#### **Province-Wide Synopsis**

### **Basin Data and Graphs**

- Upper Fraser and Nechako
- · Middle and Lower Fraser
- Thompson
- Columbia
- Kootenay
- Okanagan, Kettle, and Similkameen
- Vancouver Island and Coastal Regions
- North East Region
- North West Region
- 2004 Snow Pillow Graphs
- 2004 Ground Water Graphs
- January 2004 Groundwater Commentary
- 2004 Survey Schedule
- 2004 Snow Survey Network

# Snowpack and Water Supply Outlook for British Columbia

**January 1, 2004** 

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 on review.

### **Province-wide Synopsis**



BC Summary Graphs of Snow Water Equivalents

The January 1 snow survey is now complete. Data from 94 snow courses and 55 snow pillows around the province, with 6 out of province sampling locations and climate data from Environment Canada, have been used to form the basis for the following reports.

### Snowpack

Most B.C. snowpacks are below normal for this date, with the exception of a band of near normal snowpacks along the southern edge of the province, (as far north as northern Vancouver Island, the Nicola and Okanagan, Nelson and Cranbrook in the Kootenays). The Columbia & Kootenay regions have only slightly below normal snowpacks. The eastern and northern portions of the central plateau again have far below normal snowpacks, and the Skeena and Liard basins have well below normal snow for January 1.

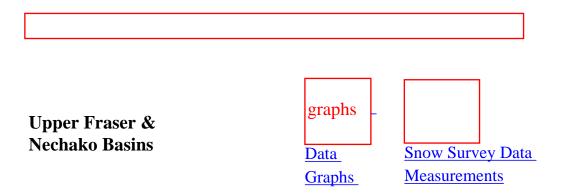
#### Weather

October had well above normal precipitation, however temperatures were slightly warmer than usual, delaying onset of snow accumulation at higher

elevations slightly. Precipitation was varied during November, however all areas except for the Liard and Upper Columbia had very low precipitation during December.

#### **Outlook**

By January 1, on average, just under half of the peak snowpack for the year has accumulated. The South Coast and Okanagan, which suffered from drought last summer, have good snowpacks for this date. However, unless the next two or three months of snow accumulation in the central B.C. area from the South Thompson through to the Nechako reservoir are above normal, there may again be low flows experienced in those regions.



### January 1

The snow water equivalent index for the Upper Fraser is at 70% of normal for January 1, however there is some variation, with the McGregor basin having slightly more, and the Willow & Bowron slightly less snow. The Nechako snowpacks are well below normal, with a snow water index of 60% of normal for this date.

While October had high precipitation, temperatures were warm for snow accumulation, and December had very low precipitation.

Regional streamflows, as indicated by the mean monthly flow in the Fraser River at Marguerite, were slightly less than usual during November and December.

Middle and Lower
Fraser

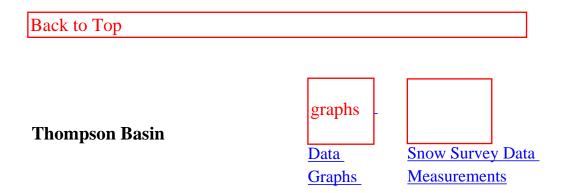
Data
Graphs
Measurements

#### January 1

The snowpacks in the Middle Fraser were well below normal on January 1, with an overall regional snow water equivalent index of 73% of normal, however there is variation within the region. The Chilcotin appears to have just slightly less than usual snow, with the plateau areas to the north of there, and areas east of the Fraser River having snowpacks in the 50% to 70% range. October was slightly warmer than usual, and November and December had around three quarters of usual precipitation.

The Lower Fraser has normal to above normal snowpacks, mainly due to a slightly wetter and colder than usual November.

Streamflows, as indicated by the mean monthly flows in the Fraser River at Hope, are unavailable at this time.



### January 1

Due to the warm October, and low precipitation and slightly warmer temperatures during December, upper elevation snowpacks are lighter than usual in both the North and South Thompson. While lower elevation snowpacks appear to be near normal in these basins, mid to upper elevation snowpacks in the North Thompson are around three quarters of usual, and in the South Thompson around two thirds of normal for January 1.

Streamflows in the region, as indicated by the mean monthly flows in the Thompson River at Spence's Bridge, were normal during November, and slightly below normal during December.

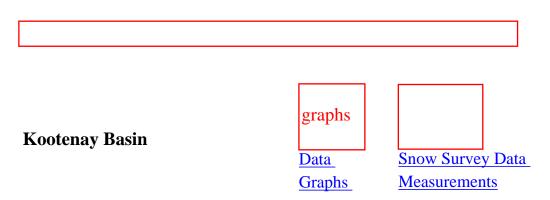
Columbia Basin

Data
Graphs
Measurements

#### January 1

Mid to upper elevation snowpacks in most of the Columbia basin are slightly below normal (80-90%) for January 1, however the southern portions of the lower Columbia have a near to slightly above normal snowpack. Lower elevation snow appears normal throughout the basin.

Streamflows in the region, as represented by the mean monthly flow in the Columbia River at Donald, were above normal during both November and December.



### January 1

Mid to upper elevation snowpacks in most of the Columbia basin are slightly below normal for January 1, with lower elevation snow near normal. Southern portions of the Kootenays have a near to slightly above normal snowpack.

Streamflows, as indicated by the mean monthly flows in the Kootenay River at Fort Steele, were slightly below normal during both November and December.

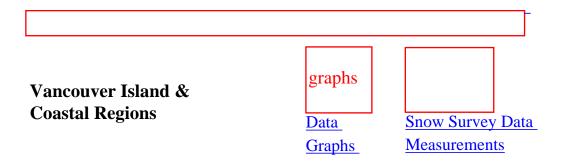
Okanagan, Kettle, and
Similkameen Basins

Data
Graphs
Measurements

#### January 1

While the overall snow water index for the Okanagan Kettle is only 82% of normal, most of the Okanagan is showing near normal snow readings for this date, with the few Kettle readings below normal. The Similkameen basin appears to have normal to slightly above normal snowpacks for January 1. While December had quite low precipitation, November was colder and had higher precipitation than usual.

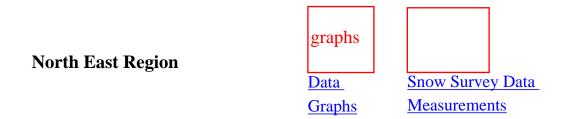
Streamflows in the region, as indicated by inflows to Okanagan Lake, were well below normal during November and December. Okanagan Lake levels are the lowest experienced for this date in the period of record, and near to the lowest for any date.



#### January 1

Snowpacks on Vancouver Island are well above normal, and on the South Coast slightly above normal, with snow water indexes of 120% and 107% of normal for January 1, respectively. While December was drier than usual, November was colder than usual, with less rain and more snow at mid to upper elevations.

Streamflows, as indicated by the mean monthly inflows to Upper Campbell Lake, were far below normal during November, (residual from the summer & fall drought), but only slightly below normal during December.

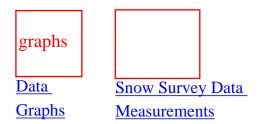


#### January 1

Snowpacks in the Peace basin are in the range of 70% to 80% of normal for January 1. From very few readings, the Liard appears to have less than 70% of normal snowpacks. Precipitation has been below normal over November and December.

Streamflows, as indicated by inflows to Williston Lake have been above normal during November and December.

### **North West Region**



#### January 1

While the overall Skeena/Nass snow water index is at 77% of normal for January 1, coastal areas appear to have near normal snowpacks, with inland areas of the Skeena, Nass and Stikine having well below normal snowpacks. Precipitation has been low over November and December, and December has been warmer than usual (preliminary data indicates the mean monthly temperature at Dease Lake was 6.7°C above normal).

Regional streamflows, as indicated by the mean monthly flows in the Skeena River at Usk, were normal during November, but slightly below normal during December.

footer graphic

# **UPPER and MIDDLE FRASER**

**January 1, 2004** 

# **UPPER FRASER**

### **Snow Survey Measurements**

					V	VATE	R EQU	IVAL	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PRINCE GEORGE A	1A10	690	06	22	42	OT	42	156	OT	70	41
PACIFIC LAKE	1A11	770	27	105	281	56	183	476	56	310	20
BURNS LAKE	1A16	800	05	27	44	10	58	176	10	77	29
PHILIP LAKE	4A13	980	02	49	99	93	163	268	64	150	21
HEDRICK LAKE	1A14	1100	27	92	266	94	248	640	94	335	13
HEDRICK LAKE	1A14P	1100	01	-	248	139	368	461	139	300*	4
KAZA LAKE	1A12	1190	02	58	131	119	219	371	113	190	18
MOUNT SHEBA	4A18	1490	27	90	269	106	450	793	106	400	15
BARKERVILLE	1A03P	1520	01	-	75	68	150	312	68	168	23
KNUDSEN LAKE	1A15	1580	27	104	286	125	387	821	125	410	14
REVOLUTION CREEK	1A17P	1690	01	-	232	191	432	814	191	415	19
LONGWORTH (UPPER)	1A05	1740	27	94	266	114	406	694	114	350	13
YELLOWHEAD	1A01P	1860	01	-	218	236	334	428	184	340	7

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

# **NECHAKO**

### **Snow Survey Measurements**

					W	VATEI	R EQU	IVALI	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SKINS LAKE	1B05	880	31	27	42	14	45	111	0	65	18
TAHTSA LAKE	1B02P	1300	01	-	427	369	957	957	369	703	11
MOUNT PONDOSY	1B08P	1400	01	-	314	204	607	686	204	451	10
MOUNT WELLS	1B01P	1490	01	-	183	131	384	433	131	328	11

#### 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

## MIDDLE FRASER

					W	VATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and	Station	Elev	Date of	Snow	2004	2003	2002	Max.	Min.	Normal	No.
Snow Course	Number	m	Survey	Depth							Years
				cm							Record
PUNTZI	1C22	940	28	21	36	2	22	106	0	40	31
MOUNTAIN											
NAZKO	1C08	1070	07	23	35	0	30	84	0	55	18
BIG CREEK	1C21	1140	29	25	38	10	18	62	10	36	17
GRANITE	1C33	1150	28	34	66	26	86	158	26	100	11
MOUNTAIN											

LAC LE JEUNE (LOWER)	1C07	1370	30	30	55	41	52	123	8	59	31
BRIDGE GLACIER (LOWER)	1C39	1400	05	92	292	326	330	456	204	322*	9
BRALORNE	1C14	1450	05	31	66	78	96	158	48	90	9
BOSS MOUNTAIN MINE	1C20P	1460	01	-	184	191	330	461	191	320	10
LAC LE JEUNE (UPPER)	1C25	1460	30	38	77	57	84	146	10	75	31
BRENDA MINE	2F18P	1460	01	-	180	100	230	304	100	186	9
BARKERVILLE	1A03P	1520	01	-	75	68	150	312	68	168	23
YANKS PEAK EAST	1C41P	1670	01	-	304	199	375	491	199	422	7
GREEN MOUNTAIN	1C12P	1780	01	-	351	354	573	707	268	440	10
MCGILLIVRAY PASS	1C05	1800	05	82	211	266	301	458	191	260	11
MISSION RIDGE	1C18P	1850	01	-	210	168	302	659	148	272	17
DOWNTON LAKE (UPPER)	1C38	1890	05	132	388	416	602	690	294	425	9
TYAUGHTON CREEK (NORTH)	1C40	1950	04	64	184	264	-	364	152	175	8
BRALORNE (UPPER)	1C37	1980	05	84	240	264	318	504	195	368	9

A - SAMPLING PROBLEMS WERE ENCOUNTERED

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\* - PERIOD OF RECORD AVERAGE

# **MIDDLE and LOWER FRASER**

**January 1, 2004** 

# MIDDLE FRASER

					V	VATEI	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	28	21	36	2	22	106	0	40	31
NAZKO	1C08	1070	07	23	35	0	30	84	0	55	18
BIG CREEK	1C21	1140	29	25	38	10	18	62	10	36	17
GRANITE MOUNTAIN	1C33	1150	28	34	66	26	86	158	26	100	11
LAC LE JEUNE (LOWER)	1C07	1370	30	30	55	41	52	123	8	59	31
BRIDGE GLACIER (LOWER)	1C39	1400	05	92	292	326	330	456	204	322*	9
BRALORNE	1C14	1450	05	31	66	78	96	158	48	90	9
BOSS MOUNTAIN MINE	1C20P	1460	01	-	184	191	330	461	191	320	10
LAC LE JEUNE (UPPER)	1C25	1460	30	38	77	57	84	146	10	75	31
BRENDA MINE	2F18P	1460	01	-	180	100	230	304	100	186	9
BARKERVILLE	1A03P	1520	01	-	75	68	150	312	68	168	23
YANKS PEAK EAST	1C41P	1670	01	-	304	199	375	491	199	422	7

GREEN MOUNTAIN	1C12P	1780	01	-	351	354	573	707	268	440	10
MCGILLIVRAY PASS	1C05	1800	05	82	211	266	301	458	191	260	11
MISSION RIDGE	1C18P	1850	01	-	210	168	302	659	148	272	17
DOWNTON LAKE (UPPER)	1C38	1890	05	132	388	416	602	690	294	425	9
TYAUGHTON CREEK (NORTH)	1C40	1950	04	64	184	264	-	364	152	175	8
BRALORNE (UPPER)	1C37	1980	05	84	240	264	318	504	195	368	9

A - SAMPLING PROBLEMS WERE ENCOUNTERED

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C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

# **LOWER FRASER**

					V	VATER	REQU	IVALI	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
WOLVERINE CREEK	1D13	300	31	27	60	24	108	193	0	68*	27
DISAPPOINTMENT LAKE	1D18P	1040	29	-	740P	490P	-	1304	487	814*	4
DICKSON LAKE	1D16	1070	29	237	786	446	668	1110	360	703*	11
DOG MOUNTAIN	3A10	1080	30	182	670	323	745	897	96	480	17
BEAVER PASS	WA12	1120	30	145	404	137	381	615	122	308*	7
KLESILKWA	3D03A	1130	29	69	166	64	107	386	0	185	13
SPUZZUM CREEK	1D19P	1180	01	-	806	409	731	840	394	619*	5
STAVE LAKE	1D08	1210	29	238	714	516	735	976	112	630	13
WAHLEACH LAKE	1D09	1400	29	128	334	143	300	417	46	260	17
WAHLEACH LAKE	1D09P	1400	01	-	549	235	494	777	235	520	11
NAHATLATCH RIVER	1D10	1520	29	205	568	549	-	975	219	600	11

EASY PASS	WA13	1580	Not	Availabl	e	-	-	1651	229	755*	20
CHILLIWACK RIVER	1D17P	1600	01	-	855	383	776	1165	383	654*	11
GREAT BEAR	1D15P	1660	Not	Measure	d	424	870	954	424	808	11
TENQUILLE LAKE	1D06	1680	28	170	470	404	645	875	205	550	26
TENQUILLE LAKE	1D06P	1680	01	-	409	390	623	623	285	433*	3

- A SAMPLING PROBLEMS WERE ENCOUNTERED
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- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

# **SKAGIT**

					W	VATE	R EQU	IVALI	ENT (r	nm)	
Drainage Basin	Station	Elev m	Date of	Snow	2004	2003	2002	Max.	Min.	Normal	No.
and Snow Course	Number		Survey	Depth							Years
				cm							Record
FREEZEOUT	WA11	1070	29	81	185	41	79	259	41	131*	7
CREEK TRAIL											
BEAVER PASS	WA12	1120	30	145	404	137	381	615	122	308*	7
KLESILKWA	3D03A	1130	29	69	166	64	107	386	0	185	13
HARTS PASS	WA09	1980	29	170	526	287	643	744	287	508*	5
HARTS PASS	WA09P	1980	01	-	495	300	508	737P	282	455*	6

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- \* PERIOD OF RECORD AVERAGE

# **THOMPSON**

**January 1, 2004** 

# **NORTH THOMPSON**

### **Snow Survey Measurements**

					V	VATEI	R EQU	IVALI	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BLUE RIVER	1E01B	670	31	67	171	50	154	263	50	160	17
COOK CREEK	1E14P	1280	01	-	229	101	240	255	101	199*	3
BOSS MOUNTAIN MINE	1C20P	1460	01	-	184	191	330	461	191	320	10
MOUNT COOK	1E02P	1550	01	-	439	469	694	694	469	582*	2
AZURE RIVER	1E08P	1620	01	-	458	356	660	780	356	620	7
KOSTAL LAKE	1E10P	1770	01	-	337	271	463	590	271	453	19

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- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

# **SOUTH THOMPSON**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
MONASHEE PASS	2E01	1370	30	53	137	-	134	239	84	165	22
KIRBYVILLE LAKE	2A25	1750	29	136	408	-	714	854	351	620	19
PARK MOUNTAIN	1F03P	1890	01	-	278	321	455	632	256	427	18
ENDERBY	1F04	1900	01	157	330	370	600A	742	292	495	28

- 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

# **MIDDLE FRASER**

					V	VATEI	R EQU	IVAL	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	28	21	36	2	22	106	0	40	31
NAZKO	1C08	1070	07	23	35	0	30	84	0	55	18
BIG CREEK	1C21	1140	29	25	38	10	18	62	10	36	17
GRANITE MOUNTAIN	1C33	1150	28	34	66	26	86	158	26	100	11
LAC LE JEUNE (LOWER)	1C07	1370	30	30	55	41	52	123	8	59	31
BRIDGE GLACIER (LOWER)	1C39	1400	05	92	292	326	330	456	204	322*	9
BRALORNE	1C14	1450	05	31	66	78	96	158	48	90	9
BOSS MOUNTAIN MINE	1C20P	1460	01	-	184	191	330	461	191	320	10
LAC LE JEUNE (UPPER)	1C25	1460	30	38	77	57	84	146	10	75	31

BRENDA MINE	2F18P	1460	01	_	180	100	230	304	100	186	9
BARKERVILLE	1A03P	1520	01	-	75	68	150	312	68	168	23
YANKS PEAK EAST	1C41P	1670	01	-	304	199	375	491	199	422	7
GREEN MOUNTAIN	1C12P	1780	01	-	351	354	573	707	268	440	10
MCGILLIVRAY PASS	1C05	1800	05	82	211	266	301	458	191	260	11
MISSION RIDGE	1C18P	1850	01	-	210	168	302	659	148	272	17
DOWNTON LAKE (UPPER)	1C38	1890	05	132	388	416	602	690	294	425	9
TYAUGHTON CREEK (NORTH)	1C40	1950	04	64	184	264	-	364	152	175	8
BRALORNE (UPPER)	1C37	1980	05	84	240	264	318	504	195	368	9

### 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

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# **COLUMBIA**

**January 1, 2004** 

### **Upper Columbia**

### **Snow Survey Measurements**

					WATER EQUIVALENT (mm)					nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DOWNIE SLIDE (LOWER)	2A27	980	29	105	302	166	-	504	166	320	18
GLACIER	2A02	1250	04	94	303	190	284	519	147	328	33
VERMONT CREEK	2A19	1520	02	70	198	140	206	328	91	230	19
AZURE RIVER	1E08P	1620	01	-	458	356	660	780	356	620	7
DOWNIE SLIDE (UPPER)	2A29	1630	29	164	518	606	770	1022	370	690	18
KICKING HORSE	2A07	1650	28	61	160	66	107	257	66	175	24
KIRBYVILLE LAKE	2A25	1750	29	136	408	-	714	854	351	620	19
MOUNT REVELSTOKE	2A06P	1830	01	-	481	433	616	835	317	599	11
FIDELITY MOUNTAIN	2A17	1870	03	166	589	350	635A	1228	334	617	29
BEAVERFOOT	2A11	1890	02	44	96	56	116	215	55	120	19
KEYSTONE CREEK	2A18	1890	29	97	279	308	449	577	217	400	19
BUSH RIVER	2A23	1920	29	124	384	-	510	722	216	442	19
GOLDSTREAM	2A16	1920	29	155	476	414	660	906	355	598	19
MOLSON CREEK	2A21P	1980	01	-	487	349	649	1072	318	558	23
MOUNT ABBOT	2A14	1980	31	163	538	386	651	1065	298	615	19
SUNBEAM LAKE	2A22	2010	29	132	412	-	489	767	243	475	19

- 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

#### **Lower Columbia**

					1	WATE	REQU	IVALE	NT (m	ım)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record

FERGUSON	2D02	880	30	97	279	93	215	409	93	275	24
FARRON	2B02A	1220	29	74	158	90	159	330	40	155	19
MONASHEE PASS	2E01	1370	30	53	137	-	134	239	84	165	22
WHATSHAN (UPPER)	2B05	1480	30	97	288	-	289	543	169	340	18
BARNES CREEK	2B06	1620	30	76	203	-	233	363	146	260	17
BARNES CREEK	2B06P	1620	01	-	180	236	248	409	158	278	11
ST. LEON CREEK	2B08	1800	30	153	469	-	618	1164	325	613	15
ST. LEON CREEK	2B08P	1800	No	t Measured		330	529	637	221	569	8
KOCH CREEK	2B07	1860	30	110	302	-	419	452	170	365	14
RECORD MOUNTAIN	2B09	1890	01	124	312	-	504	538	134	320	18
EAST CREEK	2D08P	2030	01	-	331	214	413	858	206	470	22

- A SAMPLING PROBLEMS WERE ENCOUNTERED
- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

# **KOOTENAY**

**January 1, 2004** 

# **EAST KOOTENAY**

					V	VATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FERNIE EAST	2C07	1250	01	72	148	41	144	330	28	142	28
MARBLE CANYON	2C05	1520	Not	Measured	İ	64	136	300	64	184	29
SULLIVAN MINE	2C04	1550	28	61	120	94	113	226	29	138	18
WEASEL DIVIDE	MT02	1660	30	130	366	185	414	691	162	367*	18
BANFIELD MOUNTAIN	MT05P	1710	01	-	208	180	216	340	112	196*	6
MOUNT JOFFRE	2C16	1750	02	58	139	-	133	364	86	180	16
MORRISSEY RIDGE	2C09Q	1800	01	-	323	176	319	706	123	331	20
MOYIE MOUNTAIN	2C10P	1930	01	-	221	128	176	354	76	180	24
HAWKINS LAKE	MT06P	1970	01	-	279	264	312	419	145	252*	6
THUNDER CREEK	2C17	2010	02	53	112	85	101	276	61	135	19
FLOE LAKE	2C14	2090	02	108	322	245	405	747	181	425	19
FLOE LAKE	2C14P	2090	01	-	311	221	360	502	173	363	8
HIGHWOOD SUMMIT (BUSH)	AL02	2210	29	74	206	-	-	399	97	228*	11

MOUNT ASSINIBOINE	2C15	2230	02	92	246	182	293	567	111	290	20
SUNSHINE VILLAGE	AL05	2230	30	95	249	183	272	389	137	232*	7

- A SAMPLING PROBLEMS WERE ENCOUNTERED
- B EARLY OR LATE SAMPLING
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- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

# **WEST KOOTENAY**

					V	VATE	REQU	IVALI	ENT (r	nm)	
Drainage Basin and	Station	Elev	Date of	Snow	2004	2003	2002	Max.	Min.	Normal	No.
Snow Course	Number	m	Survey	Depth							Years
				cm							Record
FERGUSON	2D02	880	30	97	279	93	215	409	93	275	24
NELSON	2D04	930	29	104	249	85	212	366	66	175	44
CHAR CREEK	2D06	1310	01	108	288	232Z	268	480	110	250	20
BUNCHGRASS	WA01P	1520	01	-	345	343	422	488	218	343*	6
MEADOW											
KOCH CREEK	2B07	1860	30	110	302	-	419	452	170	365	14
MOUNT	2D09	1860	Not	Measured	i	-	486	902	277	530	16
TEMPLEMAN											
EAST CREEK	2D08P	2030	01	-	331	214	413	858	206	470	22
REDFISH CREEK	2D14P	2104	01	-	476	401	686	686	401	544*	2

- 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

# **COASTAL**

**January 1, 2004** 

### **South Coastal**

### **Snow Survey Measurements**

					V	VATEI	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PALISADE LAKE	3A09P	880	Not	Available		403	-	785	337	577*	4
DOG MOUNTAIN	3A10	1080	30	182	670	323	745	897	96	480	17
GROUSE MOUNTAIN	3A01	1100	31	225	800	300	864	878	24	480	23
ORCHID LAKE	3A19	1190	29	278	840	625	-	1214	202	750	21
ORCHID LAKE	3A19P	1190	Not	Available	:	763	841	1285	243	753*	18
UPPER SQUAMISH RIVER	3A25P	1340	01	-	761	559	799	1072	454	730	12
NOSTETUKO RIVER	3A22P	1500	01	-	206	94	304	524	32	262*	12
UPPER MOSELY CREEK	3A24P	1650	01	-	173	139	184	491	85	188*	15

- 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

#### Vancouver Island

### **Snow Survey Measurements**

					V	VATEI	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ELK RIVER	3B04	270	01	40	104	0	71	264	0	70	19
WOLF RIVER (LOWER)	3B19	640	04	94	298	174	234	326	0	100	14
WOLF RIVER (MIDDLE)	3B18	1070	04	141	454	300	284	590	0	270	15
FORBIDDEN PLATEAU	3B01	1130	04	272	919	625	662	1287	0	630	21
JUMP CREEK	3B23P	1160	01	-	686	386	589	806	244	428	8
WOLF RIVER (UPPER)	3B17P	1490	01	-	692	625	582	1057	150	595	15

- 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

#### **North Coastal**

					W	VATE	R EQU	IVALI	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TAHTSA LAKE	1B02P	1300	01	-	427	369	957	957	369	703	11
BURNT BRIDGE CREEK	3C08P	1330	01	-	338	131	585	600	131	434*	5

- 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

# KETTLE, OKANAGAN and SIMILKAMEEN

**January 1, 2004** 

### KETTLE

### **Snow Survey Measurements**

					V	WATER EQUIVALENT (mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FARRON	2B02A	1220	29	74	158	90	159	330	40	155	19
MONASHEE PASS	2E01	1370	30	53	137	-	134	239	84	165	22
GRANO CREEK	2E07P	1860	01	-	143	199	315	315	143	227*	6

- 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

# **OKANAGAN**

					WATER EQUIVALENT (mm)						
Drainage Basin and	Station	Elev	Date of	Snow	2004	2003	2002	Max.	Min.	Normal	No.
Snow Course	Number	m	Survey	Depth							Years
				cm							Record
SUMMERLAND RESERVOIR	2F02	1280	29	54	97	42	104	198	42	114	40

BRENDA MINE	2F18P	1460	01	-	180	100	230	304	100	186	9
GREYBACK RESERVOIR	2F08	1550	05	48	83	116	162	181	56	115	21
ISINTOK LAKE	2F11	1680	30	47	102	16	74	196	16	86	38
MISSION CREEK	2F05P	1780	01	-	214	131	311	326	104	215	33
MOUNT KOBAU	2F12	1810	30	55	112	153	185	261	28	144	27

- 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

# **SIMILKAMEEN**

					W	WATER EQUIVALENT (mm)					
Drainage Basin and Snow Course	Station Number	Elev	Date of Survey	Snow Depth	2004	2003	2002	Max.	Min.	Normal	No. Years
Show Course	Number	111	Survey	cm							Record
FREEZEOUT CREEK TRAIL	WA11	1070	29	81	185	41	79	259	41	131*	7
MISSEZULA MOUNTAIN	2G05	1550	02	50	115	21	86	197	21	105*	11
ISINTOK LAKE	2F11	1680	30	47	102	16	74	196	16	86	38
BLACKWALL PEAK	2G03P	1940	01	-	409	199	450	923	108	397	34
HARTS PASS	WA09	1980	29	170	526	287	643	744	287	508*	5
HARTS PASS	WA09P	1980	01	-	495	300	508	737P	282	455*	6

- 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

# **NORTH EAST**

**January 1, 2004** 

# **PEACE**

					V	WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record	
FORT ST. JOHN A	4A25	690	28	18	28	18	36	134	14	57	28	
MACKENZIE A	4A19	700	31	53	104	26	84	283	26	116	30	
PACIFIC LAKE	1A11	770	27	105	281	56	183	476	56	310	20	
BULLHEAD MOUNTAIN	4A28	790	31	27	56	ОТ	54	111	ОТ	54	20	
PHILIP LAKE	4A13	980	02	49	99	93	163	268	64	150	21	
WARE (LOWER)	4A04	980	03	42	87	52	174	240	52	100	13	
AIKEN LAKE	4A30P	1040	01	-	113	75A	-	262	75A	138	15	
TUTIZZI LAKE	4A06	1070	02	48	90	98	191	200	85	135	13	
TSAYDAYCHI LAKE	4A12	1160	02	64	147	165	310	393	128	215	20	
KAZA LAKE	1A12	1190	02	58	131	119	219	371	113	190	18	
FREDRICKSON LAKE	4A10	1310	02	53	96	54	148	250	54	130	14	
PULPIT LAKE	4A09	1310	03	78	165	130	300	398	130	220	15	
PULPIT LAKE	4A09P	1310	01	-	192	158	287	344	158	242	12	
PINE PASS	4A02P	1400	01	-	381	241	680	1016	241	543	14	
TRYGVE LAKE	4A11	1400	03	66	131	135	-	299	126	195	16	

I .											
SIKANNI LAKE	4C01	1400	03	55	115	44	199	257	44	145	20
PINE PASS	4A02	1430	04	159	466	345	799	988	314	620	22
MORFEE MOUNTAIN	4A16	1450	04	109	313	226	468	710	226	450	8
LADY LAURIER LAKE	4A07	1460	04	79	211	140	427	472	140	270	20
MOUNT SHEBA	4A18	1490	27	90	269	106	450	793	106	400	15
GERMANSEN (UPPER)	4A05	1500	02	58	120	108	251	364	99	194	21
MOUNT STEARNS	4A21	1500	03	35	72	24	138	151	24	80	14
JOHANSON LAKE	4B02	1540	02	55	115	109	201	282	90	160	20
MONKMAN CREEK	4A20	1550	27	70	173	-	294	546	145	270	11
WARE (UPPER)	4A03	1570	03	57	118	64	224	248	64	145	14
KWADACHA RIVER	4A27P	1620	01	-	120	86	210	307	86	180*	17

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

# **LIARD**

### **Snow Survey Measurements**

					W	WATER EQUIVALENT (mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth	2004	2003	2002	Max.	Min.	Normal	No. Years
				cm							Record
FORT NELSON A	4C05	380	01	22	26	47	85	112	20	59	36
DEASE LAKE	4C03	820	01	31	46	-	61	150	20	71	36
DEADWOOD RIVER	4C09P	1300	01	-	33	-	79	211	34	82*	8
SIKANNI LAKE	4C01	1400	03	55	115	44	199	257	44	145	20

A - SAMPLING PROBLEMS WERE ENCOUNTERED

B - EARLY OR LATE SAMPLING

- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

# **NORTH WEST**

**January 1, 2004** 

# STIKINE/TAKU

### **Snow Survey Measurements**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DEASE LAKE	4C03	820	01	31	46	-	61	150	20	71	36
KINASKAN LAKE	4D11P	1020	01	-	240	-	221	378	104	191*	12
TUMEKA CREEK	4D10P	1220	01	-	240	180	311	591	180	341*	11
WADE LAKE	4D14P	1370	01	-	145A	105	184	344	91	197*	12

#### 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

## **YUKON**

No data received from the Yukon

# **SKEENA/NASS**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TERRACE A	4B13A	180	30	41	70	20	100	162	0	74*	21
GRANDUC MINE	4B12P	790	01	-	791	656	1065	1065	656	861*	2
CEDAR- KITEEN	4B18P	885	01	-	248	83	338	338	83	217*	3
KAZA LAKE	1A12	1190	02	58	131	119	219	371	113	190	18
LU LAKE	4B15P	1310	01	-	79	41	206	206	41	115*	6
TSAI CREEK	4B17P	1360	01	-	409	390	904	904	390	574*	5
TRYGVE LAKE	4A11	1400	03	66	131	135	-	299	126	195	16
HUDSON BAY MTN.	4B03A	1480	02	79	157	181	359	470	135	283	28
SHEDIN CREEK	4B16P	1480	Not	Measured		266	551	551	266	421*	8
JOHANSON LAKE	4B02	1540	02	55	115	109	201	282	90	160	20

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

### Province-Wide Synopsis

### **Basin Data and Graphs**

- <u>Upper Fraser</u>
- Mid and Lower Fraser
- <u>Thompson</u>
- Columbia
- Kootenay
- Okanagan, Kettle, and Similkameen
- Coastal
- North East
- North West
- 2004 Snow Pillow Graphs
- 2004 Ground Water Graphs
- Mid Month ASP
  Commentary
- Ground Water Commentary
- Corrected or previously unpublished data

# Snowpack and Water Supply Outlook for British Columbia

#### **February 1, 2004**

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 on review.

### Province-wide Synopsis



BC Summary Graphs
of Snow Water
Equivalents

The February 1 snow survey is now complete. Data from 131 snow courses and 51 snow pillows around the province, with 17 out of province snow sampling locations, and climate data from Environment Canada, have been used to form the basis for the following reports.

### Snowpack

BC snowpacks in general have improved significantly from the below to well below normal situation most of the province was experiencing last month. The exceptions are the Upper Fraser, the Nechako, and Bridge River area, which are well below normal. While the Peace, Liard, Skeena, and Thompson basins have slightly below normal snowpacks, the remainder of the Province has near to slightly above normal snow for February 1. Low elevation snow is nearer to normal than we have seen for most of the last few years.

#### Weather

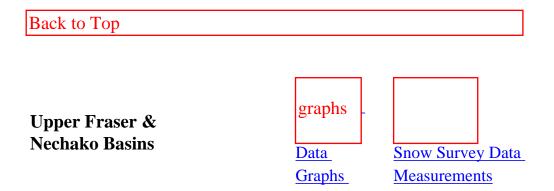
Mean monthly temperatures during January were close to seasonal in

most of the province, with the north being slightly cooler than usual, and the south slightly warmer overall. Most extreme was Fort St John, with a mean monthly temperature of 3.4°C below normal for January. Precipitation varied, however most areas of the province had from just slightly below to well above normal precipitation during January.

#### **Outlook**

By February 1, on average, approximately two thirds of the peak snowpack for the year has accumulated. The South Coast, Vancouver Island, and Okanagan, which suffered from drought last summer, have good snowpacks for this date, and if this pattern continues there should be a near normal water supply to reservoirs. The Chilcotin plateau and Quesnel Lakes have also seen increases in snowpack, and may not have the water supply problems seen last year, providing precipitation remains at least near normal into the summer.

If snowpacks remain below normal in the Upper Fraser, Nechako, and North Thompson, there will be a slightly reduced probability of serious spring freshet flooding in those basins, and in the Fraser mainstem as well, however actual peak flows during freshet are very dependant on short term weather during melt. Extreme weather can produce extreme flows even with below normal snowpacks.

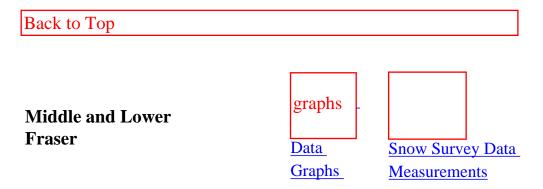


### February 1

The snow water equivalent index for the Upper Fraser is at 65% of normal for February 1, slightly down from last month. The Nechako snowpacks are still below normal as well, however the snow water index has increased from last month's 60% of normal to 73% of normal for February 1.

While January had near normal precipitation in both basins, cumulative total precipitation since November 1 is still only two thirds of usual.

Regional streamflows, as indicated by the mean monthly flow in the Fraser River at Marguerite, were slightly less than usual from November through January.

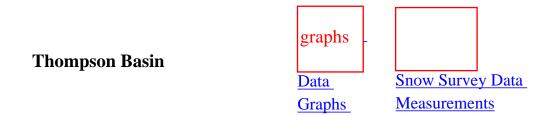


### February 1

The snowpacks in the Middle Fraser were slightly improved but still below normal on February 1, with an overall regional snow water equivalent index of 81% of normal. The Chilcotin plateau areas, and areas east of the Fraser River, have significantly improved snowpacks from last month, with near normal snow, especially at lower elevations. However the Bridge River region appears to have only around 3/4 of its normal February 1 snowpack.

The Lower Fraser has normal snowpacks, mainly due to a slightly wetter and colder than usual November, with January having near normal weather.

Streamflows, as indicated by the mean monthly flows in the Fraser River at Hope, are still unavailable.

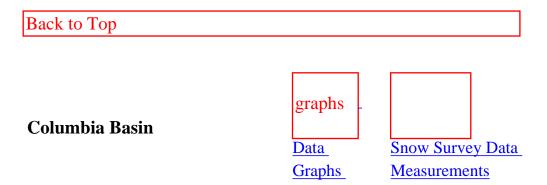


### February 1

Precipitation in both the North and South Thompson was well above normal during January, and as a result the snow water equivalent index in both basins has risen slightly since last month. Lower elevation snowpacks appear to be near to slightly above normal in these basins, however mid to upper elevation snowpacks appear to be slightly below

usual for this date. The North Thompson snow water index is at 79% of normal, and the South Thompson snow water index is at 84% of normal for February 1.

Streamflows in the region, as indicated by the mean monthly flows in the Thompson River at Spence's Bridge, were normal during November, and slightly below normal during December and January.



### February 1

Mid to upper elevation snowpacks in the Columbia basin are near normal (91%) for February 1. Lower elevation snow appears normal throughout the basin. This is a slight improvement over January 1 due to a slightly higher than usual precipitation during January.

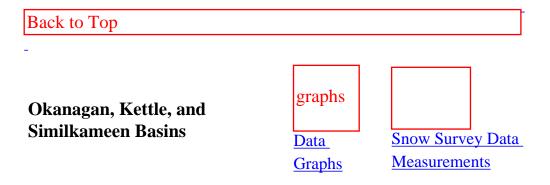
Streamflows in the region, as represented by the mean monthly flow in the Columbia River at Donald, continue to be well above normal, possibly due to good low elevation snowpacks and slightly warmer than normal temperatures in December and January.

Kootenay Basin	graphs	
•	<u>Data</u>	Snow Survey Data
	<u>Graphs</u>	<u>Measurements</u>

### February 1

Mid to upper elevation snowpacks in the Kootenay basin are near normal for February 1. Lower elevation snow appears to be slightly above normal. Southern portions of the Kootenays have a near to slightly above normal snowpack.

Streamflows, as indicated by the mean monthly flows in the Kootenay River at Fort Steele, continue slightly below normal since November, possibly due to residual effects of the drought conditions of the summer.

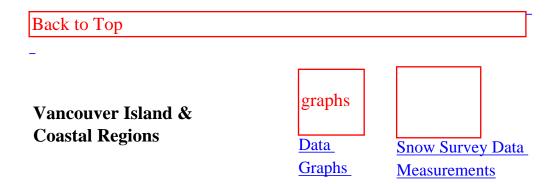


#### February 1

The overall snow water index for the Okanagan & Kettle has improved significantly, to 96% of normal for February 1. This mainly reflects an increase in the previously low snowpacks of the Kettle. Most of the Okanagan is showing near to slightly above normal snow readings for this date. Precipitation during January was well above normal in Kelowna.

The Similkameen basin appears to have slightly below normal snowpacks for February 1, down a bit from last month due to lower precipitation than usual during January.

Streamflows in the region, as indicated by inflows to Okanagan Lake, were up to normal during January, for the first time since last January. Current Okanagan Lake levels, however, continue to be the lowest recorded in the period of record.

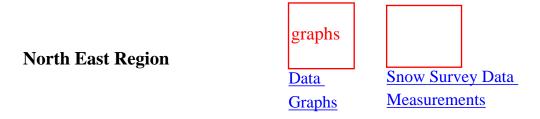


### February 1

Snowpacks on Vancouver Island and on the South Coast are above normal, with snow water indexes of 114% and 109% of normal for February 1, respectively. While December was drier than usual,

November was colder than usual, with less rain and more snow at mid to upper elevations. January had slightly above normal precipitation.

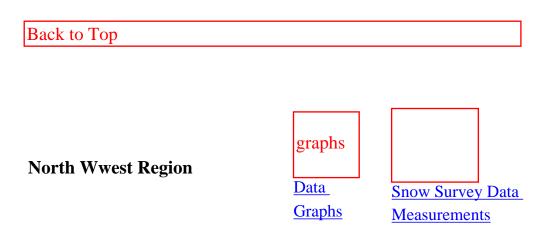
Streamflows, as indicated by the mean monthly inflows to Upper Campbell Lake, were far below normal during November, (residual from the summer & fall drought), slightly below normal during December, but were well above normal during January.



#### February 1

Both the Peace and Liard basins had colder weather than usual during January, with well above normal precipitation. Snowpacks in these basins improved significantly, with both the snow water indexes for February 1 now in the 80-85% of normal range.

Streamflows, as indicated by inflows to Williston Lake, have been above normal since November.



### February 1

The overall Skeena/Nass snow water index is at 80% of normal for February 1, with snowpacks more consistent through the basin than last month. From a relatively few readings, the Stikine appears to have a near normal snowpack for this date. Although Smithers had slightly below normal precipitation during January, most of the north appears to have had colder temperatures and higher than usual precipitation over January.

Regional streamflows, as indicated by the mean monthly flows in the Skeena River at Usk, were well below normal during January, possibly due to a colder than usual month.

footer graphic

## **UPPER and MIDDLE FRASER**

**February 1, 2004** 

## **UPPER FRASER**

					V	VATE	R EQU	IVALI	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PRINCE GEORGE A	1A10	690	28	43	67	56	79	224	46	114	42
PACIFIC LAKE	1A11	770	27	99	363	179	370	679	179	451	36
BURNS LAKE	1A16	800	02	49	84	56	92	232	44	120	33
CANOE RIVER	2A01A	910	26	22	55	32	80	140	32	90	29
PHILIP LAKE	4A13	980	28	73	153	184	208	353	118	202	37
HEDRICK LAKE	1A14	1100	27	110	357	248	421	823	248	500	36
HEDRICK LAKE	1A14P	1100	01	-	364	394	604	649	356	501*	4
BIRD CREEK	1A23	1180	01	42	76	68	106	176	66	106*	13
KAZA LAKE	1A12	1190	28	91	212	193	279	440	125	239	34
MOUNT SHEBA	4A18	1490	27	130	405	299	613	918	299	570	34
BARKERVILLE	1A03P	1520	01	-	124	116	206	351	116	253	25
KNUDSEN LAKE	1A15	1580	27	124	394	284	581	899	284	584	33
MC BRIDE (UPPER)	1A02	1580	27	72	167	178	255	503	140	296	50
REVOLUTION CREEK	1A17P	1690	01	-	295	333	625	930	305	574	18
LONGWORTH (UPPER)	1A05	1740	27	112	416	236	632	890A	236	556	30

MARMOT JASPER	AL12	1830	03	60	127	71	155	191	71	142*	6
YELLOWHEAD	1A01P	1860	01	-	255	338	428	596	233	455	7

- 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

### **NECHAKO**

### **Snow Survey Measurements**

					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	VATE	R EQU	JIVAL	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SKINS LAKE	1B05	880	30	49	79	48	55	224	35	94	36
TAHTSA LAKE	1B02	1300	01	207	635	617	1123	1209	508A	821	49
TAHTSA LAKE	1B02P	1300	01	-	658	613	1177	1177	613	903	10
KIDPRICE LAKE	4B01	1370	04	170	475	420	953	953	420	638	46
MOUNT PONDOSY	1B08P	1400	01	-	451	326	747	750	326	578	11
MOUNT WELLS	1B01	1490	01	96	229	188	443	549B	188	385	20
NUTLI LAKE	1B07	1490	01	94	229	227	484	579	227	378*	12
MOUNT WELLS	1B01P	1490	01	-	271	213	-	555	213	426	10
MOUNT SWANNELL	1B06	1620	01	62	140	88	256	382B	88	208*	15

- A SAMPLING PROBLEMS WERE ENCOUNTERED
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- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

### MIDDLE FRASER

					W	VATE	REQU	IVALE	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	31	42	56	16	34	126	0	58	34
NAZKO	1C08	1070	05	31	62	25	41	137B	6A	75	27
BIG CREEK	1C21	1140	31	51	78	10	32	100B	0	52	31
GRANITE MOUNTAIN	1C33	1150	30	74	159	59	131	217	59	145	11
LAC LE JEUNE (LOWER)	1C07	1370	01	54	94	59	80	208	25	81	47
BRIDGE GLACIER (LOWER)	1C39	1400	05	123	366	368	482	688	368	486*	8
BRALORNE	1C14	1450	05	47	100	92	122	338	0	138	33
SHOVELNOSE MOUNTAIN	1C29	1450	31	74	173	122	177	307	84	202	24
BOSS MOUNTAIN MINE	1C20P	1460	01	-	379	285	424	574	285	440	10
LAC LE JEUNE (UPPER)	1C25	1460	01	66	129	89	103	177	13	105	31
BARKERVILLE	1A03P	1520	01	-	124	116	206	351	116	253	25
MOUNT TIMOTHY	1C17	1660	01	93	205	92	209	384	92	232	37
YANKS PEAK EAST	1C41P	1670	01	-	434	304	521	761	304	595	7
GREEN MOUNTAIN	1C12P	1780	01	-	472A	585	820	948	393	605	10
MCGILLIVRAY PASS	1C05	1800	05	110	286	345	464	645	150	403	52
MISSION RIDGE	1C18P	1850	01	-	283	256	448	794	232	424	17
DOWNTON LAKE (UPPER)	1C38	1890	05	161	466	496	706	980	378	610	9
TYAUGHTON CREEK (NORTH)	1C40	1950	05	91	242	-	-	654	182	265	6
BRALORNE (UPPER)	1C37	1980	05	113	314	318	506	724	318	465	9

### A - SAMPLING PROBLEMS WERE ENCOUNTERED

### B - EARLY OR LATE SAMPLING

- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

## **MIDDLE and LOWER FRASER**

**February 1, 2004** 

## MIDDLE FRASER

					W	VATE	REQU	IVALE	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	31	42	56	16	34	126	0	58	34
NAZKO	1C08	1070	05	31	62	25	41	137B	6A	75	27
BIG CREEK	1C21	1140	31	51	78	10	32	100B	0	52	31
GRANITE MOUNTAIN	1C33	1150	30	74	159	59	131	217	59	145	11
LAC LE JEUNE (LOWER)	1C07	1370	01	54	94	59	80	208	25	81	47
BRIDGE GLACIER (LOWER)	1C39	1400	05	123	366	368	482	688	368	486*	8
BRALORNE	1C14	1450	05	47	100	92	122	338	0	138	33
SHOVELNOSE MOUNTAIN	1C29	1450	31	74	173	122	177	307	84	202	24
BOSS MOUNTAIN MINE	1C20P	1460	01	-	379	285	424	574	285	440	10
LAC LE JEUNE (UPPER)	1C25	1460	01	66	129	89	103	177	13	105	31
BRENDA MINE	2F18P	1460	Not	Measure	d	-	309	368	148	264	10
BARKERVILLE	1A03P	1520	01	-	124	116	206	351	116	253	25

MOUNT TIMOTHY	1C17	1660	01	93	205	92	209	384	92	232	37
YANKS PEAK EAST	1C41P	1670	01	-	434	304	521	761	304	595	7
GREEN MOUNTAIN	1C12P	1780	01	-	472A	585	820	948	393	605	10
MCGILLIVRAY PASS	1C05	1800	05	110	286	345	464	645	150	403	52
MISSION RIDGE	1C18P	1850	01	-	283	256	448	794	232	424	17
DOWNTON LAKE (UPPER)	1C38	1890	05	161	466	496	706	980	378	610	9
TYAUGHTON CREEK (NORTH)	1C40	1950	05	91	242	-	-	654	182	265	6
BRALORNE (UPPER)	1C37	1980	05	113	314	318	506	724	318	465	9

- 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

## **LOWER FRASER**

						WATI	ER EQU	IVALE	NT (mi	m)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
WOLVERINE CREEK	1D13	300	31	49	120	68	104	270	10A	105*	28
SUMMALLO RIVER WEST	3D01C	790	29	67	204	-	230	368	0	242	11
CALLAGHAN CREEK	3A20	1040	29	158	608	328	560	879	50	577	20
DISAPPOINTMENT LAKE	1D18P	1040	Not	Availab	le	492P	1184P	1597	492P	997*	5
DICKSON LAKE	1D16	1070	05	283	1156	542	1110A	1220	398	918	11
DOG MOUNTAIN	3A10	1080	29	219	930	237	971	1187Z	237	731	20
BEAVER PASS	WA12	1120	28	145	518	353	594	922	36	498*	35

KLESILKWA	3D03A	1130	05	86	308	47	236	508	0	257	49
SPUZZUM CREEK	1D19P	1180	01	-	1073	638	1174	1804E	593	1108*	5
STAVE LAKE	1D08	1210	05	263	998	608	920	1430	163	907	33
WAHLEACH LAKE	1D09	1400	05	154	479	199	418	815	33	396	35
WAHLEACH LAKE	1D09P	1400	01	-	796	381	838	1036	381	780	11
NAHATLATCH RIVER	1D10	1520	05	224	800	736	999	1359	262	893	30
EASY PASS	WA13	1580	Not	Measure	ed	-	-	2184	279	1160*	30
CHILLIWACK RIVER	1D17P	1600	01	-	1144	638	1178	1668	638	1027*	12
GREAT BEAR	1D15P	1660	Not	Measure	ed	791	1358	1391	608	1143	12
TENQUILLE LAKE	1D06	1680	01	202	697	673	895	1206	241	769	32
TENQUILLE LAKE	1D06P	1680	01	-	604	623	881	881	450	651*	3
A CANEDITIC DROPE	T		~~ * * * * * * * * * * * * * * * * * *								

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

## **SKAGIT**

### **Snow Survey Measurements**

					V	VATE	R EQU	JIVALE	NT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SUMALLO RIVER WEST	3D01C	790	29	67	204	-	230	368	0	242	11
FREEZEOUT CREEK TRAIL	WA11	1070	29	81	249	127	180	462	13	222*	34
BEAVER PASS	WA12	1120	28	145	518	353	594	922	36	498*	35
KLESILKWA	3D03A	1130	05	86	308	47	236	508	0	257	49
HARTS PASS	WA09	1980	29	196	686	526	1006	1328	246	777*	49
HARTS PASS	WA09P	1980	01	-	660	533	752	1005P	371	670*	6

### A - SAMPLING PROBLEMS WERE ENCOUNTERED

B - EARLY OR LATE SAMPLING

- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

## **THOMPSON**

**February 1, 2004** 

## **NORTH THOMPSON**

### **Snow Survey Measurements**

					V	VATEI	R EQU	IVALI	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BLUE RIVER	1E01B	670	31	116	297	144	178	340	98	250	20
KNOUFF LAKE	1E05	1200	31	46	117	60	134	229	38	114	44
COOK CREEK	1E14P	1280	01	-	409	248	356	413	248	331*	4
COOK FORKS	1E06	1390	05	187	591	444	604	874	353	610	30
BOSS MOUNTAIN MINE	1C20P	1460	01	-	379	285	424	574	285	440	10
MOUNT COOK	1E02P	1550	01	-	713	724	938	938	600	754*	3
MOUNT COOK	1E02A	1580	05	212	715	636	840	1237	536	866	28
AZURE RIVER	1E08P	1620	01	-	634	578	855	998	506	835	7
ADAMS RIVER	1E07	1720	31	150	406	334	528	654	285	452	23
KOSTAL LAKE	1E10P	1770	01	-	506	426	591	764	415	620	19
NORTH CLEMINA CREEK	1E13	1860	27	126	353	396	659	796	315	532	15

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

## **SOUTH THOMPSON**

### **Snow Survey Measurements**

					/	VATEI	R EQU	IVALI	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ANGLEMONT	1F02	1190	27	94	231	130A	224	483	130A	274	44
ABERDEEN LAKE	1F01A	1310	29	68	127	63	95A	193	48	119	49
MONASHEE PASS	2E01	1370	02	99	240	167	225	364	122	245	44
ADAMS RIVER	1E07	1720	31	150	406	334	528	654	285	452	23
KIRBYVILLE LAKE	2A25	1750	01	232	682	659	917	1160	381	810	28
SILVER STAR MOUNTAIN	2F10	1840	01	154	438	358	648	721	229	507	45
PARK MOUNTAIN	1F03P	1890	01	-	495	463	644	867	331	602	19
ENDERBY	1F04	1900	31	199	540	547	809	932	348	691	41

### 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

## MIDDLE FRASER

					W	ATE	REQU	IVALE	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	31	42	56	16	34	126	0	58	34

NAZKO	1C08	1070	05	31	62	25	41	137B	6A	75	27
BIG CREEK	1C21	1140	31	51	78	10	32	100B	0	52	31
GRANITE MOUNTAIN	1C33	1150	30	74	159	59	131	217	59	145	11
LAC LE JEUNE (LOWER)	1C07	1370	01	54	94	59	80	208	25	81	47
BRIDGE GLACIER (LOWER)	1C39	1400	05	123	366	368	482	688	368	486*	8
BRALORNE	1C14	1450	05	47	100	92	122	338	0	138	33
SHOVELNOSE MOUNTAIN	1C29	1450	31	74	173	122	177	307	84	202	24
BOSS MOUNTAIN MINE	1C20P	1460	01	-	379	285	424	574	285	440	10
LAC LE JEUNE (UPPER)	1C25	1460	01	66	129	89	103	177	13	105	31
BRENDA MINE	2F18P	1460	Not	Measure	d	-	309	368	148	264	10
BARKERVILLE	1A03P	1520	01	-	124	116	206	351	116	253	25
MOUNT TIMOTHY	1C17	1660	01	93	205	92	209	384	92	232	37
YANKS PEAK EAST	1C41P	1670	01	-	434	304	521	761	304	595	7
GREEN MOUNTAIN	1C12P	1780	01	-	472A	585	820	948	393	605	10
MCGILLIVRAY PASS	1C05	1800	05	110	286	345	464	645	150	403	52
MISSION RIDGE	1C18P	1850	01	-	283	256	448	794	232	424	17
DOWNTON LAKE (UPPER)	1C38	1890	05	161	466	496	706	980	378	610	9
TYAUGHTON CREEK (NORTH)	1C40	1950	05	91	242	-	-	654	182	265	6
BRALORNE (UPPER)	1C37	1980	05	113	314	318	506	724	318	465	9

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

**Go to Columbia Snow Station Map** 

### February 12 corrections in red

## COLUMBIA February 1, 2004

## **UPPER COLUMBIA**

					V	VATEI	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
CANOE RIVER	2A01A	910	26	22	55	32	80	140	32	90	29
DOWNIE SLIDE (LOWER)	2A27	980	01	210	556	326	426	740	256	509	22
GLACIER	2A02	1250	03	173	460	362	440	828	241	494	63
FIELD	2A03A	1280	29	71	133	54	72	233	46	133	64
SUNWAPTA FALLS	AL11	1400	03	52	107	109	81	254	48B	142*	31
VERMONT CREEK	2A19	1520	02	118	296	199	269	574	102	320	34
AZURE RIVER	1E08P	1620	01	-	634	578	855	998	506	835	7
DOWNIE SLIDE (UPPER)	2A29	1630	01	259	770	806	1022	1422	466	933	22
KICKING HORSE	2A07	1650	04	110	260	146	167	384	102	248	57
KIRBYVILLE LAKE	2A25	1750	01	232	682	659	917	1160	381	810	28
MOUNT REVELSTOKE	2A06P	1830	01	-	758	637	892	1140	511	850	10
NORTH CLEMINA CREEK	1E13	1860	27	126	353	396	659	796	315	532	15

FIDELITY MOUNTAIN	2A17	1870	03	281	859	578	856	1376	430	867	41
KEYSTONE CREEK	2A18	1890	01	166	453	393	608	866	290	548	34
BEAVERFOOT	2A11	1890	Not	Measure	d	84	130	249	78	154	36
BUSH RIVER	2A23	1920	Not :	Measure	d	425	678	902	292	598	36
NIGEL CREEK	AL10	1920	03	100	234	173	287	528	94B	294*	31
GOLDSTREAM	2A16	1920	01	261	733	613	882	1136	460	793	35
MOLSON CREEK	2A21P	1980	01	-	645	544	877	1155	417	760	22
MOUNT ABBOT	2A14	1980	03	244	739	570	946	1209	396	842	45
SUNBEAM LAKE	2A22	2010	01	204	583	484	691	886	348	642	36
MIRROR LAKE	AL06	2030	03	89	203	96	234	348	79	212*	36
BOW SUMMIT II	AL07A	2080	27	95	231	132	310	480	86B	263*	23

A - SAMPLING PROBLEMS WERE ENCOUNTERED

## **LOWER COLUMBIA**

					V	VATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FERGUSON	2D02	880	27	140	393	278	342	616	237	420	32
BAIRD	WA02	980	28	66	157	127	180	295	20	151*	44
FARRON	2B02A	1220	26	92	214	210	209	346	63	232	30
MONASHEE PASS	2E01	1370	02	99	240	167	225	364	122	245	44
WHATSHAN (UPPER)	2B05	1480	02	182	524	399	-	759	249	479	31
BARNES CREEK	2B06	1620	02	136	350	313	351	612	196	365	36
BARNES CREEK	2B06P	1620	01	-	319	338	360	566	195	378	11

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

ST. LEON CREEK	2B08	1800	02	252	786	671	-	1247	474	878	33
ST. LEON CREEK	2B08P	1800	01	-	649	563	799	1092	311	755	9
KOCH CREEK	2B07	1860	Not 1	Measured		-	-	708	203	501	32
RECORD MOUNTAIN	2B09	1890	02	165	429	540	577	802	117	482	29
EAST CREEK	2D08P	2030	Not 1	Measured		383	596	1012	274	654	23

### A - SAMPLING PROBLEMS WERE ENCOUNTERED

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- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

Banner			

### **KOOTENAY**

**February 1, 2004** 

### **EAST KOOTENAY**

### **Snow Survey Measurements**

						WATE	R EQU	IVALE	NT (mr	n)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FERNIE EAST	2C07	1250	01	98	247	114	252	467	51	234	50
MARBLE CANYON	2C05	1520	No	t Measured		167	237	505	107	261	55
SULLIVAN MINE	2C04	1550	29	80	180	166	142	397	46	217	58
WEASEL DIVIDE	MT02	1660	29	193	521	343	610	858	185	533*	20
BANFIELD MOUNTAIN	MT05P	1710	01	-	315	254	356	475	180	336*	6
MOUNT JOFFRE	2C16	1750	02	89	219	133	266	439	96	265	30
MORRISSEY RIDGE	2C09Q	1800	01	-	495	330	470	886	172	495	20
MOYIE MOUNTAIN	2C10P	1930	01	-	349	225	330	499	104	267	23
HAWKINS LAKE	MT06P	1970	01	-	424	363	495	612	201	391*	6
ALLISON PASS	AL01	1980	02	115	278	181	267	521	133	321*	14
THUNDER CREEK	2C17	2010	02	73	179	111	141	335	69	193	30
FLOE LAKE	2C14	2090	02	164	454	348	569	811	239	548	32
FLOE LAKE	2C14P	2090	01	-	446	349	555	731	221	510	9
HIGHWOOD SUMMIT (BUSH)	AL02	2210	02	107	259	155	284	480	89	264*	24
MOUNT ASSINIBOINE	2C15	2230	02	127	334	237	409	592	140	375	32
SUNSHINE VILLAGE	AL05	2230	29	127	312	259	445	678	150	403*	18

- 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

### **WEST KOOTENAY**

		WATER EQUIVALENT (mm)	

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DUNCAN LAKE NO. 2	2D07A	650	29	82	158	90	74	283	60	133*	13
FERGUSON	2D02	880	27	140	393	278	342	616	237	420	32
NELSON	2D04	930	26	110	312	234	271	508	79	276	65
CHAR CREEK	2D06	1310	01	161	446	365	384	650	117	381	38
BUNCHGRASS MEADOW	WA01P	1520	01	-	510	505	602	719	259	514*	6
GRAY CREEK (LOWER)	2D05	1550	01	138	384	221	-	511	127	326	53
KOCH CREEK	2B07	1860	Not I	Measured		-	-	708	203	501	32
MOUNT TEMPLEMAN	2D09	1860	Not I	Measured		564	724	1115	409	748	34
GRAY CREEK (UPPER)	2D10	1910	01	190	532	386	-	792	268	527	33
EAST CREEK	2D08P	2030	Not I	Measured		383	596	1012	274	654	23
REDFISH CREEK	2D14P	2104	01	-	746	653	1024	1024	653	839*	2

- 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

## **COASTAL**

**February 1, 2004** 

## **SOUTH COASTAL**

					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	WATE	R EQU	JIVALE	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PALISADE LAKE	3A09P	880	Not	Available	•	-	-	790	700	745*	2
CALLAGHAN CREEK	3A20	1040	29	158	608	328	560	879	50	577	20
DOG MOUNTAIN	3A10	1080	29	219	930	237	971	1187Z	237	731	20
GROUSE MOUNTAIN	3A01	1100	27	236	1020	322	1164	1530Z	50	762	54
ORCHID LAKE	3A19	1190	05	318	1273	654	1210	1624	408	1141	25
ORCHID LAKE	3A19P	1190	01	-	1423	921	1126	1859	491	1209*	17
UPPER SQUAMISH RIVER	3A25P	1340	01	-	1050	911	1073	1510	713	1025	12
NOSTETUKO RIVER	3A22P	1500	01	-	300	210	409	628	203	414*	14
UPPER MOSELY CREEK	3A24P	1650	01	-	229	101	206	509	101	233*	15

- 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

## **VANCOUVER ISLAND**

### **Snow Survey Measurements**

					V	VATE	R EQU	IVALI	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ELK RIVER	3B04	270	04	44	181	0	35	544	0	96	44
WOLF RIVER (LOWER)	3B19	640	04	118	388	162	254	528	0	248	31
TENNENT LAKE	3B22	950	02	220	790A	474	-	880	202B	660	13
WOLF RIVER (MIDDLE)	3B18	1070	04	173	582	334	370	742	16	401	32
FORBIDDEN PLATEAU	3B01	1130	04	295	1191	792	802	1640	42	955	48
JUMP CREEK	3B23P	1160	01	-	773	379	829	1251	206	710	8
WOLF RIVER (UPPER)	3B17P	1490	01	-	988	966	832	1371	501	881	14

- 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

## **NORTH COASTAL**

					V	WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record	
WEDEENE RIVER SOUTH	3C07	300	04	105	344	-	-	497	105	301*	12	
TAHTSA LAKE	1B02	1300	01	207	635	617	1123	1209	508A	821	49	

TAHTSA	1B02P	1300	01	-	658	613	1177	1177	613	903	10
LAKE											
BURNT	3C08P	1330	01	-	458	240	746	746	240	543*	6
BRIDGE											
CREEK											

### 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

## KETTLE, OKANAGAN and SIMILKAMEEN

**February 1, 2004** 

### KETTLE

### **Snow Survey Measurements**

					V	VATEI	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FARRON	2B02A	1220	26	92	214	210	209	346	63	232	30
GOAT CREEK	WA04	1220	29	66	150	140	99	224	20	132*	42
MONASHEE PASS	2E01	1370	02	99	240	167	225	364	122	245	44
SUMMIT G.S.	WA05	1400	29	79	188	198	122	244	41	147*	42
BIG WHITE MOUNTAIN	2E03	1680	02	130	320	274	380	483	178	339	38
GRANO CREEK	2E07P	1860	01	-	308	300	424	465	180	333*	6

- A SAMPLING PROBLEMS WERE ENCOUNTERED
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- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

### **OKANAGAN**

	WATER EQUIVALENT (mm)	
	,	

Drainage Basin and	Station	Elev	Date of	Snow	2004	2003	2002	Max.	Min.	Normal	No.
Snow Course	Number	m	Survey	Depth							Years
				cm							Record
MC CULLOCH	2F03	1280	30	74	134	70	120	196	57	125	67
SUMMERLAND RESERVOIR	2F02	1280	29	81	175	65	147	307	65	174	39
ABERDEEN LAKE	1F01A	1310	29	68	127	63	95A	193	48	119	49
OYAMA LAKE	2F19	1340	29	66	145	64	-	193	31	129	34
POSTILL LAKE	2F07	1370	30	88	170	77	145	243	73	147	53
TROUT CREEK	2F01	1430	31	79	180	89	139	292	33A	141	66
BRENDA MINE	2F18P	1460	Not	Measure	d	-	309	368	148	264	10
ISLAHT LAKE	2F24	1480	29	86	196	137B	277	364	124	235	20
GREYBACK RESERVOIR	2F08	1550	02	91	200	154	207	269	60	160	33
ISINTOK LAKE	2F11	1680	28	65	123	56	110A	307	26	133	38
MUTTON CREEK NO. 1	WA07	1740	28	74	178	290	297B	480	43	250*	38
MISSION CREEK	2F05P	1780	01	-	371	236	450	495	152	312	32
MOUNT KOBAU	2F12	1810	31	70	153	229	219	373	43	201	37
WHITEROCKS MOUNTAIN	2F09	1830	28	128	364	235	544	693	135	399	32
SILVER STAR MOUNTAIN	2F10	1840	01	154	438	358	648	721	229	507	45
A - SAMPLING PROP	BLEMS WI	ERE EN	COUNTE	RED							
D EADLY OD LATE	CAMDIA	īC									

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

## **SIMILKAMEEN**

					WATER EQUIVALENT (mm)						
Drainage Basin	Station	Elev	Date of	Snow	2004	2003	2002	Max.	Min.	Normal	No.
and Snow Course	Number	m	Survey	Depth							Years
				cm							Record
	,		,	,	,			,			

FREEZEOUT CREEK TRAIL	WA11	1070	29	81	249	127	180	462	13	222*	34
HAMILTON HILL	2G06	1490	31	102	258	110	193	411	104	258	40
MISSEZULA MOUNTAIN	2G05	1550	02	65	154	60	137	284	60	174	37
ISINTOK LAKE	2F11	1680	28	65	123	56	110A	307	26	133	38
LOST HORSE MOUNTAIN	2G04	1920	26	77	150A	70	146	335	70	165	43
BLACKWALL PEAK	2G03P	1940	01	-	551	383	664	1076	159	595	36
HARTS PASS	WA09	1980	29	196	686	526	1006	1328	246	777*	49
HARTS PASS	WA09P	1980	01	-	660	533	752	1005P	371	670*	6

- A SAMPLING PROBLEMS WERE ENCOUNTERED
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- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

## **NORTH EAST**

**February 1, 2004** 

## **PEACE**

					V	VATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FORT ST. JOHN A	4A25	690	31	41	56	68	60	154	29	84	30
MACKENZIE A	4A19	700	30	60	146	136	122	305	58	185	31
PACIFIC LAKE	1A11	770	27	99	363	179	370	679	179	451	36
BULLHEAD MOUNTAIN	4A28	790	31	38	80	58	76	149	ОТ	70	20
PHILIP LAKE	4A13	980	28	73	153	184	208	353	118	202	37
WARE (LOWER)	4A04	980	29	63	124	112	195	286	63	135	35
AIKEN LAKE	4A30P	1040	01	-	184	154	243	330	142	197	17
TUTIZZI LAKE	4A06	1070	28	74	161	181	244	348	109	186	35
TSAYDAYCHI LAKE	4A12	1160	28	96	225	250	325	507	146	276	36
PINK MOUNTAIN	4A14	1170	01	35	60	29	30A	138	10A	62	28
KAZA LAKE	1A12	1190	28	91	212	193	279	440	125	239	34
FREDRICKSON LAKE	4A10	1310	28	72	161	146	204	309	110	179	35
PULPIT LAKE	4A09	1310	29	117	277	242	358	530	190	298	32
PULPIT LAKE	4A09P	1310	01	-	320	290	351	405	232	310	13
PINE PASS	4A02P	1400	01	-	646	469	884	1241	469	745	12

TRYGVE LAKE	4A11	1400	29	91	214	238	322	434	183	258	34
SIKANNI LAKE	4C01	1400	29	78	170	146	249	325	81	185	34
PINE PASS	4A02	1430	30	230	795	543	1054	1194	411	809	32
MORFEE MOUNTAIN	4A16	1450	27	158	528	423	633	952	323	599	35
LADY LAURIER LAKE	4A07	1460	30	119	312	257	521	635	226	357	32
MOUNT SHEBA	4A18	1490	27	130	405	299	613	918	299	570	34
GERMANSEN (UPPER)	4A05	1500	28	79	178	203	288	371	140	239	35
MOUNT STEARNS	4A21	1500	29	47	85	61	145	196	41	101	29
JOHANSON LAKE	4B02	1540	28	85	190	193	242	355	115	208	33
MONKMAN CREEK	4A20	1550	27	86	254	163	405	775	163	409	26
WARE (UPPER)	4A03	1570	29	77	168	120	253	289	108	182	33
KWADACHA RIVER	4A27P	1620	01	-	188	184	263	371	139	242*	18
A CANADI INIC DDOI	N EN 40 XXII										

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

## **LIARD**

					W	WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record	
FORT NELSON A	4C05	380	01	35	55	83	102	128	35	80	38	
DEASE LAKE	4C03	820	30	44	85	91	81	202	36	106	39	
JADE CITY	4C15	940	29	82	182	138	162	162	138	150*	2	
DEADWOOD RIVER	4C09P	1300	01	-	67	94	98	207	61	107*	9	
SIKANNI LAKE	4C01	1400	29	78	170	146	249	325	81	185	34	

A - SAMPLIN	G PROBLEMS WERE ENCOUNTERED	
B - EARLY O	R LATE SAMPLING	

- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

### **NORTH WEST**

**February 1, 2004** 

## STIKINE/TAKU

### **Snow Survey Measurements**

					V						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
NINGUNSAW PASS	4B10	690	29	85	271	233	293	603	171	319	29
DEASE LAKE	4C03	820	30	44	85	91	81	202	36	106	39
ISKUT	4D02	1000	30	37	64	75	78	162	30	87	30
KINASKAN LAKE	4D11P	1020	01	-	308	311	274	516	155	276*	13
TUMEKA CREEK	4D10P	1220	01	-	319	326	398	744	274	448*	14
WADE LAKE	4D14P	1370	01	-	221	203	229	410	125	255*	12

- 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

## **YUKON**

		WATER EQUIVALENT (mm)	

Drainage	Station	Elev m	Date of	Snow	2004	2003	2002	Max.	Min.	Normal	No. Years
Basin and	Number		Survey	Depth							Record
Snow Course				cm							

- 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

## **SKEENA/NASS**

				WATER EQUIVALENT (mm)						mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TERRACE A	4B13A	180	30	49	121	64	103	274	0	134*	24
BEAR PASS	4B11A	460	01	128	419	340	-	821	192	505	19
NINGUNSAW PASS	4B10	690	29	85	271	233	293	603	171	319	29
GRANDUC MINE	4B12P	790	Not Measured			1275	-	1275	1275	1275*	1
CEDAR-KITEEN	4B18P	885	Not Measured			259	510	510	259	389*	3
KAZA LAKE	1A12	1190	28	91	212	193	279	440	125	239	34
LU LAKE	4B15P	1310	01	-	124	94	281	281	94	171*	5
TSAI CREEK	4B17P	1360	01	-	634	619	1151	1151	619	781*	6
KIDPRICE LAKE	4B01	1370	04	170	475	420	953	953	420	638	46
TRYGVE LAKE	4A11	1400	29	91	214	238	322	434	183	258	34
HUDSON BAY MTN.	4B03A	1480	29	113	258	259	479	665	221	379	32
SHEDIN CREEK	4B16P	1480	Not Measured			491	720	720	491	613*	8
JOHANSON LAKE	4B02	1540	28	85	190	193	242	355	115	208	33

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- E ESTIMATED BASED ON AREAL AVERAGE

### \* - PERIOD OF RECORD AVERAGE

### Province-Wide Synopsis

### **Basin Data and Graphs**

- Upper Fraser
- Mid and Lower Fraser
- Thompson
- Columbia
- Kootenay
- Okanagan, Kettle, and Similkameen
- Vancouver Island and Coastal
- North East
- North West
- 2004 Snow Pillow Graphs
- 2004 Groundwater Graphs
- Mid Month ASP Commentary
- Corrected or previously unpublished data

# Snowpack and Water Supply Outlook for British Columbia

March 1, 2004

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 on review.

### Province-wide Synopsis



BC Summary Graphs
of Snow Water
Equivalents

The March 1 snow survey is now complete. Data from 175 snow courses and 58 snow pillows around the province, with 27 out-of-province snow sampling locations, and climate data from Environment Canada, have been used to form the basis for the following reports.

### Snowpack

BC March 1 snowpacks varied, however in general most were below normal, especially in the northern two thirds of the province, with March 1 snow water equivalent index values there in the 65% to 75% of normal range. The southern middle Fraser, South Thompson, Similkameen, Columbia & Kootenay basins' snow indexes were in the 80% to 85% of normal range, with the Okanagan Kettle slightly higher and near normal. Snowpacks on the South Coast and Vancouver Island were normal for March 1.

These indexes given are overall mid to upper elevation basin snow indexes, however due to the warm October, upper elevation snowpacks began to form later than usual, and through much of the province accumulation of higher elevation snowpacks is slightly more below

normal than the middle and lower elevation snowpacks. As an example, while all Fraser basin snow indexes but the lower Fraser are well below normal, the overall 'Fraser basin low elevation stations' snow index is at 97% of normal for March 1.

### Weather

Mean monthly temperatures during February were above normal all over BC, however more so in the north, (the Peace and Liard indicator climate stations mean temperatures were around 4 degrees C above normal). February was a drier than usual month also, with precipitation in the southern and northern quarters of the province far below normal, and only a relatively small area around Quesnel and Prince George, and Vancouver Island, appearing to have had nearer normal precipitation over February. So far, only January this winter has had both near normal precipitation and temperatures throughout the province, and a normal monthly snow accumulation everywhere, although cool temperatures and normal precipitation in the southern third of the province gave good snow accumulations there during November as well.

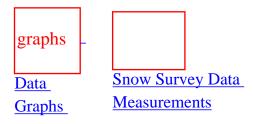
### **Outlook**

By March 1, on average approximately 80% of the peak snowpack for the year, (which usually occurs in early April), has accumulated. Areas with below normal snow now are unlikely to improve significantly before spring snowmelt. The South Coast, Vancouver Island, and Okanagan, which suffered from drought last summer, have good snowpacks for March 1, and freshet flows there should be near normal volumes. Most of the rest of the province will probably have smaller than usual overall freshet volumes. Less upper elevation snow in most areas could result in streamflows dropping more quickly than usual after the freshet, particularly if the summer is drier and warmer than usual, as is forecast for most of the province by both Environment Canada and the Canadian Institute for Climate Studies.

The snow indexes would appear to indicate a lower than normal chance of flooding this spring, however snowpacks are heavier than these indexes indicate in the mid-elevation bands of many of the basins. It is the melt of these mid-elevations which originates many of the highest flows. Actual peak flows during freshet are also very dependant on short term weather during melt. Extreme weather can produce extreme flows even with below normal snowpacks.

Back to top

**Upper Fraser & Nechako Basins** 

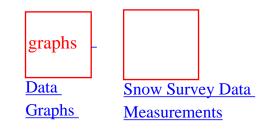


### March 1

The overall mid to upper elevation snow water equivalent index for the Upper Fraser is at 66% of normal, however mid-elevation snow is at around 70-80% of normal, with upper elevation snow readings in the 50-70% of normal range. Cumulative winter precipitation has been below normal, with December and February both significantly warmer than usual. The Nechako basin also has well below normal snowpacks, with a similar pattern of proportionately less snow compared to normal at higher elevations than at lower to mid elevations.

Regional streamflows, as indicated by the mean monthly flow in the Fraser River at Marguerite, were slightly lower than usual, as they have been since November.

Middle and Lower Fraser



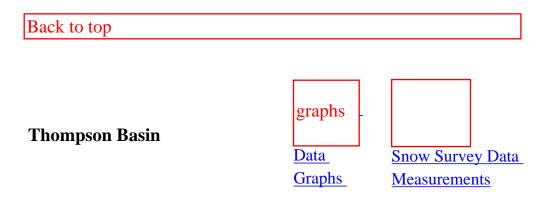
### March 1

The snowpacks in the Middle Fraser overall are less than usual, with a snow water index in that region of 78% of normal. However, the proportion of normal snowpack varies with both sub-basin and elevation. The lower plateau areas have many near normal snow readings for this time of year, and many of the upper elevation readings (above 1600 m) are in the 60-75% of normal range.

The Lower Fraser has slightly below normal snowpacks, down from normal on February 1, after receiving only around half of the usual February precipitation. Snowpacks appear to be more normally proportioned, with both lower and upper elevation snowpacks near normal.

Streamflows, as indicated by the mean monthly flows in the Fraser River

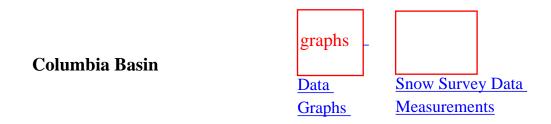
at Hope, were low at 69% of normal over February.



#### March 1

The North Thompson snow water index is at 73% of normal, and the South Thompson snow water index is at 80% of normal for March 1. However, in both basins the low to mid elevation snowpacks appear near normal, with the mid to upper elevation snowpacks in the North Thompson in the 65-80% range, and those on the South Thompson in the 75-85% range.

Streamflows in the region, as indicated by the mean monthly flows in the Thompson River at Spences Bridge, continued the slow decline from normal flows during November, with a February mean monthly flow of 81% of normal.



### March 1

The snow water index in the Columbia basin has fallen from 91% February 1 to 81% March 1, due to only around half of the normal February precipitation occurring. This appears to be relatively consistent from low to upper elevations in the Upper Columbia, however the Lower Columbia appears to have closer to 90% of normal snow at lower elevations up to around 1500 m.

Streamflows in the region, as represented by the mean monthly flow in the Columbia River at Donald, were far above normal at 173% of the usual February flow, possibly due to melt of some of the lower elevation snow during a slightly warmer than normal February.

Kootenay Basin

graphs

Data
Graphs
Measurements

#### March 1

The snow water index of mid to upper elevation snow stations in the Kootenay basin overall also fell significantly during February, from 96% to 84% of normal for March 1. Precipitation at Cranbrook was less than half of normal over February. The West Kootenay readings, however, show low to mid elevation snowpacks of near normal, and a lower proportion of normal upper elevation snow. This pattern is much less pronounced in the East Kootenays.

Streamflows, as indicated by the mean monthly flows in the Kootenay River at Fort Steele, were only slightly above normal during February.

Okanagan, Kettle, and
Similkameen Basins

Data
Graphs

Measurements

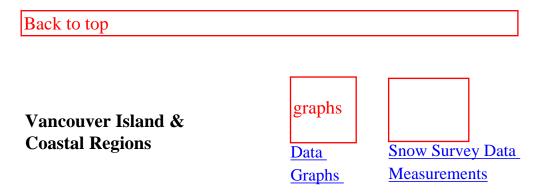
#### March 1

The overall snow water index for the Okanagan & Kettle is at 89% of normal for March 1. However, mid-elevation snow appears to be near normal. Upper elevation snowpacks vary, but are generally slightly less than normal. Precipitation during February was only around one third of normal in both the Okanagan and Similkameen. Cumulative winter total precipitation is now normal for Kelowna, but below normal for Princeton.

The Similkameen basin snow index has fallen from 93% February 1 to 85% of normal for March 1, due to the very low precipitation over February. This appears to be relatively consistent from low to higher

elevations.

Streamflows in the region, as indicated by inflows to Okanagan Lake, were below normal during February. Current Okanagan Lake levels are the lowest recorded for this date since 1921, due to last summer's drought, however with this year's near normal snowpacks the lake should fill to near normal full pool by early summer.



### March 1

Snowpacks on Vancouver Island are slightly above normal for March 1. On the South Coast, snowpacks are near normal, however they lessen as you move north. From only a few readings, the Central Coast appears to have only around three quarters of its normal snowpacks.

Streamflows, as indicated by the mean monthly inflows to Upper Campbell Lake, were below normal during February.

North East Region	graphs	
8	<u>Data</u>	Snow Survey Data
	<b>Graphs</b>	Measurements

#### March 1

Both the Peace and Liard basins have well below normal snowpacks for March 1, with both snow water indexes at 76% of normal. Precipitation during February was far below normal, and winter cumulative precipitation is also well below normal.

Streamflows, as indicated by inflows to Williston Lake, have been above normal through the winter. Mean monthly temperatures have been above normal through most of the winter, (around 4° C during both December

and February), which may be contributing to higher than usual winter runoff.

North West Region

graphs

Data
Graphs
Measurements

### March 1

The overall Skeena/Nass snow water index is at 75% of normal. From a relatively few readings, the Stikine appears to have below normal snowpacks also. Cumulative precipitation since November 1 at Smithers is less than half of usual.

Regional streamflows, as indicated by the mean monthly flows in the Skeena River at Usk, were well below normal.

footer graphic

**Go to Upper Fraser Snow Station Map** 

## **UPPER and MIDDLE FRASER**

March 1, 2004

## **UPPER FRASER**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
HANSARD	1A06A	610	26	40	122	141	136	396	44	196	31
PRINCE GEORGE A	1A10	690	26	39	121	96	107	296	33	136	42
PACIFIC LAKE	1A11	770	27	126	467	326	540	832	277	569	41
BURNS LAKE	1A16	800	01	42	100	80	112	240	60	143	32
CANOE RIVER	2A01A	910	25	32	84	38	100	251	32	113	63
PHILIP LAKE	4A13	980	28	74	201	208	260	382	138	252	40
HEDRICK LAKE	1A14	1100	27	138	476	391	554	954	327	618	36
HEDRICK LAKE	1A14P	1100	01	-	424	491	761	761	386	577*	4
BIRD CREEK	1A23	1180	27	39	80	74	150	232	74	130*	14
KAZA LAKE	1A12	1190	28	91	261	213	328	478	186	297	38
LU LAKE	4B15	1300	24	70	168	122	300	406	122	269	25
FORFAR CREEK (UPPER)	1A24	1410	26	112	304	276	638	648	276	462	10
EQUITY MINE	4B14	1420	24	86	218	190	410	514	190	351	26
MOUNT SHEBA	4A18	1490	27	143	511	432	848	1037	394	715	33

BARKERVILLE	1A03P	1520	01	-	249A	150A	270	479	150A	319	25
KNUDSEN LAKE	1A15	1580	27	137	490	409	737	1098	404	722	33
MC BRIDE (UPPER)	1A02	1580	24	81	227	234	320	594	169	361	50
NARROW LAKE	1A21	1650	25	166	523	455	-	1300	419	777	28
REVOLUTION CREEK	1A17P	1690	01	-	354	393	754	1119	336	696	18
LONGWORTH (UPPER)	1A05	1740	Not	Measure	d	438	760	1104	307	674	46
DOME MOUNTAIN	1A19	1820	24	130	418	318	615	981	318	650	30
MARMOT JASPER	AL12	1830	26	57	114	117	201	314	91	196*	20
YELLOWHEAD	1A01	1860	24	83	225	253	417	660	185	432	33
YELLOWHEAD	1A01P	1860	01	-	270	371	514	720	266	499	7
HOLMES RIVER	1A18	1900	24	117	368	455	624	910	321	620	30
A CAMDI INC DDO	DI EMC W	DDD DN	COLINITI	ZDED							

A - SAMPLING PROBLEMS WERE ENCOUNTERED

# **NECHAKO**

					V	mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SKINS LAKE	1B05	880	01	41	92	60	109	226	54	115	40
TAHTSA LAKE	1B02	1300	27	207	736	666	1476	1476	571	1025	52
TAHTSA LAKE	1B02P	1300	01	-	738	692	1442	1512	661	1084	10
KIDPRICE LAKE	4B01	1370	27	174	574	461	1137	1137	429	802	52
MOUNT PONDOSY	1B08P	1400	01	-	497	360	994	994	360	710	11
NUTLI LAKE	1B07	1490	27	92	252	229	649	651	229	467*	13

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

MOUNT WELLS	1B01	1490	27	96	263	244	562	886	244	464	51
MOUNT WELLS	1B01P	1490	01	-	299	244	579	607	244	495	11
MOUNT SWANNELL	1B06	1620	27	60	173	132	315	446	132	254*	15

- 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

### **MIDDLE FRASER**

					V	nm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	28	31	44	20	48	128	0	63	33
BROOKMERE	1C01	980	28	67	151	113	147	351	53	194	59
NAZKO	1C08	1070	07	33	78	35	60	155	0	80	27
BIG CREEK	1C21	1140	28	37	85	10	42	112	0	55	32
GRANITE MOUNTAIN	1C33	1150	01	67	187	87	167	254	87	164	11
DUFFY LAKE	1C28	1200	01	128	422	323	480	762	194	459	25
PAVILION	1C06	1230	27	35	78	20	70	168	0	71	47
LAC LE JEUNE (LOWER)	1C07	1370	28	50	110	65	77	244	20	101	45
BRIDGE GLACIER (LOWER)	1C39	1400	28	124	378	392	542	954	304	554*	9
DEADMAN RIVER	1C32	1430	29	46	118	44	107	170	44	105	20
SHOVELNOSE MOUNTAIN	1C29	1450	29	64	190	126	235	398	104	253	23
BRALORNE	1C14	1450	28	46	119	110	170	363	0	169	40
BOSS MOUNTAIN MINE	1C20P	1460	01	-	458	308	533	735	308	511	10

LAC LE JEUNE (UPPER)	1C25	1460	28	65	152	90	117	213	13A	134	31
BRENDA MINE	2F18	1460	24	79	251	155	276	495	130	287	35
BRENDA MINE	2F18P	1460	01	-	307	212	389	431	184	342	11
HIGHLAND VALLEY	1C09A	1510	27	52	133	64	90	229	25A	89	38
BARKERVILLE	1A03P	1520	01	-	249A	150A	270	479	150A	319	25
HORSEFLY MOUNTAIN	1C13A	1550	27	118	374	252	-	624	238	418	31
GNAWED MOUNTAIN	1C19	1580	27	56	134	76	106	259	15	111	36
MOUNT TIMOTHY	1C17	1660	27	92	260	239	262	468	141	285	41
YANKS PEAK EAST	1C41P	1670	01	-	540	398	660	900	398	700	7
PENFOLD CREEK	1C23	1680	25	176	570	540	928	1132	453	828	29
GREEN MOUNTAIN	1C12P	1780	01	-	524	613	930	1259	445	754	10
MCGILLIVRAY PASS	1C05	1800	28	113	368	349	582	1016	222	522	52
MISSION RIDGE	1C18P	1850	01	-	308	277	561	866	269	515	17
DOWNTON LAKE (UPPER)	1C38	1890	28	160	554	510	876	1250	458	755	9
TYAUGHTON CREEK (NORTH)	1C40	1950	28	89	248	320	480	916	282	368	9
BRALORNE (UPPER)	1C37	1980	28	109	364	322	674	944	322	631	9

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

**Go to Lower Fraser Snow Station Map** 

### **MIDDLE and LOWER FRASER**

March 1, 2004

# MIDDLE FRASER

					V	nm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	28	31	44	20	48	128	0	63	33
BROOKMERE	1C01	980	28	67	151	113	147	351	53	194	59
NAZKO	1C08	1070	07	33	78	35	60	155	0	80	27
BIG CREEK	1C21	1140	28	37	85	10	42	112	0	55	32
GRANITE MOUNTAIN	1C33	1150	01	67	187	87	167	254	87	164	11
DUFFY LAKE	1C28	1200	01	128	422	323	480	762	194	459	25
PAVILION	1C06	1230	27	35	78	20	70	168	0	71	47
LAC LE JEUNE (LOWER)	1C07	1370	28	50	110	65	77	244	20	101	45
BRIDGE GLACIER (LOWER)	1C39	1400	28	124	378	392	542	954	304	554*	9
DEADMAN RIVER	1C32	1430	29	46	118	44	107	170	44	105	20
SHOVELNOSE MOUNTAIN	1C29	1450	29	64	190	126	235	398	104	253	23
BRALORNE	1C14	1450	28	46	119	110	170	363	0	169	40

BOSS MOUNTAIN MINE	1C20P	1460	01	-	458	308	533	735	308	511	10
LAC LE JEUNE (UPPER)	1C25	1460	28	65	152	90	117	213	13A	134	31
BRENDA MINE	2F18	1460	24	79	251	155	276	495	130	287	35
BRENDA MINE	2F18P	1460	01	-	307	212	389	431	184	342	11
HIGHLAND VALLEY	1C09A	1510	27	52	133	64	90	229	25A	89	38
BARKERVILLE	1A03P	1520	01	-	249A	150A	270	479	150A	319	25
HORSEFLY MOUNTAIN	1C13A	1550	27	118	374	252	-	624	238	418	31
GNAWED MOUNTAIN	1C19	1580	27	56	134	76	106	259	15	111	36
MOUNT TIMOTHY	1C17	1660	27	92	260	239	262	468	141	285	41
YANKS PEAK EAST	1C41P	1670	01	-	540	398	660	900	398	700	7
PENFOLD CREEK	1C23	1680	25	176	570	540	928	1132	453	828	29
GREEN MOUNTAIN	1C12P	1780	01	-	524	613	930	1259	445	754	10
MCGILLIVRAY PASS	1C05	1800	28	113	368	349	582	1016	222	522	52
MISSION RIDGE	1C18P	1850	01	-	308	277	561	866	269	515	17
DOWNTON LAKE (UPPER)	1C38	1890	28	160	554	510	876	1250	458	755	9
TYAUGHTON CREEK (NORTH)	1C40	1950	28	89	248	320	480	916	282	368	9
BRALORNE (UPPER)	1C37	1980	28	109	364	322	674	944	322	631	9

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

# **LOWER FRASER**

						WATE	R EQUI	VALEN	VT (mn	n)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
WOLVERINE CREEK	1D13	300	01	32	100	40	176	232	0	96*	28
SUMMALLO RIVER WEST	3D01C	790	27	59	217	59	263	442	59	271	12
BROOKMERE	1C01	980	28	67	151	113	147	351	53	194	59
CALLAGHAN CREEK	3A20	1040	29	183	744	372	722	1260	200	770	26
DISAPPOINTMENT LAKE	1D18P	1040	01	-	1356P	620P	1476P	1746	620P	1206*	5
DICKSON LAKE	1D16	1070	01	295	1268	688	1490A	1490A	542	1263	11
DOG MOUNTAIN	3A10	1080	26	250	1113	366	1149	2146Z	345	1016	20
BEAVER PASS	WA12	1120	25	150	561	384	764	1298	30	651*	55
KLESILKWA	3D03A	1130	01	64	195	63	415	759	0	296	53
SPUZZUM CREEK	1D19P	1180	01	-	1253	739	1620	1620	739	1150*	4
DUFFEY LAKE	1C28	1200	01	128	422	323	480	762	194	459	25
STAVE LAKE	1D08	1210	01	306	1245	714	1309	2500A	353	1285	36
WAHLEACH LAKE	1D09	1400	01	161	563	259	640	1072	86	528	37
WAHLEACH LAKE	1D09P	1400	01	-	911	494	1094	1213	494	955	11
NAHATLATCH RIVER	1D10	1520	01	233	875	764	1340A	2380A	450	1194	35
EASY PASS	WA13	1580	Not	Measur	ed	-	-	2913	478	1652*	36
CHILLIWACK RIVER	1D17P	1600	01	-	1260	795	1474	1567	795	1118*	10
GREAT BEAR	1D15P	1660	01	-	1203	870	1658	1752	708	1423	12
TENQUILLE LAKE	1D06	1680	01	198	792	763	1096	1568	410	980	50
TENQUILLE LAKE	1D06P	1680	01	-	701	675	1058	1058	518	750*	3

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

# **SKAGIT**

### **Snow Survey Measurements**

					<b>'</b>	WATE	R EQU	JIVALE	NT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SUMALLO RIVER WEST	3D01C	790	27	59	217	59	263	442	59	271	12
FREEZEOUT CREEK TRAIL	WA11	1070	26	84	282	145	274	615	15	271*	55
BEAVER PASS	WA12	1120	25	150	561	384	764	1298	30	651*	55
KLESILKWA	3D03A	1130	01	64	195	63	415	759	0	296	53
LIGHTNING LAKE	3D02	1220	03	88	264	190	250	497	51	282	30
HARTS PASS	WA09	1980	25	213	759	688	1260	1636	312	944*	53
HARTS PASS	WA09P	1980	01	-	747	516	988	1320A	444	830*	6

#### A - SAMPLING PROBLEMS WERE ENCOUNTERED

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

**Go to Thompson Snow Station Map** 

# **THOMPSON**

March 1, 2004

# **NORTH THOMPSON**

					V	ım)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BLUE RIVER	1E01B	670	02	98	336	179	266	411	179	290	21
KNOUFF LAKE	1E05	1200	27	54	130	76	151	284	36	133	45
COOK CREEK	1E14P	1280	01	-	465	308	499	499	308	404*	4
COOK FORKS	1E06	1390	29	185	636	570	888	1288	453	782	41
BOSS MOUNTAIN MINE	1C20P	1460	01	-	458	308	533	735	308	511	10
MOUNT COOK	1E02P	1550	01	-	840	821	1166	1166	680	889*	3
MOUNT COOK	1E02A	1580	28	224	795A	748	1072	1550A	573	1054	30
AZURE RIVER	1E08	1620	25	195	609	-	-	1274	475	910	26
AZURE RIVER	1E08P	1620	01	-	716	634	1024	1335	548	980	7
ADAMS RIVER	1E07	1720	28	146	464	416	656	892	262	575	33
KOSTAL LAKE	1E10P	1770	01	-	597	477	727	1019	477	733	19
TROPHY MOUNTAIN	1E03A	1860	28	119	362	216	490	778	216	453	29

NORTH	1E13	1860	24	139	485	456	776	899	355	657	15
CLEMINA											
CREEK											

- 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

### **SOUTH THOMPSON**

#### **Snow Survey Measurements**

					V	VATE	R EQU	IVALI	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ANGLEMONT	1F02	1190	05	111	340	160	292	635	160	337	47
ABERDEEN LAKE	1F01A	1310	27	65	167	86	123	231	51	145	50
MONASHEE PASS	2E01	1370	02	95	281	202	271	442	149	306	44
BOULEAU LAKE	2F21	1400	29	96	268	188	266	432A	165	295	33
ADAMS RIVER	1E07	1720	28	146	464	416	656	892	262	575	33
KIRBYVILLE LAKE	2A25	1750	25	226	794	752	1160	1476	526	986	30
SILVER STAR MOUNTAIN	2F10	1840	29	156	529	456	729	912	347	636	45
PARK MOUNTAIN	1F03P	1890	01	-	563	554	786	1021	383	739	19
ENDERBY	1F04	1900	29	204	692	708	1030	1200	440	859	40

- 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

### MIDDLE FRASER

					V	VATEF	R EOU	IVALE	ENT (m	ım)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	28	31	44	20	48	128	0	63	33
BROOKMERE	1C01	980	28	67	151	113	147	351	53	194	59
NAZKO	1C08	1070	07	33	78	35	60	155	0	80	27
BIG CREEK	1C21	1140	28	37	85	10	42	112	0	55	32
GRANITE MOUNTAIN	1C33	1150	01	67	187	87	167	254	87	164	11
DUFFY LAKE	1C28	1200	01	128	422	323	480	762	194	459	25
PAVILION	1C06	1230	27	35	78	20	70	168	0	71	47
LAC LE JEUNE (LOWER)	1C07	1370	28	50	110	65	77	244	20	101	45
BRIDGE GLACIER (LOWER)	1C39	1400	28	124	378	392	542	954	304	554*	9
DEADMAN RIVER	1C32	1430	29	46	118	44	107	170	44	105	20
SHOVELNOSE MOUNTAIN	1C29	1450	29	64	190	126	235	398	104	253	23
BRALORNE	1C14	1450	28	46	119	110	170	363	0	169	40
BOSS MOUNTAIN MINE	1C20P	1460	01	-	458	308	533	735	308	511	10
LAC LE JEUNE (UPPER)	1C25	1460	28	65	152	90	117	213	13A	134	31
BRENDA MINE	2F18	1460	24	79	251	155	276	495	130	287	35
BRENDA MINE	2F18P	1460	01	-	307	212	389	431	184	342	11
HIGHLAND VALLEY	1C09A	1510	27	52	133	64	90	229	25A	89	38
BARKERVILLE	1A03P	1520	01	-	249A	150A	270	479	150A	319	25
HORSEFLY MOUNTAIN	1C13A	1550	27	118	374	252	-	624	238	418	31
GNAWED MOUNTAIN	1C19	1580	27	56	134	76	106	259	15	111	36
MOUNT TIMOTHY	1C17	1660	27	92	260	239	262	468	141	285	41

YANKS PEAK EAST	1C41P	1670	01	-	540	398	660	900	398	700	7
PENFOLD CREEK	1C23	1680	25	176	570	540	928	1132	453	828	29
GREEN MOUNTAIN	1C12P	1780	01	-	524	613	930	1259	445	754	10
MCGILLIVRAY PASS	1C05	1800	28	113	368	349	582	1016	222	522	52
MISSION RIDGE	1C18P	1850	01	-	308	277	561	866	269	515	17
DOWNTON LAKE (UPPER)	1C38	1890	28	160	554	510	876	1250	458	755	9
TYAUGHTON CREEK (NORTH)	1C40	1950	28	89	248	320	480	916	282	368	9
BRALORNE (UPPER)	1C37	1980	28	109	364	322	674	944	322	631	9

- 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

# **COLUMBIA**

March 1, 2004

# **UPPER COLUMBIA**

					V	VATEI	R EQU	IVALI	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
CANOE RIVER	2A01A	910	25	32	84	38	100	251	32	113	63
DOWNIE SLIDE (LOWER)	2A27	980	Not	Measured	d	386	578	1018	378	631	24
GLACIER	2A02	1250	29	152	519	409	568	952	251	631	64
FIELD	2A03A	1280	26	62	156	70	92	248	53	162	64
SUNWAPTA FALLS	AL11	1400	26	49	107	99	135	277	79	168*	32
VERMONT CREEK	2A19	1520	28	103	313	232	354	643	152	400	37
AZURE RIVER	1E08	1620	25	195	609	-	-	1274	475	910	26
AZURE RIVER	1E08P	1620	01	_	716	634	1024	1335	548	980	7
DOWNIE SLIDE (UPPER)	2A29	1630	25	240	900	930	1260	2120	614	1139	24
KICKING HORSE	2A07	1650	26	98	284	176	215	462	140	308	57
KIRBYVILLE LAKE	2A25	1750	25	226	794	752	1160	1476	526	986	30
MOUNT REVELSTOKE	2A06P	1830	01	-	832	738	-	1487	537	1014	9
NORTH CLEMINA CREEK	1E13	1860	24	139	485	456	776	899	355	657	15

FIDELITY MOUNTAIN	2A17	1870	28	251	950	701	1143	1703	534	1081	41
BEAVERFOOT	2A11	1890	28	65	150	108	174	333	80A	192	42
KEYSTONE CREEK	2A18	1890	25	150	481	448	725	1277	357	696	35
BUSH RIVER	2A23	1920	25	167	560	457	769	1078	281	727	36
NIGEL CREEK	AL10	1920	26	94	236	206	399	655	135	363*	32
GOLDSTREAM	2A16	1920	25	243	810	741	1105	1351	553	968	40
MOLSON CREEK	2A21P	1980	01	-	731	641	1043	1109	437	865	20
MOUNT ABBOT	2A14	1980	29	229	795	708	1119	1448	508	1051	44
SUNBEAM LAKE	2A22	2010	25	185	639	577	805	1117	389	780	35
MIRROR LAKE	AL06	2030	02	84	213	140	302	483	122	256*	37
BOW SUMMIT II	AL07A	2080	26	106	295	157	376	533	124	316*	24

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

### **LOWER COLUMBIA**

					W	ATER	REQU	IVALE	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FERGUSON	2D02	880	27	136	488	297	408	796	283	539	52
BAIRD	WA02	980	23	61	175B	140	203	368	0	184*	45
FARRON	2B02A	1220	24	94	286	219	268	450	79	295	31
MONASHEE PASS	2E01	1370	02	95	281	202	271	442	149	306	44
WHATSHAN (UPPER)	2B05	1480	02	162	569	449	519	918	285	611	42
BARNES CREEK	2B06	1620	02	126	357	384	428	634	251	447	42
BARNES CREEK	2B06P	1620	01	-	375	397	446	682	229	440	10

ST. LEON CREEK	2B08	1800	02	230	867	755	1207	1621	500	1098	34
ST. LEON CREEK	2B08P	1800	01	-	716	656	1013	1392	416	974	10
KOCH CREEK	2B07	1860	02	173	551	571	679	996	269	625	39
RECORD MOUNTAIN	2B09	1890	04	171	530A	618	691	1136	147	628	29
EAST CREEK	2D08P	2030	01	-	529	424	720	1167	312	790	23

- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

Go to Columbia Snow Station Map

# **KOOTENAY**

March 1, 2004

# **EAST KOOTENAY**

					W	ATER	REQU	IVALE	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
KISHENEHN	MT01	1190	28	84	221	119	203	399	36	210*	58
FERNIE EAST	2C07	1250	29	92	264	168	318	584	61	313	53
SINCLAIR PASS	2C01	1370	27	48	122	56	82	262	48	126	57
BRUSH CREEK TIMBER	MT03	1520	24	66	162	89	157	432	86	220*	51
MARBLE CANYON	2C05	1520	Not	Measured	l	185	303	579	152	330	57
SULLIVAN MINE	2C04	1550	25	78	202	198	224	465	53	268	58
WEASEL DIVIDE	MT02	1660	27	201	665	442	803	1257	254	733*	45
KIMBERLEY (MIDDLE)V O R	2C12	1680	25	72	189	172	213	386	97	242	35
BANFIELD MOUNTAIN	MT05P	1710	01	-	335	282	434	663	239	385*	6
MOUNT JOFFRE	2C16	1750	28	84	240	184	370	551	122	329	32
MORRISSEY RIDGE	2C09Q	1800	01	-	548	428	686	1074	232	620	20

MOYIE MOUNTAIN	2C10P	1930	01	-	394	285	435	653	149	338	24
HAWKINS LAKE	MT06P	1970	01	-	467	427	610	881	254	495*	6
WILKINSON SUMMIT (BUSH)	AL03	1980	25	61	142	62	-	307	62	171*	14
ALLISON PASS	AL01	1980	25	102	307	234	375	625	189	400*	21
THUNDER CREEK	2C17	2010	28	68	160	-	219	378	91	239	33
FLOE LAKE	2C14	2090	28	155	513	448	682	993	279	665	34
FLOE LAKE	2C14P	2090	01	-	485A	413	634	889	254	614	9
KIMBERLEY (UPPER) V O R	2C11	2140	25	101	285	273	373	696	152	390	35
HIGHWOOD SUMMIT (BUSH)	AL02	2210	25	93	269	198	404	455	145	323*	25
SUNSHINE VILLAGE	AL05	2230	27	126	361	302	569	770	211	489*	33
MOUNT ASSINIBOINE	2C15	2230	28	119	350	302	489	680	185	454	34

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

# **WEST KOOTENAY**

					V	VATE	R EQU	IVALI	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DUNCAN LAKE NO. 2	2D07A	650	26	58	189	92	112	263	72	138*	13
FERGUSON	2D02	880	27	136	488	297	408	796	283	539	52
NELSON	2D04	930	24	114	393	250A	326	558	140	353	64
SANDON	2D03	1070	29	110	396	210Z	270	475	210Z	347	27
CHAR CREEK	2D06	1310	01	159	520	425	446	754	231	476	36

BUNCHGRASS MEADOW	WA01P	1520	01	-	579	625	711	1049	318	658*	6
GRAY CREEK (LOWER)	2D05	1550	01	131	436	274	-	663	201	406	54
KOCH CREEK	2B07	1860	02	173	551	571	679	996	269	625	39
MOUNT TEMPLEMAN	2D09	1860	28	197	680	-	892	1534	490	935	33
GRAY CREEK (UPPER)	2D10	1910	01	173	594	467	-	955	343	651	33
EAST CREEK	2D08P	2030	01	-	529	424	720	1167	312	790	23
REDFISH CREEK	2D14P	2104	01	-	833	761	1256	1256	761	1009*	2

A - SAMPLING PROBLEMS WERE ENCOUNTERED

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

**Go to Okanagan Snow Station Map** 

# KETTLE, OKANAGAN and SIMILKAMEEN

March 1, 2004

### **KETTLE**

#### **Snow Survey Measurements**

					V	VATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FARRON	2B02A	1220	24	94	286	219	268	450	79	295	31
GOAT CREEK	WA04	1220	01	64	173	142	135	300	0	161*	41
CARMI	2E02	1250	04	74	160	100	102	274	56	147	41
MONASHEE PASS	2E01	1370	02	95	281	202	271	442	149	306	44
SUMMIT G.S.	WA05	1400	01	94	239	213	173	305	63	191*	40
BIG WHITE MOUNTAIN	2E03	1680	02	120	352	328	454	676	213	426	38
GRANO CREEK	2E07P	1860	01	-	386	334	510	634	206	422*	6

- 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

### **OKANAGAN**

### **Snow Survey Measurements**

					V	VATE	R EQU	IVALE	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SUMMERLAND RESERVOIR	2F02	1280	25	79	208	108	215	381	97	214	43
MC CULLOCH	2F03	1280	26	72	169	90	130	249	71	157	64
ABERDEEN LAKE	1F01A	1310	27	65	167	86	123	231	51	145	50
OYAMA LAKE	2F19	1340	27	69	177	81	147	241	73	157	34
POSTILL LAKE	2F07	1370	27	78	220	122	183	274	98	186	54
VASEUX CREEK	2F20	1400	27	52	100	76	72	284	60	139	33
BOULEAU LAKE	2F21	1400	29	96	268	188	266	432A	165	295	33
TROUT CREEK	2F01	1430	01	75	204	105	190	335	55	169	64
BRENDA MINE	2F18	1460	24	79	251	155	276	495	130	287	35
BRENDA MINE	2F18P	1460	01	-	307	212	389	431	184	342	11
ISLAHT LAKE	2F24	1480	26	98	272	180	330	497	165	317	22
GREYBACK RESERVOIR	2F08	1550	27	78	196	191	174	312	91	198	37
ESPERON CR (UPPER)	2F13	1650	28	122	352	210	412	635	157	371	35
ISINTOK LAKE	2F11	1680	26	71	140	66	129	358	53	164	39
MACDONALD LAKE	2F23	1740	24	109	347	228	479	583	170	394	27
MUTTON CREEK NO. 1	WA07	1740	27	112	290	330	335B	589	0	306*	60
MISSION CREEK	2F05P	1780	01	-	424	304	514	610	206	388	32
GRAYSTOKE LAKE	2F04	1810	27	99	276	200	352	605	128	330	25
MOUNT KOBAU	2F12	1810	28	93	231	259	269	488	61	259	38
WHITEROCKS MOUNTAIN	2F09	1830	26	146	387	295	610	809	180	499	48
SILVER STAR MOUNTAIN	2F10	1840	29	156	529	456	729	912	347	636	45

### 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

### **SIMILKAMEEN**

					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	WATE	R EQU	JIVALE	NT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BROOKMERE	1C01	980	28	67	151	113	147	351	53	194	59
FREEZEOUT CREEK TRAIL	WA11	1070	26	84	282	145	274	615	15	271*	55
LIGHTNING LAKE	3D02	1220	03	88	264	190	250	497	51	282	30
HAMILTON HILL	2G06	1490	01	86	281	140	305	676	127	326	42
MISSEZULA MOUNTAIN	2G05	1550	02	66	168	79	204	363	76	221	40
ISINTOK LAKE	2F11	1680	26	71	140	66	129	358	53	164	39
LOST HORSE MOUNTAIN	2G04	1920	29	75	206	100	160	508	92	204	41
BLACKWALL PEAK	2G03P	1940	01	-	589	431	848	1323	213	728	36
HARTS PASS	WA09	1980	25	213	759	688	1260	1636	312	944*	53
HARTS PASS	WA09P	1980	01	-	747	516	988	1320A	444	830*	6

- 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

### **COASTAL**

March 1, 2004

### **SOUTH COASTAL**

#### March 1

The overall Skeena/Nass snow water index is at 75% of normal. From a relatively few readings, the Stikine appears to have below normal snowpacks also. Cumulative precipitation since November 1 at Smithers is less than half of usual.

Regional streamflows, as indicated by the mean monthly flows in the Skeena River at Usk, were well below normal.

### **VANCOUVER ISLAND**

						WATE	ER EQU	JIVALE	ENT (m	m)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ELK RIVER	3B04	270	02	No Sn	ow	0	41	546	0	114	43
WOLF RIVER (LOWER)	3B19	640	02	100	430	126	374	1064	0	347	33
TENNENT LAKE	3B22	950	26	274	1005	556	914Z	1200	290A	833	17
UPPER THELWOOD LAKE	3B10	980	02	301	1356	754	1214	2440A	281	1204	43
WOLF RIVER (MIDDLE)	3B18	1070	02	181	702	354	552	1344	71	532	33

FORBIDDEN PLATEAU	3B01	1130	02	335	1411	864	1197	2730A	260	1279	48
JUMP CREEK	3B23P	1160	01	-	1005	484	1163	2016	304	977	8
MOUNT COKELY	3B02A	1190	27	224	830	478	776	1016	178	701	22
WOLF RIVER (UPPER)	3B17P	1490	01	-	1152	1033	1033	1777	512	1178	15

- 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

### **NORTH COASTAL**

					V	VATEI	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
WEDEENE RIVER SOUTH	3C07	300	01	88	329	268	499	817	207	405*	19
TAHTSA LAKE	1B02	1300	27	207	736	666	1476	1476	571	1025	52
TAHTSA LAKE	1B02P	1300	01	-	738	692	1442	1512	661	1084	10
BURNT BRIDGE CREEK	3C08P	1330	01	-	476	274	900	900	274	624*	6

- 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

Go to Northeast Snow Station Map

# **NORTHEAST**

March 1, 2004

# **PEACE**

					V	VATE	R EQU	IVALI	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FORT ST. JOHN A	4A25	690	29	31	62	90	78	191	38	107	30
MACKENZIE A	4A19	700	28	62	168	172	180	345	92	232	31
PACIFIC LAKE	1A11	770	27	126	467	326	540	832	277	569	41
BULLHEAD MOUNTAIN	4A28	790	24	37	89	-	86	142	ОТ	89	19
PHILIP LAKE	4A13	980	28	74	201	208	260	382	138	252	40
WARE (LOWER)	4A04	980	29	57	140	155	214	246	97	164	40
AIKEN LAKE	4A30P	1040	01	-	188	180	295	363	162	242	17
TUTIZZI LAKE	4A06	1070	28	72	201	191	290	386	140	230	40
TSAYDAYCHI LAKE	4A12	1160	28	90	255	267	444	540	166	342	40
PINK MOUNTAIN	4A14	1170	01	31	57	58	33	160	10A	77	40
KAZA LAKE	1A12	1190	28	91	261	213	328	478	186	297	38
PULPIT LAKE	4A09	1310	29	107	322	299	407	531	233	357	39
PULPIT LAKE	4A09P	1310	01	-	341	360	408	448	290	361	13

FREDRICKSON LAKE	4A10	1310	28	69	179	164	228	315	129	214	39
PINE PASS	4A02P	1400	01	-	725	600	1100	1485	600	921	12
SIKANNI LAKE	4C01	1400	29	74	198	169	273	335	107	229	38
TRYGVE LAKE	4A11	1400	28	89	256	246	337	453	211	315	39
PINE PASS	4A02	1430	01	224	924	720	1262	1502	480	1005	40
MORFEE MOUNTAIN	4A16	1450	27	159	612	518	790	1166	312	739	36
LADY LAURIER LAKE	4A07	1460	01	111	364	295	571	662	255	438	37
MOUNT SHEBA	4A18	1490	27	143	511	432	848	1037	394	715	33
GERMANSEN (UPPER)	4A05	1500	28	83	232	225	366	520	174	302	43
MOUNT STEARNS	4A21	1500	29	42	96	76	141	227	56	123	29
JOHANSON LAKE	4B02	1540	28	81	224	191	271	368	148	253	40
MONKMAN CREEK	4A20	1550	27	90	284	222	503	925	211	522	22
WARE (UPPER)	4A03	1570	29	72	182	165	253	360	114	220	43
KWADACHA RIVER	4A27P	1620	01	-	210	221	315	405	195	293*	19
A - SAMPLING PROP	RI FMS WE	REFN	COUNTER	SED							

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

### **LIARD**

					V	VATE	R EQU	IVALE	ENT (n	nm)	
Drainage Basin	Station	Elev	Date of	Snow	2004	2003	2002	Max.	Min.	Normal	No.
and Snow Course	Number	m	Survey	Depth							Years
				cm							Record
FORT NELSON A	4C05	380	01	32	51	97	124	177A	40	98	38
WATSON LAKE	YK01	700	02	56	115	121	174	216	61	127*	38
A											

FRANCES RIVER	YK02	730	02	69	156	134	154	312	65	135*	28
DEASE LAKE	4C03	820	29	45	84	118	120A	229	45	125	39
JADE CITY	4C15	940	26	82	204	158	208	208	158	183*	2
SUMMIT LAKE	4C02	1280	01	41	110	-	100A	190	OT	106	34
DEADWOOD RIVER	4C09P	1300	01	-	67	113	109	220	58	122*	10
SIKANNI LAKE	4C01	1400	29	74	198	169	273	335	107	229	38

- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

**Go to Northwest Snow Station Map** 

### **NORTHWEST**

March 1, 2004

# STIKINE/TAKU

					7	WATE	R EQU	IVALI	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SPEEL RIVER	AK03	80	04	206	686	429	813	1024	389B	657*	33
TELEGRAPH CREEK	4D01	580	01	42	110	108	109	345	53	156	29
NINGUNSAW PASS	4B10	690	26	90	294	287Z	416	629	232	408	29
DEASE LAKE	4C03	820	29	45	84	118	120A	229	45	125	39
ISKUT	4D02	1000	27	34	70	75Z	101	176	33	107	29
KINASKAN LAKE	4D11P	1020	01	-	334	341	338	527	204	332*	13
TUMEKA CREEK	4D10P	1220	01	-	345	364	487	789	338	522*	14
WADE LAKE	4D14P	1370	01	-	244	248	278	475	162	297*	12

- 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

### **YUKON**

### **Snow Survey Measurements**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ATLIN LAKE	4E02A	730	29	46	98	104	113	185A	50	109*	20
LOG CABIN	4E01	880	03	120	372	207	436	514	124	330	43
PINE LK AIRSTRIP	YK03	1010	02	87	201	150A	192	330	25	186*	28
MONTANA MTN.	YK05	1020	03	48	124	83	132	202	65	126*	28
TAGISH	YK04	1080	03	47	111	88	151	198	75	119*	28

- 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

### **SKEENA/NASS**

					V	VATE	R EQU	IVALI	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TERRACE A	4B13A	180	27	25	84	62	173	407	0	145*	22
BEAR PASS	4B11A	460	24	132	453	400A	546	824	400A	610	20
NINGUNSAW PASS	4B10	690	26	90	294	287Z	416	629	232	408	29
GRANDUC MINE	4B12P	790	01	-	1361	1384	1725	1725	1384	1555*	2
CEDAR-KITEEN	4B18P	885	01	-	428	319	649	649	319	479*	3
MCKENDRICK CREEK	4B07	1050	26	66	159	198	275	391	177	269	36
TACHEK CREEK	4B06	1140	26	60	130	120	203	330	117	206	36

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KAZA LAKE	1A12	1190	28	91	261	213	328	478	186	297	38
LU LAKE	4B15	1300	24	70	168	122	300	406	122	269	25
LU LAKE	4B15P	1310	01	-	161	116	319	319	116	199*	5
TSAI CREEK	4B17P	1360	01	-	701	694	1384	1384	694	925*	6
KIDPRICE LAKE	4B01	1370	27	174	574	461	1137	1137	429	802	52
TRYGVE LAKE	4A11	1400	28	89	256	246	337	453	211	315	39
EQUITY MINE	4B14	1420	24	86	218	190	410	514	190	351	26
CHAPMAN LAKE	4B04	1460	26	97	266	300	543	691	268	414	39
SHEDIN CREEK	4B16P	1480	01	-	568A	563	878	904	563	732*	8
HUDSON BAY MTN.	4B03A	1480	27	106	298	312	620	719	287	459	32
MOUNT CRONIN	4B08	1480	26	125	371	345	646	869	345	522	35
JOHANSON LAKE	4B02	1540	28	81	224	191	271	368	148	253	40

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

### Province-Wide Synopsis

# Basin Data and Graphs

-Upper Fraser

-Mid and Lower Fraser

-Thompson

-Columbia

-Kootenay

-Okanagan, Kettle, and Similkameen

-Coastal

-NorthEast

-NorthWest

April 1 Seasonal volume forecasts

# **Snowpack and Water Supply Outlook for British Columbia**

**April 1, 2004** 

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 on review.

# Province-wide Synopsis



B.C Summary Graphs of Snow Water Equivalents

The April 1 snow survey is now complete. Data from 174 snow courses and 58 snow pillows around the province, with 26 out-of-province snow sampling locations, and climate data from Environment Canada, have been used to form the basis for the following reports.

### **Snowpack**

B.C. April 1 snowpacks vary, however most areas have below normal snowpacks. The exceptions, with near normal snowpacks, are the Stikine basin, the west side of the coast range, some southern & eastern portions of the lower Fraser, Vancouver Island, and a small area around and east of Mission Creek in the Okanagan. Due to a late beginning to snow accumulation, some areas have a near normal mid-elevation snowpack, but below normal upper elevation snow. This is the case in the North Thompson, parts of the middle Fraser, and West Kootenays.

Areas with far below normal snowpacks are the Nechako reservoir and upper Bulkley area, parts of the Bridge River in the middle Fraser, a small area in the south east Okanagan and West Kettle, the divide between the Upper Fraser and the Columbia, the Skagit basin, and the much of the Liard basin in BC.

April 1 Snowpack

Map

Corrected or previously unpublished data

#### Weather

Mean monthly temperatures during March were above normal all over BC, for the second month in a row, (approximately two to three °C). March precipitation varied from well above normal in the northern half of the province to well below normal in most extreme southern areas. So far, only January this winter has had both near normal precipitation and temperatures throughout the province. Cumulative precipitation at indicator Environment Canada climate stations since November 1 has been below usual in most areas, with the exception of above normal cumulative precipitation in the Stikine, well below normal in the Upper Fraser and Kootenays and Similkameen, and far below normal in the Nechako reservoir region.

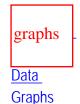
#### **Outlook**

By April 1, most mid-elevation and many higher elevation snowpacks have reached their peak snowpacks for the year, or will within a couple of weeks. Areas with below normal snowpacks now are unlikely to accumulate much more snow before melt. The South Coast and Vancouver Island, which suffered from drought last summer, have good snowpacks for April 1, and freshet flows there should be near normal volumes, as well as in the remaining coastal areas to the north, and the Stikine. Most of the rest of the province will have smaller than usual overall freshet volumes and summer flows, unless precipitation is well above normal. Less upper elevation snow in most areas could result in streamflows dropping more quickly than usual after the freshet, particularly if the summer is drier and warmer than usual, as is forecast for most of the province by both Environment Canada and the Canadian Institute for Climate Studies.

The snow indexes would appear to indicate a lower than normal chance of flooding nearly everywhere in BC this spring, however snowpacks are heavier than these indexes indicate in the mid-elevation bands of some of the basins (mentioned above). It is the melt of these mid-elevation snowpacks which originates many of the highest flows, so extreme weather in the early part of freshet could still cause flooding in these areas. Actual peak flows during freshet are very dependant on short term weather during melt. Extreme weather can produce extreme flows even with below normal snowpacks.

Areas with below normal snow will probably experience much quicker than usual drops in flow after the main snowmelt freshet, due to generally less upper elevation snow to sustain flows, and the forecast of a hot, dry summer. Residents of the Okanagan should practice water conservation, as the snowpack there is only slightly better than last year, groundwater in most of the hills appears to be lower than usual, and there is a possibility of dry weather again during the summer.

# **Upper Fraser & Nechako Basins**





#### **April 1**

The overall mid to upper elevation snow water equivalent index for the Upper Fraser is at 79% of normal, up from 66% last month. however mid-elevation snow appears slightly heavier than that, and upper elevation slightly less. Cumulative winter precipitation has been below normal, with December, February, and March mean monthly temperatures significantly warmer than usual (2 to 4 °C). The Nechako reservoir basin also has well below normal snowpacks, varying from below normal in the coast range to around 60% of normal in the foothills and plateau areas. The Stuart basin varies from 70 to 90% of normal snowpack.

Regional streamflows, as indicated by the mean monthly flow in the Fraser River at Marguerite, were up to normal during March, probably due to early melt caused by warmer March temperatures.

### Middle and Lower Fraser





### **April 1**

The Middle Fraser snow water index is at 80% of normal, however snowpacks vary significantly across the basin. The western plateau areas have 70 to 80% of normal snow, with some lower areas bare. The Bridge River area appears to have less than 70% of normal snow. However, a broad band from Williams Lake south to the lower Nicola valley appears to have near normal snowpacks, although the upper Nicola has below normal snow.

The Lower Fraser snow water index has dropped again slightly to 84% of normal, despite near normal March precipitation, due to warmer temperatures than usual during March. There is also significant variation in this region, from around 80% of normal in the upper Lillooet valley to normal in areas surrounding the lower mainland 'Fraser Valley' and up towards Merrit. The Skagit, however, has far less than usual snow for April 1.

Mean monthly flows in the Fraser River at Hope, were lower than usual at 79% of

Thompson Basin

graphs

Data
Graphs

Snow Survey Data
Measurements

#### April 1

The North Thompson snow water index is at 78% of normal, with the South Thompson index at 82% of normal for April 1. However, in the North Thompson the low to mid elevation snowpacks appear near normal, with the mid to upper elevation snowpacks in the 75-80% range. While this gives the possibility, with extreme weather conditions during early melt, of flooding in the North Thompson, streamflows are likely to drop very rapidly after freshet.

Streamflows in the region, as indicated by the mean monthly flows in the Thompson River at Spences Bridge, continued slightly below normal during March, with a mean monthly flow of 84% of normal.



### April 1

The snow water index in the Columbia basin has risen from 81% March 1 to 89% of normal for April 1, due to above normal March precipitation. Mean monthly temperature was 1 to 2 °C above normal for March. While snowpacks in are mainly in the 85 to 95% of normal range, eastern portions of the upper Columbia appear to be in the 75 to 85% of normal range, with a small area around the central Arrow Lakes in the Lower Colmbia around 95% of normal.

Streamflows in the region, as represented by the mean monthly flow in the Columbia River at Donald, were again well above normal, at 161% of the usual March flow, due to heavier than usual precipitation and melt of some of the lower elevation snow during a warmer than normal March.

### Kootenay Basin





#### **April 1**

The snow water index of mid to upper elevation snow stations in the Kootenay basin overall remains at 84% of normal for April 1. Precipitation was again less than usual, as it has been since December. Cumulative precipitation at Cranbrook since November 1 is only 69% of normal. Mean monthly temperature over March was 2.4°C above normal.

Most of the East Kootenays have less snow, with readings mainly in the 75 to 80% range, with the southern most portions having only slightly below normal snow. The West Kootenay readings are in the 85% range, with southern portions slightly higher. However, low to mid elevation snowpacks in the West Kootenays appear nearer normal, with a lesser proportion of normal upper elevation snow. This pattern is much less pronounced in the East Kootenays.

Streamflows, as indicated by the mean monthly flows in the Kootenay River at Fort Steele, were near normal during March.

Okanagan, Kettle, and Similkameen Basins



**Graphs** 



### **April 1**

The overall snow water index for the Okanagan & Kettle is at 89% of normal for April 1, however snowpacks vary considerably within the region. The Mission Creek drainage and areas east of Kelowna appear to have normal mid to upper elevation snow for this date, however most of the remaining drainages around Okanagan Lake are in the 85 to 90% of normal range, with the Trout Creek basin and areas south and north of Okanagan Lake having snowpacks in the 70 to 85% range. The Kettle basin has below normal snowpacks. Precipitation has been near normal over the winter, howevermean monthly temperatures have been above normal most of the winter, especially during March.

The Similkameen basin snow index has fallen from 84% March 1 to 81% of normal for April 1, due to the very low precipitation over February and March.

Streamflows in the region, as indicated by inflows to Okanagan Lake, were well below normal again during March. Current Okanagan Lake levels are the only a couple of centimeters above the lowest levels recorded for this date since 1921, due to last summer's drought. With the below normal snowpack, it is unlikely that the lake will fill to its usual early summer levels this freshet.

Vancouver Island
& Coastal
Regions

Bata
Graphs

Snow Survey Data
Measurements

#### **April 1**

Snowpacks on Vancouver Island are near normal for April 1. On the South Coast, snowpacks are only slightly below normal, and continue near normal on the west side of the Coast Range through the Central and North Coast.

Streamflows, as indicated by the mean monthly inflows to Upper Campbell Lake, were slightly above normal during March, due to warmer temperatures than usual (approximately 2°C above normal mean monthly temperature).



### April 1

The Peace basin has a snow water index of 84% of normal for April 1, up from 76% last month, due to well above normal precipitation during March.

While the snow water index for the Liard has also risen (though is still well below normal), increases in snowpack have been mainly in the mountains along the south and west of the basin. The majority of the basin in BC appears, from sparse data, to have in the range of 50 to 60% of usual April 1 snow.

Streamflows, as indicated by inflows to Williston Lake, have been above normal through the winter. Mean monthly temperatures have been above normal through most of the winter, (around 4° C during both December and February, 1.2° C during March), which may be contributing to higher than usual winter runoff and smaller snowpack.

NorthWest Region	graphs	
Northwest Region	<u>Data</u> Graphs	Snow Survey Data Measurements

### **April 1**

The overall Skeena/Nass snow water index is at 83% of normal, up slightly from last month, due to above normal precipitation during the month. Cumulative precipitation since November 1 at Smithers is 64% of normal for that period.

From a relatively few readings, the Stikine appears to have near normal snowpacks.

Regional streamflows, as indicated by the mean monthly flows in the Skeena River at Usk, were up to slightly below normal during March.

footer graphic			
	footer graphic		

# **UPPER and MIDDLE FRASER**

April 1, 2004

### **UPPER FRASER**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PRINCE GEORGE A	1A10	690	27	29	94	116	122	313	0	118	42
PACIFIC LAKE	1A11	770	26	156	564	469	697	879	290	628	41
BURNS LAKE	1A16	800	31	32	72	80	140	264	0	129	32
CANOE RIVER	2A01A	910	26	21	57	OT	142	262	OT	98	63
PHILIP LAKE	4A13	980	27	90	251	263	330	423	176	287	41
HEDRICK LAKE	1A14	1100	26	167	621	503	698	1046	351	688	37
HEDRICK LAKE	1A14P	1100	01	-	615	623	964	964	581	752*	4
BIRD CREEK	1A23	1180	29	37	90	88	180	270	84	145*	14
KAZA LAKE	1A12	1190	27	100	307	271	390	453	226	338	39
LU LAKE	4B15	1300	30	84	222	162	352	484	162	318	27
FORFAR CREEK (UPPER)	1A24	1410	30	131	380	372	626	760	372	534	11
EQUITY MINE	4B14	1420	30	97	282	258	458	640	258	405	27
MOUNT SHEBA	4A18	1490	26	193	684	613	988	1146	495	825	35
BARKERVILLE	1A03P	1520	01	-	325A	221	375	524	221	387	27

KNUDSEN LAKE	1A15	1580	26	187	674	544	903	1255	485	826	35
MC BRIDE (UPPER)	1A02	1580	26	110	336	334	406	780	225	429	51
NARROW LAKE	1A21	1650	27	217	801	642	812	1350	541	900	29
REVOLUTION CREEK	1A17P	1690	01	-	551	536	955	1222	453	798	18
LONGWORTH (UPPER)	1A05	1740	26	187	716	614	-	1234A	467	784	48
DOME MOUNTAIN	1A19	1820	26	164	561	499	785	1057	416	761	33
MARMOT JASPER	AL12	1830	30	59	137	170	279	422	102	236*	34
YELLOWHEAD	1A01	1860	26	108	297	403	534	770	262	507	52
YELLOWHEAD	1A01P	1860	01	-	356	544	630	784	225	593	7
HOLMES RIVER	1A18	1900	26	164	530	592	792	1029	443	724	34
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B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

## **NECHAKO**

					V	nm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SKINS LAKE	1B05	880	30	22	64	ОТ	89	203	ОТ	111	40
TAHTSA LAKE	1B02	1300	30	231	922	917	1579	1579	775	1179	51
TAHTSA LAKE	1B02P	1300	01	-	908	966	1597	1686	860	1212	11

KIDPRICE LAKE	4B01	1370	30	193	712	664	1169	1247	622	919	50
MOUNT PONDOSY	1B08P	1400	01	-	597	564	1094	1094	564	798	12
MOUNT WELLS	1B01	1490	30	100	306	273	625	960	273	524	49
NUTLI LAKE	1B07	1490	29	102	320	301	721	724	301	539*	13
MOUNT WELLS	1B01P	1490	01	-	372	344	695	725	344	573	12
MOUNT SWANNELL	1B06	1620	29	69	197	148	350	489	148	294*	15

A - SAMPLING PROBLEMS WERE ENCOUNTERED

## MIDDLE FRASER

	D-4- (C.)							WATER EQUIVALENT (mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record		
PUNTZI MOUNTAIN	1C22	940	29	No S	now	0	38	120C	0	31	34		
BROOKMERE	1C01	980	29	47	131	146	178	399	86	201	59		
NAZKO	1C08	1070	04	No S	now	6	63	165B	0	61	45		
BIG CREEK	1C21	1140	29	8	20	0	41	119	0	16	33		
GRANITE MOUNTAIN	1C33	1150	02	51	172	93	213	261	73	181	11		
DUFFY LAKE	1C28	1200	01	118	484	423	553	866	244	507	26		
PAVILION	1C06	1230	01	No S	now	0	70	147	0	40	47		
LAC LE JEUNE (LOWER)	1C07	1370	26	40	97	67	110A	251	0	97	48		

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

I .											
BRIDGE GLACIER (LOWER)	1C39	1400	01	131	446	558	628	1086	364	643*	9
DEADMAN RIVER	1C32	1430	30	35	90A	46	144	188	30	105	20
BRALORNE	1C14	1450	01	36	118	115	122	389	0	178	41
SHOVELNOSE MOUNTAIN	1C29	1450	28	47	165A	150A	312	442	108	260	25
BOSS MOUNTAIN MINE	1C20P	1460	01	-	566	420	778	844	420	615	10
BRENDA MINE	2F18	1460	30	78	275	190	318	531	178	318	35
LAC LE JEUNE (UPPER)	1C25	1460	26	53	144	118	147	228	43	135	31
BRENDA MINE	2F18P	1460	01	-	317	244	418	497	227	394	11
HIGHLAND VALLEY	1C09A	1510	31	34	96	74A	108	249	3A	96	38
BARKERVILLE	1A03P	1520	01	_	325A	221	375	524	221	387	27
HORSEFLY MOUNTAIN	1C13A	1550	31	119	454	300A	456	716	282	464	34
GNAWED MOUNTAIN	1C19	1580	31	42	120A	98A	120	307	37	126	36
MOUNT TIMOTHY	1C17	1660	29	102	310	191	317	533	186	327	41
YANKS PEAK EAST	1C41P	1670	01	-	709	521	836	994	521	829	7
PENFOLD CREEK	1C23	1680	27	218	789	779	1103	1285	641	1000	28
GREEN MOUNTAIN	1C12P	1780	01	-	661	917	1064	1408	616	896	10
MCGILLIVRAY PASS	1C05	1800	01	120	413	539	630	1118	322	602	51
MISSION RIDGE	1C18P	1850	01	_	372	430	631	908	359	576	17
DOWNTON LAKE (UPPER)	1C38	1890	01	181	656	748	1000	1416	566	900	9

TYAUGHTON CREEK (NORTH)	1C40	1950	01	90	288	466	536	844	300	432	9
BRALORNE (UPPER)	1C37	1980	01	135	494	590	740	1010	526	755	9

- 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

## **MIDDLE and LOWER FRASER**

April 1, 2004

#### MIDDLE FRASER

			V	VATE	R EQUI	VALE	NT (n	nm)			
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	29	No Si	now	0	38	120C	0	31	34
BROOKMERE	1C01	980	29	47	131	146	178	399	86	201	59
NAZKO	1C08	1070	04	No Si	now	6	63	165B	0	61	45
BIG CREEK	1C21	1140	29	8	20	0	41	119	0	16	33
GRANITE MOUNTAIN	1C33	1150	02	51	172	93	213	261	73	181	11
DUFFY LAKE	1C28	1200	01	118	484	423	553	866	244	507	26
PAVILION	1C06	1230	01	No Si	now	0	70	147	0	40	47
LAC LE JEUNE (LOWER)	1C07	1370	26	40	97	67	110A	251	0	97	48
BRIDGE GLACIER (LOWER)	1C39	1400	01	131	446	558	628	1086	364	643*	9
DEADMAN RIVER	1C32	1430	30	35	90A	46	144	188	30	105	20
BRALORNE	1C14	1450	01	36	118	115	122	389	0	178	41
SHOVELNOSE MOUNTAIN	1C29	1450	28	47	165A	150A	312	442	108	260	25
BOSS MOUNTAIN MINE	1C20P	1460	01	-	566	420	778	844	420	615	10

BRENDA MINE	2F18	1460	30	78	275	190	318	531	178	318	35
LAC LE JEUNE (UPPER)	1C25	1460	26	53	144	118	147	228	43	135	31
BRENDA MINE	2F18P	1460	01	-	317	244	418	497	227	394	11
HIGHLAND VALLEY	1C09A	1510	31	34	96	74A	108	249	3A	96	38
BARKERVILLE	1A03P	1520	01	_	325A	221	375	524	221	387	27
HORSEFLY MOUNTAIN	1C13A	1550	31	119	454	300A	456	716	282	464	34
GNAWED MOUNTAIN	1C19	1580	31	42	120A	98A	120	307	37	126	36
MOUNT TIMOTHY	1C17	1660	29	102	310	191	317	533	186	327	41
YANKS PEAK EAST	1C41P	1670	01	-	709	521	836	994	521	829	7
PENFOLD CREEK	1C23	1680	27	218	789	779	1103	1285	641	1000	28
GREEN MOUNTAIN	1C12P	1780	01	-	661	917	1064	1408	616	896	10
MCGILLIVRAY PASS	1C05	1800	01	120	413	539	630	1118	322	602	51
MISSION RIDGE	1C18P	1850	01	-	372	430	631	908	359	576	17
DOWNTON LAKE (UPPER)	1C38	1890	01	181	656	748	1000	1416	566	900	9
TYAUGHTON CREEK (NORTH)	1C40	1950	01	90	288	466	536	844	300	432	9
BRALORNE (UPPER)	1C37	1980	01	135	494	590	740	1010	526	755	9

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

### **LOWER FRASER**

#### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SUMMALLO RIVER WEST	3D01C	790	31	45	165	117	306	512B	0	238	12
BROOKMERE	1C01	980	29	47	131	146	178	399	86	201	59
CALLAGHAN CREEK	3A20	1040	02	149	700	524	882	1604	192	902	27
DISAPPOINTMENT LAKE	1D18P	1040	02	-	1410P	-	1930P	1966	1248P	1715*	3
DICKSON LAKE	1D16	1070	31	350	1648	1004	1980A	2990A	738	1547	12
DOG MOUNTAIN	3A10	1080	31	284	1326	421	1622	2720A	51	1223	59
BEAVER PASS	WA12	1120	30	137	551	559	866	1849	94	786*	59
KLESILKWA	3D03A	1130	31	44	142	125	497	792	0	293	56
SPUZZUM CREEK	1D19P	1180	01	-	1508	1159	2096	2096	1031	1521*	4
DUFFEY LAKE	1C28	1200	01	118	484	423	553	866	244	507	26
STAVE LAKE	1D08	1210	31	343	1452	984	1667	2750A	579	1554	36
WAHLEACH LAKE	1D09	1400	31	173	651	465	796	1270	125	659	36
WAHLEACH LAKE	1D09P	1400	01	-	1173	850	1344	1380P	634	1154	12
NAHATLATCH RIVER	1D10	1520	31	260	1050	1171	1497	2410A	749	1417	36
EASY PASS	WA13	1580	Not	Availa	ble	-	-	3094	996	2061*	31
CHILLIWACK RIVER	1D17P	1600	01	-	1530	1268	1894	1894	1040	1362*	10
GREAT BEAR	1D15P	1660	01	-	1421	1331	1973	2400	998	1784	12
TENQUILLE LAKE	1D06	1680	01	222	922	1071	1244	1795	605	1159	51
TENQUILLE LAKE	1D06P	1680	01	-	844	1080	1193	1193	713	995*	3

#### **SKAGIT**

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

					W	mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SUMALLO RIVER WEST	3D01C	790	31	45	165	117	306	512B	0	238	12
FREEZEOUT CREEK TRAIL	WA11	1070	30	56	198	208	353	665	8	305*	59
BEAVER PASS	WA12	1120	30	137	551	559	866	1849	94	786*	59
KLESILKWA	3D03A	1130	31	44	142	125	497	792	0	293	56
LIGHTNING LAKE	3D02	1220	01	78	274	239	330	622	140	305	56
HARTS PASS	WA09	1980	29	231	924	932	1430	1725	541	1089*	61
HARTS PASS	WA09P	1980	01	-	884	655	1217	1770	546	1025*	6

- 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

## **THOMPSON**

April 1, 2004

## **NORTH THOMPSON**

					1	WATE	R EQUI	IVALEN	VT (mn	n)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BLUE RIVER	1E01B	670	31	77	298	154	283	425	154	276	21
KNOUFF LAKE	1E05	1200	04	32	86	96	153	274	58	144	48
COOK CREEK	1E14P	1280	01	-	604	409	638	664	409	552*	4
COOK FORKS	1E06	1390	28	203	818	680	940A	1394	530A	897	41
BOSS MOUNTAIN MINE	1C20P	1460	01	-	566	420	778	844	420	615	10
MOUNT COOK	1E02P	1550	01	-	1040A	1133	1406	1406	939	1159*	3
MOUNT COOK	1E02A	1580	28	250	959	907	1240A	1709	790A	1271	30
AZURE RIVER	1E08	1620	27	247	874	893	1137	1422A	686	1086	34
AZURE RIVER	1E08P	1620	01	-	911	919	1215	1511	716	1155	7

ADAMS RIVER	1E07	1720	27	158	564	520	810	1069	435	707	34
KOSTAL LAKE	1E10P	1770	01	-	728	641	897	1165	618	878	19
NORTH CLEMINA CREEK	1E13	1860	27	173	594	669	916	1018	560	808	15
TROPHY MOUNTAIN	1E03A	1860	27	137	430	332	634	888	332	545	30

- 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

## **SOUTH THOMPSON**

					V	VATE	R EQU	IVAL	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ANGLEMONT	1F02	1190	28	78	288	155	333	561	142	353	46
ABERDEEN LAKE	1F01A	1310	29	45	137	95	121	259	6	143	65
MONASHEE PASS	2E01	1370	28	93	327	295	312	517	188	343	55
BOULEAU LAKE	2F21	1400	28	93	276	212	282	564	172B	354	33
ADAMS RIVER	1E07	1720	27	158	564	520	810	1069	435	707	34
KIRBYVILLE LAKE	2A25	1750	28	259	1010	945	1339	1816	701	1189	31
SILVER STAR MOUNTAIN	2F10	1840	03	166	638	640	827	1115	414	760	45
PARK MOUNTAIN	1F03P	1890	01	-	735	762	908	1207	549	867	19

ENDERBY 1F04 1900 30 219 798 920 1169 1430 610 1019 41
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

## MIDDLE FRASER

					V	VATER	R EQUI	VALE	NT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PUNTZI MOUNTAIN	1C22	940	29	No S	now	0	38	120C	0	31	34
BROOKMERE	1C01	980	29	47	131	146	178	399	86	201	59
NAZKO	1C08	1070	04	No S	now	6	63	165B	0	61	45
BIG CREEK	1C21	1140	29	8	20	0	41	119	0	16	33
GRANITE MOUNTAIN	1C33	1150	02	51	172	93	213	261	73	181	11
DUFFY LAKE	1C28	1200	01	118	484	423	553	866	244	507	26
PAVILION	1C06	1230	01	No S	now	0	70	147	0	40	47
LAC LE JEUNE (LOWER)	1C07	1370	26	40	97	67	110A	251	0	97	48
BRIDGE GLACIER (LOWER)	1C39	1400	01	131	446	558	628	1086	364	643*	9
DEADMAN RIVER	1C32	1430	30	35	90A	46	144	188	30	105	20
BRALORNE	1C14	1450	01	36	118	115	122	389	0	178	41
SHOVELNOSE MOUNTAIN	1C29	1450	28	47	165A	150A	312	442	108	260	25

The second secon											
BOSS MOUNTAIN MINE	1C20P	1460	01	-	566	420	778	844	420	615	10
BRENDA MINE	2F18	1460	30	78	275	190	318	531	178	318	35
LAC LE JEUNE (UPPER)	1C25	1460	26	53	144	118	147	228	43	135	31
BRENDA MINE	2F18P	1460	01	-	317	244	418	497	227	394	11
HIGHLAND VALLEY	1C09A	1510	31	34	96	74A	108	249	3A	96	38
BARKERVILLE	1A03P	1520	01	-	325A	221	375	524	221	387	27
HORSEFLY MOUNTAIN	1C13A	1550	31	119	454	300A	456	716	282	464	34
GNAWED MOUNTAIN	1C19	1580	31	42	120A	98A	120	307	37	126	36
MOUNT TIMOTHY	1C17	1660	29	102	310	191	317	533	186	327	41
YANKS PEAK EAST	1C41P	1670	01	-	709	521	836	994	521	829	7
PENFOLD CREEK	1C23	1680	27	218	789	779	1103	1285	641	1000	28
GREEN MOUNTAIN	1C12P	1780	01	-	661	917	1064	1408	616	896	10
MCGILLIVRAY PASS	1C05	1800	01	120	413	539	630	1118	322	602	51
MISSION RIDGE	1C18P	1850	01	-	372	430	631	908	359	576	17
DOWNTON LAKE (UPPER)	1C38	1890	01	181	656	748	1000	1416	566	900	9
TYAUGHTON CREEK (NORTH)	1C40	1950	01	90	288	466	536	844	300	432	9
BRALORNE (UPPER)	1C37	1980	01	135	494	590	740	1010	526	755	9

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

# **COLUMBIA**

April 1, 2004

## **UPPER COLUMBIA**

					,	WATE	R EQU	J <b>IVAL</b> E	ENT (m	m)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
CANOE RIVER	2A01A	910	26	21	57	OT	142	262	OT	98	63
DOWNIE SLIDE (LOWER)	2A27	980	Not	Measur	ed	502	704	1062	448	680	27
GLACIER	2A02	1250	30	171	661	611	665	1161	371B	730	67
FIELD	2A03A	1280	31	44	131	86	96	251	8	153	64
SUNWAPTA FALLS	AL11	1400	30	49	127	175	198	333	89	195*	35
VERMONT CREEK	2A19	1520	29	111	364	295	430	843	190	446	38
AZURE RIVER	1E08	1620	27	247	874	893	1137	1422A	686	1086	34
AZURE RIVER	1E08P	1620	01	-	911	919	1215	1511	716	1155	7
DOWNIE SLIDE (UPPER)	2A29	1630	28	296	1132	1120	1490	2360A	858	1347	26
KICKING HORSE	2A07	1650	31	100	314	272	271	589	185	346	56
KIRBYVILLE LAKE	2A25	1750	28	259	1010	945	1339	1816	701	1189	31

MOUNT REVELSTOKE	2A06P	1830	01	-	1062	1077	1307	1686	709	1230	11
NORTH CLEMINA CREEK	1E13	1860	27	173	594	669	916	1018	560	808	15
FIDELITY MOUNTAIN	2A17	1870	27	327	1234	1012	1359	1951	730	1248	41
BEAVERFOOT	2A11	1890	28	63	162	152	196	460	105	222	44
KEYSTONE CREEK	2A18	1890	28	189	657	614	829	1388	485	827	37
BUSH RIVER	2A23	1920	28	192	690	750A	864	1331	455	865	37
NIGEL CREEK	AL10	1920	30	106	322	272	437	700	198	423*	35
GOLDSTREAM	2A16	1920	28	281	1029	951	1264	1638A	785	1157	40
MOLSON CREEK	2A21P	1980	01	-	949	945	1223	1223	651	1014	21
MOUNT ABBOT	2A14	1980	29	306	1148	1015	1414	1849	698	1256	45
SUNBEAM LAKE	2A22	2010	28	231	828	762	936	1384	590	917	37
MIRROR LAKE	AL06	2030	01	89	259	234	368	561	160	301*	64
BOW SUMMIT II	AL07A	2080	29	114	330	290	439	584B	180	363*	25

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

## **LOWER COLUMBIA**

					W	ATE	REQU	IVAL	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record

FERGUSON	2D02	880	29	135	589	421	499	881	142	587	66
BAIRD	WA02	980	Not	Availab	le	137	226	363	0	157*	44
FARRON	2B02A	1220	26	85	285	243	310	480	162	330	31
MONASHEE PASS	2E01	1370	28	93	327	295	312	517	188	343	55
WHATSHAN (UPPER)	2B05	1480	28	162	642	580	601	964	350	668	46
BARNES CREEK	2B06	1620	28	134	486	520	482	768	299	518	47
BARNES CREEK	2B06P	1620	01	-	484	593	544	773	323	546	11
ST. LEON CREEK	2B08	1800	28	290	1144	1107	1451	1831	818	1253	35
ST. LEON CREEK	2B08P	1800	01	-	968	1001	1256	1553	581	1133	10
KOCH CREEK	2B07	1860	28	190	710	-	733	1156	397	755	44
RECORD MOUNTAIN	2B09	1890	29	171	655	748	810	1307	315	752	29
EAST CREEK	2D08P	2030	01	-	717	690	-	1245	442	922	22

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

## **KOOTENAY**

April 1, 2004

## **EAST KOOTENAY**

					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	VATE:	R EQU	IVALE	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
KISHENEHN	MT01	1190	28	53	183	147	284	465	36	202*	57
FERNIE EAST	2C07	1250	01	60	201	217Z	407	605	151	335	52
SINCLAIR PASS	2C01	1370	31	37	86	64	96	262A	36	135	67
BRUSH CREEK TIMBER	MT03	1520	30	33	114	119	226	434	76	242*	52
MARBLE CANYON	2C05	1520	Not	Measur	ed	288	353	587A	168	364	57
SULLIVAN MINE	2C04	1550	29	71	232	238	297	538	137	313	58
WEASEL DIVIDE	MT02	1660	01	178	742	678	1016	1346	312	828*	63
KIMBERLEY (MIDDLE)V O R	2C12	1680	30	65	194	221	254B	462	141	279	35
BANFIELD MOUNTAIN	MT05	1710	25	91	353B	391	-	919	236	534*	33

BANFIELD MOUNTAIN	MT05P	1710	01	-	348	416	561	739	279	467*	6
MOUNT JOFFRE	2C16	1750	29	88	279	299	474	711	179	388	35
MORRISSEY RIDGE	2C09Q	1800	01	-	626	675	866	1224	360	744	20
RED MOUNTAIN	MT04	1830	30	96	373	411	544	810	211	482*	65
MOYIE MOUNTAIN	2C10P	1930	01	-	401	424	540	679	216	401	24
HAWKINS LAKE	MT06	1970	25	157	564B	648	869	1313	399	757*	31
HAWKINS LAKE	MT06P	1970	01	-	533	597	782	1001	310	610*	6
ALLISON PASS	AL01	1980	29	111	354	375	432	823	247	482*	40
WILKINSON SUMMIT (BUSH)	AL03	1980	29	64	188	172	224	460	100	214*	40
THUNDER CREEK	2C17	2010	29	84	213	-	277	475	140A	287	33
FLOE LAKE	2C14	2090	29	186	660	691	806	1242	411	791	34
FLOE LAKE	2C14P	2090	01	-	656	653	769	1001	360	724	9
KIMBERLEY (UPPER) V O R	2C11	2140	30	110	343	383	457B	798	197	467	35
HIGHWOOD SUMMIT (BUSH)	AL02	2210	30	112	330	323	503	681	180	393*	33
MOUNT ASSINIBOINE	2C15	2230	29	142	452	460	600	816	252	551	35
SUNSHINE VILLAGE	AL05	2230	31	164	493	493	658	996	277	601*	37

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

#### \* - PERIOD OF RECORD AVERAGE

## **WEST KOOTENAY**

					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	WATER	EQUI	VALE	NT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DUNCAN LAKE NO. 2	2D07A	650	26	37	142	0	115	223	0	84*	13
FERGUSON	2D02	880	29	135	589	421	499	881	142	587	66
NELSON	2D04	930	30	93	374	237	374	622	137	372	66
SANDON	2D03	1070	Not	Availab	ole	289Z	294	585	71	357	65
CHAR CREEK	2D06	1310	01	135	557	511	534	940	273	563	38
SMITH CREEK	ID01	1460	01	231	1016	986	1087	1940	508	1116*	62
BUNCHGRASS MEADOW	WA01P	1520	01	-	643	742	830	1214	414	801*	6
GRAY CREEK (LOWER)	2D05	1550	30	123	487	407	-	688	290	472	55
KOCH CREEK	2B07	1860	28	190	710	-	733	1156	397	755	44
MOUNT TEMPLEMAN	2D09	1860	29	243	892	1010A	1065	1608	688	1076	34
GRAY CREEK (UPPER)	2D10	1910	30	176	689	-	-	1123	492	783	33
EAST CREEK	2D08P	2030	01	-	717	690	-	1245	442	922	22
REDFISH CREEK	2D14P	2104	01	-	1046	1193	1519	1519	1193	1356*	2

- 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

# KETTLE, OKANAGAN and SIMILKAMEEN

April 1, 2004

#### **KETTLE**

					W	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FARRON	2B02A	1220	26	85	285	243	310	480	162	330	31
GOAT CREEK	WA04	1220	Not	Availabl	le	68	89	274	0	111*	39
CARMI	2E02	1250	02	30	92	60	118	290	14	142	41
MONASHEE PASS	2E01	1370	28	93	327	295	312	517	188	343	55
SUMMIT G.S.	WA05	1400	Not	Availabl	e	226	170	338	23	208*	41
BIG WHITE MOUNTAIN	2E03	1680	02	120	460	428	534	762	332	507	38
GRANO CREEK	2E07P	1860	01	-	416	454	626	769	334	553*	6
BLUEJOINT MOUNTAIN	2E06	2040	28	177	678	-	761	1175	329	742	25

- 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

## **OKANAGAN**

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
MC CULLOCH	2F03	1280	01	31	82	52	154	249	38	155	66
SUMMERLAND RESERVOIR	2F02	1280	31	59	182	126	240	389	96	226	67
ABERDEEN LAKE	1F01A	1310	29	45	137	95	121	259	6	143	65
OYAMA LAKE	2F19	1340	29	50	161	88	183	255	61	170	33
POSTILL LAKE	2F07	1370	31	67	230	164	227	348	109	224	53
BOULEAU LAKE	2F21	1400	28	93	276	212	282	564	172B	354	33
VASEUX CREEK	2F20	1400	01	39	98	84	108	239	72	157	33
ESPERON CR (MIDDLE)	2F14	1430	28	104	348	212	366	607	196	372	36
TROUT CREEK	2F01	1430	01	53	142	130B	215A	396	52	182	67
BRENDA MINE	2F18	1460	30	78	275	190	318	531	178	318	35
BRENDA MINE	2F18P	1460	01	-	317	244	418	497	227	394	11
ISLAHT LAKE	2F24	1480	31	91	297	189	373	501	165A	349	21
GREYBACK RESERVOIR	2F08	1550	01	74	216	247	194	351	114	233	50
ESPERON CR (UPPER)	2F13	1650	28	123	392	254	482	805	244	435	35
ISINTOK LAKE	2F11	1680	30	57	146	110	167	424	66	183	39
MACDONALD LAKE	2F23	1740	30	117	410	300	540	677	257	463	27
MUTTON CREEK NO. 1	WA07	1740	26	96	274	381B	358	721	79	345*	63
MISSION CREEK	2F05P	1780	01	-	529	458	600	728	278	472	32
GRAYSTOKE LAKE	2F04	1810	31	110	284	284	404	828	196	405	34

MOUNT KOBAU	2F12	1810	26	77	240	297	320	602	105	318	38
WHITEROCKS MOUNTAIN	2F09	1830	31	141	495	343	676	1021	318	586	49
SILVER STAR MOUNTAIN	2F10	1840	03	166	638	640	827	1115	414	760	45

- 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

## **SIMILKAMEEN**

					V	VATE	R EQU	IIVAL	ENT (1	nm)		
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record	
BROOKMERE	1C01	980	29	47	131	146	178	399	86	201	59	
FREEZEOUT CREEK TRAIL	WA11	1070	30	56	198	208	353	665	8	305*	59	
LIGHTNING LAKE	3D02	1220	01	78	274	239	330	622	140	305	56	
HAMILTON HILL	2G06	1490	31	74	267	244	399	851	164	356	44	
MISSEZULA MOUNTAIN	2G05	1550	29	54	172	123	254	516B	104	242	43	
ISINTOK LAKE	2F11	1680	30	57	146	110	167	424	66	183	39	
LOST HORSE MOUNTAIN	2G04	1920	30	76	231	174	265	533	146E	243	41	
BLACKWALL PEAK	2G03P	1940	01	-	690	623	1043	1494	400	833	36	
HARTS PASS	WA09	1980	29	231	924	932	1430	1725	541	1089*	61	
HARTS PASS	WA09P	1980	01	-	884	655	1217	1770	546	1025*	6	
A - SAMPLING P	A - SAMPLING PROBLEMS WERE ENCOUNTERED											

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- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

# **COASTAL**

April 1, 2004

## **SOUTH COASTAL**

				7	WATE	R EQU	JIVALE	NT (n	nm)		
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PALISADE LAKE	3A09	880	02	303	1381	-	1863	3560A	285	1440	55
PALISADE LAKE	3A09P	880	Not	Measur	ed	-	-	1680	678	1179*	2
POWELL RIVER (LOWER)	3A05	910	02	162	721	-	844	1554	85	743	44
CALLAGHAN CREEK	3A20	1040	02	149	700	524	882	1604	192	902	27
POWELL RIVER (UPPER)	3A02	1040	02	261	1160	-	1092	1813	467	1046	41
DOG MOUNTAIN	3A10	1080	31	284	1326	421	1622	2720A	51	1223	59
GROUSE MOUNTAIN	3A01	1100	Not	Availab	ole	600	1752	2670A	44	1203	68
ORCHID LAKE	3A19	1190	02	406	1846	-	1895	3770A	980	1905	30

ORCHID LAKE	3A19P	1190	Not	Availab	le	1430	1836	3819	1220	1951*	17
UPPER SQUAMISH RIVER	3A25P	1340	01	-	1403	1406	1553	1853	1039	1620	13
NOSTETUKO RIVER	3A22P	1500	01	-	446	417	626	988	359	605*	13
UPPER MOSELY CREEK	3A24P	1650	01	-	248	135	263	567	135	279*	15

- 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

## **VANCOUVER ISLAND**

					V	VATE	R EQUI	VALEN	T (mr	n)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ELK RIVER	3B04	270	29	No S	Snow	0	0	607	0	89	42
WOLF RIVER (LOWER)	3B19	640	29	96	346	164	458	1198	0	381	32
TENNENT LAKE	3B22	950	01	267	1016	712	1300Z	2830A	432	1034	16
UPPER THELWOOD LAKE	3B10	980	29	317	1475A	1124	1576	3200A	492	1554	44
WOLF RIVER (MIDDLE)	3B18	1070	29	201	678	532	666	1706	0	664	32

FORBIDDEN PLATEAU	3B01	1130	29	337	1550A	1252	1484	3550A	413	1595	49
JUMP CREEK	3B23P	1160	01	-	1159	649	1556	1643	401	1208	7
MOUNT COKELY	3B02A	1190	26	255	990	692	994	2100A	331	864	24
WOLF RIVER (UPPER)	3B17P	1490	01	-	1359	1454	1250	1878	796	1420	15

- 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

#### **NORTH COASTAL**

					V	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
WEDEENE RIVER SOUTH	3C07	300	26	86	352	308	576	733	36	361*	20
TAHTSA LAKE	1B02	1300	30	231	922	917	1579	1579	775	1179	51
TAHTSA LAKE	1B02P	1300	01	-	908	966	1597	1686	860	1212	11
BURNT BRIDGE CREEK	3C08P	1330	01	-	638	420	1028	1028	201	639*	6

- 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

# **NORTH EAST**

April 1, 2004

## **PEACE**

		V	VATE	R EQU	IVAL	ENT (1	nm)				
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FORT ST. JOHN A	4A25	690	28	30	86	133	126	210	0	102	30
MACKENZIE A	4A19	700	Not	Measur	ed	234	200	361	0	226	32
PACIFIC LAKE	1A11	770	26	156	564	469	697	879	290	628	41
BULLHEAD MOUNTAIN	4A28	790	28	40	109	106	131	168	ОТ	95	19
PHILIP LAKE	4A13	980	27	90	251	263	330	423	176	287	41
WARE (LOWER)	4A04	980	28	62	153	202	239	316	112B	188	41
AIKEN LAKE	4A30P	1040	01	-	244	225	321	371	206	258	17
TUTIZZI LAKE	4A06	1070	27	76	223	257	319	406	166	255	41
TSAYDAYCHI LAKE	4A12	1160	27	122	335	338	530	584	234	394	41
PINK MOUNTAIN	4A14	1170	05	25	46	71	114	175	16	85	40
KAZA LAKE	1A12	1190	27	100	307	271	390	453	226	338	39

ı											
FREDRICKSON LAKE	4A10	1310	27	77	201	228	271	351	163B	245	41
PULPIT LAKE	4A09	1310	28	122	375	357	480	556	297	402	41
PULPIT LAKE	4A09P	1310	01	-	387	433	439	500	378	411	13
PINE PASS	4A02P	1400	01	-	917	844	1256	1530	844	1101	12
TRYGVE LAKE	4A11	1400	27	109	308	310	426	493	257	359	41
SIKANNI LAKE	4C01	1400	28	84	229	254	318	380	166	268	41
PINE PASS	4A02	1430	28	275	1055	870	1440	1562	668	1150	42
MORFEE MOUNTAIN	4A16	1450	28	193	724	689	987	1158	555	854	36
LADY LAURIER LAKE	4A07	1460	28	133	425	407	701	737	342	503	40
MOUNT SHEBA	4A18	1490	26	193	684	613	988	1146	495	825	35
GERMANSEN (UPPER)	4A05	1500	27	116	321	293	421	523	200	352	42
MOUNT STEARNS	4A21	1500	28	55	124	154	158	239	59	148	29
JOHANSON LAKE	4B02	1540	27	93	277	280	337	417	173	291	41
MONKMAN CREEK	4A20	1550	26	134	420	313	616	1067	313	593	25
WARE (UPPER)	4A03	1570	28	82	226	-	302	390	157	254	40
KWADACHA RIVER	4A27P	1620	01	-	236	304	345	446	240	339*	19

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

## **LIARD**

#### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FORT NELSON A	4C05	380	01	21	46	155	150	198	23	95	38
WATSON LAKE A	YK01	700	26	62	125	141	188	229	71	126*	37
FRANCES RIVER	YK02	730	31	76	174	151	176	302	76	150*	27
DEASE LAKE	4C03	820	30	37	120A	181	120	259	50A	136	39
JADE CITY	4C15	940	26	90	228	174	218	218	174	196*	2
SUMMIT LAKE	4C02	1280	02	47	96	_	108	240	0	114	35
DEADWOOD RIVER	4C09P	1300	01	-	86	154	113	283	70	147*	10
SIKANNI LAKE	4C01	1400	28	84	229	254	318	380	166	268	41

- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

## **NORTH WEST**

April 1, 2004

## STIKINE/TAKU

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SPEEL RIVER	AK03	80	31	216	838	518	800	1402	300	768*	35
TELEGRAPH CREEK	4D01	580	02	50	125	109	114	343	37	156	29
NINGUNSAW PASS	4B10	690	30	116	398	353	434Z	620	231	438	29
DEASE LAKE	4C03	820	30	37	120A	181	120	259	50A	136	39
ISKUT	4D02	1000	31	24	87	130	110A	167	0	107	29
KINASKAN LAKE	4D11P	1020	01	-	473	435	349	570	256	379*	13
TUMEKA CREEK	4D10P	1220	01	-	491	484	506	869	387	596*	14
WADE LAKE	4D14P	1370	01	-	315	315	296	527	232	345*	12

- 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

## **YUKON**

#### **Snow Survey Measurements**

					V	WATER EQUIVALENT (mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ATLIN LAKE	4E02A	730	31	69	194	98	139	197	50	117*	20
LOG CABIN	4E01	880	29	151	482	223	467B	596	213	372	44
PINE LK AIRSTRIP	YK03	1010	31	94	239	156	194B	351	122	220*	28
MONTANA MTN.	YK05	1020	26	55	127	134	144B	217A	84	137*	27
TAGISH	YK04	1080	26	60	129	107	142	177	73	132*	27
A - SAMPLING	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

## **SKEENA/NASS**

	WATER EQUIVALENT (mm)										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TERRACE A	4B13A	180	29	No S	now	19	192	333	0	81*	24
BEAR PASS	4B11A	460	05	141	554	448	604	900	408	706	20
NINGUNSAW PASS	4B10	690	30	116	398	353	434Z	620	231	438	29
GRANDUC MINE	4B12P	790	01	-	1661	1609	1815	1815	1609	1712*	2
CEDAR-KITEEN	4B18P	885	01	-	593	454	773	773	454	605*	3

MCKENDRICK	4B07	1050	30	74	204	251	311	427	183	297	36
CREEK	4007	1030	30	/4	204	231	311	421	165	291	30
TACHEK CREEK	4B06	1140	30	63	140	178	264	362	112	232	36
KAZA LAKE	1A12	1190	27	100	307	271	390	453	226	338	39
LU LAKE	4B15	1300	30	84	222	162	352	484	162	318	27
LU LAKE	4B15P	1310	01	-	199	169	398	398	154	251*	5
TSAI CREEK	4B17P	1360	01	-	938	919	1534	1534	919	1104*	6
KIDPRICE LAKE	4B01	1370	30	193	712	664	1169	1247	622	919	50
TRYGVE LAKE	4A11	1400	27	109	308	310	426	493	257	359	41
EQUITY MINE	4B14	1420	30	97	282	258	458	640	258	405	27
CHAPMAN LAKE	4B04	1460	30	114	341	392	577	762	315	474	39
HUDSON BAY MTN.	4B03A	1480	29	126	383	399	609	846	356	524	32
SHEDIN CREEK	4B16P	1480	01	-	690A	731	1005	1039	731	880*	8
MOUNT CRONIN	4B08	1480	30	147	473	476	686	1097	433	612	35
JOHANSON LAKE	4B02	1540	27	93	277	280	337	417	173	291	41

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

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\* - PERIOD OF RECORD AVERAGE

# Province-Wide Synopsis

#### Basin Data and Graphs

-Upper Fraser

-Mid and Lower Fraser

-Thompson

-Columbia

-Kootenay

-Okanagan, Kettle, and Similkameen

-Coastal

-NorthEast

-NorthWest

-May 1 Seasonal volume forecasts

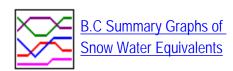
-May 1 Snow readings mapped -April 1 Peak Snowpack Map -Drought monitoring

# **Snowpack and Water Supply Outlook for British Columbia**

May 1, 2004

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 on review.

# Province-wide Synopsis



The May 1 snow survey is now complete. Data from 154 snow courses and 57 snow pillows around the province, with 20 out-of-province snow sampling locations, and climate data from Environment Canada, have been used to form the basis for the following reports.

#### **Snowpack**

BC May 1 snowpacks vary from slightly below normal to far below, with the majority in the below to well below normal range. While cumulative winter precipitation has been generally below normal, the biggest factor in the small snowpacks for May 1 has been the warm March and April weather, and a spring snowmelt two to four weeks ahead of schedule, which has also resulted in much higher snowlines than usual for this date.

Areas with far below normal snowpacks are the Nechako reservoir, the Liard basin in BC, the Bridge River area, the lower Thompson, East Kootenays, and the Similkameen. Below to well below normal snowpacks are found in the Peace, Upper Fraser, Cariboo Mtns, North and South Thompson, lower Fraser above Hope, Okanagan Kettle, West Kootenays, lower Columbia, and Vancouver Island. Only the mountains around the lower Fraser below Hope, the upper Columbia, and Stikine have upper elevation snowpacks only slightly below normal, although snowlines are high for this time of year in those regions also.

#### Weather

Mean monthly temperatures during April were well above normal all over BC, for the third month in a row, (approximately two to three °C). April precipitation varied from far below normal on the South Coast, Vancouver Island, Okanagan & Upper -Groundwater

Corrected or

previously

unpublished data

Fraser, to above normal from the Stikine through the Skeena to the Nechako reservoir.

So far, only January this winter has had both near normal precipitation and temperatures throughout the province, with all months but November and January having above normal monthly mean temperatures throughout BC. Cumulative precipitation at indicator Environment Canada climate stations since November 1 has been below usual in most areas, with the exception of normal cumulative precipitation in the Stikine and Upper Columbia.

#### Outlook

By May 1, most mid-elevation and many higher elevation snowpacks have usually reached their peak snowpacks and are settling in preparation for melt, or have begun to lose snow. This year snowmelt is advanced by 2 to 4 weeks throughout the province, with snowline receeding faster than usual. Unless there are substantial rains in the next few months (not forecast) this will result in an earlier than normal fire hazard, particularly in southern regions affected by last summer's drought, as the ground there is drying very quickly after it is bare of snow. See the Ministry of Forests web-site for current information on fire hazards.

There is a lower than normal chance of flooding nearly everywhere in BC this spring. Some southern streams may have already seen their peaks for the year (very early) unless there is heavy sustained rain over the next few weeks. Less upper elevation snow in most areas could result in streamflows dropping more quickly than usual after the freshet, particularly if the summer is drier and warmer than usual, as is forecast for most of the province by both Environment Canada and the Canadian Institute for Climate Studies.

Residents with limited water supplies in nearly all parts of the province, particularly in the southern half, should practice water conservation throughout the upcoming months, unless heavy rains in May and June change the situation. Residents of the Okanagan, Nicola, North Thompson, East Kootenays, and some other parts of the southern interior should start practicing strict water conservation now, not later, as conditions could become drier than last summer. Other regions in BC of concern for drought potential this year can be found in our drought monitoring page.

# **Upper Fraser & Nechako Basins**





#### May 1

The overall mid to upper elevation snow water equivalent index for the Upper Fraser is well below normal at 71%, down from the April 1 value of 79% of normal. A few measurements are minimums of the period of record. April had around half

of the usual precipitation at Prince George, and temperatures averaged 1.8 °C above normal, resulting in more melt at lower and middle elevations and less continued accumulation at upper elevations. Cumulative winter precipitation since November 1 has been well below normal, with most winter months also warmer than usual (2 to 4 °C). Significant snowmelt has begun 2 to 4 weeks early this year in both the Upper Fraser and Nechako.

The Nechako reservoir basin has far below normal snowpacks, varying from 50% to 65% of normal, with most readings new minimums for the period of record. The few readings from the Stuart basin indicate snowpacks at mid-elevation of 75% of normal, upper elevations may have slightly more.

Regional streamflows, as indicated by the mean monthly flow in the Fraser River at Marguerite, were 125% of normal over April, due to early snow melt.



#### Middle and Lower Fraser



<u>Data</u> <u>Graphs</u>



#### May 1

The overall Middle Fraser snow water index is down significantly since last month, at 65% of normal for May 1. Snowmelt has been around two weeks earlier than usual, with melt beginning during April at some upper elevation stations that usually show accumulations for the month. Most readings below 1500 m show no snow. Upper elevation snowpacks vary across the basin, with the more eastern Cariboo Mountains in the range of 75% to 80% of normal, and the Bridge River readings averaging less than 60%, with many new minimums for the periods of record. For Nicola comments, see Thompson basin.

The Lower Fraser snow water index has dropped again for the third month, to 73% of normal, down from 102% February 1. April precipitation was much lower than usual, and the mean monthly temperature around 2 °C above normal. However, in the mountains surrounding the lower Fraser Valley west of Hope, the upper elevation snowpack appears to be only slightly below normal, with readings in the range of 85% to 100%. The Fraser canyon and upper Lillooet valley have less, more in the 60% to 70% range. The Skagit basin has far less than usual snow for May 1.

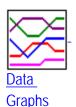
Mean monthly flows in the Fraser River at Hope, were 124% of normal over April, due to early snow melt.



#### **Hydrograph of the Fraser River at Hope**

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	$T_{\Delta}$	·P
	10	v

#### **Thompson Basin**





#### May 1

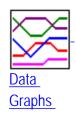
The North Thompson snow water index is at 71% of normal, with the South Thompson index at 76% of normal for May 1, both down slightly from last month. As through much of the winter, the mean monthly temperature at Environment Canada valley bottom stations has been 2 to 3°C above normal. April precipitation was around 3/4 of usual, bringing cumulative totals since November 1 in both basins to around 90% of normal. In the North Thompson, Blue River has had some late snow, and a few readings in that area, as in the adjacent Upper Columbia, are only slightly below normal. However, the remainder of the North Thompson basin readings are in the 65% to 75% range. The Cook Forks 1E06 snow course, at mid elevation, with a 40 year record, has set a new minimum, and Kostal lake snow pillow has also set a new minimum reading.

Most snow courses in and around the Nicola valley are now bare of snow. In general, snowmelt in the Thompson, due to warm April weather, is two to four weeks ahead of the usual timing.

Streamflows in the region, as indicated by the mean monthly flow in the Thompson River at Spences Bridge, were well above normal over April due to the early snow melt (142% of normal at Spences Bridge).



#### Columbia Basin





#### May 1

As in most of the province, mean monthly temperatures in the Columbia basin were a couple of degrees above normal during April. Precipitation at Revelstoke was near normal during April, however cumulative totals since November 1 are still slightly below normal. The snow water index for the overall Columbia basin is at 83% for May 1, down slightly from April 1, There is north/south variation in the Columbia mainstem basin snowpacks. While snowmelt during April was much higher than usual in the Lower Columbia, this was less pronounced in the more northern areas in the Columbia, with some higher elevation stations in the northern Upper Columbia showing accumulations over April.

Streamflows in the region, as represented by the mean monthly flow in the Columbia River at Donald, were again well above normal, with flows there of 140% of the usual April flow, due to earlier than usual snow melt.

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#### Kootenay Basin







#### May 1

Early snow melt was quite evident in the East Kootenays, and southern portions of the West Kootenays. Snow pillows in those regions are showing substantial melt up to four weeks earlier than usual. A good example is Moyie Mtn, 2C10P, where a late March above normal peak snowpack has become a well below normal melting snowpack May 1. As a result, the snow water index of mid to upper elevation snow stations in the Kootenay basin overall has fallen substantially to 67% of normal for May 1. Early melt has been most pronounced in the East Kootenays, with no snow at any stations below 1700 meters. The West Kootenays has slightly more snow, with readings above 1300 meters ranging mostly from 75% to 85%. Precipitation was again less than usual, as it has been since December. Cumulative precipitation at Cranbrook since November 1 is only 69% of normal. Mean monthly temperature over April was 2.1°C above normal.

Streamflows, as indicated by the mean monthly flows in the Kootenay River at Fort Steele, were above normal during April, with that WSC station reporting mean flow of 129% of normal during April, due to warmer weather and early snow melt.

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### Okanagan, Kettle, and Similkameen Basins





#### May 1

The overall snow water index for the Okanagan & Kettle has fallen dramatically from 89% of normal April 1, to 70% of normal for May 1, due to both early snow melt (2 to 3 weeks), and to receiving less than half of the usual April precipitation (42% at Kelowna). Snow melt has been 2 or three weeks early. Very little snow remains below 1400 meters, and mid elevation stations are reporting over twice the normal melt. Some upper elevation snow courses, which usually show a slight accumulation during April, are instead showing significant melt.

The Similkameen basin snow index has fallen to far below normal, from 81% April 1 to 42% of normal for May 1. Lower than normal April precipitation, combined with early snow melt caused by a warm April, (mean monthly temperature 2.2°C higher than normal), has reduced the Similkameen snowpacks substantially.

Streamflows in the region, as indicated by inflows to Okanagan Lake, were well above normal during April. Okanagan Lake has been rising rapidly due to the early melt, (around 0.25 meters in the last month) with inflows to the lake approximately 160% of normal April inflows. However, much of the available snow has melted, and unless heavy rains occur over the next few months Okanagan Lake is unlikely to reach last year's peak level.



# Vancouver Island & Coastal Regions



Snow Survey Data
Measurements

#### May 1

Due to the warmer weather during April, and well above normal melt, snowpacks on Vancouver Island are below to slightly below normal for May 1. On the South Coast, due to substantial early melt, snowpacks are now below normal. On the Central Coast, early melt has decreased snowpacks from near normal last month to around 2/3 of normal May 1.

Streamflows, as indicated by the mean monthly inflows to Upper Campbell Lake on Vancouver Island, were above normal during April, due to warmer temperatures

than usual (over 2°C above normal mean monthly temperature), and early snow melt.

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#### **North East Region**





#### May 1

The Peace basin has a snow water index of 80% of normal for May 1, down from 84% last month, despite slightly higher than normal precipitation during April, due to early snow melt caused by warm April weather (mean monthly temperatue 1.8° C above normal at Ft St John). Cumulative precipitation since November 1 is now at 86% of normal there.

From a very few readings, the snow water index for the Liard basin in BC has fallen steeply, to 42% of normal for May 1. Temperatures during April have also been well above normal in this basin, with higher than usual melt rates. While lower 'prairie' elevations appear to have lost most of their snow, and snowpacks are well below normal in the BC Rockies, readings from upstream in the Yukon indicate above normal snowpacks there.

Regional streamflows have been above normal through the winter, and were far above normal during April. Mean monthly inflows to Williston Lake were 159% of normal during April, due to early snow melt.



#### **NorthWest Region**







#### May 1

The overall Skeena/Nass snow water index is down slightly to 71% of normal, despite a second month of above normal precipitation. Cumulative precipitation since November 1 at Smithers is still below normal at 76% of normal for that period. Warmer weather during April (mean monthly temp over 2°C above normal) resulted in much more snow melt than usual over April, including many upper elevation snow courses which would normally have shown increases for the month.

From a relatively few readings, the Stikine appears to have a slightly below normal snowpack for May 1.

Regional streamflows, as indicated by the mean monthly flows in the Skeena River at Usk, were far above normal during April, with that WSC station reporting 187% of normal flow for the month, due to heavier than usual precipitation and early snow melt.

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Go to Upper Fraser Snow Station Map

# **UPPER and MIDDLE FRASER**

May 1, 2004

### **UPPER FRASER**

					V	VATE	R EOI	JIVALE	NT (m	ım)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.		Normal	No. Years Record
PRINCE GEORGE A	1A10	690	26	No S	now	-	0	216	0	8	38
PACIFIC LAKE	1A11	770	26	102	464	324	745	950	93	530	39
CANOE RIVER	2A01A	910	26	No S	now	-	0	147	0	6	23
PHILIP LAKE	4A13	980	27	33	102	226	320	406	0	201	40
HEDRICK LAKE	1A14	1100	26	126	575	431	875	1090A	263	648	37
HEDRICK LAKE	1A14P	1100	01	-	671	641	1054	1054	585	779*	4
BIRD CREEK	1A23	1180	28	No S	now	0Z	184	184	0Z	34*	14
KAZA LAKE	1A12	1190	27	72	250	283	405	470	201	330	38
LU LAKE	4B15	1300	28	54	166	144	426	444	144	259*	24
FORFAR CREEK (UPPER)	1A24	1410	27	119	420	438	802	802	438	558	10
EQUITY MINE	4B14	1420	28	67	236	242	560	620	212	383	26
MOUNT SHEBA	4A18	1490	26	157	692	674	1191	1251	503	876	35
BARKERVILLE	1A03P	1520	01	-	175A	165	405	604	165	350	27

KNUDSEN LAKE	1A15	1580	26	159	715	645	1107	1346A	501	874	35
MC BRIDE (UPPER)	1A02	1580	26	78	276	302	469	790	241	433	36
NARROW LAKE	1A21	1650	26	166	743	699	1063	1414	648	978	29
REVOLUTION CREEK	1A17P	1690	01	-	486	495	1105	1211	495	789	18
LONGWORTH (UPPER)	1A05	1740	26	147	640	586	1236	1476A	391	824	51
DOME MOUNTAIN	1A19	1820	26	146	603	561	1033	1138	452	844	31
MARMOT JASPER	AL12	1830	28	58	155	163	292	401	0	229*	32
YELLOWHEAD	1A01	1860	26	92	305	431	578	805A	318	528	53
YELLOWHEAD	1A01P	1860	01	-	398	581	735	836	364	641	7
HOLMES RIVER	1A18	1900	26	150	584	669	917	1140	518	803	33

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

# **NECHAKO**

			V								
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SKINS LAKE	1B05	880	30	No Sr	now	0Z	OT	100	0Z	3	35
TAHTSA LAKE	1B02	1300	30	180	836	1002	1628	1770	701	1258	52
TAHTSA LAKE	1B02P	1300	01	-	826	1018	1798	1798	866	1320	11

KIDPRICE LAKE	4B01	1370	30	135	629	704	1265	1367	551	935	52
MOUNT PONDOSY	1B08P	1400	01	-	399	631	1277	1277	546	813	10
MOUNT WELLS	1B01	1490	30	62	201	315	721	958	309	515	49
MOUNT WELLS	1B01P	1490	01	-	308	381	789	792	381	598	12
NUTLI LAKE	1B07	1490	30	74	250	391	806	806	331	515*	13
MOUNT SWANNELL	1B06	1620	30	44	156	224	457	457	109	296*	15

- 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

# MIDDLE FRASER

					V	VATEI	R EQU	IVALE			
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BROOKMERE	1C01	980	29	9	32	OT	108	419	OT	102	57
GRANITE MOUNTAIN	1C33	1150	04	No S	now	0	136	136	0	27	11
LAC LE JEUNE (LOWER)	1C07	1370	29	No S	now	0	27	163	0	18	46
BRIDGE GLACIER (LOWER)	1C39	1400	28	110	448	588	592	1018	352	637*	8
DEADMAN RIVER	1C32	1430	30	No S	now	0	106	121	0	35	20
SHOVELNOSE MOUNTAIN	1C29	1450	30	No S	now	32	170A	302	0	70	24

BRALORNE	1C14	1450	28	No S	now	OT	95	255	OT	76	40
BRENDA MINE	2F18	1460	27	35	149	132	263	526	0	236	35
BOSS MOUNTAIN MINE	1C20P	1460	01	-	495	386	686	829	386	595	10
LAC LE JEUNE (UPPER)	1C25	1460	29	No S	now	15	92	136	0	33	31
BRENDA MINE	2F18P	1460	01	No S	now	117	159	279	0	171	11
HIGHLAND VALLEY	1C09A	1510	30	No S	now	0	50	142	0	29	38
BARKERVILLE	1A03P	1520	01	-	175A	165	405	604	165	350	27
HORSEFLY MOUNTAIN	1C13A	1550	01	67	306	290A	564	676	136	422	33
GNAWED MOUNTAIN	1C19	1580	30	No S	now	0	120	241	0	78	36
MOUNT TIMOTHY	1C17	1660	25	61	233	201	319	536	118	290	41
YANKS PEAK EAST	1C41P	1670	01	-	634	536	994	1039	536	849	7
PENFOLD CREEK	1C23	1680	26	165	778	876	1231	1420	710	1081	31
GREEN MOUNTAIN	1C12P	1780	01	-	579	1042	1134	1341	661	950	10
MCGILLIVRAY PASS	1C05	1800	28	67	270	648	675	1118	302	603	51
MISSION RIDGE	1C18P	1850	01	-	204	521	664	963	313	541	17
DOWNTON LAKE (UPPER)	1C38	1890	28	146	636	836	918	1340	604	911	8
TYAUGHTON CREEK (NORTH)	1C40	1950	28	69	278	638	500	806	290A	390	8
BRALORNE (UPPER)	1C37	1980	28	109	482	710	742	1002	518	718	8

#### B - EARLY OR LATE SAMPLING

C	EADIV	$\cup$ D I	ATE	IDMAS	INC	WITH	DDODI	EMC	<b>ENCOU</b>	NTEDE
<b>(</b>	- PAKLY	UKI	A I E S	SAMPL	JINUT	wiiH	PRUBL	TEINI2	ENCO	NIEKE

- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

Go to Lower Fraser Snow Station Map

# **MIDDLE and LOWER FRASER**

May 1, 2004

### MIDDLE FRASER

					V	VATEI	R EQU	IVALE	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BROOKMERE	1C01	980	29	9	32	OT	108	419	OT	102	57
GRANITE MOUNTAIN	1C33	1150	04	No Si	now	0	136	136	0	27	11
LAC LE JEUNE (LOWER)	1C07	1370	29	No Si	now	0	27	163	0	18	46
BRIDGE GLACIER (LOWER)	1C39	1400	28	110	448	588	592	1018	352	637*	8
DEADMAN RIVER	1C32	1430	30	No Si	now	0	106	121	0	35	20
SHOVELNOSE MOUNTAIN	1C29	1450	30	No Si	now	32	170A	302	0	70	24
BRALORNE	1C14	1450	28	No S	now	OT	95	255	T0	76	40
BRENDA MINE	2F18	1460	27	35	149	132	263	526	0	236	35
BOSS MOUNTAIN MINE	1C20P	1460	01	-	495	386	686	829	386	595	10
LAC LE JEUNE (UPPER)	1C25	1460	29	No Si	now	15	92	136	0	33	31

BRENDA MINE	2F18P	1460	01	No Si	now	117	159	279	0	171	11
HIGHLAND VALLEY	1C09A	1510	30	No Si	now	0	50	142	0	29	38
BARKERVILLE	1A03P	1520	01	-	175A	165	405	604	165	350	27
HORSEFLY MOUNTAIN	1C13A	1550	01	67	306	290A	564	676	136	422	33
GNAWED MOUNTAIN	1C19	1580	30	No Si	now	0	120	241	0	78	36
MOUNT TIMOTHY	1C17	1660	25	61	233	201	319	536	118	290	41
YANKS PEAK EAST	1C41P	1670	01	-	634	536	994	1039	536	849	7
PENFOLD CREEK	1C23	1680	26	165	778	876	1231	1420	710	1081	31
GREEN MOUNTAIN	1C12P	1780	01	-	579	1042	1134	1341	661	950	10
MCGILLIVRAY PASS	1C05	1800	28	67	270	648	675	1118	302	603	51
MISSION RIDGE	1C18P	1850	01	-	204	521	664	963	313	541	17
DOWNTON LAKE (UPPER)	1C38	1890	28	146	636	836	918	1340	604	911	8
TYAUGHTON CREEK (NORTH)	1C40	1950	28	69	278	638	500	806	290A	390	8
BRALORNE (UPPER)	1C37	1980	28	109	482	710	742	1002	518	718	8
A CAMPIING DDC	DI DI IO	TIPDE I	TAICOLIA								

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

#### **LOWER FRASER**

			1	WATE	R EQU	IVALEN	NT (mr	n)		
Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record

SUMMALLO RIVER WEST	3D01C	790	01	No S	Snow	0	122	348	0	120	12
BROOKMERE	1C01	980	29	9	32	OT	108	419	ОТ	102	57
CALLAGHAN CREEK	3A20	1040	30	106	544	312	744	1568	256	805	26
DISAPPOINTMENT LAKE	1D18P	1040	28	-	1110P	987P	2000P	2000P	987P	1551*	4
DICKSON LAKE	1D16	1070	01	247	1380	1084	2122	3180A	604	1550	13
DOG MOUNTAIN	3A10	1080	Not	Availa	ble	547	1576	2760A	122	1238	20
BEAVER PASS	WA12	1120	28	84	406	437	848	1600	135	757*	55
KLESILKWA	3D03A	1130	01	No S	Snow	0	355	752	0	166	31
SPUZZUM CREEK	1D19P	1180	01	-	1211	1151	2070	2936P	1118	1822*	5
STAVE LAKE	1D08	1210	01	260	1395	1144	1745	3120A	796	1653	37
WAHLEACH LAKE	1D09	1400	01	111	494	514	846	1417	177	699	37
WAHLEACH LAKE	1D09P	1400	01	-	1140	954	1426	1585	509	1140	12
NAHATLATCH RIVER	1D10	1520	01	194	968	1385	1655	2720A	897	1487	36
EASY PASS	WA13	1580	Not	Availa	ble	-	-	3414	1072	2210*	29
CHILLIWACK RIVER	1D17P	1600	01	-	1436	1331	2111	2405P	925	1481*	11
GREAT BEAR	1D15P	1660	01	-	1436	1410	2261	2487	1091	1898	12
TENQUILLE LAKE	1D06	1680	01	163	844	1281	1352	1814	676	1222	47
TENQUILLE LAKE	1D06P	1680	01	-	653	1193	1256	1256	780	1076*	3
A - SAMPLING PROI	BLEMS V	VERE :	ENCOU	NTERI	ED						

# **SKAGIT**

					W	ATEF	REQU	IVALI	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

SUMALLO RIVER WEST	3D01C	790	01	No Sn	ow	0	122	348	0	120	12
FREEZEOUT CREEK TRAIL	WA11	1070	29	3	10	48	246	658	0	178*	52
BEAVER PASS	WA12	1120	28	84	406	437	848	1600	135	757*	55
KLESILKWA	3D03A	1130	01	No Sn	ow	0	355	752	0	166	31
LIGHTNING LAKE	3D02	1220	01	36	133	148	251	599	24	260	32
					007	1000	1,500	1047	<b>F</b> 21	1160%	
HARTS PASS	WA09	1980	29	175	897	1039	1582	1847	531	1160*	60

- 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

Go to Thompson Snow Station Map

# **THOMPSON**

May 1, 2004

# **NORTH THOMPSON**

					V	ATE	R EQU	IVALI	ENT (	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BLUE RIVER	1E01B	670	29	11	43	0Z	40	265	0Z	36	21
COOK CREEK	1E14P	1280	01	-	420	203	461	465	203	360*	4
COOK FORKS	1E06	1390	26	123	573	628	1044	1438	579	859	40
BOSS MOUNTAIN MINE	1C20P	1460	01	_	495	386	686	829	386	595	10
MOUNT COOK	1E02P	1550	01	-	998	1219	1665	1665	924	1269*	3
MOUNT COOK	1E02A	1580	26	202	932	1104	1460	1758	905	1331	30
AZURE RIVER	1E08P	1620	01	-	870	990	1478	1620	773	1280	7
ADAMS RIVER	1E07	1720	28	129	562	594	926	1173	396	762	33
KOSTAL LAKE	1E10P	1770	01	-	640	705	1034	1256	683	921	19
TROPHY MOUNTAIN	1E03A	1860	28	107	448	424	778	960	417	619	28

NORTH											
CLEMINA	1E13	1860	26	156	633	763	1045	1115	579	870	15
CREEK											

- 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

#### **SOUTH THOMPSON**

	WATER EQUIVALENT (mm)										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ANGLEMONT	1F02	1190	02	No Sı	now	0	223	496	0	213	46
ABERDEEN LAKE	1F01A	1310	01	No Sı	now	0Z	19	144	0Z	27	50
MONASHEE PASS	2E01	1370	30	No Sı	now	286	252	505	67	291	46
BOULEAU LAKE	2F21	1400	25	55	204	138	256	488	95	309	32
ADAMS RIVER	1E07	1720	28	129	562	594	926	1173	396	762	33
KIRBYVILLE LAKE	2A25	1750	26	205	1026	1090	1526	1797	770	1269	32
SILVER STAR MOUNTAIN	2F10	1840	30	126	564	665	917	1135	371	765	45
PARK MOUNTAIN	1F03P	1890	01	-	716	850	1047	1343	653	976	19
ENDERBY	1F04	1900	30	187	830	1009	1306	1430	700	1106	41

- 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

# MIDDLE FRASER

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BROOKMERE	1C01	980	29	9	32	OT	108	419	OT	102	57
GRANITE MOUNTAIN	1C33	1150	04	No S	now	0	136	136	0	27	11
LAC LE JEUNE (LOWER)	1C07	1370	29	No S	now	0	27	163	0	18	46
BRIDGE GLACIER (LOWER)	1C39	1400	28	110	448	588	592	1018	352	637*	8
DEADMAN RIVER	1C32	1430	30	No S	now	0	106	121	0	35	20
SHOVELNOSE MOUNTAIN	1C29	1450	30	No S	No Snow		170A	302	0	70	24
BRALORNE	1C14	1450	28	No S	now	OT	95	255	OT	76	40
BRENDA MINE	2F18	1460	27	35	149	132	263	526	0	236	35
BOSS MOUNTAIN MINE	1C20P	1460	01	-	495	386	686	829	386	595	10
LAC LE JEUNE (UPPER)	1C25	1460	29	No S	now	15	92	136	0	33	31
BRENDA MINE	2F18P	1460	01	No S	now	117	159	279	0	171	11
HIGHLAND VALLEY	1C09A	1510	30	No S	now	0	50	142	0	29	38
BARKERVILLE	1A03P	1520	01	-	175A	165	405	604	165	350	27
HORSEFLY MOUNTAIN	1C13A	1550	01	67	306	290A	564	676	136	422	33
GNAWED MOUNTAIN	1C19	1580	30	No S	now	0	120	241	0	78	36

MOUNT TIMOTHY	1C17	1660	25	61	233	201	319	536	118	290	41
YANKS PEAK EAST	1C41P	1670	01	-	634	536	994	1039	536	849	7
PENFOLD CREEK	1C23	1680	26	165	778	876	1231	1420	710	1081	31
GREEN MOUNTAIN	1C12P	1780	01	-	579	1042	1134	1341	661	950	10
MCGILLIVRAY PASS	1C05	1800	28	67	270	648	675	1118	302	603	51
MISSION RIDGE	1C18P	1850	01	-	204	521	664	963	313	541	17
DOWNTON LAKE (UPPER)	1C38	1890	28	146	636	836	918	1340	604	911	8
TYAUGHTON CREEK (NORTH)	1C40	1950	28	69	278	638	500	806	290A	390	8
BRALORNE (UPPER)	1C37	1980	28	109	482	710	742	1002	518	718	8

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

Go to Columbia Snow Station Map

# **COLUMBIA**

May 1, 2004

# **UPPER COLUMBIA**

		7	nm)								
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
CANOE RIVER	2A01A	910	26	No S	now	-	0	147	0	6	23
DOWNIE SLIDE (LOWER)	2A27	980	26	110	546	264	620	910	0	525	26
GLACIER	2A02	1250	28	116	549	563	718	1247	320	703	58
SUNWAPTA FALLS	AL11	1400	28	18	46	74	183	389	0	146*	33
VERMONT CREEK	2A19	1520	25	63	239	230	407	1026	140	388	38
AZURE RIVER	1E08P	1620	01	-	870	990	1478	1620	773	1280	7
DOWNIE SLIDE (UPPER)	2A29	1630	26	236	1140	1272	1758	2242	802	1424	25
KICKING HORSE	2A07	1650	28	68	263	-	-	589	63	316	54
KIRBYVILLE LAKE	2A25	1750	26	205	1026	1090	1526	1797	770	1269	32

MOUNT REVELSTOKE	2A06P	1830	01	-	1074	1139	1520	1625	874	1304	11
NORTH CLEMINA CREEK	1E13	1860	26	156	633	763	1045	1115	579	870	15
FIDELITY MOUNTAIN	2A17	1870	28	250	1231	1162	1554	1986	817	1341	41
KEYSTONE CREEK	2A18	1890	26	142	645	707	937	1421	514	863	38
BEAVERFOOT	2A11	1890	25	33	51	98	208	495	58	207	43
BUSH RIVER	2A23	1920	26	159	670	900A	1011	1392	492	892	36
NIGEL CREEK	AL10	1920	28	96	310	351	521	752	207	427*	34
GOLDSTREAM	2A16	1920	26	220	1021	1121	1457	1781	850	1229	41
MOLSON CREEK	2A21P	1980	01	-	1009	1001	1358	1375E	746	1080	21
MOUNT ABBOT	2A14	1980	Not 1	Measur	ed	1318	1618	1811	853	1361	43
SUNBEAM LAKE	2A22	2010	26	198	850	916	1108	1562	611	976	37
BOW SUMMIT II	AL07A	2080	30	93	345	325	470	597	201	380*	24

# **LOWER COLUMBIA**

					W	ATEF	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FERGUSON	2D02	880	27	78	384	305	405	773	160	444	58

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

I .											
FARRON	2B02A	1220	26	26	107	86	145	406	23	226	31
MONASHEE PASS	2E01	1370	30	No Sı	now	286	252	505	67	291	46
WHATSHAN (UPPER)	2B05	1480	30	93	451	550	492	983	255	594	43
BARNES CREEK	2B06	1620	30	75	337	542	455	742	211	500	43
BARNES CREEK	2B06P	1620	01	-	409	634	536	818	360	554	11
ST. LEON CREEK	2B08	1800	30	204	1068	1151	1537	1974	816	1340	37
ST. LEON CREEK	2B08P	1800	01	-	784	1001	1463	1501	701	1181	10
KOCH CREEK	2B07	1860	30	149	624	807	785	1201	391	815	43
RECORD MOUNTAIN	2B09	1890	04	80	354	742	857	1278	157	783	29
EAST CREEK	2D08P	2030	01	-	799	739	975	1346	480	967	22

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

Go to Columbia Snow Station Map

# **KOOTENAY**

May 1, 2004

# **EAST KOOTENAY**

		WATER EQUIVALENT (mm)									
Drainage Basin and Snow Course	Station Number	Elev	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FERNIE EAST	2C07	1250	26	No Si	now	61Z	289	541	0	191	52
SINCLAIR PASS	2C01	1370	30	No Sı	now	0	52	246	0	57	58
BRUSH CREEK TIMBER	MT03	1520	27	No Sı	now	0	96	417	0	140*	53
MARBLE CANYON	2C05	1520	Not	Measure	ed	205	359	612	102	302	57
SULLIVAN MINE	2C04	1550	28	No Sı	No Snow		258	518	0	232	58
WEASEL DIVIDE	MT02	1660	29	112	551	655	970	1422	348	835*	64
KIMBERLEY (MIDDLE)V O R	2C12	1680	30 No Sno		now	136	237	483	0	204	35
BANFIELD MOUNTAIN	MT05P	1710	01	-	127	333	478	884	213	465	7

MOUNT JOFFRE	2C16	1750	25	64	217	249	540	772	180	389	35
MORRISSEY RIDGE	2C09Q	1800	01	-	390	750	1054	1345	317	700	18
RED MOUNTAIN	MT04	1830	27	61	262	376	516	841	0	441*	66
MOYIE MOUNTAIN	2C10P	1930	01	-	150	383	480	674	18	351	24
HAWKINS LAKE	MT06P	1970	01	-	470	607	798	1041	409	772	7
WILKINSON SUMMIT (BUSH)	AL03	1980	28	19	41	124	262	279	23	184*	15
ALLISON PASS	AL01	1980	28	77	300	441	577	838	287	473*	17
THUNDER CREEK	2C17	2010	Not	Measure	ed	-	349	556	163	302	34
FLOE LAKE	2C14	2090	25	164	674	720	934	1369	497	856	35
FLOE LAKE	2C14P	2090	01	-	671	780	886	1035	481	788	9
KIMBERLEY (UPPER) V O R	2C11	2140	30	89	314	431	518	935	188	498	35
HIGHWOOD SUMMIT (BUSH)	AL02	2210	30	108	371	378	640	726	221	461*	39
SUNSHINE VILLAGE	AL05	2230	27	140	488	531	767	1092	338	636*	37
MOUNT ASSINIBOINE	2C15	2230	25	130	458	494	675	930	339	607	35

### **WEST KOOTENAY**

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

					7	WATER	EQUI	VALE	NT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FERGUSON	2D02	880	27	78	384	305	405	773	160	444	58
NELSON	2D04	930	26	19	90	0	154	508	0	177	48
SANDON	2D03	1070	01	No S	now	0Z	112	399	0Z	83	55
CHAR CREEK	2D06	1310	01	74	360	431	431	838	79	480	37
BUNCHGRASS MEADOW	WA01P	1520	01	-	416	764	770	1224	483	683	7
GRAY CREEK (LOWER)	2D05	1550	29	88	398	410	-	726	229	456	54
KOCH CREEK	2B07	1860	30	149	624	807	785	1201	391	815	43
MOUNT TEMPLEMAN	2D09	1860	25	97	446	1050A	1170	1679	731	1144	36
GRAY CREEK (UPPER)	2D10	1910	29	147	675	786	-	1300	518	821	34
EAST CREEK	2D08P	2030	01	-	799	739	975	1346	480	967	22
REDFISH CREEK	2D14P	2104	01	-	1035	1369	1706	1706	1369	1538*	2

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

B - EARLY OR LATE SAMPLING

Go to Okanagan Snow Station Map

# KETTLE, OKANAGAN and SIMILKAMEEN

May 1, 2004

#### KETTLE

					W	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FARRON	2B02A	1220	26	26	107	86	145	406	23	226	31
CARMI	2E02	1250	02	No Sı	now	0	4	173	0	29	40
MONASHEE PASS	2E01	1370	30	No Sı	now	286	252	505	67	291	46
BIG WHITE MOUNTAIN	2E03	1680	02	78	336	438	540	762	237	494	38
GRANO CREEK	2E07P	1860	01	-	428	529	683	806	420	598*	6
BLUEJOINT MOUNTAIN	2E06	2040	30	112	506	764	768	1201	287	775	28

- 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

# **OKANAGAN**

					V	VATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SUMMERLAND RESERVOIR	2F02	1280	28	1	2	0	87	368	0	129	39
MC CULLOCH	2F03	1280	01	No S	now	0	0	188	0	30	58
ABERDEEN LAKE	1F01A	1310	01	No Si	now	0Z	19	144	0Z	27	50
OYAMA LAKE	2F19	1340	28	4	15	6	68	185	0	66	34
POSTILL LAKE	2F07	1370	01	17	71	113	156	282	0	135	52
VASEUX CREEK	2F20	1400	29	No Si	now	0	0	192	0	59	33
BOULEAU LAKE	2F21	1400	25	55	204	138	256	488	95	309	32
TROUT CREEK	2F01	1430	01	No S	now	0	134	386	0	93	56
BRENDA MINE	2F18	1460	27	35	149	132	263	526	0	236	35
BRENDA MINE	2F18P	1460	01	No S	now	117	159	279	0	171	11
ISLAHT LAKE	2F24	1480	27	41	154	125	302	433	66	282	22
GREYBACK RESERVOIR	2F08	1550	29	26	78	104	146	386	0	181	32
ESPERON CR (UPPER)	2F13	1650	25	89	350	274	496	805	119	391	34
ISINTOK LAKE	2F11	1680	28	10	32	59	125	437	0	137	39
MACDONALD LAKE	2F23	1740	Not	Availab	le	337	555	650	198	459	27
MISSION CREEK	2F05P	1780	01	-	514	510	630	784	140	490	32
GRAYSTOKE LAKE	2F04	1810	28	88	286	294	418B	940	120	412	33
MOUNT KOBAU	2F12	1810	01	59	207	342	311	597	53	324	38

WHITEROCKS MOUNTAIN	2F09	1830	30	89	375	331	666	1013	175	534	33
SILVER STAR MOUNTAIN	2F10	1840	30	126	564	665	917	1135	371	765	45

- 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

### **SIMILKAMEEN**

#### **Snow Survey Measurements**

					W	ATER	EQU	IVALI	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BROOKMERE	1C01	980	29	9	32	OT	108	419	OT	102	57
FREEZEOUT CREEK TRAIL	WA11	1070	29	3	10	48	246	658	0	178*	52
LIGHTNING LAKE	3D02	1220	01	36	133	148	251	599	24	260	32
HAMILTON HILL	2G06	1490	01	4	16	168	351	838	0	268	44
MISSEZULA MOUNTAIN	2G05	1550	28	2	6	39	202	323	0	154	39
ISINTOK LAKE	2F11	1680	28	10	32	59	125	437	0	137	39
LOST HORSE MOUNTAIN	2G04	1920	01	61	185A	194	300	554	64	245	43
BLACKWALL PEAK	2G03P	1940	01	-	585	683	1136	1566	375	832	36
HARTS PASS	WA09	1980	29	175	897	1039	1582	1847	531	1160*	60
HARTS PASS	WA09P	1980	01	-	729	922	1366	1669	592	1067	7

#### A - SAMPLING PROBLEMS WERE ENCOUNTERED

#### B - EARLY OR LATE SAMPLING

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- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

Go to Coastal B.C. Snow Station Map

# **COASTAL**

May 1, 2004

# **SOUTH COASTAL**

				7	WATE	R EQU	JIVALE	ENT (n	nm)		
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PALISADE LAKE	3A09	880	28	228	1171	671	1657	3600A	0	1479	50
PALISADE LAKE	3A09P	880	Not	Availab	le	-	-	1268	1080	1174*	2
CALLAGHAN CREEK	3A20	1040	30	106	544	312	744	1568	256	805	26
DOG MOUNTAIN	3A10	1080	Not	Availab	le	547	1576	2760A	122	1238	20
GROUSE MOUNTAIN	3A01	1100	05	242	1240	636	1746	2870A	120	1212	54
ORCHID LAKE	3A19	1190	28	334	1706	1422	1867	3845A	900	2030	31
ORCHID LAKE	3A19P	1190	Not	le	1536	-	3862	1058	2043*	17	
UPPER SQUAMISH RIVER	3A25P	1340	01	-	1215	1530	1583	2760P	1088	1635	14

NOSTETUKO RIVER	3A22P	1500	01	-	390	499	656	917	207	550*	12
UPPER MOSELY CREEK	3A24P	1650	01	-	150	176	259	494	143	248*	15

- 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

# **VANCOUVER ISLAND**

					V	VATE	R EQL	JIVALE	NT (n	nm)			
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record		
ELK RIVER	3B04	270	26	No S	now	-	_	0	0	-	24		
WOLF RIVER (LOWER)	3B19	640	26	15	72	0	184	1118	0	192	34		
TENNENT   3B22   950   05   145   832   -   -   1238Z   0   909   15     UPPER													
UPPER THELWOOD LAKE	3B10	980	26	289	1476	1286	1484	3560A	644	1594	43		
WOLF RIVER (MIDDLE)	3B18	1070	26	120	522	528	584	1652	0	584	33		
FORBIDDEN PLATEAU	3B01	1130	26	298	1511	1463	1490	3500A	448	1628	47		
JUMP CREEK	3B23P	1160	01	-	875A	668	1564	1564	360	1159	7		
MOUNT COKELY	3B02A	1190	26	176	866	768	1048	2062	274	850	23		
WOLF RIVER (UPPER)	3B17P	1490	01	-	1189	1722	1234	1888	701	1445	15		
A - SAMPLING	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

#### **NORTH COASTAL**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
WEDEENE RIVER SOUTH	3C07	300	Not	Availabl	e	0Z	315	599	0Z	105*	19
TAHTSA LAKE	1B02	1300	30	180	836	1002	1628	1770	701	1258	52
TAHTSA LAKE	1B02P	1300	01	-	826	1018	1798	1798	866	1320	11
BURNT BRIDGE CREEK	3C08P	1330	01	-	450	536	1095	1095	536	731*	6

- 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

Go to Northeast Snow Station Map

# **NORTH EAST**

May 1, 2004

# **PEACE**

		\	nm)								
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PACIFIC LAKE	1A11	770	26	102	464	324	745	950	93	530	39
BULLHEAD MOUNTAIN	4A28	790	30	No S	now	0	113	113	0	3	18
WARE (LOWER)	4A04	980	28	23	56	108	206	229	0	125	38
PHILIP LAKE	4A13	980	27	33	102	226	320	406	0	201	40
AIKEN LAKE	4A30P	1040	01	-	135	158	284	284	71	157	17
TUTIZZI LAKE	4A06	1070	27	21	68	166	237	325	0	155	40
TSAYDAYCHI LAKE	4A12	1160	27	83	294	348	523	625	168	380	41
PINK MOUNTAIN	4A14	1170	01	No S	now	28	91	151	0	36	40
KAZA LAKE	1A12	1190	27	72	250	283	405	470	201	330	38
PULPIT LAKE	4A09	1310	28	99	324	362	460	560	287	399	39
FREDRICKSON LAKE	4A10	1310	27	53	178	197	269	358A	128	232	40
PULPIT LAKE	4A09P	1310	01	-	314	344	427	500	308	394	13

SIKANNI LAKE	4C01	1400	28	60	193	235	319	360	115	252	40
PINE PASS	4A02P	1400	01	-	966	936	1378	1537	936	1165	12
TRYGVE LAKE	4A11	1400	27	86	286	330	430	495	272	371	40
PINE PASS	4A02	1430	29	241	1115	996	1640	1732	681	1224	43
MORFEE MOUNTAIN	4A16	1450	26	158	660	819	1059	1181A	410	810	33
LADY LAURIER LAKE	4A07	1460	28	115	425	441	706	747	305	528	41
MOUNT SHEBA	4A18	1490	26	157	692	674	1191	1251	503	876	35
GERMANSEN (UPPER)	4A05	1500	27	88	289	337	467	597	181	355	42
MOUNT STEARNS	4A21	1500	28	31	78	130	200	271	0	143	30
JOHANSON LAKE	4B02	1540	27	69	220	266	348	418	143	295	41
MONKMAN CREEK	4A20	1550	26	111	410	378	790	1016	329	614	26
WARE (UPPER)	4A03	1570	28	77	228	257	336	402	141	273	40
KWADACHA RIVER	4A27P	1620	01	-	259	289	371	476	259	369*	16

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

### **LIARD**

	WATER EQUIVALENT (mm)										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
WATSON LAKE A	YK01	700	26	12	34	60	116	145	0	36*	33

FRANCES RIVER	YK02	730	26	43	125	91	147	237	0	74*	27
DEASE LAKE	4C03	820	29	No Snow		OT	61A	178	OT	40	37
JADE CITY	4C15	940	27	49	144	144	116A	144	116A	130*	2
SUMMIT LAKE	4C02	1280	29	No Snow		0	128	200A	0	38	37
DEADWOOD RIVER	4C09P	1300	01	-	37	105	113	207	27	113*	10
SIKANNI LAKE	4C01	1400	28	60	193	235	319	360	115	252	40

- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

**Go to Northwest Snow Station Map** 

# **NORTH WEST**

May 1, 2004

#### STIKINE/TAKU

	V										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SPEEL RIVER	AK03	80	01	132	579	259	792	1240	51	648*	38
TELEGRAPH CREEK	4D01	580	02	No Snow		0	ОТ	163	0	28	28
NINGUNSAW PASS	4B10	690	27	52	204	167	317Z	547	0	246	28
DEASE LAKE	4C03	820	29	No Si	now	OT	61A	178	OT	40	37
KINASKAN LAKE	4D11P	1020	01	-	383	356	338	487	216	324*	13
TUMEKA CREEK	4D10P	1220	01	-	476	458	495	838	411	577*	14
WADE LAKE	4D14P	1370	01	-	326	285	304	546	187	347*	12

- 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

### **YUKON**

#### **Snow Survey Measurements**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ATLIN LAKE	4E02A	730	30	No Snow		0	0	97	0	14*	18
LOG CABIN	4E01	880	27	131	511	127	417	531	127	352	46
PINE LK AIRSTRIP	YK03	1010	28	69	206	120	203	327	89	184*	28
MONTANA MTN.	YK05	1020	28	44	120	40	160A	191	0	108*	28
TAGISH	YK04	1080	27	44	106	62	150A	205	0	104*	28

- 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

### **SKEENA/NASS**

	WATER EQUIVALENT (mm)										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BEAR PASS	4B11A	460	Not Available			-	-	859	256	575	17
NINGUNSAW PASS	4B10	690	27	52	204	167	317Z	547	0	246	28
GRANDUC MINE	4B12P	790	01	-	1676	1661	1774	1774	1661	1718*	2
CEDAR- KITEEN	4B18P	885	01	-	398	259	761	761	259	535*	3

MCKENDRICK CREEK	4B07	1050	27	35	122	199	380	422	80	236	36
TACHEK CREEK	4B06	1140	29	19	55	140	313	318	69	172	34
KAZA LAKE	1A12	1190	27	72	250	283	405	470	201	330	38
LU LAKE	4B15	1300	28	54	166	144	426	444	144	259*	24
LU LAKE	4B15P	1310	01	-	79	94	443	443	94	215*	5
TSAI CREEK	4B17P	1360	01	-	975	1024	1853	1853	1024	1250*	6
KIDPRICE LAKE	4B01	1370	30	135	629	704	1265	1367	551	935	52
TRYGVE LAKE	4A11	1400	27	86	286	330	430	495	272	371	40
EQUITY MINE	4B14	1420	28	67	236	242	560	620	212	383	26
CHAPMAN LAKE	4B04	1460	27	93	322	423	708	749	308	485	38
SHEDIN CREEK	4B16P	1480	Not :	Measure	ed	728	1095	1140	728	961*	8
HUDSON BAY MTN.	4B03A	1480	28	89	348	434	735	787	362	532	32
MOUNT CRONIN	4B08	1480	27	126	478	568	867	1125	422	653	35
JOHANSON LAKE	4B02	1540	27	69	220	266	348	418	143	295	41

### 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

# Province-Wide Synopsis

### Basin Data and Graphs

-Upper Fraser

-Mid and Lower Fraser

-Thompson

-Columbia

-Kootenay

-Okanagan, Kettle, and Similkameen

-Coastal

-NorthEast

-NorthWest

-May 1 Seasonal flow volume forecasts

-April 1 Peak
Snowpack Map
-Drought
monitoring

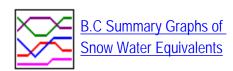
-Groundwater

# **Snowpack and Water Supply Outlook for British Columbia**

May 15, 2004

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 on review.

# Province-wide Synopsis



The May 15 snow survey is of a relatively small number of stations compared with the surveys done in the previous measurements. Data from 35 snow courses and 54 snow pillows around the province have been used to form the basis for the following reports.

### **Snowpack**

BC May 15 snowpacks vary from slightly below normal to far below, with the majority in the southern half of the province in the well below to far below normal range. While cumulative winter precipitation has been generally below normal, the biggest factor in the small southern BC snowpacks for May 15 has been the warm March, April, and mid-May weather, resulting in a spring snowmelt two to four weeks ahead of schedule, on already below normal peak snowpacks. This has also resulted in much higher snowlines than usual for this date in south and central BC. Extreme northern and northeast (Liard to Upper Fraser) snow melt does not appear to be much ahead of usual, although the Liard still has far below and the Peace below normal snowpacks for May 15. Stikine snowpacks are the only near normal snowpacks noted in BC for this date.

#### Weather

May started very warm in southern BC, with little precipitation. The second week was cooler with more normal precipitation in most places. While the south has again warmed up again, some precipitation has occurred. Rain is forecast over the next week. Parts of the north-east have received substantial rains over the last week or so. The Skeena has had warm dry weather since early May.

Corrected or previously unpublished data

#### Outlook

Snowlines in the southern half of the province are higher than usual for this date. Unless there are substantial rains in the next few months (not forecast) this will result in earlier than normal fire hazards, particularly in southern regions affected by last summer's drought. The ground in those regions is drying very quickly after it is bare of snow. See the Ministry of Forests web-site for current information on fire hazards.

There is a lower than normal chance of flooding nearly everywhere in BC this spring. Some southern streams may have already seen their peaks for the year (very early) unless there is heavy sustained rain over the next two weeks. Less upper elevation snow in most areas could result in streamflows dropping more quickly than usual after the freshet, particularly if the summer is drier and warmer than usual, as is forecast for most of the province by both Environment Canada and the Canadian Institute for Climate Studies. The north-west is the only region where high flood flows are still a reasonable possibility. See basin commentaries for particulars.

Residents with limited water supplies in nearly all parts of the province, particularly in the southern half, should practice water conservation throughout the upcoming months, unless heavy rains in May and June change the situation. Residents of the Okanagan, Nicola, North Thompson, East Kootenays, southern Vancouver Island, and some other parts of the southern interior should start practicing strict water conservation now, not later, as conditions could become drier than last summer. Other regions in BC of concern for drought potential this year can be found in our drought monitoring page.

# **Upper Fraser & Nechako Basins**





### **May 15**

The overall mid to upper elevation snow water equivalent index for the Upper Fraser has dropped very slightly since May 1, to 69% of normal, down from the April 1 value of 79% of normal. Snowmelt has slowed in the first two weeks of May, and there have even been a couple of stations showing slight accumulations in that period.

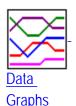
The Nechako reservoir basin has far below normal snowpacks, with a still dropping snow index value of 52% of normal for May 15. Snow melt continues to be two to three weeks advanced. All three snow pillow readings are new minimums for their 11-12 years of record. From very little data it is unclear whether the below normal

snowpack in the Stuart drainage has continued early melt, or the slower melt rates experienced by areas to the east.

Regional streamflows in the Upper Fraser have been lower than usual for the first two weeks of May due to the cooler weather, however they have been rising for the last few days. It is likely the Fraser at Prince George will peak at around the average spring peak flow within the next week or two. It is very unlikely that extreme high flows will occur in the Upper Fraser, even if extreme weather patterns during the next two weeks. Drought conditions are forecast for the Nechako plateau region this summer, unless substantial rainfall occurs in the next two months.

· Top

### Middle and Lower Fraser





### **May 15**

The overall Middle Fraser snow water index is continuing to drop, due to early melt. It has fallen from 80% of normal for April 1 to 44% for May 15. Snowmelt started around two weeks earlier than usual, with melt beginning during April at some upper elevation stations that usually show accumulations for that month. Most readings below 1500 m show no snow. Upper elevation snowpacks vary across the basin, with the more eastern Cariboo Mountains approximately 70% of normal, and the Bridge River readings averaging less than half, with a few new minimum readings for their periods of record. For Nicola comments, see Thompson basin.

The Lower Fraser snow water index has dropped again for the third month, to 61% of normal, down from 84% April 1. April precipitation was much lower than usual, and the last 10 days continue the pattern of warm, dry weather. Although the snowline is higher than usual for this date, and hence the extent of remaining snow smaller than normal, the the upper mountains surrounding the lower Fraser Valley west of Hope appear to have only slightly below normal depths. The remainder of the lower Fraser has well below normal snowpacks due to a warm late winter and spring, and a dry period since April 1.

Flows in the Fraser River at Hope have been lower than usual the last two weeks, as the lower and middle Fraser runoff appears to have peaked in early May, and be declining, and runoff from the Upper Fraser has slowed from cooler weather. Flood level flows in the lower mainstem Fraser are extremely unlikely. Unless melt from the Upper Fraser is rapid over the next week or so, or heavy basin-wide rain is experienced, we may have already seen a very low, early peak for the year at

Hope.



### Hydrograph of the Fraser River at Hope

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### **Thompson Basin**



Graphs



### **May 15**

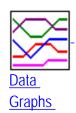
The Thompson snow water indexes have both fallen slightly in the last two weeks, as early melt continues. While the first week of May was cooler, the second week was again dry and warm. The North Thompson snow index is at 67% of normal, and the South Thompson index at 72% of normal for May 15. Most North Thompson snow readings are new minimums for the date, including 1E06 Cook Forks, with 40 years of records.

From sparse data, very little snow remains in the Nicola. It is uncertain whether remaining runoff is enough to fill Nicola Lake to full pool level.

With little low to mid elevation snow remaining, and cooler temperatures late in the first week of May, streamflows fell. However the warmer temperatures of the last week have flows in the Thompson rising again. Unless extreme weather conditioons occur in the next few weeks, flows may not again rise above those experienced in the first few days of May. High flood level flows are extremely unlikely this spring, and unless the next two months are very wet, drought conditions will be seen in the Thompson this summer, particularly in the North and lower Thompson.

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### Columbia Basin





#### **May 15**

The snow water index for the overall Columbia basin is at 77% of normal for May 15, down from 89% April 1, Temperatures have been cool in Revelstoke compared to usual for the first two weeks of the month, but have risen since then, while precipitation appears to have been slightly above normal during the first two weeks of May. There is still north/south variation in the Columbia mainstem basin snowpacks, with upper Columbia readings in the 70-90% range. The Lower Columbia, where early melt was more pronounced, appears to have upper elevation remaining snowpacks around 60-65% of normal snow water equivalent for May 15.

Streamflows in the Columbia, as represented by flows at Donald, dropped to slightly below normal in the cool first 12 days of May, but have risen to slightly above normals in the last few days. It is unlikely high flood levels will be experienced in the region this freshet, unless there is sustained hot weather and then rain. The lower Columbia will experience very dry conditions this summer unless there is substantial rain in the next two months.

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### **Kootenay Basin**



Graphs



### **May 15**

The overall Kootenay snow index is at 61% of normal for May 15, far below usual snowpacks on this date. The few readings show very little snow in the East Kootenays, with only high elevation snow remaining. The West Kootenays appears to have around half of its usual May 15 mid-elevation snow, and around 3/4 of its normal high elevation snow.

Streamflows, as indicated by the flows in the Kootenay River at Fort Steele, were above normal in early May, dropped with cooler weather over the second week, and are now rising due to rainfall. Flood level flows are extremely unlikely, and early May flows may have been the peak flows for this freshet in most locations, unless forecast rain this weekend brings them slightly higher. If heavy rain does not occur over the next two months, the Kootenays, especially eastern areas, will experience drought conditions this summer.

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## Okanagan, Kettle, and Similkameen **Basins**





#### **May 15**

The overall snow water index for the Okanagan & Kettle is still falling, from 89% of normal April 1, to 70% of normal for May 1, and now 58% of normal May 15, due to both early snow melt (2 to 3 weeks), and to receiving less than half of the usual April precipitation (42% at Kelowna). No snow remains at stations measured in the Okanagan below 1700 meters. Upper elevation snow courses are reading in the range of 2/3 of normal snow, with the exception of Mission Creek pillow, which has normal snow for this date.

The Similkameen basin snow index has fallen to far below normal, from 81% April 1 to 43% of normal for May 15. As a result of a warm, dry April, snowline appears to be above 1700 meters, and the only high elevation station, Blackwall snjow pillow, 2G03P, has around 2/3 of its normal snow water equivalent.

Streamflows, which were higher than normal in early May, fell with receeding snowpacks and cooler weather to well below normal during the second week of May. Unless the recent rain continues heavily, this early May peak may have been the peak for the freshet. Drought conditions will occur this summer, and Okanagan Lake is unlikely to even reach last year's peak level, unless heavy extended rains occur over the next few months.



## Vancouver Island & Coastal Regions



Graphs



### **May 15**

As with most of southern BC, due to the warm, dry weather during April and mid-May, snow indexes fell again on May 15, from 96% on April 1 to 77% of normal May 15 on Vancouver Island, and from 93% April 1 to 67% May 15 on the South Coast. Snowlines are high, with only upper elevation snow remaining, although there does appear to be some mid-elevation snow on the extreme South Coast. On the Central Coast snowpack area and depth is also well below normal.

Many small streams in lower elevation basins are drying up early on the Islands,

and unless substantial rain is experienced over the next two months drought conditions will exist (on central and southern Vancouver Island particularly) this summer. Similiar conditions could occur along the south and central coast.

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### **North East Region**





#### **May 15**

The Peace basin has the only snow water index which rose slightly in the last two weeks, however snowpacks are still below normal. The only Liard reading, Deadwood River snow pillow 4C09P, shows less than half of normal snow, however this is a result of little accumulation during the winter, not early melt. Melt appears to be following its usual timing in the north-east.

Drought conditions could be experienced in lower sub-basins in the Liard this summer, however precipitation over the last two months has been higher than normal, reducing the risk slightly.



### **NorthWest Region**



Graphs



### **May 15**

The overall Skeena/Nass snow water index has dropped sharply, from 83% April 1 to 52% May 15, as the Skeena has joined much of the rest of the southern half of the province in early snow melt.

From a relatively few readings, the Stikine appears to have a slightly below normal snowpack for May 15.

Regional streamflows, as indicated by the flows in the Skeena River at Usk, have risen over the last few weeks with the warmer temperatures. Although it is unlikely, the Skeena could still reach high flood levels if heavy sustained rains occur over the next two or three weeks, however it is likely to reach a peak over the next week or two at average freshet levels. Drought conditions are a high possibility in the

Bulkley, as snowpacks and spring precipitation have been light, unless above normal rainfall occurs during the next two months.

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# **UPPER and MIDDLE FRASER**

May 15, 2004

# **UPPER FRASER**

### **Snow Survey Measurements**

					W	ATE	R EQU	IVAL	ENT (	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PACIFIC LAKE	1A11	770	12	56	242	214	694	728	0	341	29
HEDRICK LAKE	1A14P	1100	15	-	709	435	998	998	435	719*	4
BARKERVILLE	1A03P	1520	15	No S	now	105	420	503	0	234	26
KNUDSEN LAKE	1A15	1580	12	144	642	660	1075	1205	359	832	29
MC BRIDE (UPPER)	1A02	1580	12	57	221	303	448	752	24	367	36
NARROW LAKE	1A21	1650	13	152	705	690	-	1375	489	950	28
REVOLUTION CREEK	1A17P	1690	15	-	435	443	1074	1161	228	713	18
LONGWORTH (UPPER)	1A05	1740	12	141	602	616	1172	1219	292	772	50
DOME MOUNTAIN	1A19	1820	12	145	591	604	999	1168	385	813	31
YELLOWHEAD	1A01P	1860	15	-	401	611	731	825	139	579	7
HOLMES RIVER	1A18	1900	12	158	602	688	928	1125	359	777	34

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

## **NECHAKO**

### **Snow Survey Measurements**

								WATER EQUIVALENT (mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record		
TAHTSA LAKE	1B02P	1300	15	-	671	972	1765	1765	732	1255	11		
MOUNT PONDOSY	1B08P	1400	15	-	207	561	1198	1198	314	645	11		
MOUNT WELLS	1B01P	1490	15	-	171	344	759	759	277	510	12		

- 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

## MIDDLE FRASER

		W	mm)								
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BOSS MOUNTAIN MINE	1C20P	1460	15	-	398	304	664	761	184	464	10
BRENDA MINE	2F18P	1460	15	No Si	now	0	17	125	0	22*	11
BARKERVILLE	1A03P	1520	15	No Si	now	105	420	503	0	234	26

MOUNT TIMOTHY	1C17	1660	09	23	76	140	330Z	466	0	201	35
YANKS PEAK EAST	1C41P	1670	15	-	563	511	1046	1125	398	800	7
PENFOLD CREEK	1C23	1680	13	142	689	884	1223	1400	585	1019	34
GREEN MOUNTAIN	1C12P	1780	15	-	424	1009	1106	1366	573	845	10
MISSION RIDGE	1C18P	1850	15	No Sı	now	463	512	878	0	382	17

### 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

# **MIDDLE and LOWER FRASER**

May 15, 2004

## **MIDDLE FRASER**

### **Snow Survey Measurements**

					W	VATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BOSS MOUNTAIN MINE	1C20P	1460	15	-	398	304	664	761	184	464	10
BRENDA MINE	2F18P	1460	15	No Si	now	0	17	125	0	22*	11
BARKERVILLE	1A03P	1520	15	No Si	now	105	420	503	0	234	26
MOUNT TIMOTHY	1C17	1660	09	23	76	140	330Z	466	0	201	35
YANKS PEAK EAST	1C41P	1670	15	-	563	511	1046	1125	398	800	7
PENFOLD CREEK	1C23	1680	13	142	689	884	1223	1400	585	1019	34
GREEN MOUNTAIN	1C12P	1780	15	-	424	1009	1106	1366	573	845	10
MISSION RIDGE	1C18P	1850	15	No Si	now	463	512	878	0	382	17

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

# **LOWER FRASER**

### **Snow Survey Measurements**

						WATE	ER EQU	IVALE	NT (m	m)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DISAPPOINTMENT LAKE	1D18P	1040	14	-	955P	730P	1930P	1930P	730P	1437*	3
DOG MOUNTAIN	3A10	1080	14	156	820	431	1565	2920Z	0	1100	18
SPUZZUM CREEK	1D19P	1180	15	-	975	1032	2085	2085	1032	1505*	4
WAHLEACH LAKE	1D09P	1400	15	-	988	911	1436	1624	335	960	12
CHILLIWACK RIVER	1D17P	1600	15	-	1271	1335	2186	2186	764	1258*	9
GREAT BEAR	1D15P	1660	15	-	1316	1425	2411	2436	1114	1823	12
TENQUILLE LAKE	1D06	1680	15	125	691	1248	1328	1875	625	1162	47
TENQUILLE LAKE	1D06P	1680	15	-	469	1144	1211	1211	765	1040*	3

### 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

## **SKAGIT**

	W										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
HARTS PASS	WA09P	1980	Not	<b>)</b>	-	1285	1748	467	952	6	

$ \mathbf{A} $	- SAMPLING PROBLEMS	WERE ENCOUNTERED
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- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

# **THOMPSON**

May 15, 2004

# **NORTH THOMPSON**

					W	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
COOK CREEK	1E14P	1280	15	-	259	0	308	345	0	199*	4
COOK FORKS	1E06	1390	16	57	273	489	924	1359	274	688	40
BOSS MOUNTAIN MINE	1C20P	1460	15	-	398	304	664	761	184	464	10
MOUNT COOK	1E02P	1550	15	-	855	1196	1793	1793	953	1314*	3
MOUNT COOK	1E02A	1580	16	149	760	1077	1544	1856	873	1270	28
AZURE RIVER	1E08P	1620	15	-	743	923	1406	1665	806	1230	7
ADAMS RIVER	1E07	1720	11	99	466	612	972	1158	280	712	32
KOSTAL LAKE	1E10P	1770	15	-	568	691	1058	1357	588	887	19
NORTH CLEMINA CREEK	1E13	1860	12	140	618	813	1060	1177	536	856	13

	TROPHY MOUNTAIN	1E03A	1860	12	78	372	448	796	1114	301	608	22	
ı	A CAMPLING	DD ODI EN	IC WED	E ENCO	INTEDI	7D							Т

- 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

### **SOUTH THOMPSON**

### **Snow Survey Measurements**

					7	VATER	EQUI	VALE	NT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ADAMS RIVER	1E07	1720	11	99	466	612	972	1158	280	712	32
SILVER STAR MOUNTAIN	2F10	1840	15	95	473	685	895	1054	100	661	45
PARK MOUNTAIN	1F03P	1890	15	-	675	864	1090	1321	474	927	19
ENDERBY	1F04	1900	15	168	738	1060Z	1366	1499	662	1089	41

#### 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

## MIDDLE FRASER

### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BOSS MOUNTAIN MINE	1C20P	1460	15	-	398	304	664	761	184	464	10
BRENDA MINE	2F18P	1460	15	No Si	now	0	17	125	0	22*	11
BARKERVILLE	1A03P	1520	15	No Si	now	105	420	503	0	234	26
MOUNT TIMOTHY	1C17	1660	09	23	76	140	330Z	466	0	201	35
YANKS PEAK EAST	1C41P	1670	15	-	563	511	1046	1125	398	800	7
PENFOLD CREEK	1C23	1680	13	142	689	884	1223	1400	585	1019	34
GREEN MOUNTAIN	1C12P	1780	15	-	424	1009	1106	1366	573	845	10
MISSION RIDGE	1C18P	1850	15	No Si	now	463	512	878	0	382	17

### 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

# **COLUMBIA**

May 15, 2004

## **UPPER COLUMBIA**

### **Snow Survey Measurements**

					V	VATE	R EQU	JIVALE	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
AZURE RIVER	1E08P	1620	15	-	743	923	1406	1665	806	1230	7
MOUNT REVELSTOKE	2A06P	1830	15	-	1031	1133	1567	1777	700	1297	11
NORTH CLEMINA CREEK	1E13	1860	12	140	618	813	1060	1177	536	856	13
MOLSON CREEK	2A21P	1980	15	-	964	1061	1335	1375E	602	1040	21

- 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

# **LOWER COLUMBIA**

					W	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FARRON	2B02A	1220	14	No Sr	now	14	32	222	0	110	24
BARNES CREEK	2B06P	1620	15	-	229	675	555	761	94	438	11
ST. LEON CREEK	2B08P	1800	15	-	720	1031	1481	1568	639	1080	10
RECORD MOUNTAIN	2B09	1890	14	76	353	727	818	1367	83	676	29
EAST CREEK	2D08P	2030	15	-	754	806	956	1387	461	925	22

- A SAMPLING PROBLEMS WERE ENCOUNTERED
- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

# **KOOTENAY**

May 15, 2004

# **EAST KOOTENAY**

					W	ATE	R EQU	IVAL	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FERNIE EAST	2C07	1250	15	No Sı	now	8	156	290	0	46	42
SULLIVAN MINE	2C04	1550	15	No Sı	now	0	213	457	0	105	52
BANFIELD MOUNTAIN	MT05P	1710	Not	Availabl	le	236	373	569	0	305	6
MORRISSEY RIDGE	2C09Q	1800	15	-	105	731	1091	1091	0	460	20
MOYIE MOUNTAIN	2C10P	1930	15	now	308	431	552	0	255	23	
HAWKINS LAKE	MT06P	1970	Not Available		le	523	737	1067	178	706	7
FLOE LAKE	2C14P	2090	15	-	683	874	897	1088	304	765	9

- 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

# **WEST KOOTENAY**

				WATER EQUIVALENT (mm)						nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
CHAR CREEK	2D06	1310	15	30	142	318	358	715	0	279	34
BUNCHGRASS MEADOW	WA01P	1520	Not	Availab	le	665	678	1163	307	582	7
EAST CREEK	2D08P	2030	15	-	754	806	956	1387	461	925	22
REDFISH CREEK	2D14P	2104	15	-	1024	1387	1748	1748	1387	1568*	2

- 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

# KETTLE, OKANAGAN and SIMILKAMEEN

May 15, 2004

### **KETTLE**

### **Snow Survey Measurements**

					W	ATER	R EQU	IVALE	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FARRON	2B02A	1220	14	No Si	now	14	32	222	0	110	24
BIG WHITE MOUNTAIN	2E03	1680	16	51	228	426	512	732	0	390	38
GRANO CREEK	2E07P	1860	15	-	375A	593	675	855	308	568*	6

### 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

## **OKANAGAN**

### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SUMMERLAND RESERVOIR	2F02	1280	15	No Si	now	0Z	0	218	0Z	32	38
VASEUX CREEK	2F20	1400	15	No Si	now	0Z	0	80	0Z	9	32
TROUT CREEK	2F01	1430	15	No S	now	0	0	307	0	30	51
BRENDA MINE	2F18P	1460	15	No S	now	0	17	125	0	22*	11
GREYBACK RESERVOIR	2F08	1550	17	No Si	now	26	78	323	0	100	32
ISINTOK LAKE	2F11	1680	15	No S	now	4	66	386	0	78	38
MISSION CREEK	2F05P	1780	15	-	401	540	638	829	0	407	32
MOUNT KOBAU	2F12	1810	15	29	93	314	306	516	0	254	37
WHITEROCKS MOUNTAIN	2F09	1830	14	53	212	289	618	968	0	401	33
SILVER STAR MOUNTAIN	2F10	1840	15	95	473	685	895	1054	100	661	45

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

# **SIMILKAMEEN**

					V	nm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
MISSEZULA MOUNTAIN	2G05	1550	15	No S	now	0	117	218	0	54	40
ISINTOK LAKE	2F11	1680	15	No S	now	4	66	386	0	78	38
LOST HORSE MOUNTAIN	2G04	1920	Not	Measure	ed	220A	254	577	4	192	40

BLACKWALL PEAK	2G03P	1940	15	-	450	671	1110	1481	208	706	36
HARTS PASS	WA09P	1980	Not .	Availab	le	-	1285	1748	467	952	6

- 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

# **COASTAL**

May 15, 2004

# **SOUTH COASTAL**

### **Snow Survey Measurements**

			WATER EQUIVALENT (mm)						nm)		
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PALISADE LAKE	3A09P	880	Not	Availab	le	-	-	1045	1045	1045*	1
DOG MOUNTAIN	3A10	1080	14	156	820	431	1565	2920Z	0	1100	18
ORCHID LAKE	3A19	1190	14	264	1430	1230	1927	3730A	774	1900	23
ORCHID LAKE	3A19P	1190	15	-	1393	1390	1899	2804	828	1840*	16
UPPER SQUAMISH RIVER	3A25P	1340	15	-	1016	1384	1526	1796	949	1515	13
NOSTETUKO RIVER	3A22P	1500	15	-	161	420	563	860	21	382*	12
UPPER MOSELY CREEK	3A24P	1650	15	No Si	now	207	236	402	0	147*	15

### 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

## **VANCOUVER ISLAND**

### **Snow Survey Measurements**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
JUMP CREEK	3B23P	1160	15	-	476	521	1474	1474	251	975	7
WOLF RIVER (UPPER)	3B17P	1490	15	-	994	1649	1103	1726	507	1300	15

- 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

# **NORTH COASTAL**

					W	ATER	REQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TAHTSA LAKE	1B02P	1300	15	-	671	972	1765	1765	732	1255	11

BURNT BRIDGE CREEK	3C08P	1330	15	-	206	484	994	994	210	612*	6
A - SAMPLING PROBLEMS WERE ENCOUNTERED											
B - EARLY OR LATE SAMPLING											
C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED											
E ECEINAA	E EGENTALEED DAGED ON A DEAT AND A GE										

\* - PERIOD OF RECORD AVERAGE

# **NORTH EAST**

May 15, 2004

## **PEACE**

### **Snow Survey Measurements**

								WATER EQUIVALENT (mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record		
PACIFIC LAKE	1A11	770	12	56	242	214	694	728	0	341	29		
AIKEN LAKE	4A30P	1040	15	No Si	now	60	168	188	0	50*	17		
PULPIT LAKE	4A09P	1310	15	-	180	292	369	454	49	230	13		
PINE PASS	4A02P	1400	15	-	920	850	1393	1471	813	1073	12		
KWADACHA RIVER	4A27P	1620	15	-	267	311	383	468	109	340*	17		

- 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

### LIARD

### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DEADWOOD RIVER	4C09P	1300	15	No Sr	now	0	19	207	0	44*	10

### 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

# **NORTH WEST**

May 15, 2004

## STIKINE/TAKU

### **Snow Survey Measurements**

					W	ATEF	REQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
KINASKAN LAKE	4D11P	1020	15	-	225	259	259	411	0	183*	13
TUMEKA CREEK	4D10P	1220	15	-	293	412	458	771	195	453*	14
WADE LAKE	4D14P	1370	15	-	248	244	296	427	0	269*	12

- 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

# **YUKON**

### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
LOG CABIN	4E01	880	16	38	150A	0	355	420	0	200	16

- 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

### SKEENA/NASS

					W	mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
GRANDUC MINE	4B12P	790	15	-	1421	1455	1545	1545	1455	1500*	2
CEDAR- KITEEN	4B18P	885	15	-	116	120	653	653	120	429*	3
LU LAKE	4B15P	1310	15	No Sr	now	0	416	416	0	133*	5
TSAI CREEK	4B17P	1360	15	-	810	975	1909	1909	953	1245*	6
HUDSON BAY MTN.	4B03A	1480	14	44	184	354	701	752	160	441	31
SHEDIN CREEK	4B16P	1480	Not	Measure	d	713	1155	1159	660	945*	8

- 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

# Province-Wide Synopsis

### Basin Data and Graphs

-Upper Fraser

-Mid and Lower Fraser

-Thompson

-Columbia

-Kootenay

-Okanagan, Kettle, and Similkameen

-Coastal

-NorthEast

-NorthWest

-May 1 Seasonal flow volume forecasts

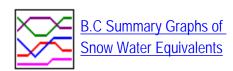
-April 1 Peak
Snowpack Map
-Drought
monitoring

# **Snowpack and Water Supply Outlook for British Columbia**

June 1, 2004

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 on review.

# Province-wide Synopsis



The June 1st snow survey is quite small, as many lower level snow courses are normally snow free by this date and those that have snow are depleting rather than accumulating. However, snow surveys have been conducted at 32 snow courses in B.C. and 7 in adjacent jurisdictions. These, together with data from 57 snow pillows, and Environment Canada climate data, have been used in making the following analyses. Because of the very limited sampling, commentaries are necessarily brief.

A very brief report will be issued about June 18 reporting on mid-month snow levels. If unusual conditions occur, please refer to our Current Runoff Conditions page for further commentaries and assessments.

### Snowpack

BC June 1 snowpacks vary from well below normal to far below, with the majority in the southern half of the province in the well below to far below normal range.

While cumulative winter precipitation has been below normal in many areas, the biggest factor in the small BC snowpacks for June 1 has been the warm March, April, and mid-May weather, resulting in a spring snowmelt two to four weeks ahead of schedule, on already below normal peak snowpacks. This has also resulted in higher snowlines than usual for this date.

#### Weather

May precipitation varied, from above normal in the Fraser, Thompson, North Columbia, Okanagan & Similkameen, to far below normal in most of the north.

Corrected or previously unpublished data Cumulative precipitation since November first also varies, with most in the normal to slightly below normal range, and the Upper Fraser, Nechako, Kootenay, and Skeena in the well below normal cumulative precipitation range.

Where March and April were warmer than usual across the province, May mean temperatures varied from well below normal in the Northeast, to well above normal in the Northwest, Nechako, lower Fraser, South Coast, and Vancouver Island.

#### **Outlook**

Snowlines throughout the province are higher than usual for this date. Unless there are substantial rains in the next few months (not forecast) this will result in earlier than normal fire hazards. See the <a href="Ministry of Forests web-site">Ministry of Forests web-site</a> for current information on fire hazards.

There is a much lower than normal chance of flooding nearly everywhere in BC this spring. Most streams, from the Skeena and Upper Fraser and southwards, have probably already seen their peaks for the year (very early) unless there is heavy sustained rain over the next two weeks. Less upper elevation snow in most areas could result in streamflows dropping more quickly than usual after the freshet, particularly if the summer is drier and warmer than usual, as is forecast for most of the province by Environment Canada.

Residents with limited water supplies in nearly all parts of the province, particularly in the southern half, should practice water conservation throughout the upcoming months, unless heavy rains in June and early July change the situation. Residents of the Bulkley Valley, Nechako, Okanagan, Nicola, North Thompson, Kootenays, southern Vancouver Island, much of the not above mentioned Southern Interior, and possibly the Liard, should start practicing strict water conservation now, not later, as conditions could become drier than last summer. Other regions in BC of concern for drought potential this year can be found in our drought monitoring page.

# **Upper Fraser & Nechako Basins**





#### June 1

While the Upper Fraser had a near normal monthly mean temperature during May, the Nechako, particularly the reservoir area, had an above normal monthly mean temperature. Precipitation was above normal in both basins (well above in the Upper Fraser). Due to the early onset of spring, and below normal peak snowpacks of this winter, there is only slightly more than half of the usual mid to higher elevation snow in the Upper Fraser, with little snow below 1600 meters. The snow index shows around a quarter of usual snow for June 1 in the Nechako, with most readings showing no snow.

Regional streamflows in the Upper Fraser , as indicated by the mean monthly flow in the Fraser River at Marguerite, have been lower than usual during May, due to less snow than normal being available for melt and runoff. It is likely the Fraser at Prince George has seen its peak, unless heavy sustained rain occurs over the next few weeks. It is very unlikely that extreme high flows will occur in the Upper Fraser this year, even if extreme weather patterns occur during the next two weeks. While there has been above normal precipitation in the Nechako plateau over the last two months, there has been well below normal precipitation over the winter, and there is little June 1 snow remaining. Drought conditions are highly possible for the Nechako plateau region this summer, unless substantial rainfall continues for the next month or so.

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### Middle and Lower Fraser



Graphs



#### June 1

Precipitation has been above normal for the last two months at Quesnel, the indicator climate station for the Middle Fraser. Mean monthly temperature during May was normal, after a very warm March and warm April. No snow was found at stations below 1650 meters. Due to the much less than normal peak snowpacks this winter, and substantially early melt, snow water equivalents measured show less than half of the usual June 1 snowpack depths in the Middle Fraser region overall.

The Lower Fraser continued warmer than usual for the fourth month in a row. Precipitation was near normal during May, after a very dry April. Remaining upper elevation snowpacks in the interior portions of the lower Fraser are far below normal for June 1. However, the few measurements from upper elevation stations immediately around the Fraser Valley/'lower mainland' area show near normal snow water equivalents, though snowlines are high for June 1.

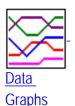
Monthly mean flow in the Fraser River at Hope was lower than usual during May, as due to the smaller than usual peak snowpacks, freshet flows have been light. Flood level flows in the lower mainstem Fraser are extremely unlikely, and unless there is heavy sustained rain over the entire basin in the next few weeks, we will probably see the very low, early peak for the season this week. Unless substantial rain occurs over the next two months, streamflows in the Middle and Lower Fraser will fall to low levels rapidly, with the Bridge River and Interior Plateau areas still at high risk of drought.



### **Hydrograph of the Fraser River at Hope**

	-	n
-	··	v

### **Thompson Basin**





#### June 1

Precipitation in the Thompson has been well above normal during May, more than twice normal at Kamloops. Despite more normal temperatures in the North Thompson during May, the warm temperatures of the three previous months have snowmelt well advanced. Little snow remains below 1500 meters, and snow above that elevation appears to be only a little more than half of normal for June 1. From fairly few readings, upper elevation snow in the South Thompson appears to be around two thirds of normal.

Very little snow remains in the Nicola. Fortunately, the rains of the last two weeks have brought Nicola Lake to full pool level. However, groundwater levels are still low, and unless the rains continue, streamflows will fall more quickly than usual as the summer progresses. Drought similiar to last year remains a possibility, depending on the next two months' weather.

Regional streamflows, as indicated by the mean monthly flow in the Thompson River at Spences Bridge, were below normal during May, due to the early melt and light peak snow pack. Unless extreme weather conditions occur in the next few weeks, flows may not again rise above those experienced this week. High flood level flows are extremely unlikely this spring. While groundwater levels have improved slightly over the last two months, they are still well below normal. Unless the next two months continue to be wet, streamflows will fall rapidly this summer, and drought conditions, especially in the North and lower Thompson, will be seen this summer.

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#### Columbia Basin





#### June 1

Temperatures in the Columbia basin have been near normal during May, after a warmer than usual previous three months. Precipitation during the month was slightly wetter than normal in northern portions, bringing cumulative precipitation since November 1 to normal at Revelstoke. Due to lighter snowpacks and early melt, the snow water index for the Columbia region overall is at 70% of normal for June 1, however there appears to be more than this in the north, and less in the lower Columbia.

Streamflows in the Columbia , as represented by the mean monthly flow at Donald, were below normal during May. Due to lighter than usual snowpacks, and early melt runoff in April, May freshet volumes were less than usual. It is unlikely high flood levels will be experienced in the region this freshet, unless there is sustained hot weather and then heavy rain. The lower Columbia will experience very dry conditions this summer unless there is substantial rain in the next two months.



#### Kootenay Basin



<u>Data</u> Graphs



#### June 1

Monthly mean temperature in the Kootenays (Cranbrook) was near normal during May, after the previous three warmer than normal months. Precipitation was below normal, with the cumulative precipitation since November 1 now only 71% of normal. Due to the lighter than normal peak snowpack, and heavier than usual early spring melt, remaining snowpacks are far below normal. The overall Kootenay snow index is at 57% of normal for June 1. The few readings show very little snow in the East Kootenays below 2000 meters, with only high elevation snow remaining. The snowline in the West Kootenays appears to be slightly lower, with somewhere around 70% of the usual upper elevation snow remaining for this date.

Streamflows, as indicated by the mean flow in the Kootenay River at Fort Steele, were well below normal during May, as much of the relatively small low to mid elevation snow melted off in a warm April, leaving less to run off in the more normal

temperatures of May. Flood level flows are extremely unlikely, and heavy sustained rains occur in the next few weeks, we have already seen the peak flows for this spring. If heavy rain does not occur over the next two months, the Kootenays, especially eastern areas, will experience drought conditions this summer.

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#### Okanagan, Kettle, and Similkameen Basins



Graphs



#### June 1

Temperatures in the Okanagan/Kettle and the Similkameen, as indicated by the mean monthly temperatures at Kelowna and Princeton, were near normal during May. Precipitation was above normal in both those locations. However, due to the less than normal peak snowpacks, and early melt, both basins appear to have less than half of their usual upper elevation snow for this date, and snowline is much higher than usual.

Streamflows, which were higher than normal in early May, fell with receeding snowpacks and cooler weather to well below normal during the second week of May, then briefly rose to near average with the warm weather then rain in the third week. Unless heavy sustained rain occurs in the next few weeks, this early May peak may have been the peak for the freshet. Recent rainfall has brought Okanagan Lake to just above last year's peak level. However, unless substantial rains continue to occur over the next two months, drought conditions will occur again this summer in these regions.

·Top

# Vancouver Island & Coastal Regions



<u>Data</u> Graphs



#### June 1

Mean monthly temperature during May was well above normal on the South Coast and Vancouver Island (2°C). While May precipitation was near normal, cumulative precipitation since November 1 has been below normal.

Early snow melt has reduced the near normal mid-winter snowpacks on the South Coast and Vancouver Island to well below normal for this date, with snowlines quite high. The extreme South Coast (near the Lower Fraser valley) appears to have more normal depth high elevation snowpacks, although they are smaller in extent than usual for this date. On the Central Coast snowpack is well below normal, with no snow at any of the snow pillows there.

With the continuing snow melt, and normal precipitation over May, streamflows on Vancouver Island, as indicated by the monthly inflow to Upper Campbell Lake, were normal. However, groundwater levels are low, and unless substantial rain is experienced over the next two months drought conditions will exist (on central and southern Vancouver Island particularly) this summer. Similiar conditions could occur along the south and central coast.



#### **North East Region**





#### June 1

The Peace and Liard basins were the only to areas to have a well below normal monthly mean temperature during May (-2°C). Precipitation was also well to far below normal for the month. Cumulative winter/spring precipitation has been below normal. From a very few readings, snow at lower elevations appears to be gone, with well below normal snow remaining at higher elevations.

Despite lower than normal temperatures and precipitation, inflow to Williston Lake was normal over May. Drought conditions could be experienced in lower subbasins in the Liard this summer.



#### **NorthWest Region**







#### June 1

The mean monthly temperature during May in the northwest was well above normal (1.7-1.9°C). Precipitation was far below normal in Smithers, but only slightly

below normal in the Stikine (Dease Lake). Remaining snowpacks appear to be far below normal in the Skeena, and, from sparse data, may be below normal in the Stikine due to more rapid May snow melt.

Regional streamflows, as indicated by the flows in the Skeena River at Usk, were well above normal during May, due to the warm weather, and despite low precipitation. Unless heavy sustained rain occurs in the next week, we are probably seeing the peak flows in the Skeena in this first week of June. Drought conditions are a high possibility in the Bulkley, as snowpacks and spring precipitation have been light, unless well above normal rainfall occurs during the next two months.



footer graphic

Go to Upper Fraser Snow Station Map

# **UPPER and MIDDLE FRASER**

June 1, 2004

### **UPPER FRASER**

				WATER EQUIVALENT (mm)							
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PACIFIC LAKE	1A11	770	26	No Si	now	0	411	411	0	71	30
HEDRICK LAKE	1A14P	1100	01	-	30	23	1380	1380	23	521*	4
BIRD CREEK	1A23	1180	31	No Si	now	0	0	0	0	-	10
BARKERVILLE	1A03P	1520	01	No Si	now	0	240	291	0	66	20
KNUDSEN LAKE	1A15	1580	26	98	487	521	1017	1039	0	662	29
MC BRIDE (UPPER)	1A02	1580	26	No Sı	now	163	370	592	ОТ	204	36
NARROW LAKE	1A21	1650	27	100	517	523	1093	1339	116	794	30
REVOLUTION CREEK	1A17P	1690	01	-	195	260	935	935	0	495	19
LONGWORTH (UPPER)	1A05	1740	26	89	436	454	1116	1194	0	591	47
DOME MOUNTAIN	1A19	1820	26	100	498	492	966	1062	0	664	32
YELLOWHEAD	1A01P	1860	01	-	229	454	645	857	0	464	7
HOLMES RIVER	1A18	1900	26	117	550	642	874	1029	84	687	33

- 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

#### **NECHAKO**

#### **Snow Survey Measurements**

			WATER EQUIVALENT (mm)								
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TAHTSA LAKE	1B02	1300	31	81	416	698	1385	1651	535	1007	29
TAHTSA LAKE	1B02P	1300	01	-	363	741	1548	1576	277	1001	11
KIDPRICE LAKE	4B01	1370	31	18	86	415	1177	1209	0	666	29
MOUNT PONDOSY	1B08P	1400	01	No St	now	250	951	951	0	280	11
MOUNT WELLS	1B01	1490	31	No Sı	now	0	529	529	0	250	27
NUTLI LAKE	1B07	1490	31	No Sı	now	0	615	615	0	245*	13
MOUNT WELLS	1B01P	1490	01	No Sı	now	91	607	607	0	250	12
MOUNT SWANNELL	1B06	1620	31	No Sı	now	95	346	350Z	0	128*	15

- 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

#### MIDDLE FRASER

#### **Snow Survey Measurements**

					V	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BOSS MOUNTAIN MINE	1C20P	1460	01	No Si	now	19	353	435	0	175	10
BRENDA MINE	2F18P	1460	01	No Si	now	0	0	0	0	-	10
BARKERVILLE	1A03P	1520	01	No Snow		0	240	291	0	66	20
MOUNT TIMOTHY	1C17	1660	29	No Si	now	-	209	332	0	52	35
YANKS PEAK EAST	1C41P	1670	01	-	364	236	911	1016	236	590	6
PENFOLD CREEK	1C23	1680	27	108	594	719	1157	1354	353	847	33
GREEN MOUNTAIN	1C12P	1780	01	-	140	738	905	1183	229	610	10
MISSION RIDGE	1C18P	1850	01	No Si	now	180	229	573	0	151	16

#### A - SAMPLING PROBLEMS WERE ENCOUNTERED

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

<sup>\* -</sup> PERIOD OF RECORD AVERAGE

Go to Lower Fraser Snow Station Map

# **MIDDLE and LOWER FRASER**

June 1, 2004

#### MIDDLE FRASER

					W	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BOSS MOUNTAIN MINE	1C20P	1460	01	No Sı	now	19	353	435	0	175	10
BRENDA MINE	2F18P	1460	01	No St	now	0	0	0	0	-	10
BARKERVILLE	1A03P	1520	01	No St	now	0	240	291	0	66	20
MOUNT TIMOTHY	1C17	1660	29	No St	now	-	209	332	0	52	35
YANKS PEAK EAST	1C41P	1670	01	-	364	236	911	1016	236	590	6
PENFOLD CREEK	1C23	1680	27	108	594	719	1157	1354	353	847	33
GREEN MOUNTAIN	1C12P	1780	01	-	140	738	905	1183	229	610	10
MISSION RIDGE	1C18P	1850	01	No St	now	180	229	573	0	151	16

- 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

#### **LOWER FRASER**

#### **Snow Survey Measurements**

						m)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DISAPPOINTMENT LAKE	1D18P	1040	04	-	564P	655P	1582P	1582P	655P	1108*	3
CALLAGHAN CREEK	3A20	1040	30	No S	now	120	254	1228	0	220	20
DOG MOUNTAIN	3A10	1080	04	67	389	280	1227	2480Z	56	850	17
BEAVER PASS	WA12	1120	28	1	5A	140	579	1270	0	352*	10
SPUZZUM CREEK	1D19P	1180	01	-	540	773	1823	1823	773	1231*	4
WAHLEACH LAKE	1D09P	1400	01	-	698	713	1225	1359	0	650	11
CHILLIWACK RIVER	1D17P	1600	01	-	938	1009	1969	1969	237	1028*	8
GREAT BEAR	1D15P	1660	01	-	1133	1433	2539	2539	908	1568	12
TENQUILLE LAKE	1D06	1680	01	74	410	1132	1128	1790	365	986	48
TENQUILLE LAKE	1D06P	1680	01	-	225	986	998	998	563	849*	3

- 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

#### **SKAGIT**

					W	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record

FREEZEOUT CREEK TRAIL	WA11	1070	27	No Sn	now	0	0	152	0	15*	11
BEAVER PASS	WA12	1120	28	1	5A	140	579	1270	0	352*	10
HARTS PASS	WA09	1980	27	81	460	881	1445	1737	338	964*	12
HARTS PASS	WA09P	1980	01	-	183	686	993	1557	76	615	7

#### 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

Go to Thompson Snow Station Map

# **THOMPSON**

June 1, 2004

# **NORTH THOMPSON**

				WATER EQUIVALENT (mm				mm)			
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
COOK CREEK	1E14P	1280	01	No Sr	now	0	0	8	0	2*	4
COOK FORKS	1E06	1390	31	5	22	245	628	1026	0	400	41
BOSS MOUNTAIN MINE	1C20P	1460	01	No Sr	now	19	353	435	0	175	10
MOUNT COOK	1E02P	1550	01	-	593	979	1579	1579	755	1104*	3
MOUNT COOK	1E02A	1580	31	98	568	878	1301	1744	377	1075	30
AZURE RIVER	1E08P	1620	01	-	473	788	1369	1778	530	1030	7
ADAMS RIVER	1E07	1720	01	66	320	372	834	1155	0	595	34
KOSTAL LAKE	1E10P	1770	01	-	416	580	984	1377	155	700	19

NOF	RTH											
CLEM	INA	1E13	1860	26	108	523	757	1040	1135	318	768	15
CR	EEK											

- 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

#### **SOUTH THOMPSON**

#### **Snow Survey Measurements**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ADAMS RIVER	1E07	1720	01	66	320	372	834	1155	0	595	34
SILVER STAR MOUNTAIN	2F10	1840	02	73	388	528	845	980	0	468	45
PARK MOUNTAIN	1F03P	1890	01	-	570	803	1036	1269	296	742	18
ENDERBY	1F04	1900	30	142	640	891	1195	1422	430	960	40

- 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

#### MIDDLE FRASER

#### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BOSS MOUNTAIN MINE	1C20P	1460	01	No Si	now	19	353	435	0	175	10
BRENDA MINE	2F18P	1460	01	No Si	now	0	0	0	0	-	10
BARKERVILLE	1A03P	1520	01	No Si	now	0	240	291	0	66	20
MOUNT TIMOTHY	1C17	1660	29	No Si	now	-	209	332	0	52	35
YANKS PEAK EAST	1C41P	1670	01	-	364	236	911	1016	236	590	6
PENFOLD CREEK	1C23	1680	27	108	594	719	1157	1354	353	847	33
GREEN MOUNTAIN	1C12P	1780	01	-	140	738	905	1183	229	610	10
MISSION RIDGE	1C18P	1850	01	No Si	now	180	229	573	0	151	16

#### 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

**Go to Columbia Snow Station Map** 

# **COLUMBIA**

June 1, 2004

#### **UPPER COLUMBIA**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
AZURE RIVER	1E08P	1620	01	-	473	788	1369	1778	530	1030	7
MOUNT REVELSTOKE	2A06P	1830	01	-	808	997	1699	2063	240	1146	11
NORTH CLEMINA CREEK	1E13	1860	26	108	523	757	1040	1135	318	768	15
MOLSON CREEK	2A21P	1980	01	-	754	953	1234	1512	98	810	20
BOW SUMMIT II	AL07A	2080	27	49	193	201	350	414	0	172*	22

- A SAMPLING PROBLEMS WERE ENCOUNTERED
- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED
- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

### **LOWER COLUMBIA**

								IVALE	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BARNES CREEK	2B06P	1620	01	No Si	now	383	341	529	0	205	11
ST. LEON CREEK	2B08P	1800	01	-	581	908	1466	1580	225	815	10
RECORD MOUNTAIN	2B09	1890	01	22	110A	-	675	1073	0	442	28
EAST CREEK	2D08P	2030	01	-	567	683	938	1256	111	770	21

- 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

Go to Columbia Snow Station Map

# **KOOTENAY**

June 1, 2004

# **EAST KOOTENAY**

			WATER EQUIVALENT (mm)								
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
MARBLE CANYON	2C05	1520	Not	Measure	ed	-	-	244	0	20	46
SULLIVAN MINE	2C04	1550	01	No Sı	now	0	0	137	0	13	21
BANFIELD MOUNTAIN	MT05P	1710	01	-	5	0	124	254	0	74	7
MORRISSEY RIDGE	2C09Q	1800	01	-	23	244	810	810	0	140	19
RED MOUNTAIN	MT04	1830	24	5	25B	36	-	559	0	132*	38
MOYIE MOUNTAIN	2C10P	1930	01	No Sı	now	0	120	438	0	60	18
HAWKINS LAKE	MT06P	1970	01	-	10	170	551	947	8	495	7
FLOE LAKE	2C14P	2090	01	-	563	675	792	979	98	610	9

HIGHWOO SUMMI (BUS)	T AL02	2210	01	97	371	381	671	671	89	374*	23
SUNSHIN VILLAC	1 / 1 / 15	2230	03	92	381	498	686	902	107	506*	19

- 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

#### WEST KOOTENAY

				V	VATEI	R EQU	IVALI	ENT (1	mm)		
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BUNCHGRASS MEADOW	WA01P	1520	Not	Measure	ed	366	368	800	0	127	7
GRAY CREEK (LOWER)	2D05	1550	Not	Measure	ed	-	-	551	0	210	51
GRAY CREEK (UPPER)	2D10	1910	31	64	328	-	-	1120	0	535	31
EAST CREEK	2D08P	2030	01	567	683	938	1256	111	770	21	
REDFISH CREEK	2D14P	2104	01	-	760	1185	1624	1624	1185	1405*	2

- 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

Go to Okanagan Snow Station Map

# KETTLE, OKANAGAN and SIMILKAMEEN

June 1, 2004

### **KETTLE**

#### **Snow Survey Measurements**

					W	ATEF	REQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BIG WHITE MOUNTAIN	2E03	1680	01	14	60	124	270	658	0	202	38
GRANO CREEK	2E07P	1860	01	-	334	390	604	754	11	386*	6

- 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

#### **OKANAGAN**

#### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BRENDA MINE	2F18P	1460	01	No Si	now	0	0	0	0	-	10
MISSION CREEK	2F05P	1780	01	-	293	308	488	641	0	236	32
MOUNT KOBAU	2F12	1810	30	No Sı	now	128	229	488	0	132	38
WHITEROCKS MOUNTAIN	2F09	1830	31	No Sı	now	0	391	848	0	196	32
SILVER STAR MOUNTAIN	2F10	1840	02	73	388	528	845	980	0	468	45

- 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

#### **SIMILKAMEEN**

			WATER EQUIVALENT (mm)								
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
FREEZEOUT CREEK TRAIL	WA11	1070	27	No Snow		0	0	152	0	15*	11
BLACKWALL PEAK	2G03P	1940	01	-	270	443	889	1253	0	452	36
HARTS PASS	WA09	1980	27	81	460	881	1445	1737	338	964*	12
HARTS PASS	WA09P	1980	01	-	183	686	993	1557	76	615	7

- 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

Go to Coastal B.C. Snow Station Map

# **COASTAL**

June 1, 2004

# **SOUTH COASTAL**

WATER EQUIVALENT (mm)											
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PALISADE LAKE	3A09P	880	Not	Availab	le	-	-	354	354	354*	1
CALLAGHAN CREEK	3A20	1040	30	No Si	now	120	254	1228	0	220	20
DOG MOUNTAIN	3A10	1080	04	67	389	280	1227	2480Z	56	850	17
ORCHID LAKE	3A19	1190	04	152	855	1056	1572	3648Z	174	1560	25
ORCHID LAKE	3A19P	1190	01	-	1036	1142	1621	2463	124	1485*	15
UPPER SQUAMISH RIVER	3A25P	1340	01	-	641	1129	1253	1485	634	1220	13
NOSTETUKO RIVER	3A22P	1500	00 01 No Snow 150 206 530 0 90*						12		
UPPER MOSELY CREEK	3A24P	1650	01	No Si	now	38	0	204	0	26*	15
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

#### **VANCOUVER ISLAND**

#### **Snow Survey Measurements**

			WATER EQUIVALENT (mm)						mm)		
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TENNENT LAKE	3B22	950	Not Available			-	-	712	0	380	10
JUMP CREEK	3B23P	1160	01 No Snow			101	968	983	0	520	7
WOLF RIVER (UPPER)	3B17P	1490	01	-	616	1362	869	2465	305	980	16

- 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

### **NORTH COASTAL**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TAHTSA LAKE	1B02	1300	31	81	416	698	1385	1651	535	1007	29

TAHTSA LAKE	1B02P	1300	01	-	363	741	1548	1576	277	1001	11
BURNT BRIDGE CREEK	3C08P	1330	01	No Sn	iow	176	649	686	0	340*	6

- 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

Go to Northeast Snow Station Map

# **NORTH EAST**

June 1, 2004

#### **PEACE**

#### **Snow Survey Measurements**

				WATER EQUIVALENT (mm)						mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PACIFIC LAKE	1A11	770	26	No Sı	now	0	411	411	0	71	30
AIKEN LAKE	4A30P	1040	01	No Sı	now	0	0	0	0	-	17
PULPIT LAKE	4A09P	1310	01	No Sr	now	0	55	189	0	44*	13
PINE PASS	4A02P	1400	01	-	576	634	1305	1305	183	795	11
KWADACHA RIVER	4A27P	1620	01	-	41	199	311	458	0	238*	15

- 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

#### **LIARD**

					V	ATER	R EQU	IVALI	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DEADWOOD RIVER	4C09P	1300	01	No Sr	now	0	0	31	0	3*	10

- 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

Go to Northwest Snow Station Map

# **NORTH WEST**

June 1, 2004

#### STIKINE/TAKU

#### **Snow Survey Measurements**

					V	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
KINASKAN LAKE	4D11P	1020	01	No St	now	0	0	83	0	10*	13
TUMEKA CREEK	4D10P	1220	01	No St	now	180	218	488	0	174*	14
WADE LAKE	4D14P	1370	01	No Sı	now	30	83	243	0	87*	12

- 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

# **YUKON**

#### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
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- 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

#### SKEENA/NASS

					V	VATE	R EQU	IVAL	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
GRANDUC MINE	4B12P	790	01	-	818	1084	904	1084	904	994*	2
CEDAR- KITEEN	4B18P	885	01	No Sr	now	0	289	356	0	215*	3
LU LAKE	4B15P	1310	01	No Sr	now	0	180	180	0	41*	5
TSAI CREEK	4B17P	1360	01	-	435	761	1826	1826	371	1083*	6
KIDPRICE LAKE	4B01	1370	31	18	86	415	1177	1209	0	666	29
HUDSON BAY MTN.	4B03A	1480	01	01 No Snow		254	596	729	0	288	31
SHEDIN CREEK	4B16P	1480	Not	Measure	d	446	990	1075	98	716*	8

- 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

# Province-Wide Synopsis

# Basin Data and Graphs

-Upper Fraser

-Mid and Lower Fraser

-Thompson

-Columbia

-Kootenay

-Okanagan, Kettle, and Similkameen

-Coastal

-NorthEast

-NorthWest

-April 1 Peak
Snowpack Map
-Drought
monitoring

# **Snowpack and Water Supply Outlook for British Columbia**

June 15, 2004

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 on review.

# Province-wide Synopsis



The June 15th snow survey is quite small, as most lower level snow courses are normally snow free by this date and those that have snow are depleting rather than accumulating. However, snow surveys have been conducted at 2 BC snow courses and 56 BC snow pillows, have been used in making the following analyses. Because of the very limited sampling, no basin commentaries are provided.

Heavy runoff is not a concern this freshet, most streams having peaked at very low levels and being in decline. Drought monitoring can be found at the link to the left.

#### **Snowpack**

BC June 15 snowpacks are far below normal for this date. While cumulative winter precipitation has been below normal in many areas, the biggest factor in the small remaining BC snowpacks for June 15 has been the warm March, April, and mid-May weather, resulting in a spring snowmelt two to four weeks ahead of schedule, on already below normal peak snowpacks. This has also resulted in

Corrected or previously unpublished data

higher snowlines than usual for this date.

#### Weather

June has had varied weather, with the first 10 to 14 days seeing most regions receive at least normal precipitation, and hot weather since then. Early snow melt continued, with dropping snow melt runoff supplemented by rainfall keeping rivers moderately high for the first two weeks of the month.

#### **Outlook**

Snowlines throughout the province are higher than usual for this date, and have been for the last two months. Unless there are substantial rains in the next few months (not forecast) this will result in earlier than normal fire hazards. See the Ministry of Forests website for current information on fire hazards.

There is extremely little chance of snow flooding anywhere in BC this spring, even if heavy rains occur in the next few weeks. Most streams, from the Skeena and Upper Fraser and southwards, have already seen their very low peaks for the spring freshet, (very early), unless there is heavy sustained rain over the next two weeks. Less upper elevation snow in most areas will result in streamflows dropping more quickly than usual after the freshet, particularly if the summer is drier and warmer than usual, as is forecast for most of the province by Environment Canada.

Residents with limited water supplies in nearly all parts of the province, particularly in the southern half, should practice water conservation throughout the upcoming months. Residents of the Bulkley Valley, Nechako, Okanagan, Nicola, North Thompson, Kootenays, Vancouver Island, much of the not above mentioned Southern Interior, and possibly the Liard, should start practicing strict water conservation now, not later, as conditions could become drier than last summer. Other regions in BC of concern for drought potential this year can be found in our drought monitoring page.

Upper Fraser & Nechako Basins





June 15

• Top

Go to Upper Fraser Snow Station Map

# **UPPER and MIDDLE FRASER**

June 15, 2004

#### **UPPER FRASER**

#### **Snow Survey Measurements**

					V	ATE	R EQU	IVAL	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
HEDRICK LAKE	1A14P	1100	15	No Si	now	0	293	293	0	73*	4
BARKERVILLE	1A03P	1520	15	No Si	now	0	0	37	0	0	20
REVOLUTION CREEK	1A17P	1690	15	No Si	now	0	724	724	0	240	18
YELLOWHEAD	1A01P	1860	15	-	60	90	413	641	0	229	7

- 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

#### **NECHAKO**

#### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TAHTSA LAKE	1B02P	1300	15	-	18	372	1219	1219	0	649	11
MOUNT PONDOSY	1B08P	1400	15	No Sr	iow	0	479	479	0	0	11
MOUNT WELLS	1B01P	1490	15	No Sr	iow	0	259	259	0	0	12

- 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

#### MIDDLE FRASER

					W	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BOSS MOUNTAIN MINE	1C20P	1460	15	No Sı	now	0	0	131	0	0	10
BRENDA MINE	2F18P	1460	15	15 No Snow			0	0	0	0	11
BARKERVILLE	1A03P	1520	15	No Sı	now	0	0	37	0	0	11
YANKS PEAK EAST	1C41P	1670	15	- 19		0	540	754	0	315	7
GREEN MOUNTAIN	1C12P	1780	15	NoSnow		329	546	933	0	340	10
MISSION RIDGE	1C18P	1850	15	No Sı	now	0	0	253	0	0	17

- A SAMPLING PROBLEMS WERE ENCOUNTERED
- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

		L AVERAGE

\* - PERIOD OF RECORD AVERAGE

**Go to Lower Fraser Snow Station Map** 

# **MIDDLE and LOWER FRASER**

June 15, 2004

#### MIDDLE FRASER

					W	ATE	R EQU	IVAL	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BOSS MOUNTAIN MINE	1C20P	1460	15	No Si	now	0	0	131	0	0	10
BRENDA MINE	2F18P	1460	15	No S	now	0	0	0	0	0	11
BARKERVILLE	1A03P	1520	15	No S	now	0	0	37	0	0	11
YANKS PEAK EAST	1C41P	1670	15	-	19	0	540	754	0	315	7
GREEN MOUNTAIN	1C12P	1780	15	NoSı	now	329	546	933	0	340	10
MISSION RIDGE	1C18P	1850	15	No S	now	0	0	253	0	0	17

- 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

#### **LOWER FRASER**

#### **Snow Survey Measurements**

					V	ATE	REQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
SPUZZUM CREEK	1D19P	1180	15	-	101	233	1403	1403	233	839	4
WAHLEACH LAKE	1D09P	1400	15	-	415	427	835	1185	0	400*	11
CHILLIWACK RIVER	1D17P	1600	15	-	499	383	1560	1759	0	751	9
GREAT BEAR	1D15P	1660	15	-	739	1178	2048	2048	655	1250	11
TENQUILLE LAKE	1D06P	1680	15	-	0	589	638	638	360	529*	3
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

#### **SKAGIT**

					V	VATER	EQU	IVALE	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
HARTS PASS	WA09P	1980	15	Not Mea	sured	190A	638	1267	0	254	7

- A SAMPLING PROBLEMS WERE ENCOUNTERED
- B EARLY OR LATE SAMPLING
- C EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E	ECTIM	IATED	BYCED	ONI	ADEAI	AVERAGI	$\Box$
IP		IAIFII	DASEL	UNIN	AKEAL	AVERALI	Г.

\* - PERIOD OF RECORD AVERAGE

**Go to Thompson Snow Station Map** 

# **THOMPSON**

June 15, 2004

#### **NORTH THOMPSON**

					WATER EQUIVALENT (mm)					mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
COOK CREEK	1E14P	1280	15	No Snow		0	0	0	0	0*	4
BOSS MOUNTAIN MINE	1C20P	1460	15	No Snow		0	0	131	0	0	10
MOUNT COOK	1E02P	1550	15	-	281	578	1155	1155	550	761*	3
AZURE RIVER	1E08P	1620	15	-	98	364	915	1489	94	680	7
KOSTAL LAKE	1E10P	1770	15	-	140	168	691	1285	0	340	19

- 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

### **SOUTH THOMPSON**

#### **Snow Survey Measurements**

				W	mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
PARK MOUNTAIN	1F03P	1890	15	-	315	378	716	1095	0	458	18
ENDERBY	1F04	1900	15	89	430		968	1326	62	715	25

- 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

### MIDDLE FRASER

Elev		WATER EQUIVALENT (mm)								
r m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record	
1460	15	No Sı	now	0	0	131	0	0	10	
1460	15	No Si	now	0	0	0	0	0	11	
1520	15	No Sı	now	0	0	37	0	0	11	
1670	15	-	19	0	540	754	0	315	7	
1780	15	NoSnow		329	546	933	0	340	10	
N RIDGE   1C18P   1850   15   No						253	0	0	17	
P	P 1460 P 1520 P 1670 P 1780 P 1850	P 1460 15 P 1520 15 P 1670 15 P 1780 15 P 1850 15	P 1460 15 No Si P 1460 15 No Si P 1520 15 No Si P 1670 15 - P 1780 15 No Si	P   1460   15	P 1460 15 No Snow 0 P 1460 15 No Snow 0 P 1520 15 No Snow 0 P 1670 15 - 19 0 P 1780 15 No Snow 329 P 1850 15 No Snow 0	P   1460   15	P       1460       15       No Snow       0       0       131         P       1460       15       No Snow       0       0       0         P       1520       15       No Snow       0       0       37         P       1670       15       -       19       0       540       754         P       1780       15       NoSnow       329       546       933         P       1850       15       No Snow       0       0       253	P   1460   15	P   1460   15	

- A SAMPLING PROBLEMS WERE ENCOUNTERED
- B EARLY OR LATE SAMPLING

- E ESTIMATED BASED ON AREAL AVERAGE
- \* PERIOD OF RECORD AVERAGE

Go to Columbia Snow Station Map

# **COLUMBIA**

June 15, 2004

### **UPPER COLUMBIA**

#### **Snow Survey Measurements**

					W	mm)					
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
AZURE RIVER	1E08P	1620	15	-	98	364	915	1489	94	680	4
MOUNT REVELSTOKE	2A06P	1830	15	-	465	593	1337	1801	0	800	11
MOLSON CREEK	2A21P	1980	15	-	353	600	990	1163	0	540	19

- 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

## **LOWER COLUMBIA**

#### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BARNES CREEK	2B06P	1620	15	No Sn	iow	0	0	169	0	0	11
ST. LEON CREEK	2B08P	1800	15	-	263	533	1136	1351	0	525	10
EAST CREEK	2D08P	2030	15	-	289	405	821	1163	0	525	20

#### 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

Go to Columbia Snow Station Map

# **KOOTENAY**

June 15, 2004

### **EAST KOOTENAY**

#### **Snow Survey Measurements**

					WATER EQUIVALENT (mm)							
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record	
BANFIELD MOUNTAIN	MT05P	1710	15	-	8	0	0	8	0	5	6	
MORRISSEY RIDGE	2C09Q	1800	15	No Sı	now	0	458	458	0	0	19	
MOYIE MOUNTAIN	2C10P	1930	15	No Sı	now	0	0	25	0	0	14	
HAWKINS LAKE	MT06P	1970	15	-	8	5	178	683	0	185	7	
FLOE LAKE	2C14P	2090	15	-	293	394	578	862	0	432	9	

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

## **WEST KOOTENAY**

					W	ATEF	R EQU	WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record			
BUNCHGRASS MEADOW	WA01P	1520	15	No Si	now	0	36	394	0	0	6			
EAST CREEK	2D08P	2030	15	-	289	405	821	1163	0	525	20			
REDFISH CREEK	2D14P	2104	15	-	653	911	1421	1421	911	1166*	2			

- 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

Go to Okanagan Snow Station Map

# KETTLE, OKANAGAN and SIMILKAMEEN

June 15, 2004

#### KETTLE

#### **Snow Survey Measurements**

					V	ATE	REQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
GRANO CREEK	2E07P	1860	15	-	68	0	263	503	0	173*	6

- 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

## **OKANAGAN**

### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BRENDA MINE	2F18P	1460	15	No Sn	now	0	0	0	0	-	11
MISSION CREEK	2F05P	1780	15	No Sn	now	0	173	424	0	0	31

- 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

### **SIMILKAMEEN**

				WATER EQUIVALENT (mm)							
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
BLACKWALL PEAK	2G03P	1940	15	-	0	0	649	1031	0	240	36

- 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

Go to Coastal B.C. Snow Station Map

# **COASTAL**

June 15, 2004

### **SOUTH COASTAL**

#### **Snow Survey Measurements**

					W	ATE	R EQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
ORCHID LAKE	3A19P	1190	15	-	714		1243	2074	0	1155	15
UPPER SQUAMISH RIVER	3A25P	1340	15	-	233	641	788	1140	236	820	13
NOSTETUKO RIVER	3A22P	1500	15	No Sı	now	0	109	116	0	17	13
UPPER MOSELY CREEK	3A24P	1650	15	No Si	now	0	0	0	0	0*	15

- 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

## **VANCOUVER ISLAND**

#### **Snow Survey Measurements**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
JUMP CREEK	3B23P	1160	15	No Sn	iow	0	420	574	0	170	7
WOLF RIVER (UPPER)	3B17P	1490	15	-	280	911	424	1024	0	580	15

- 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

### **NORTH COASTAL**

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
TAHTSA LAKE	1B02P	1300	15	-	18	372	1219	1274	0	649	11
BURNT BRIDGE CREEK	3C08P	1330	15	No Sr	now	0	199	334	0	96*	6

- 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

Go to Northeast Snow Station Map

# **NORTH EAST**

June 15, 2004

### **PEACE**

#### **Snow Survey Measurements**

						WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record	
AIKEN LAKE	4A30P	1040	15	No Snow		0	0	0	0	0*	17	
PULPIT LAKE	4A09P	1310	15	No Snow		0	0	0	0	0	13	
PINE PASS	4A02P	1400	15	-	119	259	981	981	0	0	12	
KWADACHA RIVER	4A27P	1620	15	NoSn	iow	0	68	68	0	88*	15	

- 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

### **LIARD**

#### **Snow Survey Measurements**

WATER EQUIVALENT (mm)

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
DEADWOOD RIVER	4C09P	1300	15	No Sr	now	0	0	0	0	0*	10

#### 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

**Go to Northwest Snow Station Map** 

## **NORTH WEST**

June 15, 2004

#### STIKINE/TAKU

#### **Snow Survey Measurements**

	WATER EQUIVALENT (mm)										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
KINASKAN LAKE	4D11P	1020	15	No Sno	No Snow		0	0	0	0*	13
TUMEKA CREEK	4D10P	1220	15	No Snow		0	0	67	0	5*	14
WADE LAKE	4D14P	1370	15	No Sno	w	0	0	0	0	0*	12

- 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

#### SKEENA/NASS

					WA						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	2004	2003	2002	Max.	Min.	Normal	No. Years Record
GRANDUC MINE	4B12P	790	01	-	199	480	0	480	0	240*	2
CEDAR-KITEEN	4B18P	885	01	No	Snow	0	0	70	0	23*	3
LU LAKE	4B15P	1310	01	No	Snow	0	0	0	0	0*	5
TSAI CREEK	4B17P	1360	01	-	19	304	1474	1474	0	715*	6
HUDSON BAY MTN.	4B03A	1480	01	No Snow		0	309	673	0	108	25

SHEDIN CREEK	4B16P	1480	Not Measured	0	533	896	0	395*	8	
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										