

YUKON SNOW SURVEY BULLETIN & WATER SUPPLY FORECAST

May 1, 2006

Prepared and issued by:
Environment Yukon
Environmental Programs Branch
Water Resources Section

PREFACE

The Yukon Snow Survey Bulletin and Water Supply Forecast is prepared and issued by the Water Resources Branch of Yukon Environment three times annually, after March 1, April 1 and May 1. The bulletin provides a summary of winter meteorological and streamflow conditions for Yukon, as well as current snow depth and snow water equivalent observations for 56 locations. This information is used to make projections of total volume runoff for the summer period, and an estimate of peak flow for the main river basins and sub-basins including the: upper and lower Yukon, Pelly, Stewart, Liard, Alsek, Porcupine and Peel Rivers. Information about the bulletin, snowpack conditions or streamflow projections can be obtained by contacting:

Glenn Ford
Hydrology Technologist
(867) 667-3104
glenn.ford@gov.yk.ca

Richard Janowicz
Manager, Hydrology
(867) 667-3223
richard.janowicz@gov.yk.ca

NETWORK CHANGES for 2006

No changes for 2006.

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Atmospheric Environment Service, Whitehorse
Supervisor, Technical Programs

Officer in Charge, Water Survey of Canada, Whitehorse.

Agencies cooperating with Environment Yukon in the Snow Survey Program are:

Client Service and Inspections Branch, Yukon Department of Energy Mines and Resources

Information Management and Technology, Yukon Department of Environment

B.C. Ministry of Environment, Water Stewardship Division

USDA Natural Resources Conservation Service

Yukon Department of Highways and Public Works

Parks Canada

The Yukon Energy Corporation

YUKON TERRITORY SNOWPACK CONDITIONS AND RUNOFF PROJECTION

WEATHER

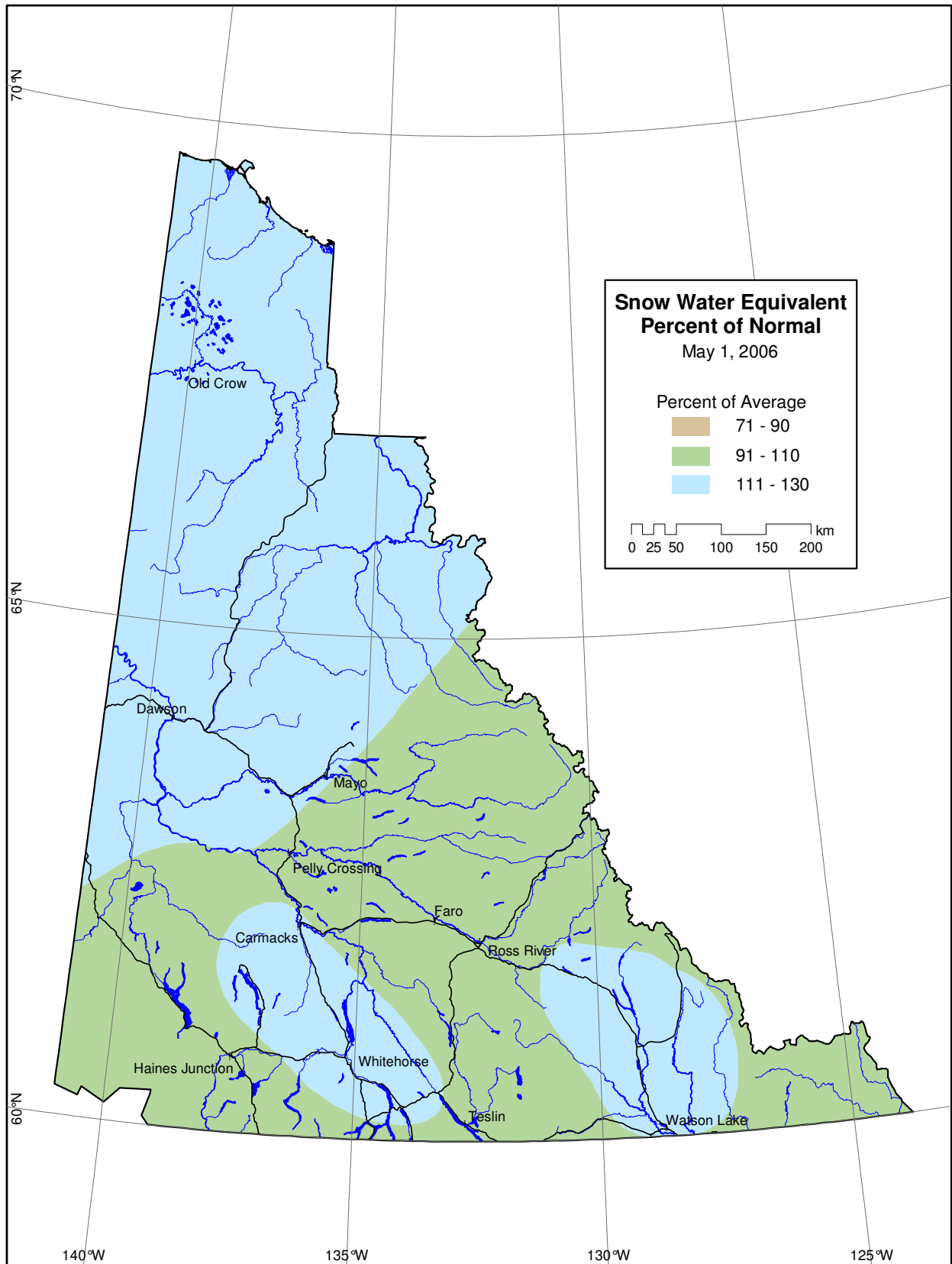
April was a very wet month relative to normal. April is a dry month in Yukon but this April Dawson, Whitehorse and Watson Lake all got triple normal amounts. Dawson recorded the second heaviest snowfalls for April since 1940. The extreme south west saw only 50 percent of normal amounts. Temperatures were slightly below but close to normal over much of the Yukon. The south east was slightly warmer than normal.

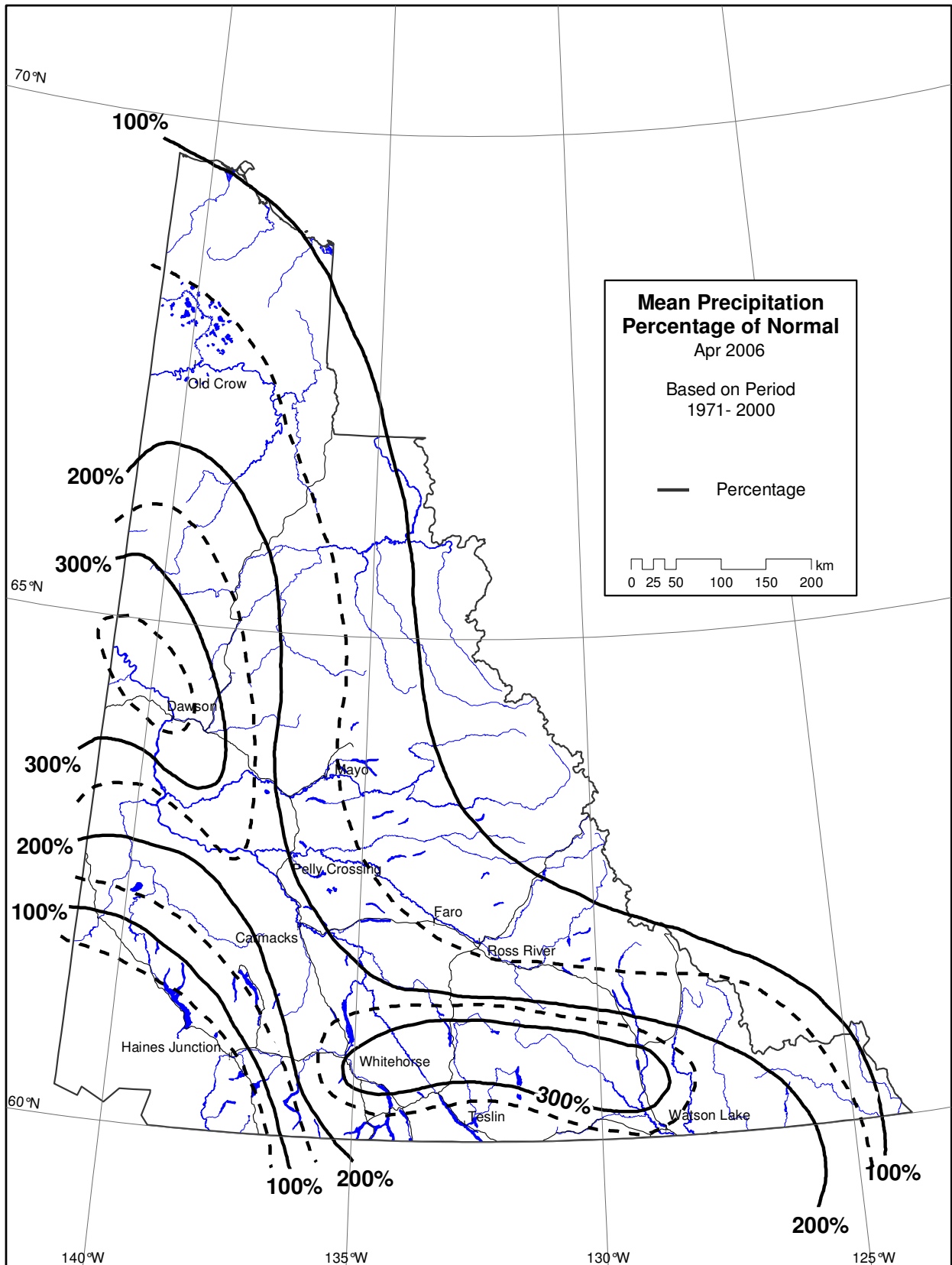
SNOWPACK

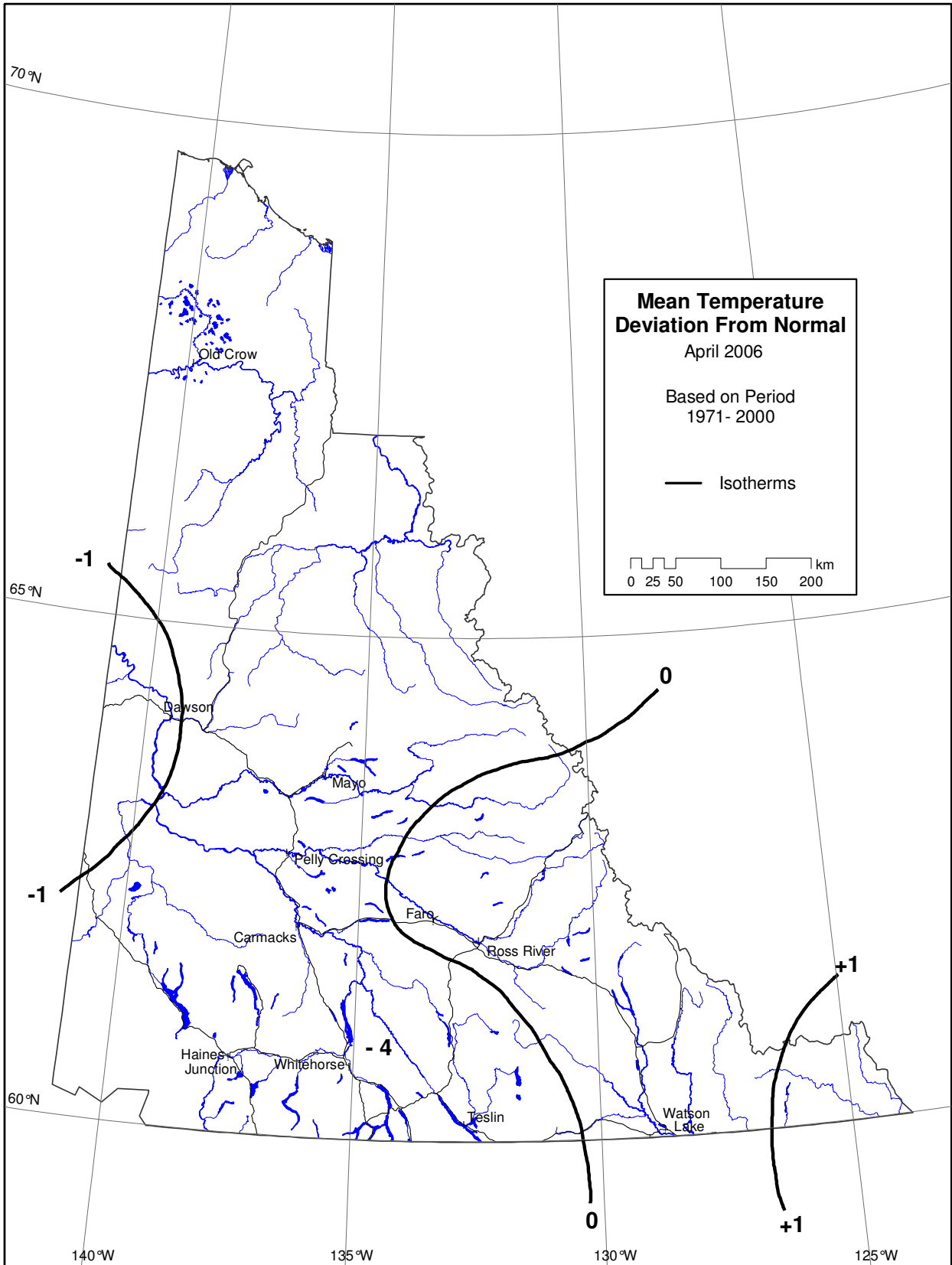
Snowpack conditions within the Yukon have changed considerably from April 1st. There has been considerable precipitation. There has also been less melt than normal. These factors combine to bring most of the Yukon to above normal snowpack for May 1st.

STREAMFLOW

Streamflow conditions within Yukon are generally slightly below normal for this date. Streamflow during this period represents winter baseflow, which provides an indication of winter groundwater contributions.







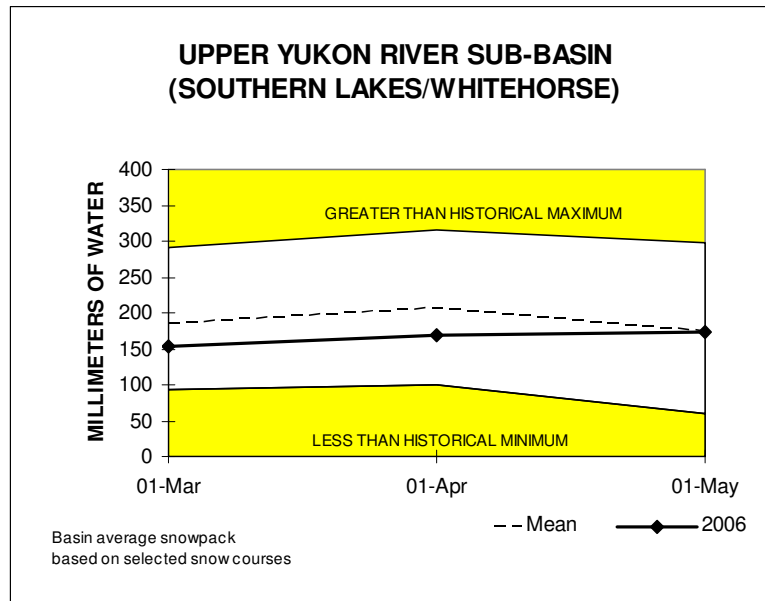
Yukon Snow Survey 2006

YUKON RIVER BASIN

Snowpack conditions in most of the Yukon River basin are now normal to above normal. This is a result of the greater than normal precipitation for the month and the below normal melt at most stations.

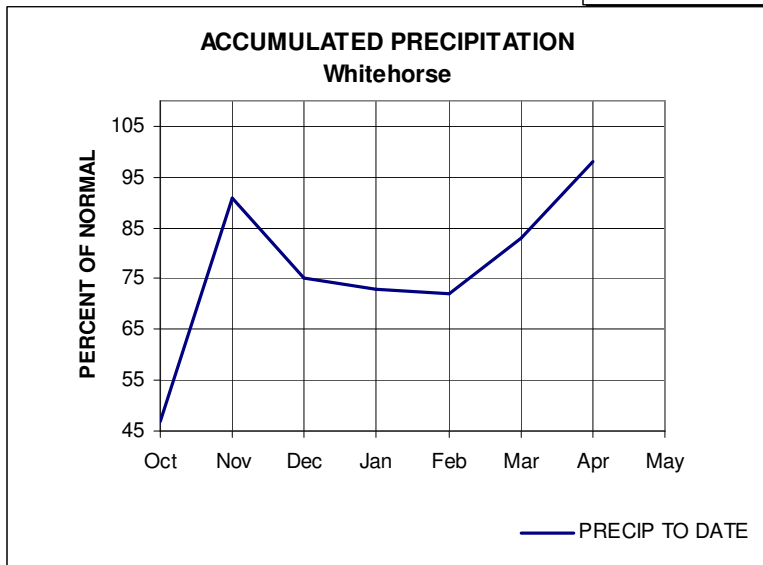
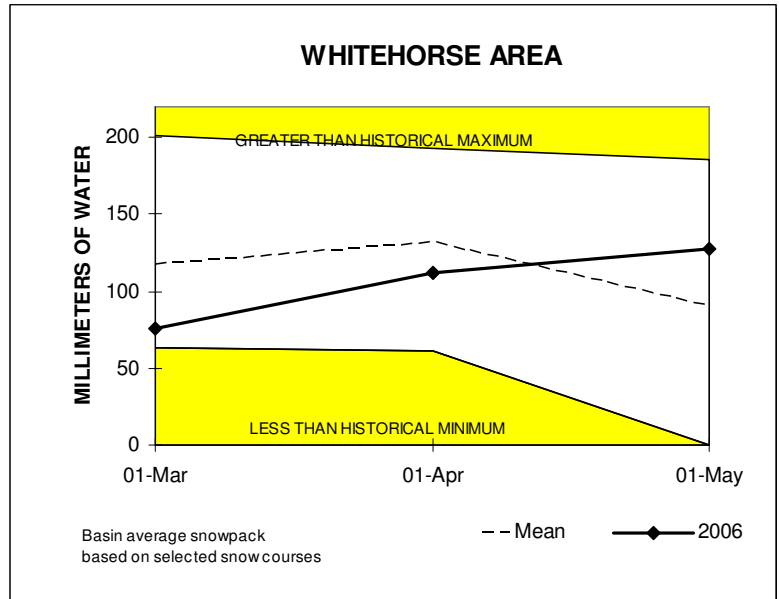
UPPER YUKON RIVER SUB-BASIN (SOUTHERN LAKES/WHITEHORSE)

Snowpack conditions for May 1st in the Upper Yukon River watershed are normal. Values range from 164 percent of normal at Tagish to no snow at Atlin. A basin wide average has been estimated to be 100 percent of normal.

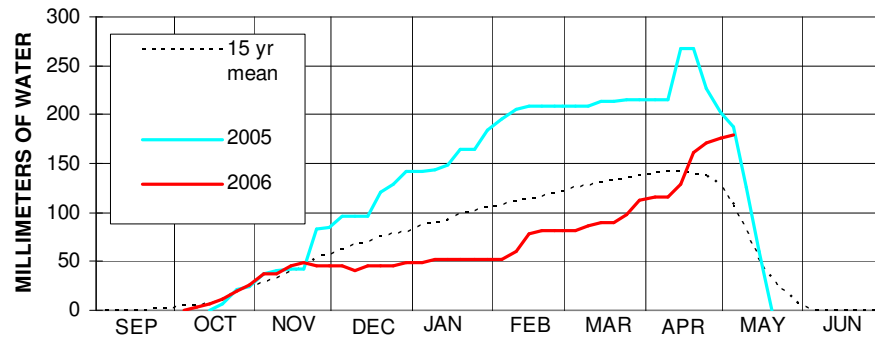


WHITEHORSE AREA

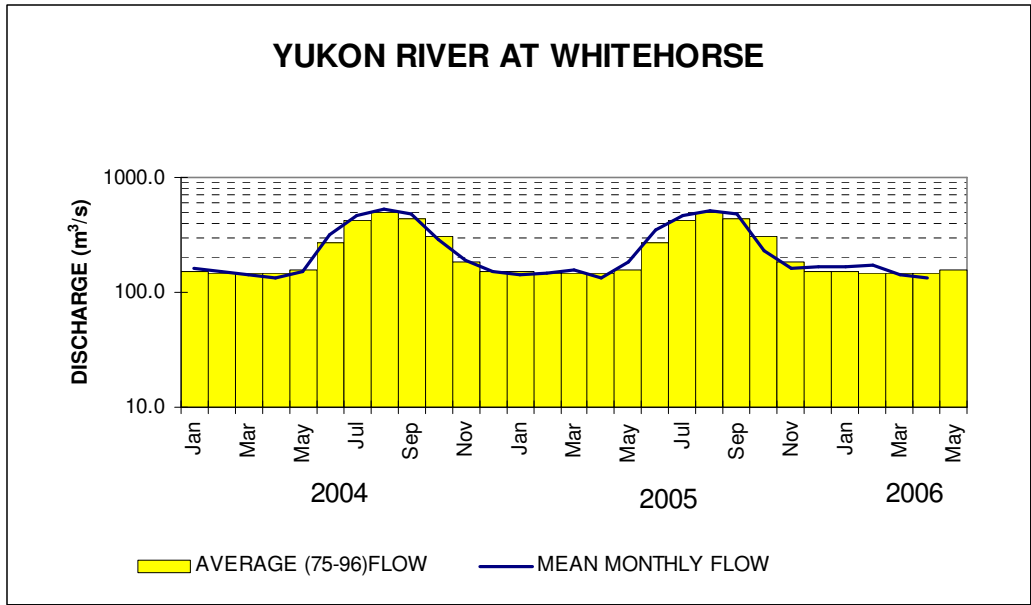
Snowpack conditions in the Whitehorse area are now above normal for May 1st and up considerably from April 1st. Values range from 186 percent of normal at Whitehorse Airport to 122 percent of normal at Montana Mountain. A basin wide average is estimated to be 143 percent of average.



**SNOW PILLOW STATION DATA
TAGISH, No: 09AA-SC1**

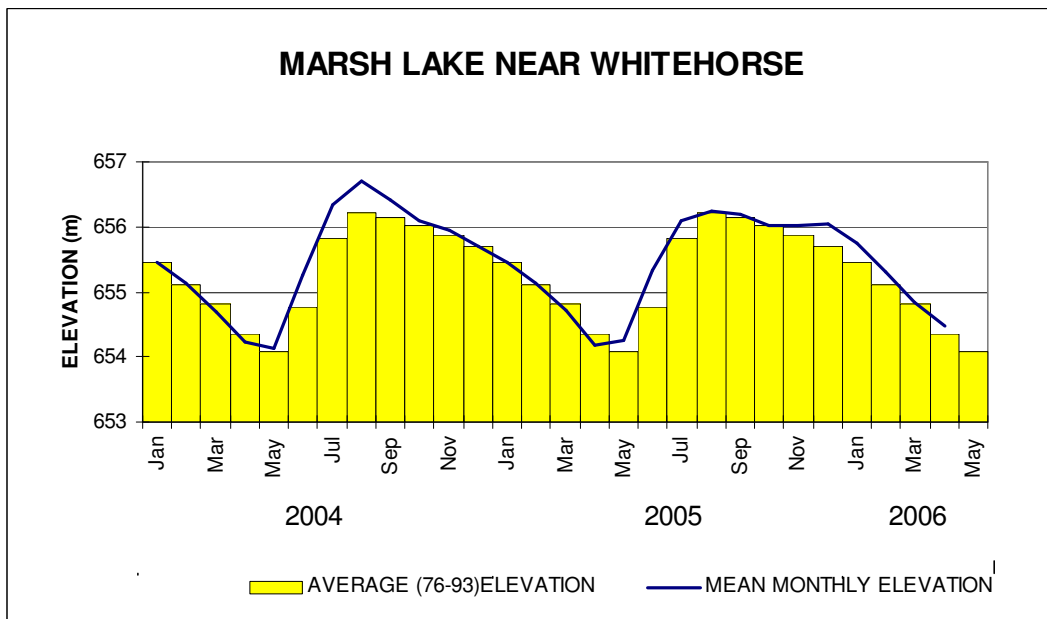


LAT 60° 17' LONG 134° 11'
ELEVATION 1080 metres
DRAINAGE YUKON BASIN



MARSH LAKE

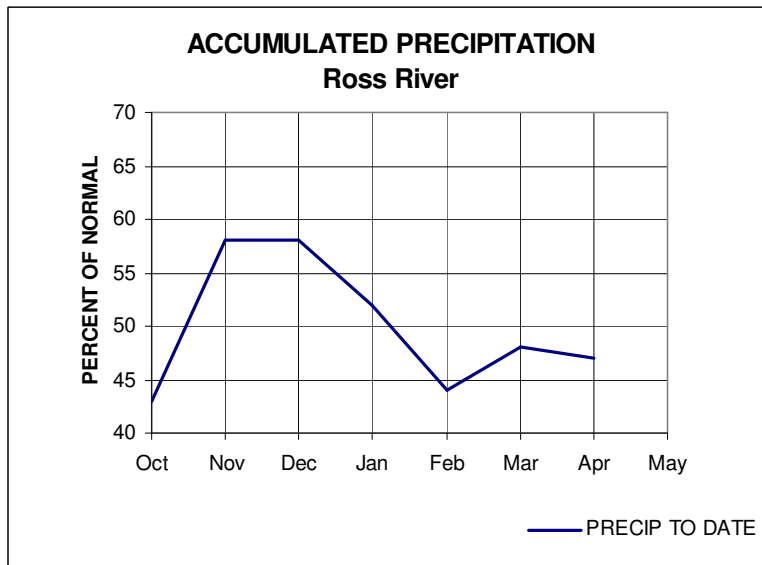
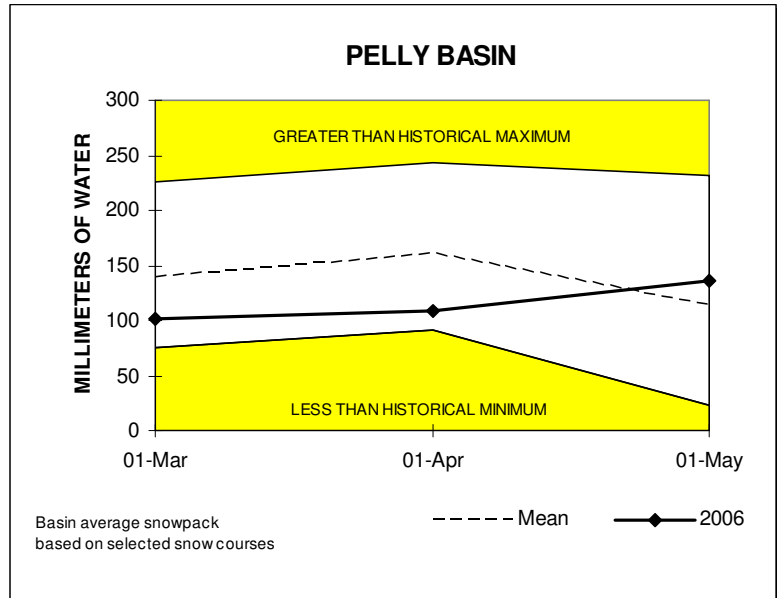
The elevation of Marsh Lake during April was 654.467 or 0.107M above normal. Yukon River at Whitehorse mean discharge during April was 90 percent of normal. Given normal summer meteorological conditions, volume runoff and peak flows for the season are expected to be 110 percent and 110 percent of normal respectively.



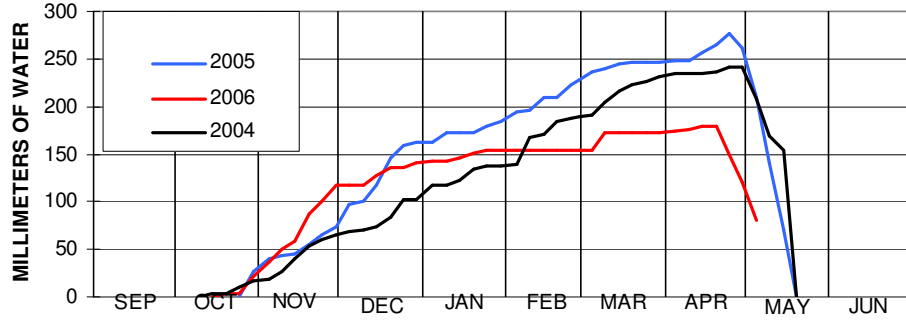
PELLY RIVER SUB-BASIN

Snowpack conditions in the Pelly River watershed are now slightly above normal for May 1st. Values of snow water equivalent range from 124 percent of normal at Twin Creeks to 111 percent of normal at Hoole River. A basin wide average has been estimated to be 119 percent of normal.

Mean April streamflow for the watershed was 101 percent of normal as indicated by the Pelly River below Vangorda Creek. Given normal summer meteorological conditions, volume runoff and peak flows are expected to be 85 percent and 85 percent of normal respectively.

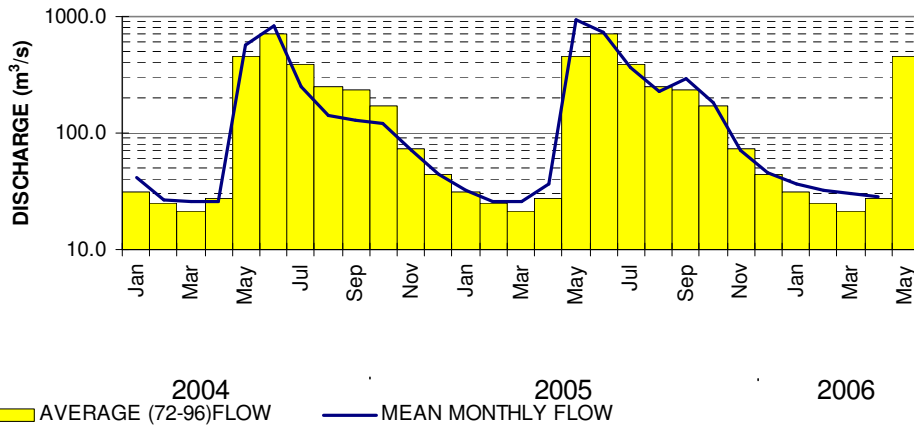


**SNOW PILLOW STATION DATA
MT SHELDON, No: 09BA-SC6**



LAT 62° 16' LONG 139° 12'
ELEVATION 900 metres
DRAINAGE PELLY BASIN

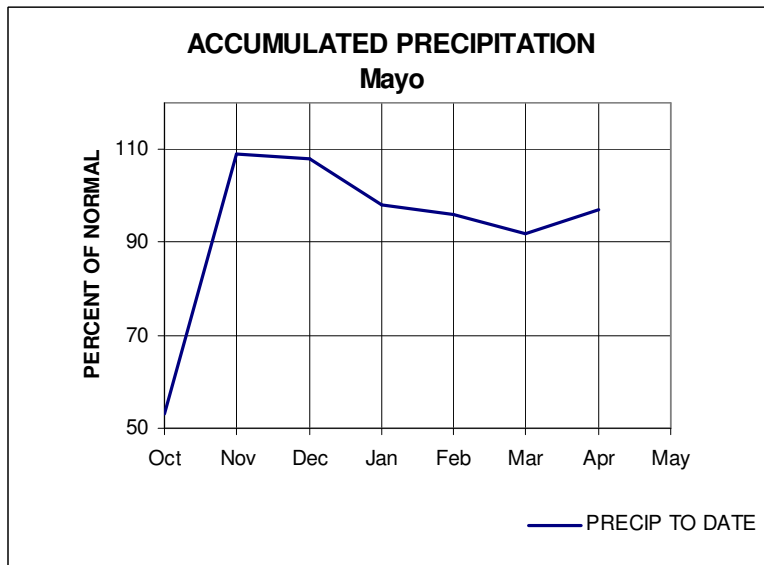
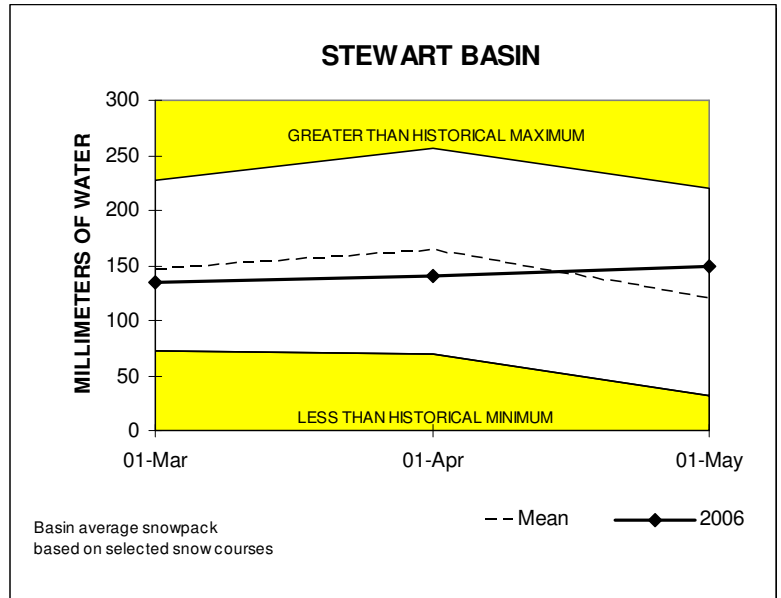
PELLY RIVER BELOW VANGORDA CREEK



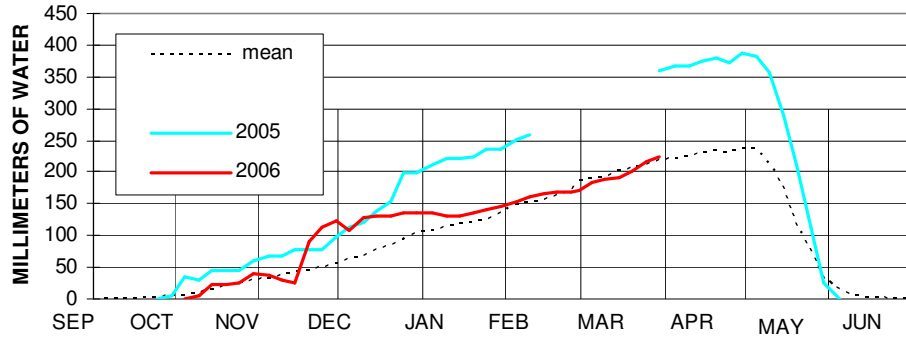
STEWART RIVER SUB-BASIN

Snowpack conditions throughout the Stewart River watershed are above normal for May 1st. Values of snow water equivalent range from 138 percent of normal at Calumet to no snow at Mayo. A basin wide average has been estimated to be 125 percent of normal.

The Stewart River near the Mouth indicates April streamflow at 66 percent of average. Given normal summer meteorological conditions, volume runoff and peak flows for the season are expected to be 95 percent and 100 percent of normal respectively.

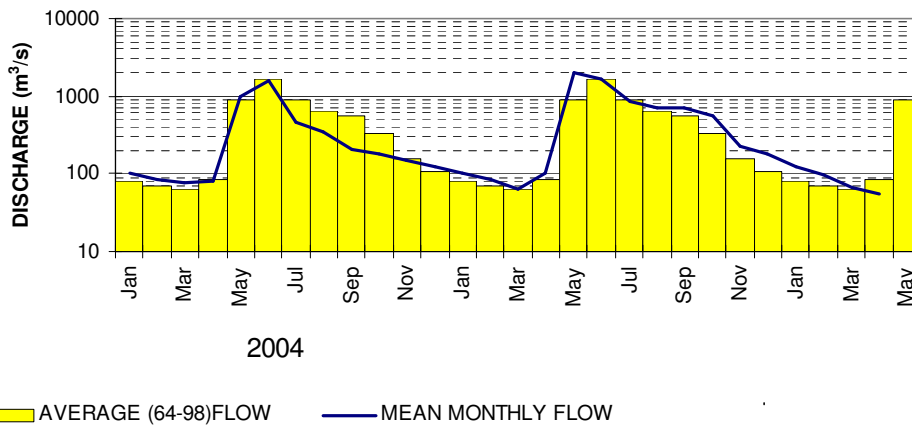


**SNOW PILLOW STATION DATA
WITHERS LAKE, No: 09DB-SC1
Not Functioning after March 21,2006**



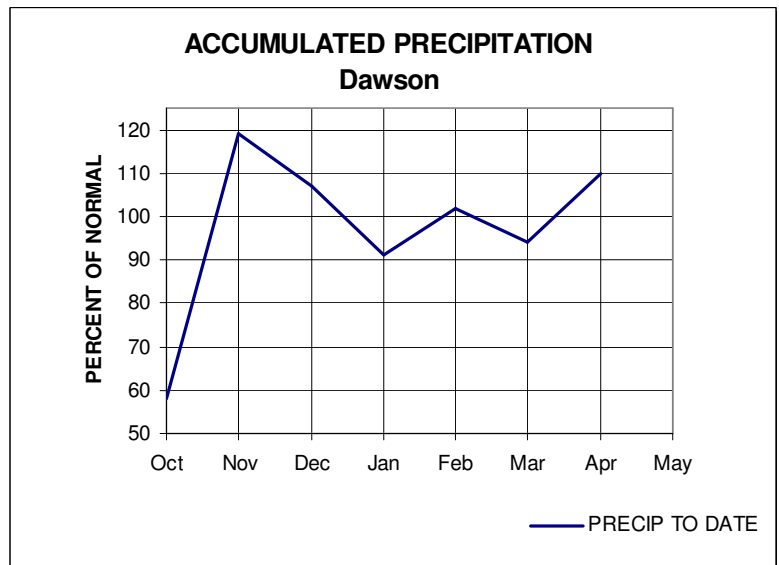
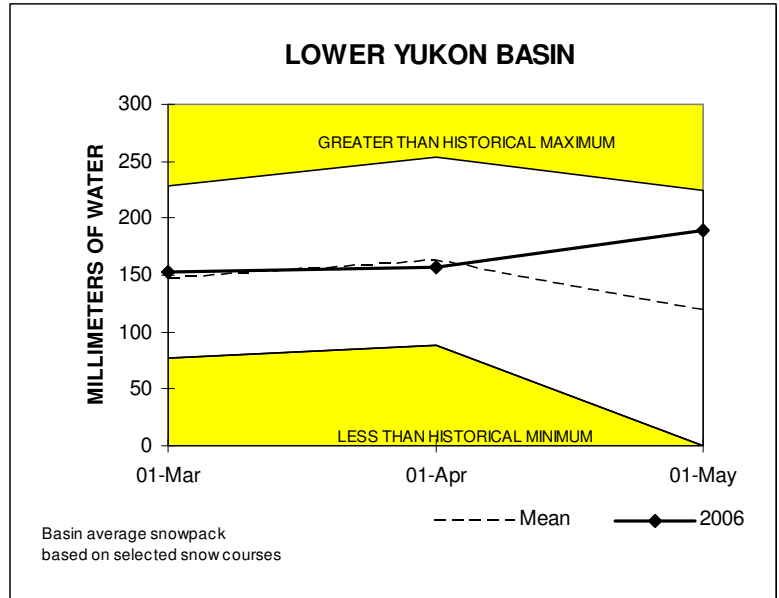
LAT 63°59' LONG 132°18'
ELEVATION 975 metres
DRAINAGE STEWART BASIN

STEWART RIVER AT THE MOUTH



LOWER YUKON RIVER BASIN (DAWSON AREA)

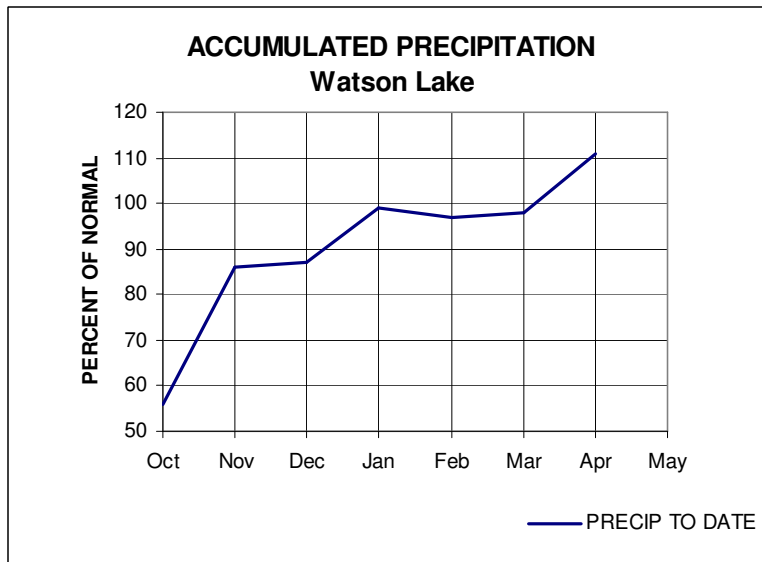
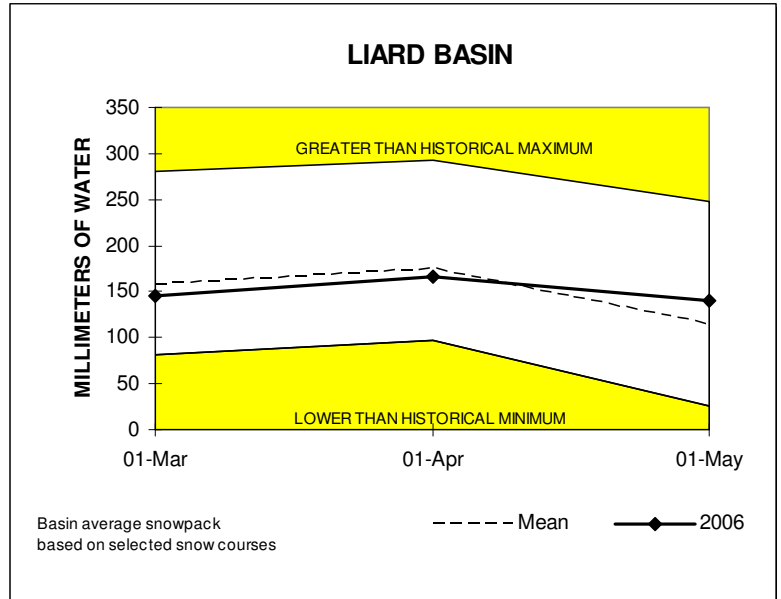
Snowpack conditions in the Dawson area have increased since April 1st. Values of snow water equivalent range from 199 percent of normal at King Solomon Dome to 133 percent of normal at Midnight Dome. An area wide average has been estimated to be 159 percent of normal.



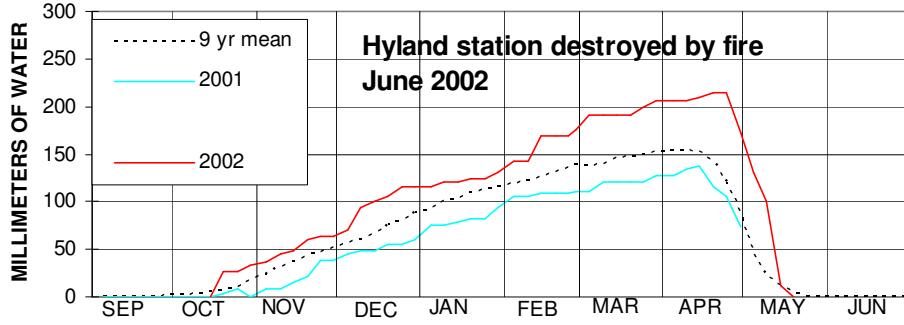
LIARD RIVER BASIN

Snowpack conditions within the Liard River watershed are near normal. Values of snow water equivalent range from 305 percent of normal at Watson Lake Airport which is often bare for this survey to 87 percent of normal at Pine Lake Airstrip. A basin wide average has been estimated to be 123 percent of normal.

Mean April streamflow for the Liard River upstream of Upper Liard was 108 percent of normal. Given normal summer meteorological conditions, volume runoff and peak flows for the season are expected to be 110 percent and 110 percent of normal.

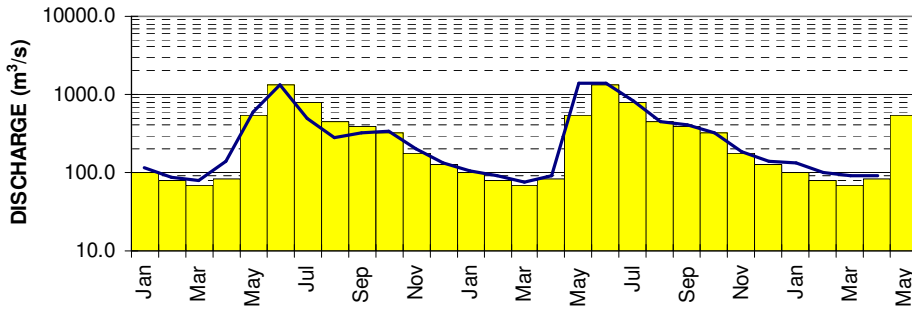


**SNOW PILLOW STATION DATA
HYLAND RIVER, No: 10AD-SC1**



LAT 61° 31' LONG 128° 16'
ELEVATION 855 metres
DRAINAGE LIARD BASIN

LIARD RIVER AT UPPER CROSSING

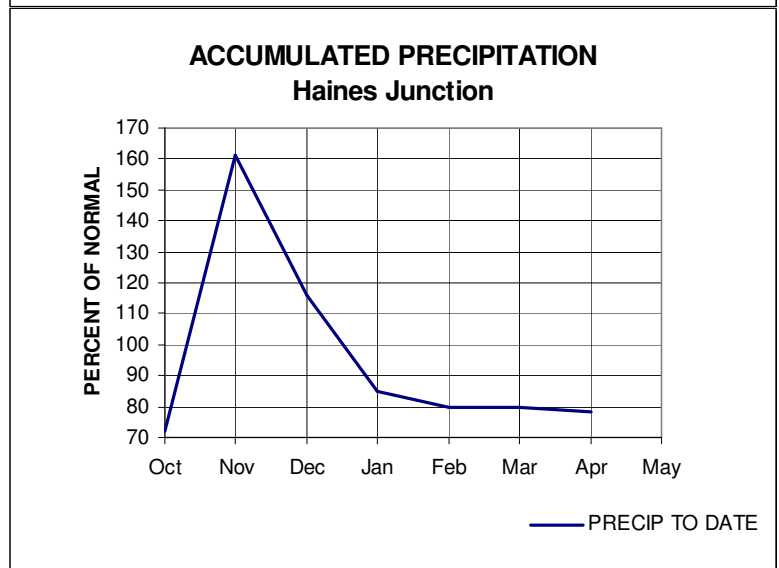
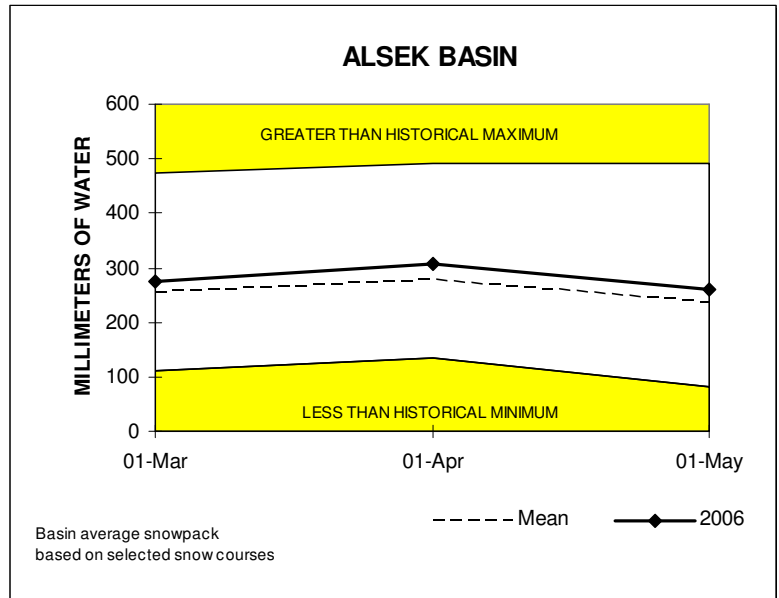


2004
2005
2006
 AVERAGE (60-96) FLOW
 MEAN MONTHLY FLOW

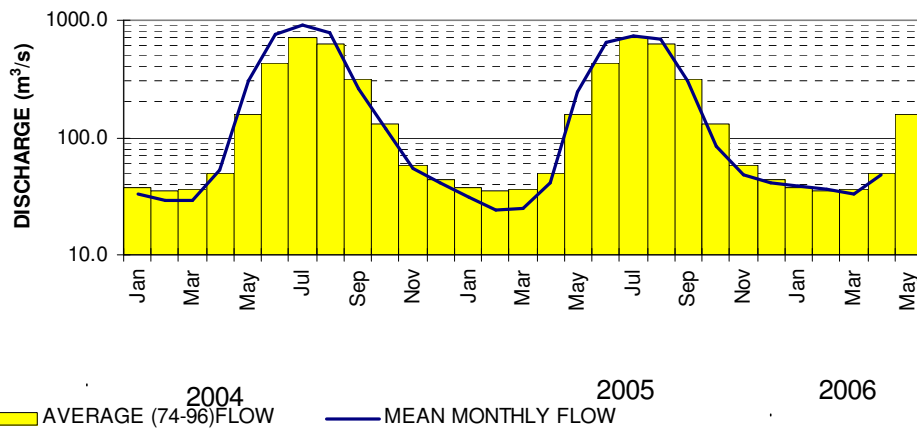
ALSEK RIVER BASIN

Snowpack conditions within the Alsek River watershed are slightly above normal for May 1st. Values of snow water equivalent range from 361 percent of normal at Canyon Lake to 85 percent of normal at Clay Creek. A basin wide average has been estimated to be 110 percent of normal.

Mean monthly streamflow for April as indicated by the Alsek River above Bates River was 99 percent of normal. The Alsek River is primarily a glacial regime type, which is largely dependent on summer temperatures. Given normal summer meteorological conditions however, volume runoff and peak flows for the season are expected to be 110 and 110 percent of normal respectively.



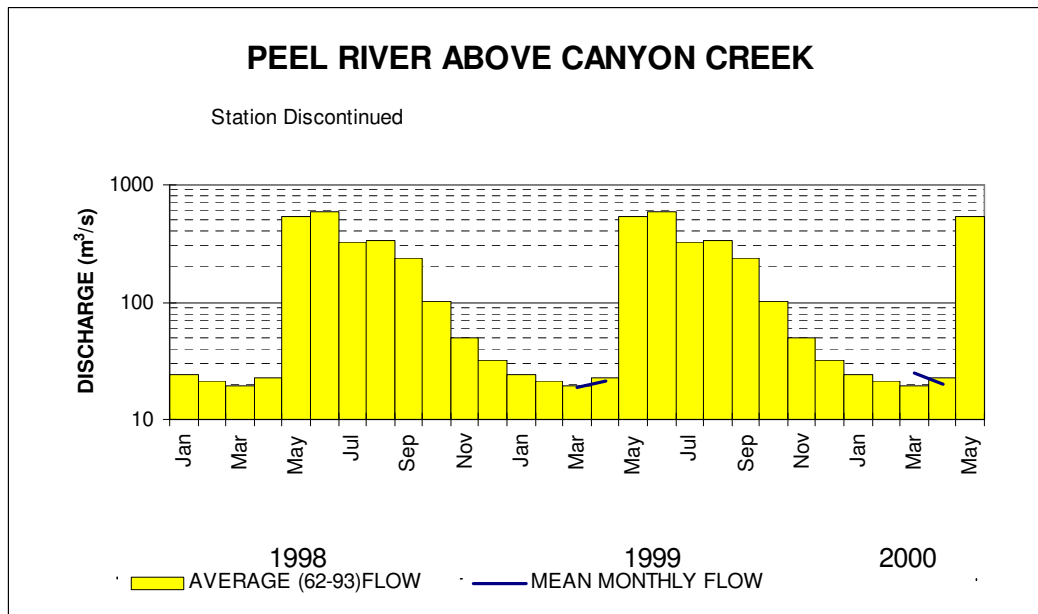
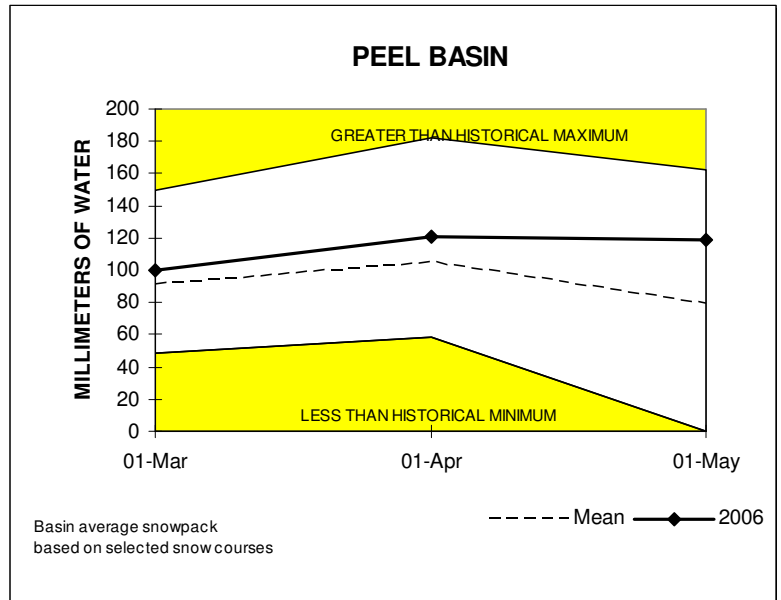
ALSEK RIVER ABOVE BATES RIVER



PEEL RIVER BASIN

Snowpack conditions in the Peel River watershed are well above normal for May 1st with values of snow water equivalent ranging from 162 percent of normal at Ogilvie to 139 percent of normal at Blackstone. A basin wide average has been estimated to be 151 percent of normal.

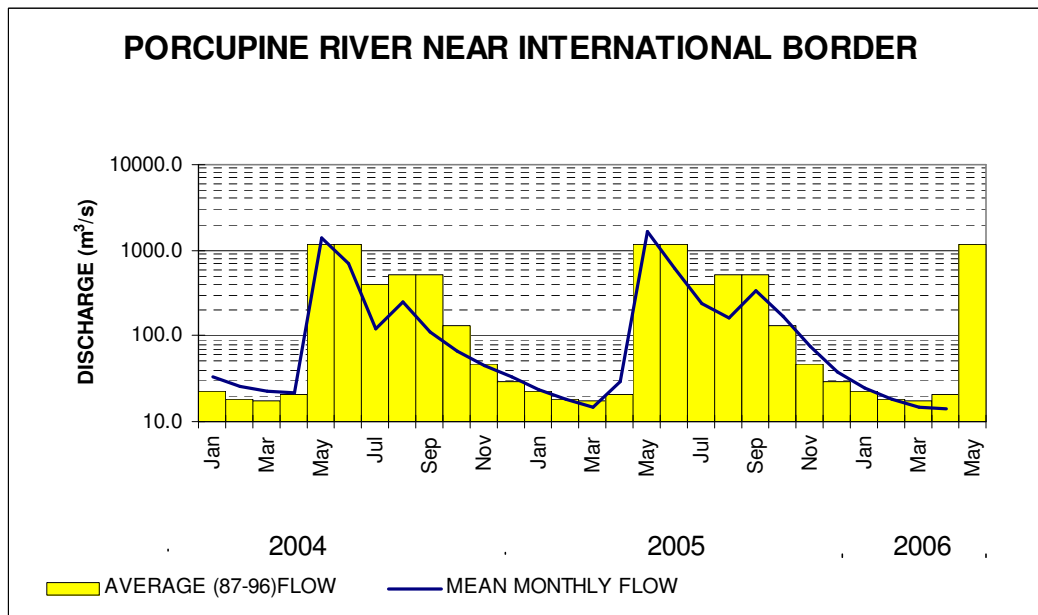
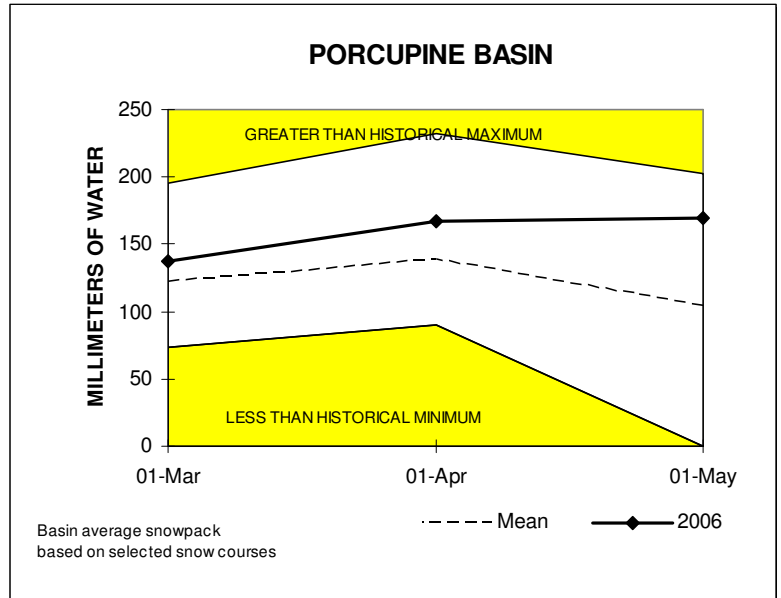
Mean monthly streamflow for April as indicated by the Peel River above Canyon Creek station is 89 percent of normal. Given normal summer meteorological conditions volume runoff and peak flows for the season are expected to be 129 and 120 percent of normal respectively.



PORCUPINE RIVER BASIN

Snowpack conditions in the Porcupine River watershed are well above normal for May 1st with values of snow water equivalent ranging from 174 percent of normal at Eagle Plains to 146 percent of normal at Old Crow. A basin wide average has been estimated to be 163 percent of normal.

Mean April streamflow for the basin as indicated by the Porcupine River near the International Boundary is 68 percent of normal. Porcupine River volume and peak flow forecasts are not available at this time.



Drainage Basin and Snow Course

For Sample Date: 2006-05-01

Name	Number	Elev (m)	Date of Survey	This Year		Water Content		Yrs of Rec
				Snow Depth (cm)	Water Content (mm)	Last Year (mm)	Average (mm)	
Alsek River Basin								
Canyon Lake	08AA-SC01	1160	2006/04/25	32	83	53	23	29
Alder Creek	08AA-SC02	768	2006/04/29	45.6	133	136	78	25
Aishihik Lake	08AA-SC03	945	2006/04/25	19	52	35	30	12
Haines Junction Farm	08AA-SC4	610	2006/04/26	11	34	0	55	6
Clay Creek	08AB-SC02	670	2006/05/01	161	541	706	635	25
Summit	08AB-SC03	1000	2006/04/26	107	284	226	208	26
Profile Mountain	08AB-SC04	900	2006/05/01	103	247	222	262	18
Yukon River Basin								
Tagish	09AA-SC01	1080	2006/04/28	72	175	183	107	30
Montana Mountain	09AA-SC02	1020	2006/04/27	53	132	154	108	30
Log Cabin (B.C.)	09AA-SC03	884	2006/04/26	95	321	373	335	48
Atlin (B.C)	09AA-SC04	730	2006/04/29	0	0	0	44	39
Mt McIntyre B	09AB-SC01B	1097	2006/04/28	68	166	182	122	30
Whitehorse Airport	09AB-SC02	700	2006/04/28	16	39	0	21	39
Meadow Creek	09AD-SC01	1235	2006/04/27	95	239	308	270	30
Jordan Lake	09AD-SC02	930	2006/04/27	40	96	114	79	19
Morley Lake	09AE-SC01	824	2006/04/28	29.5	85	115	71	19
Mount Berdoe	09AH-SC01	1035	2006/04/27	41	89	0	57	30
Satasha Lake	09AH-SC03	1106	2006/04/27	28	64	0	27	18
Williams Creek	09AH-SC04	914	2006/04/27	37	61	0	41	11
Twin Creeks	09BA-SC02	900	2006/04/26	57	182	181	147	29
Hoole River	09BA-SC03	1036	2006/04/27	35	89	139	80	29
Burns Lake	09BA-SC04	1112	2006/04/27	71	209	262	211	20
Finlayson Airstrip	09BA-SC05	988	2006/04/27	24	53	62	40	19
Fuller Lake	09BB-SC03	1126	2006/04/26	54	140	252	209	20
Russell Lake	09BB-SC04	1060	2006/04/26	80	196	280	218	19
Rose Creek	09BC-SC01	1080	2006/04/25	21	47	58	16	12
Mount Nansen	09CA-SC01	1021	2006/04/27	0	0	0	15	29
MacIntosh	09CA-SC02	1160	2006/04/27	32	76	0	49	29
Burwash Airstrip	09CA-SC03	810	2006/04/27	0	0	0	7	29
Duke River	09CA-SC05	1310	No Surv			74	72	18
Beaver Creek	09CB-SC01	655	2006/04/27	28	56	0	29	31
Chair Mountain	09CB-SC02	1067	2006/04/27	23	51	0	18	5
White River	09CB-SC03	823	No Surv			N.S.	0	2
Casino Creek	09CD-SC01	1065	2006/04/27	60	121	93	120	28
Pelly Farm	09CD-SC03	472	2006/04/25	7	19	0	13	20

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Code "E" - Estimate, Code "B" - Survey date is outside of valid sampling range

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Drainage Basin and Snow Course

For Sample Date: 2006-05-01

Name	Number	Elev (m)	Date of Survey	This Year		Water Content		
				Snow Depth (cm)	Water Content (mm)	Last Year (mm)	Average (mm)	Yrs of Rec
Yukon River Basin								
Plata Airstrip	09DA-SC01	830	2006/04/26	45	174	239	147	27
Arrowhead Lake	09DA-SC02	1120	No Surv			284	205	19
Withers Lake	09DB-SC01	975	2006/04/26	98	280	372	237	20
Rackla Lake	09DB-SC02	1040	2006/04/26	77	190	269	213	19
Mayo Airport A	09DC-SC01A	540	2006/05/01	0	0	82	14	36
Mayo Airport B	09DC-SC01B	540	2006/05/01	17	72	0	11	19
Edwards Lake	09DC-SC02	830	2006/04/26	53	138	200	157	19
Calumet	09DD-SC01	1310	2006/05/01	113.6	275 E	265	199	26
King Solomon Dome	09EA-SC01	1080	2006/04/25	84	197	122	99	31
Grizzly Creek	09EA-SC02	975	2006/04/25	84	208	192	135	31
Midnight Dome	09EB-SC01	855	2006/04/25	74	162	197	122	31
Porcupine River Basin								
Riff's Ridge	09FA-SC01	650	2006/04/27	86	212	87	115	19
Eagle Plains	09FB-SC01	710	2006/04/27	85	216	150	124	21
Eagle River	09FB-SC02	340	2006/04/27	66	164	158	100	21
Old Crow	09FD-SC01	299	2006/05/02	67	141 E	96	87	23
Liard River Basin								
Watson Lake Airport	10AA-SC01	685	2006/04/25	35	113	92	37	41
Tintina Airstrip	10AA-SC02	1067	2006/04/27	69	208	204	174	29
Pine Lake Airstrip	10AA-SC03	995	2006/04/28	67	161	216	186	30
Ford Lake	10AA-SC04	1110	2006/04/27	66	172	197	165	18
Frances River	10AB-SC01	730	2006/04/27	34	108	128	79	31
Hyland River	10AD-SC01	855	2006/04/27	31	116	152	97	30
Peel River Basin								
Blackstone River	10MA-SC01	920	2006/04/27	45	106	0	76	30
Ogilvie River	10MA-SC02	595	2006/04/27	59	131	0	81	29
Bonnet Plume Lake	10MB-SC01	1120	2006/04/26	75	191	282	205	20
Alaska Snow Courses								
Eaglecrest	08AK-SC01	305	No Surv			81	365	23
Moore Creek Bridge	08AK-SC02	700	2006/05/01	104	338	480	487	14

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Code "E" - Estimate, Code "B" - Survey date is outside of valid sampling range

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INDEX OF YUKON SNOW COURSES 2005

NAME	NUMBER	ELEVATION (m)	LATITUDE	LONGITUDE	AGENCY
YUKON RIVER BASIN					
Tagish	09AA-SC1	1080	60°17'	134°11'	2
Montana Mountain	09AA-SC2	1020	60°08'	134°44'	2
Log Cabin (B.C.)	09AA-SC3	884	59°46'	134°58'	2
Atlin (B.C.)	09AA-SC4	730	59°34'	133°42'	3
Mt. McIntyre (B)	09AB-SC1B	1097	60°39'	135°08'	1
Whitehorse Airport	09AB-SC2	700	60°42'	135°04'	1
Meadow Creek	09AD-SC1	1235	60°35'	133°05'	2
Jordan Lake	09AD-SC2	930	60°52'	132°50'	1
Morley Lake	09AE-SC1	824	60°00'	132°07'	2
Mount Berdoe	09AH-SC1	1035	62°02'	136°14'	2
Satasha Lake	09AH-SC3	1106	61°29'	136°16'	2
Williams Creek	09AH-SC4	914	60°21'	136°43'	2
Twin Creeks	09BA-SC2	900	62°37'	131°16'	1
Hoole River	09BA-SC3	1036	61°32'	131°36'	1
Burns Lake	09BA-SC4	1112	62°17'	129°57'	1
Finlayson Airstrip	09BA-SC5	988	61°42'	130°46'	1
Fuller Lake	09BB-SC3	1126	62°58'	130°46'	1
Russell Lake	09BB-SC4	1060	63°12'	133°29'	1
Mount Nansen	09CA-SC1	1021	62°02'	137°03'	2
MacIntosh	09CA-SC2	1160	61°43'	137°20'	2
Burwash Airstrip	09CA-SC3	810	61°23'	139°03'	2
Duke River	09CA-SC5	1310	61°15'	138°59'	6
Beaver Creek	09CB-SC1	655	62°25'	140°51'	2
Chair Mountain	09CB-SC2	1067	62°04'	140°48'	2
White River	09CB-SC3	823	61°55'	140°32'	2
Casino Creek	09CD-SC1	1065	62°44'	138°48'	2
Pelly Farm	09CD-SC3	472	62°50'	137°20'	8
Plata Airstrip	09DA-SC1	830	63°31'	132°03'	1
Arrowhead Lake	09DA-SC2	1120	63°42'	131°10'	1
Withers Lake	09DB-SC1	975	63°59'	132°18'	1
Rackla Lake	09DB-SC2	1040	64°17'	133°15'	1
Mayo Airport (A)	09DC-SC1A	540	63°38'	135°53'	2
Mayo Airport (B)	09DC-SC1B	540	63°38'	135°53'	2
Edwards Lake	09DC-SC2	830	63°42'	134°18'	1
Calumet	09DD-SC1	1310	63°55'	135°24'	2
King Solomon Dome	09EA-SC1	1080	63°52'	138°56'	2
Grizzly Creek	09EA-SC2	975	64°26'	138°16'	2
Boundary (Alaska)	09EC-SC2	1005	64°05'	141°27'	4
Midnight Dome	09EB-SC1	855	64°04'	139°24'	2

NAME	NUMBER	ELEVATION (m)	LATITUDE	LONGITUDE	AGENCY
LIARD RIVER BASIN					
Watson Lake Airport	10AA-SC1	685	60°07'	128°50'	2
Tintina Airstrip	10AA-SC2	1067	61°05'	131°15'	1
Pine Lake Airstrip	10AA-SC3	995	60°06'	130°56'	2
Ford Lake	10AA-SC4	1110	60°47'	131°28'	1
Frances River	10AB-SC1	730	60°35'	129°11'	2
Hyland River	10AD-SC1	855	61°31'	128°16'	2
ALSEK RIVER BASIN					
Canyon Lake	08AA-SC1	1160	61°07'	136°59'	7
Alder Creek	08AA-SC2	768	60°22'	137°06'	6
Aishihik Lake	08AA-SC3	945	61°12'	137°00'	7
Haines Junction Farm	08AA-SC4	610	60°45'	137°34'	2
Clay Creek	08AB-SC2	670	60°09'	137°56'	6
Summitt	08AB-SC3	1000	60°51'	137°47'	2
Profile Mountain	08AB-SC4	900	60°38'	137°56'	6
PEEL RIVER BASIN					
Blackstone River	10MA-SC1	920	64°57'	138°15'	2
Ogilvie River	10MA-SC2	595	65°21'	138°18'	2
Bonnet Plume Lake	10MB-SC1	1120	64°18'	132°00'	1
PORCUPINE RIVER BASIN					
Riff's Ridge	09FA-SC1	650	65°57'	137°22'	2
Eagle Plains	09FB-SC1	710	66°22'	136°44'	2
Eagle River	09FB-SC2	340	66°27'	136°43'	2
Old Crow	09FD-SC1	299	67°34'	139°51'	5
ALASKA SNOW COURSES					
Eaglecrest	34J03	305	58°17'	134°32'	4
Moore Creek Bridge	34K02	701	59°31'	135°15'	4

Numbers refer to Agencies cooperating in the Yukon Snow Surveys:

1. Department of Environment, Government of Yukon
2. Dept of Energy Mines and Resources Yukon
3. British Columbia Ministry of Environment
4. USDA Natural Resources Conservation Service
5. Yukon Transportation and Highways
6. Parks Canada
7. Yukon Energy Corp.