YUKON SNOW SURVEY BULLETIN & WATER SUPPLY FORECAST

April 1, 2023

Prepared and issued by:
Water Resources Branch
Department of Environment

Yukon

PREFACE

The Department of Environment's Water Resources Branch issues the *Yukon Snow Survey Bulletin and Water Supply Forecast* three times annually – early March, April and May. The bulletin provides a summary of winter meteorological and streamflow conditions for the Yukon, as well as current snow depth and snow water equivalent observations for 57 locations. This information is used to evaluate the potential for spring flooding caused by both breakup ice jams and large spring snowmelt (freshet) flows. It is important to note that other processes such as summer rain and glacier melt can significantly influence maximum annual water levels in specific Yukon basins.

March weather conditions for the Yukon are presented in two maps, one showing temperature anomalies (deviation from climate normals), and another showing precipitation anomalies. Territory-wide snowpack data are presented in a third map showing snow water equivalent (SWE) as a percent of historical median for each station, as well as the basin-averaged estimated SWE for 11 watersheds (or river basins). Complementary meteorological and hydrological data are presented for each basin through a series of five graphs, depending on data availability:

- **Figure A**: Daily Snow Water Equivalent (SWE) data starting in September at one specific location in the watershed, showing an overview of winter snowpack evolution.
- **Figure B**: Current, basin-averaged, estimated Snow Water Equivalent (SWE) from snow survey data, compared with historical data, serving as an indicator of potential runoff volumes in the spring (acknowledging that snow sublimation, evapotranspiration, rain and glacier melt also significantly affect runoff).
- **Figure C**: Monthly winter precipitation (rain and/or snow) compared with historical data (1980-2022 period of record), complementing the information presented in Figure B.
- **Figure D**: Cumulated degree-days of freezing (CDDF, sum of negative daily temperatures) compared with historical data, functioning as an indicator of winter coldness and overall river ice thickness; variables that influence river ice breakup scenarios in the spring.
- **Figure E**: Current, estimated daily discharge or measured water level, compared with historical data, representing an overview of the watershed hydrological conditions.

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The Yukon Snow Survey Bulletin forms part of the Yukon Snow Survey Program administered by the Water Resources Branch, Department of Environment, Government of Yukon. The Water Resources Branch (WRB) strives for water stewardship in the Yukon and is committed to responsible and collaborative monitoring to inform the management and protection of waters.

We are grateful to monitor snow and water across the territories of all fourteen Yukon First Nations and to work in partnership with many First Nations in different aspects of our work. Though the findings expressed in this report are based primarily on field observations and relevant scientific data, we acknowledge the deep and longstanding connection to, and knowledge of snow and water held by, Yukon First Nations.

Gathering snow measurements and data from across our vast territory requires working together with a number of partners. We'd like to recognize the following agencies/individuals for their significant contributions to the snow survey bulletin:

- *Data Collection Officer, Natural Resources Conservation Service, United States Department of Agriculture*
- *Meteorologist, Wildland Fire Management, Yukon Department of Community Services, Whitehorse*
- *Officer in Charge, Water Survey of Canada, Whitehorse*
- *Water Management Engineer, Yukon Energy Corporation*
- *Research Technologists, McMaster University*

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

- *B.C. Ministry of Environment, Water Stewardship Division*
- *Parks Canada, Kluane National Park and Reserve*
- *Yukon Department of Highways and Public Works*
- *Yukon Department of Energy Mines and Resources, Compliance Monitoring and Inspections Branch*
- *Yukon Department of Environment, Information Management and Technology Branch*
- *Vuntut Gwitchin First Nation*

DISCLAIMER AND LIMITATION OF LIABILITY

YUKON TERRITORY WEATHER AND SNOWPACK CONDITIONS

Fall 2022 was marked by a very wet and warm October, especially in the Klondike, Southern Lakes and Alsek River Basins, with a record rain event affecting most of the western half of the territory. When precipitation turned to snow, Dawson stood out with very high precipitation in December and January while Whitehorse recorded very low precipitation in January; the third driest on record. November to March precipitation totals were above normal in the west, falling to below normal in the east. On average, monthly average temperatures were warmer than normal in November, January and February, but December and March temperatures were colder than normal. Old Crow notably had the warmest January on record with an average monthly temperature 8.5°C warmer than normal[1].

October

October was marked by a very abrupt shift in temperature with mean daily temperatures remaining above freezing across most of the territory until late in the month, when cooler arctic air finally moved its way south and pushed temperatures well into the negatives. While mean monthly temperatures remained 2-3 °C warmer than climate normals for the month, the most notable weather story was heavy rain and snowfall in the southwest Yukon mid-month, bringing up to 200 mm of mixed rain and snow in just 24 hours. The warmer temperatures and this single event pushed most stations, except those in the southeast, to 150-200% of normal October precipitation.

November

In contrast to October, November experienced typical weather for late fall, with daily mean temperatures dropping below freezing and staying there save for a few brief warm spells. Precipitation was likewise unremarkable, if slightly dry, when compared to climate normals for the month.

December

The start of December brought the first, albeit short-lived, arctic outbreak of winter 2022-23 as overnight lows dropped to the -30°C range. After a brief respite, temperatures plunged even further over the holiday season with several official reports of -50°C. The calendar year closed with mean monthly temperatures several degrees colder than normal and most of the territory slightly drier than normal with the exception of the central Yukon which ranged from 150% to 200% of normal.

January

The first month of the new year was characterized by well above normal temperatures, in most cases by 5-10°C. A split jet stream resulted in a near absence of organized weather over the Yukon until the final week of January. Despite this, a persistent moist flow into western Yukon brought two to three times the normal monthly precipitation to Burwash, Dawson and surrounding areas.

February

The final month of the meteorological winter was varied, with mostly short-lived storms and temperatures that skirted both sides of seasonal normals. Despite some arctic air in the final week of the month, mean temperatures across the territory were almost uniformly within 1°C of climate normals, while precipitation was slightly above normal (150-200%) except in Old Crow where it was near 50% of normal.

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[1] Historical temperature, precipitation, snow water equivalent and discharge or water level records are not always long enough to establish a state-of-the-art “normal”, which implies 30 years of data. Therefore, this document refers to historical average, or more simply, average. Historical records considered in this bulletin are always long enough to be representative of recent hydrometeorological conditions.

March

Mean monthly temperatures were slightly below climate normals in Central and Southern Yukon, despite a sustained warm period around March 16-24. Snowmelt on south aspects and at lower elevations occurred with several daytime highs around 7°C in most communities, from Watson Lake to Dawson City. In the Klondike and Northern Yukon, mean monthly temperatures were above climate normals. Precipitation patterns varied substantially across the territory. Stations in the North recorded near normal snowfall (Old Crow, Dawson, and Mayo). In Carmacks and the Kluane Region, precipitation was three to four times the normal amount. Snowfall in the Southern Lakes region was slightly above normal, while the Southeast (Teslin to Watson Lake) experienced drier than normal conditions.

Snowpack

The April 1 snow survey revealed a continuation of the trend observed in March; namely, that the snowpack in most of the southern and eastern parts of the territory is close to or slightly above average, and above average in the northern half and central-west areas of the Yukon.

Basin-averaged snowpack estimates range from a low of 96% from median in the Stewart River Basin to 147% in the White River Basin. The Upper Yukon Basin (Southern Lakes) (114%), Teslin River Basin (106%), Stewart River Basin (96%), Pelly River Basin (108%), Liard River Basin (111%) and Alsek River Basin (106%) are all close to normal. The Central Yukon Basin (137%), White River Basin (147%), Lower Yukon Basin (132%), Porcupine Basin (133%) and Peel River Basin (128%) are all above normal for this time of year.

The April 1 snow survey typically represents peak snowpack in most parts of the territory. While the snowpack may still increase in early April, it is typically lower on May 1 in most regions.

YUKON TERRITORY FLOW CONDITIONS AND OUTLOOK

Winter discharge (or baseflow) is estimated based on a combination of periodic winter measurements as well as historic data and regional trends. While most sites have had recent measurements it should be noted that discharge estimates are provisional at all stations.

Estimated discharge and water level, presented in the hydrographs below, range from near average to above historical maximums. The Yukon government also monitors groundwater levels around the territory. In many observation wells, the highest annual maximum groundwater levels were observed in 2022 within their periods of record. However, it must be noted that in many cases the records are relatively short. The observed winter baseflows support the suggestion that these groundwater levels are much higher than normal.

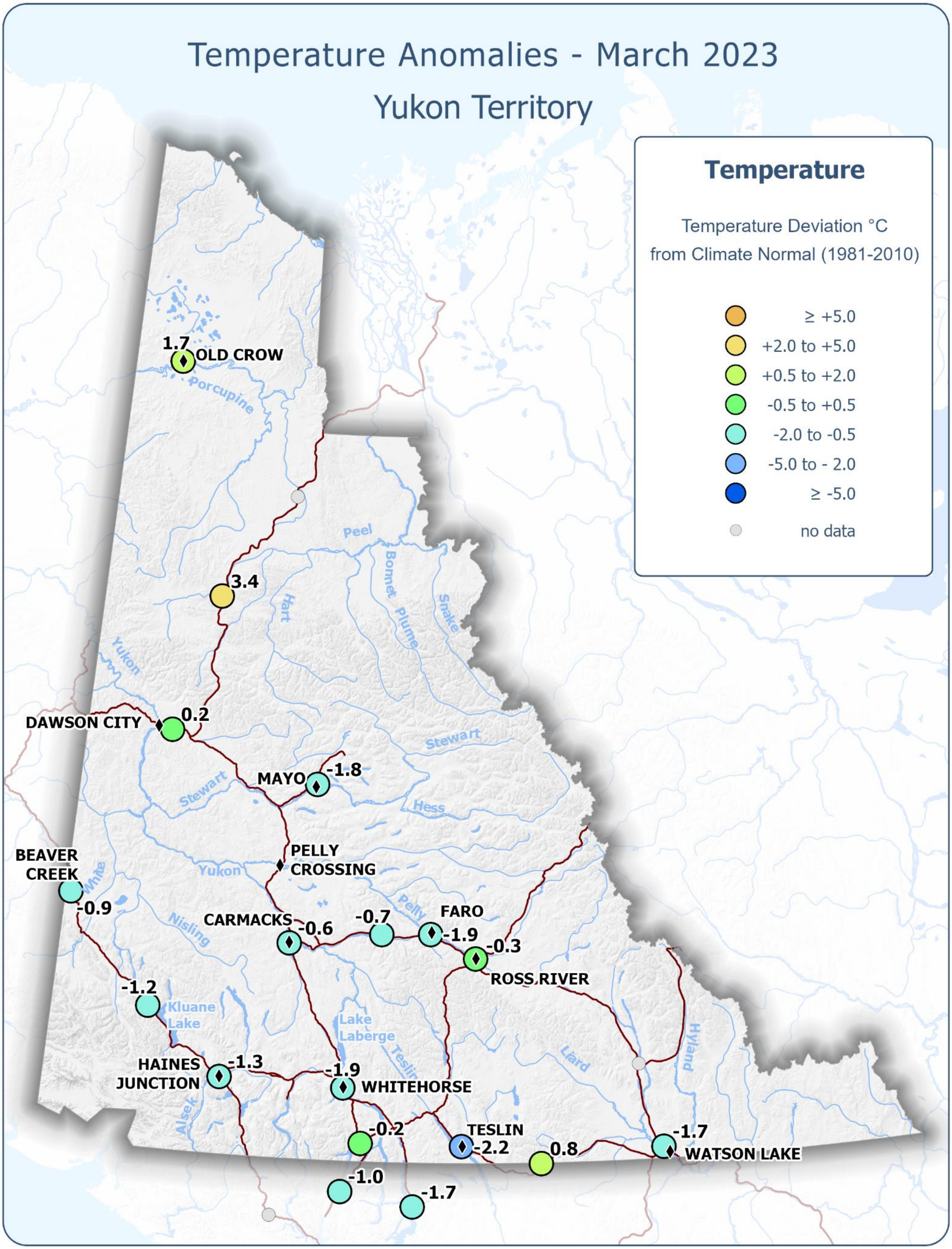
Following a drier fall in southeast Yukon, the Liard River had average winter flows and Teslin Lake has an average winter lake level. The Liard River is showing a slight early snowmelt response. The Peel and Porcupine Basins also have close to average baseflow conditions. Most other basins continue to have winter flows near or exceeding historical maximums including the Alsek River Basin, White River Basin, Lower Yukon River Basin, Central Yukon River Basin, Stewart River Basin, Pelly River Basin and the Upper Yukon River Basin. Lake Laberge is included in the bulletin as a more accurate representation of baseflow conditions in the Upper Yukon River basin given the regulation of Marsh Lake. Over the next month, most systems will begin to respond to snowmelt inputs.

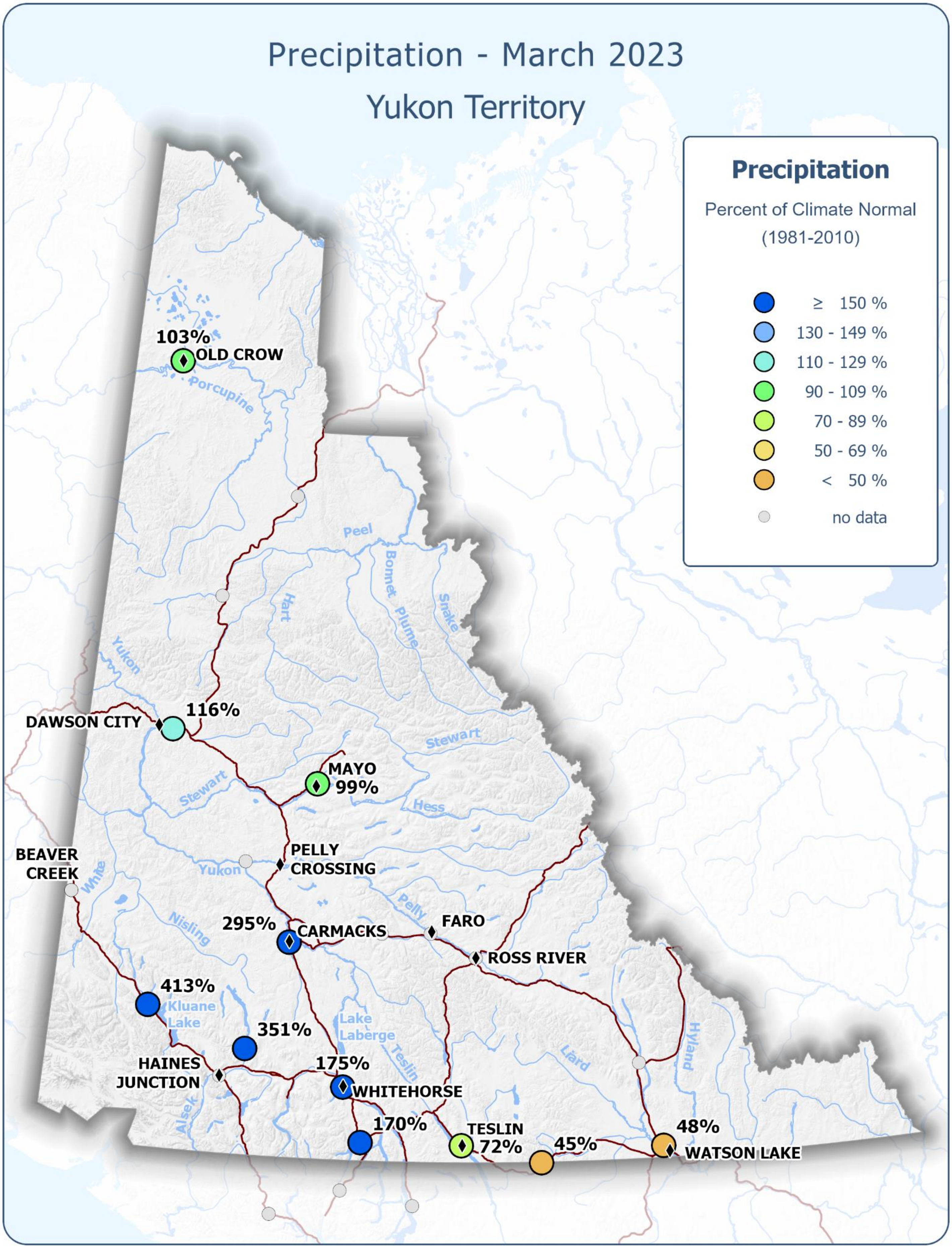
The combination of high groundwater tables and close to average or slightly above average snowpack suggests spring snowmelt runoff in creeks and streams will likely be slightly above average in most of the Yukon River Basin and its main tributaries. Assuming average weather conditions, this also suggests slightly above average peak water levels in the Southern Lakes as well as other lakes in the Yukon Basin, with Teslin Lake being a likely exception. Teslin is expected to have average water levels this summer.

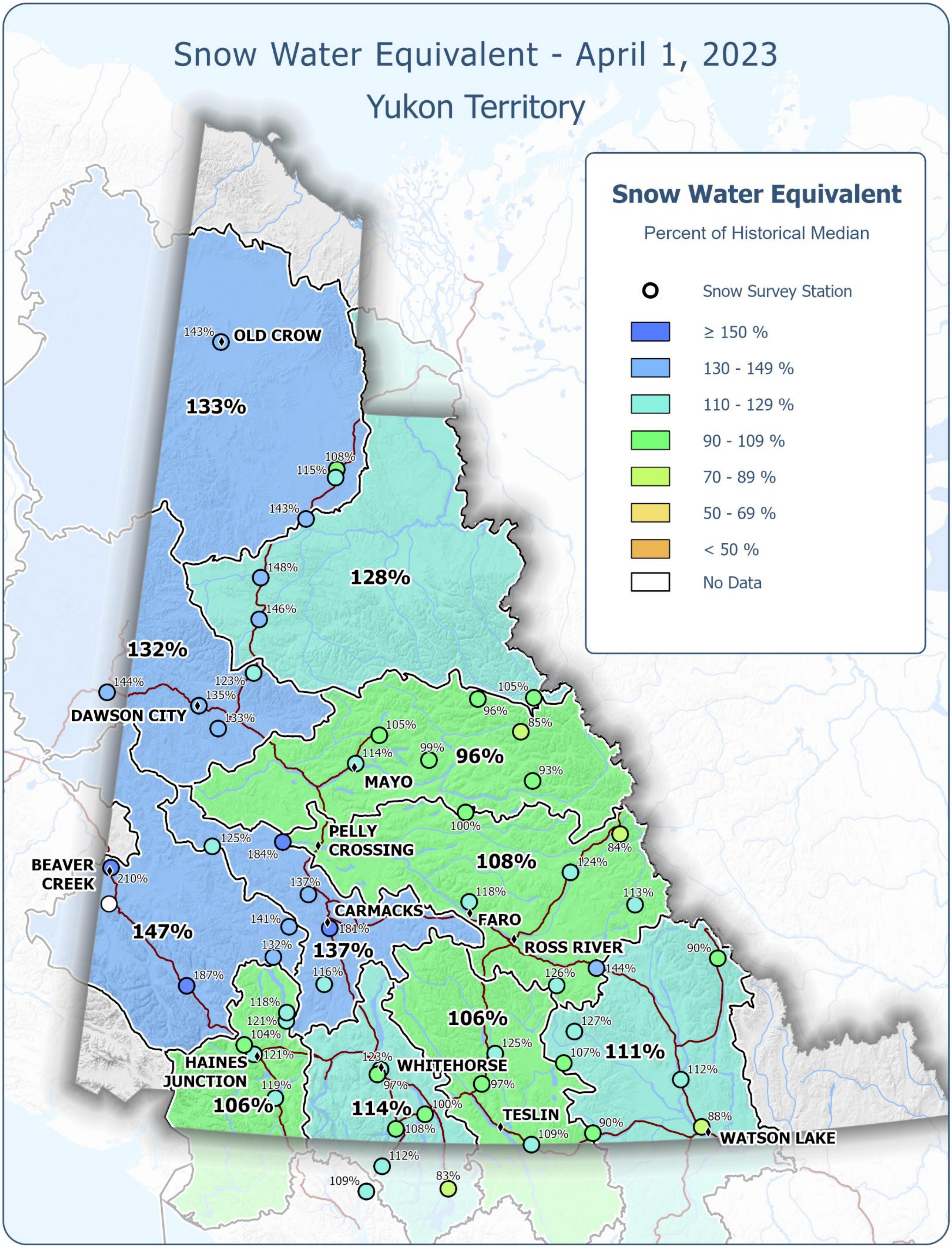
Current conditions in the Central and Lower Yukon River Basins as well as the White, Peel, and Porcupine River Basins suggest above average spring freshet flows in those regions. This is likely to be more pronounced in the smaller to medium sized catchments in these regions.

Breakup-induced ice jamming is caused by several local factors, such as ice thickness and freeze-up levels. Ice thickness, influenced by cumulative degree-days of freezing (CDDF), plays an important role in determining the *severity* of ice jams. With a late freeze-up and generally warmer-than-average winter, ice is likely thinner than usual in most parts – as confirmed by observers around the territory. However, ice may have formed at a higher elevation in some locations, which can lead to a higher risk of ice jamming. A sudden and sustained rise in temperature could lead to significant ice jam levels in some locations, although the overall risk of ice jam flooding is assessed to be close to average in places of concern.

Peak spring freshet flows will depend on spring weather patterns, while weather conditions over the spring and summer will influence peak flows and lake levels in watersheds influenced by glacial melt.

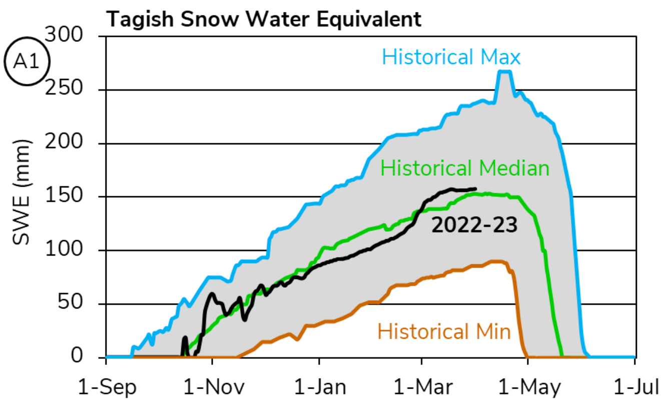

Temperature Anomalies - March 2023
Yukon Territory
Temperature
Temperature Deviation °C
from Climate Normal (1981-2010)
≥ +5.0
+2.0 to +5.0
+0.5 to +2.0
-0.5 to +0.5
-2.0 to -0.5
-5.0 to - 2.0
≥ -5.0
no data
1.7
OLD CROW
Porcupine
Peel
3.4
Hart
Bonnet Plume
Snake
Yukon
DAWSON CITY
0.2
Stewart
MAYO
-1.8
Stewart
Hess
PELLY
CROSSING
BEAVER
CREEK
White
-0.9
Yukon
Nisling
CARMACKS
-0.6
-0.7
Pelly
FARO
-1.9
-0.3
ROSS RIVER
-1.2
Kluane
Lake
Lake
Laberge
Teslin
Liard
Hyland
HAINES
JUNCTION
-1.3
-1.9
WHITEHORSE
Alsek
-0.2
TESLIN
-2.2
0.8
-1.7
WATSON LAKE
-1.0
-1.7

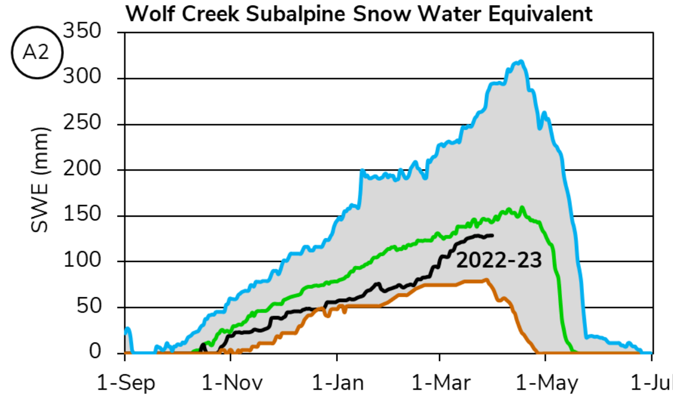

Precipitation - March 2023
Yukon Territory
Precipitation
Percent of Climate Normal
(1981-2010)
≥ 150 %
130 - 149 %
110 - 129 %
90 - 109 %
70 - 89 %
50 - 69 %
< 50 %
no data
103%
OLD CROW
Porcupine
Peel
Bonnet Plume
Snake
Hart
Yukon
116%
DAWSON CITY
Stewart
MAYO
99%
Stewart
Hess
PELLY
CROSSING
BEAVER
CREEK
White
Yukon
Pelly
FARO
Nisling
295%
CARMACKS
ROSS RIVER
413%
Kluane
Lake
351%
Lake
Laberge
Teslin
Liard
Hyland
HAINES
JUNCTION
175%
WHITEHORSE
Alsek
170%
TESLIN
72%
45%
48%
WATSON LAKE

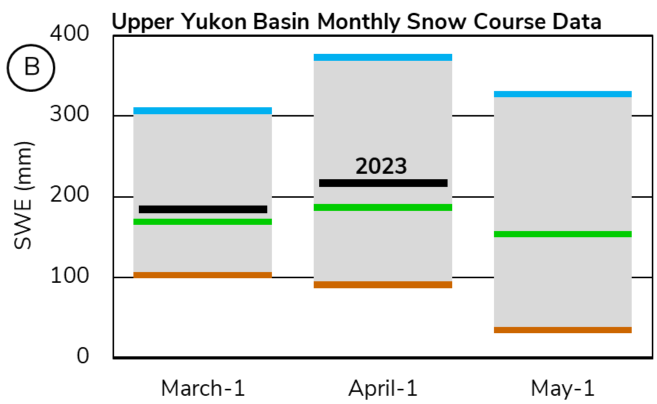

Snow Water Equivalent - April 1, 2023
Yukon Territory
Snow Water Equivalent
Percent of Historical Median
Snow Survey Station
≥ 150 %
130 - 149 %
110 - 129 %
90 - 109 %
70 - 89 %
50 - 69 %
< 50 %
No Data
OLD CROW
143%
133%
108%
115%
143%
148%
128%
146%
132%
144%
123%
135%
DAWSON CITY
133%
105%
96%
85%
105%
114%
99%
96%
MAYO
93%
100%
PELLY
CROSSING
125%
184%
84%
BEAVER
CREEK
210%
108%
124%
137%
118%
113%
CARMACKS
FARO
141%
181%
147%
ROSS RIVER
90%
132%
137%
144%
116%
126%
187%
118%
121%
106%
127%
104%
125%
HAINES
JUNCTION
121%
123%
WHITEHORSE
107%
111%
112%
119%
97%
97%
106%
114%
100%
TESLIN
88%
108%
109%
90%
WATSON LAKE
112%
109%
83%

UPPER YUKON RIVER BASIN (SOUTHERN LAKES / WHITEHORSE)

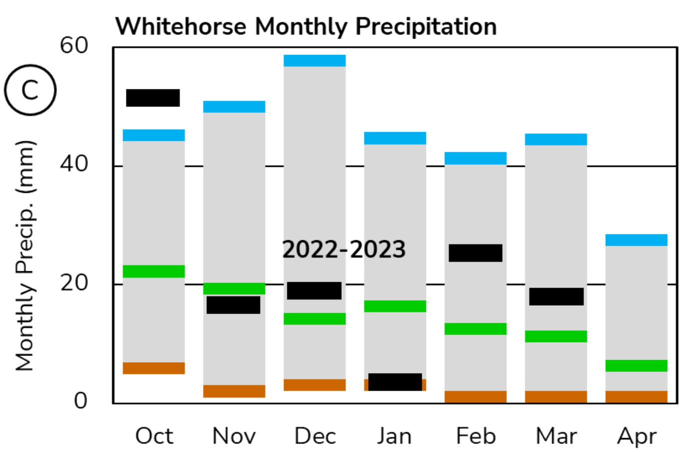
The Upper Yukon River Basin snowpack is **slightly above average**. At Tagish Meteorological Station, Snow Water Equivalent (SWE) is estimated to be **103%** of the **historical median** (Figure A1), while at Wolf Creek Subalpine Meteorological Station, SWE is estimated to be **90%** of the **historical median** (Figure A2). The Upper Yukon basin-averaged SWE is estimated to be **114%** of the **historical median**, with **217 mm** as of April 1 (Figure B).

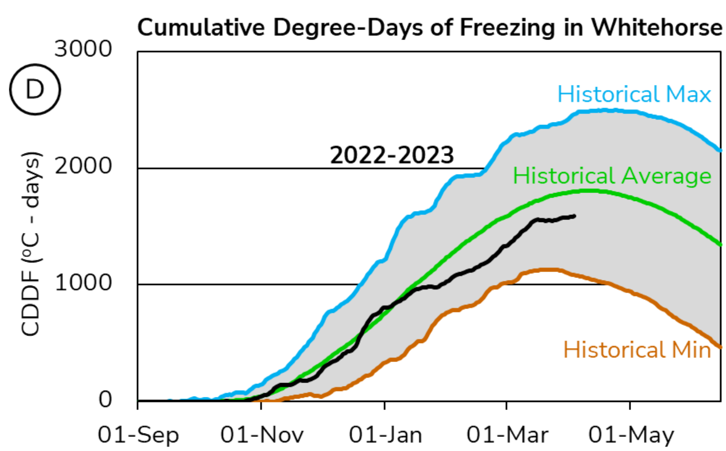




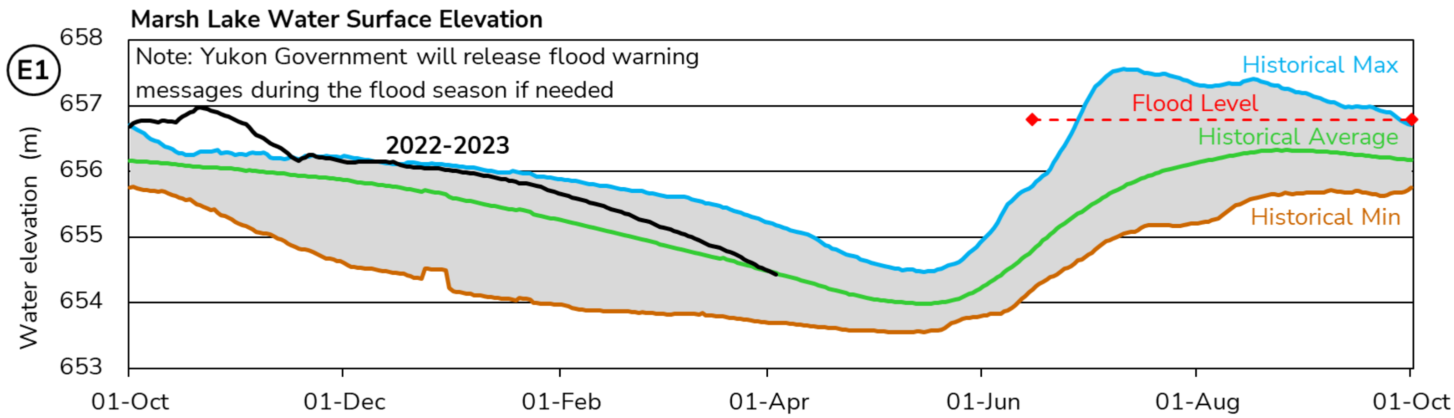


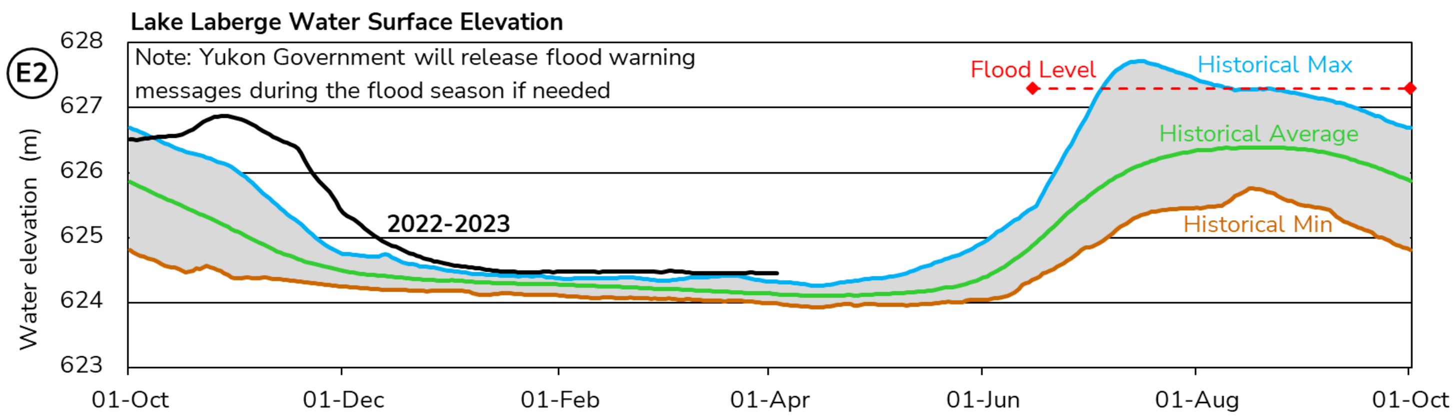
October was the **wettest** on record at Whitehorse Airport (Figure C) and was followed by **near median** monthly precipitation in November and December, a **very dry** January and **above median** snowfall in February and March. Cumulative winter precipitation is **34% above median** on April 1. Cumulative degree-days of freezing (CDDF) are **12% below average**, with 1580°C-Days on April 1 (Figure D), which suggests that the thickness of the ice cover on rivers and lakes of the region is likely **thinner than normal**.





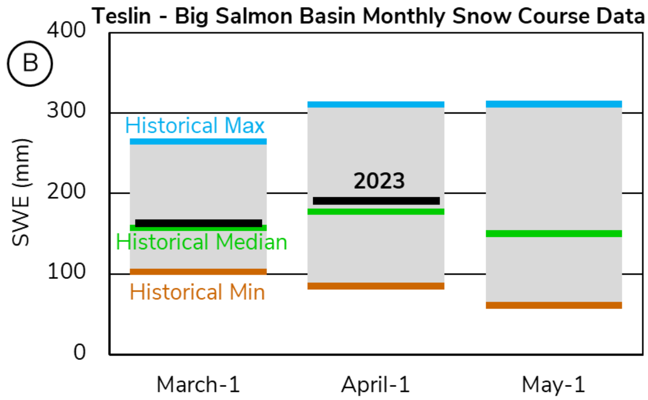
The measured water surface elevation (relative to sea level) in Marsh Lake is currently **average** (Figure E1). The current snow and groundwater conditions suggest that water levels will be **slightly above average** this summer. However, weather conditions over the spring and summer will determine the peak water level in Marsh Lake, which typically occurs in late summer in response to peak glacial runoff and large precipitation events. Lake Laberge also exhibited record levels in late 2022 in response to the warm wet fall and is currently above the historic maximum for this time of year (Figure E2). Lake Laberge follows a similar summer pattern to the upper Southern Lakes and is expected to experience above average water levels this summer.



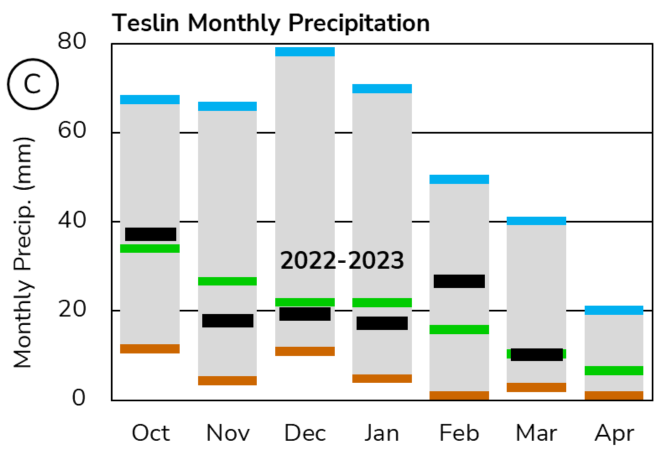


TESLIN RIVER BASIN

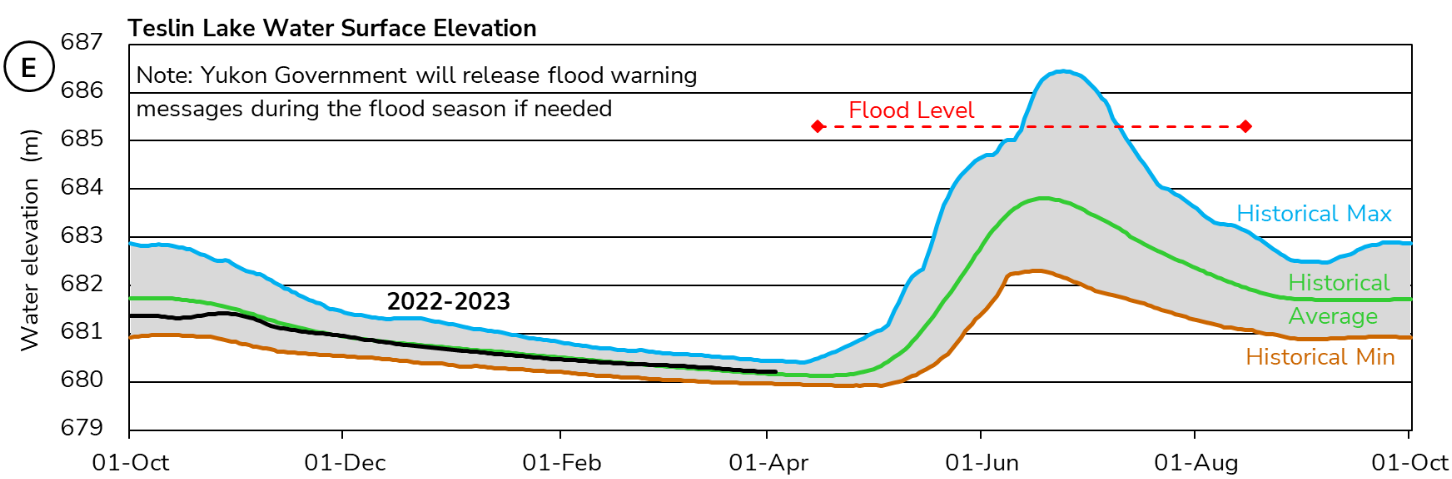
The Teslin River Basin snowpack is **close to average**. The basin-averaged SWE is estimated at **106%** of the **historical median**, with **191 mm** as of April 1 (Figure B).



Teslin monthly precipitation has been **near median** from October to February (Figure C), and cumulative precipitation was **5% below median** on April 1.

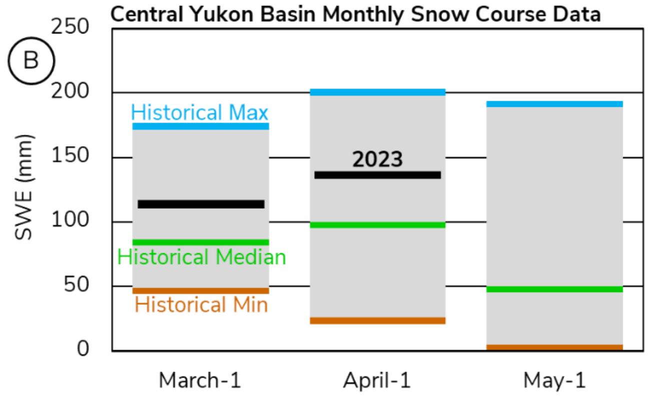


The measured water surface elevation (relative to sea level) in Teslin Lake is currently **near average** (Figure E). The **average** snowpack and **average** water level suggest that summer water levels will be **close to average**.

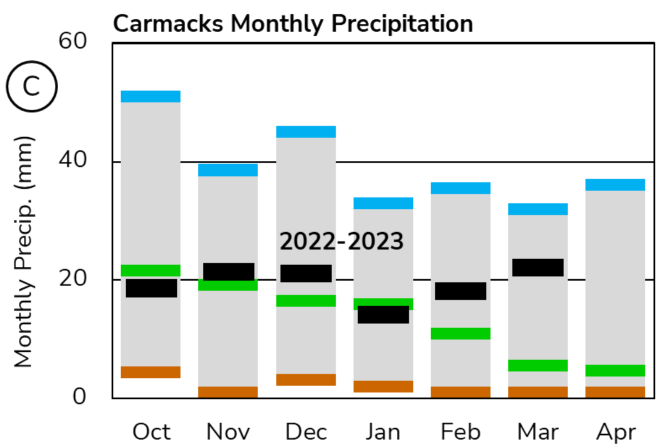


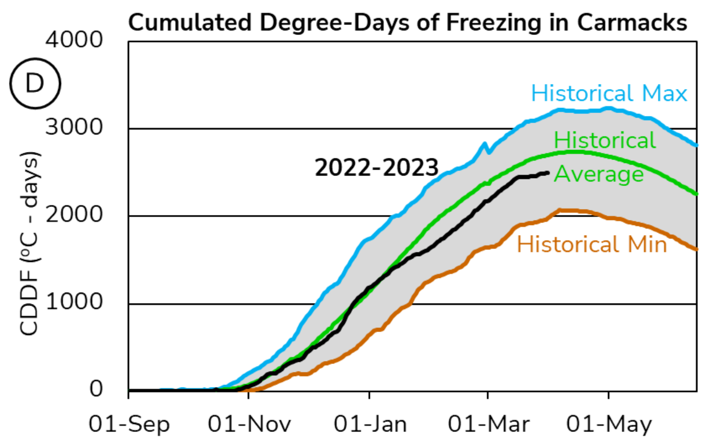
CENTRAL YUKON RIVER BASIN (CARMACKS AREA)

The Central Yukon River Basin snowpack is **above average**. The basin-averaged SWE is estimated to be **137%** of the **historical median**, with **137 mm** as of April 1 (Figure B).

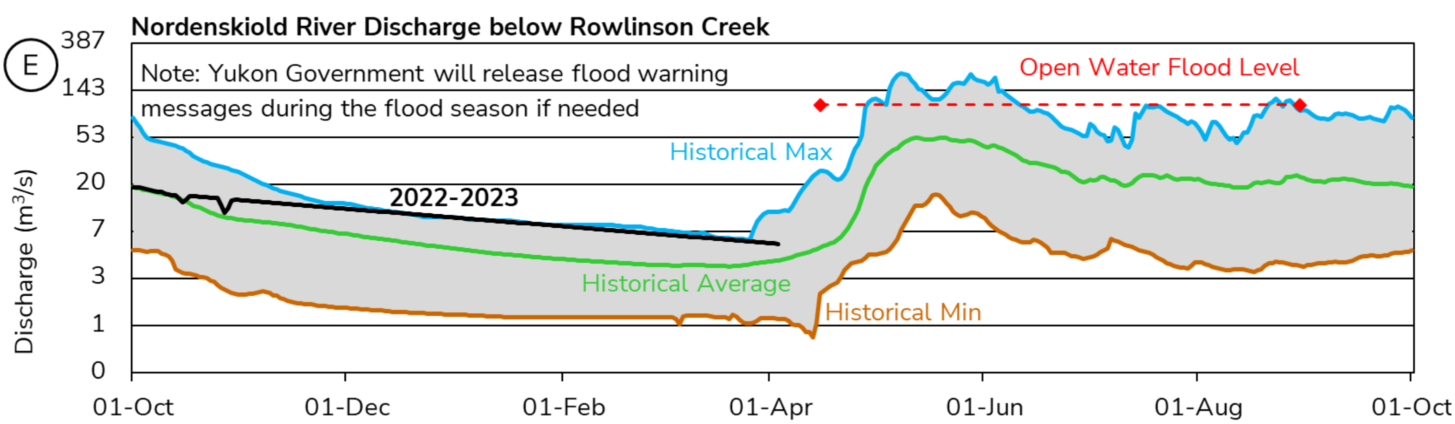


Carmacks monthly precipitation has been **near or above median** since October (Figure C), with cumulative precipitation being **24% above median** on April 1. Cumulated degree-days of freezing (CDDF) are **8% below average**, with 2503°C-Days on April 1 (Figure D).



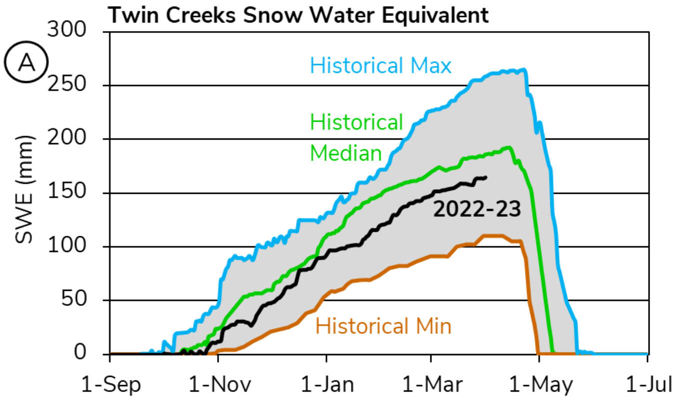


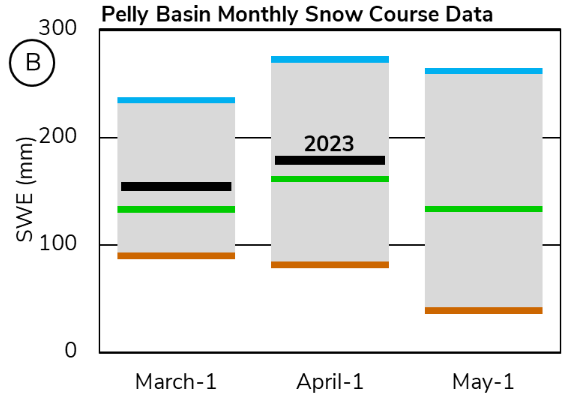
The estimated Nordenskiold River discharge is currently **above average** (Figure E). The **above average** snowpack combined with **high** winter flows in the watershed suggests **spring freshet flow volumes** will be **above average** with a potential for **higher-than-normal spring freshet water levels** on smaller and medium sized creeks and rivers. A combination of local conditions such as ice thickness, freeze-up levels, and current flow volumes suggest an **average** ice jam risk. Weather patterns leading to breakup and the spring freshet will play a critical role in determining potential ice jam severity and peak water levels.



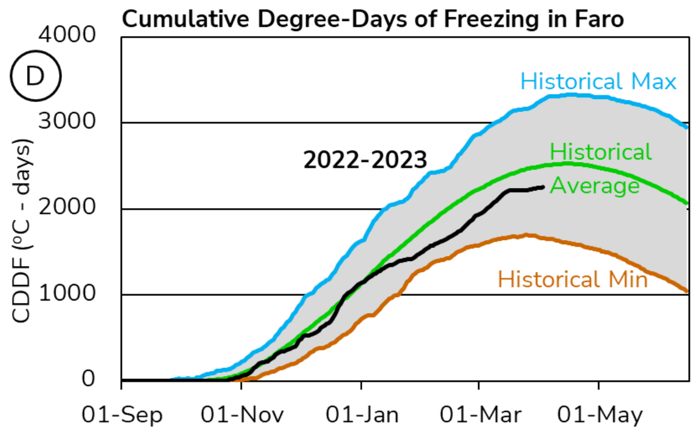
PELLY RIVER BASIN

The Pelly River Basin snowpack is **close to average**. At Twin Creeks Meteorological Station, Snow Water Equivalent (SWE) is estimated to be **89%** of the **historical median** (Figure A). The Pelly River basin-averaged SWE is estimated to be **108%** of the **historical median**, with **179 mm** as of April 1 (Figure B).

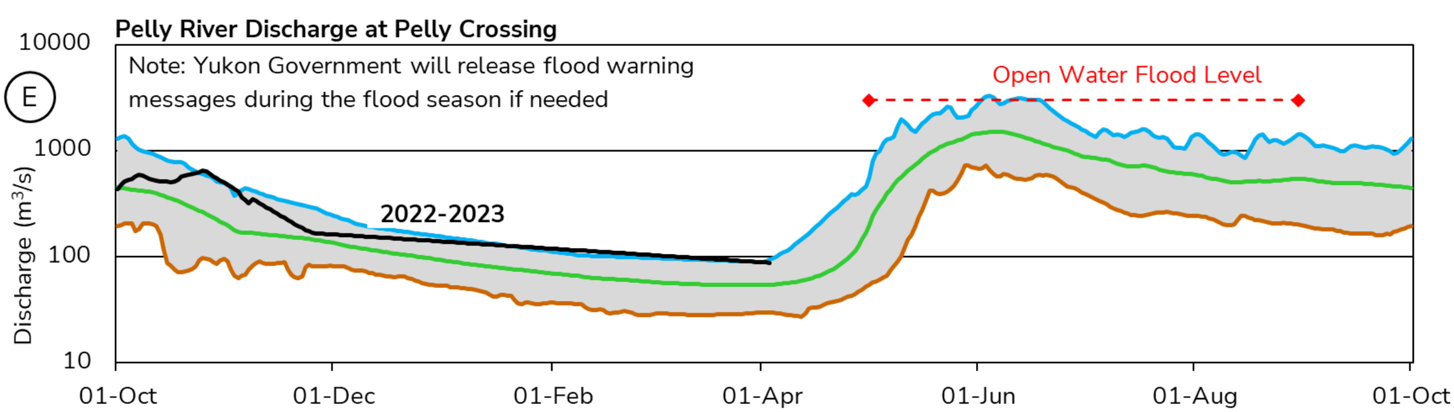




Precipitation at Faro has not been recorded, but snowpack observations indicate values are **slightly above** the **climate normals**. Cumulated degree-days of freezing (CDDF) at Faro are **10% below average** at 2249°C-Days on April 1 (Figure D), which suggests that the thickness of the ice cover on rivers and lakes of the region is likely **thinner than normal**.

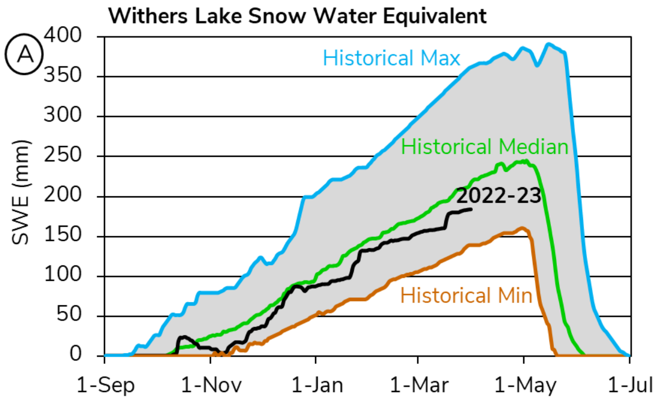


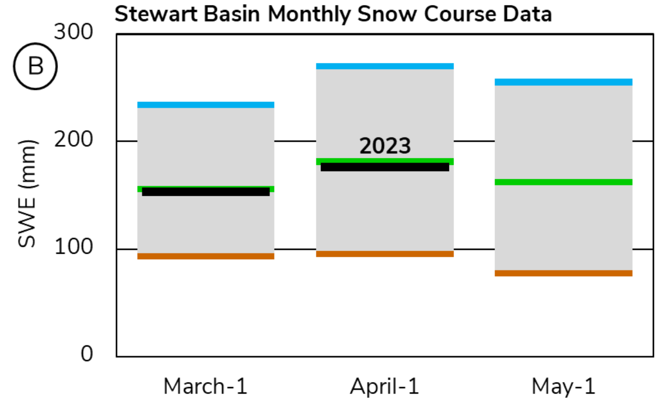
The estimated Pelly River discharge at Pelly Crossing is currently **near its historical maximum** (Figure E). The **slightly above average** snowpack combined with high winter flows in the watershed suggests a potential for **above average spring freshet flows.** A combination of local conditions such as ice thickness, freeze-up levels, and current flow volumes suggest an **elevated** ice jam risk. Weather patterns leading to breakup and the spring freshet will play a critical role in determining potential ice jam severity and peak water levels.



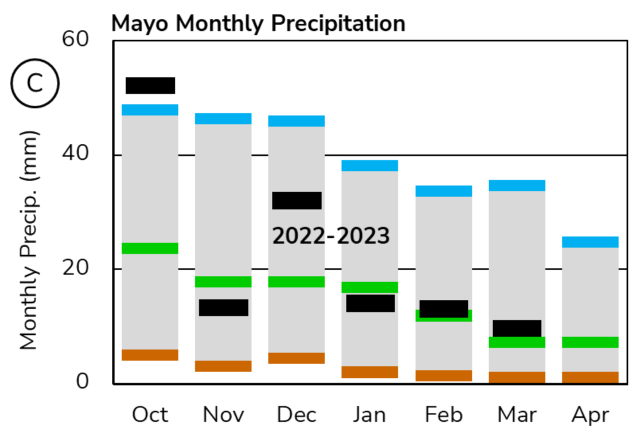
STEWART RIVER BASIN

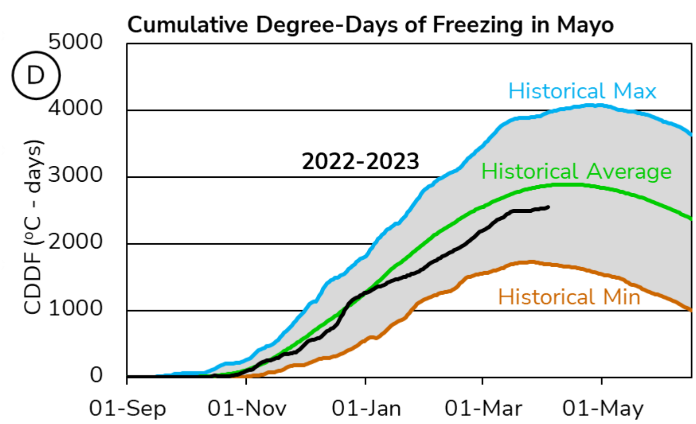
The Stewart River Basin snowpack is **close to average**. At Withers Lake Meteorological Station, Snow Water Equivalent (SWE) is estimated to be **89%** of the **historical median** (Figure A). The Stewart River basin-averaged SWE is estimated to be **96%** of **historical median**, with **176 mm** as of April 1 (Figure B).



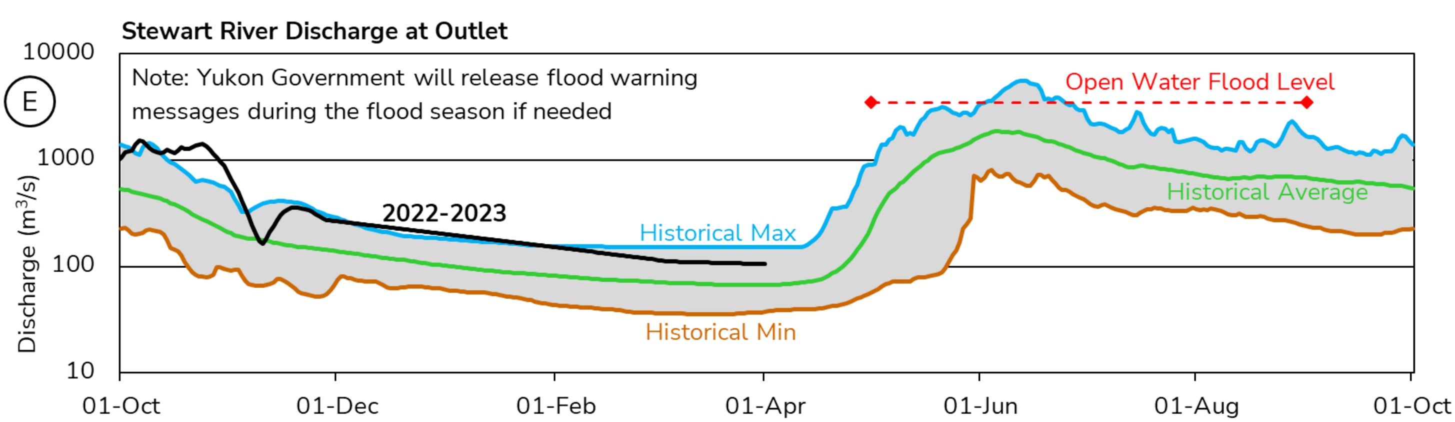


October was the **wettest** of the past four decades at Mayo Airport and December had **above median** precipitation as well. While November, January and February saw precipitation **slightly below median**, cumulative winter precipitation is **35% above median** on April 1 (Figure C). Cumulated degree-days of freezing (CDDF) are **12% below average**, with 2533°C-Days on April 1 (Figure D), which suggests that the thickness of the ice cover on rivers and lakes of the region is likely **thinner than normal**.



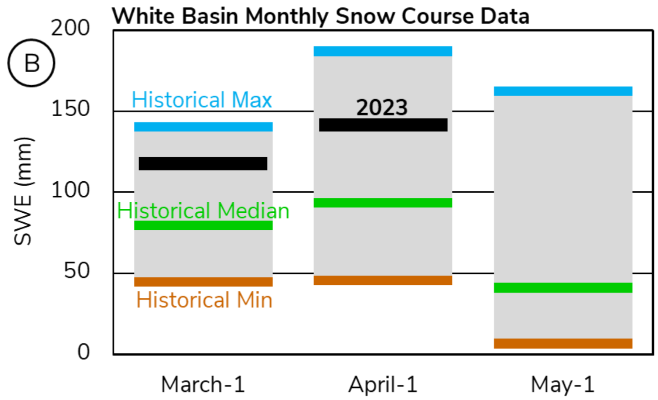


The estimated Stewart River discharge at the outlet is currently **well above average** (Figure E). The **close to average** snowpack combined with high winter flows in the watershed suggests a potential for **slightly above average spring freshet flows.** A combination of local conditions such as ice thickness, freeze-up levels, and current flow volumes suggest an **elevated** ice jam risk. Weather patterns leading to breakup and the spring freshet will play a critical role in determining potential ice jam severity and peak water levels.

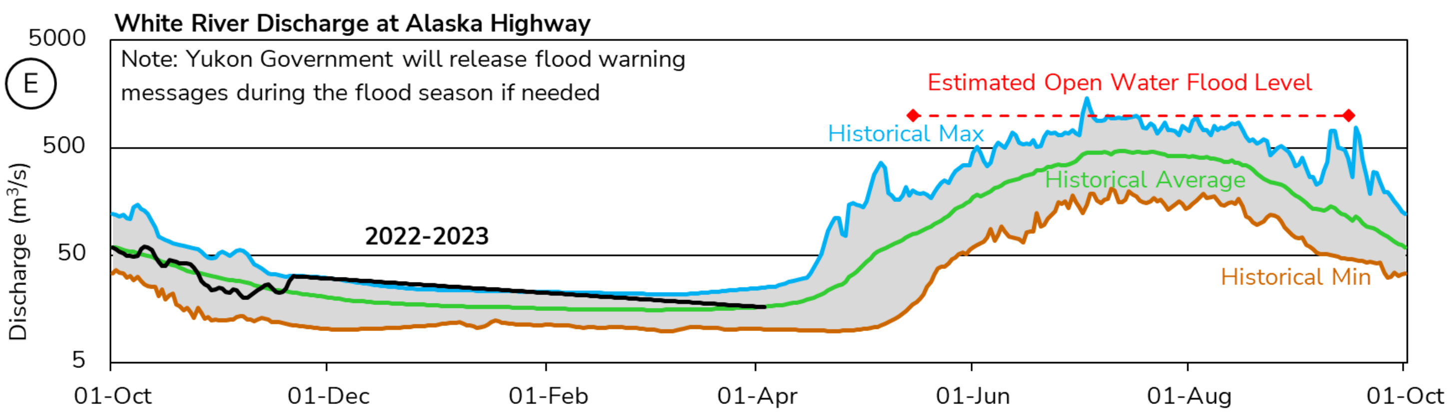


WHITE RIVER BASIN

The White River Basin snowpack is **above average**. The basin-averaged SWE is estimated to be **147%** of the **historical median**, with **142 mm** as of April 1 (Figure B).

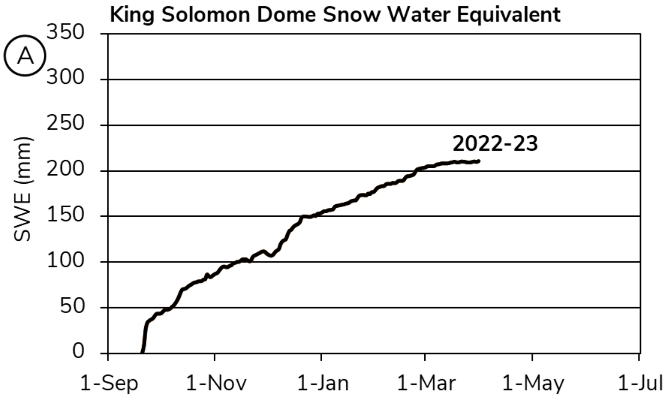


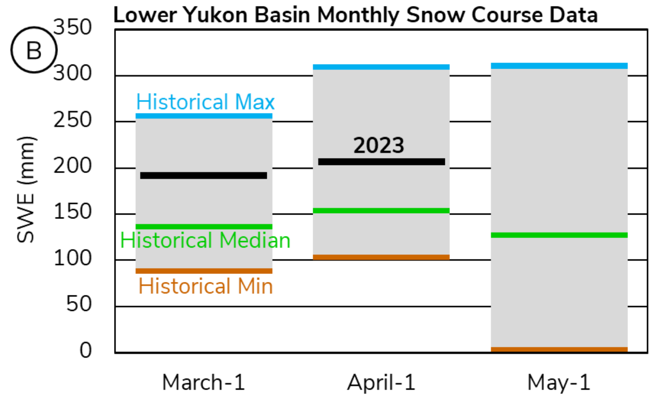
The estimated White River discharge at the Alaska Highway is currently **above average** (Figure E). In this watershed, high flows are dominated by mountain snowmelt and glacial melt that are largely influenced by summer temperatures and precipitation. The **above average** snowpack combined with **above average** winter flows suggests **spring freshet flow volumes** will be **above average** with a potential for **higher-than-normal spring freshet water levels.** Warm and/or wet weather anomalies during the next four months will likely generate **high peak flows**, including in rivers and streams crossing the Alaska Highway in the Kluane region.



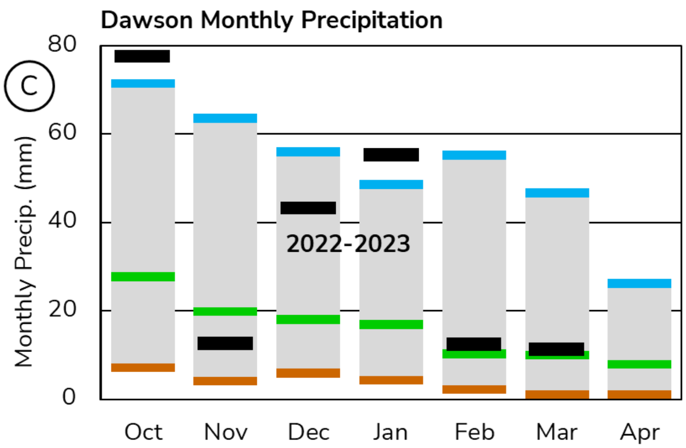
LOWER YUKON RIVER BASIN (DAWSON AREA)

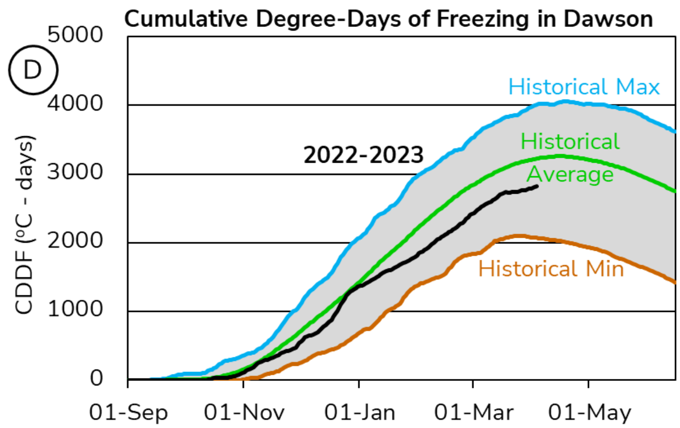
The Lower Yukon River Basin snowpack is **above average**. Established in 2022, the King Solomon Dome Meteorological Station registered Snow Water Equivalent (SWE) at **127%** of the **historical median** when compared with the manual snow survey record for that site (Figure A). The Lower Yukon basin-averaged SWE is estimated to be **132%** of the **historical median**, with **207 mm** as of April 1 (Figure B).



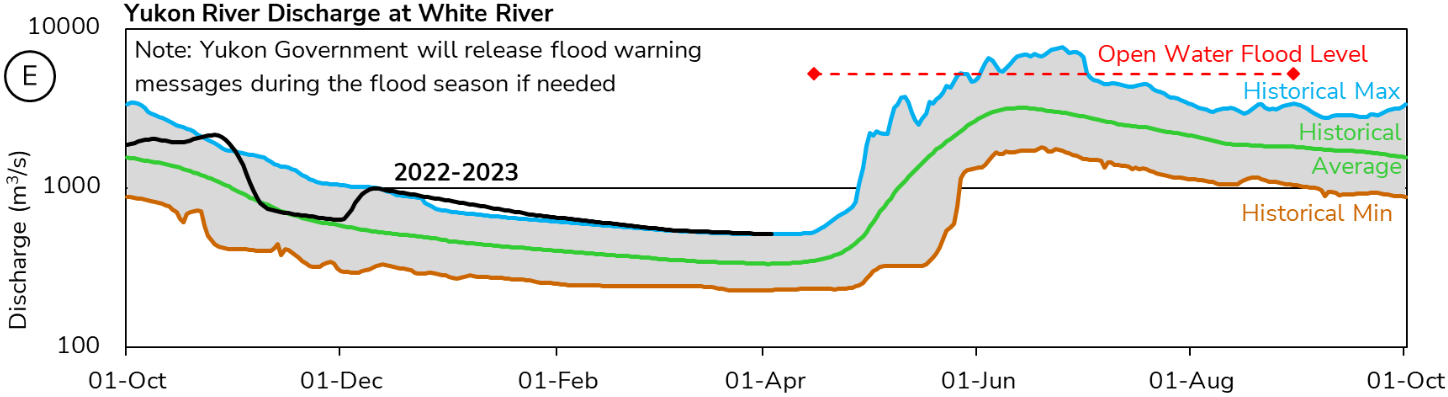


Monthly precipitation at Dawson Airport set **new record highs** for October and January, and snowfall was also **well above median** in December (Figure C), resulting in cumulative precipitation **98% above median** on April 1. Cumulated degree-days of freezing (CDDF) are **13% below average**, with 2787°C-Days on April 1 (Figure D), which suggests that the thickness of the ice cover on rivers and lakes of the region is likely **thinner than normal**.



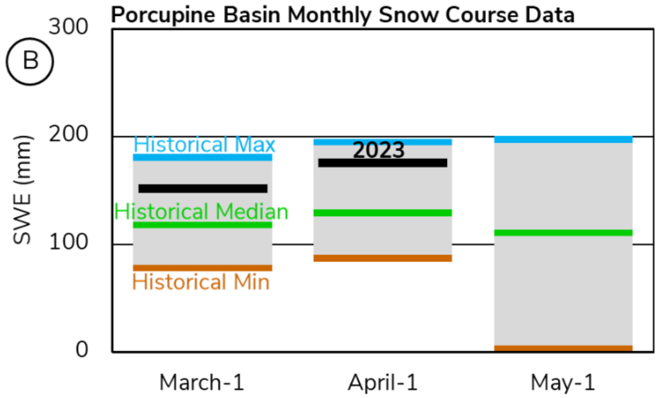


The estimated Yukon River discharge at the White River is **above historical maximum** (Figure E). The **above average** snowpack combined with **well above average** winter flows suggests **spring freshet flow volumes** will be **above average** with a **high** potential for **higher-than-normal** **spring freshet water levels.** Weather conditions in March and April will determine the most probable spring scenario. A combination of local conditions such as ice thickness, freeze-up levels, and current flow volumes suggest an **elevated** ice jam risk. Weather patterns leading to breakup and the spring freshet will play a critical role in determining potential ice jam severity and peak water levels. These statements also apply to the Klondike River.

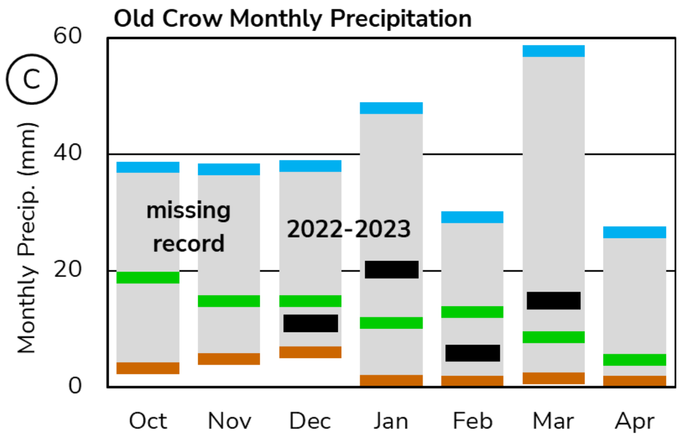


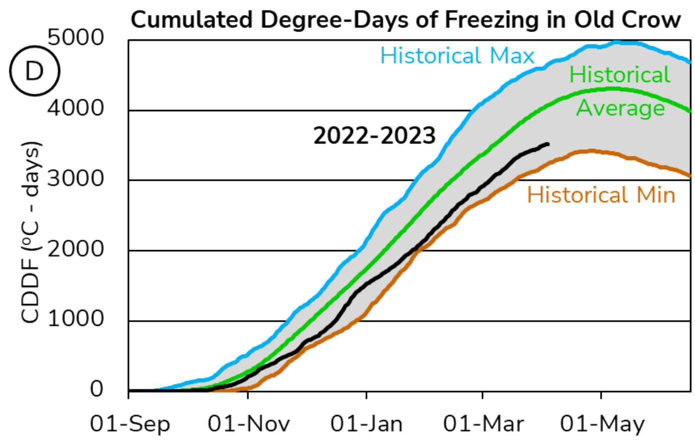
PORCUPINE RIVER BASIN

The Porcupine River Basin snowpack is **above average**. The basin-averaged SWE is estimated to be **133%** of the **historical median**, with **176 mm** as of April 1 (Figure B).

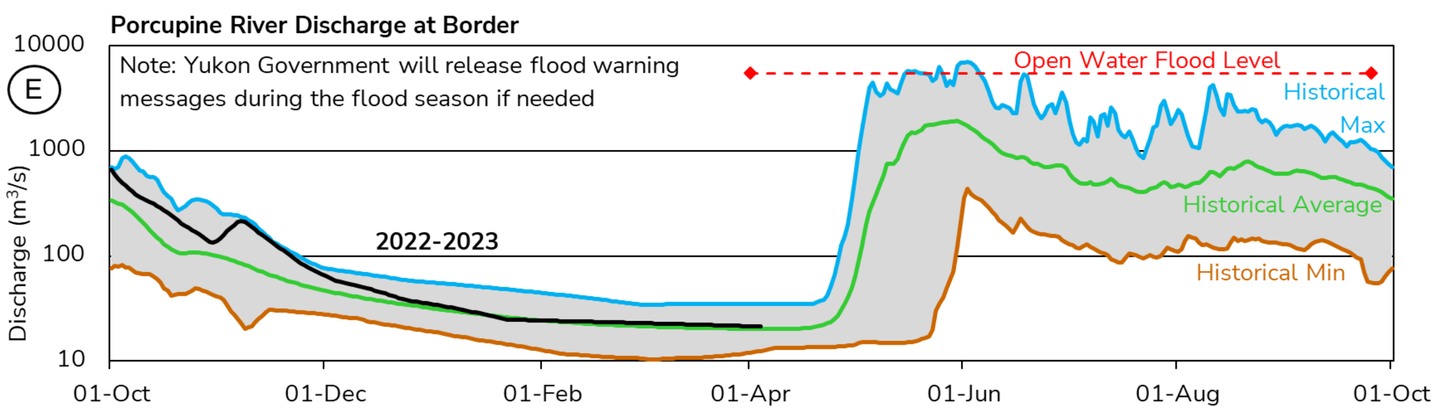


January and March snowfall at Old Crow Airport were **above median**, while December and February precipitation totals were **below median** (Figure C). Cumulated degree-days of freezing (CDDF) are **13% below average**, with 3503°C-Days as of April 1 (Figure D), which suggests a **thinner than average** ice cover thickness on lakes and rivers in the region.



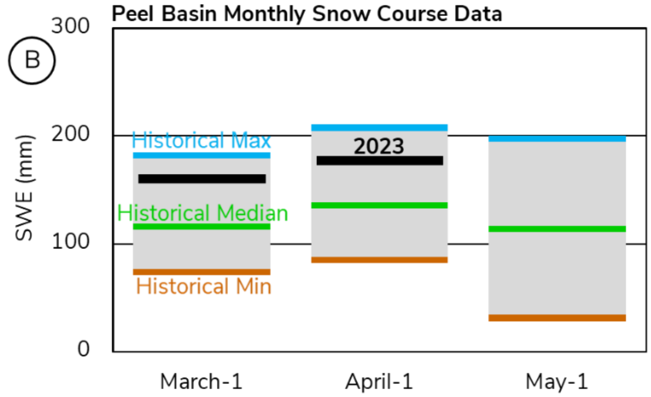


The estimated Porcupine River discharge is **close to average** (Figure E). The **above average** snowpack in the watershed suggests **spring freshet flow volumes** will be **above average** with a potential for **higher-than-normal spring freshet water levels.** Weather patterns leading to breakup and the spring freshet will play a critical role in determining potential ice jam severity and peak water levels.

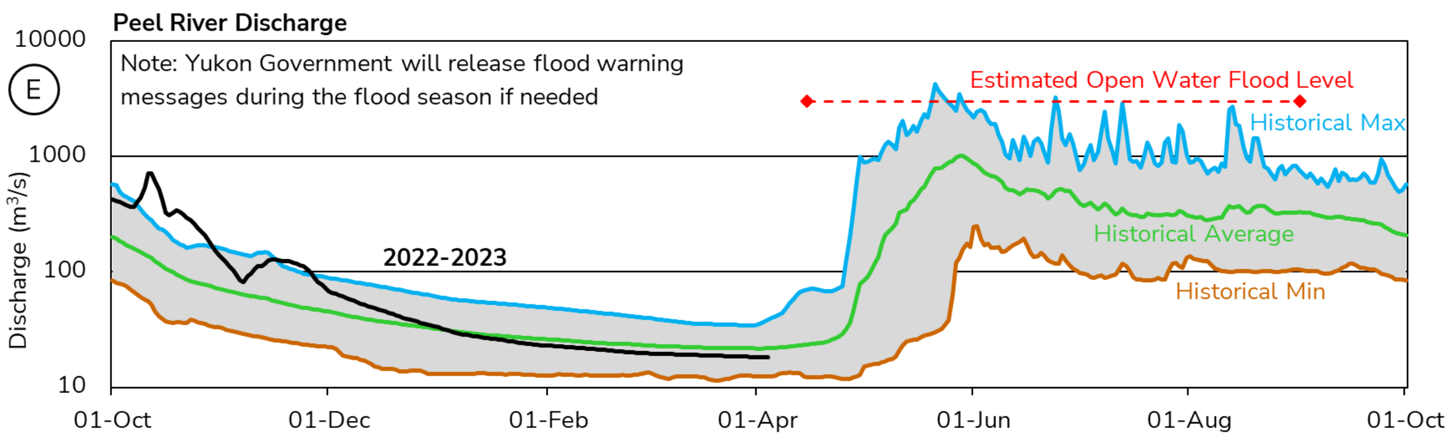


PEEL RIVER BASIN

The Peel River Basin snowpack is **above average**. The basin-averaged SWE is estimated to be **128%** of the **historical median**, with **178 mm** as of April 1 (Figure B).

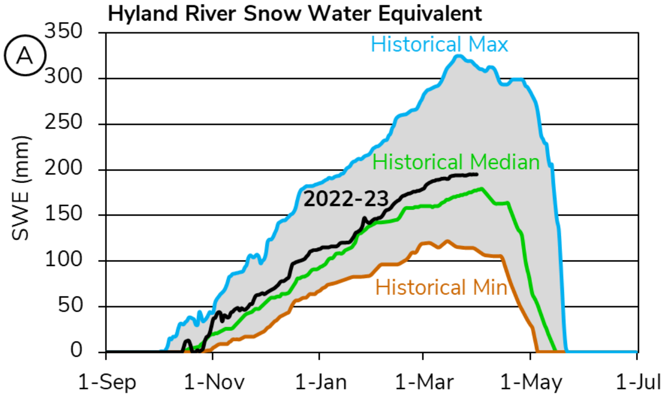


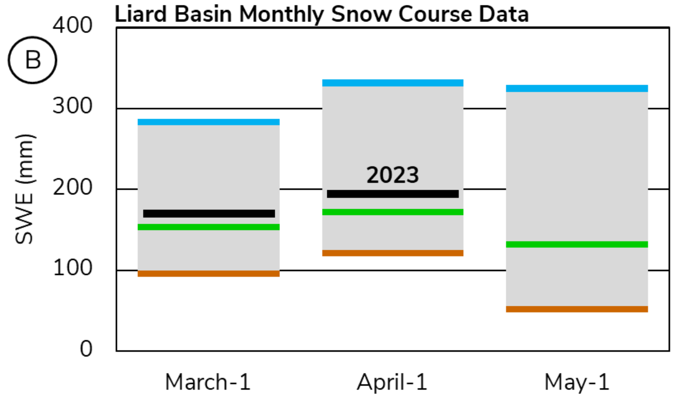
The estimated Peel River discharge is **close to average** (Figure E). The **above average** snowpack suggests **spring freshet flow volumes** will be **above average** with a potential for **higher-than-normal spring freshet water levels**, including rivers and streams crossing the Dempster Highway.



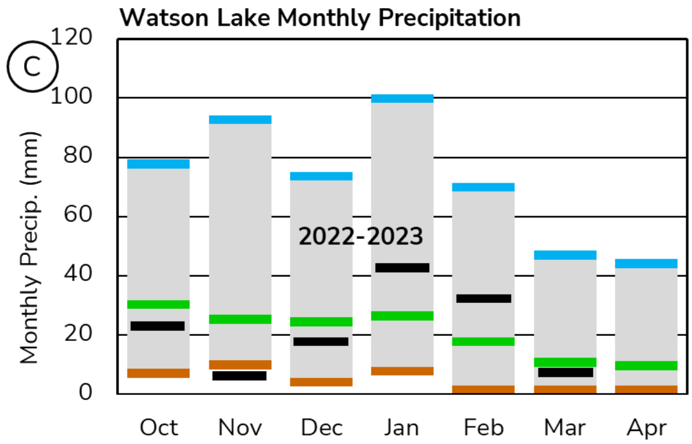
LIARD RIVER BASIN

The Liard River Basin snowpack is **close to average**. At Hyland Meteorological Station, Snow Water Equivalent (SWE) is estimated to be **110%** of the **historical median** (Figure A). The Liard River basin-averaged SWE is estimated to be **111%** of the **historical median**, with **195 mm** as of April 1 (Figure B).

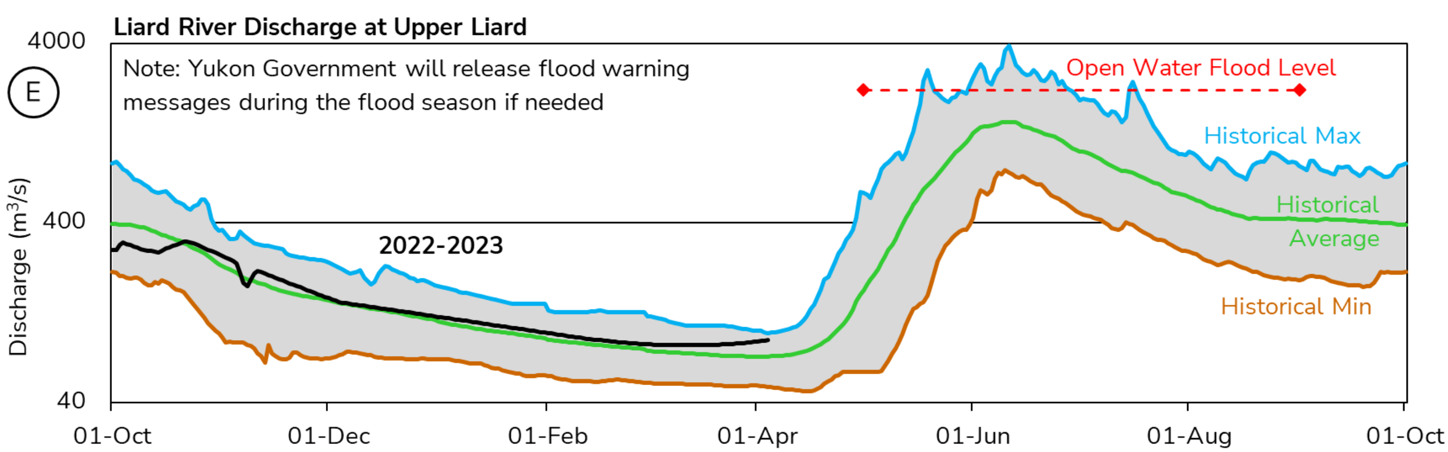




October to December and March precipitation at Watson Lake Airport was **below median**, including a **record dry** November. While January to February had **above median** snowfall, cumulative precipitation on April 1 was **9% below median** (Figure C).

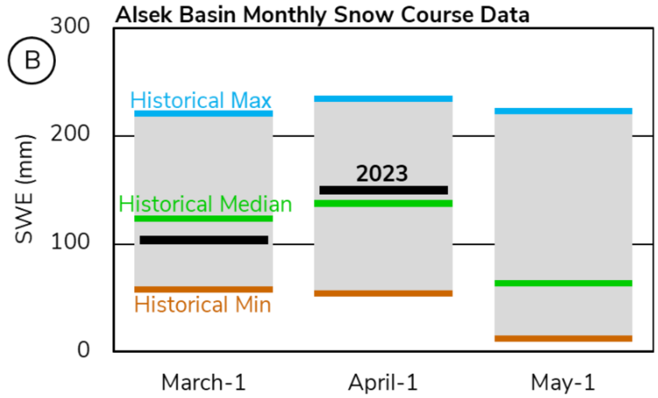


The estimated Liard River discharge at Upper Liard was **near average** until March and currently rising **above average** (Figure E). The **average** snowpack in the watershed combined with **average** winter flows suggests **spring freshet flows and levels** will be near average. Weather patterns leading to spring freshet still have the potential to generate above average water levels on small to medium creeks and rivers including those cross the Alaska and Robert Campbell highways.

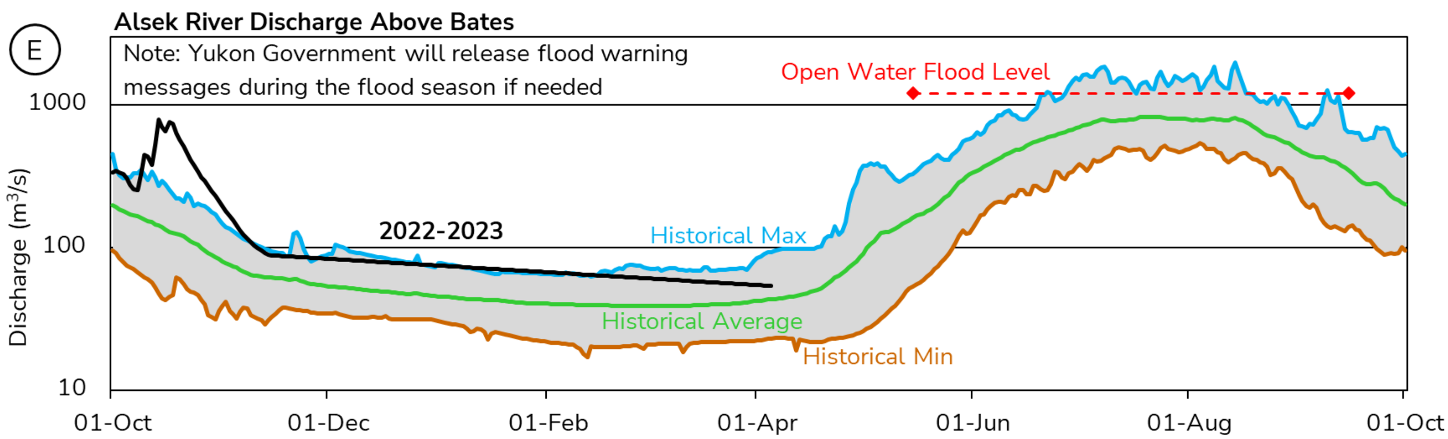


ALSEK RIVER BASIN

The Alsek River Basin snowpack is **close to average**. The basin-averaged SWE is estimated to be **106%** of the **historical median,** with **149 mm** as of April 1 (Figure B).



The estimated Alsek River discharge is currently **well above average** (Figure E). High flows in this watershed are dominated by mountain snowmelt and glacial melt that are largely influenced by summer temperatures and precipitation. The snowpack in the St. Elias Range is likely to generate **close to average freshet volumes**. Weather conditions over the spring and summer will determine peak flows.



DRAINAGE BASIN AND SNOW COURSE

For Sample Date: 2023-04-01

Name	Number	Eleva-tion (m)	Date of survey	This year snow depth (cm)	Water content (SWE) (mm)	Last year (mm)	Median Historical SWE (mm)	Years of record
Alsek River Basin								
Canyon Lake	08AA-SC01	1160	2023-03-31	65	105	188	87	44
Alder Creek	08AA-SC02	768	2023-03-31	81	175	222	147	42
Aishihik Lake	08AA-SC03	945	2023-03-31	50	86	162	73	29
Haines Junction Farm	08AA-SC04	610	2023-03-27	53	105	97	87	22
Summit	08AB-SC03	1000	2023-03-27	106	270	295	260	40
Yukon River Basin								
Tagish	09AA-SC01	1080	2023-03-27	74	150	203	150	46
Montana Mountain	09AA-SC02	1020	2023-03-27	61	158	171	146	43
Log Cabin (B.C.)	09AA-SC03	884	2023-03-27	128	405	485	363	59
Atlin (B.C)	09AA-SC04	730	2023-03-28	32	93	136	112	57
Mt McIntyre B	09AB-SC01B	1097	2023-03-30	70	153	265	157	45
Whitehorse Airport	09AB-SC02	700	2023-03-29	55	125	183	102	56
Meadow Creek	09AD-SC01	1235	2023-03-28	105	270	470	278	45
Jordan Lake	09AD-SC02	930	2023-03-29	76	167	226	134	36
Morley Lake	09AE-SC01	824	2023-03-30	61	152	248	139	33
Mount Berdoe	09AH-SC01	1035	2023-03-29	88	183	N.S.	101	45
Satasha Lake	09AH-SC03	1106	2023-03-28	60	113	169	97	36
Williams Creek	09AH-SC04	914	2023-03-28	72	134	203	98	28
Twin Creeks B	09BA-SC02B	900	2023-03-29	87	188	307	152	41
Hoole River	09BA-SC03	1036	2023-03-29	79	171	225	136	46
Burns Lake	09BA-SC04	1112	2023-03-29	109	262	395	231	37
Finlayson Airstrip	09BA-SC05	988	2023-03-29	68	145	218	101	36
Fuller Lake	09BB-SC03	1126	2023-03-29	82	164	262	195	36
Russell Lake	09BB-SC04	1060	2023-03-30	106	223	384	223	36
Rose Creek	09BC-SC01	1080	2023-03-28	62	133	210	113	29
Mount Nansen	09CA-SC01	1021	2023-03-28	63	113	159	80	47
MacIntosh	09CA-SC02	1160	2023-03-28	75	133	197	101	47
Burwash Airstrip	09CA-SC03	810	2023-03-28	50	86	93	46	44
Beaver Creek	09CB-SC01	655	2023-03-30	72	172	213	82	46
Chair Mountain	09CB-SC02	1067	N.S.	-	-	168	101	31
Casino Creek	09CD-SC01	1065	2023-03-28	85	159	280	127	45
Pelly Farm	09CD-SC03	472	2023-03-30	61	145	182	79	36
Plata Airstrip	09DA-SC01	830	2023-03-30	83	179	308	193	45
Withers Lake	09DB-SC01	975	2023-03-30	86	191	287	224	37
Rackla Lake	09DB-SC02	1040	2023-03-30	94	183	243	191	36

Code "E" – Estimate; Code "B" - Survey date is outside of valid sampling range; “N.S.” – No survey; “R” – New record

DRAINAGE BASIN AND SNOW COURSE

For Sample Date: 2023-04-01

Name	Number	Elev a-tion (m)	Date of survey	This year snow depth (cm)	Water content (SWE) (mm)	Last year (mm)	Median Historic al SWE (mm)	Years of record
Yukon River Basin								
Mayo Airport A	09DC-SC01A	540	2023-03-27	65	120	180	101	50
Mayo Airport B	09DC-SC01B	540	2023-03-27	64	114	167 E	105	34
Edwards Lake	09DC-SC02	830	2023-03-30	80	163	259	165	36
Calumet	09DD-SC01	1310	2023-03-27	104	196	273	186	42
King Solomon Dome	09EA-SC01	1070	2023-03-27	95	220	370	166	46
Grizzly Creek	09EA-SC02	975	2023-03-27	91	211	249	172	47
Midnight Dome	09EB-SC01	855	2023-03-28	90	212	306	157	48
Boundary (Alaska)	09EC-SC02	1005	2023-03-30	81	183	315	127	50
Porcupine River Basin								
Riff's Ridge	09FA-SC01	650	2023-03-29	95	210	212	147	35
Eagle Plains	09FB-SC01	710	2023-03-29	87	189	238	165	39
Eagle River	09FB-SC02	340	2023-03-29	69	143	204	133	37
Old Crow	09FD-SC01	299	2023-04-03	86	169	171	118	40
Liard River Basin								
Watson Lake Airport	10AA-SC01	685	2023-03-28	59	112	312	127	58
Tintina Airstrip	10AA-SC02	1067	2023-03-29	98	255	368	200	45
Pine Lake Airstrip	10AA-SC03	995	2023-03-29	80	204	400	226	45
Ford Lake	10AA-SC04	1110	2023-03-29	89	199	348	187	36
Frances River	10AB-SC01	730	2023-03-29	79	173	290	154	48
Hyland River B	10AD-SC01B	880	2023-03-29	86	178	311	199	46
Peel River Basin								
Blackstone River	10MA-SC01	920	2023-03-29	77	153	183	105	47
Ogilvie River	10MA-SC02	595	2023-03-29	76	154	176	104	45
Bonnet Plume Lake	10MB-SC01	1120	2023-03-30	86	174	203	167	36
Alaska Snow Courses								
Eaglecrest	08AK-SC01	305	2023-03-31	147	538	719 E	493	41
Moore Creek Bridge	08AK-SC02	700	2023-03-30	165	574	587	527	30

Code "E" – Estimate; Code "B" - Survey date is outside of valid sampling range; “N.S.” – No survey; “R” – New record

Location of Water Resources Snow Courses