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

Snow Survey Measurements

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	WATER EQUIVALENT (mm) 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 Snow		-	-	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 Snow		125	0	125	0	11	4
LAC LE JEUNE (UPPER)	1C25	1460	13	No Snow		-	-	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 Measured			-	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 Measured			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 Snow		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 PROBLEMS WERE ENCOUNTERED

B - EARLY OR LATE SAMPLING

C - EARLY OR LATE SAMPLING WITH PROBLEMS ENCOUNTERED

E - ESTIMATED BASED ON AREAL AVERAGE

* - PERIOD OF RECORD AVERAGE

COLUMBIA

May 15, 1997

Snow Survey Measurements

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	WATER EQUIVALENT (mm) 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 Measured			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 Snow		0	0	80	0	10*	25
TROUT CREEK	2F01	1430	13	No Snow		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 Snow		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 Measured			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

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COASTAL

May 15, 1997

Snow Survey Measurements

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	WATER EQUIVALENT (mm) 1997	1996	1995	Max.	Min.	Normal	No. Years Record
SOUTH COASTAL											
PALISADE LAKE	3A09P	880	Not Measured		-	-	-	-	-	-	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											

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NORTH

May 15, 1997

Snow Survey Measurements

Drainage Basin and Snow Course	Station Number	Elev m	Date of Survey	Snow Depth cm	WATER EQUIVALENT (mm) 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 Available			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 Measured			101	0	101	0	4	4

DEADWOOD RIVER	4C09P	1300	15	No Snow		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 Measured			123	4	420	4	239*	11

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