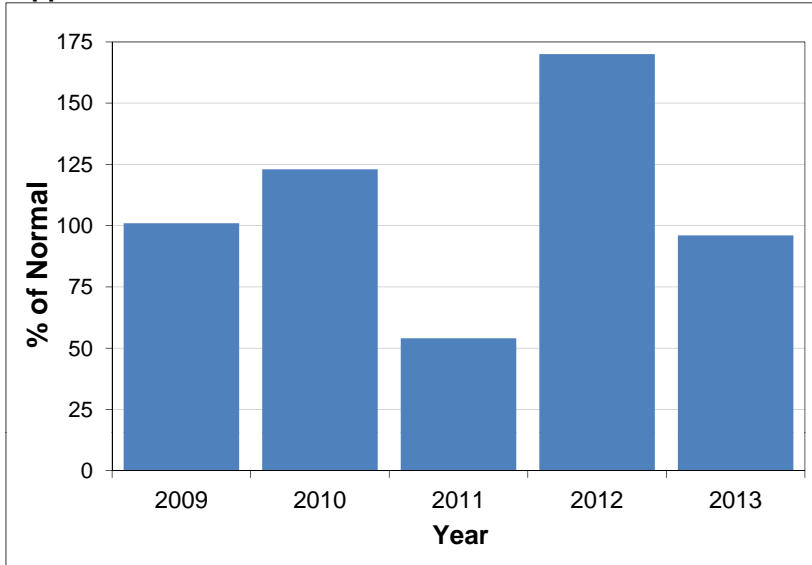
Snow Course Name and Number	Elev. metres	Date of Survey	Jan 2013			Yrs of Record	
			Snow Depth cm	Water Equiv. mm	% of Normal		
TERRACE A	4B13A	180	27-Dec	26	31	42	28
GRANDUC MINE	4B12P	790	01-Jan	N/A	488	56	7
CEDAR-KITEEN	4B18P	885	01-Jan	76	199	69	12
KAZA LAKE	1A12	1190	03-Jan	84	200	105	27
LU LAKE	4B15P	1310	01-Jan	56	137	98	15
TSAL CREEK	4B17P	1360	01-Jan	131	504	84	14
TRYGVE LAKE	4A11	1400					24
HUDSON BAY MTN.	4B03A	1480	31-Dec	87	239	84	37
SHEDIN CREEK	4B16P	1480	01-Jan	102	307	73	15
JOHANSON LAKE	4B02	1540					29

STIKINE/TAKU Drainage Basin

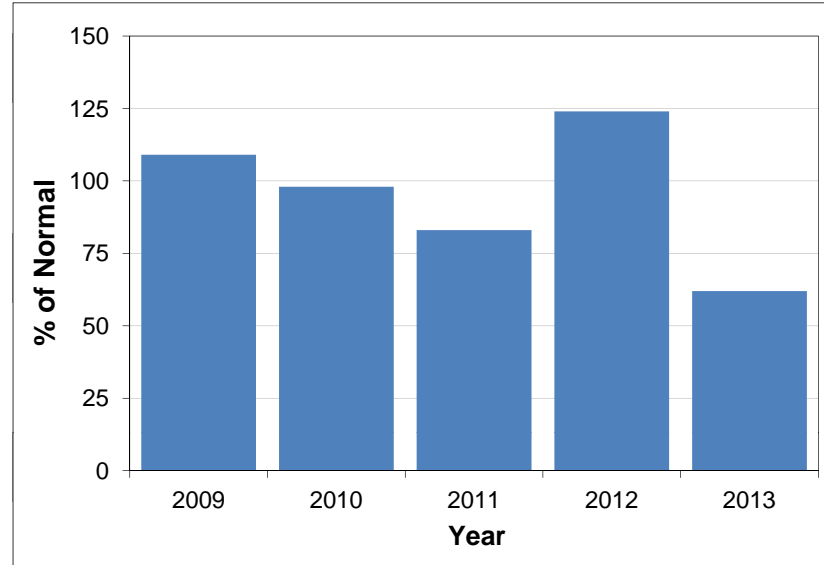
Snow Course Name and Number	Elev. metres	Date of Survey	Jan 2013			Yrs of Record
			Snow Depth cm	Water Equiv. mm	% of Normal	
DEASE LAKE	4C03	820				44
A - SAMPLING PROBLEMS WERE ENCOUNTERED B - EARLY OR LATE SAMPLING C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED E - ESTIMATED BASED ON AREAL AVERAGE * - PERIOD OF RECORD AVERAGE N/A - NOT AVAILABLE NOTE: 1971-2000 NORMALS BEING USED						

Snow Basin Index Graphs - January 1, 2013

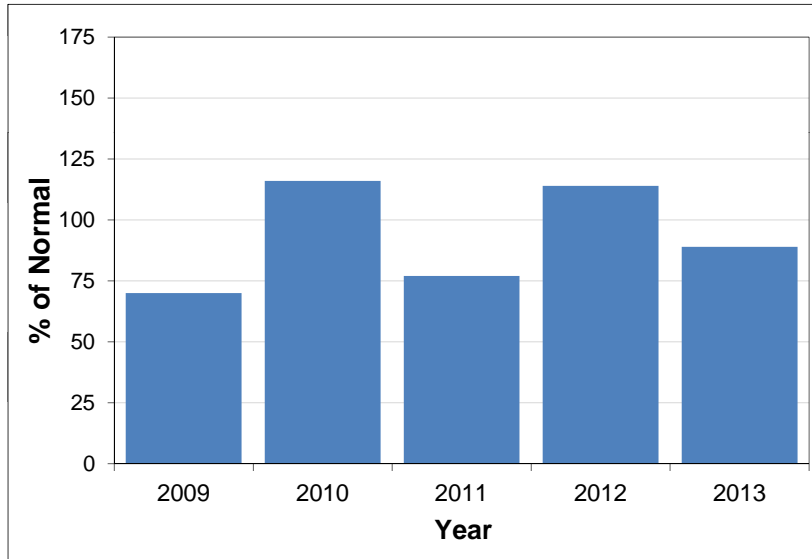
Upper Fraser



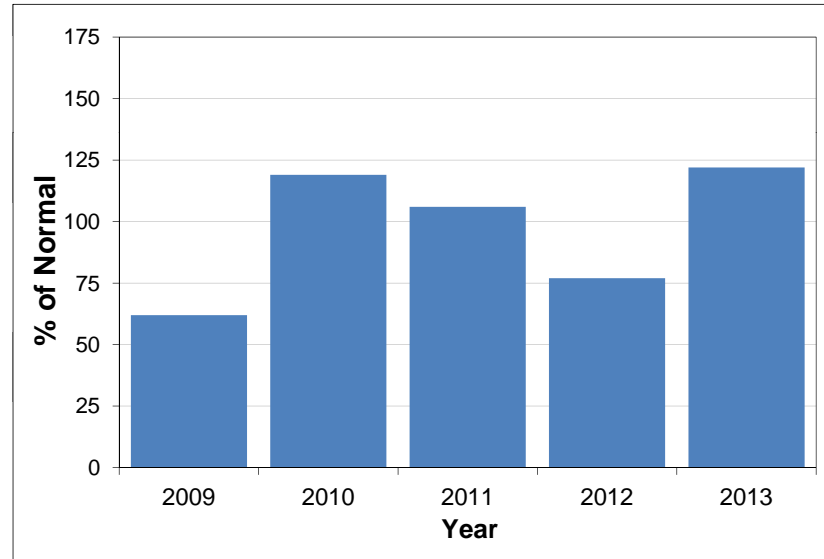
Nechako



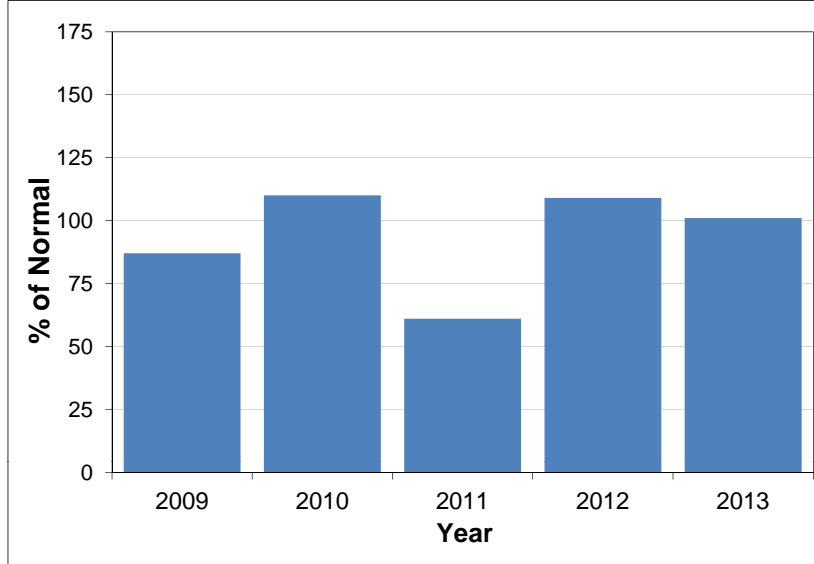
Middle Fraser



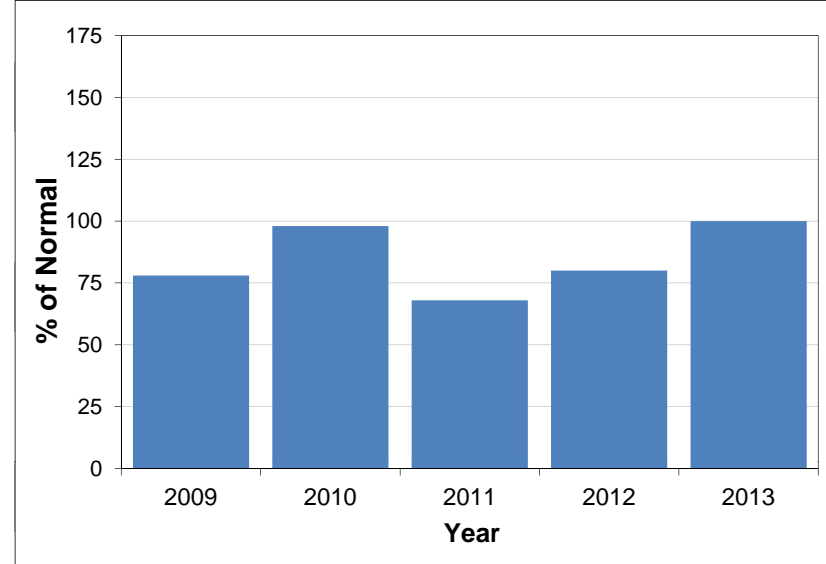
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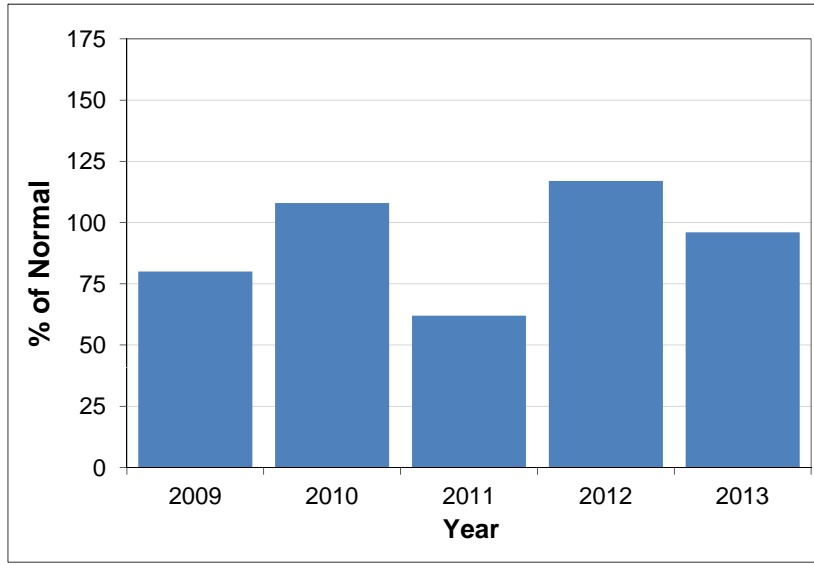
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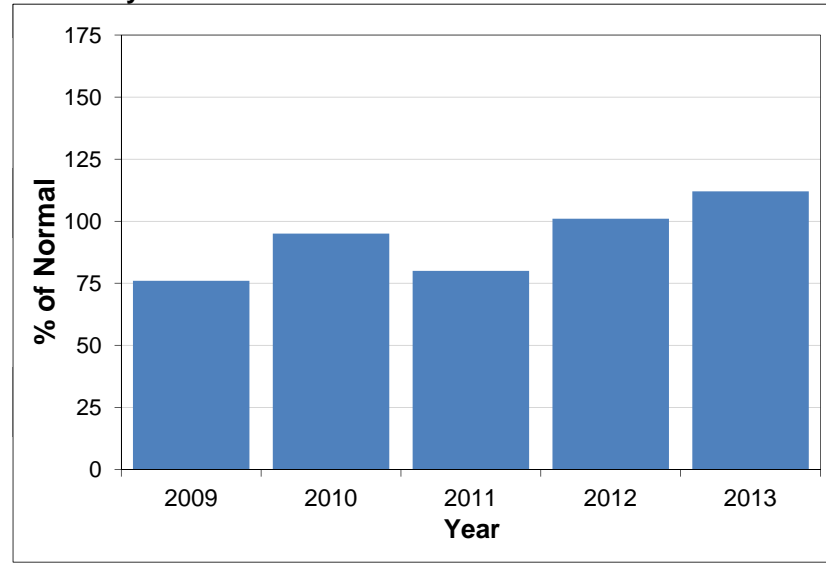
South Thompson



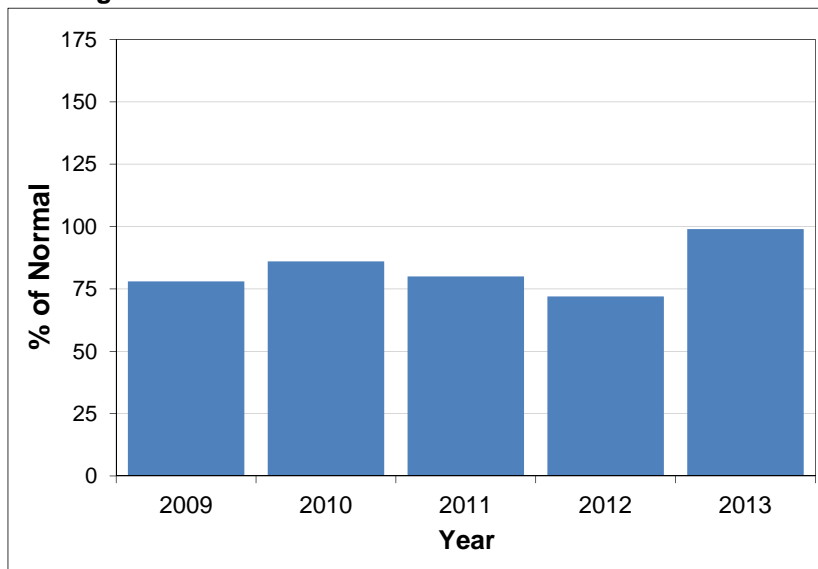
Columbia



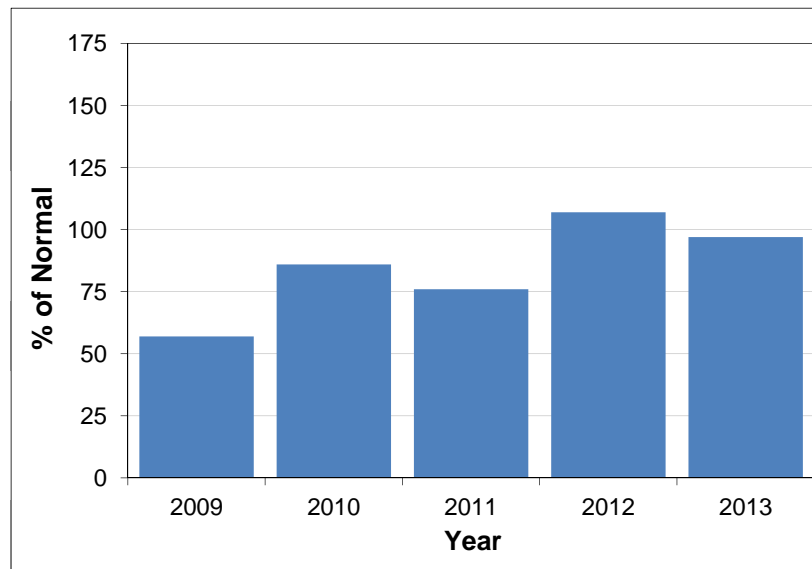
Kootenay



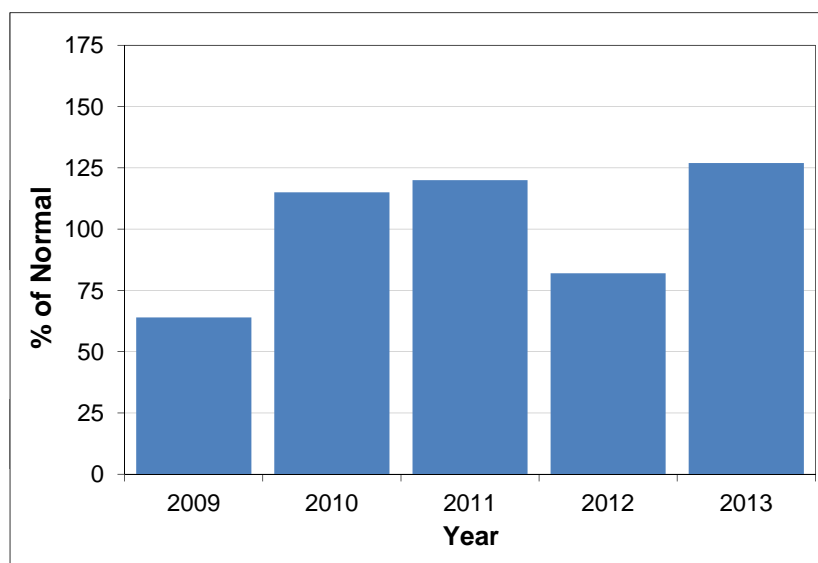
Okanagan-Kettle



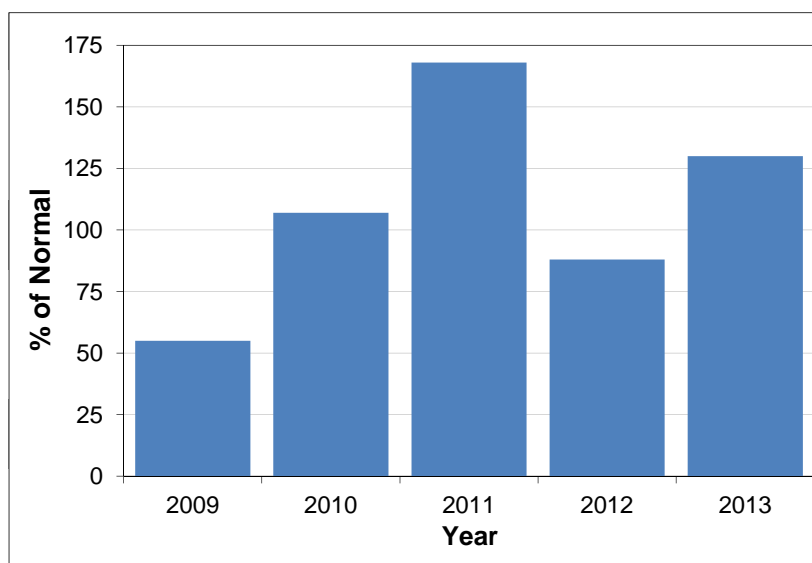
Similkameen



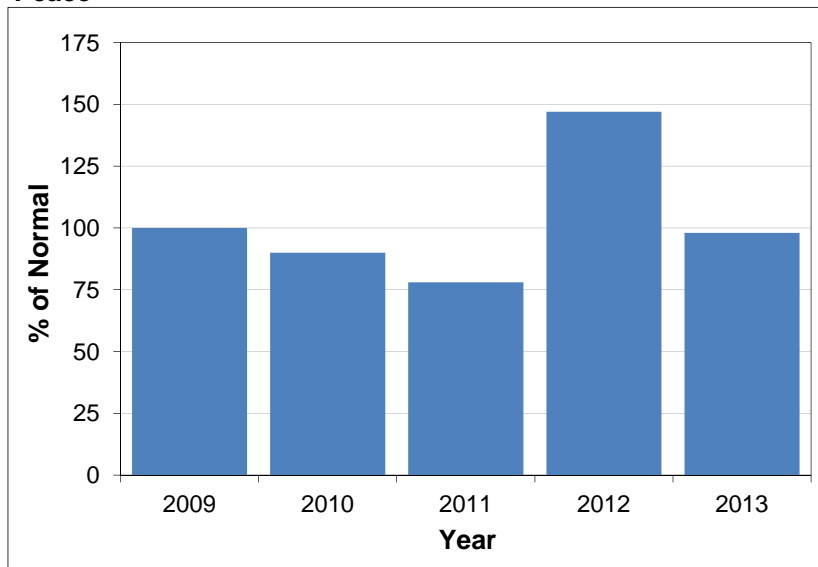
South Coast



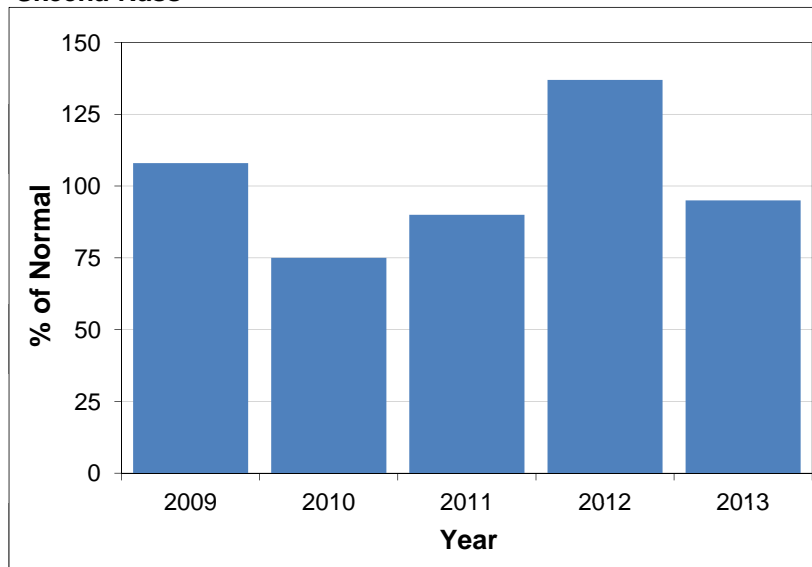
Vancouver Island



Peace



Skeena-Nass



Snow Survey and Water Supply Bulletin – February 1st, 2013

The February 1st snow survey is now complete. Data from 107 snow courses and 53 snow pillows around the province and out-of-province sampling locations, and climate data from Environment Canada, have been used to form the basis for the following reports¹.

Weather

Stable weather conditions prevailed across British Columbia through January. High pressure ridging in the middle of the month created prolonged dry weather and inverted temperatures, with above freezing temperatures above snowline elevations. Conditions were much drier than normal across the province throughout the month. Temperatures were +1 - 3 °C above normal through most areas of the province, with some low elevation regions in south-west BC having below normal temperatures.

Snowpack

Due to drier conditions, most regions saw below normal snow accumulation and a decline in snow basin indices through the month of January. Snow basin indices ranged from a low of 78% of normal, to a high of 116%. Drier conditions are prevalent through west-central and north-west British Columbia, including the Nechako, Middle Fraser (Chilcotin), Central Coast and Skeena-Nass basins. Snow packs are above normal (>110%) in the Okanagan-Kettle and South Coast regions, and near normal or slightly below normal (85-110%) through the rest of the province.

BC Snow Basin Indices – February 1, 2013

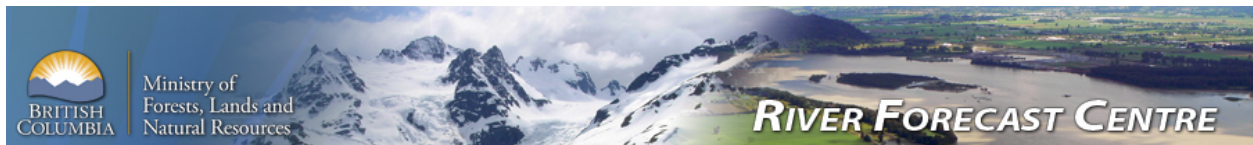
Basin	% of Normal	Basin	% of Normal
Upper Fraser	86%	Kootenay	97%
Nechako	78%	Okanagan-Kettle	116%
Middle Fraser	83%	Similkameen	89%
Lower Fraser	103%	South Coast	113%
North Thompson	94%	Vancouver Island	107%
South Thompson	109%	Peace	90%
Columbia	93%	Skeena-Nass	84%

Outlook

This season has favored neutral El Niño Southern Oscillation (ENSO) conditions, with near normal sea surface temperatures in the equatorial Pacific Ocean. Current forecasts from the Climate Prediction Centre with the U.S. National Weather Service (NOAA) favour neutral conditions into the spring of 2013. This suggests that current ocean conditions favour normal seasonal weather conditions. Current 3-month seasonal forecasts (February through April) from Environment Canada are fairly neutral, with similar likelihoods of above-normal, below-normal or normal precipitation and temperature. A slight increased likelihood of below normal temperatures is forecast for south-west BC. Current short-term weather forecasts indicate a period of high pressure across most of the province to the middle of February, and limited snowfall is expected.

By this date, generally about two-thirds of the annual BC snowpack has accumulated. While there is still two and a half months left in the snow accumulation season, given current short-term and seasonal outlooks, the current snowpack is not expected to change significantly over the remainder of 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.



Snow Survey and Water Supply Bulletin – February 1st, 2013

At this point there are no strong indications of a high likelihood of extreme wet or dry seasonal weather through the rest of the accumulation season. Unless the region experiences some late-season Pacific storm cycles, dry conditions are likely to persist in the Nechako, Central Coast, Skeena-Nass, and Middle Fraser. Normal conditions are expected to persist in other regions. While possible, heavy snow pack accumulation over the remainder of the season is unlikely.

In general snow packs across the province are below levels that were observed last year (see snow basin graphs below). Below normal seasonal flows during freshet and into summer are likely in the west-central region of the province (Nechako, Middle Fraser, Central Coast, Skeena-Nass). Above normal seasonal flow, and the potential for elevated seasonal flood risk, is possible in the Okanagan basin. Above normal seasonal flow is also expected in the Lower Fraser, South Coast and Vancouver Island, however these regions tend to have limited flood potential in the spring, and current snow packs are not expected to have a significant impact on seasonal flood risk. Normal seasonal flow and seasonal flood risk is likely through the rest of the province.

Snow data reporting has been adjusted for this snow bulletin (attached) and this format will be used through the remainder of this snow season. The River Forecast Centre is currently estimating values for 6 snow pillows, and the February 1st, 2013 estimates can be found in Table 1.

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

Produced by: BC River Forecast Centre
February 8, 2013

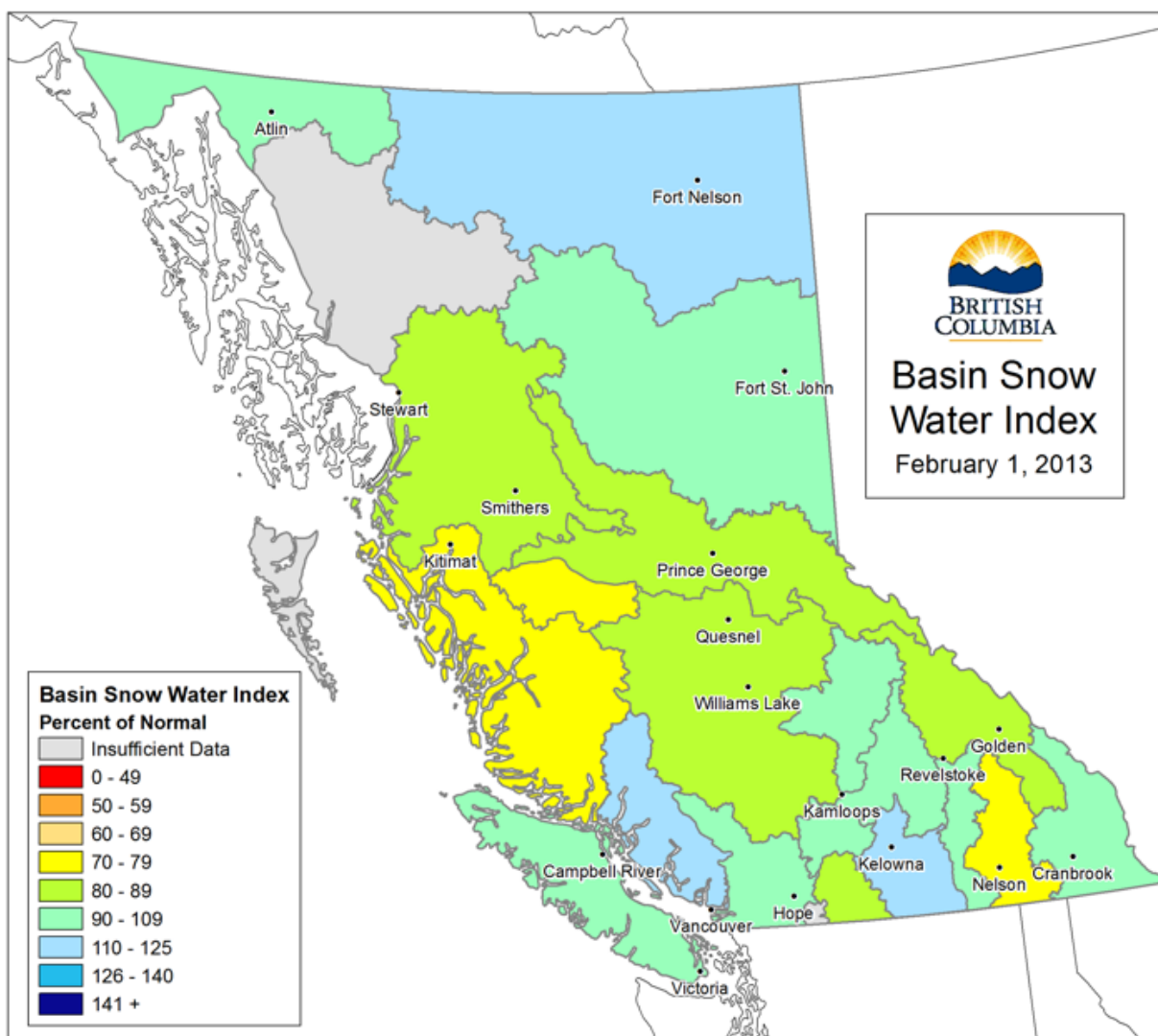


Ministry of
Forests, Lands and
Natural Resources

RIVER FORECAST CENTRE

Snow Survey and Water Supply Bulletin – February 1st, 2013

Map 1: Basin Snow Water Index-February 1st, 2013



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, 2013

Table 1: February 1st Automated Snow Pillow Estimates

SNOW PILLOW ID	SNOW PILLOW NAME	OBSERVATION DATE	ESTIMATED Snow Water Equivalent (mm)
1A01P	YELLOWHEAD LAKE	01-Feb	284
1B08P	MOUNT PONDOSY	01-Feb	364
1C12P	GREEN MOUNTAIN	01-Feb	439
1E02P	MOUNT COOK	01-Feb	835
1E08P	AZURE RIVER	01-Feb	808
2G03P	BLACKWALL PEAK	01-Feb	527

Reporting Period: Feb 01, 2013

Basin EK EAST KOOTENAY

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
Snow Course Name and Number																
FERNIE EAST	2C07											(72)	(77)			
		1213	Feb-01	70	199	234	85	52	92	207	210	467	51	28	26	61
SULLIVAN MINE	2C04											(97)	(77)			
		1580	Jan-31	76	238	217	110	62	79	198	192	397	46	31	26	68
MOUNT JOFFRE	2C16											(72)	(01)			
		1763	Feb-04	91	289	265	109	36	85	234	278	439	96	32	26	43
MOYIE MOUNTAIN AUTOMATED SNOW PILLOW	2C10P											(99)	(12)			
		1840	Feb-01	77	256	267	96	78	87	21	325	499	21	33		34
MORRISSEY RIDGE AUTOMATED SNOW PILLOW	2C09Q											(91)	(01)			
		1860	Feb-01		428	495	86	450.5	164	458.	521.3	886	172			30
THUNDER CREEK	2C17											(72)	(77)			
		2062	Feb-04			193			58	0	195	335	69		25	42
FLOE LAKE	2C14											(91)	(01)			
		2087	Feb-04	178	606	548	111	112	123	0	491	811	239	34	31	44
FLOE LAKE AUTOMATED SNOW PILLOW	2C14P											(12)	(94)			
		2110	Feb-01		532	510	104	103	147	533.	457.5	3533	-999			21
MOUNT ASSINIBOINE	2C15											(91)	(01)			
		2230	Feb-04			375			85	0	310	592	140		28	44

Basin KE KETTLE

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	(mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
FARRON	2B02A	1229	Jan-29	74	190	232	82	50	77	151	208	(83)	(77)	26	27	41
MONASHEE PASS	2E01	1387	Feb-01	87	208	245	85	104	80	0	221	(97)	(80)	24	27	54
BIG WHITE MOUNTAIN	2E03	1672	Feb-01	124	334	339	99		109	0	276	(74)	(01)	27	28	46

Basin LC LOWER COLUMBIA

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec	
Snow Course Name and Number																
FARRON	2B02A										(83)	(77)				
		1229	Jan-29	74	190	232	82	50	77	151	208	346	63	26	27	41
MONASHEE PASS	2E01											(97)	(80)			
		1387	Feb-01	87	208	245	85	104	80	0	221	364	122	24	27	54
WHATSHAN (UPPER)	2B05											(97)	(77)			
		1476	Feb-01	136	418	479	87		139	0	483	759	249	31	30	45
BARNES CREEK AUTOMATED SNOW PILLOW	2B06P											(97)	(94)			
		1595	Feb-01		354	378	94	121	100	326.	352.5	581	-999			21
BARNES CREEK	2B06											(97)	(80)			
		1598	Feb-01	128	339	365	93	126	105	0	341	612	196	26	29	45

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
KOCH CREEK 2B07	1813	Feb-01			501		136	0	433	(97)	(77)		32	53
ST. LEON CREEK 2B08P	1822	Feb-01		693	755	92	201	186	728.	(99)	(94)			20
ST. LEON CREEK 2B08	1828	Feb-01	254	809	878	92	238	265	0	(91)	(01)	32	34	46
RECORD MOUNTAIN 2B09	1906	Jan-30	188	640	482	133	65	162	0	(99)	(77)	34	31	35
EAST CREEK 2D08P	2004	Feb-01		534	654	82	74	184	671.	(91)	(90)			33

Basin LF LOWER FRASER

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
SUMALLO RIVER WEST 3D01C	801	Feb-07			242			304	147	(97)	(92)		33	22
DOG MOUNTAIN 3A10	1007	Jan-26	265	1071	731	147	281	251	696	(08)	(05)	40	38	30
CALLAGHAN CREEK 3A20	1009	Jan-30	167	552	577	96	207	638	670	(07)	(81)	33	33	31
WAHLEACH LAKE 1D09P	1408	Feb-01		658	780	84	199	260	594.	(97)	(05)			21
BARKERVILLE 1A03P	1483	Feb-01	92	210	253	83	48	85	-5	(85)	(82)	23		37
GREAT BEAR 1D15P	1664	Jan-31		180	1143	16	0	335	180	(03)	(09)			23

Basin LI LIARD

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
FORT NELSON AIRPORT 4C05	368	Jan-31	53	113	80	141	22	21	46	(82)	(01)	21	18	47
DEASE LAKE 4C03	805	Jan-31	74	148	106	140	69	35	68	(92)	(69)	20	19	48
SIKANNI LAKE 4C01	1390	Jan-31	81	171	185	92	29	40	234	(92)	(80)	21	23	46

Basin MF MIDDLE FRASER

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
PUNTZI MOUNTAIN 1C22	939	Jan-29	29	44	58	76	24	18	16	(96)	(83)	15	19	41

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	(mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
NAZKO 1C08											(75)	(81)			
	1029	Feb-04	23	54	75	72	18	20	47	88	132	6	23	21	35
BIG CREEK 1C21											(75)	(81)			
	1130	Jan-31	25	36	52	69	21	16	14	36	94	0	14	19	40
GRANITE MOUNTAIN 1C33A											(07)	(06)			
	1175	Feb-01	62	145	145	100	43	45	136	156	175	97	23	23	8
BRALORNE 1C14											(74)	(77)			
	1382	Feb-02			138			48	102	139	338	0		24	41
SHOVELNOSE MOUNTAIN 1C29											(99)	(05)			
	1456	Jan-30	67	200	202	99			253	167	307	48	30	28	31
LAC LE JEUNE (UPPER) 1C25											(97)	(81)			
	1471	Jan-28	54	143	105	136	31	30	92	89	177	13	26	22	41
BOSS MOUNTAIN MINE AUTOMATED SNOW PILLOW 1C20P											(96)	(12)			
	1477	Feb-01	138	351	440	80	81	120	2	353	581	2	25		20
BARKERVILLE AUTOMATED SNOW PILLOW 1A03P											(85)	(82)			
	1483	Feb-01	92	210	253	83	48	85	-5	225	352	-999	23		37
MOUNT TIMOTHY 1C17											(99)	(03)			
	1632	Jan-26	80	221	232	95		77	222	228	384	92	28	26	52
YANKS PEAK EAST AUTOMATED SNOW PILLOW 1C41P											(99)	(12)			
	1683	Feb-01	180	538	595	90	128	173	165	534	765	165	30		17
MCGILLIVRAY PASS 1C05											(99)	(79)			
	1715	Feb-02	101	296	403	73		143	517	354	645	150	29	28	61
GREEN MOUNTAIN AUTOMATED SNOW PILLOW 1C12P											(07)	(09)			
	1766	Jan-31		430	605	71	73	165	752	554	985	232.			20
DOWNTOWN LAKE (UPPER) 1C38											(99)	(09)			
	1884	Feb-02			610			185	710	572	980	250		34	19
MISSION RIDGE AUTOMATED SNOW PILLOW 1C18P											(91)	(77)			
	1903	Feb-01		322	424	76	93	152	486	338.3	794	185			37
TYAUGHTON CREEK (NORTH) 1C40											(99)	(09)			
	1946	Feb-02			265			90	378	300	654	128		24	18
BRALORNE (UPPER) 1C37											(99)	(09)			
	1980	Feb-02			465			97	594	432	724	178		30	19

Basin NC NORTH COAST

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	(mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
TAHTSA LAKE 1B02											(12)	(56)			
	1319	Jan-30	179	694	821	85			1442	833	1442	508	39	33	60
TAHTSA LAKE AUTOMATED SNOW PILLOW 1B02P											(07)	(96)			
	1319	Feb-01		563	903	62	110	200	1041	917.4	1536	-999			21

Basin NE NECHAKO

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
SKINS LAKE 1B05	877	Jan-30	41	88	94	94	26 29	60	108	(97) 224	(81) 35	21	22	46
TAHTSA LAKE 1B02	1319	Jan-30	179	694	821	85		1442	833	1442	(12) (56) 508	39	33	60
TAHTSA LAKE AUTOMATED SNOW PILLOW 1B02P	1319	Feb-01		563	903	62	110 200	1041	917.4	(07) 1536	(96) -999			21
MOUNT PONDOSY AUTOMATED SNOW PILLOW 1B08P	1413	Feb-01		68	578	12	-205 127	879	460.2	(12) 891	(98) -999			21
KIDPRICE LAKE 4B01	1415	Jan-31	128	490	638	77		1220	681	(12) 1220	(03) 420	38	32	58
MOUNT WELLS 1B01	1489	Jan-31	92	272	385	71		514	381	(07) 606	(03) 188	30	31	28
MOUNT WELLS AUTOMATED SNOW PILLOW 1B01P	1489	Feb-01		259	426	61	66 98	635	354	(06) 2505	(02) -999			21

Basin NT NORTH THOMPSON

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
BLUE RIVER 1E01B	673	Jan-28	78	185	250	74	61 90	238	233	(07) 380	(88) 98	24	25	29
KNOUFF LAKE 1E05	1189	Jan-31	55	132	114	116		100	96	(56) 229	(77) 38	24	23	56
BOSS MOUNTAIN MINE AUTOMATED SNOW PILLOW 1C20P	1477	Feb-01	138	351	440	80	81 120	2	353	(96) 581	(12) 2	25		20
AZURE AUTOMATED SNOW PILLOW 1E08P	1625	Feb-01	210	< -47	835	-6	-694 215	1029	673	(12) 1029	(01) 461	-2		17
KOSTAL LAKE AUTOMATED SNOW PILLOW 1E10P	1760	Feb-01	164	538	620	87	128 167	691	528	(10) 1275	(10) -1	33		29
ADAMS RIVER 1E07	1769	Jan-27	141	471	452	104	147	514	411	(99) 654	(80) 285	33	30	33

Basin OK OKANAGAN

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
ABERDEEN LAKE 1F01A	1262	Jan-31	51	116	119	97		89	0	(78) 193	(81) 48	23	23	57
MCCULLOCH 2F03	1266	Jan-31	70	153	125	122	38	116	136	(46) 196	(40) 63	22	22	74
SUMMERLAND RESERVOIR 2F02	1304	Jan-29	68	159	174	91	62 60	148	181	(72) 307	(03) 65	23	25	50
POSTILL LAKE 2F07	1358	Feb-01	60	134	147	91		144	133	(97) 243	(88) 73	22	23	64

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
Snow Course Name and Number																
OYAMA LAKE	2F19											(69)	(81)			
		1365	Feb-01	50	100	129	78			93	88	193	31	20	24	45
VASEUX CREEK	2F20											(72)	(05)			
		1403	Jan-31	51	98	100	98	40	90	0	208	44	19	20	26	
TROUT CREEK	2F01											(72)	(81)			
		1428	Jan-31	62	201	141	143		206	167	292	33	32	24	73	
BRENDA MINES	2F18P											(97)	(07)			
AUTOMATED SNOW PILLOW		1453	Feb-01		211	264	80	63	78	216	243	369	****			21
GREYBACK RESERVOIR	2F08											(72)	(81)			
		1548	Jan-29	80	191	160	119	45	156	0	269	60	24	24	39	
ISINTOK LAKE	2F11											(72)	(81)			
		1651	Jan-29	64	106	133	80	24	47	109	103	307	26	17	24	47
WHITEROCKS MOUNTAIN	2F09											(74)	(77)			
		1789	Jan-26	122	429	399	108	109	296	359	693	135	35	31	42	
MISSION CREEK	2F05P											(99)	(12)			
AUTOMATED SNOW PILLOW		1794	Feb-01	122	371	312	119	131	97	-7	230	499	-7	30		44
MOUNT KOBAL	2F12				>							(74)	(77)			
		1817	Jan-27	117	400	201	199	57	131	164	373	43	34	26	47	
SILVER STAR MOUNTAIN	2F10											(69)	(77)			
		1834	Feb-02	174	626	507	123	140	396	527	721	229	36	33	55	

Basin PC PEACE

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
FORT ST. JOHN AIRPORT	4A25	692	Feb-05	61	121	84	144	4	27	60	71	(97)	(06)	20	20	38
PACIFIC LAKE	1A11	756	Jan-28	163	453	451	100	75	141	649	440	(91)	(03)	28	28	46
WARE (LOWER)	4A04	969	Jan-31	67	137	135	101	19	35	160	110	(92)	(69)	20	21	49
PHILIP LAKE	4A13	1013	Jan-30	83	204	202	101	-13	52	272	197	(07)	(01)	25	23	45
TUTIZZI LAKE	4A06	1043	Jan-30	80	175	186	94	18	51	277	183	(92)	(84)	22	22	44
AIKEN LAKE AUTOMATED SNOW PILLOW	4A30P	1061	Feb-01		152	197	77	23	59	256	189	(92)	(93)			28
TSAYDAYCHI LAKE	4A12	1173	Jan-30	92	232	276	84	7	61	430	294	(92)	(80)	25	25	45
KAZA LAKE	1A12	1247	Jan-30	94	220	239	92	20	49	299	243	(92)	(95)	23	24	44
FREDRICKSON LAKE	4A10	1323	Jan-30	68	135	179	75		49	197	142	(92)	(84)	20	22	44

Snow Course Name and Number		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
PULPIT LAKE	4A09											(92)	(80)			
		1331	Jan-31	126	328	298	110	78	78	375	282	530	190	26	25	46
PULPIT LAKE	4A09P											(09)	(97)			
AUTOMATED SNOW PILLOW		1331	Feb-01		334	310	108	84	68	373	313	491.	-999			23
PINE PASS	4A02P											(12)	(92)			
AUTOMATED SNOW PILLOW		1386	Feb-01		599	745	80	124	202	1257	623	1257	-999			25
SIKANNI LAKE	4C01											(92)	(80)			
		1390	Jan-31	81	171	185	92	29	40	234	158	325	81	21	23	46
TRYGVE LAKE	4A11											(92)	(84)			
		1409	Jan-30	91	242	258	94		63	362	215	434	183	27	25	44
MORFEE MOUNTAIN	4A16											(92)	(77)			
		1427	Feb-01	162	606	599	101	160	149	733	570	952	323	37	33	46
PINE PASS	4A02											(91)	(80)			
		1439	Feb-01	217	755	809	93	185	189	0	779	1194	411	35	34	45
LADY LAURIER LAKE	4A07											(12)	(77)			
		1446	Feb-01	110	290	357	81	60	87	679	357	679	226	26	28	45
JOHANSON LAKE	4B02											(92)	(80)			
		1480	Jan-30	80	184	208	88	39	48	272	183	355	115	23	24	44
MOUNT SHEBA	4A18											(07)	(03)			
		1480	Jan-28	170	567	570	99	76	170	872	560	932	299	33	31	45
GERMANSEN (UPPER)	4A05											(76)	(80)			
		1489	Jan-30	88	216	239	90	22	45	325	263	371	140	25	25	46
MOUNT STEARNS	4A21											(96)	(06)			
		1514	Jan-31	58	115	101	114	15	21	98	105	196	40	20	20	40
WARE (UPPER)	4A03											(96)	(84)			
		1563	Jan-31	84	204	182	112	15	37	184	160	289	108	24	23	50
MONKMAN CREEK	4A20											(76)	(03)			
		1566	Jan-28	121	366	409	89	43	0	0	412	775	163	30	29	38

Basin SC SOUTH COAST

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec	
Snow Course Name and Number																
DOG MOUNTAIN	3A10										(08)	(05)				
		1007	Jan-26	265	1071	731	147	281	251	696	754	1243	206	40	38	30
CALLAGHAN CREEK	3A20										(07)	(81)				
		1009	Jan-30	167	552	577	96		207	638	670	1040	50	33	33	31
GROUSE MOUNTAIN	3A01										(99)	(81)				
		1126	Jan-30	283	1142	762	150	342	282	764	870	1530	50	40	40	63
ORCHID LAKE	3A19										(07)	(81)				
		1178	Feb-02	318	1289	1141	113	469	391	1341	1246	1855	408	41	38	35
SQUAMISH (UPPER) AUTOMATED SNOW PILLOW	3A25P										(99)	(90)				
		1387	Feb-01	248	989	1025	96	196	295	2	1367	1513	-999	40		24

Basin SI SIMILKAMEEN

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
HAMILTON HILL 2G06										(71)	(05)			
	1477	Feb-01	69	185	258	72	78	282	143	411	91	27	27	52
MISSEZULA MOUNTAIN 2G05										(74)	(03)			
	1602	Jan-31	60	130	174	75		152	143	284	60	22	25	52
ISINTOK LAKE 2F11										(72)	(81)			
	1651	Jan-29	64	106	133	80	24	47	109	103	307	26	17	47
BLACKWALL PEAK AUTOMATED SNOW PILLOW 2G03P										(91)	(77)			
	1934	Jan-31	157	476	595	80	181	198	736	538	1076	151	30	46
LOST HORSE MOUNTAIN 2G04										(72)	(03)			
	1988	Jan-31	86	212	165	128	45	154	144	335	70	25	24	53

Basin SK SKAGIT

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
SUMALLO RIVER WEST 3D01C										(97)	(92)			
	801	Feb-07			242			304	147	368	0		33	22

Basin SN SKEENA/NASS

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
BEAR PASS 4B11A										(92)	(01)			
	437	Jan-26	101	315	505	62		710	417	821	192	31	30	29
NINGUNSAW PASS 4B10										(92)	(84)			
	647	Feb-01	102	242	319	76		462	282	603	171	24	28	36
TACHEK CREEK 4B06										(07)	(03)			
	1133	Jan-28	65	142	160	89		198	172	298	99	22	21	17
KAZA LAKE 1A12										(92)	(95)			
	1247	Jan-30	94	220	239	92	20	49	299	243	440	125	23	44
TRYGVE LAKE 4A11										(92)	(84)			
	1409	Jan-30	91	242	258	94	63	362	215	434	183	27	25	44
KIDPRICE LAKE 4B01										(12)	(03)			
	1415	Jan-31	128	490	638	77		1220	681	1220	420	38	32	58
HUDSON BAY MTN. 4B03A										(76)	(80)			
	1452	Jan-31	104	299	379	79	60	96	582	359	665	221	29	42
JOHANSON LAKE 4B02										(92)	(80)			
	1480	Jan-30	80	184	208	88	39	48	272	183	355	115	23	44

Basin ST SOUTH THOMPSON

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
ANGLEMONT 1F02										(75)	(03)			
	1168	Jan-29	84	224	274	82	74	224	302	483	130	27	28	54

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	(mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
ABERDEEN LAKE 1F01A											(78)	(81)			
	1262	Jan-31	51	116	119	97			89	0	193	48	23	23	57
MONASHEE PASS 2E01											(97)	(80)			
	1387	Feb-01	87	208	245	85	104	80	0	221	364	122	24	27	54
KIRBYVILLE LAKE 2A25											(96)	(77)			
	1739	Jan-29	244	832	810	103	123	190	0	694	1160	381	34	33	40
SILVER STAR MOUNTAIN 2F10											(69)	(77)			
	1834	Feb-02	174	626	507	123		140	396	527	721	229	36	33	55
PARK MOUNTAIN AUTOMATED SNOW PILLOW 1F03P											(97)	(12)			
	1857	Feb-01	197	605	602	100	175	175	68	564	868	68	31		29
ENDERBY 1F04											(99)	(64)			
	1948	Feb-06	234	817	691	118		196	0	756	932	348	35	32	47

Basin TA STIKINE/TAKU

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	(mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
NINGUNSAW PASS 4B10											(92)	(84)			
	647	Feb-01	102	242	319	76			462	282	603	171	24	28	36
DEASE LAKE 4C03											(92)	(69)			
	805	Jan-31	74	148	106	140	69	35	68	97	202	36	20	19	48
ISKUT 4D02											(92)	(00)			
	931	Feb-01	46	76	87	87		37	74	101	162	30	17	20	36

Basin UC UPPER COLUMBIA

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	(mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
CANOE RIVER 2A01A											(82)	(05)			
	866	Jan-30	36	47	90	52		40	124	108	140	17	13	21	37
DOWNIE SLIDE (LOWER) 2A27											(97)	(79)			
	964	Jan-29	146	448	509	88	160	189	0	470	740	256	31	29	36
GLACIER 2A02											(67)	(42)			
	1249	Jan-27	133	428	494	87	144	166	643	473	828	241	32	30	73
FIELD 2A03A											(97)	(40)			
	1310	Feb-04	42	76	133	57		48	121	130	233	46	18	22	74
VERMONT CREEK 2A19											(67)	(77)			
	1533	Feb-04			320			90	377	288	574	102		28	46
DOWNIE SLIDE (UPPER) 2A29											(96)	(79)			
	1628	Jan-29	256	910	933	98	118	243	0	750	1422	466	36	35	34
KICKING HORSE 2A07											(67)	(01)			
	1648	Feb-04	86	178	248	72	21	73	225	232	384	102	21	25	67
KIRBYVILLE LAKE 2A25											(96)	(77)			
	1739	Jan-29	244	832	810	103	123	190	0	694	1160	381	34	33	40

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
MOUNT REVELSTOKE AUTOMATED SNOW PILLOW 2A06P	1770	Feb-01		768	850	90	200	251	629	560	(99) (01)			21
KEYSTONE CREEK 2A18	1839	Jan-29	160	520	548	95		148	0	492	(67) (77)			44
FIDELITY MOUNTAIN 2A17	1852	Jan-27	214	687	867	79	149	250	1104	782	(91) (01)			51
GOLDSTREAM 2A16	1914	Jan-29	217	721	793	91	136	195	0	721	(96) (77)			45
BEAVERFOOT 2A11	1924	Feb-04	59	170	154	110	48	34	0	148	(74) (01)			62
MOLSON CREEK AUTOMATED SNOW PILLOW 2A21P	1930	Feb-01		686	760	90	146	202	1046	562.5	(91) (04)			33
BUSH RIVER 2A23	1982	Jan-29			598			156	0	486	(67) (93)			44
MOUNT ABBOT 2A14	2031	Jan-26	226	785	842	93	166	227	1142	740	(96) (01)			53
SUNBEAM LAKE 2A22	2066	Jan-29			642			167	0	580	(67) (01)			44

Basin UF UPPER FRASER

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
PRINCE GEORGE AIRPORT 1A10	684	Jan-31	57	124	114	109	38	44	96	112	(74) (05)			52
PACIFIC LAKE 1A11	756	Jan-28	163	453	451	100	75	141	649	440	(91) (03)			46
BURNS LAKE 1A16	820	Jan-30	49	94	120	78	10	43	120	98	(97) (81)			44
CANOE RIVER 2A01A	866	Jan-30	36	47	90	52		40	124	108	(82) (05)			37
PHILIP LAKE 4A13	1013	Jan-30	83	204	202	101	-13	52	272	197	(07) (01)			45
HEDRICK LAKE 1A14	1113	Jan-28	173	539	500	108	131	165	753	501	(91) (03)			45
KAZA LAKE 1A12	1247	Jan-30	94	220	239	92	20	49	299	243	(92) (95)			44
MOUNT SHEBA 4A18	1480	Jan-28	170	567	570	99	76	170	872	560	(07) (03)			45
BARKERVILLE AUTOMATED SNOW PILLOW 1A03P	1483	Feb-01	92	210	253	83	48	85	-5	225	(85) (82)			37
KNUDSEN LAKE 1A15	1598	Jan-28	157	455	584	78	104	174	840	519	(91) (03)			43

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
REVOLUTION CREEK AUTOMATED SNOW PILLOW 1A17P	1676	Feb-01	212	553	574	96	163	159	-2	502	(91) (12)	26		29
LONGWORTH (UPPER) 1A05	1693	Jan-28	189	592	556	106		206	782	562	(90) (03)	31	31	42
YELLOWHEAD AUTOMATED SNOW PILLOW 1A01P	1847	Jan-31	91	0	455	n/a	-223	115	-22	200	(99) (12)	0		17

Basin VI VANCOUVER ISLAND

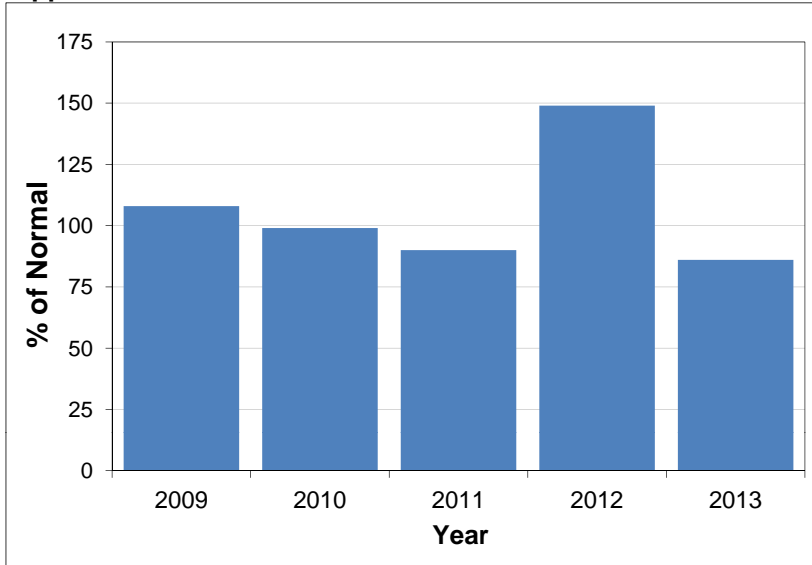
Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
ELK RIVER 3B04	270	Feb-02	22	82	96	85		26	77	141	(56) (01)	37	32	57
WOLF RIVER (LOWER) 3B19	615	Feb-02	105	368	248	148		148	254	444	(08) (05)	35	31	42
WOLF RIVER (MIDDLE) 3B18	1050	Feb-02	151	544	401	136		131	324	622	(72) (05)	36	32	42
FORBIDDEN PLATEAU 3B01	1110	Feb-02	281	1091	955	114		325	1164	1337	(99) (05)	39	38	55
JUMP CREEK AUTOMATED SNOW PILLOW 3B23P	1134	Feb-01	225	824	710	116	204	282	511	711	(07) (05)	37		18
WOLF RIVER (UPPER) AUTOMATED SNOW PILLOW 3B17P	1422	Feb-01		877	881	100	102	286	917	1189	(95) (99)	-999		30

Basin WK WEST KOOTENAY

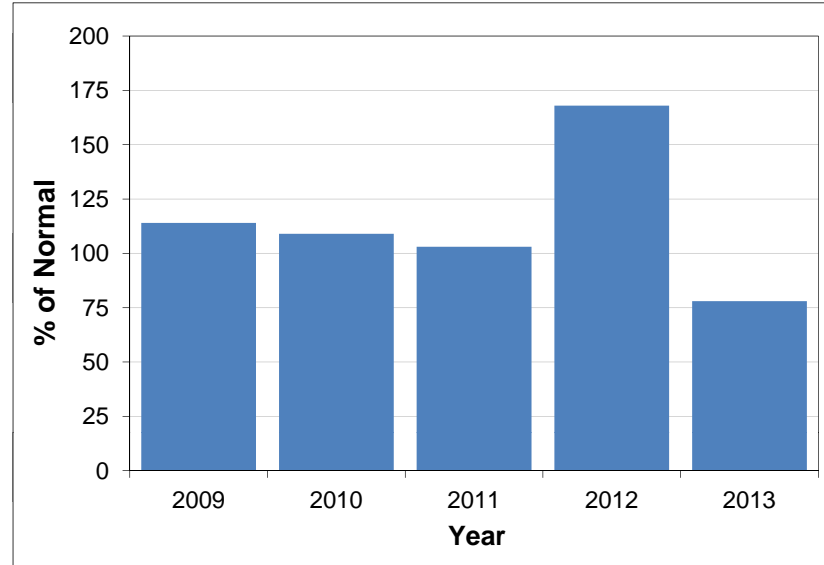
Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
NELSON 2D04	952	Jan-30	69	180	276	65	59	101	237	234	(97) (77)	26	27	76
CHAR CREEK 2D06	1290	Feb-01	120	368	381	97	58	131	364	299	(97) (77)	31	29	47
GRAY CREEK (LOWER) 2D05	1558	Feb-07			326			131	285	378	(72) (77)		28	65
KOCH CREEK 2B07	1813	Feb-01			501			136	0	433	(97) (77)		32	53
MOUNT TEMPLEMAN 2D09	1879	Feb-04			748			218	762	684	(74) (01)		33	45
GRAY CREEK (UPPER) 2D10	1926	Feb-07			527			142	568	575	(74) (79)		31	45
EAST CREEK AUTOMATED SNOW PILLOW 2D08P	2004	Feb-01		534	654	82	74	184	671	573.8	(91) (90)	-999		33

Snow Basin Index Graphs - February 1, 2013

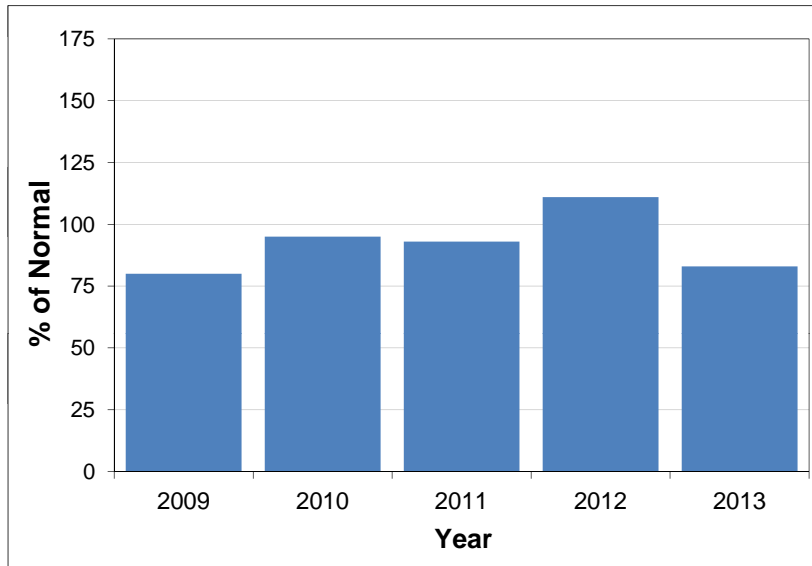
Upper Fraser



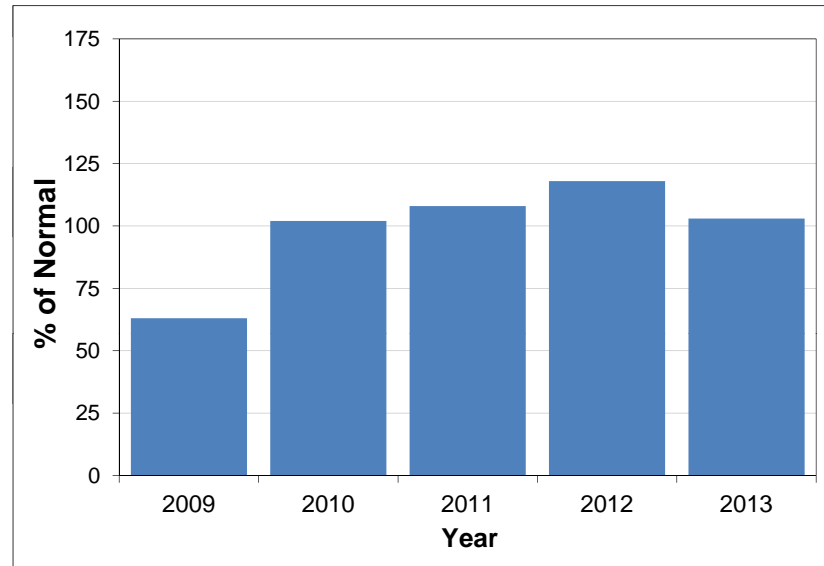
Nechako



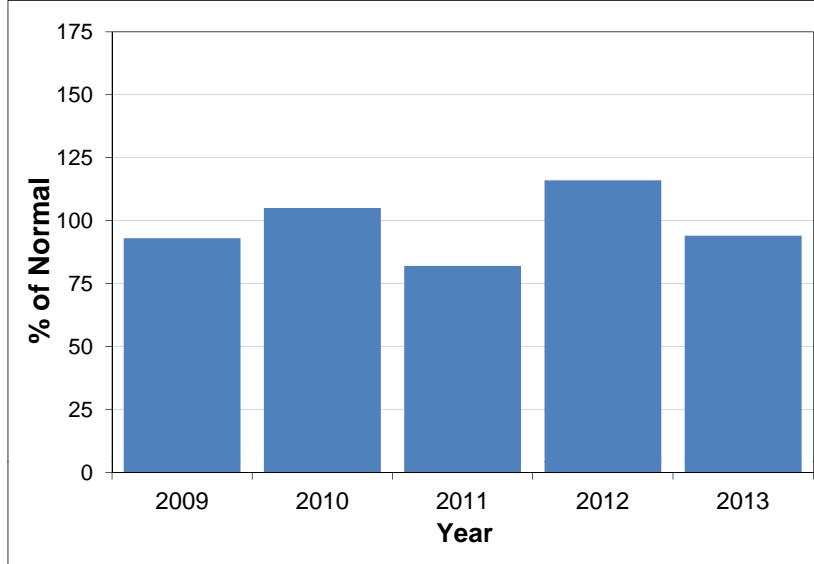
Middle Fraser



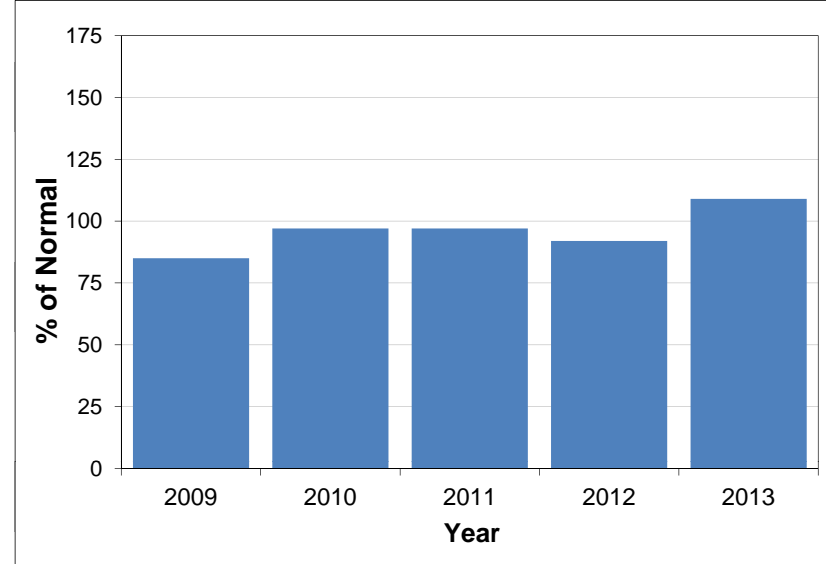
Lower Fraser



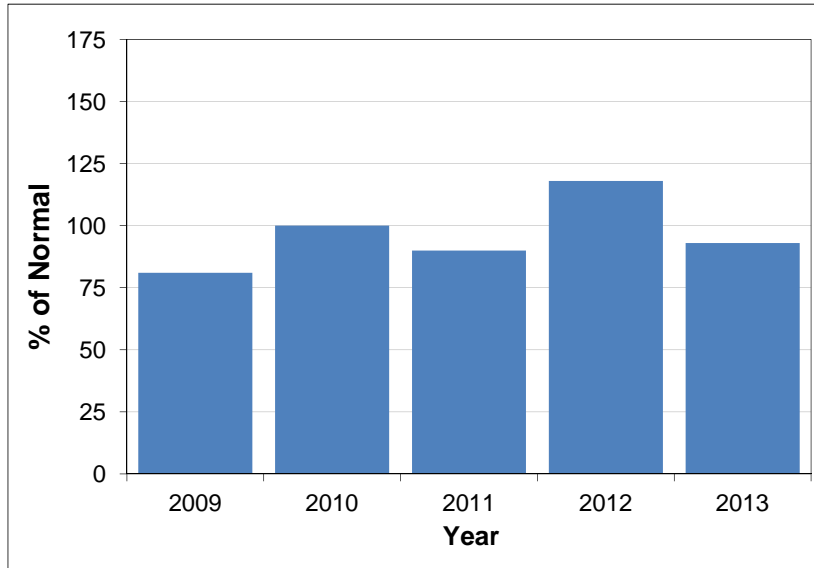
North Thompson



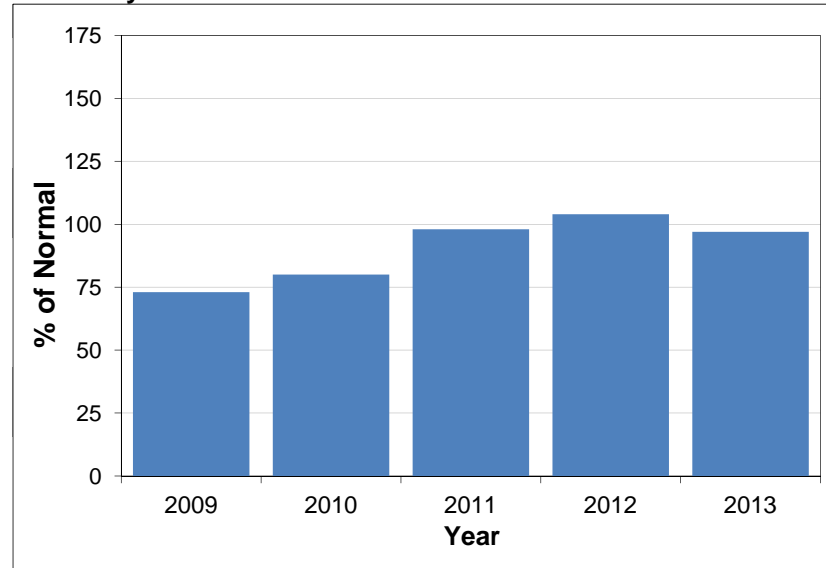
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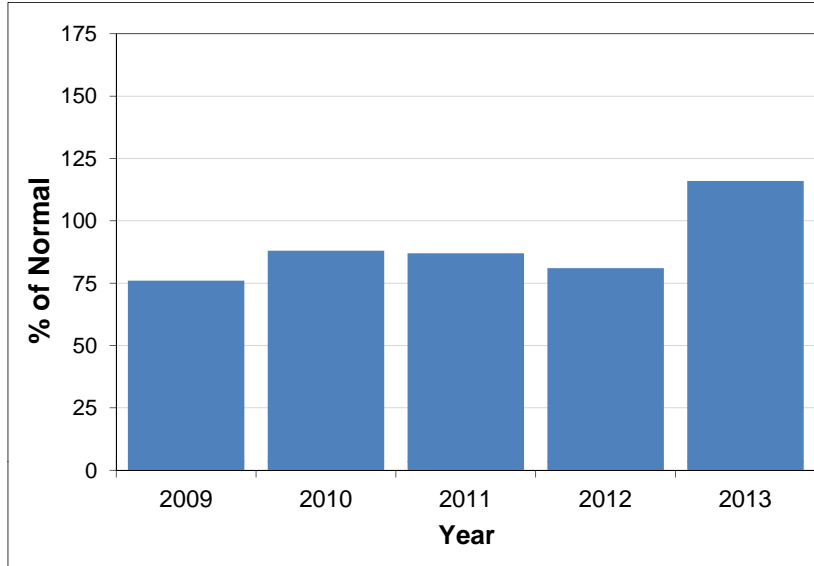
Columbia



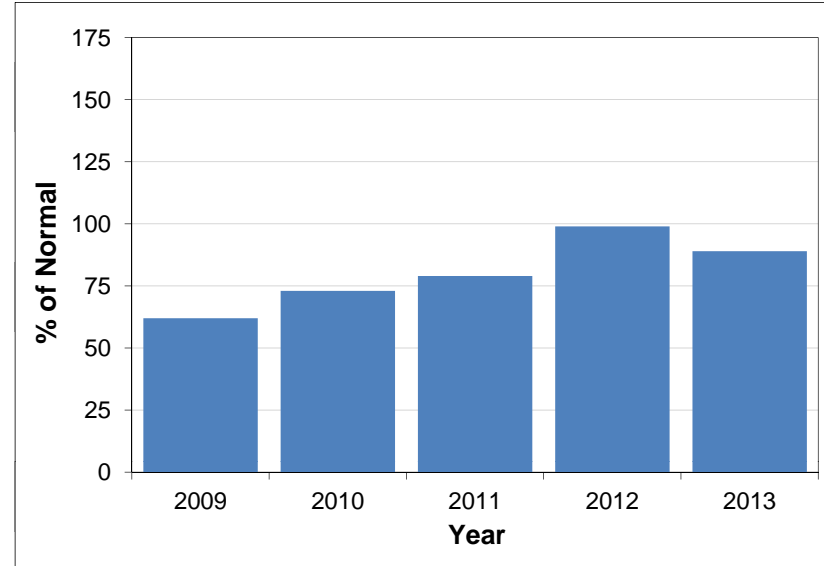
Kootenay



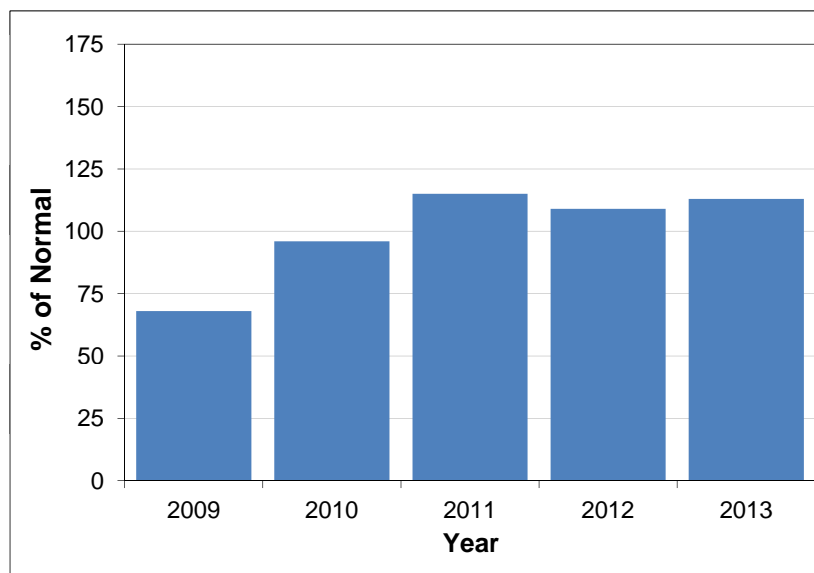
Okanagan-Kettle



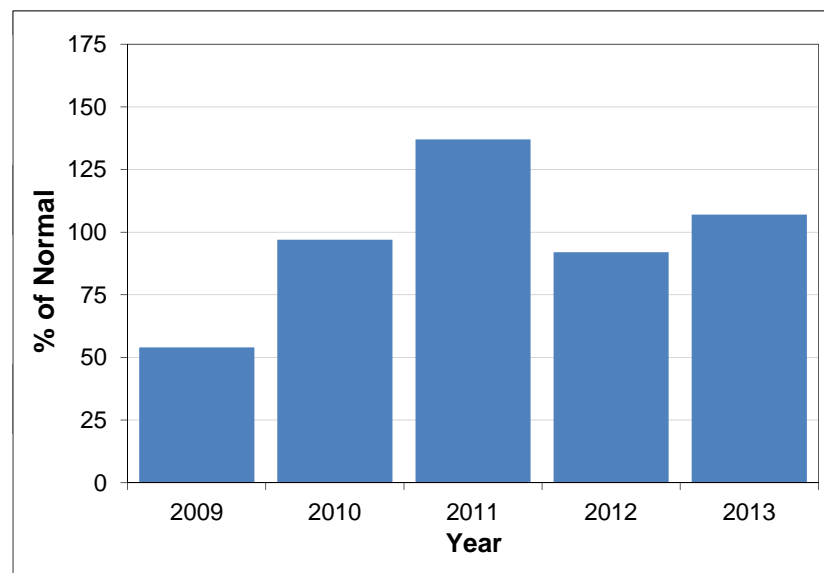
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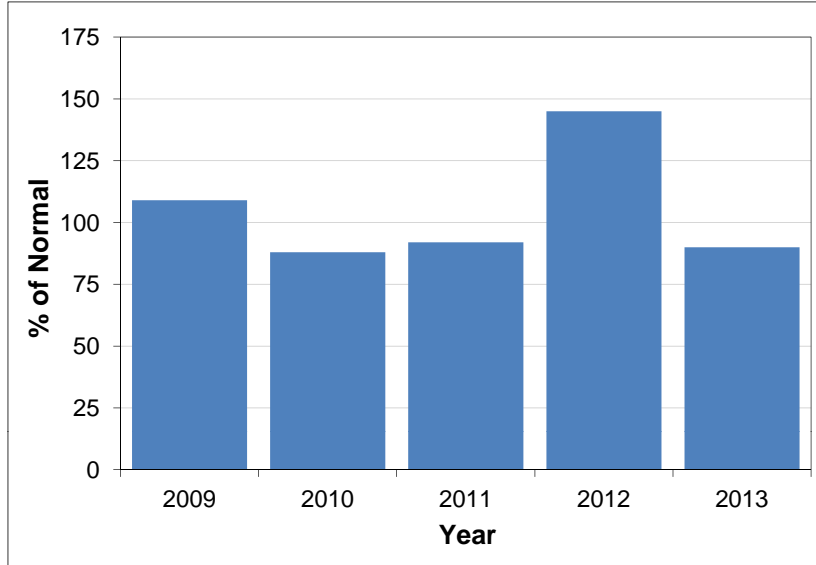
South Coast



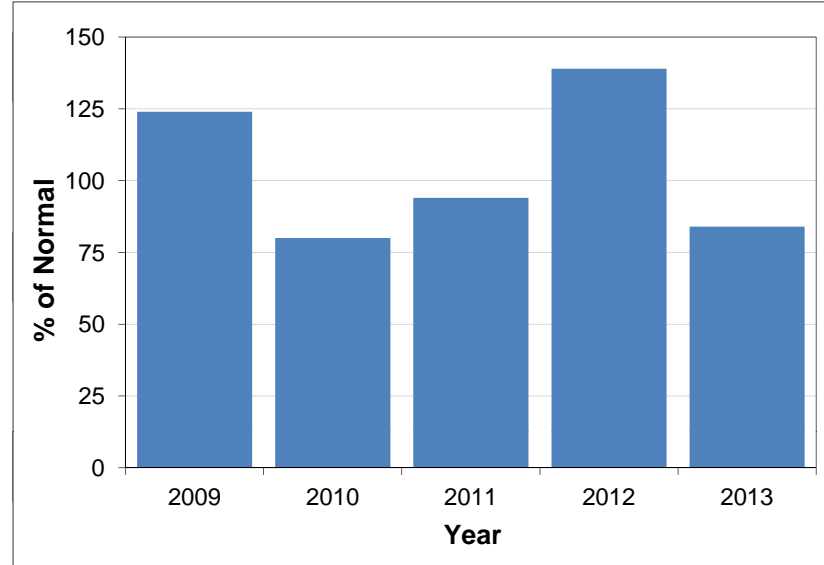
Vancouver Island



Peace



Skeena-Nass



Snow Survey and Water Supply Bulletin – April 1st, 2013

The April 1st snow survey is now complete. Data from 155 snow courses and 53 snow pillows around the province and out-of-province sampling locations, and climate data from Environment Canada, have been used to form the basis for the following reports¹.

Weather

The first half of March featured two atmospheric river events that delivered heavy precipitation across most of the southern half of the province. The remainder of the month featured relatively stable, dry weather, with several days of unseasonably warm weather in the final days of the month. Temperatures and precipitation rates through March were near normal through most of the province.

Snowpack

Snowpack levels surged in the early part of the month in response to the atmospheric river events. Snow packs remained fairly constant with stable weather in the second half of the month. Increases in snow basin indices from March occurred in the Upper Fraser, Middle Fraser, North Thompson and the South Coast. Snow basin indices decreased in the Okanagan-Kettle and Vancouver Island, and remained stable in other areas. April 1st snow basin indices are near normal (90-110%) through the majority of the province (Table 1, Map 1, and Snow Basin Graphs). In the Upper Fraser and South Thompson, snow basin indices are moderately elevated (111-119%). Snow basin indices are slightly below normal (<90%) in the Nechako, West Kootenay, Similkameen, and Skeena-Nass basins. Snow water-equivalent data is currently being estimated at four automated snow pillow sites (Table 2). Detailed Snow Survey Data are attached for reference.

Table 1: BC Snow Basin Indices – April 1, 2013

Basin	% of Normal	Basin	% of Normal
Upper Fraser	119%	Kootenay	91%
Nechako	77%	Okanagan-Kettle	107%
Middle Fraser	95%	Similkameen	82%
Lower Fraser	105%	South Coast	106%
North Thompson	101%	Vancouver Island	91%
South Thompson	111%	Peace	95%
Nicola	91%	Skeena-Nass	85%
Fraser River – All Basins	101%	Stikine	90%
Columbia	102%	Liard	102%

Outlook

Current modelling from the Climate Prediction Centre with the U.S. National Weather Service (NOAA) continues to forecast the persistence of the current neutral El Niño Southern Oscillation (ENSO) conditions into the summer of 2013. Typically neutral ENSO years do not favour wetter or drier conditions in British Columbia. Current [3-month seasonal forecasts](#) (April through June) from Environment Canada are indicating a high likelihood of above normal temperatures across the southern two-thirds of the province, and a small likelihood of cooler than normal temperatures in the northern part of the province.

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

Snow Survey and Water Supply Bulletin – April 1st, 2013

Forecasts indicate a higher likelihood of drier than normal April-June conditions along the south-west coast and southern and central interior of the province. Forecasts do not indicate any strongly favoured seasonal precipitation conditions through the rest of the province.

By this date, typically 96% of the annual BC snowpack has accumulated, with the peak accumulations generally occurring in mid-April with the transition from accumulating snow to melting snow. The current state of near-normal snow pack across most of the province suggests that for the majority of the province, normal seasonal flood risk is expected. One exception is in the Upper Fraser basin, where the current snow basin index (119%) indicates a moderate increase in the seasonal flood risk. For comparison, last year's April 1st snow basin index in the Upper Fraser was 152%.

The current overall Fraser Basin index is 101%. Normal seasonal flood risk is expected on the Fraser River through the Fraser Valley. Under current snow pack conditions, "normal" flood risk is expected this season. A likely (i.e. a 50% chance of occurrence) peak flow on the Fraser River at Hope is 8700 m³/s, there is approximately a 5% chance of a peak flow of 11,500 m³/s (slightly below peak levels that were experienced in 2012) and less than a 1% chance of a peak flow of 15,200 m³/s (similar flows to the 1948 flood).

It is important to note that snow pack is only one element that influences whether flooding occurs during the spring freshet. Of critical importance are how the snow melts and how much, and when, precipitation is received during the snow melt period. Therefore weather during the melt season is the key driver that determines if flooding will occur or not. Analysis of snow pack should not be considered a forecast of upcoming spring flood conditions; rather it is an assessment of whether or not flooding is more likely to occur. Heavy snow packs lead to an increased likelihood, or risk, of flooding, however flooding can occur during years with normal snow pack and conversely years with heavy snow pack do not always lead to flooding.

In summary, near-normal seasonal flow (i.e. the total volume of flow over the spring-summer) is expected through most of the province. Higher than normal snow pack in the Upper Fraser and South Thompson indicate that higher than normal freshet runoff is expected. Below normal seasonal runoff is expected in the Nechako, Nicola, West Kootenay, Similkameen, Skeena-Nass and Bulkley basins. Current seasonal forecasts for select watersheds are given in Table 3. One potential risk factor that could affect low flows this summer is the current seasonal weather forecast of potentially warmer and drier weather through regions of the province (particularly in southern BC).

The next snow bulletin will be released on May 8th, 2013.

Produced by: BC River Forecast Centre
April 8, 2013

Snow Survey and Water Supply Bulletin – April 1st, 2013

Map 1: Basin Snow Water Index - April 1st, 2013

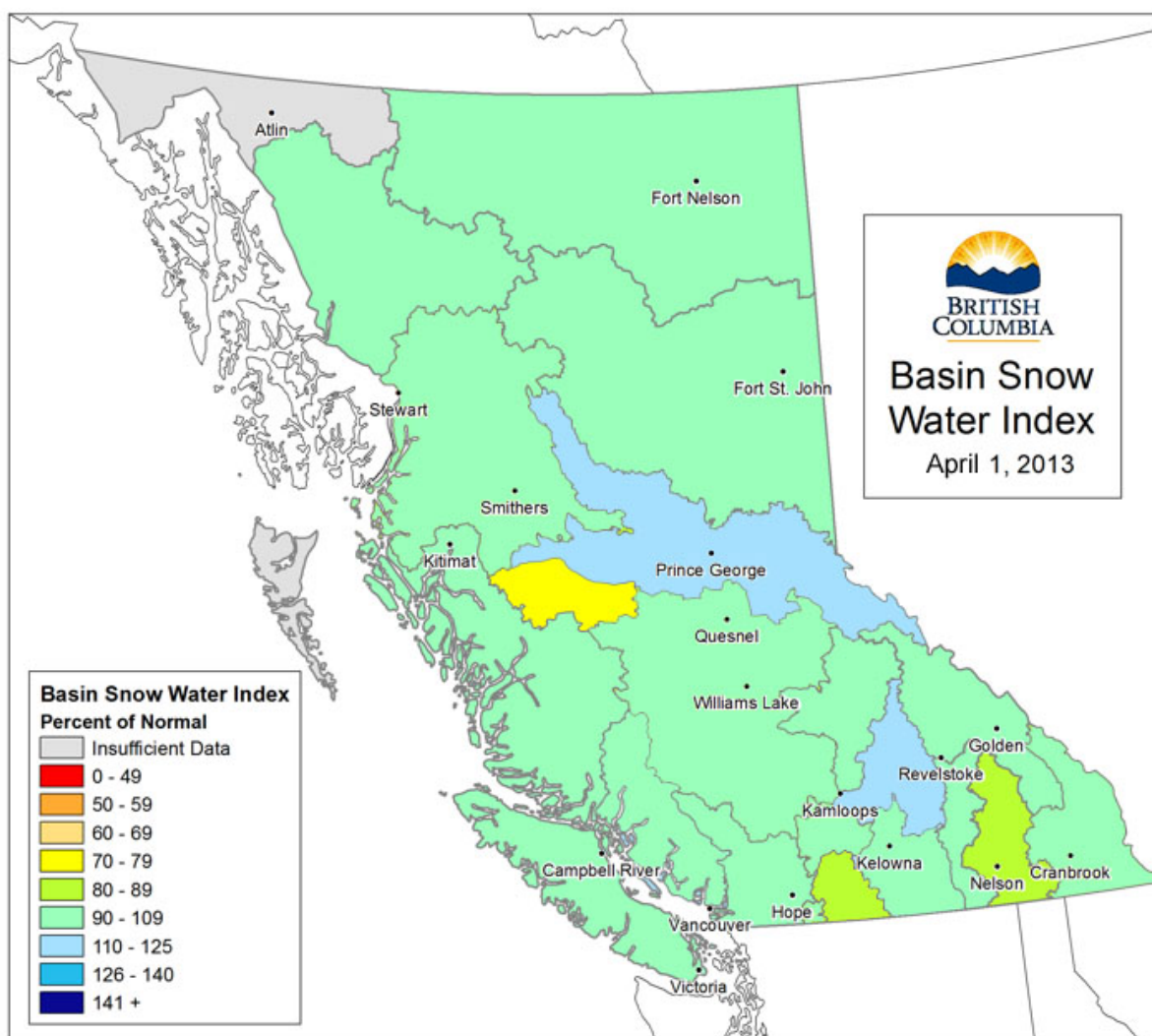


Table 2: April 1st Automated Snow Pillow Estimates

SNOW PILLOW ID	SNOW PILLOW NAME	OBSERVATION DATE	ESTIMATED Snow Water Equivalent (mm)
1B08P	MOUNT PONDOSY	01-Apr	478
1D18P	DISAPPOINTMENT LAKE	01-Apr	1576
1E02P	MOUNT COOK	01-Apr	1258
2C09Q	MORRISSEY RIDGE	01-Apr	594

Ministry of Forests, Lands and Natural Resource Operations
River Forecast Centre
Volume Runoff Forecast April 2013

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	3583	3699	97%	307					5067	5166	98%	381
	McGregor at Lower Canyon	4784	3964	121%	428					5205	5010	104%	564
	Fraser at Shelley	17673	15700	113%	1179					22050	19730	112%	1562
Middle Fraser Basin	Quesnel River at Quesnel	4474	4541	99%	444					5826	5872	99%	605
Thompson Basin	N. Thompson at McLure	9088	8916	102%	481					11417	11085	103%	753
	S. Thompson at Chase	6179	5792	107%	448					7915	7359	108%	686
	Thompson at Spences Bridge	15856	15114	105%	973					20305	19094	106%	1160
Bulkley and Skeena	Bulkley at Quick	2073	2625	79%	236					2618	3222	81%	271
	Skeena at Usk	15898	18673	85%	1173					19954	23017	87%	1698
Nicola Lake	Inflows	131	120	109%	30	148	138	108%	35				
Nicola River	at Spences Bridge	479	486	99%	82	545	554	98%	101				
Okanagan and Kalamalka- Wood Lake	Okanagan Lake Inflow	509	440	116%	88	540	465	116%	108				
	Kalamalka-Wood Lake Inflow	32.3	28.0	116%	11.3	31.6	29.4	107%	13.2				
Similkameen River	Similkameen at Nighthawk	1181	1273	93%	128					1451	1583	92%	156
	Similkameen at Hedley	924	989	94%	96					1089	1177	93%	96
Cowichan River	Cowichan Lake Inflows	235	248	95%	57					277	292	95%	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

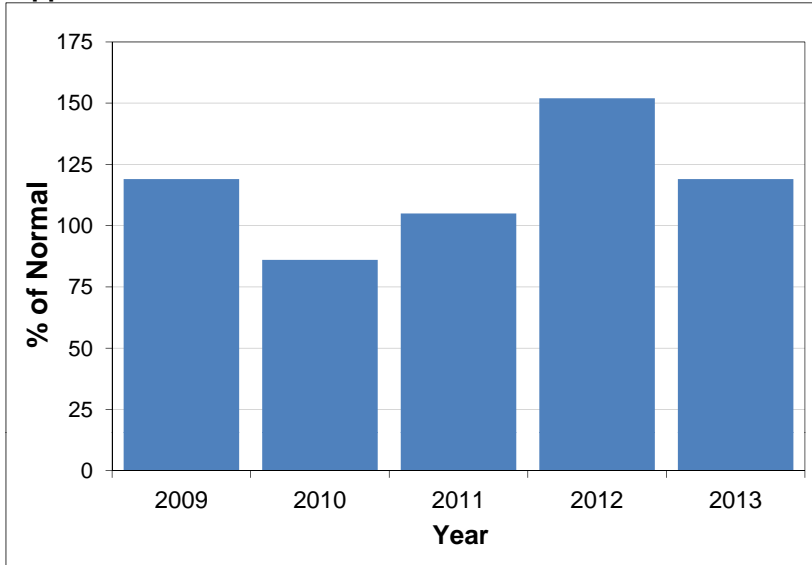
The Standard Error in the Cowichan forecast reflects model error, and does not capture uncertainty over seasonal weather

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

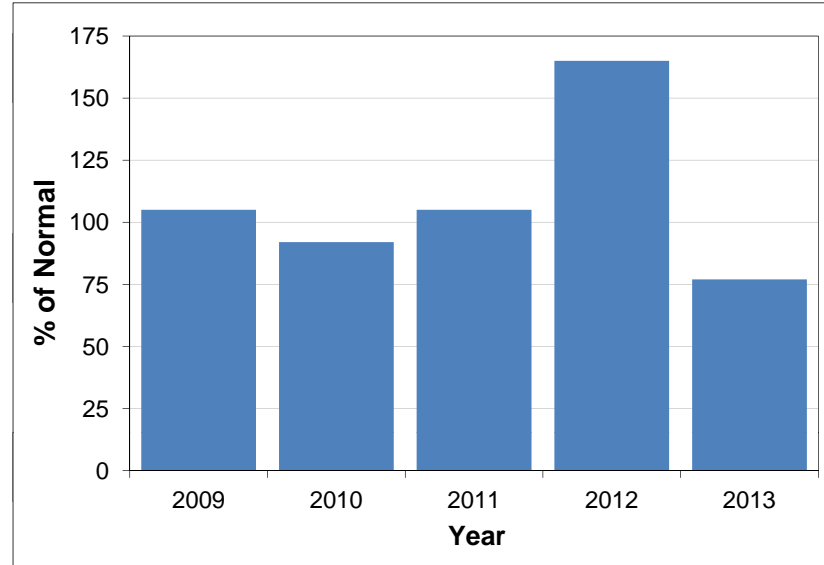
Use at your own risk

Snow Basin Index Graphs - April 1, 2013

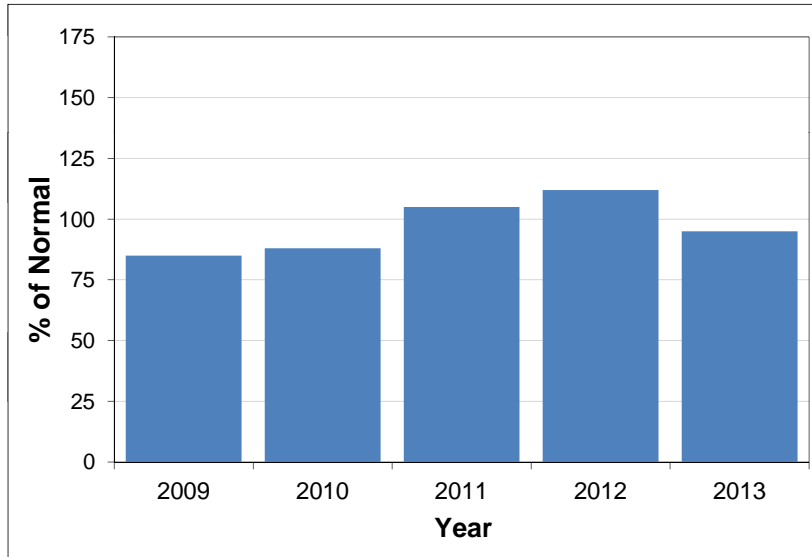
Upper Fraser



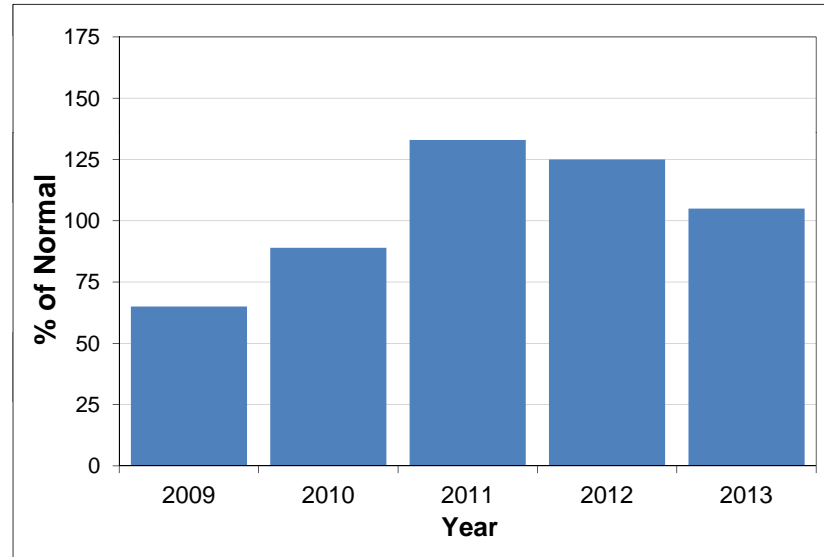
Nechako



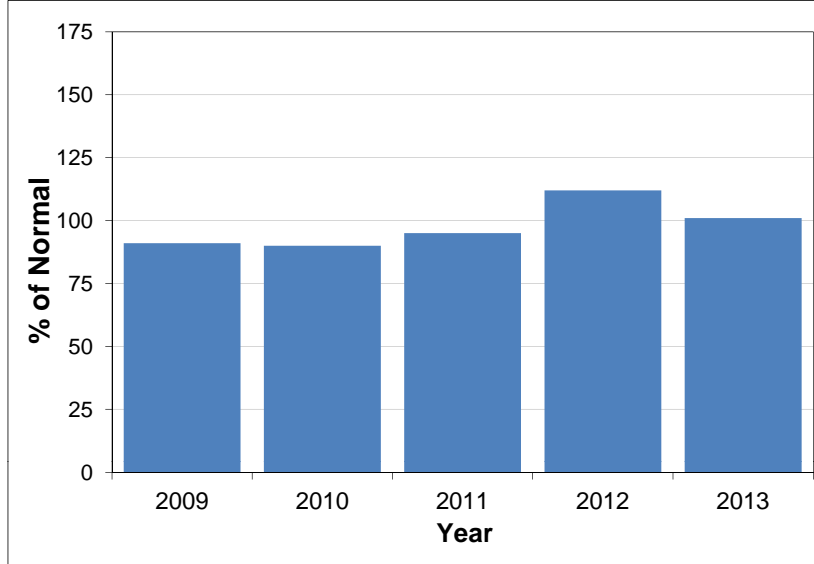
Middle Fraser



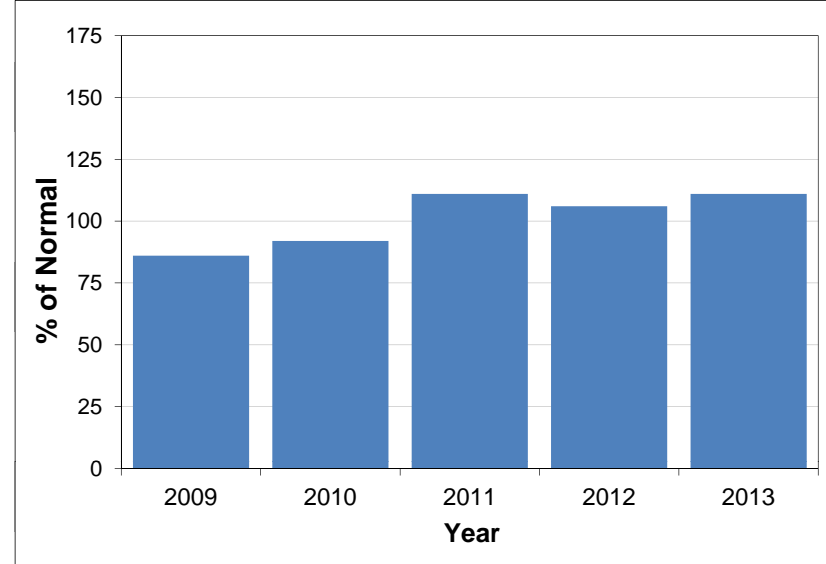
Lower Fraser



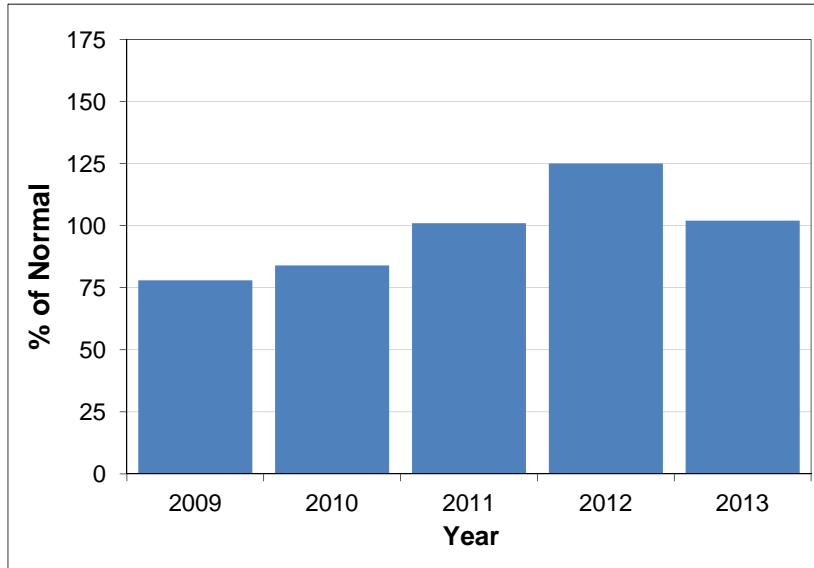
North Thompson



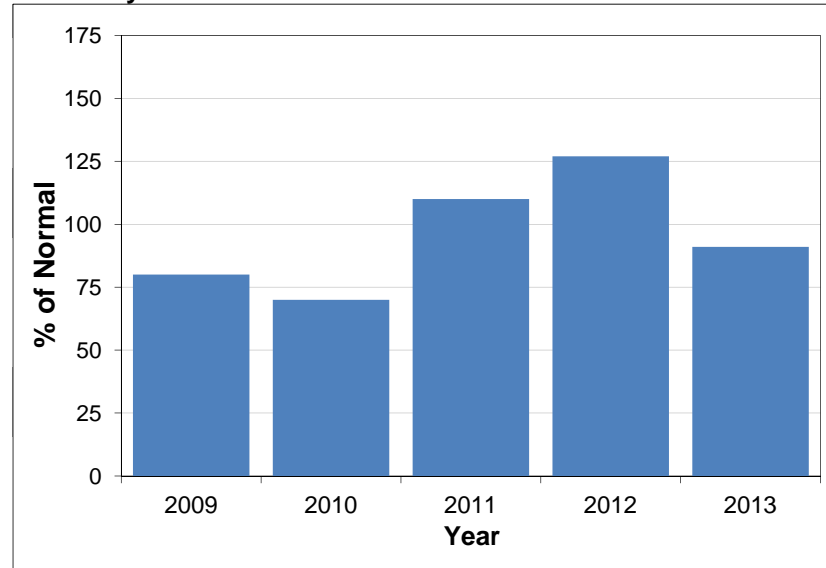
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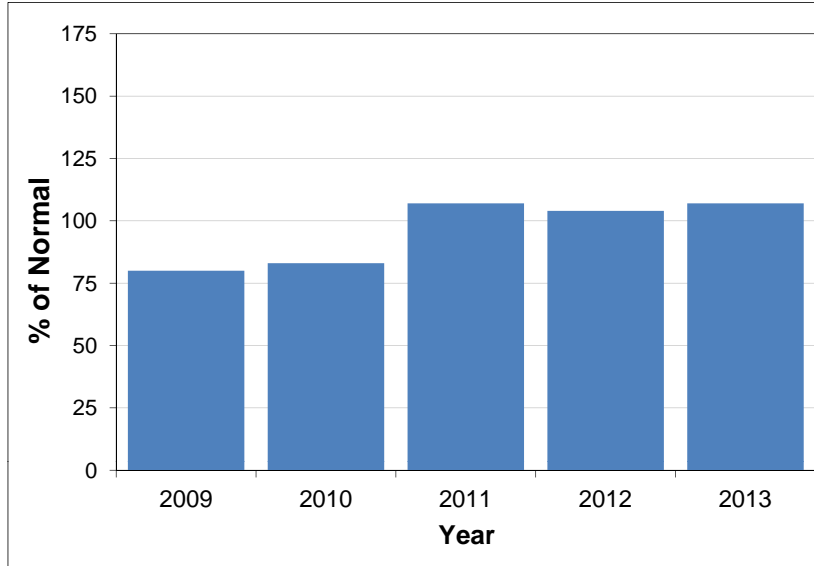
Columbia



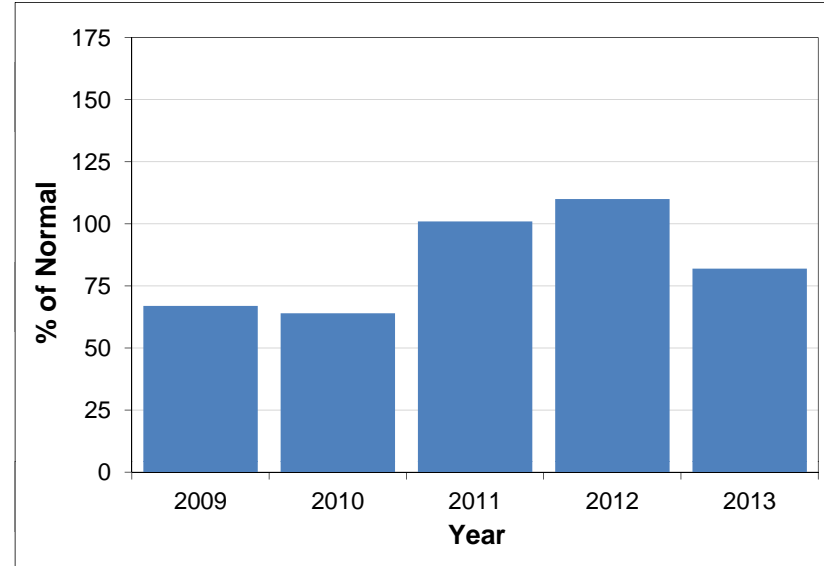
Kootenay



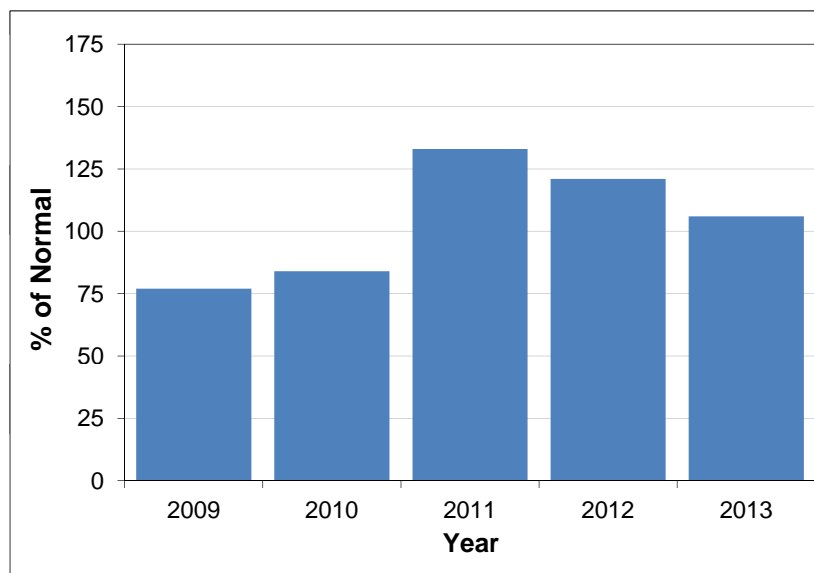
Okanagan-Kettle



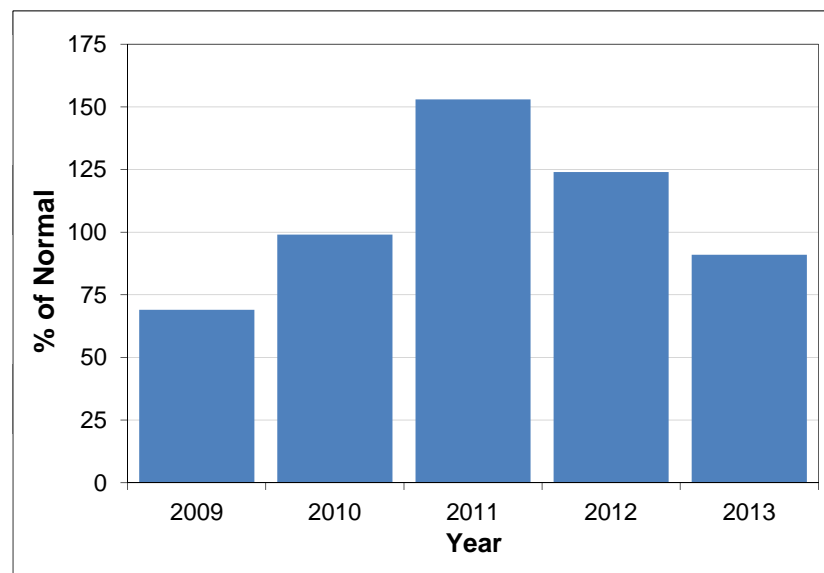
Similkameen



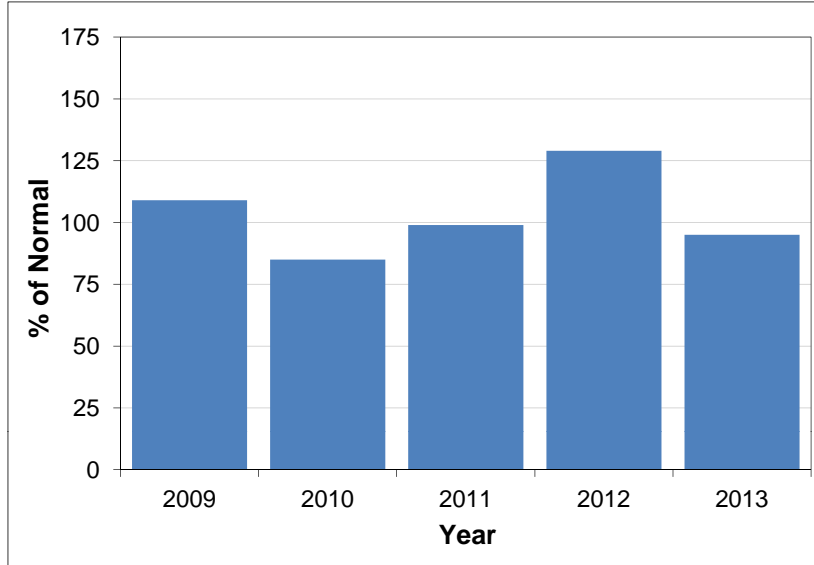
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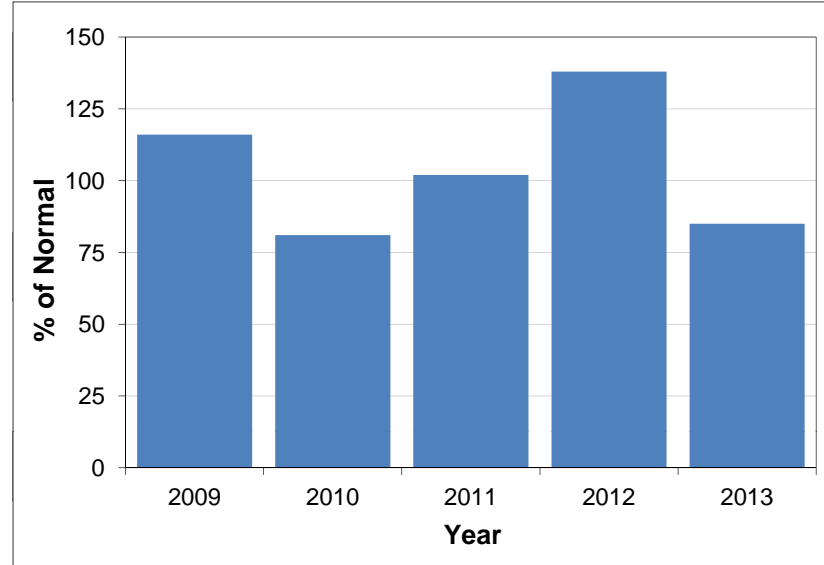
Vancouver Island



Peace



Skeena-Nass



Reporting Period: Apr 01, 2013

Basin EK EAST KOOTENAY

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change		2012	2011	Max	Min	Dens (%)	Normal Dens (%)	Yrs of Rec
Snow Course Name and Number								(mm)	(mm)	(mm)	(mm)	(mm)	(mm)			
FERNIE EAST	2C07											(54)	(05)			
		1213	Mar-31	68	246	335	73	21	22	372	371	605	123	36	35	62
SINCLAIR PASS	2C01											(54)	(41)			
		1374	Apr-03	27	73	135	54	13	9	184	130	262	36	27	27	74
SULLIVAN MINE	2C04											(50)	(10)			
		1580	Mar-29	80	242	313	77	28	45	372	318	538	134	30	32	68
MOUNT JOFFRE	2C16											(72)	(01)			
		1763	Mar-27	129	428	388	110	65	59	533	0	711	179	33	31	41
MOYIE MOUNTAIN AUTOMATED SNOW PILLOW	2C10P											(99)	(77)			
		1840	Apr-01	83	352	401	88	58	63	627	381	683	205	42		34
MORRISSEY RIDGE AUTOMATED SNOW PILLOW	2C09Q				<							(91)	(01)			
		1860	Apr-01		-205	744	-28	-690	124	829.	798.8	1224	360			30
THUNDER CREEK	2C17											(72)	(01)			
		2062	Mar-27	124	377	287	131	103	48	452	335	475	140	30	28	41
FLOE LAKE	2C14											(72)	(93)			
		2087	Mar-27	223	899	791	114	245	126	1027	918	1242	411	40	36	41
FLOE LAKE AUTOMATED SNOW PILLOW	2C14P											(99)	(94)			
		2110	Apr-01		761	724	105	174	110	994.	817.5	1001	-999			21
MOUNT ASSINIBOINE	2C15											(91)	(01)			
		2230	Mar-27	172	592	551	107		97	0	610	816	252	34	32	41

Basin KE KETTLE

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change		2012	2011	Max	Min	Dens (%)	Normal Dens (%)	Yrs of Rec
Snow Course Name and Number								(mm)	(mm)	(mm)	(mm)	(mm)	(mm)			
FARRON	2B02A											(74)	(01)			
		1229	Mar-28	78	258	330	78	5	35	311	356	480	162	33	34	41
CARMI	2E02											(75)	(92)			
		1254	Apr-05	20	72	142	51	-60	-5	134	132	290	14	36	30	51
MONASHEE PASS	2E01											(97)	(01)			
		1387	Mar-28	88	291	343	85	6	37	375	365	517	188	33	33	60
BIG WHITE MOUNTAIN	2E03											(74)	(01)			
		1672	Apr-02	125	450	507	89	22	81	478	508	762	332	36	34	48
BLUEJOINT MOUNTAIN	2E06											(99)	(01)			
		1990	Mar-28	201	736	742	99	20		692	796	1175	329	37	36	37

Basin LC LOWER COLUMBIA

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
FERGUSON	2D02											(99)	(42)			
		929	Mar-28	134	498	587	85	28	48	620	716	881	142	37	41	70
FARRON	2B02A											(74)	(01)			
		1229	Mar-28	78	258	330	78	5	35	311	356	480	162	33	34	41

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
MONASHEE PASS 2E01										(97)	(01)			
	1387	Mar-28	88	291	343	85	6	37	375	365	517	188	33	60
WHATSHAN (UPPER) 2B05										(99)	(01)			
	1476	Mar-28	156	524	668	78	8	57	686	710	964	350	34	51
BARNES CREEK AUTOMATED SNOW PILLOW 2B06P										(97)	(00)			
	1595	Apr-01		549	546	101	112	106	570	585	803	-999		21
BARNES CREEK 2B06										(97)	(01)			
	1598	Mar-28	132	473	518	91	57	71	550	527	768	299	36	53
KOCH CREEK 2B07										(99)	(01)			
	1813	Mar-28	206	748	755	99	34	130	825	768	1156	397	36	51
ST. LEON CREEK AUTOMATED SNOW PILLOW 2B08P										(99)	(98)			
	1822	Apr-01		1165	1133	103	317	159	1211	1264	1553	-999		22
ST. LEON CREEK 2B08										(72)	(93)			
	1828	Mar-28	312	1227	1253	98	191	155	1442	0	1831	818	39	43
RECORD MOUNTAIN 2B09										(99)	(77)			
	1906	Mar-31	200	780	752	104	35	124	805	790	1307	315	39	37
EAST CREEK AUTOMATED SNOW PILLOW 2D08P										(91)	(01)			
	2004	Apr-01		825	922	89	215	132	1009	945	1246	412		32

Basin LF LOWER FRASER

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
SUMALLO RIVER WEST 3D01C										(12)	(05)			
	801	Mar-27	69	239	238	100	-33	461	288	461	0	35	42	21
BROOKMERE 1C01										(72)	(05)			
	994	Mar-31	46	143	201	71	-29	7	223	220	399	51	31	68
DOG MOUNTAIN 3A10										(99)	(81)			
	1007	Mar-26	322	1540	1223	126	100	207	1525	1559	2720	51	48	63
CALLAGHAN CREEK 3A20										(99)	(81)			
	1009	Mar-30	160	882	902	98	148	132	1128	1280	1604	192	55	35
KLESILKWA 3D03A										(72)	(81)			
	1134	Mar-27	87	303	293	103	-3	416	357	792	0	35	38	62
DICKSON LAKE 1D16										(99)	(05)			
	1147	Mar-27	421	2106	1547	136	284	0	0	2990	412	50	46	21
STAVE LAKE 1D08										(99)	(05)			
	1211	Mar-27	353	1615	1554	104	269	1985	2083	2750	446	46	42	44
DUFFEY LAKE 1C28										(99)	(81)			
	1253	Apr-01	122	536	507	106	146	48	646	732	866	244	44	36
WAHLEACH LAKE 1D09										(74)	(81)			
	1395	Mar-27	194	779	659	118	131	0	724	1270	125	40	37	44
WAHLEACH LAKE AUTOMATED SNOW PILLOW 1D09P										(99)	(05)			
	1408	Apr-01		985	1154	85	178	199	911	993.6	1640	509		22

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
Snow Course Name and Number																
BARKERVILLE AUTOMATED SNOW PILLOW	1A03P											(85)	(72)			
		1483	Apr-01	105	375	387	97	95	68	439	414	532	-999	36		37
NAHATLATCH RIVER	1D10											(99)	(05)			
		1530	Mar-27	323	1351	1417	95	223	0	2000	2410	523	42	42	44	
GREAT BEAR AUTOMATED SNOW PILLOW	1D15P											(99)	(93)			
		1664	Mar-31		180	1784	10	0	361	180	180	2400	-999			23

Basin LI LIARD

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
FORT NELSON AIRPORT	4C05											(67)	(98)			
		368	Mar-28	67	108	95	114	-27	-3	58	81	198	23	16	22	47
DEASE LAKE	4C03											(67)	(01)			
		805	Mar-31	67	160	136	118	7	11	67	113	259	50	24	24	48
SUMMIT LAKE	4C02											(96)	(00)			
		1291	Apr-01	32	75	114	66	-91	8	54	204	240	0	23	23	50
SIKANNI LAKE	4C01											(92)	(00)			
		1390	Mar-28	91	231	268	86	16	39	294	252	380	194	25	27	48

Basin MF MIDDLE FRASER

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
Snow Course Name and Number															
PUNTZI MOUNTAIN	1C22										(75)	(01)			
		939	Mar-30	12	40	31	129	-20	-32	0	64	91	0	33	41
BROOKMERE	1C01										(72)	(05)			
		994	Mar-31	46	143	201	71	-29	7	223	220	399	51	31	68
NAZKO	1C08										(58)	(04)			
		1029	Apr-04	7	23	61	38	-52	-19	73	117	142	0	33	51
BIG CREEK	1C21										(91)	(03)			
		1130	Mar-31	2	6	16	38	-48	-39	10	30	119	0	30	42
GRANITE MOUNTAIN	1C33A										(08)	(10)			
		1175	Mar-27	64	205	181	113	24	17	191	226	272	115	32	8
DUFFEY LAKE	1C28										(99)	(81)			
		1253	Apr-01	122	536	507	106	146	48	646	732	866	244	44	36
BRALORNE	1C14										(74)	(79)			
		1382	Mar-26	48	151	178	85	-7	9	204	200	389	0	31	48
BRENDA MINE	2F18										(72)	(05)			
		1453	Mar-27	83	253	318	80	53	31	295	0	531	159	30	43
SHOVELNOSE MOUNTAIN	1C29										(99)	(05)			
		1456	Mar-27	63	237	260	91	40	7	337	298	442	70	38	30
HIGHLAND VALLEY	1C09A										(74)	(92)			
		1457	Mar-27	47	128	96	133	20	7	140	130	249	3	27	46

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	(mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
DEADMAN RIVER 1C32											(11)	(92)			
	1463	Apr-01	37	120	105	114	-30	0	168	196	196	30	32	26	28
LAC LE JEUNE (UPPER) 1C25											(99)	(77)			
	1471	Mar-28	56	174	135	129	27	1	170	174	228	43	31	29	41
BOSS MOUNTAIN MINE AUTOMATED SNOW PILLOW 1C20P											(99)	(03)			
	1477	Apr-01	151	596	615	97	128	104	564	587	859	383	39		20
BARKERVILLE AUTOMATED SNOW PILLOW 1A03P											(85)	(72)			
	1483	Apr-01	105	375	387	97	95	68	439	414	532	-999	36		37
HORSEFLY MOUNTAIN 1C13A											(99)	(70)			
	1612	Mar-27	151	584	464	126	50	46	502	576	716	282	39	34	43
GNAWED MOUNTAIN 1C19											(74)	(05)			
	1617	Mar-27	57	146	126	116	24	15	195	120	307	21	26	27	46
MOUNT TIMOTHY 1C17											(74)	(81)			
	1632	Mar-28	115	364	327	111	79	42	353	340	533	186	32	31	53
YANKS PEAK EAST AUTOMATED SNOW PILLOW 1C41P											(99)	(03)			
	1683	Apr-01	210	889	829	107	175	129	943	894	1009	488	42		17
PENFOLD CREEK 1C23											(72)	(01)			
	1687	Apr-03	256	1055	1000	106		172	1173	1051	1285	641	41	38	42
MCGILLIVRAY PASS 1C05											(54)	(93)			
	1715	Mar-26	132	462	602	77		80	793	625	1118	322	35	35	61
GREEN MOUNTAIN AUTOMATED SNOW PILLOW 1C12P											(99)	(09)			
	1766	Apr-01		621	896	69	101	142	1054	952	1408	454.			20
DOWNTOWN LAKE (UPPER) 1C38											(99)	(09)			
	1884	Mar-26	190	678	900	75		145	0	984	1416	422	36	40	19
MISSION RIDGE AUTOMATED SNOW PILLOW 1C18P											(72)	(77)			
	1903	Apr-01		498	576	86	121	61	708	530.4	1006	158			37
TYAUGHTON CREEK (NORTH) 1C40											(99)	(09)			
	1946	Mar-26	108	350	432	81	212	64	550	514	844	264	32	33	19

Basin NC NORTH COAST

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	(mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
TAHTSA LAKE 1B02											(12)	(70)			
	1319	Mar-28	226	920	1179	78	45	154	1972	1313	1972	775	41	39	60
TAHTSA LAKE AUTOMATED SNOW PILLOW 1B02P											(07)	(96)			
	1319	Apr-01		882	1212	73	109	128	1849	1273	2240	0			21

Basin NE NECHAKO

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	(mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
SKINS LAKE 1B05											(74)	(03)			
	877	Mar-28	38	100	111	90	8	-4	92	118	203	0	26	30	49

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
TAHTSA LAKE 1B02											(12)	(70)			
	1319	Mar-28	226	920	1179	78	45	154	1972	1313	1972	775	41	39	60
TAHTSA LAKE 1B02P											(07)	(96)			
AUTOMATED SNOW PILLOW	1319	Apr-01		882	1212	73	109	128	1849	1273	2240	0			21
MOUNT PONDOSY 1B08P											(12)	(04)			
AUTOMATED SNOW PILLOW	1413	Apr-01		529	798	66	363	88	1155	744	1159	1.92			21
KIDPRICE LAKE 4B01											(12)	(70)			
	1415	Mar-28	170	694	919	76	58	117	1781	973	1781	622	41	39	58
MOUNT WELLS 1B01											(76)	(03)			
	1489	Mar-28	118	409	524	78	55	60	706	516	960	273	35	34	58
MOUNT WELLS 1B01P											(07)	(06)			
AUTOMATED SNOW PILLOW	1489	Apr-01		419	573	73	79	78	798	539	872	8.56			21

Basin NT NORTH THOMPSON

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
BLUE RIVER 1E01B											(97)	(03)			
	673	Mar-27	82	300	276	109	48	-14	382	368	425	154	37	34	31
KNOUFF LAKE 1E05											(56)	(92)			
	1189	Apr-01	58	174	144	121	24	11	176	109	274	58	30	29	57
BOSS MOUNTAIN MINE 1C20P											(99)	(03)			
AUTOMATED SNOW PILLOW	1477	Apr-01	151	596	615	97	128	104	564	587	859	383	39		20
AZURE AUTOMATED 1E08P											(99)	(01)			
SNOW PILLOW	1625	Apr-01	261	1222	1155	106	228	175	1386	1135	1545	679	47		17
KOSTAL LAKE 1E10P											(99)	(01)			
AUTOMATED SNOW PILLOW	1760	Apr-01	234	894	878	102	195	145	983	899	1165	608	38		29
ADAMS RIVER 1E07											(99)	(79)			
	1769	Mar-29	196	769	707	109	199	132	0	0	1069	435	39	35	42
TROPHY MOUNTAIN 1E03A											(99)	(03)			
	1907	Mar-30	159	568	545	104	136	92	0	0	888	332	36	33	36

Basin OK OKANAGAN

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
ABERDEEN LAKE 1F01A											(75)	(92)			
	1262	Mar-26	45	143	143	100	3	-2	153	0	259	6	32	29	71
MCCULLOCH 2F03											(74)	(92)			
	1266	Mar-28	53	165	155	106	-14	-2	189	204	249	38	31	29	78
SUMMERLAND 2F02											(72)	(92)			
RESERVOIR	1304	Mar-28	68	224	226	99	43	12	239	305	389	96	33	31	73
POSTILL LAKE 2F07											(74)	(63)			
	1358	Mar-28	63	190	224	85	21	38	241	203	348	109	30	30	64

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
OYAMA LAKE 2F19										(97)	(92)			
	1365	Mar-28	47	136	170	80	26	13	174	163	255	61	29	43
VASEUX CREEK 2F20										(72)	(05)			
	1403	Mar-27	41	104	157	66	-10	18	118	154	239	40	25	43
BOULEAU LAKE 2F21										(75)	(09)			
	1405	Mar-31	97	324	354	92	48	59	246	264	564	192	33	39
TROUT CREEK 2F01										(72)	(92)			
	1428	Mar-27	66	206	182	113	9	13	248	0	396	52	31	68
ESPERON CR (MIDDLE) 2F14										(74)	(01)			
	1440	Mar-31	94	342	372	92		57	296	322	607	196	36	45
BRENDA MINE 2F18										(72)	(05)			
	1453	Mar-27	83	253	318	80	53	31	295	0	531	159	30	43
BRENDA MINES AUTOMATED SNOW PILLOW 2F18P										(97)	(07)			
	1453	Apr-01		275	394	70	19	52	341	385	502	****		21
ISLAHT LAKE 2F24										(99)	(01)			
	1492	Apr-04	80	259	349	74	-27	32	227	292	501	165	32	32
GREYBACK RESERVOIR 2F08										(72)	(63)			
	1548	Mar-26	91	253	233	109	35	35	298	280	351	114	28	60
ESPERON CR (UPPER) 2F13										(74)	(01)			
	1634	Mar-31	115	410	435	94	56	64	384	376	805	244	36	45
ISINTOK LAKE 2F11										(74)	(92)			
	1651	Mar-28	57	176	183	96	25	19	200	169	340	66	31	46
MACDONALD LAKE 2F23										(99)	(77)			
	1742	Mar-27	128	428	463	92	105	69	380	0	677	257	33	35
WHITEROCKS MOUNTAIN 2F09										(74)	(01)			
	1789	Mar-31	157	601	586	103	114	87	563	550	1021	318	38	61
MISSION CREEK AUTOMATED SNOW PILLOW 2F05P										(99)	(94)			
	1794	Apr-01	140	548	472	116	91	84	549	230	743	0	39	44
MOUNT KOBAU 2F12										(74)	(79)			
	1817	Mar-27	127	496	318	156	49	59	312	405	602	105	39	48
SILVER STAR MOUNTAIN 2F10										(74)	(60)			
	1834	Mar-29	205	854	760	112	105	124	740	794	1115	414	42	55

Basin PC PEACE

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
FORT ST. JOHN AIRPORT 4A25										(07)	(92)			
	692	Apr-03	56	154	102	151	25	-5	70	103	226	0	28	39
PACIFIC LAKE 1A11										(12)	(78)			
	756	Mar-26	239	920	628	146	188	59	1060	733	1060	290	38	50
WARE (LOWER) 4A04										(92)	(84)			
	969	Mar-28	77	190	188	101	19	24	215	164	316	118	25	42

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
PHILIP LAKE 4A13	1013	Mar-27	109	322	287	112	78	35	357	302	(07) 449	(01) 176	30	29	47
TUTIZZI LAKE 4A06	1043	Mar-27	86	231	255	91	2	25	349	294	(67) 406	(80) 166	27	29	49
AIKEN LAKE AUTOMATED SNOW PILLOW 4A30P	1061	Apr-01		202	258	78	22	16	329	263	(92) 382	(95) -999			28
TSAYDAYCHI LAKE 4A12	1173	Mar-27	117	363	394	92	41	52	575	435	(07) 639	(78) 277	31	30	47
KAZA LAKE 1A12	1247	Mar-27	110	346	338	102	38	41	476	365	(12) 476	(10) 220	31	29	49
FREDRICKSON LAKE 4A10	1323	Mar-27	84	221	245	90	32	31	259	200	(67) 351	(69) 163	26	27	49
PULPIT LAKE 4A09	1331	Mar-28	139	439	402	109	13	45	516	410	(09) 618	(80) 297	32	30	49
PULPIT LAKE AUTOMATED SNOW PILLOW 4A09P	1331	Apr-01		438	411	107	49	50	527	445	(07) 622.	(06) 338.			23
PINE PASS AUTOMATED SNOW PILLOW 4A02P	1386	Apr-01		964	1101	88	87	180	1488	878	(07) 1551	(92) -999			25
SIKANNI LAKE 4C01	1390	Mar-28	91	231	268	86	16	39	294	252	(92) 380	(00) 194	25	27	48
TRYGVE LAKE 4A11	1409	Mar-27	111	328	359	91	16	44	452	344	(07) 511	(69) 257	30	29	49
MORFEE MOUNTAIN 4A16	1427	Mar-26	217	863	854	101	167	115	1003	934	(73) 1158	(83) 555	40	38	46
PINE PASS 4A02	1439	Mar-26	295	1179	1150	103	211	145	1731	1116	(12) 1731	(80) 668	40	38	51
LADY LAURIER LAKE 4A07	1446	Mar-28	136	414	503	82	35	65	694	523	(07) 854	(70) 384	30	31	48
JOHANSON LAKE 4B02	1480	Mar-27	96	272	291	93	35	38	341	278	(67) 417	(80) 173	28	28	49
MOUNT SHEBA 4A18	1480	Mar-26	265	1010	825	122		110	1181	1036	(07) 1294	(93) 495	38	36	44
GERMANSEN (UPPER) 4A05	1489	Mar-27	114	326	352	93	52	50	488	391	(76) 523	(81) 261	29	29	47
MOUNT STEARNS 4A21	1514	Mar-28	68	151	148	102	15	25	110	151	(96) 239	(00) 59	22	23	37
WARE (UPPER) 4A03	1563	Mar-28	102	266	254	105	19	34	235	255	(96) 390	(80) 157	26	26	44
MONKMAN CREEK 4A20	1566	Mar-26	210	717	593	121	178	71	796	0	(76) 1067	(03) 313	34	34	39

Basin SC SOUTH COAST

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
POWELL RIVER (LOWER) 3A05	882	Mar-27	268	1138	743	153			0	1257	1554	(99) (96) 85	42	40	36
PALISADE LAKE 3A09	898	Mar-26	342	1610	1440	112	155	257	0	0	3560	(99) (81) 285	47	45	58
POWELL RIVER (UPPER) 3A02	1002	Mar-27	196	888	1046	85			0	1610	1813	(99) (96) 511	45	42	45
DOG MOUNTAIN 3A10	1007	Mar-26	322	1540	1223	126	100	207	1525	1559	2720	(99) (81) 51	48	45	63
CALLAGHAN CREEK 3A20	1009	Mar-30	160	882	902	98	148	132	1128	1280	1604	(99) (81) 192	55	42	35
GROUSE MOUNTAIN 3A01	1126	Mar-28	337	1650	1203	137	10	206	1590	1640	2670	(99) (81) 44	49	45	72
ORCHID LAKE 3A19	1178	Mar-26	417	1953	1905	103	183	337	0	2650	3770	(99) (05) 748	47	45	36
SQUAMISH (UPPER) AUTOMATED SNOW PILLOW 3A25P	1387	Apr-01	340	1582	1620	98	255	240	1961	2183	2750	(99) (99) -999	47		24

Basin SI SIMILKAMEEN

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
BROOKMERE 1C01	994	Mar-31	46	143	201	71	-29	7	223	220	(72) (05) 399	51	31	30	68
LIGHTNING LAKE 3D02	1254	Mar-29	84	276	305	90	32	23	445	345	(56) (05) 622	60	33	33	64
HAMILTON HILL 2G06	1477	Mar-30	62	213	356	60	2	30	367	294	(72) (05) 851	83	34	33	54
MISSEZULA MOUNTAIN 2G05	1602	Mar-31	62	166	242	69	24	21	0	234	(74) (05) 361	90	27	31	48
ISINTOK LAKE 2F11	1651	Mar-28	57	176	183	96	25	19	200	169	(74) (92) 340	66	31	28	46
BLACKWALL PEAK AUTOMATED SNOW PILLOW 2G03P	1934	Apr-01	179	713	833	86	122	105	1134	944	(72) (01) 1494	379	40		46
LOST HORSE MOUNTAIN 2G04	1988	Mar-31	84	248	243	102	30	39	0	292	(72) (05) 533	138	30	27	52

Basin SK SKAGIT

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
SUMALLO RIVER WEST 3D01C	801	Mar-27	69	239	238	100		-33	461	288	(12) (05) 461	0	35	42	21
KLESILKWA 3D03A	1134	Mar-27	87	303	293	103		-3	416	357	(72) (81) 792	0	35	38	62

Snow Course Name and Number		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec	
LIGHTNING LAKE 3D02											(56)	(05)				
		1254	Mar-29	84	276	305	90	32	23	445	345	622	60	33	33	64

Basin SN SKEENA/NASS

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec	
BEAR PASS 4B11A										(07)	(10)				
	437	Mar-28	142	544	706	77	34	96	771	550	1013	330	38	40	29
NINGUNSAW PASS 4B10										(07)	(98)				
	647	Mar-27	108	324	438	74	-6	30	554	248	730	231	30	37	39
MCKENDRICK CREEK 4B07										(72)	(81)				
	1048	Mar-26	91	265	297	89	39	28	362	322	427	183	29	31	45
TACHEK CREEK 4B06										(97)	(69)				
	1133	Mar-27	86	242	232	104	58	26	328	272	362	112	28	27	45
KAZA LAKE 1A12										(12)	(10)				
	1247	Mar-27	110	346	338	102	38	41	476	365	476	220	31	29	49
LU LAKE 4B15										(07)	(03)				
	1296	Mar-27	93	272	318	86	62	49	456	332	504	162	29	30	37
TRYGVE LAKE 4A11										(07)	(69)				
	1409	Mar-27	111	328	359	91	16	44	452	344	511	257	30	29	49
KIDPRICE LAKE 4B01										(12)	(70)				
	1415	Mar-28	170	694	919	76	58	117	1781	973	1781	622	41	39	58
EQUITY MINE 4B14										(97)	(03)				
	1434	Mar-27	111	332	405	82	58	54	556	420	640	258	30	32	37
HUDSON BAY MTN. 4B03A										(76)	(80)				
	1452	Mar-26	128	392	524	75	36	65	651	550	846	356	31	34	42
JOHANSON LAKE 4B02										(67)	(80)				
	1480	Mar-27	96	272	291	93	35	38	341	278	417	173	28	28	49
CHAPMAN LAKE 4B04										(73)	(80)				
	1485	Mar-26	125	404	474	85	40	60	672	560	762	315	32	33	48
MOUNT CRONIN 4B08										(76)	(80)				
	1491	Mar-26	147	512	612	84	58	90	743	716	1097	433	35	35	45

Basin ST SOUTH THOMPSON

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
SNOW COURSE NAME AND NUMBER															
ANGLEMONT	1F02										(65)	(92)			
		1168	Mar-29	87	334	353	95	30	16	324	400	561	142	38	58
ABERDEEN LAKE	1F01A										(75)	(92)			
		1262	Mar-26	45	143	143	100	3	-2	153	0	259	6	32	71
MONASHEE PASS	2E01										(97)	(01)			
		1387	Mar-28	88	291	343	85	6	37	375	365	517	188	33	60

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec	
Snow Course Name and Number																
BOULEAU LAKE	2F21										(75)	(09)				
		1405	Mar-31	97	324	354	92	48	59	246	264	564	192	33	30	39
KIRBYVILLE LAKE	2A25										(99)	(77)				
		1739	Mar-26	321	1324	1189	111	186	203	1360	1234	1816	701	41	40	40
SILVER STAR MOUNTAIN	2F10										(74)	(60)				
		1834	Mar-29	205	854	760	112	105	124	740	794	1115	414	42	38	55
PARK MOUNTAIN AUTOMATED SNOW PILLOW	1F03P										(97)	(01)				
		1857	Apr-01	231	947	867	109	194	128	801	903	1207	499	41		29
ENDERBY	1F04										(11)	(79)				
		1948	Apr-04	277	1171	1019	115	141	160	1115	1501	1501	610	42	37	48

Basin TA STIKINE/TAKU

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
TELEGRAPH CREEK	4D01										(89)	(84)			
		490	Mar-27	49	121	156	78	5	0	0	94	343	37	25	29
NINGUNSAW PASS	4B10										(07)	(98)			
		647	Mar-27	108	324	438	74	-6	30	554	248	730	231	30	37
DEASE LAKE	4C03										(67)	(01)			
		805	Mar-31	67	160	136	118	7	11	67	113	259	50	24	24
ISKUT	4D02										(07)	(84)			
		931	Mar-27	44	94	107	88	8	0	106	126	180	0	21	25

Basin UC UPPER COLUMBIA

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
DOWNIE SLIDE (LOWER)	2A27											(99)	(01)			
		964	Mar-26	163	624	680	92	4	49	858	838	1062	448	38	40	36
GLACIER	2A02											(72)	(42)			
		1249	Mar-26	155	660	730	90	118	99	976	771	1161	376	43	39	75
FIELD	2A03A											(67)	(40)			
		1310	Apr-02	28	71	153	46	-11	-9	151	236	251	8	25	29	71
VERMONT CREEK	2A19											(67)	(01)			
		1533	Mar-27	125	425	446	95	65	46	603	568	843	190	34	34	45
DOWNIE SLIDE (UPPER)	2A29											(99)	(93)			
		1628	Mar-26	336	1332	1347	99	92	208	1570	1278	2360	858	40	40	35
KICKING HORSE	2A07											(72)	(01)			
		1648	Apr-02	90	280	346	81	39	38	381	318	589	185	31	31	63
KIRBYVILLE LAKE	2A25											(99)	(77)			
		1739	Mar-26	321	1324	1189	111	186	203	1360	1234	1816	701	41	40	40
MOUNT REVELSTOKE AUTOMATED SNOW PILLOW	2A06P											(99)	(94)			
		1770	Apr-01		1223	1230	99	255	216	19	833	1688	-999			21

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
KEYSTONE CREEK 2A18	1839	Mar-26	222	856	827	104	136	131	1037	901	(99) (01)	39	37	45
FIDELITY MOUNTAIN 2A17	1852	Mar-27	321	1269	1248	102	306	167	1740	1250	(67) (93)	40	39	49
GOLDSTREAM 2A16	1914	Mar-26	320	1236	1157	107	230	189	1410	1230	(67) (93)	39	39	48
BEAVERFOOT 2A11	1924	Mar-27	69	196	222	88	40	30	284	258	(72) (84)	28	27	62
MOLSON CREEK AUTOMATED SNOW PILLOW 2A21P	1930	Apr-01		1080	1014	107	234	149	1384	922.5	(07) (91)			33
BUSH RIVER 2A23	1982	Mar-26	221	862	865	100		138	0	782	(72) (93)	39	38	44
MOUNT ABBOT 2A14	2031	Mar-26	316	1282	1256	102	322	205	1623	1216	(72) (93)	41	39	50
SUNBEAM LAKE 2A22	2066	Mar-26	248	983	917	107	169	137	1216	1021	(72) (01)	40	37	44

Basin UF UPPER FRASER

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
PRINCE GEORGE AIRPORT 1A10	684	Apr-02	62	175	118	148	35	-18	143	183	(82) (05)	28	30	52
PACIFIC LAKE 1A11	756	Mar-26	239	920	628	146	188	59	1060	733	(12) (78)	38	37	50
BURNS LAKE 1A16	820	Apr-03	56	112	129	87	2	-14	162	132	(97) (81)	20	27	44
PHILIP LAKE 4A13	1013	Mar-27	109	322	287	112	78	35	357	302	(07) (01)	30	29	47
HEDRICK LAKE 1A14	1113	Mar-26	287	1066	688	155	216	70	1041	891	(67) (78)	37	37	46
KAZA LAKE 1A12	1247	Mar-27	110	346	338	102	38	41	476	365	(12) (10)	31	29	49
LU LAKE 4B15	1296	Mar-27	93	272	318	86	62	49	456	332	(07) (03)	29	30	37
EQUITY MINE 4B14	1434	Mar-27	111	332	405	82	58	54	556	420	(97) (03)	30	32	37
MOUNT SHEBA 4A18	1480	Mar-26	265	1010	825	122		110	1181	1036	(07) (93)	38	36	44
BARKERVILLE AUTOMATED SNOW PILLOW 1A03P	1483	Apr-01	105	375	387	97	95	68	439	414	(85) (72)	36		37
KNUDSEN LAKE 1A15	1598	Mar-26	258	941	826	114	206	104	1264	925	(12) (93)	36	36	46

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm)	2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
Snow Course Name and Number															
REVOLUTION CREEK AUTOMATED SNOW PILLOW	1A17P	1676	Apr-01	282	963	798	121	165	102	1292	816	(12) -999	(86)	34	29
LONGWORTH (UPPER)	1A05	1693	Mar-26	317	1220	784	156	416	110	1150	0	(64) 1234	(78) 467	38	59
YELLOWHEAD AUTOMATED SNOW PILLOW	1A01P	1847	Apr-01	137	473	593	80	129	94	732	538	(99) -999	(97)	35	17

Basin VI VANCOUVER ISLAND

Snow Course Name and Number		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
ELK RIVER	3B04					<						(56)	(00)			
		270	Apr-03	0	0	89	n/a	0	-25	0	0	607	0	n/a	42	55
WOLF RIVER (LOWER)	3B19											(99)	(81)			
		615	Apr-03	68	326	381	86	-112	34	650	846	1198	0	48	39	43
UPPER THELWOOD LAKE	3B10											(99)	(05)			
		1014	Apr-03	344	1634	1554	105	46	350	2158	2287	3200	354	48	42	55
WOLF RIVER (MIDDLE)	3B18											(99)	(92)			
		1050	Apr-03	157	640	664	96	-56	132	828	1062	1706	0	41	36	43
FORBIDDEN PLATEAU	3B01											(99)	(05)			
		1110	Apr-03	319	1529	1595	96	112	316	2188	2565	3550	387	48	43	59
JUMP CREEK AUTOMATED SNOW PILLOW	3B23P											(99)	(99)			
		1134	Apr-01	257	1269	1208	105	37	231	1708	1864	3000	-999	49		18
MOUNT COKELY	3B02A											(99)	(81)			
		1267	Mar-27	227	1086	864	126		163	0	1378	2100	331	48	41	33
WOLF RIVER (UPPER) AUTOMATED SNOW PILLOW	3B17P											(99)	(05)			
		1422	Apr-01		1221	1420	86	151	242	1220	2054.	2600	195.			30

Basin WK WEST KOOTENAY

		Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change		2012	2011	Max	Min	Dens (%)	Normal Dens (%)	Yrs of Rec
Snow Course Name and Number								(mm)	(mm)	(mm)	(mm)	(mm)	(mm)			
FERGUSON	2D02											(99)	(42)			
		929	Mar-28	134	498	587	85	28	48	620	716	881	142	37	41	70
NELSON	2D04											(56)	(41)			
		952	Mar-28	62	210	372	56	16	19	393	352	622	137	34	36	75
SANDON	2D03											(82)	(41)			
		1072	Mar-31	78	249	357	70	-16	10	0	0	585	71	32	39	71
CHAR CREEK	2D06											(74)	(01)			
		1290	Apr-01	123	445	563	79	20	87	620	545	940	273	36	37	48
GRAY CREEK (LOWER)	2D05											(72)	(70)			
		1558	Mar-26	131	413	472	88	45	66	645	662	688	290	32	34	64
KOCH CREEK	2B07											(99)	(01)			
		1813	Mar-28	206	748	755	99	34	130	825	768	1156	397	36	36	51

Snow Course Name and Number	Elev (m)	Date of Survey	Snow Depth (cm)	Water Equiv (mm)	Normal Water Equiv (mm)	% of Normal	Change/Normal Change (mm) (mm)		2012 (mm)	2011 (mm)	Max (mm)	Min (mm)	Dens (%)	Normal Dens (%)	Yrs of Rec
MOUNT TEMPLEMAN 2D09	1879	Mar-27	281	1086	1076	101	141	0	0		(72)	(93)	39	39	41
GRAY CREEK (UPPER) 2D10	1926	Mar-26	222	785	783	100	126	132	1048	956	(72)	(01)	35	36	44
EAST CREEK AUTOMATED SNOW PILLOW 2D08P	2004	Apr-01		825	922	89	215	132	1009	945	(91)	(01)			32

Snow Survey and Water Supply Bulletin – May 1st, 2013

The May 1st snow survey is now complete. Data from 135 snow courses and 53 snow pillows around the province and out-of-province sampling locations, and climate data from Environment Canada, have been used to form the basis for the following reports¹.

Weather

Weather was mixed through the month of April. A hot, dry spell over the Easter long weekend had record or near record temperatures in many regions of the province. The weather then transitioned into more unsettled weather patterns which persisted through the remainder of the month. This led to wetter than normal conditions for most of the province, and slightly below normal temperatures. In the northern part of the province, temperatures through April were well below normal.

Snowpack

The heat spell in early April led to the onset of snowmelt in some locations of the province, particularly low to mid elevations areas. This trend was reversed with more unsettled weather through the remainder of the month. With cooler and wetter conditions, continued snow accumulation occurred for most areas up until the end of April. Typically snow packs transition from accumulating snow to melting snow around the middle of April, however this transition was delayed this season by one to two weeks. The combination of modest growth in snow packs and the delay in the melt season has led to modest increases in snow basin indices since April 1st for most areas of the province. Snow basin indices, however, remain near normal (90-100%) for most of British Columbia (Table 1, Map 1, and Snow Basin Graphs). Below normal basin indices (<90%) are present in the Nechako and on Vancouver Island. Snow basin indices are moderately elevated (110-120%) in the North Thompson, South Thompson, Okanagan-Kettle and Stikine, and high (>120%) in the Upper Fraser. The Liard has a snow basin index of 236%, however this is largely reflective of the delay in snowmelt in that watershed rather than exceptional amounts in comparison to a normal annual maximum amount of snow.

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

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

Basin	% of Normal	Basin	% of Normal
Upper Fraser	129%	Kootenay	101%
Nechako	82%	Okanagan-Kettle	115%
Middle Fraser	103%	Similkameen	100%
Lower Fraser	103%	South Coast	104%
North Thompson	111%	Vancouver Island	85%
South Thompson	120%	Peace	100%
Nicola	105%	Skeena-Nass	94%
Fraser River – All Basins	107%	Stikine	111%
Columbia	106%	Liard	236%

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, 2013

Outlook

With a slight delay in the onset of the snow melt season, and small increases in the size of the snow pack in some regions, there have been small increases in the seasonal flood risk across the province. Seasonal flood risk is moderately elevated in the North Thompson, South Thompson, Okanagan-Kettle and Liard Rivers. Seasonal flood risk is high in the Upper Fraser basin. Elsewhere in the province, seasonal flood risk is considered to be normal.

The May 1st Fraser Basin index is 107% and normal seasonal flood risk is expected on the lower Fraser River through the Fraser Valley. The revised May estimate for the most likely (i.e. a 50% chance of occurrence) peak flow on the Fraser River at Hope is 9100 m³/s or less. There is approximately a 5% chance of a peak flow of 11,500 m³/s (slightly below peak levels that were experienced in 2012) and less than a 1% chance of a peak flow of 15,200 m³/s (similar flows to the 1948 flood).

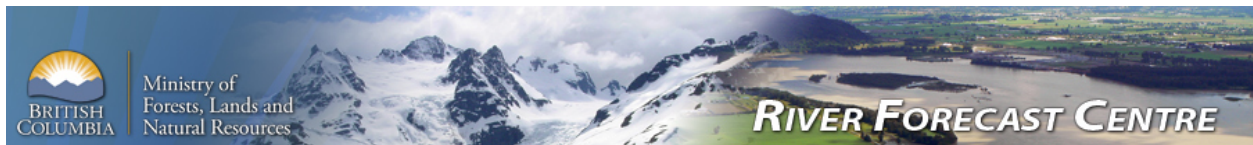
It is important to note that snow pack is only one element that influences whether flooding occurs during the spring freshet. Of critical importance are how the snow melts and how much, and when, precipitation is received during the snow melt period. While there is an increased likelihood of flooding in areas with higher than normal snow packs, flooding is possible in any region given adverse weather conditions (prolonged heat and/or heavy precipitation).

Seasonal flows are expected to be near normal throughout most of the province. Lower than normal spring-summer flows are expected in the Nechako basin and on Vancouver Island. Current seasonal forecasts for select watersheds are given in Table 3.

As of May 1st, weather has transitioned into persistent high pressure systems with temperatures that have been well above normal, and in some cases reaching new record levels. This has led to the onset of the snowmelt season across BC, with the highest rates of melt occurring in the southern half of the province. The current weather forecasts from Environment Canada are indicating hot temperatures through to May 10th or 11th for most of the province, with a slight cooling and chance of wet weather towards the end of the weekend and into early next week (May 12-13th). The current NAEFS (North American Ensemble Forecast System) 8-14 day temperature anomaly probabilistic forecast is for a high likelihood of above normal temperatures through the May 15th-22nd period. The current 30-day temperature anomaly outlook (issued April 30th, 2013 for the month of May) from Environment Canada indicates an increased likelihood for above normal temperature for southern British Columbia. Longer-range (3-month) [seasonal forecasts](#) from Environment Canada are also suggesting a higher likelihood of above normal temperature and below normal precipitation over the May-July period, specifically in the southern half of the province.

Currently most rivers are well below flood stage, but hot weather through the first week in May has led to rapidly rising river levels across most of the province. With an increased likelihood of warmer weather over the next 1-3 weeks, continued rapid snow melt is expected. Flooding is possible during this window of time if temperatures remain high, or if there are any significant rainstorms that accompany the hot weather.

The River Forecast Centre is currently publishing information on the 2013 year's freshet season including a table and map of daily river flows at various Water Survey of Canada hydrometric gauges across the



Snow Survey and Water Supply Bulletin – May 1st, 2013

province, 5-day flow forecasts for the Fraser River and major tributaries, and a weekly Provincial River Outlook Summary. This can be found at: <http://bcrcfc.env.gov.bc.ca/bulletins/freshet.htm>, and additional information will be added as it becomes available.

The next snow bulletin will be released on May 22nd, 2013.

Produced by: BC River Forecast Centre
May 8, 2013

Snow Survey and Water Supply Bulletin – May 1st, 2013

Map 1: Basin Snow Water Index - May 1st, 2013

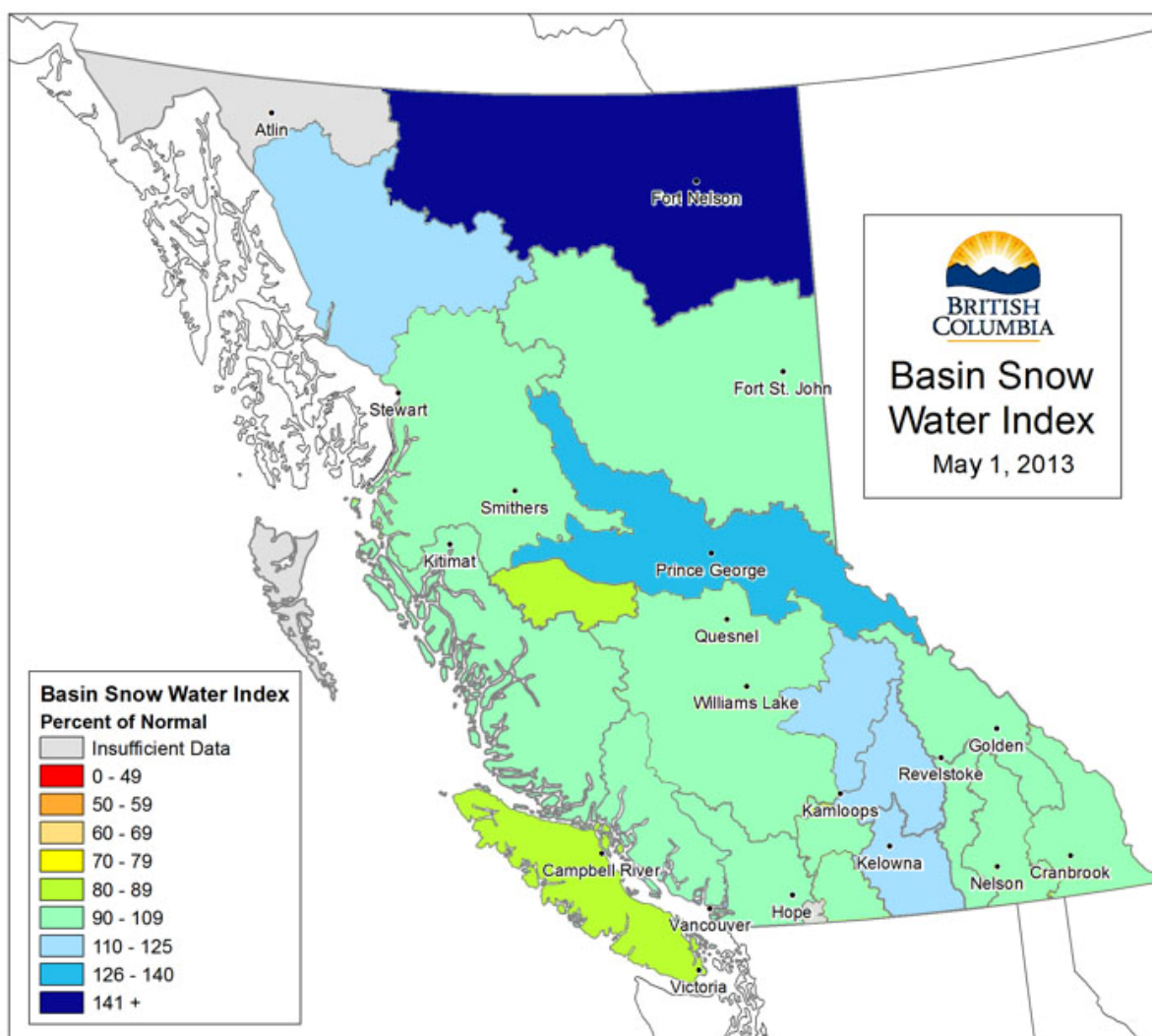


Table 2: May 1st Automated Snow Pillow Estimates

SNOW PILLOW ID	SNOW PILLOW NAME	OBSERVATION DATE	ESTIMATED Snow Water Equivalent (mm)
1E02P	MOUNT COOK	01-May	1462
2C09Q	MORRISSEY RIDGE	01-May	600
2D08P	EAST CREEK	01-May	976

TABLE 3
Ministry of Forests, Lands and Natural Resource Operations
River Forecast Centre
Volume Runoff Forecast May 2013

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	3470	3534	98%	297				4934	5000	99%	373
	McGregor at Lower Canyon	4382	3552	123%	376				4802	4598	104%	563
	Fraser at Shelley	16508	13672	121%	1070				18675	17732	105%	1657
Middle Fraser Basin	Quesnel River at Quesnel	4375	4117	106%	419				5813	5448	107%	574
Thompson Basin	N. Thompson at McLure	8934	8209	109%	425				11389	10379	110%	785
	S. Thompson at Chase	5956	5298	112%	403				7789	6866	113%	659
	Thompson at Spences Bridge	15643	13923	112%	825				20369	17903	114%	1510
Bulkley and Skeena	Bulkley at Quick	2157	2383	91%	185				2741	2980	92%	220
	Skeena at Usk	15979	17317	92%	964				20657	21661	95%	1463
Nicola Lake	Inflows	129	105	123%	28	155	122	128%	33			
Nicola River	at Spences Bridge	469	409	115%	76	552	477	116%	103			
Okanagan and Kalamalka-Wood Lake	Okanagan Lake Inflow	496	349	142%	81	548	376	146%	103			
	Kalamalka-Wood Lake Inflow	27.5	21.5	145%	8.2	30.7	23.7	150%	10.7			
Similkameen River	Similkameen at Nighthawk	1202	1101	109%	152				1556	1411	110%	193
	Similkameen at Hedley	861	827	104%	91				1061	1015	105%	105
Cowichan River	Cowichan Lake Inflows	118	130	91%	45				160	174	92%	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

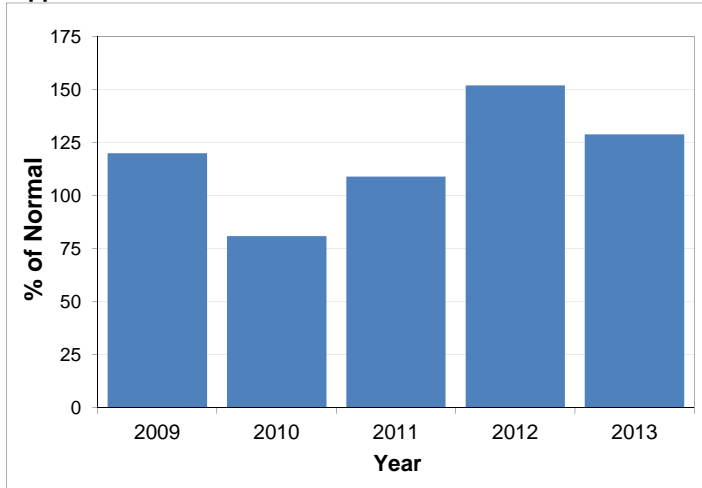
The Standard Error in the Cowichan forecast reflects model error, and does not capture uncertainty over seasonal weather

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

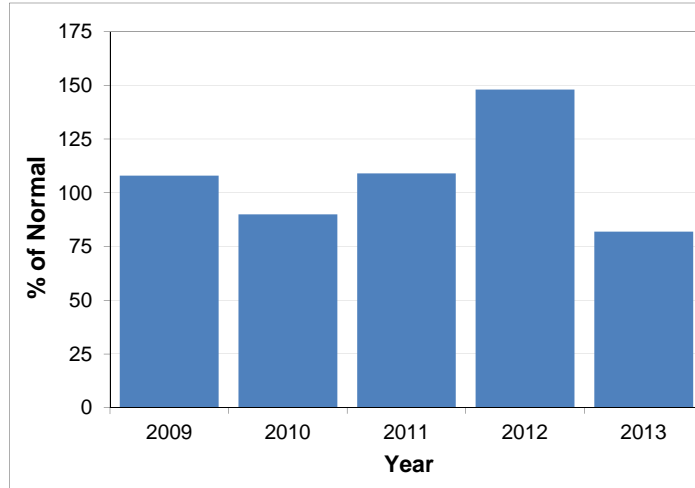
Use at your own risk

Snow Basin Index Graphs - May 1, 2013

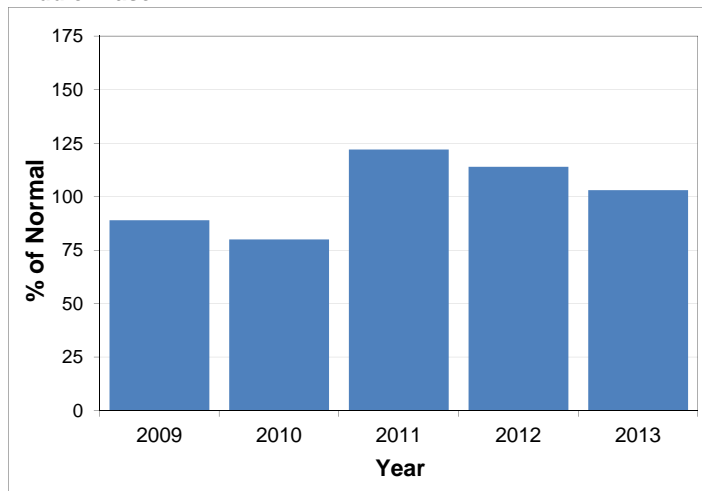
Upper Fraser



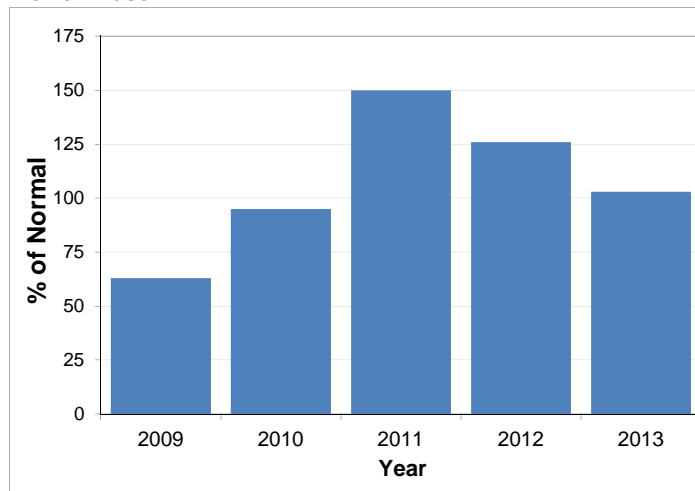
Nechako



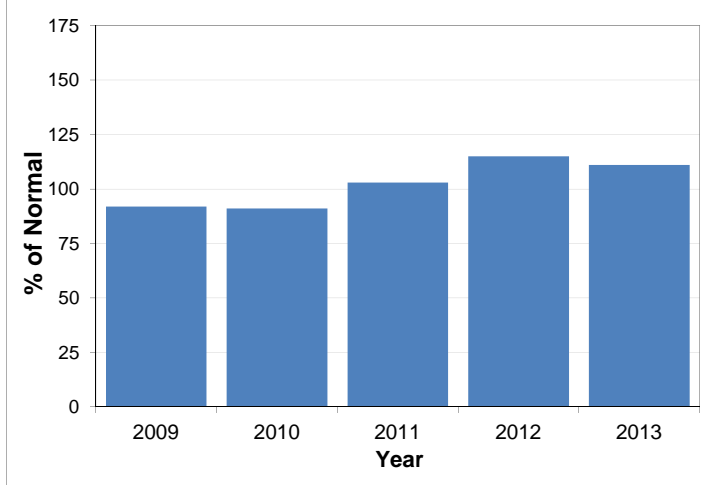
Middle Fraser



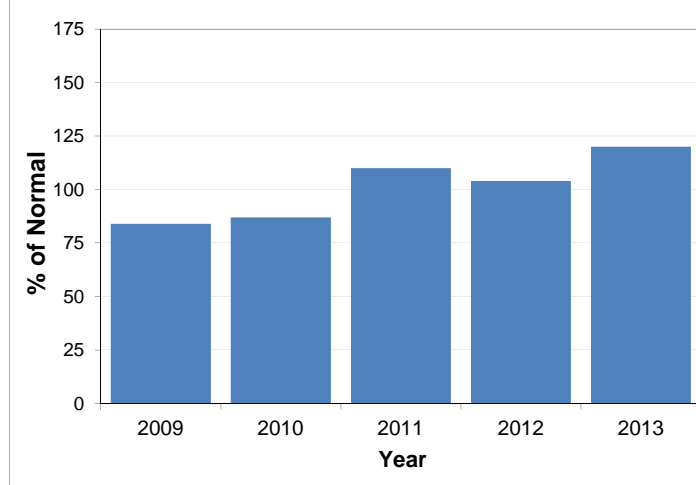
Lower Fraser



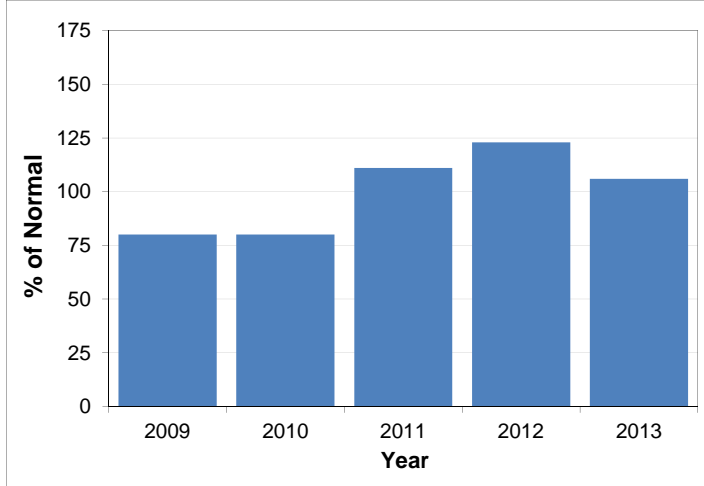
North Thompson



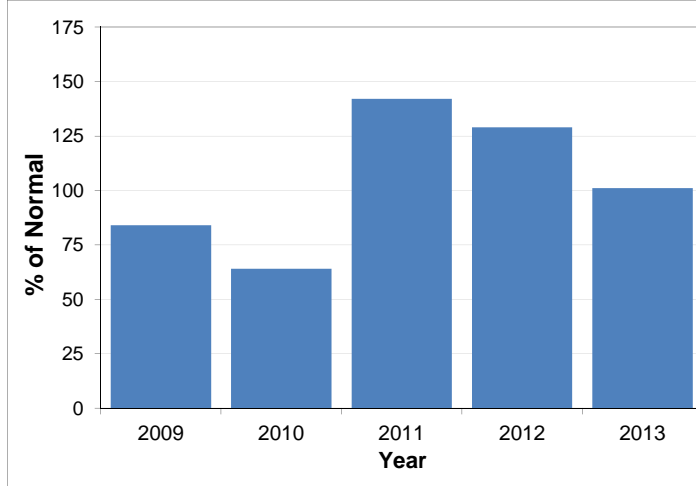
South Thompson



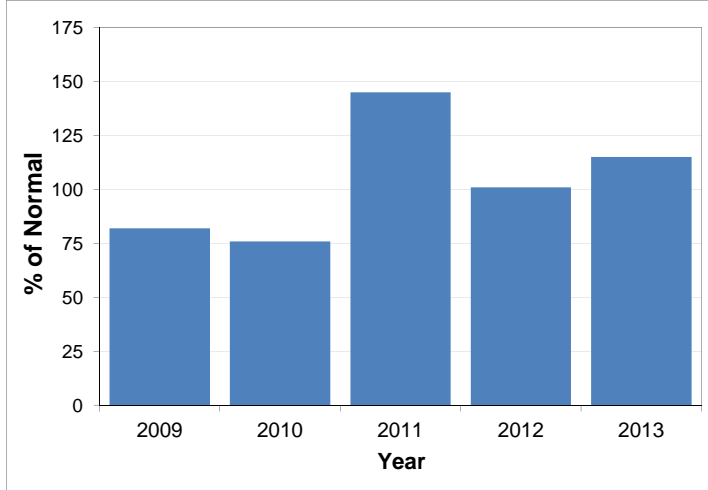
Columbia



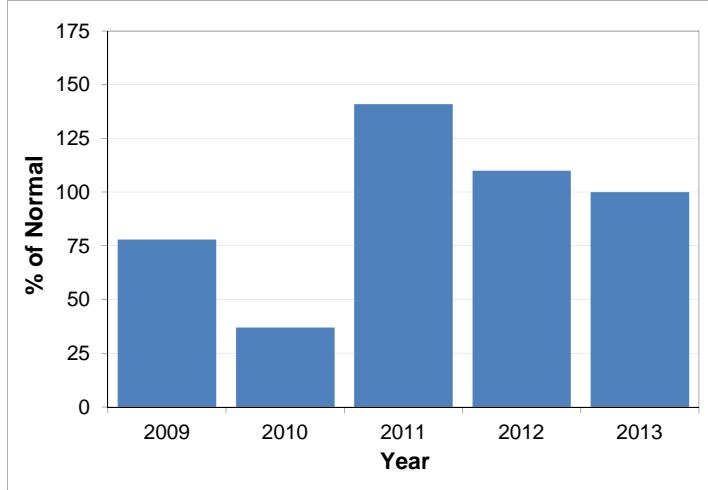
Kootenay



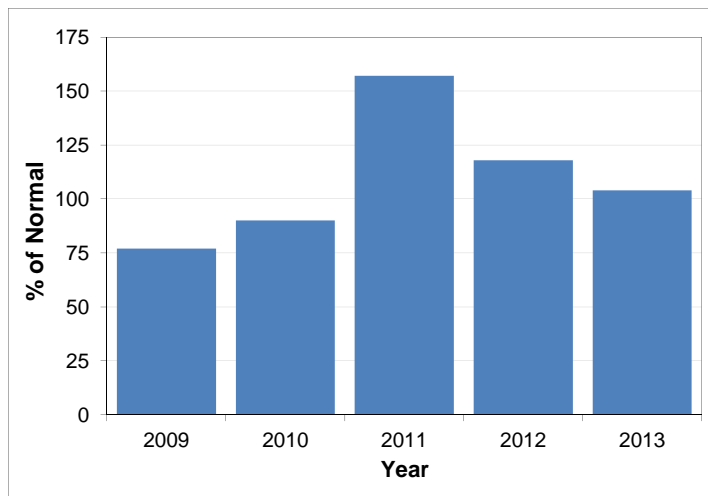
Okanagan-Kettle



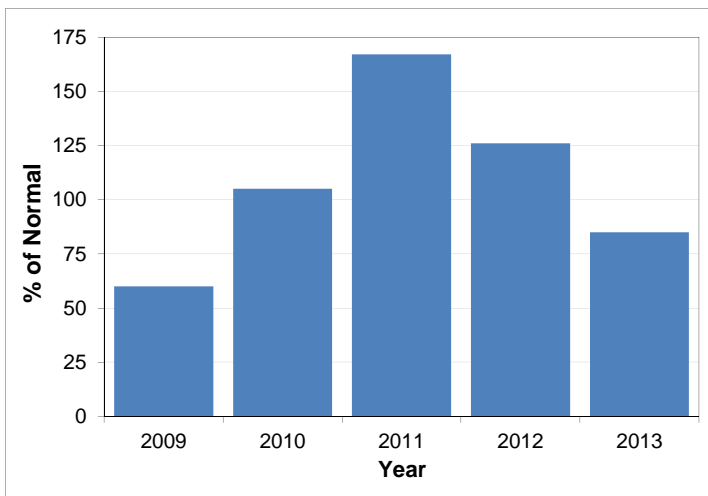
Similkameen



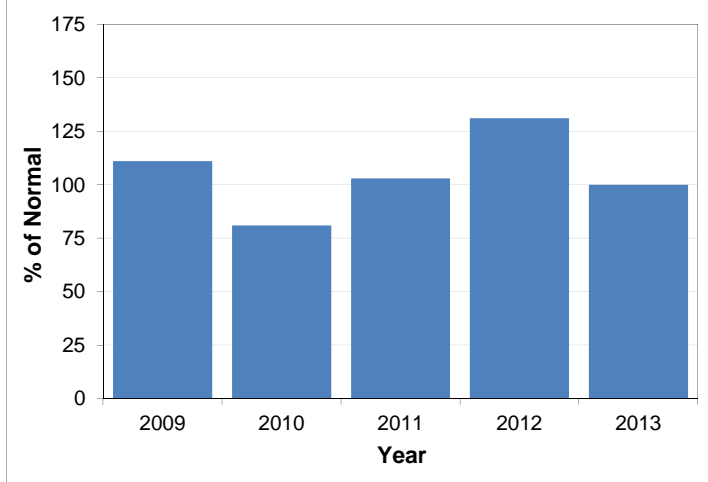
South Coast



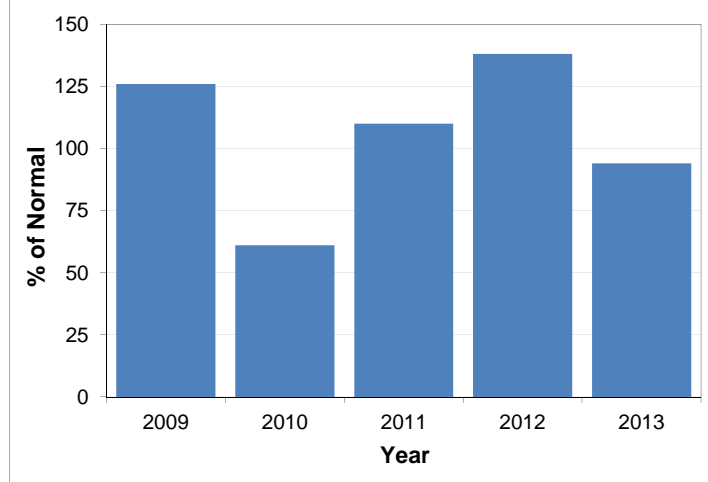
Vancouver Island



Peace



Skeena-Nass



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

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

Weather

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

Snowpack

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

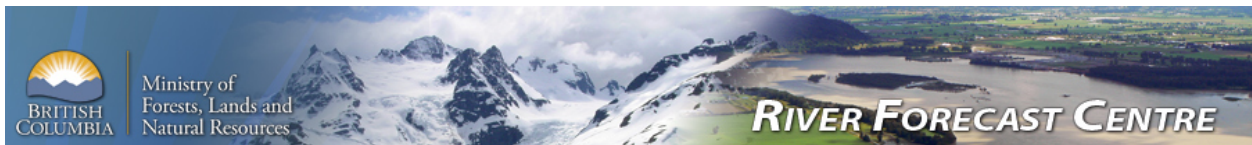
Snow basin indices are normal (90-110%) in the North and South Thompson, Upper Fraser and South Coast, and moderately elevated (110-130%) in the Stikine. Snow packs in other areas of the province are below normal (<90%).

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

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

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

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

Outlook

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

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

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

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

Produced by: BC River Forecast Centre
May 22, 2013

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

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

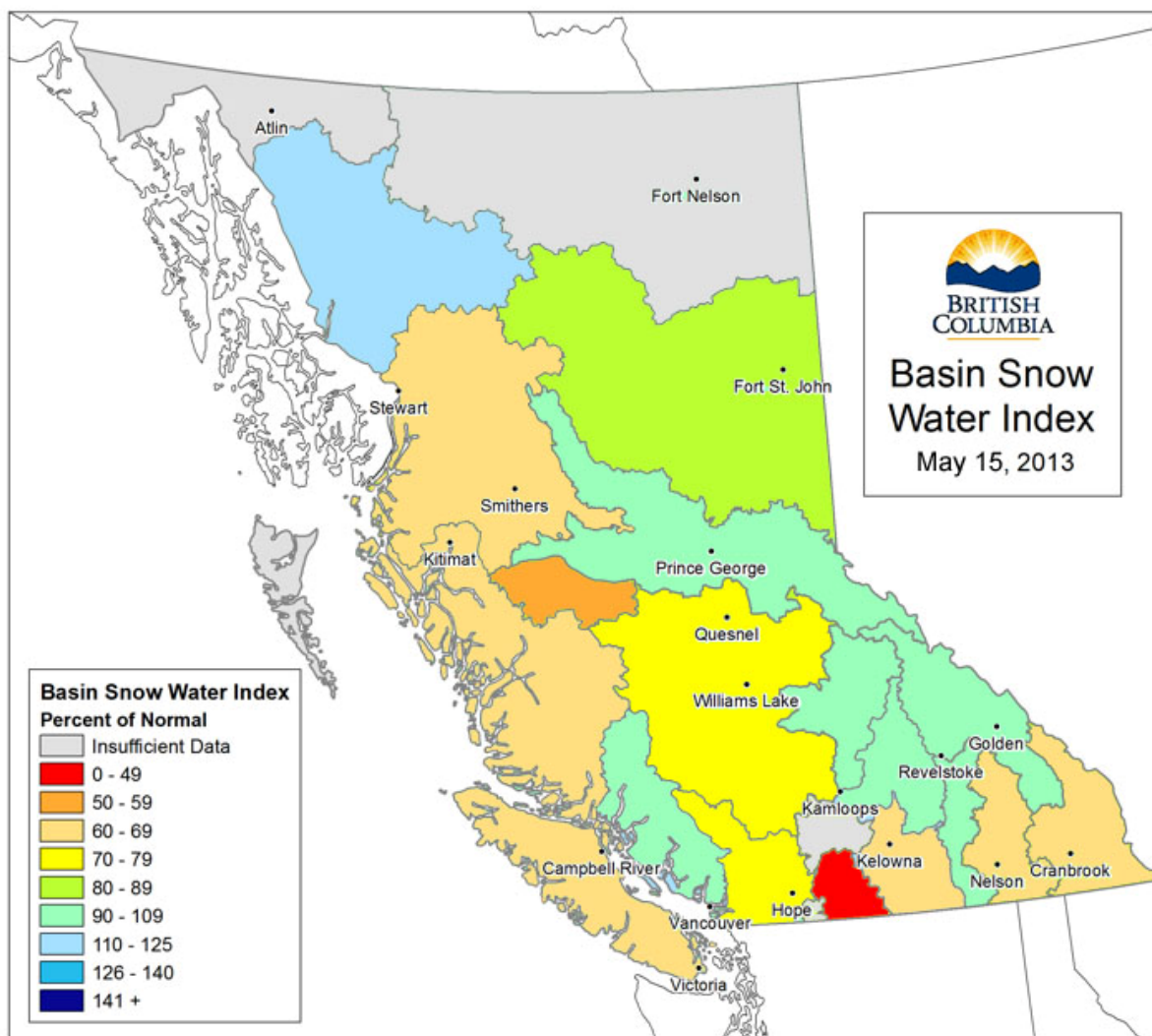


Table 2: May 15th Automated Snow Pillow Estimates

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

Snow Survey and Water Supply Bulletin – June 1st, 2013

The June 1st snow survey is now complete. Data from 22 snow courses and 47 snow pillows around the province (including some out-of-province sampling locations), and climate data from Environment Canada, have been used to form the basis for the following reports¹.

Weather

The month of May began with widespread, unseasonably warm temperatures and dry conditions that persisted for 8-9 days due to the establishment of a stable high pressure ridge over BC. Weather through the second half of May was more unsettled, with the prevalence of cooler and wetter conditions. Province-wide temperatures were 0.5 to 2.0 °C above normal through May, with slightly above normal precipitation through most regions.

Snowpack

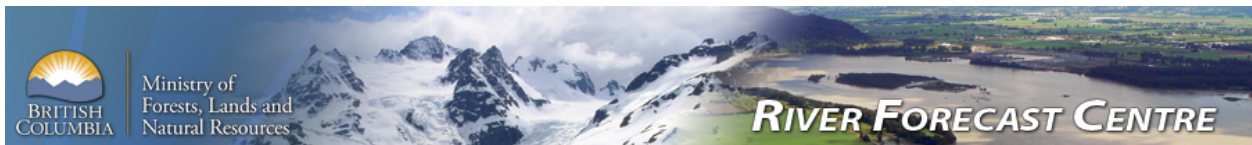
Snowmelt has been rapid through the month of May. Snow basin indices are well below normal (<70%) through most regions of the province (Table 1 and Figure 1). Near normal snow pack exists in the North Thompson and South Thompson. In the Columbia, snow melt has been more limited and current snow packs are above normal (131%) in the Columbia. Low snow basin indices at this time of the year are reflective of an earlier than normal snow melt season, with current snow pack conditions being similar to what might be expected to occur in mid-June (i.e. melt season is 1 to 2 weeks ahead of normal this year). This year's snow pack melt contrasts significantly with the past two years, where snow melt was delayed by 2-3 weeks (Figure 2).

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

Table 1: BC Snow Basin Indices – June 1, 2013

Basin	% of Normal	Basin	% of Normal
Upper Fraser	84%	Kootenay	63%
Nechako	47%	Okanagan-Kettle	76%
Middle Fraser	40%	Similkameen	35%
Lower Fraser	51%	South Coast	67%
North Thompson	100%	Vancouver Island	68%
South Thompson	105%	Peace	42%
Columbia	131%	Skeena-Nass	30%

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Snow Survey and Water Supply Bulletin – June 1st, 2013

Outlook

Seasonal flood risk from snow melt alone is starting to ease in many regions of the province, including the entire mainstem of the Fraser River, and the North Thompson, Okanagan, Similkameen, Kootenay, Peace and Skeena Rivers. On the South Thompson River and upper Columbia River (e.g. at Donald and upstream), the peak typically occurs later in the season, therefore there may be another 2 weeks of on-going risk on these systems, particularly with the higher remaining snowpack in the Columbia region. Flooding is still possible in any region if areas receive extreme rainfall.

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

The next snow bulletin will be released on June 21st, 2013.

Produced by: BC River Forecast Centre
June 6, 2013

Figure 1: Basin Snow Water Index - June 1st, 2013

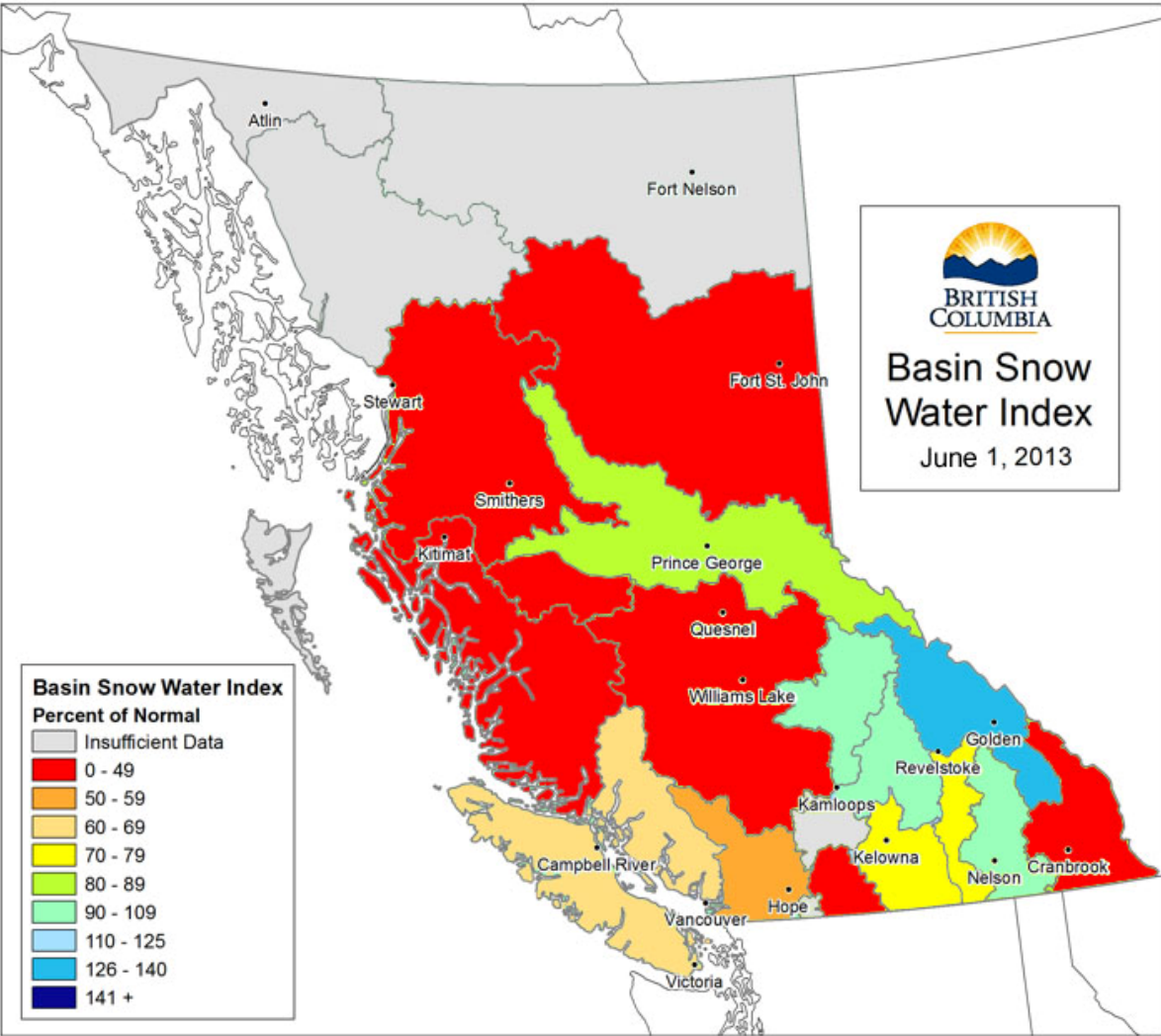


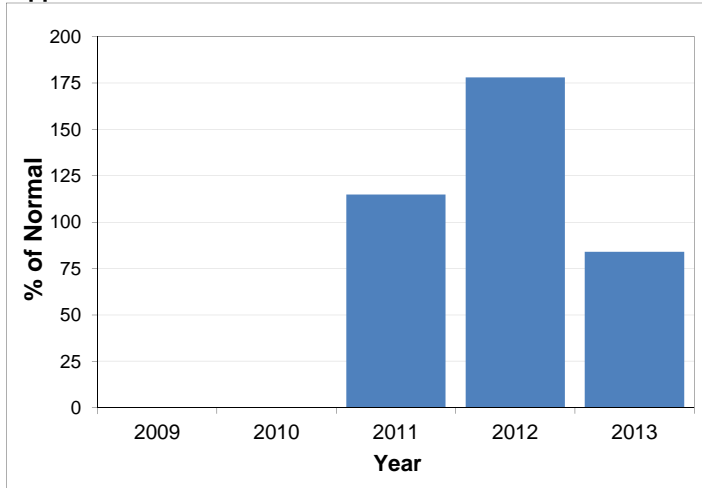
Table 2: June 1st Automated Snow Pillow Estimates

SNOW PILLOW ID	SNOW PILLOW NAME	OBSERVATION DATE	ESTIMATED Snow Water Equivalent (mm)
1E02P	MOUNT COOK	1-June	1169
2C09Q	MORRISSEY RIDGE	1-June	63
2D08P	EAST CREEK	1-June	503

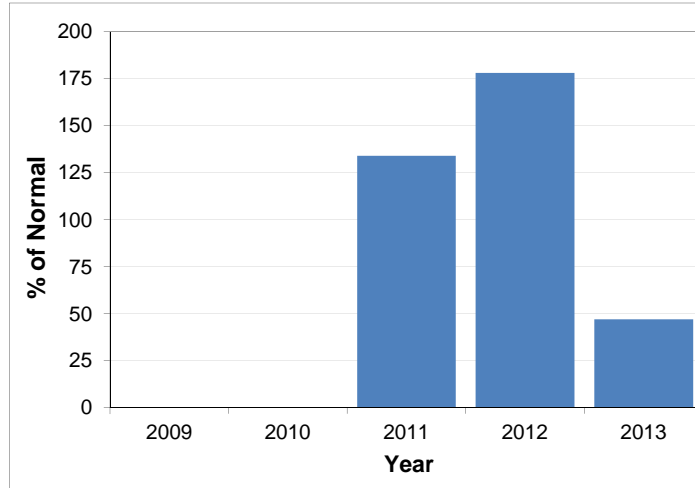
1. Every effort is made to ensure that data reported on these pages are accurate. However, in order to update the graphs and indices as quickly as possible, some data may have been estimated. Please note that data provided on these pages are preliminary and subject to revision upon review.

Snow Basin Index Graphs - June 1, 2013

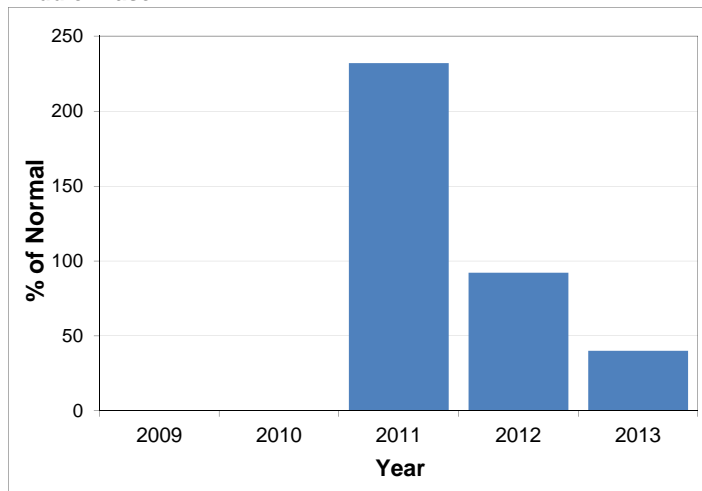
Upper Fraser



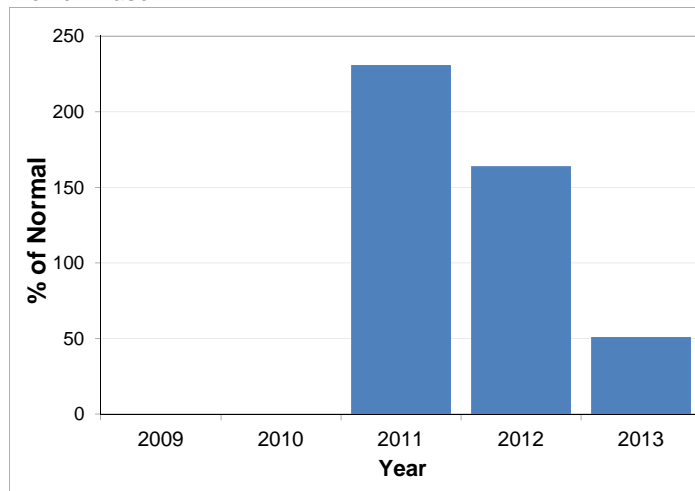
Nechako



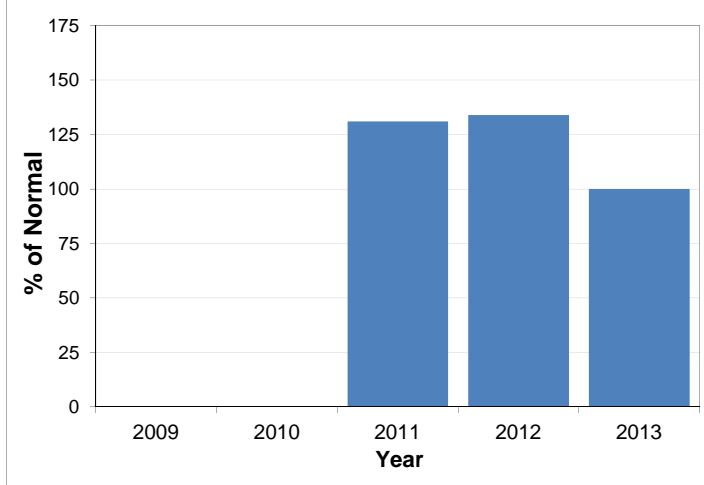
Middle Fraser



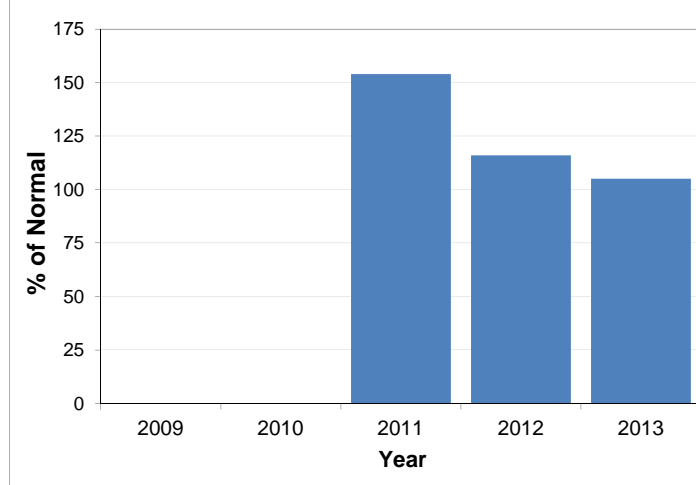
Lower Fraser



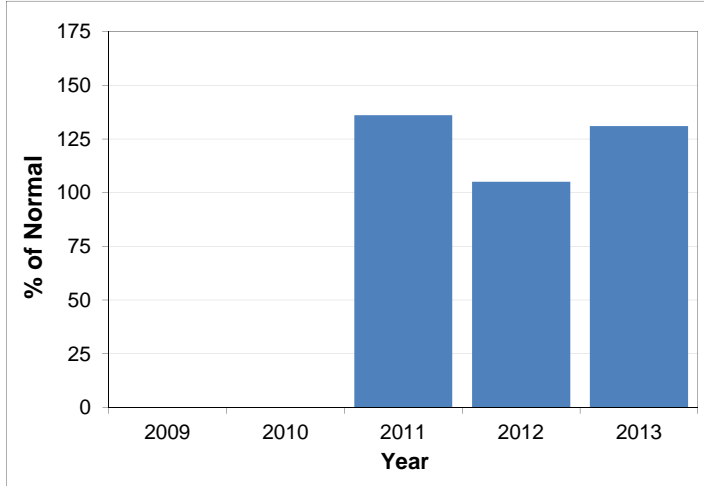
North Thompson



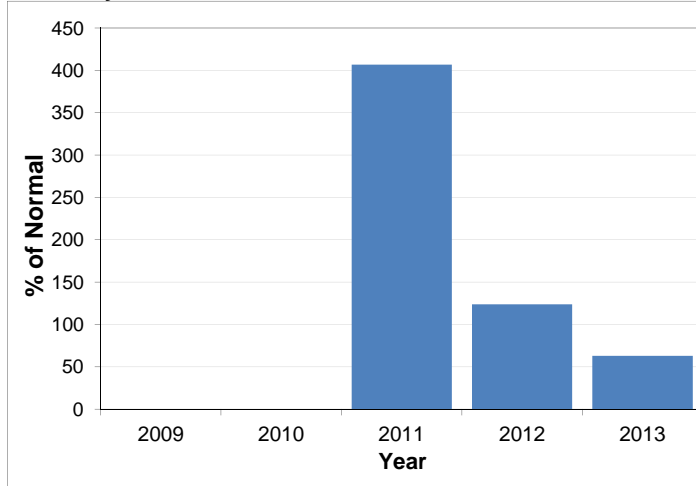
South Thompson



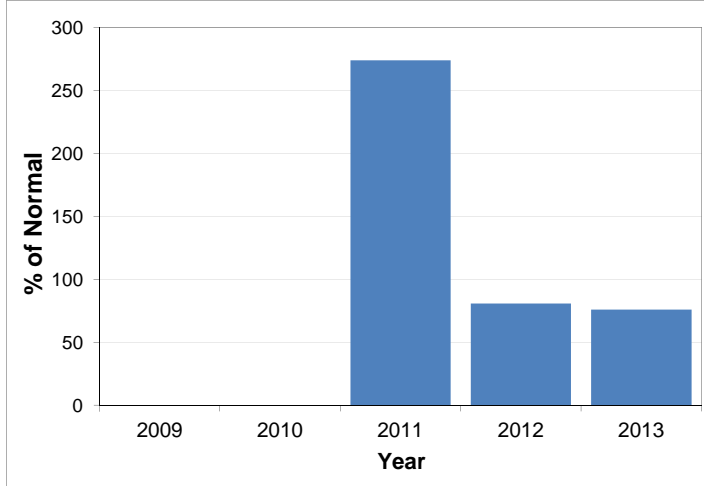
Columbia



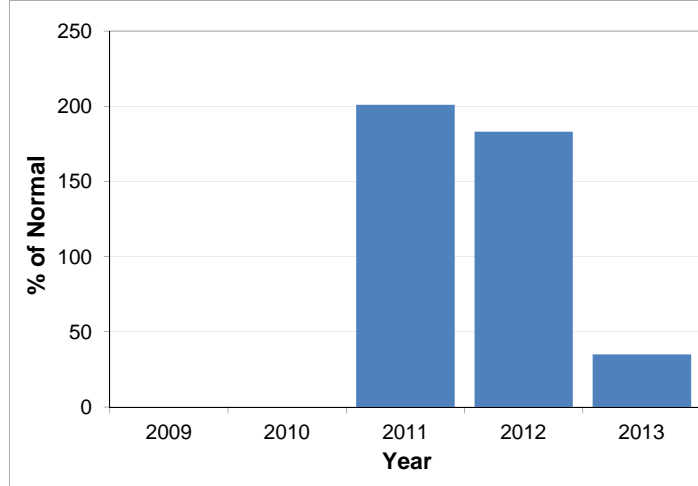
Kootenay



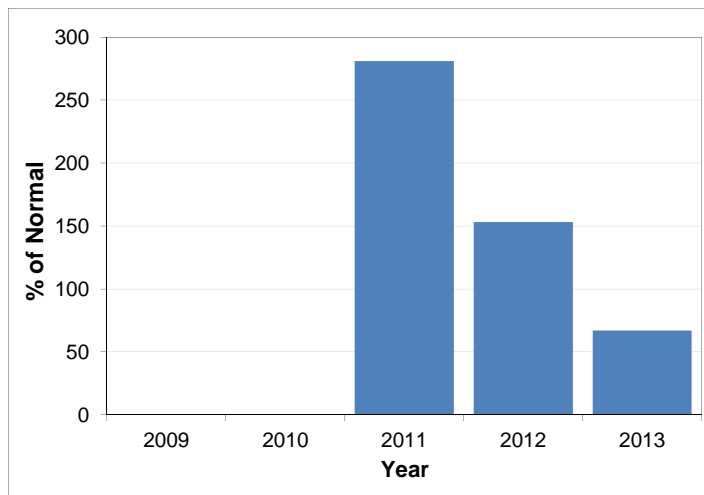
Okanagan-Kettle



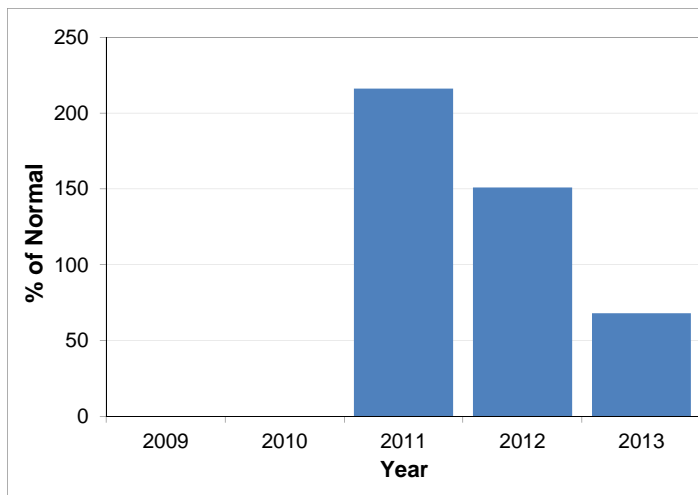
Similkameen



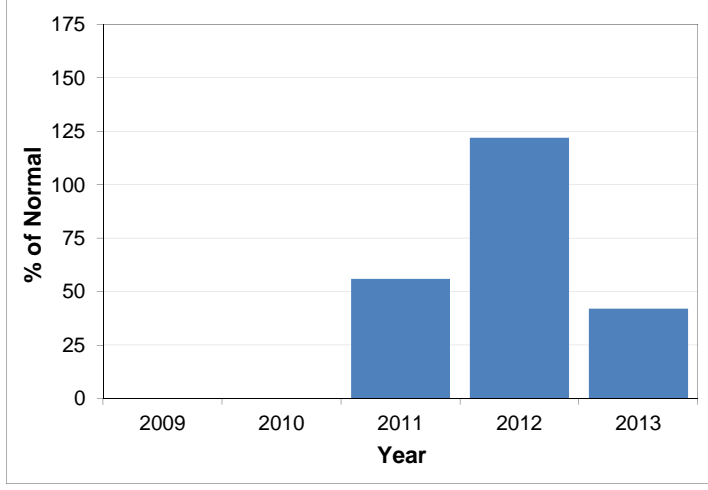
South Coast



Vancouver Island



Peace



Skeena-Nass

