## **FRASER**

January 1, 1997

					V	VATE	R EQU	JIVAL	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER FRASER											
PRINCE GEORGE A	1A10	690	31	54	83	98	43	156	19	69	34
PACIFIC LAKE	1A11	770	06	188	464	356	434	476	177	294*	13
BURNS LAKE	1A16	800	02	86	176	130	76	152	26	69	22
PHILIP LAKE	4A13	980	03	123	234	230	132	268	64	120	14
HEDRICK LAKE	1A14	1100	07	176	453	-	319	640	300A	414*	6
KAZA LAKE	1A12	1190	03	96	194	263	119	371	113	182*	11
MOUNT SHEBA	4A18	1490	06	207	588	573	465	793	287	489*	8
BARKERVILLE	1A03P	1520	01	-	184	_	-	312	103	179	16
KNUDSEN LAKE	1A15	1580	06	152	369	503	411	821	341	490*	8
REVOLUTION CREEK	1A17P	1690	01	-	311	475	410	814	240	452	12
LONGWORTH (UPPER)	1A05	1740	07	170	446	486	364	694	304	471*	7
YELLOWHEAD	1A01P	1860	01	104	236	-	-	_	-	-	0
NECHAKO											
SKINS LAKE	1B05	880	111	65	111	0	55*	12			
TAHTSA LAKE	1B02P	1300	01	-	631	738	939	939	475	670*	4
MOUNT PONDOSY	1B08P	1400	01	-	506	552	686	686	283	463*	4
MOUNT WELLS	1B01P	1490	01	-	433	347	372	372	241	310	4
MIDDLE FRASER											

PUNTZI MOUNTAIN	1C22	940	30	24	44	60	32	106	0	40	24
NAZKO	1C08	1070	05	47	74	84	-	84	17	39	11
BIG CREEK	1C21	1140	30	27	35	51	23	62	16	44	10
GRANITE MOUNTAIN	1C33	1150	02	71	153	158	98	158	76	121*	4
LAC LE JEUNE (LOWER)	1C07	1370	31	58	123	31	76	115	8	66	24
BRIDGE GLACIER (LOWER)	1C39	1400	27	82	204	340	456	456	340	398*	2
BRALORNE	1C14	1450	27	38	70	89	158	158	89	124*	2
BOSS MOUNTAIN MINE	1C20P	1460	01	125	394	461	405	461	302	323	3
BRENDA MINE	2F18P	1460	01	-	304	254	213	254	120	195	3
LAC LE JEUNE (UPPER)	1C25	1460	31	68	146	45	123	143	10	81	24
BARKERVILLE	1A03P	1520	01	-	184	-	-	312	103	179	16
FISH LAKE	1C35	1540	03	28	39	71	120	120	71	96*	2
FISH LAKE NO. 2	1C35A	1550	03	27	38	-	-	-	-	-	0
GREEN MOUNTAIN	1C12	1630	27	76	199	364	-	528	110	315	10
MOUNT TIMOTHY	1C17	1660	01	82	193	223	-	251	89	149	11
YANKS PEAK EAST	1C41P	1670	01	257	473	-	-	-	-	-	0
GREEN MOUNTAIN	1C12P	1780	01	_	405	518	707	707	312	512*	3
MCGILLIVRAY PASS	1C05	1800	27	87	235	313	458	458	196	295*	4
MISSION RIDGE	1C18P	1850	01	_	259	293	460	659	148	270	10
DOWNTON LAKE (UPPER)	1C38	1890	27	104	294	588	672	672	588	630*	2
TYAUGHTON CREEK (NORTH)	1C40	1950	27	81	216	256	364	364	256	310*	2
BRALORNE (UPPER)	1C37	1980	27	77	195	388	504	504	388	446*	2

## LOWER FRASER

WOLVERINE CREEK	1D13	300	02	108	193	88	72	170A	0	93	20
DISAPPOINTMENT LAKE	1D18P	1040	01	-	487	_	1304	1304	1304	1304	1
CALLAGHAN CREEK	3A20	1040	01	155	426	170	638	638	100	284*	9
DICKSON LAKE	1D16	1070	05	278	1006	360	1110	1110	360	680*	4
DOG MOUNTAIN	3A10	1080	02	214	807	-	897	897	96	561	10
KLESILKWA	3D03A	1130	05	131	386	31	163	163	0	82*	7
STAVE LAKE	1D08	1210	05	268	878	367	892	892	112	507*	7
WAHLEACH LAKE	1D09	1400	05	137	402	143	358	358	46	206*	10
WAHLEACH LAKE	1D09P	1400	01	-	774	259	616	616	259	477*	4
NAHATLATCH RIVER	1D10	1520	05	225	752	537	903	903	219	514*	7
EASY PASS	WA13	1580	Not	Measur	ed	381	1651	1651	229	731*	19
CHILLIWACK RIVER	1D17P	1600	01	270	1076	454	-	615	454	744	4
GREAT BEAR	1D15P	1660	01	-	954	860	-	860	446	651	5
TENQUILLE LAKE	1D06	1680	07	221	658	655	782	875	205	522	19
NORTH THOMPSON											
BLUE RIVER	1E01B	670	01	101	232	263	172	263	69	155*	12
COOK FORKS	1E06	1390	31	179	484	495	488	630	216	406	17
BOSS MOUNTAIN MINE	1C20P	1460	01	125	394	461	405	461	302	323	3
MOUNT COOK	1E02A	1580	31	230	740E	803	660	803	400	582	17
AZURE RIVER	1E08P	1620	01	182	540	-	-	-	-	-	0
ADAMS RIVER	1E07	1720	04	137	397	414	444	475	205	288	11
KOSTAL LAKE	1E10P	1770	01	-	493	590	507	590	303	437	12
SOUTH THOMPSON											
MONASHEE PASS	2E01	1370	Not	Measur	ed	195	-	239	84	162	18
ADAMS RIVER	1E07	1720	04	137	397	414	444	475	205	288	11
KIRBYVILLE LAKE	2A25	1750	05	226	715	854	754	854	389	565	14

SILVER STAR MOUNTAIN	2F10	1840	01	178	565	516	444	531	163	339	32
PARK MOUNTAIN	1F03P	1890	01	-	608	601	445	632	281	410	11
ENDERBY	1F04	1900	31	181	650	684	443	742	292	476	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

# **COLUMBIA**

January 1, 1997

			WATER EQUIVAL					ENT (1	nm)		
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER COLUMBIA											
DOWNIE SLIDE (LOWER)	2A27	980	05	163	484	446	392	504	190	320	14
GLACIER	2A02	1250	28	103	271	434	314	519	147	331	26
FIELD	2A03A	1280	Not	Measur	ed	127	108	127	40	86*	8
VERMONT CREEK	2A19	1520	04	133	283	298	309	309	120	221	13
AZURE RIVER	1E08P	1620	01	182	540	-	-	-	-	-	0
DOWNIE SLIDE (UPPER)	2A29	1630	05	238	772	1022	984	1022	402	575	12
KICKING HORSE	2A07	1650	Not	Measur	ed	199	190	257	87	169	20
KIRBYVILLE LAKE	2A25	1750	05	226	715	854	754	854	389	565	14
MOUNT REVELSTOKE	2A06	1830	07	275	590	842	631	842	335A	585	16
MOUNT REVELSTOKE	2A06P	1830	01	-	647	835	598	835	383	571	4
FIDELITY MOUNTAIN	2A17	1870	28	158	510	938	611	1228	334	610	22
BEAVERFOOT	2A11	1890	Not	Measur	ed	151	125	215	70	118	13
KEYSTONE CREEK	2A18	1890	05	177	527	540	479	577	266	376	13

GOLDSTREAM	2A16	1920	05	203	595	852	592	906	427	579	13
BUSH RIVER	2A23	1920	05	158	416	623	523	722	216	416	13
MOUNT ABBOT	2A14	1980	30	183	512	864	656	1065	350	575	12
MOLSON CREEK	2A21P	1980	01	-	427	746	648	1072	318	565	16
SUNBEAM LAKE	2A22	2010	05	182	484	656	478	767	305	479	13
LOWER COLUMBIA											
FERGUSON	2D02	880	Not	Measur	red	409	396	409	117	263	18
FARRON	2B02A	1220	07	106	330	180	167	251	46	177	12
MONASHEE PASS	2E01	1370	Not	Measur	ed	195	-	239	84	162	18
WHATSHAN (UPPER)	2B05	1480	Not	Measur	ed	349	395	543	207	316	14
BARNES CREEK	2B06	1620	Not	Measur	ed	332	276	363	146	240	13
BARNES CREEK	2B06P	1620	01	-	409	364	257	364	257	305*	4
ST. LEON CREEK	2B08	1800	Not	Measur	red	818	677	1164	397	620	11
ST. LEON CREEK	2B08P	1800	01	-	626	-	637	637	368	569	3
KOCH CREEK	2B07	1860	Not	Measur	red	410	452	452	170	329	11
RECORD MOUNTAIN	2B09	1890	30	180	504	305	465	465	134	401	12
EAST CREEK	2D08P	2030	01	-	382	737	569	858	219	476	15
EAST KOOTENAY											
FERNIE EAST	2C07	1250	27	120	222	-	143	330	28	166	21
MARBLE CANYON	2C05	1520	03	111	247	277	206	300	84	176	22
SULLIVAN MINE	2C04	1550	27	105	226	189	161	224	35	125*	11
WEASEL DIVIDE	MT02	1660	411	472	691	218	402*	12			
MOUNT JOFFRE	2C16	1750	04	125	303	249	178	364	86	155	13

MORRISSEY RIDGE	2C09Q	1800	01	-	517	351	382	706	157	322	13
MOYIE MOUNTAIN	2C10	1940	Not	Measur	ed	185	202	366P	76P	204	23
THUNDER CREEK	2C17	2010	04	103	240	174	126	276	65	117	13
FLOE LAKE	2C14	2090	Not	Measur	ed	566	461	747	217	383	13
FLOE LAKE	2C14P	2090	01	-	394	502	_	502	187	332	2
HIGHWOOD SUMMIT (BUSH)	AL02	2210	02	118	272	325	211	399	97	219*	8
MOUNT ASSINIBOINE	2C15	2230	04	137	325	437	314	567	162	248	13
SUNSHINE VILLAGE	AL05	2230	-	-	251P	193	222*	2			
WEST KOOTENAY											
FERGUSON	2D02	880	Not	Measur	red	409	396	409	117	263	18
NELSON	2D04	930	31	144	366	164	257	340	66	173	37
CHAR CREEK	2D06	1310	31	183	480	224	290	399	110	239	13
GRAY CREEK (LOWER)	2D05	1550	Not	Measur	ed	-	264	372	69	185	19
KOCH CREEK	2B07	1860	Not	Measur	ed	410	452	452	170	329	11
MOUNT TEMPLEMAN	2D09	1860	Not	Measur	ed	829	616	902	347	504	11
GRAY CREEK (UPPER)	2D10	1910	Not	Measur	ed	-	406	612	222	380	11
EAST CREEK	2D08P	2030	01	-	382	737	569	858	219	476	15
KETTLE											
FARRON	2B02A	1220	07	106	330	180	167	251	46	177	12
MONASHEE PASS	2E01	1370	Not	Measur	red	195	-	239	84	162	18
BIG WHITE MOUNTAIN	2E03	1680	31	118	326	298	310	310	112	198	13
OKANAGAN											

SUMMERLAND RESERVOIR	2F02	1280	02	85	183	132	135	198	46	111	33
BRENDA MINE	2F18P	1460	01	-	304	254	213	254	120	195	3
GREYBACK RESERVOIR	2F08	1550	02	74	179	148	155	181	56	112	14
ISINTOK LAKE	2F11	1680	03	64	131	93	95	196	16	84	31
MISSION CREEK	2F05	1780	01	123	359	-	-	340	113	223	25
MISSION CREEK	2F05P	1780	01	115	325	248	271	326	104	201	26
MOUNT KOBAU	2F12	1810	31	111	261	161	181	228	28	157	20
WHITEROCKS MOUNTAIN	2F09	1830	06	130	396	270	382	447	122	272	19
SILVER STAR MOUNTAIN	2F10	1840	01	178	565	516	444	531	163	339	32
SIMILKAMEEN											
HAMILTON HILL	2G06	1490	05	116	299	201	194	313	55	139	12
MISSEZULA MOUNTAIN	2G05	1550	04	88	197	138	193	193	83	130*	4
ISINTOK LAKE	2F11	1680	03	64	131	93	95	196	16	84	31
BLACKWALL PEAK	2G03P	1940	01	-	611	454	507	923	108	391	27
A - SAMPLING PROBLEMS WERE ENCOUNTERED											
B - EARLY OR LA	TE SAM	PLINC	j								
C - EARLY OR LA	TE SAM	PLINC	WITH	PROBI	LEMS	ENCC	UNTE	ERED			
E - ESTIMATED B	ASED O	N ARE	EAL AV	ERAGI	Ξ						

\* - PERIOD OF RECORD AVERAGE

# **COASTAL**

January 1, 1997

## **Snow Survey Measurements**

					WATER EQUIVALENT (mm)					mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
SOUTH COASTAL											
PALISADE LAKE	3A09P	880	-	785	785	785	785*	1			
CALLAGHAN CREEK	3A20	1040	01	155	426	170	638	638	100	284*	9
DOG MOUNTAIN	3A10	1080	02	214	807	-	897	897	96	561	10
GROUSE MOUNTAIN	3A01	1100	02	231	866	252	878	878	24	428	16
ORCHID LAKE	3A19	1190	432	1148	1214	202	801	17			
ORCHID LAKE	3A19P	1190	427	1037	1285	243	764*	13			
UPPER SQUAMISH RIVER	3A25P	1340	01	262	818	608	1072	1072	503	723	5
TIEDEMANN GLACIER	3A17P	1400	01	-	570	817	914	914	282	629*	4
NOSTETUKO RIVER	3A22P	1500	01	-	207	320	524	524	32	265*	7
UPPER MOSELY CREEK	3A24P	1650	01	-	128	186	265	491	85	182	8

VANCOUVER ISLAND

ELK RIVER	3B04	270	04	61	159	0	140A	264	0	94*	12	
WOLF RIVER (LOWER)	3B19	640	05	122	306	0	326	326	0	105*	8	
WOLF RIVER (MIDDLE)	3B18	1070	05	143	402	126	590	590	0	203*	8	
FORBIDDEN PLATEAU	3B01	1130	Not	Measur	ed	364	1287	1287	0	587	15	
JUMP CREEK	3B23P	1160	01	210	806	244	-	244	244	244*	1	
SNO-BIRD LAKE	3B16	1400	03	225	816	265	919	919	0	528	21	
WOLF RIVER (UPPER)	3B17P	1490	01	-	597	366	1057	1057	150	531	8	
NORTH COASTAL												
TAHTSA LAKE	1B02P	1300	01	-	631	738	939	939	475	670*	4	
SKAGIT												
KLESILKWA	3D03A	1130	05	131	386	31	163	163	0	82*	7	
A - SAMPLING PROBLEMS WERE ENCOUNTERED												
B - EARLY OR LATE SAMPLING												
C - EARLY OR L	ATE SA	MPLIN	G WITH	I PROB	LEMS	ENC	OUNTI	ERED				
E - ESTIMATED	BASED	ON AR	EAL AV	ERAG	E							
* - PERIOD OF R	- PERIOD OF RECORD AVERAGE											

# **NORTH**

January 1, 1997

					WATER EQUIVALENT (mm)					mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
PEACE											
FORT ST. JOHN A	4A25	690	29	48	104	96	30	134	17	56	22
MACKENZIE A	4A19	700	31	63	136	162	136	283	51	97	24
PACIFIC LAKE	1A11	770	06	188	464	356	434	476	177	294*	13
BULLHEAD MOUNTAIN	4A28	790	06	58	108	93	52	111	0	52*	13
WARE (LOWER)	4A04	980	04	64	117	173	63	240	63	128*	6
PHILIP LAKE	4A13	980	03	123	234	230	132	268	64	120	14
AIKEN LAKE	4A30P	1040	01	-	128	165	124	262	86	143*	9
TUTIZZI LAKE	4A06	1070	03	85	147	187	129	187	85	139*	6
TSAYDAYCHI LAKE	4A12	1160	03	119	282	300	206	393	128	186	13
KAZA IAKE	1A12	1190	03	96	194	263	119	371	113	182*	11
PULPIT LAKE	4A09	1310	04	106	219	291	221	398	182	269*	8
PULPIT LAKE	4A09P	1310	01	-	204	308	229	344	229	285*	5
FREDRICKSON LAKE	4A10	1310	03	68	108	182	114	250	107	160*	7
PINE PASS	4A02P	1400	01	-	548	570	744	1016	509	566	7
TRYGVE LAKE	4A11	1400	04	84	160	242	200	299	126	188	11
SIKANNI LAKE	4C01	1400	04	72	124	171	139	257	65	138	13

PINE PASS	4A02	1430	Not Measured				728	988	314	549	16
MORFEE MOUNTAIN	4A16	1450	Not	Measur	ed	-	-	710	373	596*	3
LADY LAURIER LAKE	4A07	1460	05	96	216	334	275	472	154	249	13
MOUNT SHEBA	4A18	1490	06	207	588	573	465	793	287	489*	8
GERMANSEN (UPPER)	4A05	1500	03	100	228	256	187	364	99	179	14
MOUNT STEARNS	4A21	1500	04	59	91	133	45	151	45	98*	7
JOHANSON LAKE	4B02	1540	03	79	137	230	170	282	90	148	14
MONKMAN CREEK	4A20	1550	Not	Measur	ed	-	311	546	221	306*	7
WARE (UPPER)	4A03	1570	04	71	143	248	119	248	97	172*	7
BULLMOOSE CREEK	4A31	1570	06	116	266	374	340	493	94	284*	9
KWADACHA RIVER	4A27P	1620	01	-	160	198	109	307	109	171	11
SKEENA/NASS											
TERRACE A	4B13A	180	30	68	162	_	154	154	0	65*	14
KAZA LAKE	1A12	1190	03	96	194	263	119	371	113	182*	11
TRYGVE LAKE	4A11	1400	04	84	160	242	200	299	126	188	11
HUDSON BAY MTN.	4B03A	1480	07	144	394	336	280	470	135	254	21
SHEDIN CREEK	4B16P	1480	01	116	405	400	_	400	400	400*	1
JOHANSON LAKE	4B02	1540	03	79	137	230	170	282	90	148	14
LIARD											
FORT NELSON A	4C05	380	30	38	59	101	50	112	20	59*	30
DEASE LAKE	4C03	820	68 57 150			20	70	31			
BLUFF CREEK	4C11P	1040	Not	158	85	158	85	136	4		

DEADWOOD RIVER	4C09P	1300	01	-	58	76	-	211	76	125*	3
SIKANNI LAKE	4C01	1400	04	72	124	171	139	257	65	138	13
STIKINE/ TAKU											
FORREST- KERR CREEK	4D08P	560	01	-	198	317	369	655	317	403*	6
DEASE LAKE	4C03	820	68	57	150	20	70	31			
KINASKAN LAKE	4D11P	1020	01	-	107	168	186	378	143	224*	6
TUMEKA CREEK	4D10P	1220	Not	Measur	ed	329	363	591	314	341	6
WADE LAKE	4D14P	1370	Not	Measur	ed	250	125	344	125	240	6

189

271

268

183

303\*

7

433

## **YUKON**

UPPER STIKINE | 4D13P

A - SAMPLING PROBLEMS WERE ENCOUNTERED

1450

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

01

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

# **FRASER**

February 1, 1997

## **Snow Survey Measurements**

					, T	WATE	R EQU	IVALE	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER FRASER											
PRINCE GEORGE A	1A10	690	31	68	150	130	60	224	52	118	35
PACIFIC LAKE	1A11	770	28	185	544	341	452	679	269	425	29
BURNS LAKE	1A16	800	04	93	230	176	-	198	44	112	26
FORT ST.JAMES	1A07	810	29	93	194	124	97	216	51	134	42
CANOE RIVER	2A01A	910	29	57	104	129	66	140	39	102	22
PHILIP LAKE	4A13	980	03	125	336	238	146	353	124	199	30
HEDRICK LAKE	1A14	1100	28	185	555	444	349	823	316	465	29
BIRD CREEK	1A23	1180	02	85	176	144	112	144	72B	116*	6
KAZA LAKE	1A12	1190	03	118	290	297	125	440	125	229	27
MOUNT SHEBA	4A18	1490	28	211	687	609	596	918	317	543	27
BARKERVILLE	1A03P	1520	01	-	296	-	-	351	163	251	18
MC BRIDE (UPPER)	1A02	1580	31	121	312	312	290	503	174	315	43
KNUDSEN LAKE	1A15	1580	28	165	477	567	430	899	334	613	26
REVOLUTION CREEK	1A17P	1690	01	-	499	649	474	930	462	609	11
LONGWORTH (UPPER)	1A05	1740	28	193	630	494	424	890A	315	523	24
YELLOWHEAD	1A01P	1860	01	140	386	-	_	-	-	-	0

**NECHAKO** 

SKINS LAKE	1B05	880	27	70	224	139	69	201	35	93	29
TAHTSA LAKE	1B02	1300	02	255	835	1015	927	1209	508A	779	42
TAHTSA LAKE	1B02P	1300	01	_	881	_	1030	1030	652	797*	3
KIDPRICE LAKE	4B01	1370	01	218	748	870	566	894B	440	607	39
MOUNT PONDOSY	1B08P	1400	01	-	677	750	747	750	393	571*	4
MOUNT WELLS	1B01	1490	01	158	477	505	417	549B	213	367	13
MOUNT WELLS	1B01P	1490	01	-	530	555	408	555	390	381	4
NUTLI LAKE	1B07	1490	02	160	431	579	492	579	295	414*	5
MOUNT SWANNELL	1B06	1620	02	105	333	283	222	382B	142	219*	8
MIDDLE FRASER											
PUNTZI MOUNTAIN	1C22	940	28	35	64	126	47	126	0	55	27
NAZKO	1C08	1070	01	44	94	88	32	137B	6A	69	20
BIG CREEK	1C21	1140	30	25	49	80	36	100B	0	52	24
GRANITE MOUNTAIN	1C33	1150	30	82	217	195	125	195	125	171*	4
LAC LE JEUNE (LOWER)	1C07	1370	29	57	130	68	112	208	25	91	40
CONANT LAKE	1C31	1370	01	81	241	145	192	196	72	154	15
BRIDGE GLACIER (LOWER)	1C39	1400	27	156	410	460	520	520	460	490*	2
BRALORNE	1C14	1450	27	83	184	110	202	338	0	135	26
SHOVELNOSE MOUNTAIN	1C29	1450	01	100	296	187	217E	265	84	214	17
BONAPARTE LAKE	1C34	1450	01	108	295	252	221	327	204	251*	4
SPAHOMIN	1C30	1450	31	56	148	73	88B	143	10	76	17
BOSS MOUNTAIN MINE	1C20P	1460	01	-	518	566	510	566	510	432	3
BRENDA MINE	2F18P	1460	01	-	368	343	299	343	168	265	4
LAC LE JEUNE (UPPER)	1C25	1460	29	70	177	82	171	171	13	114	24
BARKERVILLE	1A03P	1520	01	-	296	-	-	351	163	251	18

FISH LAKE	1C35	1540	23	36	47B	81	_	123	81	102*	2
							_		01		
FISH LAKE NO. 2	1C35A	1550	23	37	50B	-	-	-	-	-	0
GREEN MOUNTAIN	1C12	1630	27	161	449	496	-	658	119	449	29
MOUNT TIMOTHY	1C17	1660	01	109	315	301	219	376	103	222	30
YANKS PEAK EAST	1C41P	1670	01	178	653	-	-	-	-	-	0
GREEN MOUNTAIN	1C12P	1780	01	-	668	732	808	808	410	650*	3
MCGILLIVRAY PASS	1C05	1800	27	159	454	420	506	618	150	399	45
MISSION RIDGE	1C18P	1850	01	-	457	451	517	794	254	434	10
DOWNTON LAKE (UPPER)	1C38	1890	27	190	552	780	680	780	680	730*	2
TYAUGHTON CREEK (NORTH)	1C40	1950	27	129	360	288	330	330	288	309*	2
BRALORNE (UPPER)	1C37	1980	27	161	498	518	600	600	518	559*	2
LOWER FRASER											
WOLVERINE CREEK	1D13	300	01	95	270	116	136	260A	10A	139	21
SUMMALLO RIVER WEST	3D01C	790	30	113	368	87	200	200	0	97*	5
DISAPPOINTMENT LAKE	1D18P	1040	01	-	1144	-	1597	1597	1597	1597	1
CALLAGHAN CREEK	3A20	1040	01	177	662	336	616	879	50	569	13
DICKSON LAKE	1D16	1070	31	259	1264	398	1220	1220	398	764*	5
DOG MOUNTAIN	3A10	1080	30	203	966	316	980A	980A	316	738	13
BEAVER PASS	WA12	1120	30	213	886	196	627	922	36	487*	28
KLESILKWA	3D03A	1130	01	133	454	62	124	508	0	223	43
STAVE LAKE	1D08	1210	31	256	1043	626	1178	1430	163	984	27
WAHLEACH LAKE	1D09	1400	01	148	526	259A	327	815	33	366	29
WAHLEACH LAKE	1D09P	1400	01	-	1042	573	698	714	573	640*	4

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NAHATLATCH RIVER	1D10	1520	31	251	939	797	1040	1359	262	934	24
EASY PASS	WA13	1580	N/A	940	1680	2184	279	1146	29		
CHILLIWACK RIVER	1D17P	1600	01	308	1560	803	1164	1164	771	1136	5
GREAT BEAR	1D15P	1660	01	-	1391	1241	1353	1353	682	1017	6
TENQUILLE LAKE	1D06	1680	N/A	868	980	1206	241	735	25		
NORTH THOMPSON											
BLUE RIVER	1E01B	670	31	139	339	310	226	319	98	243*	13
KNOUFF LAKE	1E05	1200	01	52	139	117	124	229	38	114	37
COOK FORKS	1E06	1390	30	245	715	736	601	874	353	584	23
BOSS MOUNTAIN MINE	1C20P	1460	01	-	518	566	510	566	510	432	3
MOUNT COOK	1E02A	1580	31	290	975	1098	886	1237	536	824	21
AZURE RIVER	1E08P	1620	01	-	788	-	-	-	-	-	0
ADAMS RIVER	1E07	1720	01	181	582	588	546	588	285	433	16
KOSTAL LAKE	1E10P	1770	01	-	713	764	625	764	415	604	12
NORTH CLEMINA CREEK	1E13	1860	30	189	542	796	549	796	315	608*	8
SOUTH THOMPSON											
ANGLEMONT	1F02	1190	30	131	404	280	303	483	131	259	37
ABERDEEN LAKE	1F01A	1310	29	74	190	151	106	193	48	119	42
MONASHEE PASS	2E01	1370	03	122	364	-	251	351	122	235	37
ADAMS RIVER	1E07	1720	01	181	582	588	546	588	285	433	16
KIRBYVILLE LAKE	2A25	1750	N/A	1160	945	1160	381	770	23		
SILVER STAR MOUNTAIN	2F10	1840	27	195	650	617	553	721	229	481	38
PARK MOUNTAIN	1F03P	1890	01	-	867	743	580	790	384	567	12
ENDERBY	1F04	1900	31	258	900	820	704	928	348	641	34
A - SAMPLING PROP	BLEMS V	VERE :	ENCOU	NTERI	ED						
B - EARLY OR LATE	SAMPL	ING									

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

# **COLUMBIA**

February 1, 1997

					V	VATEF	R EQU	IVALE	ENT (r	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER COLUMBIA											
CANOE RIVER	2A01A	910	29	57	104	129	66	140	39	102	22
DOWNIE SLIDE (LOWER)	2A27	980	03	234	740	680	530	680	256	525	17
GLACIER	2A02	1250	28	185	531	654	428	828	241	493	56
FIELD	2A03A	1280	04	90	233	196	129	196	46	129	57
SUNWAPTA FALLS	AL11	1400	03	89	202	254	99	254	48B	146*	24
VERMONT CREEK	2A19	1520	27	138	371	391	389	574	102	325	29
AZURE RIVER	1E08P	1620	01	-	788	-	-	-	_	-	0
DOWNIE SLIDE (UPPER)	2A29	1630	03	304	1100	1422	1238	1422	466	837	16
KICKING HORSE	2A07	1650	04	120	313	300A	232	384	153	256	50
KIRBYVILLE LAKE	2A25	1750	N/A	1160	945	1160	381	770	23		
MOUNT REVELSTOKE	2A06	1830	27	275	838	1088	803	1161	440	823	41
MOUNT REVELSTOKE	2A06P	1830	01	-	939	1126	740	1126	511	775	4

NORTH CLEMINA CREEK	1E13	1860	30	189	542	796	549	796	315	608*	8
FIDELITY MOUNTAIN	2A17	1870	28	265	864	1260	714	1376	480	842	34
BEAVERFOOT	2A11	1890	28	92	224	212	137	249	81	156	31
KEYSTONE CREEK	2A18	1890	N/A	711	577	866	290	553	29		
GOLDSTREAM	2A16	1920	03	268	880	1136	773	1136	460	756	29
BUSH RIVER	2A23	1920	03	195	574	844	654	902	292	584	30
NIGEL CREEK	AL10	1920	03	121	288	508	267	528	94B	304*	24
MOUNT ABBOT	2A14	1980	29	252	789	1209	723	1209	473	836	38
MOLSON CREEK	2A21P	1980	01	-	721	922	747	1155	417	739	15
SUNBEAM LAKE	2A22	2010	03	202	602	827	575	886	405	641	30
MIRROR LAKE	AL06	2030	27	105	244	284	208	348	104	219*	29
BOW SUMMIT II	AL07A	2080	27	115	236	411	267	480	86B	279*	17
LOWER											
COLUMBIA											
FERGUSON	2D02	880	05	184	616	573	509	573	251	385	25
BAIRD	WA02	980	28	109	295	84	224	236	20	145*	37
FARRON	2B02A	1220	N/A	237	257	346	63	236	24		
MONASHEE PASS	2E01	1370	03	122	364	-	251	351	122	235	37
WHATSHAN (UPPER)	2B05	1480	03	212	759	558	-	704	249	447	27
BARNES CREEK	2B06	1620	03	171	612	481	373	488	196	341	29
BARNES CREEK	2B06P	1620	01	-	566	484	327	484	327	412*	4
ST. LEON CREEK	2B08	1800	03	283	1092	1080	834	1247	475	834	28
ST. LEON CREEK	2B08P	1800	01	-	829	-	781	781	524	739	3
KOCH CREEK	2B07	1860	03	197	708	586	674	674	203	476	29
RECORD MOUNTAIN	2B09	1890	01	193	645	433	738	738	117	496	22
EAST CREEK	2D08P	2030	01	-	611	955	719	1012	306	644	16

EAST KOOTENAY											
FERNIE EAST	2C07	1250	29	133	406	-	237	467	51	252	43
MARBLE CANYON	2C05	1520	31	137	296	363	232	505	130	258	48
SULLIVAN MINE	2C04	1550	31	131	397	245	213	381	46	228	51
WEASEL DIVIDE	MT02	1660	29	236	813	706	599	858	185	531*	13
MOUNT JOFFRE	2C16	1750	27	135	357	373	213	439	107	265	25
MORRISSEY RIDGE	2C09Q	1800	01	-	727	534	547	886	346	500	13
MOYIE MOUNTAIN	2C10	1940	29	139	480	334	248	447	127	293	27
ALLISON PASS	AL01	1980	04	153	518	424	_	521	251	361*	7
THUNDER CREEK	2C17	2010	27	104	261	240	164	335	69	192	25
FLOE LAKE	2C14	2090	27	205	620	688	554	811	287	531	27
FLOE LAKE	2C14P	2090	01	-	574	634	-	634	238	465	2
HIGHWOOD SUMMIT (BUSH)	AL02	2210	27	113	320	376	244	480	132	275*	17
MOUNT ASSINIBOINE	2C15	2230	27	152	415	526	381	592	170	362	27
SUNSHINE VILLAGE	AL05	2230	27	156	386	559	422	678	231	431*	11
WEST KOOTENAY											
DUNCAN LAKE NO. 2	2D07A	650	29	93	283	162	88	199	60	132*	6
FERGUSON	2D02	880	05	184	616	573	509	573	251	385	25
NELSON	2D04	930	04	154	508	236	352	419	79	276	58
CHAR CREEK	2D06	1310	31	188	650	362	471	610	117	382	31
GRAY CREEK (LOWER)	2D05	1550	27	150	484	304	328	511	127	305	48
KOCH CREEK	2B07	1860	03	197	708	586	674	674	203	476	29
MOUNT TEMPLEMAN	2D09	1860	27	227	1143	1020	770	1115	452	738	29

GRAY CREEK (UPPER)	2D10	1910	27	207	672	634	512	792	268	518	28
MEADOW MOUNTAIN	2D13	1990	02	226	809	-	672	672	425	542*	3
EAST CREEK	2D08P	2030	01	-	611	955	719	1012	306	644	16
KETTLE											
FARRON	2B02A	1220	N/A	237	257	346	63	236	24		
GOAT CREEK	WA04	1220	28	81	201	119	165	224	20	133*	35
MONASHEE PASS	2E01	1370	03	122	364	-	251	351	122	235	37
SUMMIT G.S.	WA05	1400	28	94	244	127	211	236	41	143*	35
BIG WHITE MOUNTAIN	2E03	1680	31	145	458	386	404	483	183	317	31
OKANAGAN											
SUMMERLAND RESERVOIR	2F02	1280	30	95	238	212	215	307	66	175	32
MC CULLOCH	2F03	1280	30	73	175	137	152	196	57	120	60
ABERDEEN LAKE	1F01A	1310	29	74	190	151	106	193	48	119	42
OYAMA LAKE	2F19	1340	01	79	184	157	150E	193	31	126	28
POSTILL LAKE	2F07	1370	30	90	243	185	158	216	73	140	46
TROUT CREEK	2F01	1430	30	79	180	179	153	292	33A	136	59
BRENDA MINE	2F18P	1460	01	-	368	343	299	343	168	265	4
ISLAHT LAKE	2F24	1480	28	110	314	274	364	364	134	229	13
GREYBACK RESERVOIR	2F08	1550	30	93	244	214	194	269	60	155	26
ISINTOK LAKE	2F11	1680	31	63	151	160	138	307	26	133	31
MUTTON CREEK NO. 1	WA07	1740	28	127	422	221	373	480	43	247*	34
MISSION CREEK	2F05	1780	28	156	458	-	_	485	175	336	35
MISSION CREEK	2F05P	1780	N/A	315	345	443	152	299	26		
GRAYSTOKE LAKE	2F04	1810	28	111	318	-	-	297	297	297*	1
MOUNT KOBAU	2F12	1810	29	107	331	212	260	373	43	215	30

WHITEROCKS MOUNTAIN	2F09	1830	31	142	453	361	504	693	135	392	26
SILVER STAR MOUNTAIN	2F10	1840	27	195	650	617	553	721	229	481	38
SIMILKAMEEN											
FREEZEOUT CREEK TRAIL	WA11	1070	30	117	409	79	264	462	13	221*	27
HAMILTON HILL	2G06	1490	26	123	346	281	240	411	104	256	33
MISSEZULA MOUNTAIN	2G05	1550	01	83	241	193	245	284	61	166	30
ISINTOK LAKE	2F11	1680	31	63	151	160	138	307	26	133	31
LOST HORSE MOUNTAIN	2G04	1920	03	82	216	212	178	335	70	160	36
BLACKWALL PEAK	2G03P	1940	01	-	817	600	628	1076	159	597	29
HARTS PASS	WA09	1980	29	277	917	828	828	1328	246	778*	42
A - SAMPLING PR	OBLEMS	WERI	E ENCO	UNTER	RED						
B - EARLY OR LA	TE SAME	PLING									

## C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

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

# **COASTAL**

February, 1997

					V	VATE	R EQU	IVALI	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
SOUTH COASTAL											
PALISADE LAKE	3A09P	880	N/A	-	790	790	790	790*	1		
CHAPMAN CREEK	3A26	1022	31	254	1010	-	1250	1250	546	839*	3
CALLAGHAN CREEK	3A20	1040	01	177	662	336	616	879	50	569	13
EDWARDS LAKE	3A27	1070	31	193	790	-	944	944	410	644*	3
DOG MOUNTAIN	3A10	1080	30	203	966	316	980A	980A	316	738	13
GROUSE MOUNTAIN	3A01	1100	30	236	1056	420	966	1273	50	788	47
ORCHID LAKE	3A19	1190	27	313	1278	780	1503	1624	408	1185	19
ORCHID LAKE	3A19P	1190	N/A	-	1185	1844	491	1220	13		
UPPER SQUAMISH RIVER	3A25P	1340	01	312	1196	896	1260	1406	802	1042	5
TIEDEMANN GLACIER	3A17P	1400	01	-	625	1308	1088	1308	388	876*	4
NOSTETUKO RIVER	3A22P	1500	01	-	366	533	628	628	203	422*	8

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UPPER MOSELY CREEK	3A24P	1650	01	-	155	283	274	509	107	229	8		
VANCOUVER ISLAND													
ELK RIVER	3B04	270	04	51	174	19	0	544	0	125	37		
WOLF RIVER (LOWER)	3B19	640	04	103	358	20	382	528	0	263	24		
TENNENT LAKE	3B22	950	05	178	620E	-	-	872	202B	623	8		
WOLF RIVER (MIDDLE)	3B18	1070	04	133	460	192	724	742	16	408	25		
FORBIDDEN PLATEAU	3B01	1130	04	264	1085	452	1538	1538	42	961	41		
JUMP CREEK	3B23P	1160	01	163	911	206	-	206	206	206*	1		
SNO-BIRD LAKE	3B16	1400	24	227	963B	430	1188	1443	51	808	31		
WOLF RIVER (UPPER)	3B17P	1490	N/A	546	1371	1371	501	862	8				
NORTH COASTAL													
TAHTSA LAKE	1B02	1300	02	255	835	1015	927	1209	508A	779	42		
TAHTSA LAKE	1B02P	1300	01	-	881	-	1030	1030	652	797*	3		
SKAGIT													
SUMALLO RIVER WEST	3D01C	790	30	113	368	87	200	200	0	97*	5		
FREEZEOUT CREEK TRAIL	WA11	1070	30	117	409	79	264	462	13	221*	27		
BEAVER PASS	WA12	1120	30	213	886	196	627	922	36	487*	28		
KLESILKWA	3D03A	1130	01	133	454	62	124	508	0	223	43		
HARTS PASS	WA09	1980	29	277	917	828	828	1328	246	778*	42		
A - SAMPLING P	A - SAMPLING PROBLEMS WERE ENCOUNTERED												
B - EARLY OR L	ATE SAN	/PLIN	3										
C - EARLY OR L	ATE SAN	/PLIN	G WITH	PROBI	LEMS I	ENCO	UNTE	RED					

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

# **NORTH**

February 1, 1997

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
PEACE											
FORT ST. JOHN A	4A25	690	02	63	154	146	44	146	44	84	23
MACKENZIE A	4A19	700	31	94	256	192	158	305	58	175	24
PACIFIC LAKE	1A11	770	28	185	544	341	452	679	269	425	29
BULLHEAD MOUNTAIN	4A28	790	31	57	122	149	58	149	20	65*	13
WARE (LOWER)	4A04	980	04	80	171	195	74	286	63	127	28
PHILIP LAKE	4A13	980	03	125	336	238	146	353	124	199	30
AIKEN LAKE	4A30P	1040	01	-	180	289	142	330	142	208*	10
TUTIZZI LAKE	4A06	1070	03	99	213	256	144	348	109	181	28
TSAYDAYCHI LAKE	4A12	1160	03	144	381	355	220	507	146	270	29
PINK MOUNTAIN	4A14	1170	05	57	98	138	34	138	25	64	22
KAZA IAKE	1A12	1190	03	118	290	297	125	440	125	229	27
PULPIT LAKE	4A09	1310	04	120	272	369	244	530	190	293	25
PULPIT LAKE	4A09P	1310	01	-	299	366	232	405	232	321	6
FREDRICKSON LAKE	4A10	1310	03	82	161	235	117	309	110	173	28
PINE PASS	4A02P	1400	01	-	762	-	866	1241	817	823	5
TRYGVE LAKE	4A11	1400	04	104	224	326	224	434	183	255	27

LIARD											
TERRACE A	4B13A	1805	29	109	246	154	182	250	0	150	17
JOHANSON LAKE	4B02	1540	03	95	214	297	178	355	115	202	26
HUDSON BAY MTN.	4B03A	1480	31	166	477	463	328	665	221	361	25
SHEDIN CREEK	4B16P	1480	01	191	600	693	-	693	693	693*	1
TRYGVE LAKE	4A11	1400	04	104	224	326	224	434	183	255	27
KIDPRICE LAKE	4B01	1370	01	218	748	870	566	894B	440	607	39
KAZA LAKE	1A12	1190	03	118	290	297	125	440	125	229	27
NINGUNSAW PASS	4B10	690	30	126	298	280A	316	603	171	308	22
BEAR PASS	4B11A	460	01	140	412	297	418	821	297	627	13
SKEENA/NASS	ı	J		1.	1		1		,	J	1
KWADACHA RIVER	4A27P	1620	01	-	232	258	139	371	139	230	12
BULLMOOSE CREEK	4A31	1570	04	136	376	469	414	539B	217	364*	9
WARE (UPPER)	4A03	1570	04	83	180	289	-	289	108	178	26
MONKMAN CREEK	4A20	1550	28	148	426	501	336	775	238	418	20
JOHANSON LAKE	4B02	1540	03	95	214	297	178	355	115	202	26
MOUNT STEARNS	4A21	1500	04	58	115	196	56	196	41	107	22
GERMANSEN (UPPER)	4A05	1500	03	121	309	272	199	371	140	241	28
MOUNT SHEBA	4A18	1490	28	211	687	609	596	918	317	543	27
LADY LAURIER LAKE	4A07	1460	05	120	307	519	281	635	226	343	25
MORFEE MOUNTAIN	4A16	1450	05	221	772	727	532	952	323	579	28
PINE PASS	4A02	1430	05	254	856	988	832	1194	411	771	26
SIKANNI LAKE	4C01	1400	04	87	184	252	139	325	81	178	27

FORT NELSON A	4C05	380	01	46	77	119	50	128	48	86	31	
DEASE LAKE	4C03	820	31	49	102	124	56A	202	36	104	32	
BLUFF CREEK	4C11P	1040	N/A	204	98	308	98	189	6			
DEADWOOD RIVER	4C09P	1300	01	-	73	113	-	207	113	146*	3	
CASSIAR	4C04	1390	28	80	153	-	211	452	137	234	32	
SIKANNI LAKE	4C01	1400	04	87	184	252	139	325	81	178	27	
STIKINE/TAKU												
FORREST- KERR CREEK	4D08P	560	01	-	360	439	402	570	402	472*	5	
TELEGRAPH CREEK	4D01	580	01	28	53	-	79	244	51	131	17	
NINGUNSAW PASS	4B10	690	30	126	298	280A	316	603	171	308	22	
DEASE LAKE	4C03	820	31	49	102	124	56A	202	36	104	32	
ISKUT	4D02	1000	30	37	75	82	50	162	36	88	23	
KINASKAN LAKE	4D11P	1020	01	-	155	241	207	516	207	323*	6	
TUMEKA CREEK	4D10P	1220	01	-	274	463	384	744	384	449	7	
WADE LAKE	4D14P	1370	N/A	277	125	410	125	295	6			
UPPER STIKINE	4D13P	1450	01	-	253	378	311	552	305	307	7	
YUKON												
ATLIN LAKE	4E02A	730	27	35	54	128	79	175	54	103*	13	
A - SAMPLING PI	ROBLEM	S WER	E ENCO	UNTER	RED							
B - EARLY OR LA	ATE SAM	PLING										
C - EARLY OR LA	C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED											
E - ESTIMATED E	E - ESTIMATED BASED ON AREAL AVERAGE											
* - PERIOD OF RE	ECORD A	VERA	GE									

# SNOWPACK and WATER SUPPLY OUTLOOK in BRITISH COLUMBIA

#### March 1, 1997

The March 1 snow survey has been conducted throughout the province with a total of 190 snow courses being measured. These readings, together with data from 42 snow pillows, 24 snow courses from adjacent jurisdictions and weather and flow data provided by Environment Canada have been used in making the following reports.

#### **Snowpack**

Accumulations of snow around the province during February were generally below normal. This means that many areas which were above normal a month ago are now close to normal. The snowpacks in the Stikine River basin in the north and Vancouver Island on the west are both below normal while those in the South Thompson, the Kootenays and the Similkameen are above normal and the Okanagan-Kettle is well above normal. Elsewhere snowpacks are within 10% of their normal readings for this date.

#### Weather

The majority of the province received less than normal precipitation during February - the exceptions were the Nechako and Liard basins and the Peace River area which were slightly above normal. November through February accumulations, however, remain above normal for all areas except Vancouver Island and the northwest regions of the province. Mean temperatures during February varied from 6°C above normal at the Alaskan border to just below normal in the Okanagan.

#### Outlook

Snow can be expected to accumulate at higher elevations for at least another month, about 80% of the peak snowpack typically having fallen by March 1. This means that the weather in the next 4 to 6 weeks will have an effect on the volume of snow available for runoff during the freshet. However, unless conditions alter substantially, it appears that runoff volumes will be well above normal in the Nicola, South Thompson, Similkameen, Okanagan, Kettle, lower Columbia and Kootenays and above normal elsewhere with the exception of the northwest and Vancouver Island. Whether these higher volume runoffs result in flooding is dependent on the weather patterns during the melt in May and June.

#### UPPER FRASER AND NECHAKO

Precipitation during February was a little below normal with the accumulated precipitation since the beginning of November about 11% above normal. February mean temperatures were about 2°C above normal.

Snowpack accumulations during February were a little above normal with the result that the regional snow water equivalent index has risen from normal at the beginning of the month to 3% above normal by the end. The western portions of the basin including the Nechako River and reservoir and the Stuart River, have snowpacks that are more above normal than the rest of the basin

The natural flow as indicated by the Fraser River at Marguerite was a little below normal for the month.

#### MIDDLE AND LOWER FRASER

Lower than normal precipitation during February has resulted in less than normal accumulations at most snow courses. As a result, the regional snowpack indices are for 107% and 110% of normal for the middle and lower Fraser basins, respectively.

Snowpacks along the eastern boundary of the middle Fraser are well above normal with above normal volume runoff likely in the Quesnel, Williams Lake and Deadman Rivers. In the Nicola basin the snowpack is at near record levels. For example, Spahomin snowcourse (1C30) which has 17 years of data at this sampling period, reports a record high water equivalent, 25% greater than previously recorded.

Peak flows during the freshet will depend on weather patterns during the remainder of the accumulation period and through the melt season. With near-record runoff possible in the Nicola basin, every effort will be made to draw down the lake to provide as much storage as possible. However, high lake levels and outflows seem quite likely. The volume runoff of the Fraser River at Hope is likely to be a little above normal, but unless there are abnormal weather patterns in the next few months, damaging flooding in the lower mainland area is not likely.

### NORTH AND SOUTH THOMPSON

Temperatures close to normal and precipitation below normal during the month of February resulted in below normal accumulations of snow. This has resulted in a dramatic reduction in the regional snowpack index in the South Thompson basin from 44% above normal a month ago to 22% above normal now. The corresponding figures for the North Thompson basin are 117% and 107%.

Despite this, volume runoff is anticipated to be above normal in the North Thompson and well above normal in the South Thompson basin. As a result, higher than normal peak flows can be

anticipated during the freshet but whether flood stage will be reached will depend on the weather patterns in the next month and on melt patterns during the freshet in May and June.

The natural flow as indicated by the flow in the Thompson River near Spences Bridge continued to be above normal during February.

#### **UPPER AND LOWER COLUMBIA**

Precipitation in the Columbia Basin during February was estimated at 73% of normal with the November through February accumulation dropping from 140% on February 1 to 128% on March 1. The valley temperatures for February were about 0.5°C above normal.

Basin runoff, as indicated by the Columbia River at Donald, remained near the 1961-90 normal during February.

## EAST AND WEST KOOTENAY

The regional snowpack has decreased from 136% of normal a month ago to 124% of normal as of March 1, as a result of below normal precipitation during February. Snow courses report well above normal snow packs in many areas of both the East and West Kootenays. In the East Kootenay, Sinclair Pass (2C01), for example, reports 147% of normal and Gray Creek Lower (2D05), in the West, is 146% of normal.

The mean temperature at valley stations during February was about 0.5°C above normal. February precipitation was reported to be well below normal at only 56% of its 30-year normal, considerably lower than the preceding 4 months.

Runoff in the basin, indicated by the Kootenay River at Fort Steele remains close to the 1961 to 1990 normal, however with the heavy snowpacks, runoff from unregulated watersheds during the freshet can be expected to exceed normal volumes. Peak flows will depend on weather patterns during the freshet.

### OKANAGAN, SIMILKAMEEN AND KETTLE

Temperatures were a little below normal during February and this, combined with below normal precipitation, resulted in near normal snowpack accumulations in the Okanagan and Kettle valleys where the regional snowpack is estimated at 132% of normal compared with 135% a month ago. In the Similkameen basin, February accumulations were below normal and the regional snowpack index has dropped from 135% of normal a month ago to 117% on March 1.

Seasonal volume runoff is expected to be above normal in all three basins and this will probably result in above normal peak flows. Whether flows and lake levels reach flood stage will depend largely on weather patterns over the next three or four months, particularly during the snowmelt in May and June. In anticipation of above normal runoff, releases from both Kalamalka and Okanagan lakes have been as high as practicable for some time to provide as much storage space

for the freshet runoff as possible. High flows in the Okanagan River channel are likely throughout the spring.

Inflow to Okanagan Lake during February was more than twice normal. This was the 19th consecutive month in which inflows to the lake were greater than normal. Despite this, Okanagan Lake is now lower than it was at this time last year.

#### SOUTH COASTAL AND VANCOUVER ISLAND

March 1 snowpack patterns in the South Coast region continue the trends established earlier this winter. Snowcourses in the lower mainland area are above normal, while the snowpack farther north is below normal. February precipitation at low elevation weather stations was below normal, bringing the November through February total to 109% of normal.

Vancouver Island snow surveys indicate a March 1 snowpack that is below normal, especially at lower elevation snow courses. Precipitation was well below normal for February, and the seasonal total is near normal.

For both the South Coast and Vancouver Island, mean monthly temperatures were a little below normal for September through December, but have warmed to about 1°C above normal for January and February.

Inflow to Upper Campbell Lake on Vancouver Island was below normal for February. Inflow has been quite variable throughout this winter - this is not uncommon for coastal watersheds where winter runoff depends highly on storm paths and temperatures.

#### **NORTHEASTERN**

The overall March 1 snowpack in the Peace River basin is near normal, but some low elevation snow courses report record high water content for this date. The Liard basin snowpack is also near normal for this date, which is an increase compared to last month.

Based on very little data, precipitation at weather stations in the Peace was near normal for February, while the total since November is above normal. In the Liard basin, February precipitation was above normal but the seasonal total remains below normal. February mean temperatures in northeastern British Columbia ranged from 3 to 6°C above normal, reversing the cold trend of the preceding months.

Inflow to Williston Lake is used as an indicator of regional runoff - this was normal for November and above normal for December through February.

#### **NORTHWESTERN**

Overall snowpack in the Skeena-Nass accumulated less than the normal amount during February with the snowpack index for this very large area estimated to be 105% of normal. However, March 1 surveys show several snow courses in the headwaters of the Babine and Bulkley Rivers

have record high water equivalents. To the north in the Stikine-Taku and Yukon River basins, most snow courses report below normal water content for March 1 surveys.

Precipitation measured at weather stations in February was below normal near Terrace and Smithers, but above normal farther north. Temperatures have been colder than normal since September, but this trend reversed during February with mean temperatures varying from 2°C above normal near Smithers to 6°C above normal near the Yukon border.

Streamflow in the Skeena River at Usk was just below normal for February, up somewhat from the preceding three months. These low flows are likely due to the cold temperatures experienced this winter.

# **FRASER**

March 1, 1997

	V										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER FRASER											
PRINCE GEORGE A	1A10	690	28	45	188	145	82	296	33	142	35
PACIFIC LAKE	1A11	770	27	198	677	440	532	832	277	544	34
MCBRIDE (LOWER)	1A22	790	28	63	166	108	74	280	44	154	22
BURNS LAKE	1A16	800	28	85	240	174	-	240	60	136	25
FORT ST.JAMES	1A07	810	23	85	218	144	120B	277	68	154	42
CANOE RIVER	2A01A	910	24	42	119	142	82	251	32	133	56
PHILIP LAKE	4A13	980	28	117	352	288	215	382	152	249	33
HEDRICK LAKE	1A14	1100	27	222	729	548	452	954	330	588	29
MCBRIDE (MIDDLE)	1A20	1160	28	124	350	298	264	411	174	337	23
BIRD CREEK	1A23	1180	26	85	232	142	148A	170	102	132*	7
KAZA LAKE	1A12	1190	28	122	326	397	226	478	186	282	31
LU LAKE	4B15	1300	28	125	406	356	260	356	172	274	18
FORFAR CREEK (UPPER)	1A24	1410	27	180	648	546	470	546	408	475*	3
EQUITY MINE	4B14	1420	25	153	514	460	340	462	234	302	19
MOUNT SHEBA	4A18	1490	27	250	901	730	737	1037	394	697	26
BARKERVILLE	1A03P	1520	01	-	375	-	-	479	194	324	18
MC BRIDE (UPPER)	1A02	1580	28	131	362	356	339	594	182	389	43

KNUDSEN LAKE	1A15	1580	27	218	679	687	544	1098	422	772	26
NARROW LAKE	1A21	1650	25	283	939	632	703	1300	419	739	22
REVOLUTION CREEK	1A17P	1690	01	-	654	745	622	1119	622	759	11
LONGWORTH (UPPER)	1A05	1740	27	279	870	632	514	1104	307	637	39
DOME MOUNTAIN	1A19	1820	24	213	689	538	601	981	351	680	23
MARMOT JASPER	AL12	1830	26	82	213	251	183	314	111	210*	13
YELLOWHEAD	1A01	1860	24	140	414	624	468	660	185	438	26
YELLOWHEAD	1A01P	1860	01	140	439	-	-	_	-	-	0
HOLMES RIVER	1A18	1900	24	202	571	662	572	910	321	642	23
NECHAKO											
SKINS LAKE	1B05	880	28	56	160	159	110A	226	54	119	33
TAHTSA LAKE	1B02	1300	26	270	1019	1119	1171	1405	571	980	45
TAHTSA LAKE	1B02P	1300	01	-	1158	-	1198	1198	661	953*	3
KIDPRICE LAKE	4B01	1370	26	225	838	988	821	1101	429	773	45
MOUNT PONDOSY	1B08P	1400	01	_	799	853	887	887	405	684*	4
MOUNT WELLS	1B01	1490	27	154	555	549	437	886	277	455	44
MOUNT WELLS	1B01P	1490	01	-	607	597	469	597	396	493	4
NUTLI LAKE	1B07	1490	27	157	511	624	539	651	304	523*	6
MOUNT SWANNELL	1B06	1620	26	112	300	295	232	446	189	274*	8
MIDDLE FRASER											
PASS LAKE	1C04	870	27	50	112	118	78	196	0	93	37
PUNTZI MOUNTAIN	1C22	940	27	18	66	128	44	128	0	62	26
BROOKMERE	1C01	980	04	100	289	226	185	351	53	200	52
NAZKO	1C08	1070	02	45	107	81	45	155	0	83	20
BIG CREEK	1C21	1140	28	18	40	90	37	112	0	54	25
GRANITE MOUNTAIN	1C33	1150	28	85	254	215	133	215	133	184*	4
DUFFY LAKE	1C28	1200	28	155	556	356	472	606	194	442	18
PAVILION	1C06	1230	02	33	89	54	61	168	0	82	40

LAC LE JEUNE (LOWER)	1C07	1370	25	58	163	88	130	244	20	112	38
CONANT LAKE	1C31	1370	23	93	267	187	213	222	102	196	14
BRIDGE GLACIER (LOWER)	1C39	1400	25	142	476	590	620	620	590	605*	2
TRANQUILLE LAKE	1C03	1420	27	90	226	182	192	307	99	199	36
DEADMAN RIVER	1C32	1430	28	49	110	74	71	170	62	112	13
BRALORNE	1C14	1450	25	71	212	119	218	363	0	166	33
BONAPARTE LAKE	1C34	1450	26	114	312	308	254	309	254	283*	4
SHOVELNOSE MOUNTAIN	1C29	1450	23	92	309	244	256	303	104	258	16
SPAHOMIN	1C30	1450	28	57	160	80	88	128	33	90	17
BOSS MOUNTAIN MINE	1C20P	1460	01	171	604	619	570	619	570	503	3
BRENDA MINE	2F18P	1460	01	-	412	427	339	427	220	329	4
LAC LE JEUNE (UPPER)	1C25	1460	25	72	213	105	169	213	13A	141	24
BRENDA MINE	2F18	1460	25	108	337	354	284	495	130	292	28
BOSS MOUNTAIN MINE	1C20	1500	23	183	604	588	557	664	348	489	28
HIGHLAND VALLEY	1C09A	1510	26	63	149	59	84	229	25A	95	31
BARKERVILLE	1A03P	1520	01	-	375	-	-	479	194	324	18
FISH LAKE	1C35	1540	24	25	57	74	155	162	74	130*	3
HORSEFLY MOUNTAIN	1C13A	1550	26	168	536	568	388	624	238	379	25
FISH LAKE NO. 2	1C35A	1550	24	28	46	-	-	-	-	-	0
GNAWED MOUNTAIN	1C19	1580	26	65	146	62	110	259	15	123	29
GREEN MOUNTAIN	1C12	1630	25	156	514	685	-	909	196	554	33
MOUNT TIMOTHY	1C17	1660	02	124	363	329	243	439	141	285	34
YANKS PEAK EAST	1C41P	1670	01	268	818	-	-	-	-	-	0

PENFOLD CREEK	1C23	1680	25	275	970	966	846	1132	494	816	22
YANKS PEAK	1C24	1710	25	234	755	693	646	964	366	653	23
TATLAYOKO LAKE	3A13	1710	01	56	139	323	274	485	63	226	33
GREEN MOUNTAIN	1C12P	1780	01	-	704	887	923	923	690	833*	3
MCGILLIVRAY PASS	1C05	1800	25	160	574	538	592	1016	222	512	45
PORCUPINE RIDGE	1C02	1830	Not	Measur	ed	304	341	472	202	355	27
MISSION RIDGE	1C18P	1850	01	-	500	561	607	866	269	529	10
DOWNTON LAKE (UPPER)	1C38	1890	25	187	662	964	928	964	928	946*	2
TYAUGHTON CREEK (NORTH)	1C40	1950	25	135	416	388	420	420	388	404*	2
PAVILION MOUNTAIN	1C36	1960	02	87	248	197	230	230	197	214*	2
BRALORNE (UPPER)	1C37	1980	25	170	612	634	748	748	634	691*	2
LOWER FRASER											
WOLVERINE CREEK	1D13	300	01	64	230	120	100	226	0	139	21
SUMMALLO RIVER WEST	3D01C	790	28	119	442	89	188	202	79	139*	5
BROOKMERE	1C01	980	04	100	289	226	185	351	53	200	52
DISAPPOINTMENT LAKE	1D18P	1040	01	-	1284	-	1746	1746	1746	1746	1
CALLAGHAN CREEK	3A20	1040	03	201	720	454	852	1260	200	853	19
DICKSON LAKE	1D16	1070	Not	Measur	red	542	1358	1358	542	980*	6
DOG MOUNTAIN	3A10	1080	26	253	1170	345	1197	1197	345	1011	13
BEAVER PASS	WA12	1120	26	231	924	411	610	1240	30	642*	48
KLESILKWA	3D03A	1130	28	132	508	62	102	759	0	283	46
DUFFEY LAKE	1C28	1200	28	155	556	356	472	606	194	442	18
STAVE LAKE	1D08	1210	04	318	1190	846	1353	2047	353	1335	30
WAHLEACH LAKE	1D09	1400	28	164	604	323	382	1072	86	521	30

					1						_
WAHLEACH LAKE	1D09P	1400	01	_	1213	698	741	826	646	721*	5
NAHATLATCH RIVER	1D10	1520	04	307	1190	1067	1220	1897	450	1193	28
EASY PASS	WA13	1580	24	508	2388	1346	2184	2913	478	1659	34
CHILLIWACK RIVER	1D17P	1600	01	_	1567	1050	-	1157	827	1338	4
GREAT BEAR	1D15P	1660	01	_	1669	1490	1752	1752	708	1254	6
TENQUILLE LAKE	1D06	1680	27	251	940	965	1148	1539	410	973	43
NORTH THOMPSON											
BLUE RIVER	1E01B	670	28	127	410	341	271	360	224	291	14
PASS LAKE	1C04	870	27	50	112	118	78	196	0	93	37
KNOUFF LAKE	1E05	1200	01	62	166	141	126	284	36	134	38
COOK FORKS	1E06	1390	28	251	880	906	722	1288	453	782	34
TRANQUILLE LAKE	1C03	1420	27	90	226	182	192	307	99	199	36
BOSS MOUNTAIN MINE	1C20P	1460	01	171	604	619	570	619	570	503	3
BOSS MOUNTAIN MINE	1C20	1500	23	183	604	588	557	664	348	489	28
MOUNT COOK	1E02A	1580	01	318	1142	1283	1032	1311	573	1024	23
AZURE RIVER	1E08	1620	25	254	911	1262	958	1262	475	875	23
AZURE RIVER	1E08P	1620	01	233	923	-	-	-	-	-	0
ADAMS RIVER	1E07	1720	26	189	650	660	638	777	262	564	26
KOSTAL LAKE	1E10P	1770	01	_	822	874	709	887	519	721	12
PORCUPINE RIDGE	1C02	1830	Not	Measur	ed	304	341	472	202	355	27
TROPHY MOUNTAIN	1E03A	1860	01	177	566	455	412	619	281	447	22
NORTH CLEMINA CREEK	1E13	1860	24	192	554	860	709	899	355	717*	8
SOUTH THOMPSON											
ANGLEMONT	1F02	1190	27	137	494	342	328	635	200	332	40
ABERDEEN LAKE	1F01A	1310	26	79	218	195	122	231	51	144	43

MONASHEE PASS	2E01	1370	Not	Measur	ed	354	271	442	149	301	38
BOULEAU LAKE	2F21	1400	23	118	360	248	312	432A	165	296	26
ADAMS RIVER	1E07	1720	26	189	650	660	638	777	262	564	26
KIRBYVILLE LAKE	2A25	1750	24	285	995	1342	1127	1342	526	935	23
SILVER STAR MOUNTAIN	2F10	1840	23	203	764	759	674	912	361	607	38
PARK MOUNTAIN	1F03P	1890	01	-	1021	898	664	909	559	707	12
ENDERBY	1F04	1900	28	291	1030	906	775	1160	523	831	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

# **COLUMBIA**

March 1, 1997

					V	VATEF	R EQU	IVALE	ENT (1	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER COLUMBIA											
CANOE RIVER	2A01A	910	24	42	119	142	82	251	32	133	56
DOWNIE SLIDE (LOWER)	2A27	980	24	236	792	852	634	852	378	665	19
GLACIER	2A02	1250	27	204	692	805	596	952	251	633	57
FIELD	2A03A	1280	24	87	248	246	172	246	53	158	57
SUNWAPTA FALLS	AL11	1400	26	82	208	274	145	277	79	172*	25
VERMONT CREEK	2A19	1520	25	136	440	514	511	643	152	409	30
AZURE RIVER	1E08	1620	25	254	911	1262	958	1262	475	875	23
AZURE RIVER	1E08P	1620	01	233	923	-	-	-	_	-	0
DOWNIE SLIDE (UPPER)	2A29	1630	Not	Measur	ed	1414	1440	1524	666	1048	18
KICKING HORSE	2A07	1650	24	134	382	381	305	462	178	313	50
KIRBYVILLE LAKE	2A25	1750	24	285	995	1342	1127	1342	526	935	23
MOUNT REVELSTOKE	2A06	1830	23	306	1170	1248	950	1344	573	1025	39
MOUNT REVELSTOKE	2A06P	1830	01	-	1091	1254	926	1254	537	997	3

ı											
NORTH CLEMINA CREEK	1E13	1860	24	192	554	860	709	899	355	717*	8
FIDELITY MOUNTAIN	2A17	1870	25	317	1126	1403	987	1703	534	1068	34
BEAVERFOOT	2A11	1890	25	88	259	268	177	333	94	200	35
KEYSTONE CREEK	2A18	1890	Not	Measur	ed	901	669	1013	366	690	29
GOLDSTREAM	2A16	1920	24	293	950	1341	927	1351	553	943	33
BUSH RIVER	2A23	1920	24	202	641	966	756	1078	281	712	29
NIGEL CREEK	AL10	1920	26	108	302	588	389	655	135	374*	25
MOUNT ABBOT	2A14	1980	28	281	1040	1281	830	1448	508	1046	37
MOLSON CREEK	2A21P	1980	01	-	810	-	929	1109	437	889	14
SUNBEAM LAKE	2A22	2010	24	222	747	1002	714	1090	389	777	29
MIRROR LAKE	AL06	2030	24	114	318	358	277	483	124	260*	30
BOW SUMMIT II	AL07A	2080	24	112	320	-	356	533	124	326*	17
LOWER COLUMBIA											
FERGUSON	2D02	880	25	186	668	692	620	692	332	521	45
BAIRD	WA02	980	27	117	368	140	221	269	0	177*	38
FARRON	2B02A	1220	27	126	405	333	304	450	79	301	24
MONASHEE PASS	2E01	1370	Not	Measur	ed	354	271	442	149	301	38
WHATSHAN (UPPER)	2B05	1480	Not	Measur	ed	726	595	881	340	573	36
BARNES CREEK	2B06	1620	Not	Measur	ed	536	379	605	251	430	36
BARNES CREEK	2B06P	1620	01	-	682	566	367	566	367	470*	3
ST. LEON CREEK	2B08	1800	Not	Measur	ed	1243	1058	1590	658	1052	29
ST. LEON CREEK	2B08P	1800	01	-	1020	-	982	992	554	969	3
KOCH CREEK	2B07	1860	Not	Measur	ed	746	668	846	269	605	34

RECORD MOUNTAIN	2B09	1890	24	214	723	594	777	900	147	629	22
EAST CREEK	2D08P	2030	01	-	698	1101	903	1167	312	786	16
EAST KOOTENAY											
KISHENEHN	MT01	1190	25	114	320	203	193	399	36	212*	51
FERNIE EAST	2C07	1250	23	129	420	275	259	584	61	333	46
UPPER ELK RIVER	2C06	1340	27	63	192	110	42	330	3A	136	47
SINCLAIR PASS	2C01	1370	26	73	193	156	129	262	48	131	50
MARBLE CANYON	2C05	1520	27	140	372	450A	342	579	152	323	50
BRUSH CREEK TIMBER	MT03	1520	24	91	249	135	112	432	86	229*	45
SULLIVAN MINE	2C04	1550	27	127	412	327	254	465	53	279	51
WEASEL DIVIDE	MT02	1660	27	259	909	1026	716	1257	254	748*	38
KIMBERLEY (MIDDLE)V O R	2C12	1680	27	125	357	277	190	386	97	259	28
MOUNT JOFFRE	2C16	1750	Not	Measur	ed	475	320	551	140	316	26
MORRISSEY RIDGE	2C09Q	1800	01	-	787	748	693	1074	414	626	13
MOYIE MOUNTAIN	2C10	1940	23	146	560	419	269	691	150	379	28
ALLISON PASS	AL01	1980	25	153	559	493	335	625	267	424*	14
THUNDER CREEK	2C17	2010	25	104	320	322	232	378	91	230	27
FLOE LAKE	2C14	2090	25	214	710	790	682	993	319	636	27
FLOE LAKE	2C14P	2090	01	-	660	716	-	716	254	560	2
KIMBERLEY (UPPER) V O R	2C11	2140	27	171	499	455	351	696	163	413	28
HIGHWOOD SUMMIT (BUSH)	AL02	2210	03	124	353	455	315	455	150	334*	18

MOUNT ASSINIBOINE	2C15	2230	25	156	504	666	467	680	213	434	27
SUNSHINE VILLAGE	AL05	2230	25	171	488	678	-	770	254	498*	26
WEST KOOTENAY											
DUNCAN LAKE NO. 2	2D07A	650	26	76	263	204	106	221	73	134*	6
FERGUSON	2D02	880	25	186	668	692	620	692	332	521	45
NELSON	2D04	930	28	160	558	336	382	554	140	355	57
SANDON	2D03	1070	23	119	403	388	322	434	239	343	20
CHAR CREEK	2D06	1310	28	205	698	492	522	754	234	487	29
BUNCHGRASS MEADOW	WA01	1520	544	_	843	427	581*	13			
GRAY CREEK (LOWER)	2D05	1550	03	179	568	386	336	663	201	390	48
ARROW CREEK	2D11	1620	25	225	897	749	662	749	442	616	17
KOCH CREEK	2B07	1860	Not	Measur	ed	746	668	846	269	605	34
MOUNT TEMPLEMAN	2D09	1860	Not	Measur	ed	1225	937	1534	516	909	29
GRAY CREEK (UPPER)	2D10	1910	03	239	840	754	587	955	356	647	28
HARLOW CREEK	2D12	1920	01	257	830	1017	825	1110	555	816*	9
MEADOW MOUNTAIN	2D13	1990	973	744	973	744	824*	3			
EAST CREEK	2D08P	2030	01	_	698	1101	903	1167	312	786	16
KETTLE											
TRAPPING CREEK (LOWER)	2E05	930	02	68	178	176	124	224	44	128	31
FARRON	2B02A	1220	27	126	405	333	304	450	79	301	24
GOAT CREEK	WA04	1220	27	71	226	160	119	300	0	161*	34
CARMI	2E02	1250	02	77	196	180	120	274	56	147	34

TRAPPING	2E04A	1350	01	97	252	200	170	239	120	200	14
CREEK (UPPER)	ZEU4A	1330	UI	91	232	200	170	239	120	200	14
MONASHEE PASS	2E01	1370	Not	Measur	ed	354	271	442	149	301	38
SUMMIT G.S.	WA05	1400	27	102	277	206	198	305	63	187*	33
BIG WHITE MOUNTAIN	2E03	1680	01	188	530	512	502	676	213	403	31
OKANAGAN											
SUMMERLAND RESERVOIR	2F02	1280	25	96	279	257	230	381	97	213	36
MC CULLOCH	2F03	1280	27	80	193	166	164	249	71	156	57
ABERDEEN LAKE	1F01A	1310	26	79	218	195	122	231	51	144	43
OYAMA LAKE	2F19	1340	01	90	241	209	177	241	73	151	27
POSTILL LAKE	2F07	1370	27	100	272	226	211	274	98	179	47
BOULEAU LAKE	2F21	1400	23	118	360	248	312	432A	165	296	26
VASEUX CREEK	2F20	1400	03	73	176	138	158	284	71A	139	26
TROUT CREEK	2F01	1430	28	78	209	221	159	335	55	165	57
BRENDA MINE	2F18	1460	25	108	337	354	284	495	130	292	28
BRENDA MINE	2F18P	1460	01	-	412	427	339	427	220	329	4
ISLAHT LAKE	2F24	1480	25	121	400	349	364	394	214	297	15
GREYBACK RESERVOIR	2F08	1550	28	112	306	262	216	312	91	195	30
ESPERON CR (UPPER)	2F13	1650	01	169	490	364	402	635	157	364	28
ISINTOK LAKE	2F11	1680	26	72	169	195	163	358	53	161	32
MACDONALD LAKE	2F23	1740	25	136	436	436	512	512	170	377	20
MUTTON CREEK NO. 1	WA07	1740	26	117	396	305	358	571	0	301*	53
MISSION CREEK	2F05	1780	26	189	581	-	-	650	267	428	35
MISSION CREEK	2F05P	1780	Not	Measur	ed	371	367	610	213	380	26

4 1810												
1010	26	126	416	-	-	605	148	337	19			
2 1810	01	113	360	293	315	488	61	265	31			
9 1830	03	172	582	448	547	787	180	489	41			
0 1840	23	203	764	759	674	912	361	607	38			
1 980	04	100	289	226	185	351	53	200	52			
11 1070	28	124	414	168	274	615	15	269*	48			
1220	01	133	422	307	277	478	51	258	23			
6 1490	02	129	396	340	278	676	127	336	35			
1550	01	91	259	239	267	363	76	223	33			
1 1680	26	72	169	195	163	358	53	161	32			
1920	05	95	252	246	212	508	92	193	35			
3P 1940	01	-	892	780	756	1323	213	755	29			
HARTS PASS   WA09   1980   27   302   1069   1095   1016   1636   312   942*   46												
A - SAMPLING PROBLEMS WERE ENCOUNTERED												
AMPLIN	1G											
C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED												
	09 1830 10 1840 01 980 11 1070 02 1220 06 1490 05 1550 11 1680 04 1920 03P 1940 09 1980 EMS WE	09       1830       03         10       1840       23         01       980       04         11       1070       28         02       1220       01         06       1490       02         05       1550       01         11       1680       26         04       1920       05         03P       1940       01         09       1980       27         LEMS WERE ENGRAMPLING	09       1830       03       172         10       1840       23       203         01       980       04       100         11       1070       28       124         02       1220       01       133         06       1490       02       129         05       1550       01       91         11       1680       26       72         04       1920       05       95         03P       1940       01       -         09       1980       27       302         JEMS WERE ENCOUNTING	09     1830     03     172     582       10     1840     23     203     764       01     980     04     100     289       11     1070     28     124     414       02     1220     01     133     422       06     1490     02     129     396       05     1550     01     91     259       11     1680     26     72     169       04     1920     05     95     252       03P     1940     01     -     892       09     1980     27     302     1069       LEMS WERE ENCOUNTERED       AMPLING	09     1830     03     172     582     448       10     1840     23     203     764     759       01     980     04     100     289     226       111     1070     28     124     414     168       02     1220     01     133     422     307       06     1490     02     129     396     340       05     1550     01     91     259     239       11     1680     26     72     169     195       04     1920     05     95     252     246       3P     1940     01     -     892     780       3P     1980     27     302     1069     1095       3AMPLING	10	10	09     1830     03     172     582     448     547     787     180       10     1840     23     203     764     759     674     912     361       01     980     04     100     289     226     185     351     53       111     1070     28     124     414     168     274     615     15       02     1220     01     133     422     307     277     478     51       06     1490     02     129     396     340     278     676     127       05     1550     01     91     259     239     267     363     76       11     1680     26     72     169     195     163     358     53       04     1920     05     95     252     246     212     508     92       3P     1940     01     -     892     780     756     1323     213       09     1980     27     302     1069     1095     1016     1636     312       JEMS WERE ENCOUNTERED	10			

E - ESTIMATED BASED ON AREAL AVERAGE

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

# **COASTAL**

March 1, 1997

				7	WATE	R EQU	IVALI	ENT (n	nm)		
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
SOUTH COASTAL											
PALISADE LAKE	3A09	880	25	279	1281	461	1284	1961	95	1199	42
PALISADE LAKE	3A09P	880	Not	Measur	ed	-	-	-	-	-	0
CHAPMAN CREEK	3A26	1022	Not	Measur	ed	662	1376	1376	662	948*	4
CALLAGHAN CREEK	3A20	1040	03	201	720	454	852	1260	200	853	19
EDWARDS LAKE	3A27	1070	Not	Measur	ed	380	944	944	380	657*	4
DOG MOUNTAIN	3A10	1080	26	253	1170	345	1197	1197	345	1011	13
GROUSE MOUNTAIN	3A01	1100	24	293	1320	522	973	2098	143	1023	46
ORCHID LAKE	3A19	1190	25	367	1639	1027	1670	2370	444	1577	22
ORCHID LAKE	3A19P	1190	Not	Measur	ed	-	1325	2238	805	1573	12
UPPER SQUAMISH RIVER	3A25P	1340	01	313	1313	1163	1515	1853	840	1359	7

March 1, 1997 Snow Surv	ey Measureme	nts									
TIEDEMANN GLACIER	3A17P	1400	01	-	917	1521	1301	1521	394	1082	4
DIAMOND HEAD	3A21	1420	Not	Measur	ed	1001	1184	1578	483	1214	19
NOSTETUKO RIVER	3A22P	1500	01	-	393	668	741	741	203	528*	8
UPPER MOSELY CREEK	3A24P	1650	01	-	155	286	290	555	98	275	8
TATLAYOKO LAKE	3A13	1710	01	56	139	323	274	485	63	226	33
VANCOUVER ISLAND											
ELK RIVER	3B04	270	23	No S	now	20	0	546	0	168	36
WOLF RIVER (LOWER)	3B19	640	23	101	332	58	360	660	0	355	26
TENNENT LAKE	3B22	950	28	193	742	500A	1000	1000	290A	740	12
UPPER THELWOOD LAKE	3B10	980	23	258	1004	584	1596	2083	281	1221	36
WOLF RIVER (MIDDLE)	3B18	1070	23	135	404	186	754	864A	71	539	26
FORBIDDEN PLATEAU	3B01	1130	23	282	1180	633	1646	2225	260	1283	41
JUMP CREEK	3B23P	1160	01	208	1196	304	-	304	304	304*	1
NEWCASTLE RIDGE	3B14	1170	Not	Measur	ed	772	2117	2570	255	1380	29
MOUNT COKELY	3B02A	1190	27	138	474	-	970	1016	178	716	16
SNO-BIRD LAKE	3B16	1400	25	251	1124	596	1222	1758	188	1073	30

802

1502 | 1502

512

1140

9

939

NORTH COASTAL

(UPPER)

WOLF RIVER

3B17P

1490

01

WEDEENE RIVER SOUTH	3C07	300	28	127	507	349	547	547	240A	364	13	
TAHTSA LAKE	1B02	1300	26	270	1019	1119	1171	1405	571	980	45	
TAHTSA LAKE	1B02P	1300	01	-	1158	-	1198	1198	661	953*	3	
SKAGIT												
SUMALLO RIVER WEST	3D01C	790	28	119	442	89	188	202	79	139*	5	
FREEZEOUT CREEK TRAIL	WA11	1070	28	124	414	168	274	615	15	269*	48	
BEAVER PASS	WA12	1120	26	231	924	411	610	1240	30	642*	48	
KLESILKWA	3D03A	1130	28	132	508	62	102	759	0	283	46	
LIGHTNING LAKE	3D02	1220	01	133	422	307	277	478	51	258	23	
HARTS PASS	WA09	1980	27	302	1069	1095	1016	1636	312	942*	46	
A - SAMPLING	- 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

# **NORTH**

March 1, 1997

					WATER EQUIVALENT (mm)							
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record	
PEACE												
FORT ST. JOHN A	4A25	690	01	66	182	154	72	191	52	111	23	
MACKENZIE A	4A19	700	28	92	264	236	212	345	130	217	24	
PACIFIC LAKE	1A11	770	27	198	677	440	532	832	277	544	34	
BULLHEAD MOUNTAIN	4A28	790	28	56	142	136	89	136	12	76*	13	
MC LEOD LAKE	4A01	980	27	113	364	230	222	331	98	204	37	
WARE (LOWER)	4A04	980	01	79	202	246	128	246	97	155	33	
PHILIP LAKE	4A13	980	28	117	352	288	215	382	152	249	33	
AIKEN LAKE	4A30P	1040	01	-	317	327	195	363	162	247*	10	
TUTIZZI LAKE	4A06	1070	28	94	234	297	208	386	140	225	33	
TSAYDAYCHI LAKE	4A12	1160	28	140	423	437	305	540	166	339	33	
PINK MOUNTAIN	4A14	1170	05	57	100	160	50	160	40	74	33	
KAZA IAKE	1A12	1190	28	122	326	397	226	478	186	282	31	
PULPIT LAKE	4A09	1310	01	130	350	442	338	531	233	358	32	
PULPIT LAKE	4A09P	1310	01	-	378	448	326	448	326	366	6	
FREDRICKSON LAKE	4A10	1310	28	88	202	293	184	315	129	212	32	

PINE PASS	4A02P	1400	01	-	835	-	1009	1485	1009	963	5
TRYGVE LAKE	4A11	1400	01	110	274	412	307	453	211	314	32
SIKANNI LAKE	4C01	1400	01	95	219	317	197	335	107	223	31
PINE PASS	4A02	1430	27	309	1100	1163	1006	1502	480	969	33
MORFEE MOUNTAIN	4A16	1450	27	252	904	927	688	1166	312	717	29
LADY LAURIER LAKE	4A07	1460	01	138	375	594	385	662	255	425	30
MOUNT SHEBA	4A18	1490	27	250	901	730	737	1037	394	697	26
GERMANSEN (UPPER)	4A05	1500	28	123	344	326	279	520	174	300	36
MOUNT STEARNS	4A21	1500	01	57	123	227	77	227	58	129	22
JOHANSON LAKE	4B02	1540	28	97	232	368	240	368	148	250	33
MONKMAN CREEK	4A20	1550	27	158	521	595	444	925	290	540	15
WARE (UPPER)	4A03	1570	01	84	205	360	189	360	114	213	36
BULLMOOSE CREEK	4A31	1570	07	156	472	539	516	663	273	478*	9
KWADACHA RIVER	4A27P	1620	01	-	265	333	195	405	195	284	13
SKEENA/NASS											
TERRACE A	4B13A	180	05	67	240	132	192	407	0	179	15
BEAR PASS	4B11A	460	28	151	550	567	586	824	458	751	13
NINGUNSAW PASS	4B10	690	03	104	359	417	394	629	259	400	22
MCKENDRICK CREEK	4B07	1050	27	123	381	293	190	391	177	265	29
TACHEK CREEK	4B06	1140	24	113	330	286	202	286	117	191	29
KAZA LAKE	1A12	1190	28	122	326	397	226	478	186	282	31
LU LAKE	4B15	1300	28	125	406	356	260	356	172	274	18

KIDPRICE LAKE	4B01	1370	26	225	838	988	821	1101	429	773	45
TRYGVE LAKE	4A11	1400	01	110	274	412	307	453	211	314	32
EQUITY MINE	4B14	1420	25	153	514	460	340	462	234	302	19
CHAPMAN LAKE	4B04	1460	27	159	536	561	309	691	268	396	32
HUDSON BAY MTN.	4B03A	1480	28	171	568	513	380	719	287	449	25
SHEDIN CREEK	4B16P	1480	01	206	750	904	-	904	904	904*	1
MOUNT CRONIN	4B08	1480	27	174	599	563	388	869	348	521	28
JOHANSON LAKE	4B02	1540	28	97	232	368	240	368	148	250	33
LIARD											
FORT NELSON A	4C05	380	01	50	92	140	95	177A	52	102	31
WATSON LAKE A	YK01	700	25	50	111	180	86	216	61	127*	31
FRANCES RIVER	YK02	730	25	55	120	158	112	312	65	135*	21
DEASE LAKE	4C03	820	28	63	138	178	81	229	46	129	32
BLUFF CREEK	4C11P	1040	Not	Measur	red	262	131	293	131	229	4
SUMMIT LAKE	4C02	1280	01	58	104	-	65	190	48	105	29
DEADWOOD RIVER	4C09P	1300	01	-	101	152	-	220	152	176*	3
CASSIAR	4C04	1390	22	86	332B	-	223	456	142A	286	32
SIKANNI LAKE	4C01	1400	01	95	219	317	197	335	107	223	31
STIKINE/ TAKU											
SPEEL RIVER	AK03	80	26	168	584	414	772	1024	396	665*	26
FORREST- KERR CREEK	4D08P	560	01	-	494	567	512	640	512	567*	4
TELEGRAPH CREEK	4D01	580	06	28	53	117	102	345	58	156	22

NINGUNSAW 4B10 600 03 104 350 417 304 620 250 400 22												
NINGUNSAW PASS	4B10	690	03	104	359	417	394	629	259	400	22	
DEASE LAKE	4C03	820	28	63	138	178	81	229	46	129	32	
ISKUT	4D02	1000	03	46	86	109	87	176	38A	113	22	
KINASKAN LAKE	4D11P	1020	01	-	204	296	274	527	274	318	6	
TUMEKA CREEK	4D10P	1220	01	-	354	546	485	789	485	576	7	
WADE LAKE	4D14P	1370	Not	Measur	red	366	162	475	162	354	6	
UPPER STIKINE	4D13P	1450	01	-	344	454	384	591	363	395	7	
YUKON												
ATLIN LAKE	4E02A	730	01	32	71	117	112	185A	50	120*	13	
LOG CABIN	4E01	880	04	91	244	265	311	514	124	303	36	
PINE LK AIRSTRIP	YK03	1010	04	75	151	162	127	330	25	187*	21	
MONTANA MTN.	YK05	1020	04	58	125	-	-	182	71	126*	17	
TAGISH	YK04	1080	27	52	99	163	133	198	75	125*	21	
A - SAMPLING P	A - SAMPLING PROBLEMS WERE ENCOUNTERED											
B - EARLY OR L	ATE SAN	MPLIN	G									

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

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

# SNOWPACK and WATER SUPPLY OUTLOOK in BRITISH COLUMBIA

#### **April 1, 1997**

The April 1 snow survey has been conducted throughout the province with a total of 209 snow courses being measured. These readings, together with data from 41 snow pillows, 26 snow courses from adjacent jurisdictions and weather and flow data provided by Environment Canada have been used in making the following reports.

#### **Snowpack**

The highest readings of the year occur at this sampling period at many snow courses throughout the province. However, further accumulations will occur at some stations, particularly at the higher elevations. March accumulations were generally a little greater than normal with the result that almost all areas of the province now have above or well above normal snowpacks. The graphs below show this year's snow pack by region compared with the previous two years. The snowpacks in the northwest of the province are a little below normal while those in the South Thompson, the Kootenays and the Okanagan-Kettle are above normal

#### Weather

The majority of the province received above normal precipitation during March - the only exception was the Similkameen basin where precipitation was slightly below normal. November through March accumulations remain above normal for all areas except the northwest regions of the province. Mean temperatures during March varied from 3oC below normal at the Alaskan border to near normal in the south.

#### Outlook

With most areas of the province having greater than normal snowpacks for this date, it appears that runoff volumes will be above normal. Due to the wet fall and winter, many areas report that the ground is much wetter than normal and this, as well as causing slope stability problems, will increase the volume of the runoff when snowmelt occurs. Any time there is an above normal snowpack, there is the potential for flooding to occur if the melt sequence is early and/or rapid. This, of course, depends on the weather patterns during the next eight to ten weeks.

Areas where the potential for flooding is the greatest include the Nicola, South Thompson, Okanagan, Kettle, lower Columbia, upper Columbia upstream of Golden, Kootenays, Nechako, Babine and Bulkley basins.

#### UPPER FRASER AND NECHAKO

Above normal March precipitation combined with temperatures a little below normal have resulted in greater than normal snowpack accumulations throughout the basin. The increase has been particularly noticable in the Nechako basin where the reservoir catchment snowpack is estimated at 28% above normal. In the uncontrolled portion of the Nechako basin, the snowpack is close to record high levels for this time of year. The April through September runoff of inflow to the Nechako Reservoir is for 145% of normal.

The snowpack in the upper Fraser is estimated to be 111% of normal and this, combined with other indicators has resulted in an April through September forecast for the Fraser River at Marguerite of 37,000 million cubic metres which is 8% greater than normal for this period.

Natural flow in the basin during March, as indicated by the Fraser River at Marguerite, was a little below normal for the third consecutive month.

#### MIDDLE AND LOWER FRASER

Precipitation throughout the middle and lower Fraser basins during March was considerably above normal and this resulted in above normal accumulation of snow at most stations. The regional snowpack indices for the middle and lower Fraser basins are estimated to be 110 and 117% of normal, respectively, up from 107 and 110 % a month ago.

The snowpack in the Nicola River basin is well above normal and the freshet runoff into the lake is forecast to be 177 million cubic metres which is 155% of normal. Nicola Lake has been drawn down in anticipation of this runoff, but high flows out of the lake can be expected for the next few weeks.

The flow in the Fraser River at Hope has been near normal all winter. The April through September forecast for this station is for a volume 15% greater than normal. Peak flows greater than normal can be anticipated, but the peak levels will depend on when, and how rapidly, the snow melts. Weather patterns in the next three months will determine the peak levels. An early fast melt could cause some quite high river levels, while a slow gradual melt would result in peak levels well within the capacity of the rivers.

#### NORTH AND SOUTH THOMPSON

March precipitation was considerably above normal throughout the basin with the November through March total precipitation estimated to be 129% of normal in the north and 143% in the south, respectively.

The snowpack accumulations during March were greater than normal and the regional snowpack indices for the North and South Thompson are now estimated to be 112 and 125% of normal, respectively. This is considerably greater than was reported this time last year, particularly in the South Thompson.

The flow as measured at the Environment Canada gauge on the Thompson near Spences Bridge has been more than 20% above normal all winter. The volume forecast for the North Thompson at McLure is for 112% of normal while that for the South Thompson River at Chase is for 132% of normal. These above normal volumes will probably result in above average peak levels being reached during the freshet. Whether these flows will be high enough to cause damage will largely depend on the rate of melt, which is a function of the weather patterns in the coming three months.

#### UPPER AND LOWER COLUMBIA

The mountain snow pack increased overall during March and remains above normal throughout the Columbia Basin. The regional snow water equivalent index increased from 102% of normal last month to 113% on April 1. With few exceptions stations are reporting snow packs between normal and 140% of normal. In the upper Columbia, Downie Slide (2A27) reported a 20 year high water equivalent of 137% of normal, while in the lower basin, Whatshan (Upper) (2B05), and Barnes Creek (2B06) with 39 and 40 year records report record high readings of 143 and 151% of normal, respectively.

Valley temperatures were 0.5 o C below normal during March. After a dry February, March precipitation was 169% of normal.

March runoff, as indicated by the Columbia River at Donald, was slightly above normal. The forecast runoff for the period April through September is 4950 thousand cubic decametres, 105% of the 1961-90 normal. With above normal snowpacks there is potential for above average peak flows with possible flooding in unregulated basins. The peak level reached is, however, largely a function of the weather pattern in the next few weeks

#### EAST AND WEST KOOTENAY

The April 1 snow water equivalent for the Kootenay basin increased slightly to 127% of normal, from the 124% reported on March 1. All snow courses reporting in the basin have snow water equivalents in the range of 100% to 140% of normal, with virtually no melting to date. Arrow Creek (2D11), with a 19 year record, reports a record high of 135% for this date.

The valley temperatures during March were 0.5 o C below normal. March precipitation was reported to exceed 200% of normal.

March runoff in the basin, indicated by the Kootenay River at Fort Steele, was 110% of the 1961-90 normal. The seasonal runoff for the period April to September, is forecast to be 5620 thousand cubic decametres, 120% of normal. Peak flows are expected to be higher than normal,

#### SOUTH COAST AND VANCOUVER ISLAND

For the April 1 snow survey period, snowpacks in the lower mainland/Howe Sound area continue to be above normal. To the northwest in the Homathko River drainage, water equivalents are below normal. Precipitation measured at valley bottom weather stations for

March was very heavy. The November-March total precipitation was a record high amount for the lower mainland, but near normal farther up the coast.

On Vancouver Island, the available data is all from the central part of the Island. Most snow courses are close to normal, while two of the lower elevation snow courses are above normal. Precipitation was very high for March, and the seasonal total is just above normal.

Mean monthly temperatures for March were near normal for the South Coast and Vancouver Island.

Monthly runoff into Upper Campbell Lake was 143% of normal for March, in keeping with the high precipitation. The seasonal runoff forecast for April through July is 98% of normal, assuming normal weather conditions during this period.

with the possibility of damaging flooding if there are any extended warm weather during the melt period.

#### OKANAGAN, SIMILKAMEEN AND KETTLE

March precipitation as measured at valley-bottom stations was 24% greater than normal and temperatures were close to normal for this time of year. Despite this, in the Okanagan and Kettle basins the snowpack accumulations were a little below normal and the regional snowpack is now estimated to be 127% of normal compared with 132% a month ago. In the Similkameen the index has risen from 117% to 124% of normal in the last month.

Seasonal volume runoff is expected to be above normal in all three basins and this will probably result in above normal peak flows. Whether flows and lake levels reach flood stage will depend largely on weather patterns over the next two or three months, particularly during the melting of high level snow in May and June. Rapid melting could result in high peak flows on both the Similkameen and Kettle Rivers. In anticipation of above normal runoff, releases from both Kalamalka and Okanagan lakes have been as high as practicable for some time to provide as much storage space for the freshet runoff as possible. High flows in the Okanagan River channel are likely throughout the spring.

Inflow to Okanagan Lake during March was more than twice normal. This was the 20th consecutive month in which inflows to the lake were greater than normal. The April through July forecast is for 665 million cubic metres which is 55% greater than the normal inflow for this period. Okanagan Lake is now considerably lower than it was at this time last year and it is hoped that the lake will peak at close to its normal maximum level.

April 1 snow surveys in the Peace River show above normal water content in the southern part of the basin, and slightly below normal in the northern part. Information from only a very few snow courses indicates that the Liard River basin snowpack is near normal for this date.

Based on only a few weather stations, precipitation in northeastern British Columbia is estimated to be as follows. Peace River basin: well above normal for March, with the November-March

total at 130% of normal. Liard River basin: March was above normal, and the November-March total is 84%. Mean monthly temperatures in the northeast were 2-3 oC colder than normal.

Regional runoff is indicated by inflow to Williston Lake which was 146% of normal for March, continuing the trend that began in December. The runoff forecast for April through September is 115% of normal, assuming average weather conditions during the period.

#### **NORTHWESTERN**

The snowpack in the Skeena-Nass region has increased more than normal during March. In the southern part near Terrace and Smithers, the snowpack is very heavy, with two snow courses reporting new records. However, in the headwater portions of the Skeena and Nass Rivers, the snowpack is close to normal.

In the Iskut and Stikine River basins, most snow courses show below normal water content. Farther north near the Yukon border, the four local snow courses show variable readings, but the average is near normal.

March precipitation in northwest British Columbia was above normal, and average monthly temperatures were about 1 oC cooler than normal. Total precipitation for November through March was normal.

March volume runoff in the Skeena River at Usk was 116% of normal, after four months of below normal flows. The runoff forecast for April through September is 110% of normal.

# **FRASER**

April 1, 1997

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER FRASER											
PRINCE GEORGE A	1A10	690	31	55	141	101	36	313	0	132	35
PACIFIC LAKE	1A11	770	01	225	836	478	559	879	290	623	34
MCBRIDE (LOWER)	1A22	790	27	58	164	62	0	284	0	140	22
BURNS LAKE	1A16	800	27	92	264	196	186	234	0	125	26
FORT ST.JAMES	1A07	810	27	83	202	150	109	258	0	140	42
CANOE RIVER	2A01A	910	26	41	121	107	0	262	0	123	56
PHILIP LAKE	4A13	980	04	144	423	312	262	419	180	288	34
HEDRICK LAKE	1A14	1100	01	246	897	598	516	1046	351	689	30
MCBRIDE (MIDDLE)	1A20	1160	27	128	392	348	286	488	214	382	23
BIRD CREEK	1A23	1180	31	111	270	176	180A	180A	84	142*	7
KAZA LAKE	1A12	1190	04	137	389	442	283	453	226	330	32
LU LAKE	4B15	1300	01	149	484	360	300	396	170	310	20
FORFAR CREEK (UPPER)	1A24	1410	26	211	760	584	516	584	426B	525*	4
EQUITY MINE	4B14	1420	01	186	640	452	432	464	258	357	20
MOUNT SHEBA	4A18	1490	01	334	1140	783	824	1146	495	815	28
BARKERVILLE	1A03P	1520	01	-	461	-	-	524	269	393	20
MC BRIDE (UPPER)	1A02	1580	27	148	433	385	400	780	260	462	44
KNUDSEN LAKE	1A15	1580	01	259	910A	775	616	1255	485	864	28

NARROW LAKE	1A21	1650	27	296	1214	686	776	1350	541	895	22
REVOLUTION CREEK	1A17P	1690	01	-	839	815	671	1222	671	863	11
LONGWORTH (UPPER)	1A05	1740	Not	Measu	red	676	562	1234	467	781	43
DOME MOUNTAIN	1A19	1820	26	230	838	601	640A	1057	416	802	26
MARMOT JASPER	AL12	1830	24	101	265B	263	213	422	152	244*	27
YELLOWHEAD	1A01	1860	26	185	538	648	531	770	293	520	45
YELLOWHEAD	1A01P	1860	01	181	225	-	-	_	-	-	0
HOLMES RIVER	1A18	1900	26	236	790	744	660	1029	459	748	27
NECHAKO											
SKINS LAKE	1B05	880	02	47	153	152	102	203	0	115	33
TAHTSA LAKE	1B02	1300	01	357	1378	1264	1283	1554	775	1117	44
TAHTSA LAKE	1B02P	1300	01	-	1551	-	1304	1500	860	1213	4
KIDPRICE LAKE	4B01	1370	01	296	1095	969	925	1247	622	888	43
MOUNT PONDOSY	1B08P	1400	01	-	985	948	1006	1006	576	830*	5
MOUNT WELLS	1B01	1490	01	199	711	594	466	960	356	516	42
MOUNT WELLS	1B01P	1490	01	_	725	677	542	677	494	603	5
NUTLI LAKE	1B07	1490	31	207	679	724	593	724	461	588*	6
MOUNT SWANNELL	1B06	1620	31	163	437	321	283	489	215	303*	8
MIDDLE FRASER											
PASS LAKE	1C04	870	27	47	110	53	8	224	0	58	46
PUNTZI MOUNTAIN	1C22	940	28	16	52	84	6	120C	0	28	27
BROOKMERE	1C01	980	31	96	296	275	186	399	92	211	52
NAZKO	1C08	1070	02	31	80	29	30	165B	0	71	38
BIG CREEK	1C21	1140	28	1	3	35	0	119	0	17*	26
GRANITE MOUNTAIN	1C33	1150	01	83	261	198	128	227A	128	191*	4
DUFFY LAKE	1C28	1200	02	178	777	405	506	638	244	484	19
PAVILION	1C06	1230	02	25	60	0	0	147	0	60	40
LAC LE JEUNE (LOWER)	1C07	1370	01	63	171	74	143	251	0	112	41

CONANTIARE	1021	1270	28	02	202	100	226	260D	56	206	16
CONANT LAKE	1C31	1370	28	92	292	188	226	260B	56	206	16
BRIDGE GLACIER (LOWER)	1C39	1400	01	204	648	604	716	716	604	660*	2
TRANQUILLE LAKE	1C03	1420	27	97	281	193	221	381	116	232	46
DEADMAN RIVER	1C32	1430	28	46	122	81	60	188	30	122	13
BRALORNE	1C14	1450	01	82	271	130	211	389	0	173	34
BONAPARTE LAKE	1C34	1450	30	119	384	342	290	364	290	325*	4
SHOVELNOSE MOUNTAIN	1C29	1450	28	92	321	248	266	320	108	265	18
SPAHOMIN	1C30	1450	27	52	148	40	76	148	10	104	18
BOSS MOUNTAIN MINE	1C20P	1460	01	149	743	694	660	694	660	577	3
BRENDA MINE	2F18P	1460	01	-	497	469	388	469	227	356	4
LAC LE JEUNE (UPPER)	1C25	1460	01	75	222	105	185	226	43	147	24
BRENDA MINE	2F18	1460	25	123	398B	334	328	531	190	325	28
BOSS MOUNTAIN MINE	1C20	1500	28	194	702	632	666	782	397	583	29
HIGHLAND VALLEY	1C09A	1510	27	65	174	50	104	249	3A	102	31
BARKERVILLE	1A03P	1520	01	-	461	-	-	524	269	393	20
FISH LAKE	1C35	1540	27	26	64	0	115	165	0	93*	3
HORSEFLY MOUNTAIN	1C13A	1550	26	166	616	518	384	645A	282	462	27
FISH LAKE NO. 2	1C35A	1550	27	37	80	-	_	_	-	-	0
GNAWED MOUNTAIN	1C19	1580	27	69	185	53	122	307	37	140	29
GREEN MOUNTAIN	1C12	1630	01	208	717	625	-	1173	338	661	32
MOUNT TIMOTHY	1C17	1660	02	130	419	341	281	533	186	331	34
YANKS PEAK EAST	1C41P	1670	01	308	953	-	-	-	-	-	0
PENFOLD CREEK	1C23	1680	27	285	1106	1058	1060	1285	700	999	22
YANKS PEAK	1C24	1710	27	241	896	735	741	1045	475	763	24

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TATLAYOKO LAKE	3A13	1710	02	84	225	338	302	563	74	252	45
GREEN MOUNTAIN	1C12P	1780	01	_	1021	954	1025	1025	884	954*	3
MCGILLIVRAY PASS	1C05	1800	01	200	766	571	684	1118	322	594	44
PORCUPINE RIDGE	1C02	1830	27	149	490	353	404	668	243	434	35
MISSION RIDGE	1C18P	1850	01	_	661	612	659	907	359	650	10
DOWNTON LAKE (UPPER)	1C38	1890	01	257	884	1030	1014	1030	1014	1022	2
TYAUGHTON CREEK (NORTH)	1C40	1950	01	172	584	396	470	470	396	433*	2
PAVILION MOUNTAIN	1C36	1960	04	108	313	232	234	234	232	233*	2
BRALORNE (UPPER)	1C37	1980	01	236	834	708	780	780	708	744*	2
LOWER FRASER											
WOLVERINE CREEK	1D13	300	31	27	92	10	0	160	0	15*	21
SUMMALLO RIVER WEST	3D01C	790	25	130	522B	0	0	114	0	23*	5
BROOKMERE	1C01	980	31	96	296	275	186	399	92	211	52
DISAPPOINTMENT LAKE	1D18P	1040	Not	Availa	ble	-	1966	1966	1966	1966	1
CALLAGHAN CREEK	3A20	1040	31	269	1064	370	910	1570	192	973	20
DICKSON LAKE	1D16	1070	02	433	1992	738	1556	1556	738	1077	5
DOG MOUNTAIN	3A10	1080	26	315	1474	363	1171	2314	51	1261	52
BEAVER PASS	WA12	1120	31	272	1041	399	823	1849	94	780*	52
KLESILKWA	3D03A	1130	02	137	528	26	121	792	0	303	49
DUFFEY LAKE	1C28	1200	02	178	777	405	506	638	244	484	19
STAVE LAKE	1D08	1210	02	435	1876	916	1630	2421	579	1585	29
WAHLEACH LAKE	1D09	1400	02	217	844	276	465	1270	125	666	29
WAHLEACH LAKE	1D09P	1400	01	-	1457	802	841	871	634	789*	5

NAHATLATCH RIVER	1D10	1520	02	355	1480	1126	1510	2225	749	1426	29
EASY PASS	WA13	1580	Not	Availal	ble	1118	2464	3094	996	2061	31
CHILLIWACK RIVER	1D17P	1600	01	434	1850	1140	-	1325	1040	1635	4
GREAT BEAR	1D15P	1660	01	-	2300	1669	1982	1982	1375	1607	5
TENQUILLE LAKE	1D06	1680	01	334	1310	1072	1268	1773	605	1167	44
NORTH THOMPSON											
BLUE RIVER	1E01B	670	31	116	425	322	253	392	186	286	14
PASS LAKE	1C04	870	27	47	110	53	8	224	0	58	46
KNOUFF LAKE	1E05	1200	29	61	189	152	158	274	58	147	41
COOK FORKS	1E06	1390	31	289	1033	904	747	1394	530A	924	34
TRANQUILLE LAKE	1C03	1420	27	97	281	193	221	381	116	232	46
BOSS MOUNTAIN MINE	1C20P	1460	01	149	743	694	660	694	660	577	3
BOSS MOUNTAIN MINE	1C20	1500	28	194	702	632	666	782	397	583	29
MOUNT COOK	1E02A	1580	31	361	1381	1468	1247	1500	790A	1243	23
AZURE RIVER	1E08	1620	27	308	1166	1333	1164	1422	712	1034	27
AZURE RIVER	1E08P	1620	01	311	1241	_	-	-	_	-	0
ADAMS RIVER	1E07	1720	02	208	813	706	746	1016	435	710	27
KOSTAL LAKE	1E10P	1770	01	-	1009	980	854	980	618	871	12
PORCUPINE RIDGE	1C02	1830	27	149	490	353	404	668	243	434	35
TROPHY MOUNTAIN	1E03A	1860	30	184	653	578	461	739	366	545	23
NORTH CLEMINA CREEK	1E13	1860	27	232	823	1003	817	1003	560	839*	8
SOUTH THOMPSON											
ANGLEMONT	1F02	1190	26	113	440	326	312	561	142	361	39
ABERDEEN LAKE	1F01A	1310	26	71	212	184	116	259	6	145	58
MONASHEE PASS	2E01	1370	29	133	517	408	338	460	205	346	48

BOULEAU LAKE	2F21	1400	28	135	436	336	384B	564	201	351	26
ADAMS RIVER	1E07	1720	02	208	813	706	746	1016	435	710	27
KIRBYVILLE LAKE	2A25	1750	27	319	1311	1443	1328	1567	701	1126	24
SILVER STAR MOUNTAIN	2F10	1840	28	235	907	773	780	1115	414	726	38
PARK MOUNTAIN	1F03P	1890	01	-	1207	1008	779	1008	666	834	12
ENDERBY	1F04	1900	31	316	1230	1018	906	1316	610	988	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

# **COLUMBIA**

April 1, 1997

					V	VATE	R EQU	IVALI	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER COLUMBIA											
CANOE RIVER	2A01A	910	26	41	121	107	0	262	0	123	56
DOWNIE SLIDE (LOWER)	2A27	980	27	238	970	826	710	915	465	710	20
GLACIER	2A02	1250	28	217	843	875	702	1161	371B	735	60
FIELD	2A03A	1280	01	75	230	222	-	251	8	151	57
SUNWAPTA FALLS	AL11	1400	25	91	245B	274	144	333	89	197*	28
VERMONT CREEK	2A19	1520	30	149	520	508	599	843	202	459	31
AZURE RIVER	1E08	1620	27	308	1166	1333	1164	1422	712	1034	27
AZURE RIVER	1E08P	1620	01	311	1241	-	-	-	-	-	0
DOWNIE SLIDE (UPPER)	2A29	1630	27	372	1420	1656	1638	1656	858	1231	19
KICKING HORSE	2A07	1650	01	134	442	392	-	589	211	357	49
KIRBYVILLE LAKE	2A25	1750	27	319	1311	1443	1328	1567	701	1126	24
MOUNT REVELSTOKE	2A06	1830	04	353	1410	1352	1113	1806	736	1224	48
MOUNT REVELSTOKE	2A06P	1830	01	-	1351	1386	1085	1386	709	1198	4

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NORTH CLEMINA CREEK	1E13	1860	27	232	823	1003	817	1003	560	839*	8
FIDELITY MOUNTAIN	2A17	1870	28	364	1429	1572	1099	1951	730	1245	34
BEAVERFOOT	2A11	1890	27	103	301	265	244	460	105	227	37
KEYSTONE CREEK	2A18	1890	27	242	928	825	832	1278	548	817	30
GOLDSTREAM	2A16	1920	27	327	1272	1421	1084	1638	785	1125	33
BUSH RIVER	2A23	1920	27	238	915	1014	973	1331	455	850	30
NIGEL CREEK	AL10	1920	25	158	478B	598	447	700	198	431*	28
MOUNT ABBOT	2A14	1980	30	361	1358	1556	1104	1849	698	1258	38
MOLSON CREEK	2A21P	1980	01	-	1089	-	998	1166	651	1003	14
SUNBEAM LAKE	2A22	2010	27	272	954	1028	880	1384	600	916	30
MIRROR LAKE	AL06	2030	27	142	434	389	325	561	160	300*	57
BOW SUMMIT II	AL07A	2080	27	153	462	527	394	584B	206	364*	18
LOWER COLUMBIA											
FERGUSON	2D02	880	27	187	783	706	643	790	142	576	59
BAIRD	WA02	980	28	109	363	117	216	300	0	143*	37
FARRON	2B02A	1220	26	121	447	344	337	480	167	338	24
MONASHEE PASS	2E01	1370	29	133	517	408	338	460	205	346	48
WHATSHAN (UPPER)	2B05	1480	29	236	928	737	632	909	427	647	39
BARNES CREEK	2B06	1620	29	187	768	627	487	696	321	509	40
BARNES CREEK	2B06P	1620	01	-	773	656	471	656	471	559*	4
ST. LEON CREEK	2B08	1800	Not	Not Measured			1210	1831	818	1201	30
ST. LEON CREEK	2B08P	1800	01	-	1260	-	1165	1185	712	1102	3
KOCH CREEK	2B07	1860	29	246	917	809	901	1034	424	742	38

RECORD MOUNTAIN	2B09	1890	28	260	978	620	848	1091	315	775	22
EAST CREEK	2D08P	2030	01	-	900	1187	1091	1245	466	897	16
EAST KOOTENAY											
KISHENEHN	MT01	1190	28	117	363	201	147	465	36	201*	50
FERNIE EAST	2C07	1250	30	132	468	254	276	605	151	370	45
UPPER ELK RIVER	2C06	1340	29	47	140	60	0	345	0	116	49
SINCLAIR PASS	2C01	1370	26	66	194	160	112	262A	36	134	60
MARBLE CANYON	2C05	1520	27	138	464	489	384	587A	168	352	50
BRUSH CREEK TIMBER	MT03	1520	31	94	312	152	127	434	76	253*	45
SULLIVAN MINE	2C04	1550	30	126	468	405	313	538	137	324	51
WEASEL DIVIDE	MT02	1660	Not Available			899	848	1346	432	834*	57
KIMBERLEY (MIDDLE)V O R	2C12	1680	27	118	394	298	242	462	163	298	28
BANFIELD MOUNTAIN	MT05	1710	Not	Availab	ole	521	447	919	290	549*	28
MOUNT JOFFRE	2C16	1750	30	141	480	505	402	711	188	376	28
MORRISSEY RIDGE	2C09Q	1800	01	-	1035	812	851	1224	492	751	13
RED MOUNTAIN	MT04	1830	27	173	726	561	437	810	211	483*	58
MOYIE MOUNTAIN	2C10	1940	29	165	660	412	305	747P	170	450	27
HAWKINS LAKE	MT06	1970	Not	Availab	ole	798	701	1313	399	768*	27
ALLISON PASS	AL01	1980	27	158	622	556	384	823	302	493*	33
WILKINSON SUMMIT (BUSH)	AL03	1980	26	84	213	221	173	460	112	221*	33
THUNDER CREEK	2C17	2010	30	124	380	334	262	475	171	279	27
FLOE LAKE	2C14	2090	30	245	924	897	793	1242	411	762	27

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FLOE LAKE	2C14P	2090	01	-	840	795	-	795	360	674	2
KIMBERLEY (UPPER) V O R	2C11	2140	27	178	618	616	462	798	234	488	28
HIGHWOOD SUMMIT (BUSH)	AL02	2210	02	147	465	526	353	681	244	397*	27
MOUNT ASSINIBOINE	2C15	2230	30	186	630	701	565	816	295	530	28
SUNSHINE VILLAGE	AL05	2230	03	199	693	744	597	996	340	612*	30
WEST KOOTENAY											
DUNCAN LAKE NO. 2	2D07A	650	30	61	223	178	33	178	0	81*	6
FERGUSON	2D02	880	27	187	783	706	643	790	142	576	59
NELSON	2D04	930	01	150	600	332	411	622	137	380	59
SANDON	2D03	1070	30	111	450	401	260	585	71	352	58
CHAR CREEK	2D06	1310	30	204	821	513	613	940	302	584	31
SMITH CREEK	ID01	1460	Not	Availal	ole	960	1077	1791	587	1116	56
BUNCHGRASS MEADOW	WA01	1520	31	277	1107	561	678	1173	340	735*	56
GRAY CREEK (LOWER)	2D05	1550	27	166	628	440	444	688	290	467	49
ARROW CREEK	2D11	1620	29	234	1005	800	779	901	474	743	19
KOCH CREEK	2B07	1860	29	246	917	809	901	1034	424	742	38
MOUNT TEMPLEMAN	2D09	1860	30	325	1260	1259	1127	1608	688	1057	28
GRAY CREEK (UPPER)	2D10	1910	27	235	938	830	752	1123	524	793	28
HARLOW CREEK	2D12	1920	Not Measured			1131	768	1261	622	923*	9
MEADOW MOUNTAIN	2D13	1990	Not Available			1128	961	1128	586	878*	4
EAST CREEK	2D08P	2030	01	-	900	1187	1091	1245	466	897	16
KETTLE											

KETTLE

T. Control of the Con											
TRAPPING CREEK (LOWER)	2E05	930	30	44	124	114	42	218	0	80	31
FARRON	2B02A	1220	26	121	447	344	337	480	167	338	24
GOAT CREEK	WA04	1220	28	46	150	53	107	274	0	110*	33
CARMI	2E02	1250	30	62	200	146	146	290	14	150	34
TRAPPING CREEK (UPPER)	2E04A	1350	29	88	286	150	152	252	26	210	13
MONASHEE PASS	2E01	1370	29	133	517	408	338	460	205	346	48
SUMMIT G.S.	WA05	1400	28	104	305	173	226	338	23	202*	34
BIG WHITE MOUNTAIN	2E03	1680	29	184	658	530	592	762	358	479	31
BLUEJOINT MOUNTAIN	2E06	2040	29	252	1040	-	949	949	378	727	19
OKANAGAN											
SUMMERLAND RESERVOIR	2F02	1280	27	103	339	256	244	389	96	230	60
MC CULLOCH	2F03	1280	27	70	206	146	140A	249	38	159	59
ABERDEEN LAKE	1F01A	1310	26	71	212	184	116	259	6	145	58
OYAMA LAKE	2F19	1340	30	76	255	218	174	249	61	162	26
POSTILL LAKE	2F07	1370	27	89	286	261	235	348	109	220	46
BOULEAU LAKE	2F21	1400	28	135	436	336	384B	564	201	351	26
VASEUX CREEK	2F20	1400	27	61	186	148	154	239	82	160	26
TROUT CREEK	2F01	1430	29	85	260	232	178	396	52	175	60
ESPERON CR (MIDDLE)	2F14	1430	29	134	460	368	414	607	224	362	29
BRENDA MINE	2F18	1460	25	123	398B	334	328	531	190	325	28
BRENDA MINE	2F18P	1460	01	-	497	469	388	469	227	356	4
ISLAHT LAKE	2F24	1480	26	129	460	376	462	462	222	341	14
GREYBACK RESERVOIR	2F08	1550	26	100	326	268	256	351	114	228	43

Separation Criting														
MACDONALD LAKE         2F23         1740         25         161         554B         464         616         616         257         441         20           MUTTON CREEK NO         WA07         1740         31         122         444         312         546         721         79         338*         56           MISSION CREEK         2F05         1780         26         181         655         475         -         757         302         509         57           MISSION CREEK         2F05P         1780         Not Measured         655         475         -         757         302         509         57           MISSION CREEK         2F05P         1780         Not Measured         456         330         354         4828         206         412         27           MOUNT KOBAU         2F12         1810         28         112         375         311         449         602         105         322         31           WHITEROCKS         2F09         1830         01         177         638         500         649         1021         323         584         42           SILVER STAR MOUNTAIN         2F10         184		2F13	1650	29	151	536	390	478	805	270	432	28		
LAKE	ISINTOK LAKE	2F11	1680	26	76	203	207	195	424	66	181	32		
CREEK NO. 1         WAOI         1/40         31         122         444         312         546         721         79         338*         56           MISSION CREEK         2F05         1780         26         181         655         475         -         757         302         509         57           MISSION CREEK         2F05P         1780         Not-Measuret         388         460         683         278         468         26           GRAYSTOKE LAKE         2F04         1810         26         129         456         330         354         828         206         412         27           MOUNT KOBAU         2F12         1810         28         112         375         311         449         602         105         322         31           WHITEROCKS MOUNTAIN         2F10         1840         28         235         907         773         780         1115         414         726         38           SILVER STAR MOUNTAIN         2F10         1840         28         235         907         773         780         1115         414         726         38           SILIVER STAR MOUNTAIN         1070		2F23	1740	25	161	554B	464	616	616	257	441	20		
MISSION CREEK   2F05P   1780   Not Measured   388   460   683   278   468   26     GRAYSTOKE LAKE   2F04   1810   26   129   456   330   354   828   206   412   27     MOUNT KOBAU   2F12   1810   28   112   375   311   449   602   105   322   31     WHITEROCKS MOUNTAIN   2F09   1830   01   177   638   500   649   1021   323   584   42     SILVER STAR MOUNTAIN   2F10   1840   28   235   907   773   780   1115   414   726   38     SIMILKAMEEN   SIMILKAMEEN     BROOKMERE   1C01   980   31   96   296   275   186   399   92   211   52     FREEZEOUT CREEK TRAIL   WA11   1070   02   130   508   122   236   665   8   302*   52     LIGHTNING LAKE   3D02   1220   01   131   462   334   284   622   140   315   49     HAMILTON HILL   2G06   1490   02   130   466   363   290   851   164   373   37     MISSEZULA MOUNTAIN   2G05   1550   01   95   304   252   255   516B   104   235   36     ISINTOK LAKE   2F11   1680   26   76   203   207   195   424   66   181   32     LOST HORSE MOUNTAIN   2G04   1920   02   94   262   256   252   533   146E   235   34     BLACKWALL PEAK   2G03P   1940   01   - 1080   863   839   1494   400   841   29     HARTS PASS   WA09   1980   01   333   120   1118   1191   1725   541   1084   54     A - SAMPLING PROBLEMS WERE ENCOUNTERED		WA07	1740	31	122	444	312	546	721	79	338*	56		
GRAYSTOKE LAKE	MISSION CREEK	2F05	1780	26	181	655	475	-	757	302	509	57		
LAKE   2F04   1810   26   129   456   330   354   828   206   412   27	MISSION CREEK	2F05P	1780	Not	Measur	red	388	460	683	278	468	26		
WHITEROCKS MOUNTAIN         2F09         1830         01         177         638         500         649         1021         323         584         42           SILVER STAR MOUNTAIN         2F10         1840         28         235         907         773         780         1115         414         726         38           SIMILKAMEEN           BROOKMERE         1C01         980         31         96         296         275         186         399         92         211         52           FREEZEOUT CREEK TRAIL         WA11         1070         02         130         508         122         236         665         8         302*         52           LIGHTNING LAKE         3D02         1220         01         131         462         334         284         622         140         315         49           HAMILTON HILL         2G06         1490         02         130         466         363         290         851         164         373         37           MISSEZULA MOUNTAIN         2G05         1550         01         95         304         252         255         516B         104         235         36		2F04	1810	26	129	456	330	354	828	206	412	27		
MOUNTAIN   2F09   1830   01   177   638   500   649   1021   323   584   42	MOUNT KOBAU	2F12	1810	28	112	375	311	449	602	105	322	31		
SIMILKAMEEN   SIMILKAMEEN   BROOKMERE   ICO1   980   31   96   296   275   186   399   92   211   52		2F09	1830	01	177	638	500	649	1021	323	584	42		
BROOKMERE 1C01 980 31 96 296 275 186 399 92 211 52 FREEZEOUT CREEK TRAIL WA11 1070 02 130 508 122 236 665 8 302* 52  LIGHTNING LAKE 3D02 1220 01 131 462 334 284 622 140 315 49  HAMILTON HILL 2G06 1490 02 130 466 363 290 851 164 373 37  MISSEZULA MOUNTAIN 2G05 1550 01 95 304 252 255 516B 104 235 36  ISINTOK LAKE 2F11 1680 26 76 203 207 195 424 66 181 32  LOST HORSE MOUNTAIN 2G04 1920 02 94 262 256 252 533 146E 235 34  BLACKWALL 2G05 1940 01 - 1080 863 839 1494 400 841 29  HARTS PASS WA09 1980 01 333 1201 1118 1191 1725 541 1084 54  A - SAMPLING PROBLEMS WERE ENCOUNTERED		2F10	1840	28	235	907	773	780	1115	414	726	38		
FREEZEOUT CREEK TRAIL WA11 1070 02 130 508 122 236 665 8 302* 52  LIGHTNING LAKE 3D02 1220 01 131 462 334 284 622 140 315 49  HAMILTON HILL 2G06 1490 02 130 466 363 290 851 164 373 37  MISSEZULA MOUNTAIN 2G05 1550 01 95 304 252 255 516B 104 235 36  ISINTOK LAKE 2F11 1680 26 76 203 207 195 424 666 181 32  LOST HORSE MOUNTAIN 2G04 1920 02 94 262 256 252 533 146E 235 34  BLACKWALL 2G03P 1940 01 - 1080 863 839 1494 400 841 29  HARTS PASS WA09 1980 01 333 1201 1118 1191 1725 541 1084 54  A - SAMPLING PROBLEMS WERE ENCOUNTERED	SIMILKAMEEN													
CREEK TRAIL WA11 1070 02 130 508 122 236 665 8 302* 52  LIGHTNING LAKE 3D02 1220 01 131 462 334 284 622 140 315 49  HAMILTON HILL 2G06 1490 02 130 466 363 290 851 164 373 37  MISSEZULA MOUNTAIN 2G05 1550 01 95 304 252 255 516B 104 235 36  ISINTOK LAKE 2F11 1680 26 76 203 207 195 424 66 181 32  LOST HORSE MOUNTAIN 2G04 1920 02 94 262 256 252 533 146E 235 34  BLACKWALL PEAK 2G03P 1940 01 - 1080 863 839 1494 400 841 29  HARTS PASS WA09 1980 01 333 1201 1118 1191 1725 541 1084 54  A - SAMPLING PROBLEMS WERE ENCOUNTERED	BROOKMERE	1C01	980	31	96	296	275	186	399	92	211	52		
LAKE       3D02       1220       01       131       462       334       284       622       140       315       49         HAMILTON HILL       2G06       1490       02       130       466       363       290       851       164       373       37         MISSEZULA MOUNTAIN       2G05       1550       01       95       304       252       255       516B       104       235       36         ISINTOK LAKE       2F11       1680       26       76       203       207       195       424       66       181       32         LOST HORSE MOUNTAIN       2G04       1920       02       94       262       256       252       533       146E       235       34         BLACKWALL PEAK       2G03P       1940       01       -       1080       863       839       1494       400       841       29         HARTS PASS       WA09       1980       01       333       1201       1118       1191       1725       541       1084       54         A - SAMPLING PROBLEMS WERE ENCOUNTERED         B - EARLY OR LATE SAMPLING		WA11	1070	02	130	508	122	236	665	8	302*	52		
HILL         2G06         1490         02         130         466         363         290         851         164         373         37           MISSEZULA MOUNTAIN         2G05         1550         01         95         304         252         255         516B         104         235         36           ISINTOK LAKE         2F11         1680         26         76         203         207         195         424         66         181         32           LOST HORSE MOUNTAIN         2G04         1920         02         94         262         256         252         533         146E         235         34           BLACKWALL PEAK         2G03P         1940         01         -         1080         863         839         1494         400         841         29           HARTS PASS         WA09         1980         01         333         1201         1118         1191         1725         541         1084         54           A - SAMPLING PROBLEMS WERE ENCOUNTERED           B - EARLY OR LATE SAMPLING		3D02	1220	01	131	462	334	284	622	140	315	49		
MOUNTAIN         2G05         1550         01         95         304         252         255         516B         104         235         36           ISINTOK LAKE         2F11         1680         26         76         203         207         195         424         66         181         32           LOST HORSE MOUNTAIN         2G04         1920         02         94         262         256         252         533         146E         235         34           BLACKWALL PEAK         2G03P         1940         01         -         1080         863         839         1494         400         841         29           HARTS PASS         WA09         1980         01         333         1201         1118         1191         1725         541         1084         54           A - SAMPLING PROBLEMS WERE ENCOUNTERED   B - EARLY OR LATE SAMPLING		2G06	1490	02	130	466	363	290	851	164	373	37		
LOST HORSE MOUNTAIN         2G04         1920         02         94         262         256         252         533         146E         235         34           BLACKWALL PEAK         2G03P         1940         01         -         1080         863         839         1494         400         841         29           HARTS PASS         WA09         1980         01         333         1201         1118         1191         1725         541         1084         54           A - SAMPLING PROBLEMS WERE ENCOUNTERED           B - EARLY OR LATE SAMPLING		2G05	1550	01	95	304	252	255	516B	104	235	36		
MOUNTAIN         2G04         1920         02         94         262         256         252         533         146E         235         34           BLACKWALL PEAK         2G03P         1940         01         -         1080         863         839         1494         400         841         29           HARTS PASS         WA09         1980         01         333         1201         1118         1191         1725         541         1084         54           A - SAMPLING PROBLEMS WERE ENCOUNTERED           B - EARLY OR LATE SAMPLING	ISINTOK LAKE	2F11	1680	26	76	203	207	195	424	66	181	32		
PEAK 2G03P 1940 01 - 1080 863 839 1494 400 841 29  HARTS PASS WA09 1980 01 333 1201 1118 1191 1725 541 1084 54  A - SAMPLING PROBLEMS WERE ENCOUNTERED  B - EARLY OR LATE SAMPLING		2G04	1920	02	94	262	256	252	533	146E	235	34		
A - SAMPLING PROBLEMS WERE ENCOUNTERED B - EARLY OR LATE SAMPLING		2G03P	1940	01	-	1080	863	839	1494	400	841	29		
B - EARLY OR LATE SAMPLING	HARTS PASS   WA09   1980   01   333   1201   1118   1191   1725   541   1084   54													
	A - SAMPLING PROBLEMS WERE ENCOUNTERED													
C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED	B - EARLY OR LA	B - EARLY OR LATE SAMPLING												
	C - EARLY OR LA	TE SAM	PLING	WITH	PROBL	EMS E	NCOU	JNTEF	RED					

### E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

# **COASTAL**

April 1, 1997

				WATER EQUIVALENT					ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
SOUTH COASTAL											
PALISADE LAKE	3A09	880	01	409	1700	447	1367	2845	285	1502	50
PALISADE LAKE	3A09P	880	Not	Availab	ole	-	678	678	678	678*	1
POWELL RIVER (LOWER)	3A05	910	05	234	992	85	-	1466	85	771	38
CHAPMAN CREEK	3A26	1022	01	423	1648	704	1660	1660	704	1141	4
POWELL RIVER (UPPER)	3A02	1040	05	311	1296	511	-	1674	467	1023	35
CALLAGHAN CREEK	3A20	1040	31	269	1064	370	910	1570	192	973	20
EDWARDS LAKE	3A27	1070	01	332	1286	398	1182	1182	398	792*	4
DOG MOUNTAIN	3A10	1080	26	315	1474	363	1171	2314	51	1261	52
GROUSE MOUNTAIN	3A01	1100	27	391	1714	544	1044	2497	44	1263	61
ORCHID LAKE	3A19	1190	01	521	2150	1111	1935	3353	980	1992	25
ORCHID LAKE	3A19P	1190	Not	Availab	ole	-	1524	2614	1241	1906	12

UPPER SQUAMISH RIVER	3A25P	1340	01	437	1853	1208	1759	1819	1144	1620	7
TIEDEMANN GLACIER	3A17P	1400	01	-	1311	1692	1411	1692	794	1342	4
DIAMOND HEAD	3A21	1420	03	399	1750	995	1525	1923	780	1454	19
NOSTETUKO RIVER	3A22P	1500	01	-	579	738	823	823	359	585*	7
UPPER MOSELY CREEK	3A24P	1650	01	-	201	320	299	567	158	299	8
TATLAYOKO LAKE	3A13	1710	02	84	225	338	302	563	74	252	45
VANCOUVER ISLAND											
ELK RIVER	3B04	270	01	No S	now	0	0	607	0	126	35
WOLF RIVER (LOWER)	3B19	640	01	125	516	0	432	945	0	403	25
TENNENT LAKE	3B22	950	01	357	1390	-	-	1000	432	954	11
UPPER THELWOOD LAKE	3B10	980	01	437	1578	-	1932	2774	492	1591	37
MARGARET LAKE	3B21	1040	28	481	2058	-	2484	2570	540	1874	20
WOLF RIVER (MIDDLE)	3B18	1070	01	225	730	204	956	1290	0	676	25
FORBIDDEN PLATEAU	3B01	1130	01	394	1550	748	2073	2619	413	1639	42
JUMP CREEK	3B23P	1160	01	336	1643	401	-	401	401	401*	1
NEWCASTLE RIDGE	3B14	1170	Not	Measur	ed	854	2048	2276	379	1590	34
MOUNT COKELY	3B02A	1190	06	205	824	368	940	1342	331	873	17
SPROAT LAKE	3B20	1220	28	420	1661	-	2234	2265	462	1653	20

April 1, 1997 Snow Survey	Measurements	5									
SNO-BIRD LAKE	3B16	1400	07	347	1590	699	1469	2245	408	1364	30
WOLF RIVER (UPPER)	3B17P	1490	01	-	1335	908	1852	1852	796	1474	9
NORTH COASTAL											
WEDEENE RIVER SOUTH	3C07	300	01	143	577	293	535	535	36	323	13
TAHTSA LAKE	1B02	1300	01	357	1378	1264	1283	1554	775	1117	44
TAHTSA LAKE	1B02P	1300	01	-	1551	-	1304	1500	860	1213	4
SKAGIT											
SUMALLO RIVER WEST	3D01C	790	25	130	522B	0	0	114	0	23*	5
FREEZEOUT CREEK TRAIL	WA11	1070	02	130	508	122	236	665	8	302*	52
BEAVER PASS	WA12	1120	31	272	1041	399	823	1849	94	780*	52
KLESILKWA	3D03A	1130	02	137	528	26	121	792	0	303	49
LIGHTNING LAKE	3D02	1220	01	131	462	334	284	622	140	315	49
HARTS PASS	WA09	1980	01	333	1201	1118	1191	1725	541	1084	54
A - SAMPLING I	PROBLE	MS WE	RE ENC	COUNT	ERED						
B - EARLY OR L	ATE SAI	MPLIN	G								
C - EARLY OR L	ATE SA	MPLIN	G WITH	I PROB	LEMS	ENCO	DUNT	ERED			
E - ESTIMATED	BASED	ON AR	EAL AV	/ERAG	E						

\* - PERIOD OF RECORD AVERAGE

# **NORTH**

April 1, 1997

					V	VATER	R EQU	IVALI	ENT (n	nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
PEACE											
FORT ST. JOHN A	4A25	690	30	66	196	154	85	210	0	111	23
MACKENZIE A	4A19	700	29	95	300	268	232	361	0	223	25
PACIFIC LAKE	1A11	770	01	225	836	478	559	879	290	623	34
BULLHEAD MOUNTAIN	4A28	790	01	75	168	140	-	140	0	118	12
MC LEOD LAKE	4A01	980	27	117	388	240	260	360	60	219	37
WARE (LOWER)	4A04	980	05	84	199	267	148	316	112B	183	34
PHILIP LAKE	4A13	980	04	144	423	312	262	419	180	288	34
AIKEN LAKE	4A30P	1040	01	-	262	360	220	371	206	280*	10
TUTIZZI LAKE	4A06	1070	04	98	278	340	255	406	166	249	34
TSAYDAYCHI LAKE	4A12	1160	04	166	510	458	351	584	234	392	34
PINK MOUNTAIN	4A14	1170	07	68	161	174	54	175	20	87	33
KAZA IAKE	1A12	1190	04	137	389	442	283	453	226	330	32
PULPIT LAKE	4A09	1310	05	144	410	447	394	556	297	400	34
PULPIT LAKE	4A09P	1310	01	-	421	500	390	500	390	395	6
FREDRICKSON LAKE	4A10	1310	04	94	237	321	228	351	163B	249	34

PINE PASS	4A02P	1400	01	-	1116	-	1149	1530	1144	1120	5
TRYGVE LAKE	4A11	1400	04	125	331	421	348	493	257	357	34
SIKANNI LAKE	4C01	1400	05	115	273	354	238	380	166	264	34
PINE PASS	4A02	1430	06	356	1351	1252	1113	1562	668	1129	35
MORFEE MOUNTAIN	4A16	1450	05	276	1115	1059	794	1158	555	857	29
LADY LAURIER LAKE	4A07	1460	05	174	485	659	451	737	342	493	33
MOUNT SHEBA	4A18	1490	01	334	1140	783	824	1146	495	815	28
GERMANSEN (UPPER)	4A05	1500	04	152	429	361	320	523	200	346	35
MOUNT STEARNS	4A21	1500	05	77	142	239	122	239	76	161	22
JOHANSON LAKE	4B02	1540	04	111	284	401	281	417	173	286	34
MONKMAN CREEK	4A20	1550	01	220	730A	-	557	1067	347	626	19
WARE (UPPER)	4A03	1570	05	101	232	390	240	390	157	253	34
BULLMOOSE CREEK	4A31	1570	27	194	626	654	524	698	312	536*	9
KWADACHA RIVER	4A27P	1620	01	-	306	387	240	446	240	332	13
SKEENA/NASS											
TERRACE A	4B13A	180	26	56	228	38	158	333	0	65*	17
BEAR PASS	4B11A	460	27	157	673	591	532	900	492	773	13
NINGUNSAW PASS	4B10	690	04	151	480	428	398	620	267	422	22
GRANDUC MINE	4B12	790	03	472	1790	1625	1248	1834	1152	1447	21
MCKENDRICK CREEK	4B07	1050	26	131	398	323	228	427	183	297	29
TACHEK CREEK	4B06	1140	26	118	362	282	227	345	112	218	29

KAZA LAKE	1A12	1190	04	137	389	442	283	453	226	330	32
LU LAKE	4B15	1300	01	149	484	360	300	396	170	310	20
KIDPRICE LAKE	4B01	1370	01	296	1095	969	925	1247	622	888	43
TRYGVE LAKE	4A11	1400	04	125	331	421	348	493	257	357	34
EQUITY MINE	4B14	1420	01	186	640	452	432	464	258	357	20
CHAPMAN LAKE	4B04	1460	26	191	641	601	365	762	315	461	32
SHEDIN CREEK	4B16P	1480	01	256	896	1039	-	1039	1039	1039	1
HUDSON BAY MTN.	4B03A	1480	27	206	770	520	432	846	356	515	25
MOUNT CRONIN	4B08	1480	26	217	725	613	443	1097	433	624	28
JOHANSON LAKE	4B02	1540	04	111	284	401	281	417	173	286	34
LIARD											
FORT NELSON A	4C05	380	28	56	104	186	102	198	36	105	31
WATSON LAKE A	YK01	700	03	66	116	185	124	229	71	124*	30
FRANCES RIVER	YK02	730	26	76	131	174	138	302	76	151*	20
DEASE LAKE	4C03	820	28	61	147	187	79A	259	66	144	32
BLUFF CREEK	4C11P	1040	Not	Availal	ole	344	140	344	140	254	4
SUMMIT LAKE	4C02	1280	Not	Availal	ole	240	70	240	0	122	31
DEADWOOD RIVER	4C09P	1300	01	-	113	229	-	283	167	226*	3
CASSIAR	4C04	1390	Not	Availal	ole	318	280	582	163	327	32
SIKANNI LAKE	4C01	1400	05	115	273	354	238	380	166	264	34
STIKINE/ TAKU											
SPEEL RIVER	AK03	80	30	218	691	475	879	1402	300	796*	28

FORREST- KERR CREEK	4D08P	560	01	-	509	588	552	671	552	595*	4
TELEGRAPH CREEK	4D01	580	29	26	58	159	71B	343	37	155	22
NINGUNSAW PASS	4B10	690	04	151	480	428	398	620	267	422	22
DEASE LAKE	4C03	820	28	61	147	187	79A	259	66	144	32
ISKUT	4D02	1000	04	51	100	130	50	167	0	120	22
KINASKAN LAKE	4D11P	1020	01	-	277	351	317	570	317	368	6
TUMEKA CREEK	4D10P	1220	01	-	457	622	533	869	533	638	7
WADE LAKE	4D14P	1370	Not	Measur	ed	421	232	527	232	406	6
UPPER STIKINE	4D13P	1450	01	-	402	512	439	689	433	474	7
YUKON											
ATLIN LAKE	4E02A	730	28	52	101	130	125	197	50	126*	13
LOG CABIN	4E01	880	01	116	301	354	363	596	213	331	37
PINE LK AIRSTRIP	YK03	1010	28	89	191	184	169	351	122	223*	21
MONTANA MTN.	YK05	1020	02	71	160	-	-	185	84	137*	16
TAGISH	YK04	1080	26	76	142	167B	160	177	73	138*	20
A - SAMPLING P	ROBLEN	MS WE	RE ENC	COUNT	ERED						
B - EARLY OR L	ATE SAN	MPLIN	G								

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

\* - PERIOD OF RECORD AVERAGE

# SNOWPACK and WATER SUPPLY OUTLOOK in BRITISH COLUMBIA

#### May 1, 1997

The May 1 snow survey has been conducted throughout the province with a total of 191 snow courses being measured. These readings, together with data from 44 snow pillows, 21 snow courses from adjacent jurisdictions and weather and flow data provided by Environment Canada have been used in making the following report.

#### **Snowpack**

Snowpack accumulations and depletions were generally close to normal for April with no warm spells to melt off the higher elevation snowpack. As a result the snowpack remains above to well above normal throughout the great majority of the province.

#### Weather

April was generally cool and unsettled. Mean temperatures were mostly within 2 degrees of normal, but there were no warm spells. Precipitation during the month was above normal in almost all areas with the accumulated totals since November about 30% above normal in many areas in the southern interior of the province.

#### Outlook

Forecast runoff volumes for the spring (which assume normal weather for the remainder of the forecast period) are given on the following pages and are generally above normal. Due to the wet fall and winter, many areas report that the ground is much wetter than normal and this, as well as causing slope stability problems, will increase the volume of the runoff when snowmelt occurs.

Any time there is an above normal snowpack, there is the potential for flooding to occur if the melt sequence is early and/or rapid or there are substantial rains. This will depend on the weather patterns during the next four to six weeks. Areas where the potential for flooding is the greatest remain the Nicola, Fraser canyon, South Thompson, Okanagan, Kettle, lower Columbia, upper Columbia upstream of Golden, Kootenays, Nechako, Babine and Bulkley basins.

#### UPPER FRASER AND NECHAKO

Above normal precipitation combined with near normal temperatures has resulted in close to normal snowpack accumulations and depletions during the month. One area where there has

been an improvement is in the Nechako basin where the snowpack is now estimated to be 16% above normal compared with 28% a month ago. The forecast volume inflow for the Nechako reservoir, however, remains high at 135% of normal and flows throughout the Nechako River system are likely to remain above normal for some time.

The snowpack in the upper Fraser is about 10% above normal and the forecast volume runoff for the period May through September at the gauge at Marguerite is for 10% above normal. This is unlikely to cause damaging flooding unless the snowmelt is very rapid or there is unusual rainfall.

Considerable inflow from the Nechako, Stuart and Salmon Rivers has resulted in much higher flows than normal in the Fraser River at Marguerite where the flow during April was 54% above normal.

#### MIDDLE AND LOWER FRASER

The snowpack in the middle and lower Fraser basins, expressed as a percentage of normal, has increased slightly during April as a result of the relatively cool, unsettled weather. Unusually large snowpacks still exist in the Nicola River basin and Nicola Lake is being maintained at a low level to provide some storage as the runoff peaks in the next few weeks.

In the lower Fraser, long-term snow courses are well below previously recorded maximum levels. However, the snowpack is estimated to be 19% above normal and a rapid melt could cause steep snowmelt-fed creeks and rivers to rise very rapidly.

Flows in the Fraser River at Hope have been unusually high during April at 154% of normal, largely due to the melting of low-elevation snow in the northern plateau areas around Prince George. The volume flow forecast for the period May through September for the Fraser River at Hope is for 115% of normal. The flow in the main stem of the Fraser is not expected to reach damaging flood levels unless there are very abnormal weather conditions.

#### NORTH AND SOUTH THOMPSON

Snow conditions throughout the Thompson River basin remained relatively unchanged during April. The regional indices of snow water equivalent are for 113% and 124% of normal for the North and South Thompson basins, respectively.

Flows in the Thompson River near Spences Bridge during April were 40% greater than normal, largely as a result of low elevation snow melting. The volume runoff forecast for this location for the May through September period is for 123% of normal. Whether peak flows reach damaging levels will largely depend on the weather patterns during the next few weeks. Any prolonged warm weather will cause rivers and lakes throughout the region to rise quite rapidly and steep snow-melt fed creeks could reach flood stage quickly. With snowpacks in the South Thompson basin well above normal for this time of year there is an increased danger of high levels occurring in this area.

#### UPPER AND LOWER COLUMBIA

The relatively cool, unsettled weather during April resulted in little overall change in the Columbia basin snowpack. The snowpack north of a line from Revelstoke to Golden generally remains close to, or slightly above, normal. One exception is the Downie Slide area where both snowcourses (2A27 and 2A29) report 20-year record high water equivalents. South of this line the snowpack is well above normal for this sampling period.

The May through September volume runoff forecast for the Columbia at Donald is for 106% of normal while that for the Columbia at Birchbank as it crosses the border is for 118% of normal. While the main stem is largely controlled by Hydro dams, the tributary creeks are uncontrolled and any warm weather could cause a rapid rise in levels as the ground in most areas is more saturated than normal.

#### EAST AND WEST KOOTENAY

The snowpack in the Kootenay River basin remains well above normal with the regional snowpack index now estimated to be 35% greater than normal - an increase of 8% from a month ago. However, most snow courses are below previously recorded maximum readings for this date.

April temperatures were a little below normal in the area and this is reflected in the flow of the Kootenay River at Fort Steele which was 94% of normal for April. The May through September volume forecast at this location is for 117% of normal.

Any warm weather in the next few weeks will bring water levels in steep snowmelt-fed streams up quite rapidly. Residents in flood-prone areas should take whatever preventative measures they can. A prolonged warm spell and/or excessive rainfall could bring main stem rivers to flood stage.

#### OKANAGAN, SIMILKAMEEN AND KETTLE

Greater than normal precipitation during April and the absence of any warm weather has resulted in the regional snow water equivalent index increasing slightly over the past month. The index is estimated to be 131% of normal in the Okanagan-Kettle and 127% of normal in the Similkameen.

Seasonal volume forecasts for the area, which assume normal weather conditions for the forecast period, are all for well above normal runoff. For example, the April through July forecast for the Similkameen at Nighthawk is for 145% of normal. If the runoff is rapid and early, tributary creeks may reach flood stage quite quickly, but warm weather would have to last for several days for the larger rivers to reach damaging flood levels.

Inflow to Okanagan Lake during April was almost three times greater than normal and the lake rose 6 cm during the month despite high outflows through the dam at Penticton. These high flows can be expected to continue during May. It is still anticipated that there is sufficient

storage to contain the runoff if weather patterns are normal for the rest of the runoff period. Runoff into Kalamalka Lake is expected to keep water levels in that area high for most of the next two months.

#### SOUTH COASTAL AND VANCOUVER ISLAND

May 1 snow surveys show that the overall snowpack in the lower mainland/Howe Sound area continues to be slightly above normal - most snow courses have lost more snow than normal since April 1. Up the coast in the Homathko River drainage, water equivalents are below normal, though these snow courses have not lost much water content during April. Precipitation measured at valley-bottom weather stations for April was above normal, keeping the seasonal totals since November very high.

On Vancouver Island, most snow courses have slightly above normal water content. Depletion or increases of water equivalent has been quite variable among the Island snow courses that were sampled May 1. Precipitation was high for April, especially on the south Island, and the seasonal total is 14% above normal.

April mean monthly temperatures were near normal for the South Coast and Vancouver Island.

Monthly runoff into Upper Campbell Lake was 88% of normal for April, and the seasonal runoff forecast for May through July is 100% of normal, assuming normal weather conditions during this period.

#### NORTHEASTERN

The May 1 snowpack in the Peace River basin is quite variable, but overall appears to be well above normal. In the Liard River basin, the few snow courses that were sampled May 1 suggest a below normal snowpack.

Very few weather stations are available in northeastern British Columbia, but April precipitation is estimated to be just above normal for the Peace, and well below normal for the Liard. April mean temperatures were about 0.5 oC below normal for northeastern B. C.

April inflow to Williston Lake continued to be well above normal. Assuming normal weather, seasonal runoff for May through September is expected to be 115% of normal.

#### NORTHWESTERN

May 1 snow surveys continue to show a heavy snowpack in the Skeena basin near Smithers. In the Nass drainage, the indication is of a near normal snowpack. Farther north in the Stikine, Taku, and Yukon River drainages, the snowpack appears to be just below normal.

Precipitation in the northwest was highly variable for April, and the November-April total is estimated to be just above normal. Mean temperatures for April were 1-2 oC above normal in the northwest.

Monthly flow for April was very high for the Skeena River, and the volume runoff for May through September is 109% of normal assuming typical weather during the period.

# **COLUMBIA**

May 1, 1997

					V	ATE	R EQU	IVAL	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER COLUMBIA											
DOWNIE SLIDE (LOWER)	2A27	980	01	193	910	714	474	900	0	638	20
GLACIER	2A02	1250	28	180	807	792	566	1247	320	719	51
FIELD	2A03A	1280	01	36	119	28	24	178	0	28	44
SUNWAPTA FALLS	AL11	1400	30	49	172	172	114	389	0	151*	26
VERMONT CREEK	2A19	1520	02	114	477	448	501	1026	140	447	31
AZURE RIVER	1E08	1620	25	300	1329	1414	1196	1491	766	1120	27
AZURE RIVER	1E08P	1620	01	273	1459	-	-	-	-	-	0
DOWNIE SLIDE (UPPER)	2A29	1630	01	374	1744	-	1646	1646	886	1314	18
KICKING HORSE	2A07	1650	01	113	406	357	352	589	63	324	50
KIRBYVILLE LAKE	2A25	1750	01	297	1422	1597	1386	1793	770	1233	25
MOUNT REVELSTOKE	2A06	1830	30	304	1398	1455	1163	1961	874	1308	50
MOUNT REVELSTOKE	2A06P	1830	01	-	1306	1502	1135	1502	874	1324	4

NORTH CLEMINA CREEK	1E13	1860	25	233	879	1090	863	1115	579	892*	8
FIDELITY MOUNTAIN	2A17	1870	28	340	1514	1650	1177	1986	817	1347	34
BEAVERFOOT	2A11	1890	02	82	300	264	239	495	66A	225	36
KEYSTONE CREEK	2A18	1890	01	222	974	948	869	1372	565	879	31
GOLDSTREAM	2A16	1920	01	306	1367	1488	1175	1781	850	1204	34
BUSH RIVER	2A23	1920	01	224	945	-	1000	1392	538	892	29
NIGEL CREEK	AL10	1920	30	127	445	601	467	752	207	429*	27
MOUNT ABBOT	2A14	1980	29	338	1506	1585	1274	1811	853	1383	37
MOLSON CREEK	2A21P	1980	01	-	1156	-	1083	1230	746	1093	14
SUNBEAM LAKE	2A22	2010	01	240	1021	1187	901	1562	637	990	30
BOW SUMMIT II	AL07A	2080	30	123	450	503	446	597	201	383*	17
LOWER COLUMBIA											
FERGUSON	2D02	880	29	141	652	594	480	757	160	430	51
FARRON	2B02A	1220	28	82	355	208	261	406	23	235	24
MONASHEE PASS	2E01	1370	28	101	442	330	286	505	67	305	39
WHATSHAN (UPPER)	2B05	1480	28	194	898	677	605	983	255	587	36
BARNES CREEK	2B06	1620	28	155	714	574	482	742	211	499	36
BARNES CREEK	2B06P	1620	01	-	818	679	463	679	463	543*	4
ST. LEON CREEK	2B08	1800	28	330	1485	1557	1301	1974	914	1307	30
ST. LEON CREEK	2B08P	1800	01	-	1309	-	1227	1227	861	1193	3
KOCH CREEK	2B07	1860	28	224	995	899	930	1201	391	808	36
RECORD MOUNTAIN	2B09	1890	29	244	1071	713	1011	1194	157	823	22
EAST CREEK	2D08P	2030	01	-	983	1236	1237	1330	568	907	15

<b>EAST</b>
KOOTENAY

KOOTENAY											
FERNIE EAST	2C07	1250	26	95	374	101	138	541	0	230	45
UPPER ELK RIVER	2C06	1340	28	No S	now	-	-	140	0	24*	32
SINCLAIR PASS	2C01	1370	29	36	127	79	51	246	0	59	51
MARBLE CANYON	2C05	1520	01	107	407	422	349	612	102	296	50
BRUSH CREEK TIMBER	MT03	1520	01	48	173	33	10	417	0	153*	46
SULLIVAN MINE	2C04	1550	29	96	408	345	250	518	0	262	51
WEASEL DIVIDE	MT02	1660	30	239	1201	1006	937	1422	348	840*	57
KIMBERLEY (MIDDLE)V O R	2C12	1680	29	93	362	267	208	483	0	238	28
MOUNT JOFFRE	2C16	1750	02	148	537	543	416	772	180	370	28
MORRISSEY RIDGE	2C09Q	1800	Not	Availab	ole	906	896	1345	317	784	13
RED MOUNTAIN	MT04	1830	28	150	678	526	452	841	0	442*	59
MOYIE MOUNTAIN	2C10	1940	27	143	650	462	344	772	0	460	26
ALLISON PASS	AL01	1980	29	143	612	607	455	838	287	474*	10
WILKINSON SUMMIT (BUSH)	AL03	1980	29	68	173	198	279	279	23	182*	8
THUNDER CREEK	2C17	2010	02	114	390	364	342	556	163	297	28
FLOE LAKE	2C14	2090	02	236	1010	1074	902	1369	511	820	28
FLOE LAKE	2C14P	2090	01	-	934	934	-	934	481	726	2
KIMBERLEY (UPPER) V O R	2C11	2140	29	173	674	583	539	935	188	538	28
HIGHWOOD SUMMIT (BUSH)	AL02	2210	29	150	513	544	495	726	221	462*	32

MOUNT ASSINIBOINE	2C15	2230	02	177	684	770	658	930	366	586	28
SUNSHINE VILLAGE	AL05	2230	01	192	716	768	664	1092	338	644*	30
WEST KOOTENAY											
DUNCAN LAKE NO. 2	2D07A	650	25	18	42	0	-	0	0	-	1
FERGUSON	2D02	880	29	141	652	594	480	757	160	430	51
NELSON	2D04	930	25	115	510	146	299	414	0	171	41
SANDON	2D03	1070	01	46	237	64	0	399	0	103	48
CHAR CREEK	2D06	1310	30	167	758	437	590	838	79	484	30
SMITH CREEK	ID01	1460	01	302	1585	782	1021	1920	119	1033	55
BUNCHGRASS MEADOW	WA01	1520	Not	Availab	ole	559	-	1219	165	665*	55
GRAY CREEK (LOWER)	2D05	1550	30	149	645	432	487	726	229	471	48
ARROW CREEK	2D11	1620	27	194	988	-	-	925	524	697	6
KOCH CREEK	2B07	1860	28	224	995	899	930	1201	391	808	36
MOUNT TEMPLEMAN	2D09	1860	Not	Measur	ed	1463	1162	1679	785	1167	30
GRAY CREEK (UPPER)	2D10	1910	30	227	1194	914	813	1300	518	856	28
HARLOW CREEK	2D12	1920	Not	Availab	ole	1077	-	1293	746	935*	7
MEADOW MOUNTAIN	2D13	1990	Not	Measur	ed	1113	-	1113	667	879*	3
EAST CREEK	2D08P	2030	01	-	983	1236	1237	1330	568	907	15
KETTLE											
TRAPPING CREEK (LOWER)	2E05	930	26	No Si	now	0	0	0	0	-	25
FARRON	2B02A	1220	28	82	355	208	261	406	23	235	24
CARMI	2E02	1250	26	19	74	6	28	173	0	36	33

TRAPPING CREEK (UPPER)	2E04A	1350	27	32	116	4	10	46	0	8*	13
MONASHEE PASS	2E01	1370	28	101	442	330	286	505	67	305	39
BIG WHITE MOUNTAIN	2E03	1680	27	148	648	510	596	762	237	474	31
BLUEJOINT MOUNTAIN	2E06	2040	28	226	1002	787	929	1186	287	784	21
OKANAGAN											
SUMMERLAND RESERVOIR	2F02	1280	28	57	220	127	134	368	0	141	32
MC CULLOCH	2F03	1280	29	2	7	0	4	188	0	51	51
ABERDEEN LAKE	1F01A	1310	25	20	77	0	0	144	0	37	43
OYAMA LAKE	2F19	1340	29	32	109	83	149	185	0	66	27
POSTILL LAKE	2F07	1370	30	45	182	184	190	282	0	144	45
VASEUX CREEK	2F20	1400	28	24	90	6A	68	192	0	68	26
BOULEAU LAKE	2F21	1400	27	99	384	268	340	488	95	320	25
TROUT CREEK	2F01	1430	29	35	118	68	57	386	0	110	49
ESPERON CR (MIDDLE)	2F14	1430	30	82	336	286	360	551	0	252	27
BRENDA MINE	2F18	1460	29	85	344	272	342	526	0	234	28
BRENDA MINE	2F18P	1460	01	-	273	235	240	279	0	179	4
ISLAHT LAKE	2F24	1480	29	95	377	285	399	399	66	271	15
GREYBACK RESERVOIR	2F08	1550	28	72	247	208	243E	386	0	190	25
ESPERON CR (UPPER)	2F13	1650	30	121	498	350	466	805	119	385	27
ISINTOK LAKE	2F11	1680	30	56	169	125	188E	437	0	142	32
MACDONALD LAKE	2F23	1740	29	144	548	465	622	622	198	441	20
MISSION CREEK	2F05	1780	30	172	701	-	-	798	242	536	44

May 1, 1997 Show Survey W	cusuroments										
MISSION CREEK	2F05P	1780	Not	Measur	ed	451	507	726	140	468	26
GRAYSTOKE LAKE	2F04	1810	29	131	504	328	380	940	120	431	26
MOUNT KOBAU	2F12	1810	29	122	393	298	480	597	53	333	31
WHITEROCKS MOUNTAIN	2F09	1830	01	149	629	506	648	1013	175	529	26
SILVER STAR MOUNTAIN	2F10	1840	27	211	925	819	847	1135	371	733	38
SIMILKAMEEN											
BROOKMERE	1C01	980	30	64	238	106	74A	419	0	117	50
FREEZEOUT CREEK TRAIL	WA11	1070	29	91	348	15	112	658	0	180*	45
LIGHTNING LAKE	3D02	1220	30	104	429	287	220	599	24	255	25
HAMILTON HILL	2G06	1490	28	101	399	232	159	838	0	302	37
MISSEZULA MOUNTAIN	2G05	1550	27	56	202	112	142	323	0	165	32
ISINTOK LAKE	2F11	1680	30	56	169	125	188E	437	0	142	32
LOST HORSE MOUNTAIN	2G04	1920	30	97	326	284	-	554	64	248	36
BLACKWALL PEAK	2G03P	1940	01	-	1121	926	845	1566	375	886	29
HARTS PASS	WA09	1980	29	318	1425	1219	1255	1847	531	1153	53
A - SAMPLING PR	ROBLEM	S WER	E ENC	OUNTE	ERED						
B - EARLY OR LA	TE SAM	PLINC	<del>j</del>								
C - EARLY OR LA	TE SAM	PLINC	WITH	PROBI	LEMS	ENCC	UNTE	ERED			
E - ESTIMATED B	SASED O	N ARE	EAL AV	ERAGI	Ξ						

\* - PERIOD OF RECORD AVERAGE

# **COASTAL**

May 1, 1997

			WATER EQUIVALENT (mm)							nm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
SOUTH COASTAL											
PALISADE LAKE	3A09	880	02	306	1533	-	1424	2852	0	1595	44
PALISADE LAKE	3A09P	880	Not	Measur	ed	-	-	-	-	-	0
CHAPMAN CREEK	3A26	1022	01	328	1506	756	1710	1710	756	1147	4
CALLAGHAN CREEK	3A20	1040	27	252	990	320	828	1565	256	933	19
EDWARDS LAKE	3A27	1070	01	249	1176	400	1180	1180	400	758*	4
DOG MOUNTAIN	3A10	1080	30	290	1475	404	1190	1458	122	1384	13
GROUSE MOUNTAIN	3A01	1100	30	325	1610	638	1090	2426	120	1303	47
ORCHID LAKE	3A19	1190	02	417	1985	-	1990	3721	900	2210	24
ORCHID LAKE	3A19P	1190	Not	Measur	ed	-	1537	2889	1058	2000	13
UPPER SQUAMISH RIVER	3A25P	1340	01	358	1766	1324	1886	1886	1153	1647	7
TIEDEMANN GLACIER	3A17P	1400	01	-	1509	1750	1484	1750	921	1398	4

DIAMOND HEAD	3A21	1420	30	360	1845	1186	1529	1982	935B	1532	20
NOSTETUKO RIVER	3A22P	1500	01	-	549	555	780	780	207	487*	7
UPPER MOSELY CREEK	3A24P	1650	01	-	226	286	308	494	158	240	8
TATLAYOKO LAKE	3A13	1710	02	73	215	273	296	544	69	234	33
VANCOUVER ISLAND											
WOLF RIVER (LOWER)	3B19	640	01	47	196	0	0	798	0	224	27
TENNENT LAKE	3B22	950	03	265	1238	384	1010	1050	0	998	12
UPPER THELWOOD LAKE	3B10	980	01	352	1822	734	1786	2766	644	1672	36
MARGARET LAKE	3B21	1040	29	432	2160	1330	2740	2740	632	2013	21
WOLF RIVER (MIDDLE)	3B18	1070	01	150	634	122	846	1229	0	611	26
FORBIDDEN PLATEAU	3B01	1130	01	354	1591	832	2211	2728	448	1688	40
JUMP CREEK	3B23P	1160	01	280	1545	360	-	360	360	360*	1
NEWCASTLE RIDGE	3B14	1170	Not :	Measur	ed	878	-	2362	570	1623	34
MOUNT COKELY	3B02A	1190	04	216	960	450	998	1494	274	912	17
SPROAT LAKE	3B20	1220	Not	Availab	le	1060	2283	2415	613	1746	21
SNO-BIRD LAKE	3B16	1400	29	326	1655	665	1548	2367	294	1395	30
WOLF RIVER (UPPER)	3B17P	1490	01	-	1420	1061	1888	1888	701	1388	9

NORTH COASTAL

WEDEENE RIVER SOUTH	3C07	300	29	56	249	25	170	170	0	60*	12
TAHTSA LAKE	1B02	1300	30	298	1424	1286	1446	1770	701	1202	45
TAHTSA LAKE	1B02P	1300	01	-	1658	-	1356	1430	866	1204	4
SKAGIT											
SUMALLO RIVER WEST	3D01C	790	29	71	348	0	0	0	0	-	5
FREEZEOUT CREEK TRAIL	WA11	1070	29	91	348	15	112	658	0	180*	45
BEAVER PASS	WA12	1120	28	229	1074	348	785	1590	135	756*	48
KLESILKWA	3D03A	1130	02	80	379	0	0	752	0	176	24
LIGHTNING LAKE	3D02	1220	30	104	429	287	220	599	24	255	25
HARTS PASS	WA09	1980	29	318	1425	1219	1255	1847	531	1153	53

#### 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

# **NORTH**

May 1, 1997

	WATER EQUIVALENT (mm)  Date Snow										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
PEACE											
FORT ST. JOHN A	4A25	690	01	No S	now	0	0	56	0	4*	23
MACKENZIE A	4A19	700	28	38	138	0	0	242	0	36*	25
PACIFIC LAKE	1A11	770	30	165	735	265	423	950	93	558	32
BULLHEAD MOUNTAIN	4A28	790	01	No S	now	0	-	0	0	-	12
MC LEOD LAKE	4A01	980	29	61	238	66	62	267	0	102	37
WARE (LOWER)	4A04	980	02	48	119	172	54	229	0	139	31
PHILIP LAKE	4A13	980	01	89	329	202	209	406	0	228	33
AIKEN LAKE	4A30P	1040	01	-	191	263	120	276	71	169*	10
TUTIZZI LAKE	4A06	1070	01	44	146	193	136	325	0	173	33
TSAYDAYCHI LAKE	4A12	1160	01	124	472	465	357	625	168	381	34
PINK MOUNTAIN	4A14	1170	01	35	95	151	11	151	0	48	33
KAZA IAKE	1A12	1190	01	104	375	412	251	470	201	337	31
PULPIT LAKE	4A09	1310	02	111	314	487	319	560	287	417	32
PULPIT LAKE	4A09P	1310	01	-	387	500	332	500	308	407	6
FREDRICKSON LAKE	4A10	1310	01	70	220	324	231A	358A	138	237	33

PINE PASS	4A02P	1400	01	-	1262	-	1201	1537	1088	1221	5	
TRYGVE LAKE	4A11	1400	01	98	339	467	328	495	272	381	33	
SIKANNI LAKE	4C01	1400	02	85	240	343	197	360	115	261	33	
PINE PASS	4A02	1430	30	311	1365	1474	1189	1732	681	1222	36	
MORFEE MOUNTAIN	4A16	1450	30	205	935	939	772	1181	410	830	26	
LADY LAURIER LAKE	4A07	1460	02	141	503	686	446	747	305	529	34	
MOUNT SHEBA	4A18	1490	30	277	1251	889	904	1227	503	865	28	
GERMANSEN (UPPER)	4A05	1500	01	121	410	388	328	597	181	350	35	
MOUNT STEARNS	4A21	1500	02	53	140	271	116A	271	0	161	23	
JOHANSON LAKE	4B02	1540	01	88	289	418	288	418	143	299	34	
MONKMAN CREEK	4A20	1550	30	189	735	-	583	1016	329	649	20	
WARE (UPPER)	4A03	1570	02	91	245	402	224	402	141	260	33	
BULLMOOSE CREEK	4A31	1570	30	134	592	608A	560	695	294	508*	9	
KWADACHA RIVER	4A27P	1620	01	-	325	427	259	476	259	370	11	
SKEENA/NASS												
TERRACE A	4B13A	180	01	No S	now	0	-	0	0	-	1	
BEAR PASS	4B11A	460	30	113	494	360	460	859	360	637	12	
NINGUNSAW PASS	4B10	690	30	67	276	243	140A	547	0	254	21	
GRANDUC MINE	4B12	790	Not 1	Measur	ed	1321	1365	2095	1213	1554	16	
MCKENDRICK CREEK	4B07	1050	02	88	350	229	179	422	80	254	29	
TACHEK CREEK	4B06	1140	29	88	318	234	182	317	69	174	27	

KAZA LAKE	1A12	1190	01	104	375	412	251	470	201	337	31
LU LAKE	4B15	1300	30	121	444	356	250	356	180	279	17
KIDPRICE LAKE	4B01	1370	30	246	1173	1094	986	1367	551	919	45
TRYGVE LAKE	4A11	1400	01	98	339	467	328	495	272	381	33
EQUITY MINE	4B14	1420	29	152	620	480	-	480	212	345	19
CHAPMAN LAKE	4B04	1460	02	162	689	657	366	749	308	485	31
HUDSON BAY MTN.	4B03A	1480	01	165	707	598	381	787	363	532	25
MOUNT CRONIN	4B08	1480	02	193	807	723	484	1125	422	670	28
SHEDIN CREEK	4B16P	1480	01	213	1065	1140	-	1140	1140	1140	1
JOHANSON LAKE	4B02	1540	01	88	289	418	288	418	143	299	34
LIARD											
WATSON LAKE A	YK01	700	30	2	4	85	0	145	0	32*	26
FRANCES RIVER	YK02	730	30	19	44	85	12	237	0	72*	20
DEASE LAKE	4C03	820	Not	Availat	ole	80	0	178	0	55	32
BLUFF CREEK	4C11P	1040	Not	Measur	ed	222	0	222	0	89	4
SUMMIT LAKE	4C02	1280	30	No S	now	0	0	200A	0	50*	31
DEADWOOD RIVER	4C09P	1300	01	-	85	207	-	207	27	135*	3
CASSIAR	4C04	1390	Not :	Measur	ed	-	197	484	79	308	31
SIKANNI LAKE	4C01	1400	02	85	240	343	197	360	115	261	33
STIKINE/ TAKU											
SPEEL RIVER	AK03	80	28	168	615	323	655	1240	51	678*	31
FORREST- KERR CREEK	4D08P	560	01	-	445	439	323	469	323	407*	5

TELEGRAPH CREEK	4D01	580	26	No Snow		14	0	163	0	30*	22	
NINGUNSAW PASS	4B10	690	30	67	276	243	140A	547	0	254	21	
DEASE LAKE	4C03	820	Not	Availat	ole	80	0	178	0	55	32	
ISKUT	4D02	1000	30	No S	now	0	0	146	0	20*	21	
KINASKAN LAKE	4D11P	1020	01	-	280	314	216	487	216	376	6	
TUMEKA CREEK	4D10P	1220	01	-	482	655	463	838	463	578	7	
WADE LAKE	4D14P	1370	Not	Measur	ed	463	187	546	187	405	6	
UPPER STIKINE	4D13P	1450	01	-	439	552	424	707	421	517	7	
YUKON												
ATLIN LAKE	4E02A	730	30	No S	now	-	0	97	0	21*	12	
LOG CABIN	4E01	880	25	88	285	303	321	531	173	318	39	
PINE LK AIRSTRIP	YK03	1010	01	60	175	183	142	327	89	185*	21	
MONTANA MTN.	YK05	1020	02	43	92	-	-	191	0	105*	17	
TAGISH	YK04	1080	02	34	105	150	140	205	0	105*	21	
A - SAMPLING P	ROBLEN	AS WE	RE ENC	COUNT	ERED	)						
B - EARLY OR L	B - EARLY OR LATE SAMPLING											
CEADLYOPI	ATECAN	JDI IN	СМЛТ	I DD () E	T ENG	ENIC	OI INITI	DED				

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

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

# SNOWPACK and WATER SUPPLY OUTLOOK in BRITISH COLUMBIA

May 15, 1997

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 to be estimated. Please note that data provided on these pages are preliminary and subject to revision on review. The next set of snow survey samples will be taken about June 1, 1997 and should be posted by June 5.

The May 15 snow survey is of a relatively small number of stations compared with the surveys done in the previous measurements. Data from 61 snow courses and 43 snow pillows around the province have been used to form the basis for the following reports.

#### **Snowpack**

The mountain snowpack has been somewhat depleted by the warm weather in the first half of May. However, measurements made on or about May 15 show that the mountain snowpack remains above normal in most areas for this time of year. A further snow survey will be conducted on June 1.

#### Weather

The ten-day warm spell starting on about May 9, has caused substantial snowmelt in most parts of the province. Precipitation to mid-month has been well below normal.

#### Outlook

Although river levels were dropping in response to the cooler weather in the interior over the long weekend, a return to warm weather in the next two or three weeks could bring rivers back up to dangerously high levels as there is still a lot of snow at the higher elevations and the ground remains highly saturated.

#### UPPER FRASER AND NECHAKO

Snowmelt in the upper Fraser brought river stages to levels not seen for a few years. In the Nechako system, river levels remain high and are expected to remain high for some time as the snowpacks are above normal for this time of year.

A return to summer-like conditions in the next two or three weeks could bring rivers back up, but it seems unlikely that the levels would exceed those which have occurred on the main stem of the Fraser. Snowmelt in the upper Fraser brought river stages to levels not seen for a few years. In the Nechako system, river levels remain high and are expected to remain high for some time as the snowpacks are above normal for this time of year.

#### MIDDLE AND LOWER FRASER

The peak flow on the Fraser River at Hope on about May 21 will be the highest that has been recorded for several years. A higher peak is possible if there is a return to hot weather in the interior in the next two or three weeks, particularly if it is associated with any substantial rainfall. However, damaging flooding along the main stem of the Fraser does not appear likely at this time.

#### NORTH AND SOUTH THOMPSON

In spite of the melting of the last ten days, snowpacks throughout the Thompson River basin are above normal as they have been all season. The snowpack remains well above normal in the South Thompson (24%) and above normal (15%) in the North Thompson. There is still a substantial snowpack at mid to high elevations and river and lake levels greater than those which have occurred to date could occur if the hot weather returns for a few days in the next two or three weeks.

#### **UPPER AND LOWER COLUMBIA**

Snowpacks in the southern portions of the Columbia River basin remain above normal for this date with the regional snowpack index estimated to be 14% above normal.

Although rivers rose in response to the warm weather in the first half of May, the main melt in the Columbia basin has not really started and higher river flows can be expected in the next month or six weeks.

#### EAST AND WEST KOOTENAY

The May 15 regional snow water equivalent index is estimated to be 38% above normal for this sampling period. While rivers rose in response to the warmth in the first half of May, there is still a lot of snow to be melted and many rivers with high elevation headwaters can be expected to reach higher peaks than those which have already occurred.

A return to summerlike conditions with warm day and night temperatures could bring rivers back up quite quickly.

#### OKANAGAN, SIMILKAMEEN AND KETTLE

The snowpacks in the Okanagan, Kettle and Similkameen valleys are still above normal for this time of year with the Okanagan-Kettle index estimated to be 20% above normal and the Similkameen just above normal.

Peak flows recorded at mid-month in both the Similkameen and Kettle valleys, while below record values, were greater than anything that has occurred for several years. Any return to hot weather in the next two or three weeks could bring these rivers up again as there is still a lot of snow above elevation 1500m. Levels greater than those which have already occurred are not very likely unless there is substantial precipitation.

In the Okanagan, Okanagan Lake continues to rise as inflows exceed outlet capacity. Although it is still hoped that Okanagan Lake will not exceed its normal full pool elevation, if the high inflow rates continue, it is quite probable that this level may be exceeded. High flows will continue in the Okanagan River channel between Penticton and the border for some time to come. Kalamalka Lake continues to rise although at a reduced rate and it is anticipated that the lake will peak in the next few days. Osoyoos Lake levels are declining as the Similkameen drops, but would rise again if a further peak was to occur on the Similkameen. Any return to the hot weather will bring a rise in any streams fed by melting snow.

#### SOUTH COASTAL AND VANCOUVER ISLAND

Based on the few measurements made at this sampling date, the snowpack in the coastal and Vancouver Island watersheds remains slightly above normal. Unless abnormal weather conditions occur, flooding problems are not likely and water supplies for the summer should be good.

#### **NORTHEASTERN**

The snowpack in the Peace drainage, based on the few snow courses sampled, remains slightly above normal for this date. There are insufficient data to assess the snowpack in the Liard basin.

#### NORTHWESTERN

The snowpack in the Skeena-Nass basin is estimated to be about 12% above normal for this date. There are few data available for the Stikine-Taku areas, but the indications are that the snowpack remains a little below normal.

High water levels and some flooding have been reported in the Bulkley River basin (a tributary to the Skeena River) in response to the warm temperatures in the first half of May. Flows have dropped from the peak levels recorded over the long weekend, but if there were to be a return to warm weather or substantial rains in the basin, river levels could easily rise again. A further peak on the main stem of the Skeena River is still quite possible.

# **FRASER**

May 15, 1997

	ainage Basin and    Station    Elev						R EQU	IVAL	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER FRASER											
PACIFIC LAKE	1A11	770	09	143	722	0	264	567	0	358	22
MCBRIDE (MIDDLE)	1A20	1160	11	57	218	166	36	334	0	166	23
LU LAKE	4B15	1300	15	80	330	318	-	318	0	204	12
FORFAR CREEK (UPPER)	1A24	1410	17	161	738	-	-	-	-	-	0
BARKERVILLE	1A03P	1520	15	_	326	-	-	503	0	282	19
MC BRIDE (UPPER)	1A02	1580	11	112	408	376	358	752	24	413	29
KNUDSEN LAKE	1A15	1580	09	199	941	826	663	1205	359	873	22
NARROW LAKE	1A21	1650	09	262	1238	-	866	1375	489	993	22
REVOLUTION CREEK	1A17P	1690	15	-	766	875	574	1161	574	757	11
LONGWORTH (UPPER)	1A05	1740	09	258	1158	778	634	1219	292	802	43
DOME MOUNTAIN	1A19	1820	09	202	931	765	699	1168	385	859	24
YELLOWHEAD	1A01P	1860	15	111	326	_	_	-	_	-	0
HOLMES RIVER	1A18	1900	09	210	903	865	635	1125	359	813	27
NECHAKO											
TAHTSA LAKE	1B02P	1300	15	-	1509	-	1149	1344	732	1052	4
MOUNT PONDOSY	1B08P	1400	15	-	850	-	701	705	314	521*	4
MOUNT WELLS	1B01P	1490	15	-	680	698	378	698	338	485	5

MOUNT SWANNELL	1B06	1620	17	88	331	-	-	-	-	-	0
MIDDLE FRASER											
BROOKMERE	1C01	980	14	14	57	12	-	208	0	31*	22
LAC LE JEUNE (LOWER)	1C07	1370	13	No S	now	-	-	0	0	-	3
BOSS MOUNTAIN MINE	1C20P	1460	15	_	521	709	652	709	265	502	3
BRENDA MINE	2F18	1460	13	42	180	-	60	368	0	69*	25
BRENDA MINE	2F18P	1460	15	No S	now	125	0	125	0	11	4
LAC LE JEUNE (UPPER)	1C25	1460	13	No S	now	-	-	0	0	-	2
BARKERVILLE	1A03P	1520	15	-	326	-	-	503	0	282	19
MOUNT TIMOTHY	1C17	1660	15	61	244	312	191	437	0	225	28
YANKS PEAK EAST	1C41P	1670	15	139	878	-	-	-	-	-	0
PENFOLD CREEK	1C23	1680	09	264	1242	1157	1089	1349	585	1008	27
GREEN MOUNTAIN	1C12P	1780	15	_	978	1036	869	1036	577	827*	3
MISSION RIDGE	1C18P	1850	15	-	372	503	397	701	0	468	10
PAVILION MOUNTAIN	1C36	1960	15	67	234	308	214	308	214	261*	2
LOWER FRASER											
BROOKMERE	1C01	980	14	14	57	12	-	208	0	31*	22
DISAPPOINTMENT LAKE	1D18P	1040	Not	Measur	red	-	1652	1652	1652	1652	1
CALLAGHAN CREEK	3A20	1040	16	110	564	290	680	1311	55A	664	14
DOG MOUNTAIN	3A10	1080	09	255	1290	407	916	1507	0	1311	12
WAHLEACH LAKE	1D09P	1400	15	_	1643	847	631	847	335	590*	5
CHILLIWACK RIVER	1D17P	1600	Not	Measur	red	1208	-	1208	764	1443	4
GREAT BEAR	1D15P	1660	15	_	2436	1798	2049	2049	1181	1524	5
TENQUILLE LAKE	1D06	1680	17	263	1372	1268	1225	1707	625	1182	40

NORTH THOMPSON											
BLUE RIVER	1E01B	670	15	No S	now	0	-	0	0	-	6
COOK FORKS	1E06	1390	15	184	864	904	545	1359	295	749	34
BOSS MOUNTAIN MINE	1C20P	1460	15	-	521	709	652	709	265	502	3
MOUNT COOK	1E02A	1580	15	299	1485	1670	1195	1670	873	1292	22
AZURE RIVER	1E08P	1620	15	233	1496	-	_	_	-	-	0
ADAMS RIVER	1E07	1720	11	184	861	844	736	1107	280	745	25
KOSTAL LAKE	1E10P	1770	15	_	981	1120	928	1120	588	914	12
TROPHY MOUNTAIN	1E03A	1860	17	143	636	820E	565	825	301	607*	15
NORTH CLEMINA CREEK	1E13	1860	09	234	990	1144	871	1177	536	871*	7
SOUTH THOMPSON											
ANGLEMONT	1F02	1190	13	62	292	17	0	361	0	110	14
ADAMS RIVER	1E07	1720	11	184	861	844	736	1107	280	745	25
SILVER STAR MOUNTAIN	2F10	1840	13	176	848	861	787	1054	100	642	38
PARK MOUNTAIN	1F03P	1890	15	-	1321	1172	847	1241	474	916	12
ENDERBY	1F04	1900	13	290	1440	1233	960	1499	662	1099	34
A - SAMPLING PROI	BLEMS V	VERE 1	ENCOL	JNTER	ED						
B - EARLY OR LATE	E SAMPL	ING									
C - EARLY OR LATE	E SAMPL	ING W	TTH PF	ROBLE	MS EN	ICOUN	TERE	ED			
E - ESTIMATED BAS	SED ON A	AREAI	AVER	RAGE							

\* - PERIOD OF RECORD AVERAGE

# **COLUMBIA**

May 15, 1997

			WATER EQUIVALENT (mm)								
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER COLUMBIA											
AZURE RIVER	1E08P	1620	15	233	1496	-	-	-	_	-	0
KICKING HORSE	2A07	1650	14	88	362	-	319	521	0	230	43
MOUNT REVELSTOKE	2A06P	1830	15	-	1458	1624	1080	1624	700	1221	4
NORTH CLEMINA CREEK	1E13	1860	09	234	990	1144	871	1177	536	871*	7
MOLSON CREEK	2A21P	1980	15	-	1175	-	1076	1294	602	1036	14
LOWER COLUMBIA											
FERGUSON	2D02	880	14	100	495	465	_	580B	20	213	33
FARRON	2B02A	1220	13	36	164	156	27	222	0	111	17
BARNES CREEK	2B06P	1620	15	-	679	758	285	758	157	368*	4
ST. LEON CREEK	2B08P	1800	15	-	1219	-	1057	1057	639	987	3
RECORD MOUNTAIN	2B09	1890	10	226	1112	788	916	1125	83	732	22
EAST CREEK	2D08P	2030	15	-	825	1286	-	1387	461	877	15

EAST KOOTENAY											
FERNIE EAST	2C07	1250	15	21	90	37	22	290	0	61	35
SULLIVAN MINE	2C04	1550	12	58	272	363	117	457	0	123	45
MORRISSEY RIDGE	2C09Q	1800	15	-	749	971	768	971	0	580	13
MOYIE MOUNTAIN	2C10	1940	11	128	645	498	325	643P	0	339	27
FLOE LAKE	2C14P	2090	15	-	893	1028	-	1028	357	597	2
WEST KOOTENAY											
FERGUSON	2D02	880	14	100	495	465	-	580B	20	213	33
NELSON	2D04	930	15	38	184	-	0	132	0	24	37
CHAR CREEK	2D06	1310	15	126	610	414	410	676	0	248	27
GRAY CREEK (LOWER)	2D05	1550	Not	Measur	ed	440	277	709	0	385	46
GRAY CREEK (UPPER)	2D10	1910	Not Measured			1014	673	1194	311	770	27
EAST CREEK	2D08P	2030	15	-	825	1286	-	1387	461	877	15
KETTLE											
FARRON	2B02A	1220	13	36	164	156	27	222	0	111	17
BIG WHITE MOUNTAIN	2E03	1680	15	94	432	530	448	732	0	400	31
OKANAGAN											
SUMMERLAND RESERVOIR	2F02	1280	12	7	27	0	0	218	0	42	31
VASEUX CREEK	2F20	1400	12	No S	now	0	0	80	0	10*	25
TROUT CREEK	2F01	1430	13	No S	now	21	0	307	0	39	44
ESPERON CR (MIDDLE)	2F14	1430	14	34	150	-	160	335	0	125	9
BRENDA MINE	2F18	1460	13	42	180	-	60	368	0	69*	25
BRENDA MINE	2F18P	1460	15	No S	now	125	0	125	0	11	4
ISLAHT LAKE	2F24	1480	15	39	181	-	-	-	-	-	0

GREYBACK RESERVOIR	2F08	1550	15	14	52	140	101	323	0	122	25
ESPERON CR (UPPER)	2F13	1650	14	78	360	-	334	625	66	323*	7
ISINTOK LAKE	2F11	1680	13	15	43	118	85	386	0	83	31
MACDONALD LAKE	2F23	1740	13	107	474	-	499	518	0	361	17
MISSION CREEK	2F05	1780	14	139	636	-	-	785	16	487	46
MISSION CREEK	2F05P	1780	Not	Measur	ed	471	407	706	0	399	26
GRAYSTOKE LAKE	2F04	1810	15	98	412	-	-	742	0	395	15
MOUNT KOBAU	2F12	1810	14	84	323	321	430	513	0	260	30
WHITEROCKS MOUNTAIN	2F09	1830	14	103	474	492	512	968	0	402	26
SILVER STAR MOUNTAIN	2F10	1840	13	176	848	861	787	1054	100	642	38
SIMILKAMEEN											
BROOKMERE	1C01	980	14	14	57	12	-	208	0	31*	22
HAMILTON HILL	2G06	1490	15	29	131	159	-	434	0	145	30
MISSEZULA MOUNTAIN	2G05	1550	15	2	7	47	0	218	0	66	33
ISINTOK LAKE	2F11	1680	13	15	43	118	85	386	0	83	31
LOST HORSE MOUNTAIN	2G04	1920	14	54	220	304B	-	577	4	211	33
BLACKWALL PEAK	2G03P	1940	15	-	960	934	775	1481	208	804	29
A - SAMPLING PR	ROBLEM	S WER	RE ENC	OUNTE	ERED						

- 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, 1997

	WATER EQUIVALENT (mm)										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
SOUTH COASTAL											
PALISADE LAKE	3A09P	880	Not	Measur	ed	-	-	-	-	-	0
CALLAGHAN CREEK	3A20	1040	16	110	564	290	680	1311	55A	664	14
DOG MOUNTAIN	3A10	1080	09	255	1290	407	916	1507	0	1311	12
ORCHID LAKE	3A19	1190	09	412	2100	1315	1598	2310	774	1891	18
ORCHID LAKE	3A19P	1190	Not Measured			-	-	2804	828	1909	12
UPPER SQUAMISH RIVER	3A25P	1340	15	308	1628	1354	1676	1781	949	1515	7
TIEDEMANN GLACIER	3A17P	1400	15	-	1484	1765	1253	1765	780	1247	4
NOSTETUKO RIVER	3A22P	1500	15	-	387	469	494	494	21	267*	7
UPPER MOSELY CREEK	3A24P	1650	15	-	37	347	192	347	0	114	8
VANCOUVER ISLAND											
JUMP CREEK	3B23P	1160	15	215	1358	251	-	251	251	251*	1

SNO-BIRD LAKE	3B16	1400	16	268	1404	670	1164	2426	417	1343	28
WOLF RIVER (UPPER)	3B17P	1490	15	-	1390	1048	1726	1726	507	1318	9

### NORTH COASTAL

TAHTSA LAKE | 1B02P | 1300 | 15 | - | 1509 | - | 1149 | 1344 | 732 | 1052 | 4

### **SKAGIT**

- 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**

May 15, 1997

					W	VATE	R EQU	IVAL	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
PEACE											
PACIFIC LAKE	1A11	770	09	143	722	0	264	567	0	358	22
AIKEN LAKE	4A30P	1040	15	-	8	188	0	188	0	49*	10
PULPIT LAKE	4A09P	1310	15	-	229	454	49	454	49	196*	6
PINE PASS	4A02P	1400	15	-	1100	-	1024	1471	813	1134	5
KWADACHA RIVER	4A27P	1620	15	-	251	445	109	468	109	329	12
SKEENA/NASS											
MCKENDRICK CREEK	4B07	1050	17	35	156	166	-	277	0	102	16
LU LAKE	4B15	1300	15	80	330	318	-	318	0	204	12
CHAPMAN LAKE	4B04	1460	17	118	533	-	-	683	238	436*	3
HUDSON BAY MTN.	4B03A	1480	Not	Availab	ole	597	190	752	186	463	24
MOUNT CRONIN	4B08	1480	17	158	717	-	-	927	481	623	9
SHEDIN CREEK	4B16P	1480	15	178	956	1159	-	1159	1159	1159	1
LIARD											
BLUFF CREEK	4C11P	1040	Not	Measur	ed	101	0	101	0	4	4

DEADWOOD RIVER	4C09P	1300	15	No Si	now	207	-	207	0	86*	3
STIKINE/ TAKU											
FORREST- KERR CREEK	4D08P	560	15	-	250	247	26	247	26	148*	5
KINASKAN LAKE	4D11P	1020	15	-	79	226	0	411	0	183*	6
TUMEKA CREEK	4D10P	1220	15	-	317	561	195	771	195	409	7
WADE LAKE	4D14P	1370	Not Measured 405 0 427 0 290 6								
UPPER STIKINE	4D13P	1450	15	-	344	564	183	686	183	431*	7
YUKON											
LOG CABIN	4E01	880	Not :	Measur	ed	123	4	420	4	239*	11
A - SAMPLING P	ROBLEN	IS WE	RE ENC	OUNTI	ERED	,	,	,	,	,	,
B - EARLY OR L	ATE SAN	APLIN(	G								
C - EARLY OR L	ATE SAN	APLIN(	G WITH	PROB	LEMS	ENCC	DUNT	ERED			
E - ESTIMATED	BASED (	ON AR	EAL AV	'ERAGI	 E						
* - PERIOD OF R	ECORD /	AVER A	AGE								

#### SNOWPACK and WATER SUPPLY OUTLOOK

in

### **BRITISH COLUMBIA**

June 1, 1997

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 to be estimated. Please note that data provided on these pages are preliminary and subject to revision on review.

This will be the final Snow Survey Bulletin of the year. The graphs of the <u>snow pillows</u> will be updated four time per month until there is no snow.

The June 1 snow survey is of a relatively small number of stations compared with the surveys done at the beginning of other months. Because many of the stations have had no snow on this date in the past and have relatively few measurements, great care must be taken when drawing conclusions regarding comparisons with averages for this date. Data from 54 snow courses and 43 snow pillows around the province together with hydrometric and climate data provided by Environment Canada have been used to form the basis for the following reports.

### **Snowpack**

Although the snowline has risen considerably during the past month, the remaining snowpack in much of the province remains above normal for this date. Summaries of the regional snow water indices are available through the icon at the bottom of this page.

#### Weather

After a long warm spell in the first half of May, the latter half of the month has generally been unsettled resulting in monthly precipitation totals being well above normal in most areas.

#### **Outlook**

Most rivers in the province peaked on or before May 20th as the result of snowmelt. Many of these rivers have experienced a second peak in early June as the result of heavy rainfall. Further rainfall peaks are quite possible if there is sufficient precipitation in the next two weeks. In most areas the snow is sufficiently depleted that damaging peaks due to snowmelt seem unlikely.

#### UPPER FRASER AND NECHAKO

Although mean monthly temperatures and total precipitation were close to normal during May, the first half of the month was warm and dry, the latter half cooler and with above normal precipitation.

The warm weather in the first half of May resulted in higher than normal peak flows in many parts of the upper Fraser basin with some flooding in the Nechako and Stewart basins. Heavy rains in the latter half of the month have brought rivers back up to similar levels again and, although most rivers appear to have crested, further peaks are possible if there is substantial rainfall in the first half of June.

Flows in the Nechako and Stewart Rivers will continue to be above normal for some time as the lake systems return to more normal values and releases are made from the Nechako Reservoir.

#### MIDDLE AND LOWER FRASER

The warm weather in the first half of May resulted in much of the snowpack in the middle and lower Fraser basins being melted off. However, the remaining high level snow in the lower Fraser basin remains slightly above normal for this date.

The snowmelt peak in the Fraser passed through the lower mainland on May 20. Substantial rainfall on the May 31 weekend throughout the basin brought the river up quite sharply and a higher peak is occurring in the first week of June. This is the highest flow recorded in the Fraser River since 1972, but is well within the river's dike capacities.

Any substantial rainfall in the next two weeks or so could produce further increases in river levels, but is unlikely to cause any damaging flooding in the lower Fraser valley.

#### NORTH AND SOUTH THOMPSON

The June 1 regional snowpacks in the North and South Thompson River basins remain above normal at 112% and 121% of normal, respectively.

Flows in the Thompson River system have been considerably higher than normal during May, reaching levels that have not been exceeded since 1972. Although the North Thompson was peaking at the beginning of June, further peaks would be possible if warm weather and/or substantial rainfall were to occur in the next two weeks. The South Thompson is expected to continue to rise for a few days and Shuswap Lake could reach levels higher than anything that has occurred since the early 1970's.

#### UPPER AND LOWER COLUMBIA

The relatively few snow courses sampled in the Columbia at this date indicate that the remaining snowpack is about 16% above normal.

While most of the low elevation snow has now melted, further peaks are possible on uncontrolled streams fed from high mountain snowpacks if warm weather and/or substantial precipitation occurs in the next two or three weeks.

Flows in the Columbia River at Donald were close to normal during May which indicates that the main peak for the year has probably not yet occurred.

#### EAST AND WEST KOOTENAY

Very warm temperatures in the first part of June led to high water levels and flooding in some basins in the Kootenays, particularly the western portions. The remaining snowpack is still well above normal for this date and further peaks are quite likely in basins fed by high mountain snowpack runoff.

The mean flow in the Kootenay River at Fort Steele was close to normal in May which probably indicates that there will be a further, higher, peak if warm weather occurs in the next two or three weeks.

#### OKANAGAN, SIMILKAMEEN AND KETTLE

Although there has been considerable snowmelt in the area over the past month, the remaining snowpack in the Okanagan and Kettle basins remains about 10% above normal, while that in the Similkameen is close to normal for this date.

The Kettle River experienced two very high peaks, the first as the result of snowmelt and the second as the result of rain on the streams already swollen by snowmelt. Unless there is exceptionally heavy rain in the next few days, these flows are unlikely to be seen again this year. The Similkameen River also peaked twice and this has resulted in high levels in Osoyoos Lake because of the Similkameen restricting the outflow capacity of the lake. Further peaks as high as those seen to date are unlikely unless very abnormal weather occurs.

Okanagan Lake experienced the greatest May inflow recorded in the 76 years for which there are readings. This continues a pattern of greater than normal inflows that has lasted for almost two years. As a result, the lake is now above its normal upper level and is expected to continue to rise for several days, the final peak depending largely on the amount of precipitation that occurs in the next few days. High flows can be expected in the Okanagan River from Penticton to Osoyoos for much of the summer as the lake is returned to more normal levels.

#### SOUTH COASTAL AND VANCOUVER ISLAND

June 1 snow surveys show that the remaining mountain snowpack in the South Coast region is normal for this time of year. The depletion in snowpack during May was above normal. Precipitation measured at valley bottom weather stations for May was above normal for the third month in a row, and seasonal totals since November are very high.

On Vancouver Island, very few snow courses were sampled for June 1. The one with the longest record, Sno-Bird Lake, has 119% of normal water content. Monthly total precipitation was very high for May, and the seasonal total is 16% above normal.

Mean monthly temperatures for May were 2 oC above normal for the South Coast and Vancouver Island.

Monthly runoff into Upper Campbell Lake was 152% of normal for May, in keeping with high regional precipitation and depletion of snowpack. Volume runoff for the rest of the snowmelt season will be normal to above normal, depending on the amount of rain.

#### **NORTHEASTERN**

The reduced number of snow courses sampled June 1 makes it very difficult to assess the remaining snowpack in the Peace River basin, but it looks as though the southern portions have above normal snowpack, and the central portions have near normal snowpack. No snow surveys were carried out in the Liard River basin.

Very few weather stations are available in northeastern British Columbia, but May precipitation is estimated to be just above normal for the Peace, and well below normal for the Liard, very similar to April conditions. Mean monthly temperatures were very near normal for northeastern B.C.

Inflow to Williston Lake is used as an indicator of regional runoff. May inflow continued to be well above normal, for the sixth consecutive month. Assuming normal weather, seasonal runoff through September is expected to be normal to above normal.

#### **NORTHWESTERN**

The few snow surveys carried out for June 1 suggest that the mountain snowpack in the Skeena basin near Smithers is still above normal. No snow courses were sampled in the Nass, Stikine, Taku, and Yukon River drainages.

Precipitation in the northwest was near normal for May, and the November -May total is estimated to be very close to normal. Mean temperatures for May were 1.5 oC above normal in the northwest.

Monthly flow for May was very high for the Skeena River, and high peak flows have been experienced on the Bulkley during May. Volume runoff for the remainder of the snowmelt period should be above normal assuming typical weather during the period.

# **FRASER**

June 1, 1997

					V	ATEF	REQU	IVAL	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER FRASER											
PACIFIC LAKE	1A11	770	26	67	348	0	0	286	0	60*	23
HEDRICK LAKE	1A14	1100	26	103	522	_	_	665	0	353	20
BIRD CREEK	1A23	1180	25	No S	now	0	0	0	0	-	3
FORFAR CREEK (UPPER)	1A24	1410	27	141	662	716	-	716	716	716*	1
BARKERVILLE	1A03P	1520	01	No S	now	-	_	291	0	120	13
MC BRIDE (UPPER)	1A02	1580	30	32	129	232	109	592	0	266	29
KNUDSEN LAKE	1A15	1580	26	158	787	673	399	1039	0	762	22
NARROW LAKE	1A21	1650	26	196	1007	724	691	1339	297	855	23
REVOLUTION CREEK	1A17P	1690	01	-	508	682	256	820	0	514	12
LONGWORTH (UPPER)	1A05	1740	26	188	956	686	324	1194	0	630	40
DOME MOUNTAIN	1A19	1820	26	156	785	644	561	1062	0	760	25
YELLOWHEAD	1A01P	1860	01	72	233	-	-	-	-	-	0
HOLMES RIVER	1A18	1900	26	167	766	-	511	1029	224	748	26
NECHAKO											
SKINS LAKE	1B05	880	25	No S	now	0	0	0	0	_	8
TAHTSA LAKE	1B02	1300	25	214	1190	1164	921	1651	535	971	22
TAHTSA LAKE	1B02P	1300	01	-	1140	-	768	1064	277	704*	4
KIDPRICE LAKE	4B01	1370	25	151	805B	974	290	1209	70	680	22

MOUNT PONDOSY	1B08P	1400	01	_	424	-	280	337	0	157*	4
MOUNT WELLS	1B01	1490	25	107	449B	488	0	488	0	238	20
MOUNT WELLS	1B01P	1490	01	-	418	463	21	463	0	298	5
NUTLI LAKE	1B07	1490	25	98	418B	594	0	594	0	217*	6
MOUNT SWANNELL	1B06	1620	25	78	350B	240	0	240	0	56*	8
MIDDLE FRASER											
BOSS MOUNTAIN MINE	1C20P	1460	01	-	116	435	225	435	0	248	3
BRENDA MINE	2F18P	1460	01	No S	now	0	0	0	0	-	4
BARKERVILLE	1A03P	1520	01	No S	Snow	-	-	291	0	120	13
MOUNT TIMOTHY	1C17	1660	01	No S	now	130	0	325	0	60*	29
YANKS PEAK EAST	1C41P	1670	01	_	555	-	-	-	-	-	0
PENFOLD CREEK	1C23	1680	26	186	972	1068	866	1179	353	849	26
GREEN MOUNTAIN	1C12P	1780	01	-	753	887	460	887	330	559*	3
MISSION RIDGE	1C18P	1850	01	_	70	198	0	314	0	151	9
LOWER FRASER											
DISAPPOINTMENT LAKE	1D18P	1040	Not	Measuı	red	-	1087	1087	1087	1087	1
CALLAGHAN CREEK	3A20	1040	Not	Availal	ble	24	244	1128	0	424	13
DOG MOUNTAIN	3A10	1080	27	165	885	153	314	1115	56	999	10
BEAVER PASS	WA12	1120	29	135	714	132	272	272	0	135*	3
WAHLEACH LAKE	1D09P	1400	01	-	1170	747	8	747	0	225*	4
CHILLIWACK RIVER	1D17P	1600	Not	Measuı	red	1099	-	1099	237	905	3
GREAT BEAR	1D15P	1660	01	-	2007	1791	1515	1791	908	1179	5
TENQUILLE LAKE	1D06	1680	Not	Availal	ble	1092	770	1654	365	1030	41
NORTH THOMPSON											
COOK FORKS	1E06	1390	30	111	541	570	268	1026	0	458	34

BOSS MOUNTAIN MINE	1C20P	1460	01	-	116	435	225	435	0	248	3
MOUNT COOK	1E02A	1580	30	225	1231	1512	1004	1575	377	1125	23
AZURE RIVER	1E08P	1620	01	_	1283	_	_	-	-	-	0
ADAMS RIVER	1E07	1720	27	132	659	810	632	1123	0	645	27
KOSTAL LAKE	1E10P	1770	01	-	914	1113	622	1113	155	753	12
NORTH CLEMINA CREEK	1E13	1860	26	175	862	1058	742	1058	318	753*	8

## SOUTH THOMPSON

ANGLEMONT	1F02	1190	29	No S	now	_	_	61	0	24*	8
ADAMS RIVER	1E07	1720	27	132	659	810	632	1123	0	645	27
SILVER STAR MOUNTAIN	2F10	1840	28	124	631	841	552	980	0	409	38
PARK MOUNTAIN	1F03P	1890	01	-	1152	1228	497	1228	299	811	11
ENDERBY	1F04	1900	31	222	1160	1280	681	1422	430	985	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

# **COLUMBIA**

June 1, 1997

					W	ATE	R EQU	IVAL	ENT (	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER COLUMBIA											
AZURE RIVER	1E08P	1620	01	-	1283	_	-	-	-	_	0
KICKING HORSE	2A07	1650	01	20	83	181	39	226	0	64	31
MOUNT REVELSTOKE	2A06	1830	29	213	1270	-	754	1778	414	1137	48
MOUNT REVELSTOKE	2A06P	1830	01	-	1200	1631	671	1631	240	995	4
NORTH CLEMINA CREEK	1E13	1860	26	175	862	1058	742	1058	318	753*	8
FIDELITY MOUNTAIN	2A17	1870	02	230	1275	1699	910	2045	439	1185	34
MOLSON CREEK	2A21P	1980	01	-	928	-	799	1026	98	796	13
BOW SUMMIT II	AL07A	2080	28	63	254	_	236	414	0	161*	15
LOWER COLUMBIA											
FARRON	2B02A	1220	29	1	5	0	0	19	0	2*	15
BARNES CREEK	2B06P	1620	01	-	255	529	0	529	0	132*	4
ST. LEON CREEK	2B08P	1800	01	-	930	-	649	668	225	647	3

2B09	1890	26	135	827	752	495	916	0	526	22
2D08P	2030	01	-	806	1144	-	1238	111	673	14
2C07	1250	27	1	3	0	-	51	0	7*	12
2C01	1370	02	No S	now	-	-	0	0	-	12
2C05	1520	02	No S	now	-	-	244	0	19	45
2C04	1550	26	10	52	-	0	137	0	20*	14
2C09Q	1800	Not :	Measur	ed	767	108	767	0	325	13
MT04	1830	29	38	190	287	86	559	0B	136*	33
2C10	1940	28	61	328	401	118	630	0	179	25
2C14P	2090	01	-	724	975	_	975	112	342	2
AL02	2210	27	129	485	635	478	660	114	366*	16
AL05	2230	29	139	612	798	516	902	119	512*	12
2D04	930	29	2	8	-	-	8	0	1*	15
2D03	1070	01	No S	now	-	_	0	0	-	1
2D06	1310	31	62	315	150	54	310	0	48*	28
2D05	1550	28	77	366	280	72	551	0	200	48
2D10	1910	28	136	770	871	384	1120	0	555	28
2D08P	2030	01	-	806	1144	-	1238	111	673	14
2B02A	1220	29	1	5	0	0	19	0	2*	15
	2D08P  2C07 2C01 2C04  2C09Q  MT04  2C10  2C14P  AL02  AL05  2D04  2D04  2D03  2D06  2D05  2D05	2D08P   2030   2C07   1250   2C05   1520   2C09Q   1800   2C14P   2090   AL02   2210   AL05   2230   2D04   1310   2D06   1310   2D06   1310   2D06   1550   2D08P   2030   2D08P   2030		2D08P       2030       01       -         2C07       1250       27       1         2C01       1370       02       No S         2C05       1520       02       No S         2C04       1550       26       10         2C09Q       1800       Not Measur         MT04       1830       29       38         2C10       1940       28       61         2C14P       2090       01       -         AL02       2210       27       129         AL05       2230       29       139         2D04       930       29       2         2D03       1070       01       No S         2D06       1310       31       62         2D05       1550       28       77         2D10       1910       28       136         2D08P       2030       01       -	2D08P       2030       01       -       806         2C07       1250       27       1       3         2C01       1370       02       No Snow         2C05       1520       02       No Snow         2C04       1550       26       10       52         2C09Q       1800       Not Measured         MT04       1830       29       38       190         2C10       1940       28       61       328         2C14P       2090       01       -       724         AL02       2210       27       129       485         AL05       2230       29       139       612         2D04       930       29       2       8         2D03       1070       01       No Snow         2D06       1310       31       62       315         2D05       1550       28       77       366         2D10       1910       28       136       770         2D08P       2030       01       -       806	2D08P       2030       01       -       806       1144         2C07       1250       27       1       3       0         2C01       1370       02       No Snow       -         2C05       1520       02       No Snow       -         2C04       1550       26       10       52       -         2C09Q       1800       Not Measured       767         MT04       1830       29       38       190       287         2C10       1940       28       61       328       401         2C14P       2090       01       -       724       975         AL02       2210       27       129       485       635         AL05       2230       29       139       612       798         2D04       930       29       2       8       -         2D03       1070       01       No Snow       -         2D06       1310       31       62       315       150         2D05       1550       28       77       366       280         2D10       1910       28       136       770       871	2D08P       2030       01       -       806       1144       -         2C07       1250       27       1       3       0       -         2C01       1370       02       No Snow       -       -         2C05       1520       02       No Snow       -       -         2C04       1550       26       10       52       -       0         2C09Q       1800       Not Measured       767       108         MT04       1830       29       38       190       287       86         2C10       1940       28       61       328       401       118         2C14P       2090       01       -       724       975       -         AL02       2210       27       129       485       635       478         AL05       2230       29       139       612       798       516         2D04       930       29       2       8       -       -         2D03       1070       01       No Snow       -       -         2D06       1310       31       62       315       150       54	2D08P       2030       01       -       806       1144       -       1238         2C07       1250       27       1       3       0       -       51         2C01       1370       02       No Snow       -       -       0         2C05       1520       02       No Snow       -       -       244         2C04       1550       26       10       52       -       0       137         2C09Q       1800       Not Measured       767       108       767         MT04       1830       29       38       190       287       86       559         2C10       1940       28       61       328       401       118       630         2C14P       2090       01       -       724       975       -       975         AL02       2210       27       129       485       635       478       660         AL05       2230       29       139       612       798       516       902         2D04       930       29       2       8       -       -       0         2D05       1550       28	2D08P       2030       01       -       806       1144       -       1238       111         2C07       1250       27       1       3       0       -       51       0         2C01       1370       02       No Snow       -       -       0       0         2C05       1520       02       No Snow       -       -       244       0         2C04       1550       26       10       52       -       0       137       0         2C09Q       1800       Not Measured       767       108       767       0         MT04       1830       29       38       190       287       86       559       0B         2C10       1940       28       61       328       401       118       630       0         2C14P       2090       01       -       724       975       -       975       112         AL02       2210       27       129       485       635       478       660       114         AL05       2230       29       139       612       798       516       902       119         2D04	2D08P   2030   01   -   806   1144   -   1238   111   673

•											
BIG WHITE MOUNTAIN	2E03	1680	28	56	276	436	148	658	0	194	31
OKANAGAN											
BRENDA MINE	2F18P	1460	01	No S	now	0	0	0	0	-	4
MACDONALD LAKE	2F23	1740	29	52	219	-	226	428	0	170	16
MISSION CREEK	2F05	1780	28	102	490	-	-	747	0	336	46
MISSION CREEK	2F05P	1780	Not	Measur	ed	475	53	615	0	209	26
GRAYSTOKE LAKE	2F04	1810	29	73	336	-	-	584	0	262	12
MOUNT KOBAU	2F12	1810	31	29	128	284	278	488	0	128	31
WHITEROCKS MOUNTAIN	2F09	1830	02	23	118	369	94	848	0	167	25
SILVER STAR MOUNTAIN	2F10	1840	28	124	631	841	552	980	0	409	38
SIMILKAMEEN											
FREEZEOUT CREEK TRAIL	WA11	1070	29	5	15	0	0	0	0	-	4
LOST HORSE MOUNTAIN	2G04	1920	30	14	54	330	35	330	0	97	28
BLACKWALL PEAK	2G03P	1940	01	-	713	840	343	1253	0	607	29
HARTS PASS	WA09	1980	28	221	1323	1118	861	1118	406	888*	5
A - SAMPLING PR	ROBLEM	S WER	RE ENC	OUNTE	ERED						
B - EARLY OR LA	TE SAM	PLINC	j								
C - EARLY OR LA	TE SAM	PLINC	WITH	PROBI	LEMS	ENCC	UNTE	ERED			
E - ESTIMATED B	ASED O	N ARE	EAL AV	ERAGE	E						
* - PERIOD OF RE	CORD A	VERA	GE								

# **COASTAL**

June 1, 1997

	WATER EQUIVALENT (mm)  Date Snow										
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
SOUTH COASTAL											
PALISADE LAKE	3A09P	880	Not	Measure	ed	-	-	-	-	-	0
CALLAGHAN CREEK	3A20	1040	Not	Availab	le	24	244	1128	0	424	13
DOG MOUNTAIN	3A10	1080	27	165	885	153	314	1115	56	999	10
ORCHID LAKE	3A19	1190	27	302	1598	1074	1110	2190	174	1593	18
ORCHID LAKE	3A19P	1190	Not	Measure	ed	-	-	2463	124	1536	11
UPPER SQUAMISH RIVER	3A25P	1340	01	228	1358	1121	1144	1485	634	1246	7
TIEDEMANN GLACIER	3A17P	1400	01	-	1097	1426	734	1426	271	810*	3
NOSTETUKO RIVER	3A22P	1500	01	No Si	now	67	18	67	0	19*	7
UPPER MOSELY CREEK	3A24P	1650	01	No Si	now	204	0	204	0	26*	8
VANCOUVER ISLAND											
TENNENT LAKE	3B22	950	03	111	572	-	-	712	0	194*	9

JUMP CREEK	3B23P	1160	01	113	701	0	-	0	0	-	1	
NEWCASTLE RIDGE	3B14	1170	Not ?	Measur	ed	-	1112	2037	110	1191	33	
SNO-BIRD LAKE	3B16	1400	27	237	1300	487	728	2438	0	1091	29	
WOLF RIVER (UPPER)	3B17P	1490	01	-	1030	878	1260	1260	305	1119	9	
NORTH COASTAL												
TAHTSA LAKE	1B02	1300	25	214	1190	1164	921	1651	535	971	22	
TAHTSA LAKE         1B02         1300         23         214         1190         1104         921         1031         333         971         22           TAHTSA LAKE         1B02P         1300         01         -         1140         -         768         1064         277         704*         4												
SKAGIT												
FREEZEOUT CREEK TRAIL	WA11	1070	29	5	15	0	0	0	0	-	4	
BEAVER PASS	WA12	1120	29	135	714	132	272	272	0	135*	3	
HARTS PASS	WA09	1980	28	221	1323	1118	861	1118	406	888*	5	
A - SAMPLING P	PROBLEM	AS WE	RE ENC	OUNT	ERED							
B - EARLY OR L	ATE SAN	MPLIN	G									
C - EARLY OR L	ATE SAN	MPLIN	G WITH	PROB	LEMS	ENCC	DUNTI	ERED				
E - ESTIMATED	BASED (	ON AR	EAL AV	ERAG	E							

\* - PERIOD OF RECORD AVERAGE

# **NORTH**

June 1, 1997

					WATER EQUIVALENT (mm)						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
PEACE											
PACIFIC LAKE	1A11	770	26	67	348	0	0	286	0	60*	23
AIKEN LAKE	4A30P	1040	01	No S	now	0	0	0	0	-	10
PULPIT LAKE	4A09P	1310	01	No S	now	146	0	146	0	24*	6
PINE PASS	4A02P	1400	01	-	997	_	585	826	466	871	4
KWADACHA RIVER	4A27P	1620	01	-	208	389	0	409	0	211	10
SKEENA/NASS											
MCKENDRICK CREEK	4B07	1050	27	6	31	-	-	4	0	-	10
KIDPRICE LAKE	4B01	1370	25	151	805B	974	290	1209	70	680	22
CHAPMAN LAKE	4B04	1460	27	82	396	593	-	594	593	594*	2
HUDSON BAY MTN.	4B03A	1480	27	81	380	447	0	729	0	323	25
MOUNT CRONIN	4B08	1480	27	129	566	726	-	927	610	758*	5
SHEDIN CREEK	4B16P	1480	01	109	536	945	-	945	945	945*	1
LIARD											
BLUFF CREEK	4C11P	1040	Not	Measur	red	24	0	24	0	6*	4

DEADWOOD RIVER	4C09P	1300	01	No Snow		0	-	0	0	-	3
STIKINE/ TAKU											
SPEEL RIVER	AK03	80	01	No S	now	-	0	884	0	214*	13
FORREST- KERR CREEK	4D08P	560	01	No S	now	0	0	135	0	23*	6
KINASKAN LAKE	4D11P	1020	01	No S	now	0	0	83	0	14*	6
TUMEKA CREEK	4D10P	1220	01	No S	now	274	0	488	0	89	7
WADE LAKE	4D14P	1370	Not	Measur	ed	204	0	204	0	90	6
UPPER STIKINE	4D13P	1450	01	-	12	351	0	424	0	163*	7

## **YUKON**

- 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

# SNOWPACK and WATER SUPPLY OUTLOOK in BRITISH COLUMBIA

June 15, 1997

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 to be estimated. Please note that data provided on these pages are preliminary and subject to revision on review.

This will be the final Snow Survey Bulletin of the year. The graphs of the snow pillows will be updated four time per month until there is no snow.

The June 15 snow survey is of a very small number of stations compared with the surveys done at other times. Because many of the stations have had no snow on this date in the past and have relatively few measurements, great care must be taken when drawing conclusions regarding comparisons with averages for this date.

Because there are so few data no commentaries are given. The snow water equivalent graphs have been completed to June 15 where there were sufficient data to make this practicable. No data are available for precipitaion or groundwater graph updating.

# **FRASER**

June 15, 1997

					V	VATER	REQU	IVALI	ENT (1	mm)	
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER FRASER											
BARKERVILLE	1A03P	1520	15	No S	now	-	-	37	0	23	4
REVOLUTION CREEK	1A17P	1690	15	-	178	366	0	513	0	221	11
YELLOWHEAD	1A01P	1860	15	No S	now	_	-	-	-	_	0
NECHAKO											
TAHTSA LAKE	1B02P	1300	15	-	796	-	405	765	0	399*	4
MOUNT PONDOSY	1B08P	1400	15	No S	now	-	0	0	0	-	4
MOUNT WELLS	1B01P	1490	15	-	30	198	0	198	0	40*	5
MIDDLE FRASER											
BOSS MOUNTAIN MINE	1C20P	1460	15	No S	now	26	0	26	0	9*	3
BRENDA MINE	2F18P	1460	15	No S	now	0	0	0	0	-	4
BARKERVILLE	1A03P	1520	15	No S	now	-	-	37	0	23	4
YANKS PEAK EAST	1C41P	1670	15	-	146	-	-	-	-	-	0
GREEN MOUNTAIN	1C12P	1780	15	-	421	552	115	552	101	256*	3
MISSION RIDGE	1C18P	1850	15	No S	now	0	0	8	0	1*	10
LOWER FRASER											
DISAPPOINTMENT LAKE	1D18P	1040	Not	Measur	ed	-	595	595	595	595*	1

CALLAGHAN CREEK	3A20	1040	17	No S	now	0	0	0	0	-	6
DOG MOUNTAIN	3A10	1080	10	92	539	0	58	730	0	657	11
WAHLEACH LAKE	1D09P	1400	15	-	686	296	0	296	0	74*	4
CHILLIWACK RIVER	1D17P	1600	Not	Measur	ed	585	-	585	0	301	3
GREAT BEAR	1D15P	1660	15	-	1623	1521	1023	1521	655	786	5
TENQUILLE LAKE	1D06	1680	15	148	880	868	490	1529	10	705	13
NORTH THOMPSON											
COOK FORKS	1E06	1390	13	34	157	235E	0	518	0	151	18
BOSS MOUNTAIN MINE	1C20P	1460	15	No S	now	26	0	26	0	9*	3
MOUNT COOK	1E02A	1580	13	154	869	1172	483	1311	58	820	17
AZURE RIVER	1E08P	1620	15	_	750	-	-	_	_	-	0
ADAMS RIVER	1E07	1720	14	48	233	559	212	1046	0	338	17
KOSTAL LAKE	1E10P	1770	15	-	500	817	227	817	0	430	12
SOUTH THOMPSON											
ADAMS RIVER	1E07	1720	14	48	233	559	212	1046	0	338	17
SILVER STAR MOUNTAIN	2F10	1840	12	56	297	564	172	747	0	150	28
PARK MOUNTAIN	1F03P	1890	15	-	703	925	158	958	0	552	11
ENDERBY	1F04	1900	14	145	820	1053	411	1326	62	754	19
A - SAMPLING PROI	BLEMS V	VERE 1	ENCOU	NTER	ED						
B - EARLY OR LATE	SAMPL	ING									
C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED											
E - ESTIMATED BAS	SED ON A	AREAI	AVER	AGE							
* - PERIOD OF RECO	ORD AVE	ERAGE	)								

# **COLUMBIA**

June 15, 1997

					V						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
UPPER COLUMBIA											
AZURE RIVER	1E08P	1620	15	-	750	-	-	-	-	-	0
KICKING HORSE	2A07	1650	Not	Measur	ed	0	-	30	0	8*	4
MOUNT REVELSTOKE	2A06P	1830	15	-	747	1283	287	1283	0	690	4
FIDELITY MOUNTAIN	2A17	1870	10	191	1121	-	436	1603	0	898	24
MOLSON CREEK	2A21P	1980	15	-	598	-	332	894	0	536	12
LOWER COLUMBIA											
BARNES CREEK	2B06P	1620	15	No S	now	169	0	169	0	42*	4
ST. LEON CREEK	2B08P	1800	15	-	499	-	237	424	0	247	3
RECORD MOUNTAIN	2B09	1890	14	31	161	289	163	331	0	101*	12
EAST CREEK	2D08P	2030	15	-	491	986	-	1090	0	395	13
EAST KOOTENAY											
MORRISSEY RIDGE	2C09Q	1800	Not	Measur	ed	12	0	74	0	36	13

MOYIE MOUNTAIN	2C10	1940	15	No S	now	0	0	292A	0	28*	23
FLOE LAKE	2C14P	2090	15	_	409	720	_	720	0	8	2
WEST KOOTENAY											
CHAR CREEK	2D06	1310	14	4	20	0	_	25	0	13*	2
GRAY CREEK (LOWER)	2D05	1550	Not	Measur	ed	0	0	282	0	50*	15
GRAY CREEK (UPPER)	2D10	1910	Not	Measur	ed	570	-	825	0	206*	12
EAST CREEK	2D08P	2030	15	_	491	986	-	1090	0	395	13
KETTLE											
BIG WHITE MOUNTAIN	2E03	1680	15	No S	now	78	0	356	0	61*	16
OKANAGAN	,	,		,			,		,		
BRENDA MINE	2F18P	1460	15	No S	now	0	0	0	0	-	4
MISSION CREEK	2F05	1780	11	42	207	-	-	531	0	122	24
MISSION CREEK	2F05P	1780	Not	Measur	ed	131	0	377	0	74	26
GRAYSTOKE LAKE	2F04	1810	12	14	78	-	-	137	84	111*	2
WHITEROCKS MOUNTAIN	2F09	1830	Not	Measur	ed	0	0	533	0	56*	16
SILVER STAR MOUNTAIN	2F10	1840	12	56	297	564	172	747	0	150	28
SIMILKAMEEN											
BLACKWALL PEAK	2G03P	1940	15	-	330	488	71	1031	0	329	29
A - SAMPLING PR	ROBLEM	S WER	RE ENC	OUNTI	ERED						
B - EARLY OR LA	TE SAM	PLINC	Ť								
C - EARLY OR LA	TE SAM	PLINC	WITH	PROB1	LEMS	ENCC	UNTI	ERED			
E - ESTIMATED B	BASED O	N ARE	EAL AV	ERAG	E						
* - PERIOD OF RE	CORD A	VERA	GE								

# **COASTAL**

June 15, 1997

					V						
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
SOUTH COASTAL											
PALISADE LAKE	3A09P	880	Not	Measure	ed	-	-	-	-	-	0
CALLAGHAN CREEK	3A20	1040	17	No Si	now	0	0	0	0	-	6
DOG MOUNTAIN	3A10	1080	10	92	539	0	58	730	0	657	11
ORCHID LAKE	3A19	1190	10	224	1246	579	597	1910	0	1247	17
ORCHID LAKE	3A19P	1190	Not	Measure	ed	-	_	2074	0	1171	12
UPPER SQUAMISH RIVER	3A25P	1340	15	156	990	694	668	1140	236	834	7
TIEDEMANN GLACIER	3A17P	1400	15	-	704	1024	279	1024	0	434*	3
NOSTETUKO RIVER	3A22P	1500	15	No Si	now	0	0	0	0	-	7
UPPER MOSELY CREEK	3A24P	1650	15	No Si	now	0	0	0	0	-	8
VANCOUVER ISLAND											
JUMP CREEK	3B23P	1160	15	5	26	0	-	0	0	-	1

SNO-BIRD LAKE	3B16	1400	13	130	766	116	249	1996	0	738	15
WOLF RIVER (UPPER)	3B17P	1490	15	-	680	512	866	984	0	785	9

## NORTH COASTAL

TAHTSA LAKE | 1B02P | 1300 | 15 | - | 796 | - | 405 | 765 | 0 | 399\* | 4

## **SKAGIT**

- 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**

June 15, 1997

				WATER EQUIVALENT (mm)							
Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	1997	1996	1995	Max.	Min.	Normal	No. Years Record
PEACE											
AIKEN LAKE	4A30P	1040	15	No S	now	0	0	0	0	-	10
PULPIT LAKE	4A09P	1310	15	No S	now	0	0	0	0	-	6
PINE PASS	4A02P	1400	15	-	582	_	76	620	3	487	5
KWADACHA RIVER	4A27P	1620	15	No Si	now	239	0	239	0	38	9
SKEENA/ NASS											
HUDSON BAY MTN.	4B03A	1480	13	14	68	237	0	673	0	128	18
SHEDIN CREEK	4B16P	1480	15	-	169	626	-	626	626	626*	1
LIARD											
BLUFF CREEK	4C11P	1040	Not	Measure	ed	0	0	0	0	-	4
DEADWOOD RIVER	4C09P	1300	15	No S	now	0	-	0	0	-	3
STIKINE/ TAKU											
FORREST- KERR CREEK	4D08P	560	15	No S	now	0	0	0	0	-	6
KINASKAN LAKE	4D11P	1020	15	No Si	now	0	0	0	0	-	6

TUMEKA CREE	4D10P	1220	15	No Snow	0	0	67	0	10*	7
WADE LAK	E 4D14P	1370	Not	Measured	0	0	0	0	14	6
UPPEF STIKIN	4D13P	1450	15	No Snow	58	0	58	0	10*	7

## YUKON

- 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