YUKON SNOW SURVEY BULLETIN & WATER SUPPLY FORECAST

May 1, 2026

Prepared and issued by:
Water Science and Stewardship
Department of Environment

Yukon

PREFACE

The Department of Environment, Water Science and Stewardship 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.

For further information about the bulletin, snowpack conditions, or streamflow projections, please contact waterlevels@yukon.ca

Water Science and Stewardship Department of Environment
(867) 667-3171, toll free (in Yukon, NWT, Nunavut): 1-800-661-0408, ext. 3171
Fax: 867-667-3195 | Email: waterscience@yukon.ca

This bulletin as well as earlier editions are available online at:
Yukon.ca/snow-survey

ISSN 1705-883X

Reference to this report should be made in the following form:
Yukon Snow Survey Bulletin and Water Supply Forecast, May 1, 2026

Water Science and Stewardship
Department of Environment
Government of Yukon
Box 2703, Whitehorse, Yukon Y1A 2C6

DISCLAIMER AND LIMITATION OF LIABILITY

The User understands and acknowledges that the use of the data is solely at their own risk. The User is solely responsible for confirming the accuracy, availability, suitability, reliability, usability, completeness or timeliness of the data.

The User accepts the data “as is” and acknowledges that the Government of Yukon makes no warranties or representations (express or implied) with respect to the accuracy, availability, suitability, reliability, usability, completeness or timeliness of the data, including, without limitation, implied warranties for merchantability, fitness for a particular purpose, and non-infringement.

In consideration of access to the data, the User also agrees that in no event will the Government of Yukon be liable (in tort or contract) or responsible whatsoever to the User or any other legal entity for the accuracy, availability, suitability, reliability, usability, completeness or timeliness of the data, including, without limitation, any loss of revenue or profit, or for direct, indirect, special, incidental, or consequential damages arising from or related to the data.

ACKNOWLEDGEMENTS
The Yukon Snow Survey Bulletin forms part of the Yukon Snow Survey Program administered by Water Science and Stewardship, Department of Environment, Government of Yukon. Water Science and Stewardship (WSS) 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 several partners. We would like to recognize the following agencies/individuals for their significant contributions to the snow survey bulletin:

- *Alaska Snow Survey Program Manager, Natural Resources Conservation Service, United States Department of Agriculture*
- *Chief Meteorologist, Wildland Fire Management, Yukon Department of Community Services, Whitehorse*
- *Hydrometric Supervisors and Technologists, Water Survey of Canada, Whitehorse*
- *Land Guardians, Vuntut Gwitchin First Nation*
- *Plant Operations, Yukon Energy Corporation*
- *Research Technologists, McMaster University*
- *Natural Resource Officers, Compliance Monitoring and Inspections Branch, Yukon Department of Energy Mines and Resources*

Agencies cooperating with the Department of Environment in the Snow Survey Program are:

- *B.C. Ministry of Environment, Water Stewardship Division*
- *Carcross/Tagish First Nation*
- *Parks Canada, Kluane National Park and Reserve*
- *Pelly River Ranch*
- *Vuntut Gwitchin First Nation*
- *Yukon Department of Highways and Public Works*
- *Yukon Energy Corporation*

WHAT'S NEW IN THIS BULLETIN

Name change

- Water Resources Branch is now Water Science and Stewardship (WSS) to better represent the work of the branch as water specialists and our role (alongside our partners) as water stewards. Please note that this change does not impact operations and we can continue to be contacted at 867-667-3171 or by emailing waterscience@yukon.ca for general inquiries and waterlevels@yukon.ca for forecasting-related inquiries.

Data availability

- In January 2026, WSS launched the Water Data Explorer, where users can access and visualize water data from our monitoring networks, as well as those of our partners. This complements the Water Conditions application, which allows users to check snow, water level and flow conditions for monitoring stations through a simple, easy to use interface. Both are accessible from the Flood Hub web page under the Water data tab.
- The most recent snow water equivalent map is now available on the Flood Hub web page under the Forecasting tab. The map is interactive and allows users to click on basins or sample locations (including snow pillows) to see absolute values in millimetres of snow water equivalent, and as a percentage of historical values.

Station changes

- In 2025, new snow pillows were installed at Montana Mountain (09AA-M3) and Tagish (09AA-M1) meteorological stations. The Montana Mountain station was established in 2023 in collaboration with Carcross/Tagish First Nation. The Tagish snow pillow replaced existing equipment to continue a decades-long continuous snow water equivalent record.
- A new meteorological station, Fishing Branch (09FA-M1), was established within Ni'iinlii Njik Territorial Park in September 2025, and includes continuous snowpack monitoring.
- A new snow course was established on Crow Mountain (09FD-SC02) near Old Crow in 2025.
- Snow courses with two distinct sampling locations are now displayed as one composite record. Four snow courses are affected by this change: Whitehorse Airport (09AB-SC02), Twin Creeks (09BA-SC02), Mayo Airport (09DC-SC01), and Hyland River (10AD-SC01). Footnotes in Table 1 provide further explanations on methods used to compile each composite record and which historical records were transformed to account for variation between the paired locations, thereby improving historical comparisons.
- The Log Cabin meteorological station (09AA-M2) was installed in June 2023 (Figure A3). The snow pillow historical ranges have been augmented by extending the time-series backward in time using composite estimates from two proxy records:
    1. SWE series between March 1 and May 1 (or May 15 whenever available) were created by linear interpolation of the discrete snow survey results at the adjacent Log Cabin snow course from 1980 to 2023;
    2. SWE series for earlier snow accumulation (October 1 to March 1) and spring melt (May 1 to June 15) were derived from estimates of average historical snow densities observed at the Log

Cabin snow course and the continuous snow depth series from the Fraser Meteorological Station operated by Avalanche Canada between November 2019 and June 2023.

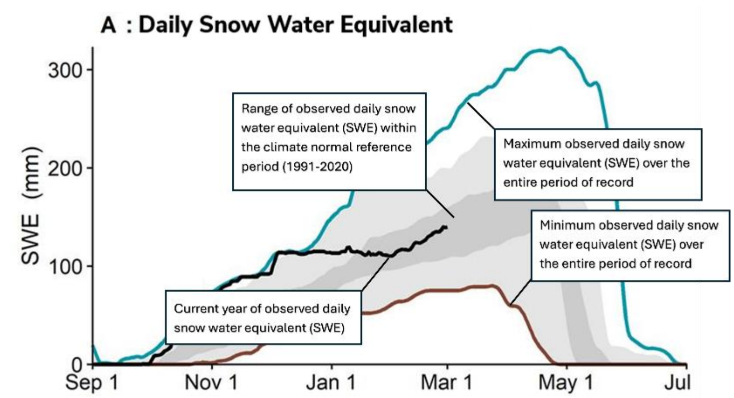
Bulletin changes

- A climate normal reference period is now calculated for all parameters. The normal is the median of the current reference period, October 1990 to September 2020. The reference period uses “water years” as opposed to calendar years. This is important as snowpack begins accumulating in the fall and influences the following summer water levels and flows. The normal range is represented by the grey shaded areas within plots. Historical maximum and minimum bounds are also included.
- A new section, *How to Read This Bulletin*, is included with annotated figures to help readers interpret the information presented in each figure.
- Previously, the April 1 and May 1 bulletin temperature and precipitation maps displayed anomalies for the previous month while the March 1 bulletin maps displayed the October through February anomalies. The April 1 and May 1 bulletin temperature and precipitation maps will now also show cumulative anomalies from October through the preceding month to better summarize the winter to date.

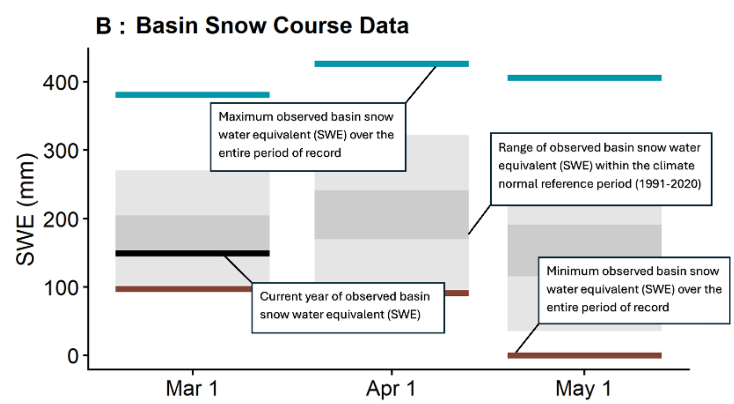
HOW TO READ THIS BULLETIN

Weather conditions for the winter to date are presented in two maps, one showing temperature anomalies (deviation from normal), and another showing precipitation anomalies (percent of normal). Territory-wide snowpack data are presented in a third map showing Snow Water Equivalent (SWE) as a percent of normal for each station, as well as the basin-averaged estimated SWE for 11 watersheds (or river basins). Where available, complementary meteorological and hydrological data are presented for each basin through a series of plots, detailed below. Not all basins contain the instrumentation to support all five figure types. Normals are the calculated median of a fixed reference period from October 1990 to September 2020. The gray shaded areas represent data within the reference period: top light gray band (above average range), dark gray band (average range), lower gray band (below average range).

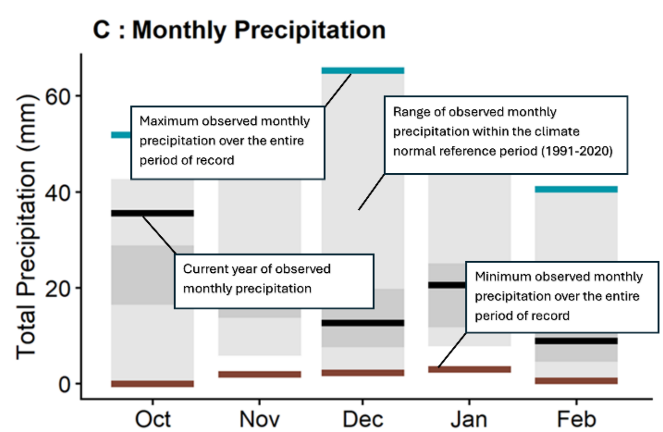
- **Figure A:** Daily SWE data starting in September at one specific location in the watershed, showing the current winter snowpack evolution (black line) compared with historical data from the October 1990 to September 2020 reference period (grey shaded areas) augmented with historical maximum and minimum bounds (blue and brown lines, respectively) over the entire period of record.



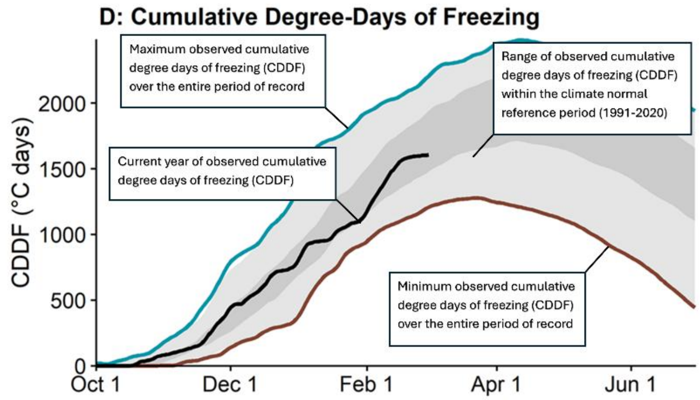
- **Figure B:** Current, basin-averaged estimated SWE from snow survey data (black line) compared with historical data from October 1990 to September 2020 reference period (grey shaded areas) augmented with historical maximum and minimum bounds (blue and brown lines, respectively) over the entire period of record, serving as an indicator of potential runoff volumes in the spring (acknowledging that snow sublimation, evapotranspiration, rain and glacier melt also significantly affect runoff).



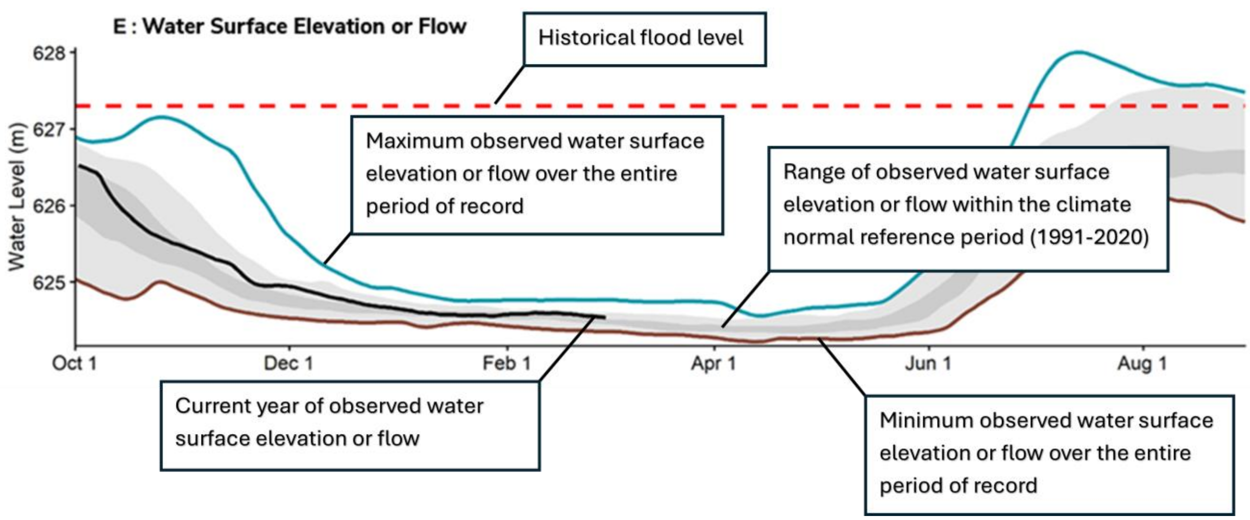
- **Figure C:** Monthly winter precipitation (rain and/or snow; black line) compared with historical data from October 1990 to September 2020 reference period (grey shaded areas) augmented with historical maximum and minimum bounds (blue and brown lines, respectively) over the entire period of record, complementing the information presented in Figure B.



- **Figure D:** Cumulative degree-days of freezing (CDDF, sum of negative daily temperatures; black line) compared with historical data from October 1990 to September 2020 reference period (grey shaded areas) augmented with historical maximum and minimum bounds (blue and brown lines, respectively) over the entire period of record, 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 (black line) compared with historical data from October 1990 to September 2020 reference period (grey shaded areas) augmented with historical maximum and minimum bounds (blue and brown lines, respectively) over the entire period of record, representing an overview of the watershed hydrological conditions. The flood level refers to the lowest elevation at which flood impacts are estimated to occur.



YUKON TERRITORY WEATHER AND SNOWPACK CONDITIONS

The winter of 2025-2026 has been one of dramatic shifts. The winter started extremely warm and relatively dry through October and November, but winter roared into December with a spell of extreme cold not seen in decades, combined with record breaking snowfall across the southern Yukon. The snowpack and the cumulative degree-days of freezing quickly caught up to, and surpassed, normals, breaking records along the way. Temperatures moderated in January, although many areas continued to experience above normal snowfall, a pattern which continued into February. March broke more temperature records and was the coldest on record for much of the territory, resulting in cumulative degree-days of freezing climbing above the 75th percentile of climate normals at many stations. Precipitation was more varied, but Whitehorse received about three times the normal in March. In contrast, April was close to normal for temperatures. A normally dry month, April was more variable for precipitation amounts, with both above and below normal snowfall depending on the region. Large snowpacks can hold onto a lot of meltwater with consistent overnight freezing, and that proved to be the case as relative snowpacks increased across the territory through the month of April.

October

An upper atmospheric ridge remained in place over the territory for much of October, leading to warmer than normal temperatures. In terms of precipitation, drier conditions were observed over much of the territory, except in Burwash and Dawson, where near normal and wetter conditions were observed, respectively.

November

Warm air from the south continued to flow into the territory, keeping temperatures warmer than normal throughout the Yukon. In the second week of November, a low pressure system over the Gulf of Alaska dumped snow in the southern Yukon. However, relatively dry conditions persisted for the remainder of the month. Regarding precipitation anomalies, Watson Lake, Burwash, and Mayo recorded drier than normal conditions, with about 42%, 40%, and 46% of the total normal precipitation, respectively.

December

December saw a significant weather swing in the Yukon as an Arctic high settled over the territory, resulting in persistent extreme cold. Specifically, the average monthly temperature in Whitehorse was 12.8 degrees below normal, while Faro and Mayo recorded 14.2 and 14.6 degrees below normal temperatures, respectively. At times, this cold was accompanied by moist air from the Gulf of Alaska, overriding the surface cold air mass, and resulting in significant snowfall in the southern Yukon. As a result, Whitehorse, Watson Lake, and Burwash recorded 418%, 324%, and 220% of their usual monthly precipitation totals for December, respectively. In contrast, Dawson and Old Crow saw near normal precipitation anomalies, while Mayo experienced drier conditions, with only 38% of the total monthly precipitation.

January

Temperatures in January returned to normal to warmer than normal across the Yukon, as the Arctic ridge retreated. Precipitation-wise, wetter than normal conditions were observed over much of the territory, with Dawson reporting 283% of the total normal precipitation. In contrast, drier conditions were reported in Burwash, with only 78% of the total normal precipitation.

February

In February, temperatures remained normal over the Yukon, with Mayo reporting colder than normal conditions. Precipitation conditions remained wet across much of the central and southern Yukon, with Old Crow receiving near normal precipitation.

March

Cold conditions persisted through March, with the month ranked as the coldest on record at most Yukon stations. Mean temperature anomalies of 8–11 °C below normal were recorded across much of the territory; Old Crow was less anomalous at approximately 4 °C below normal. Precipitation was highly variable, with well above normal snowfall in the southern Yukon (Whitehorse exceeding 300% of normal), above normal totals near Dawson, near normal amounts elsewhere, and very dry conditions in Old Crow (14% of normal). These conditions were driven by a persistent Arctic air mass over northern Canada, reinforced by high-latitude blocking over the Bering Sea that limited Pacific influence and maintained prolonged cold across the Yukon.

April

While April began on the colder side, a transition to slightly warmer temperatures in the latter half of the month meant average temperatures were close to normal for most of the territory. Precipitation was varied, but Old Crow and Mayo recorded more precipitation than normal, Burwash was normal, and Dawson and Watson Lake were drier than normal. Missing data at some stations precludes a full assessment.

Snowpack

Territory-wide snowpack data are presented in Map 3 below, showing snow water equivalent (SWE) as a percent of normal for each station, as well as the basin-averaged estimated SWE for 11 watersheds (or river basins). New for 2026, snow survey results are compared to historical data from a normal reference period (referred to as the 1991-2020 reference period). The normal is the median of the reference period from October 1990 to September 2020, noting that the reference period uses “water years” as opposed to calendar years. This is important as snowpack begins accumulating in the fall and influences the following summer water levels and flows.

The May 1 snow survey found above normal to well above normal snowpack across the territory.

The White (274%), Central Yukon (Carmacks area) (267%), Alsek (195%), Teslin / Big Salmon (187%), Lower Yukon (Dawson/Klondike area) (184%), Liard (180%), Peel (170%), Upper Yukon (Southern Lakes/Whitehorse area) (168%), Porcupine (161%), and Pelly (145%) basin snowpacks are all well above normal for May 1. The Stewart River Basin (117%) is above normal.

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.

Winter river discharge or lake water levels are presented at one or two important indicator sites within each basin. Winter discharge and water levels are affected by many factors including the previous year's snowpack, annual rainfall, pre-existing groundwater conditions, freeze-up timing, and landscape changes. Increasing winter baseflow is an observed trend across the territory and is documented in the Yukon's State of the Environment Report. The Yukon's climate is predicted to trend wetter over time, but permafrost degradation may also be contributing to greater groundwater recharge, resulting in more winter baseflow.

Snowmelt is underway, and river discharge and lake levels are rising. Most rivers in the Yukon River Basin are within their normal ranges for this time of year. Some exceptions exist, such as on the Nordenskiold River, where the freshet is slightly late getting underway and water levels are lower than normal but catching up. Teslin Lake is close to normal, while Marsh Lake and Lake Laberge are slightly below normal. The Liard and Alsek rivers are also below normal, as freshet is slightly late in the southern Yukon. The Peel River is close to normal. While the Porcupine River was estimated to be below normal on May 1, it is now rising in response to recent above normal temperatures.

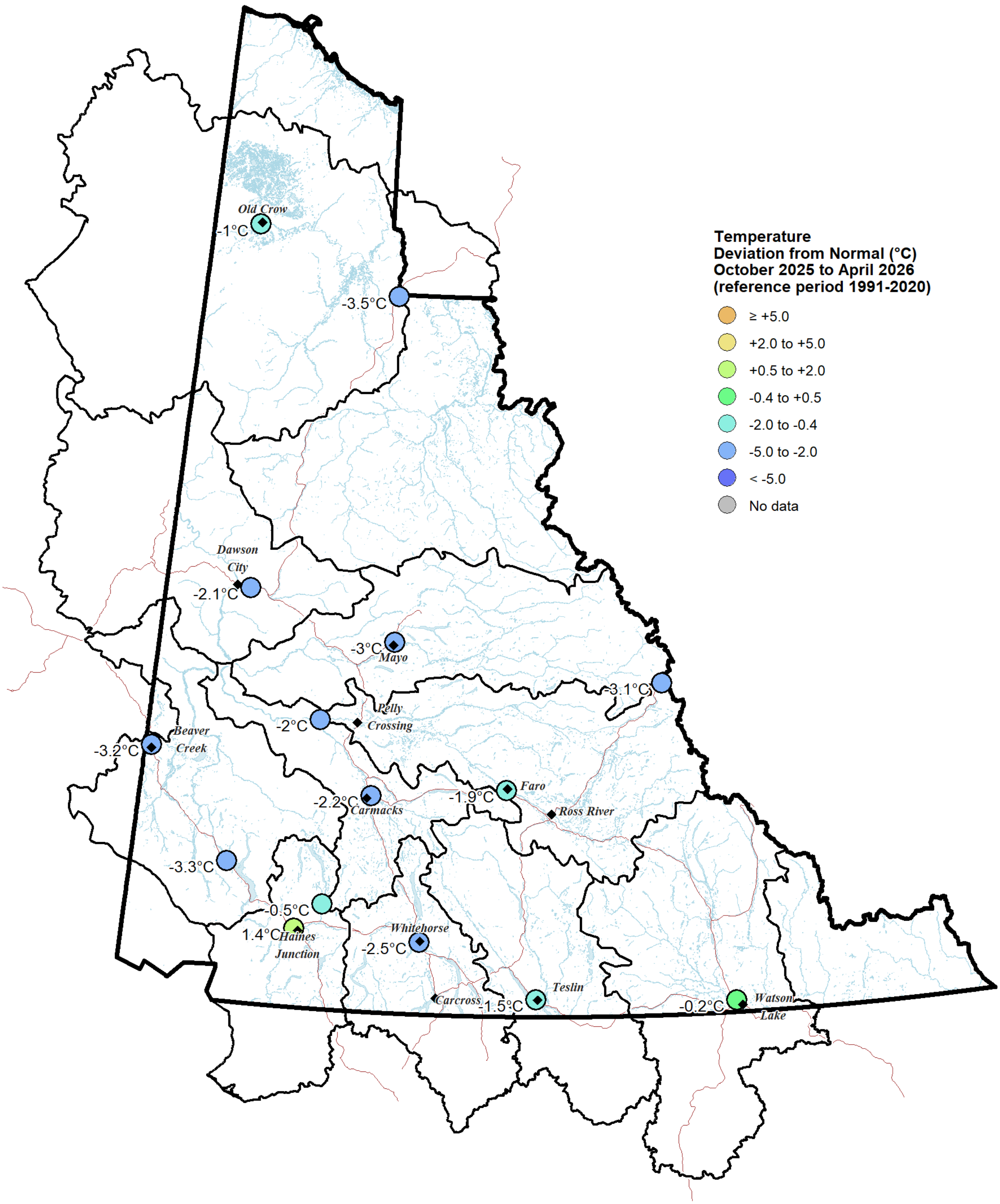
Given the current well above normal snowpack, most of the territory is expected to experience well above normal freshet peak flows. The exception is the Stewart and Mayo rivers and their tributaries, which should experience slightly above normal peak freshet flows.

While the April 1 snow survey typically captures the highest snow water equivalent value of the winter and is the most robust predictor of freshet flood potential, the May 1 snow survey provides an indication of how much snow has melted to date and typically captures a snowpack in decline. It can indicate the potential for a compressed freshet, where more water moves through rivers in a shorter window of time, resulting in higher peak flows. May is currently forecast to be warmer than normal overall, which also suggests the territory may see flows rise more rapidly than in an average year.

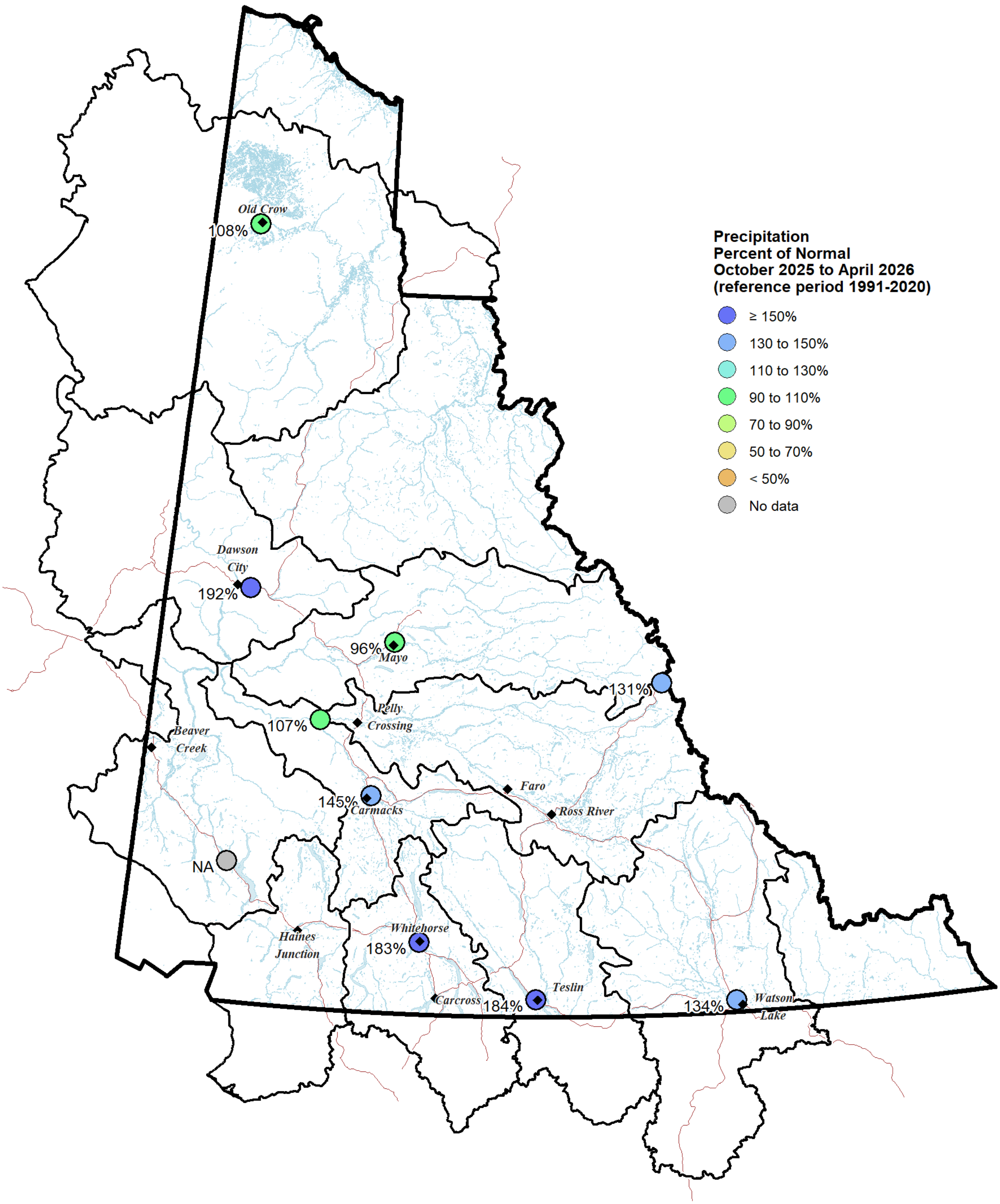
Current snowpack conditions indicate elevated freshet flood potential for the communities of Teslin, Carmacks, Upper Liard, and the Klondike Valley. There is also a high potential for small and medium watercourse flooding across most of the territory, with impacts already observed on highways in the first week of May.

The Southern Lakes snowpack is well above normal in the lower basin, but the high elevation mountain snowpack is not as high relative to historical records, with Log Cabin at 125% of normal. While the above normal snowpack increases flood potential for the Southern Lakes, the timing of snowmelt, summer precipitation and glacial melt act together to drive flooding, making flood potential more uncertain compared to other communities. Consistently below average water level in Marsh Lake through the winter indicates lower groundwater levels as well, reinforced by real-time groundwater monitoring in several parts of the region.

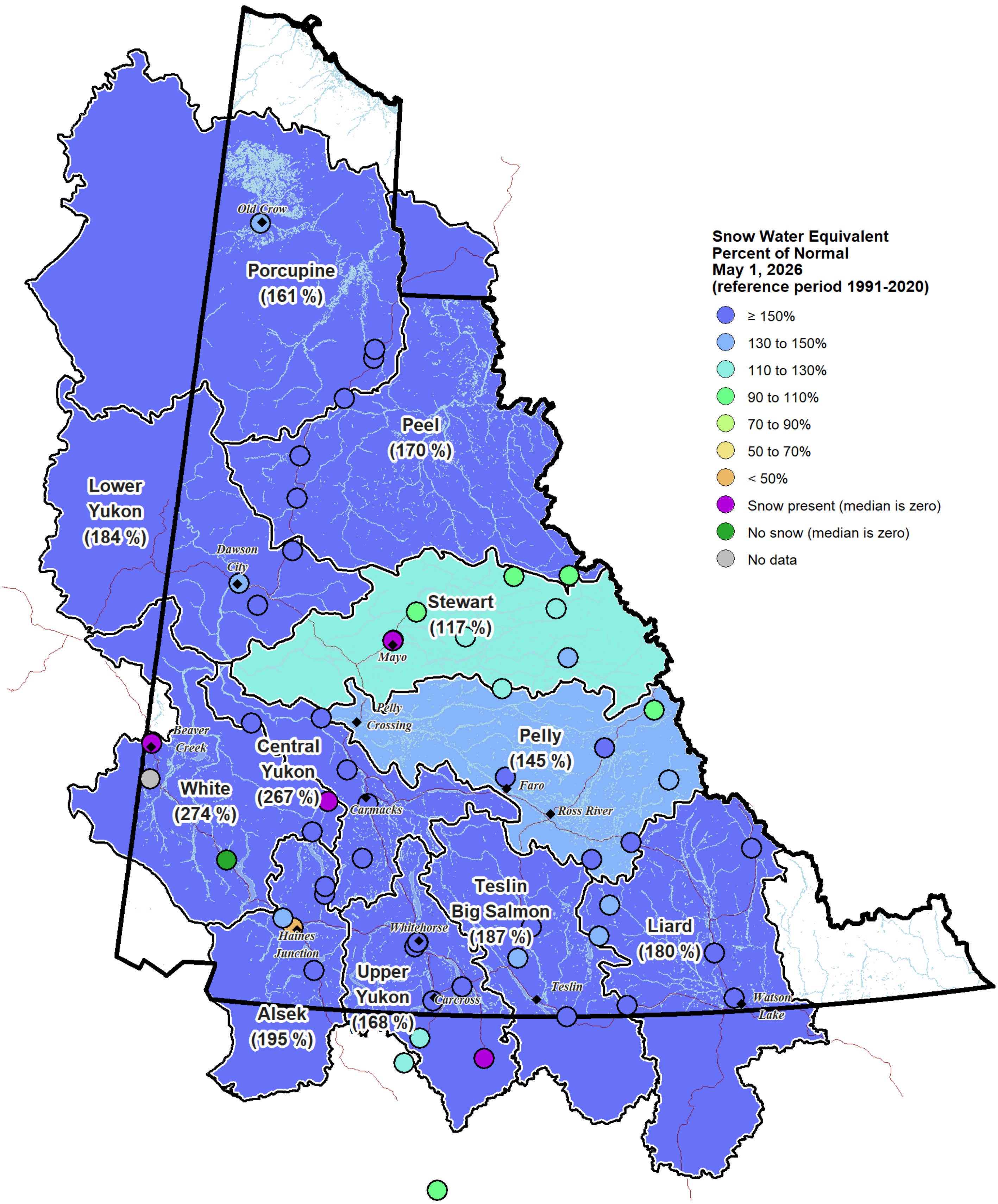
MAP 1. TEMPERATURE ANOMALIES



MAP 2. PRECIPITATION



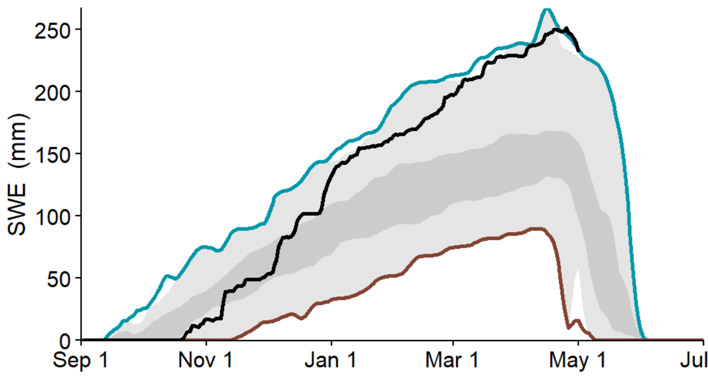
MAP 3. SNOW WATER EQUIVALENT



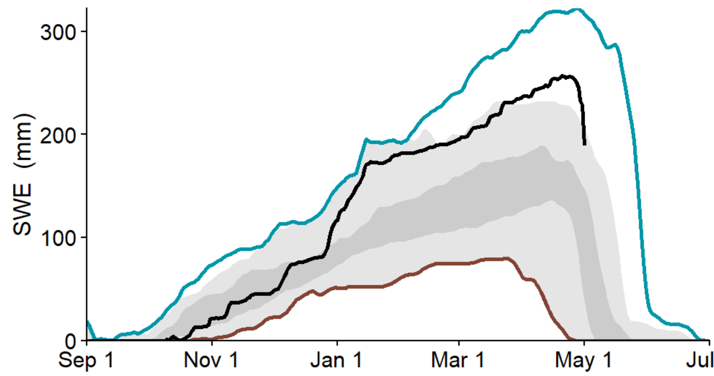
UPPER YUKON RIVER BASIN (SOUTHERN LAKES/WHITEHORSE)

The Upper Yukon River Basin snowpack is **well above normal**. At Tagish Meteorological Station, Snow Water Equivalent (SWE) is estimated to be **166%** of normal (Figure A1) while at Wolf Creek Subalpine Meteorological Station, SWE is estimated to be **153%** of normal (Figure A2). Established in 2023, Log Cabin Meteorological Station registered SWE at **103%** of normal when compared with the manual snow survey record for that site (Figure A3). The Upper Yukon basin-averaged SWE is estimated to be **168%** of normal, with **262 mm** as of May 1 (Figure B).

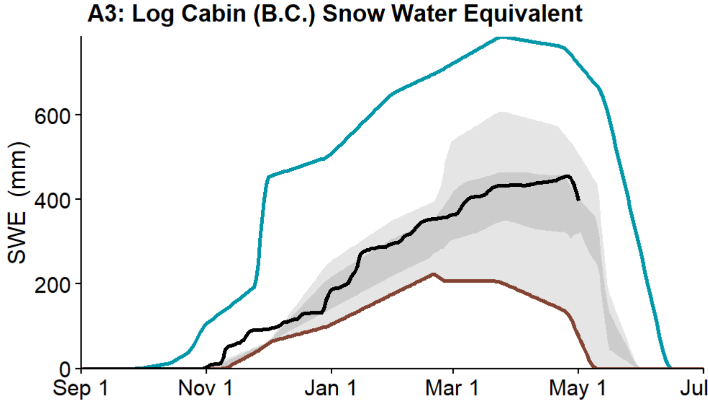
A1: Tagish Snow Water Equivalent



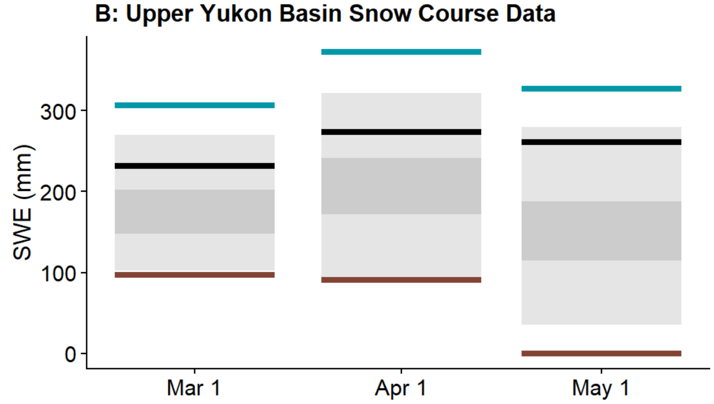
A2: Wolf Creek Snow Water Equivalent



A3: Log Cabin (B.C.) Snow Water Equivalent

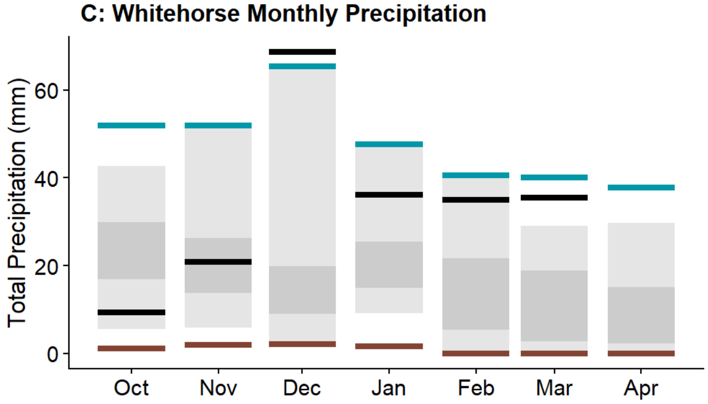


B: Upper Yukon Basin Snow Course Data

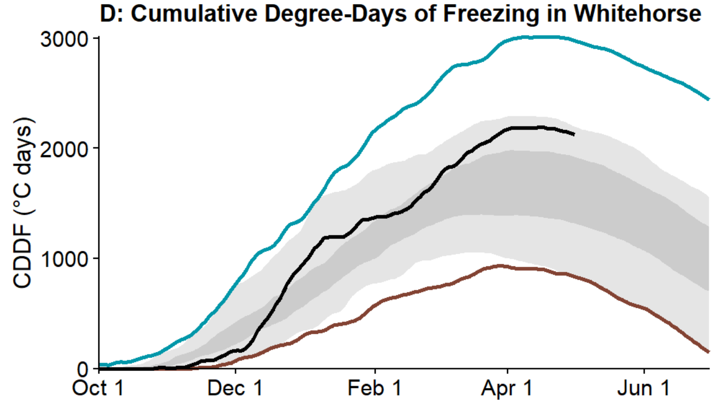


Whitehorse precipitation has been **well above normal** from October through April (Figure C). Cumulative winter precipitation was **183%** of normal on May 1. Cumulative degree-days of freezing (CDDF) are **131%** of normal, with **2125°C-Days** on May 1 (Figure D). Ice cover degradation was delayed by the late onset of melt, but is now underway.

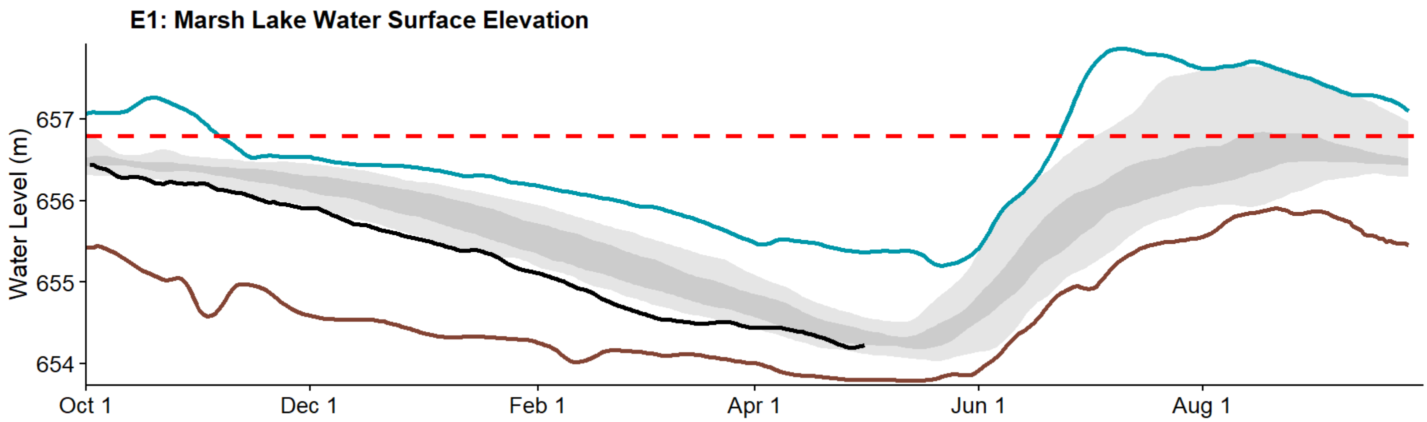
C: Whitehorse Monthly Precipitation

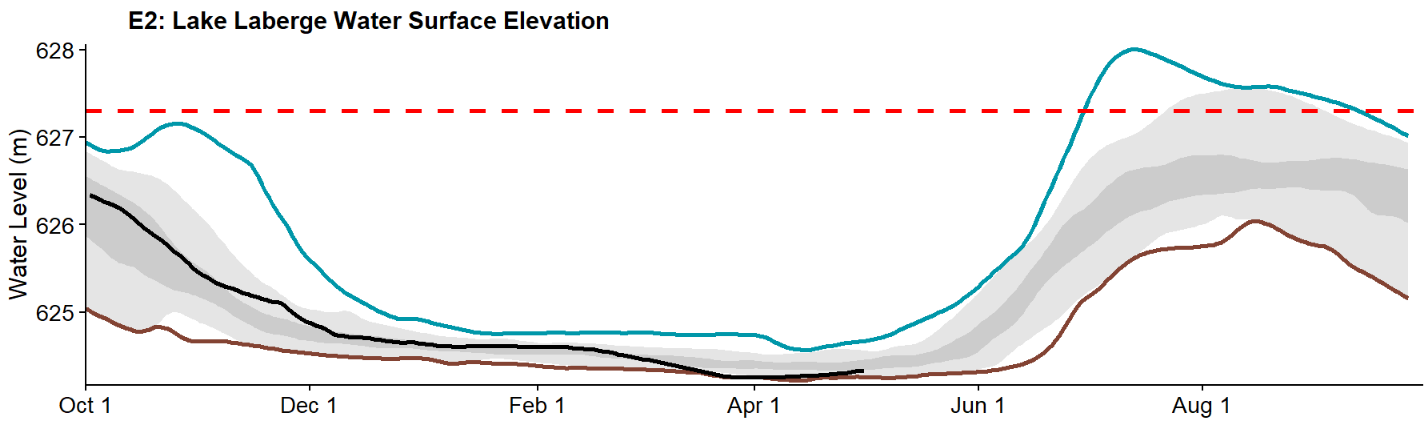


D: Cumulative Degree-Days of Freezing in Whitehorse



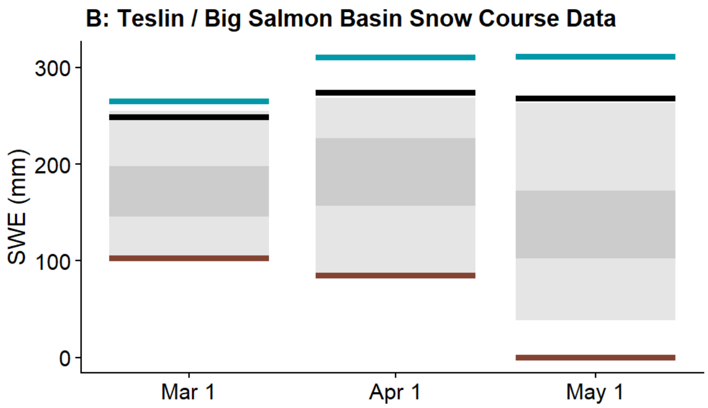
The measured water surface elevation (relative to sea level) in Marsh Lake is currently **below normal** (Figure E1). The current snow and groundwater conditions suggest that water levels will be **above normal** this summer. Weather conditions over the next three months will determine the peak water level in Marsh Lake, which typically occurs in late summer in response to peak glacial runoff and large precipitation events. Lake Laberge water surface elevation is currently **below normal** (Figure E2). Lake Laberge follows a similar summer pattern to the upper Southern Lakes and is expected to experience **above normal** water levels this summer. Warm and/or wet weather will generate **high** runoff rates and peak flows, including in rivers and streams crossing the Alaska Highway, the North Klondike Highway and other roads in the Whitehorse area.



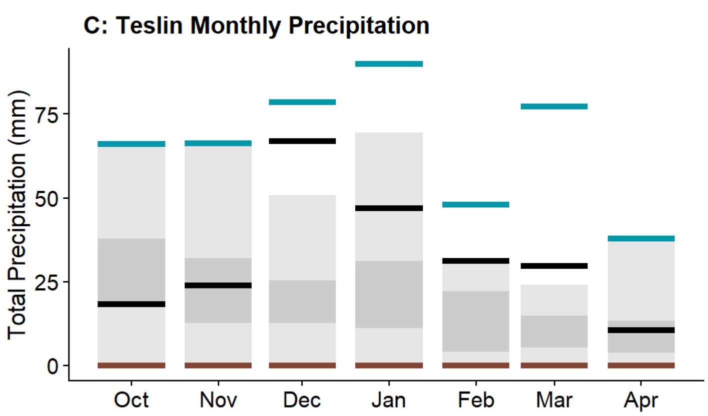


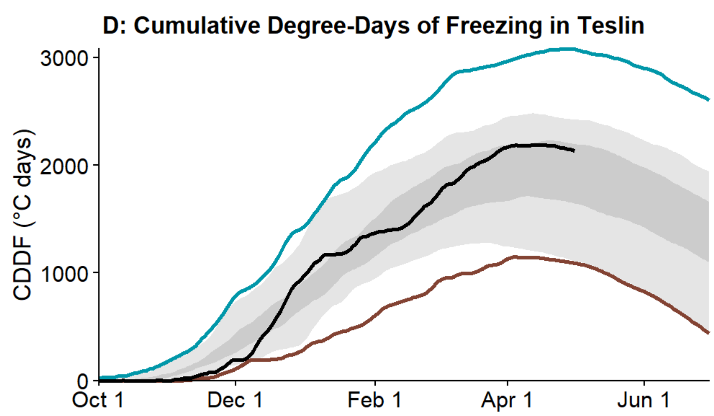
TESLIN / BIG SALMON RIVER BASIN

The Teslin / Big Salmon River Basin snowpack is **well above normal**. The basin-averaged Snow Water Equivalent (SWE) is estimated at **187%** of normal, with **268 mm** as of May (Figure B).

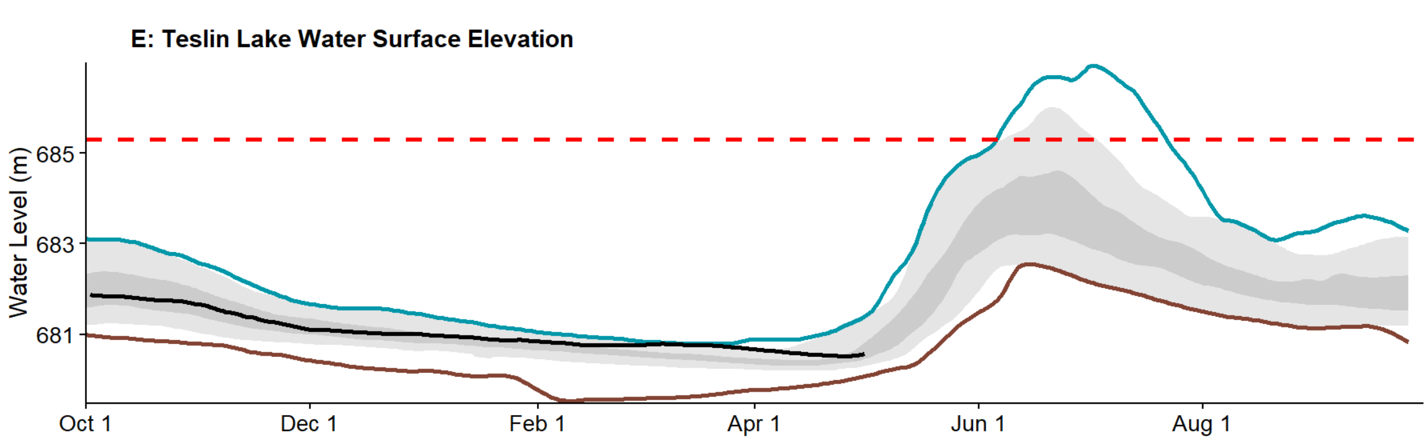


Teslin precipitation has been **well above normal** from October through April (Figure C). Cumulative winter precipitation was **184%** of normal on May 1. Cumulative degree-days of freezing (CDDF) are **118%** of normal, with **2134°C-Days** on May 1 (Figure D). Ice cover degradation was delayed by the late onset of melt, but is now underway.



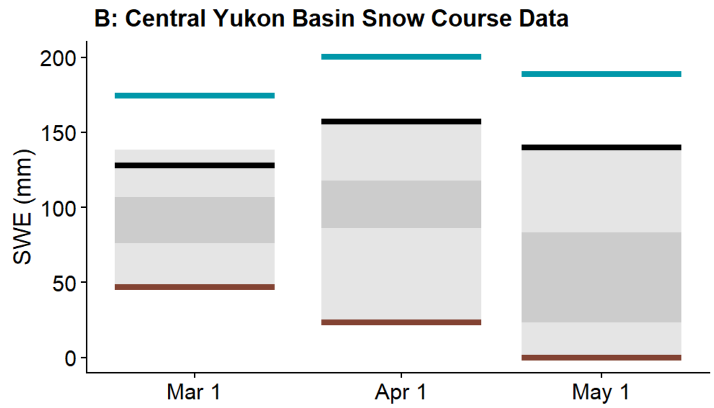


The measured water surface elevation (relative to sea level) in Teslin Lake is currently **normal** (Figure C). Teslin Lake typically peaks in late June and is predominantly snowmelt driven. The **well above normal** snowpack and **normal** water level suggest that summer water levels will be **well above normal**. Peak water level will depend on weather conditions over the next two months. Warm and/or wet weather will generate **high** runoff rates and peak flows, including in rivers and streams crossing the Alaska Highway and the South Canol Road.

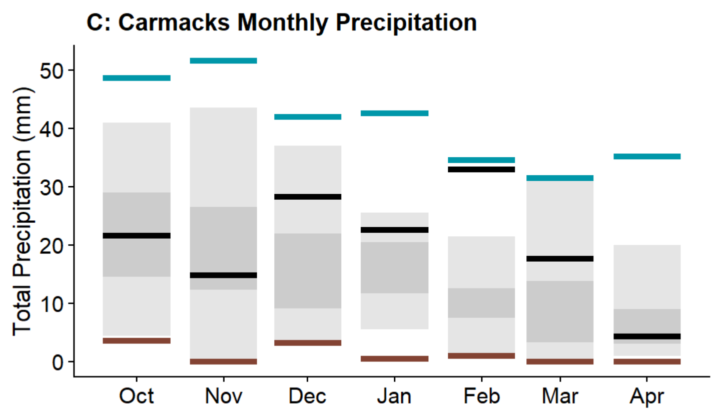


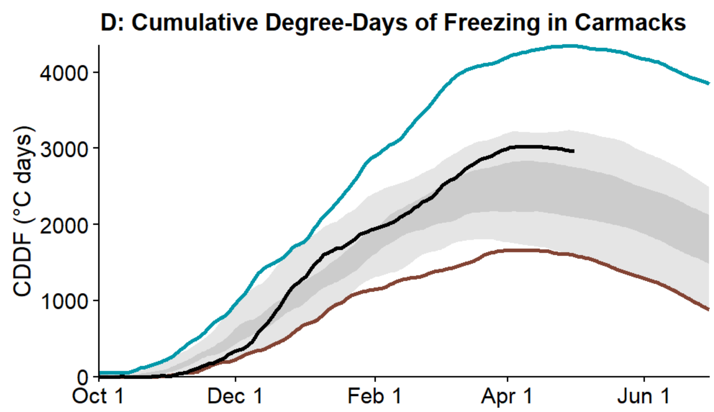
CENTRAL YUKON RIVER BASIN (CARMACKS)

The Central Yukon River Basin snowpack is **well above normal**. The basin-averaged Snow Water Equivalent (SWE) is estimated to be **267%** of normal, with **140 mm** as of May 1 (Figure B).

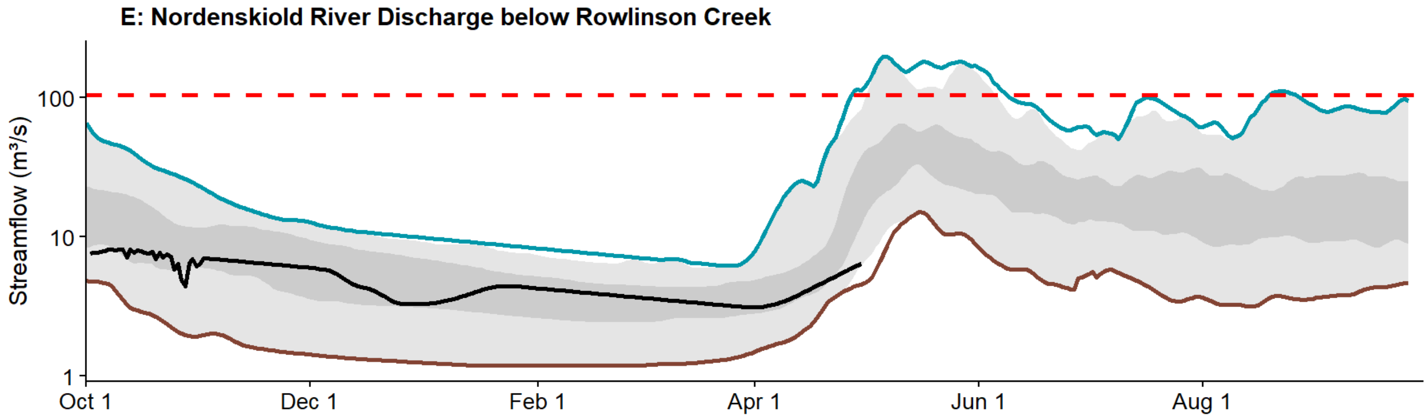


Carmacks precipitation has been **well above normal** from October through April (Figure C). Cumulative winter precipitation was **145%** of normal on May 1. Cumulative degree-days of freezing (CDDF) are **115%** of normal, with **2962°C-Days** on May 1 (Figure D). River ice breakup is complete on the Nordenskiold River and on the Yukon River at Carmacks.



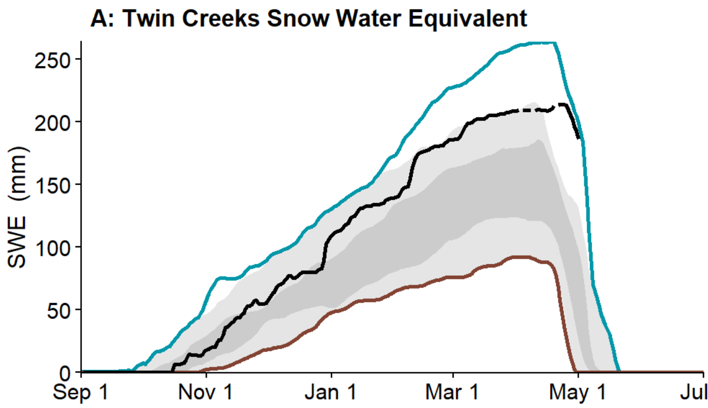


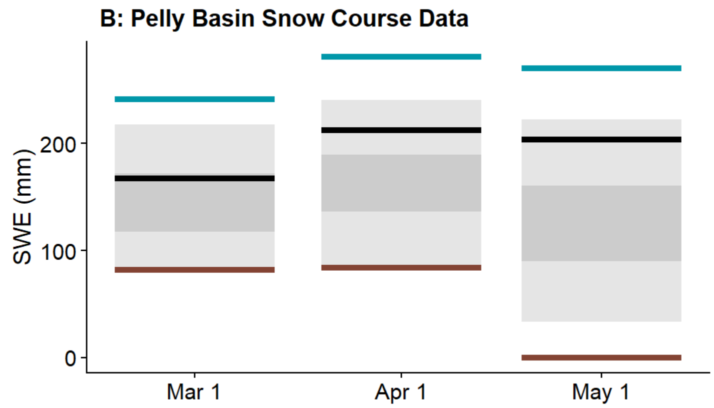
The estimated Nordenskiold River discharge is currently **well below normal** (Figure E). The **well above normal** snowpack suggests spring freshet flow volumes will be **well above normal**. On the Yukon River at Carmacks, the **well above normal** upstream snowpack suggests spring freshet flow volumes will also be **well above normal**. Weather conditions over the next two months will play a role in determining peak water levels. Warm and/or wet weather will generate **high** runoff rates and peak flows, including in rivers and streams crossing the North Klondike and Robert Campbell Highways.



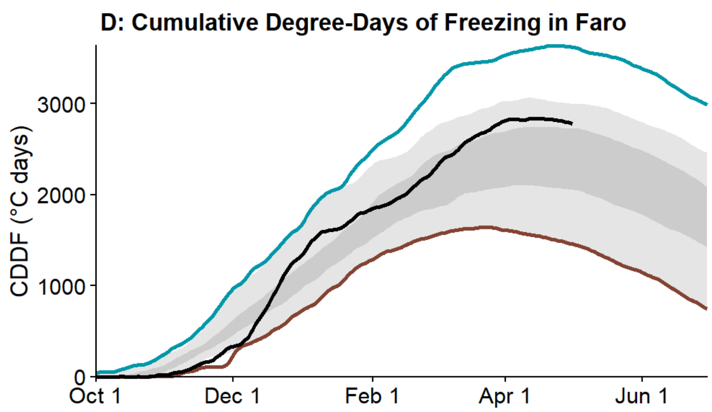
PELLY RIVER BASIN

The Pelly River Basin snowpack is **well above normal**. At Twin Creeks Meteorological Station, Snow Water Equivalent (SWE) is estimated to be **287%** of normal (Figure A). The Pelly River basin-averaged SWE is estimated to be **145%** of normal, with **204 mm** as of May 1 (Figure B).

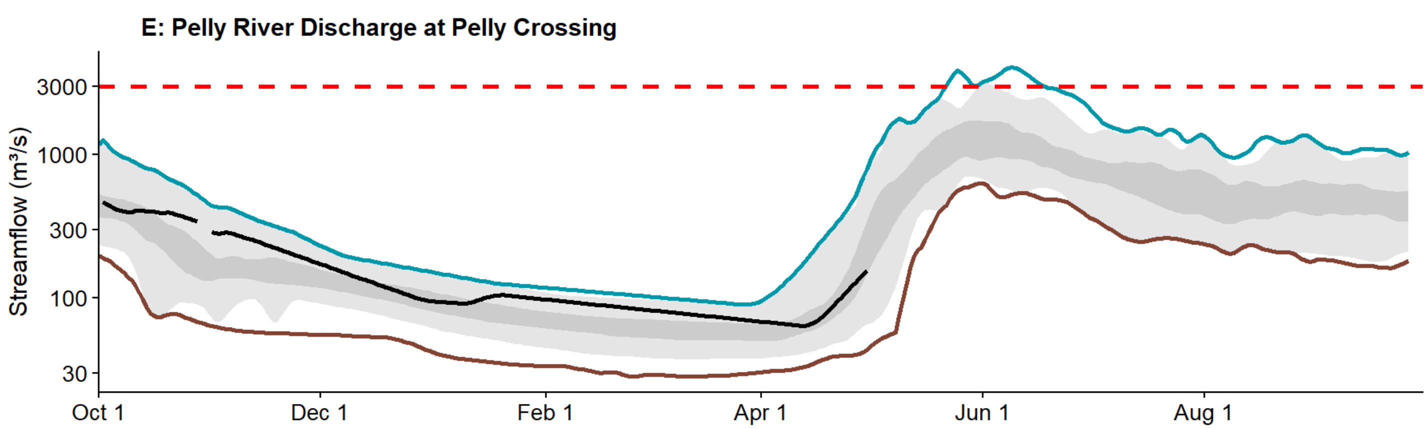




There are no precipitation data available at Faro but the snowpack data indicate that winter precipitation has been **well above normal**. Cumulative degree-days of freezing (CDDF) are **115%** of normal, with **2784°C-Days** on May 1 (Figure C). River ice breakup is currently underway on the Pelly River.

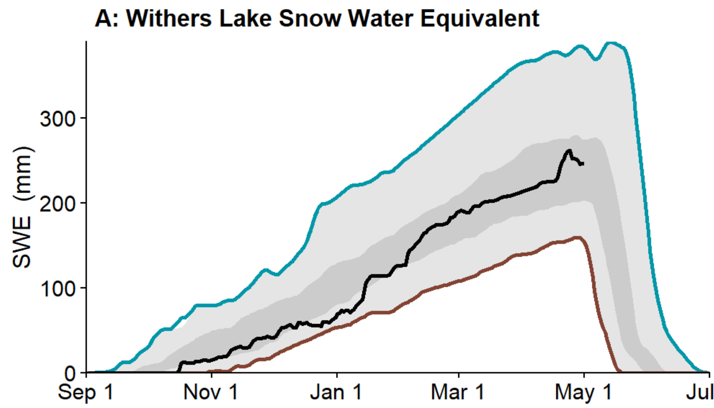


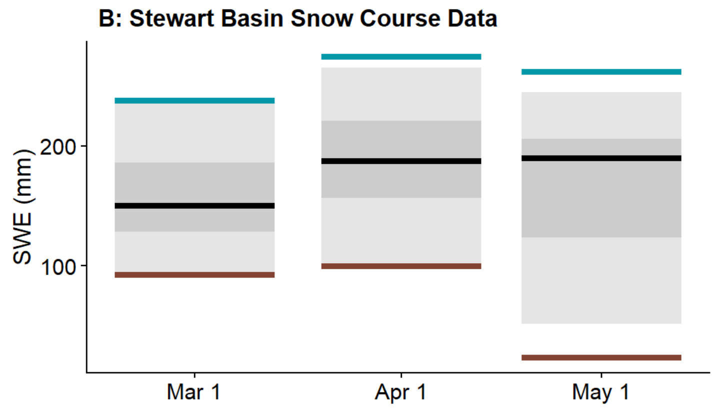
The estimated Pelly River discharge at Pelly Crossing is currently **close to normal** (Figure E). The **well above normal** snowpack suggests spring freshet flow volumes will be **well above normal**. Weather conditions over the next two months will play a role in determining peak water levels. Warm and/or wet weather will generate **high** runoff rates and peak flows, including in rivers and streams crossing the Robert Campbell Highway and Canol Road.



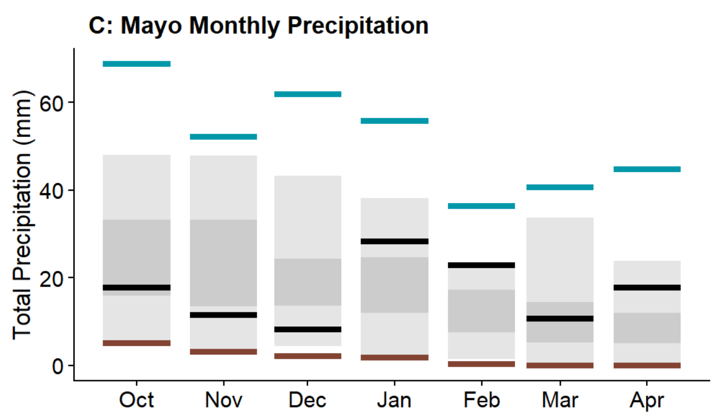
STEWART RIVER BASIN

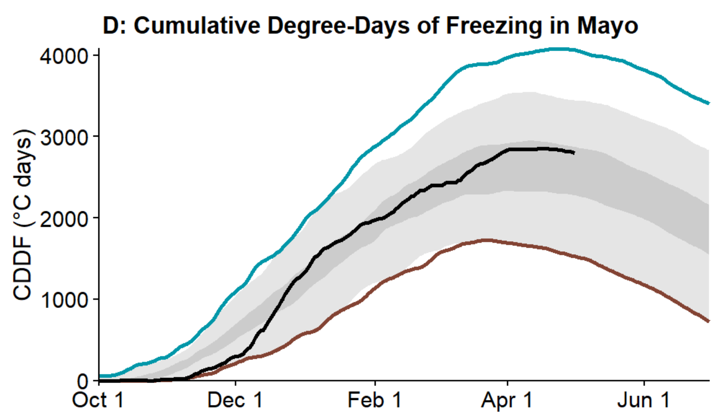
The Stewart River Basin snowpack is **above normal**. At Withers Lake Meteorological Station, Snow Water Equivalent (SWE) is estimated to be **103%** of normal (Figure A). The basin-averaged SWE is estimated to be **117%** of normal, with **190 mm** as of May 1 (Figure B).



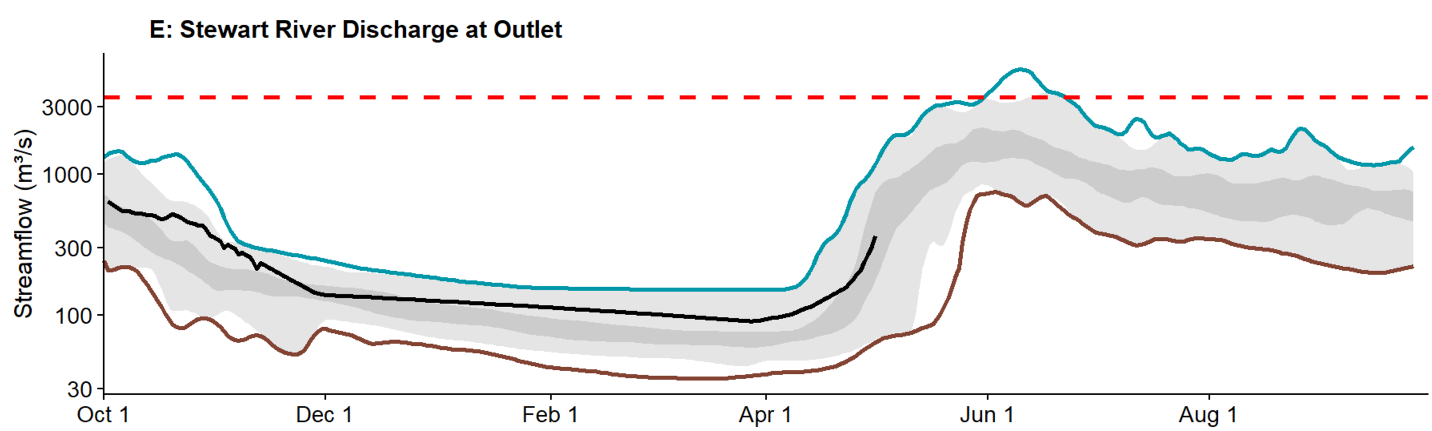


Mayo precipitation has been **close to normal** from October through April (Figure C). Cumulative winter precipitation was **96%** of normal on May 1. Cumulative degree-days of freezing (CDDF) are **107%** of normal, with **2803°C-Days** on May 1 (Figure D). River ice breakup is currently underway on the Stewart River.



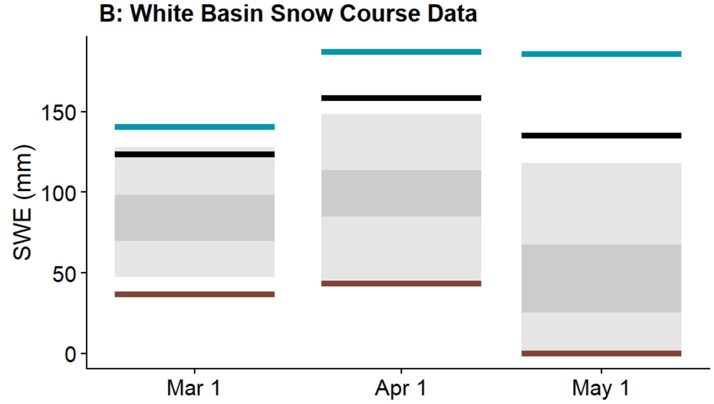


The estimated Stewart River discharge at the outlet is currently **close to normal** (Figure E). The **above normal** snowpack suggests spring freshet flow volumes will be **above normal**. Weather conditions over the next two months will play a role in determining peak water levels. Warm and/or wet weather will generate **high** runoff rates and peak flows, including on creeks crossing the Silver Trail Highway and other local roads.

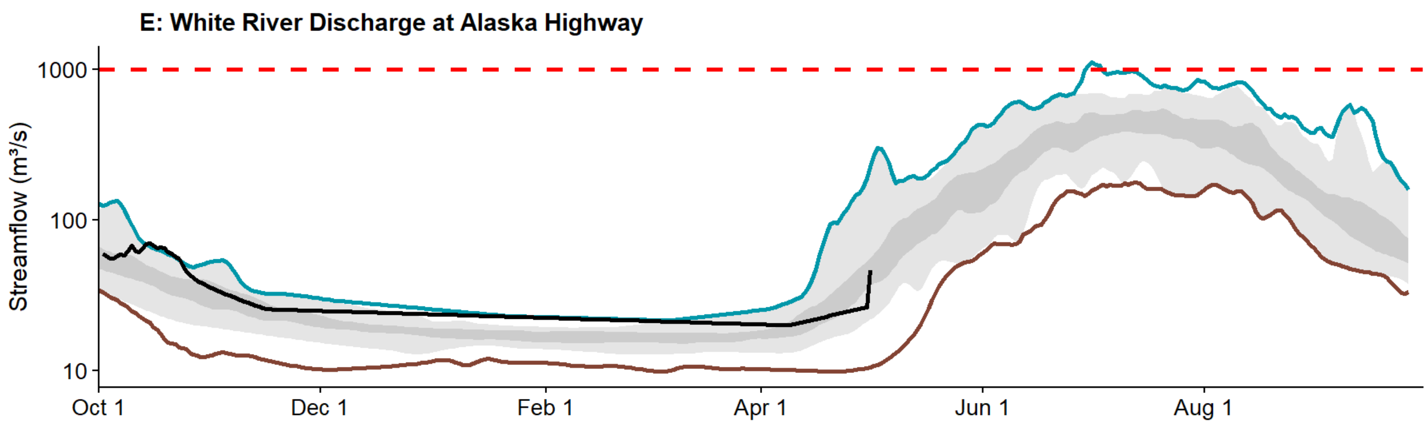


WHITE RIVER BASIN

The White River Basin snowpack is **well above normal**. The basin-averaged Snow Water Equivalent (SWE) is estimated to be **274%** of normal, with **135 mm** as of May 1 (Figure B).

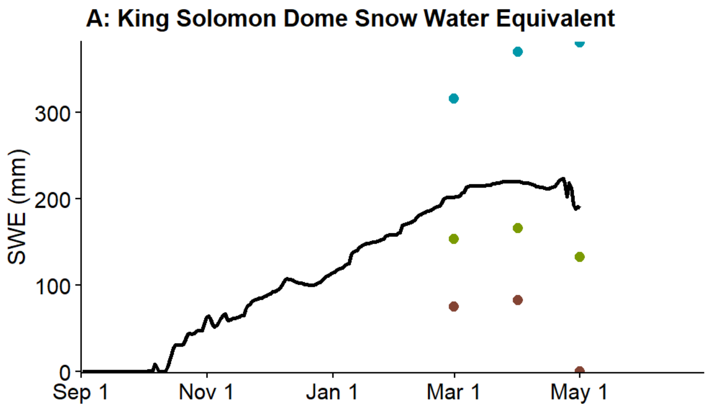


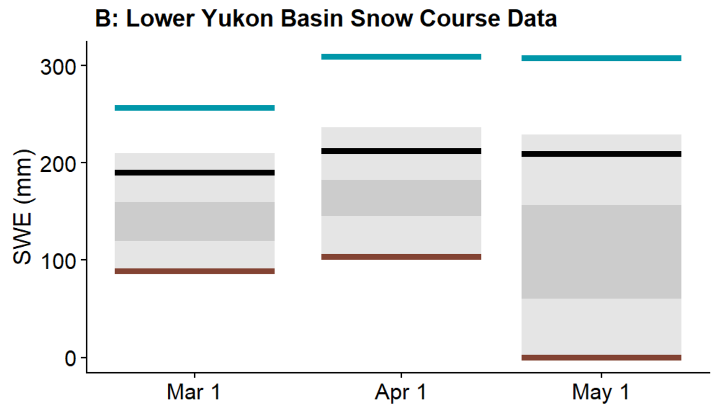
The estimated White River discharge at the Alaska Highway is currently **close to normal** (Figure E). In this watershed, high flows are dominated by mountain snowmelt and glacial melt that are largely influenced by summer temperatures and precipitation. The **well above normal** snowpack suggests spring freshet flow volumes will be **well above normal**. Warm and/or wet weather during the next three months will generate high runoff rates and peak flows, including in rivers and streams crossing the Alaska Highway in the Kluane region.



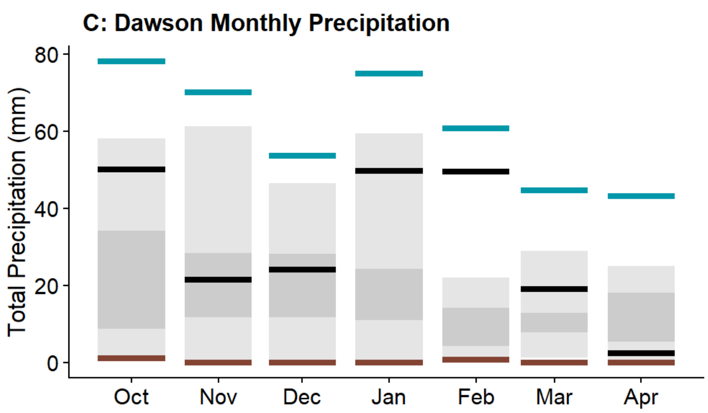
LOWER YUKON RIVER BASIN (DAWSON/KLONDIKE)

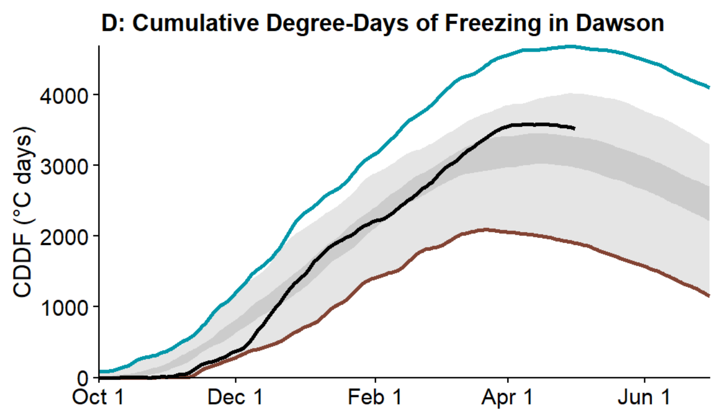
The Lower Yukon River Basin snowpack is **well above normal**. Established in 2022, King Solomon Dome Meteorological Station registered Snow Water Equivalent (SWE) at **145%** of normal when compared with the manual snow survey record for that site (Figure A). The basin-averaged SWE is estimated to be **184%** of normal, with **209 mm** as of May 1 (Figure B).



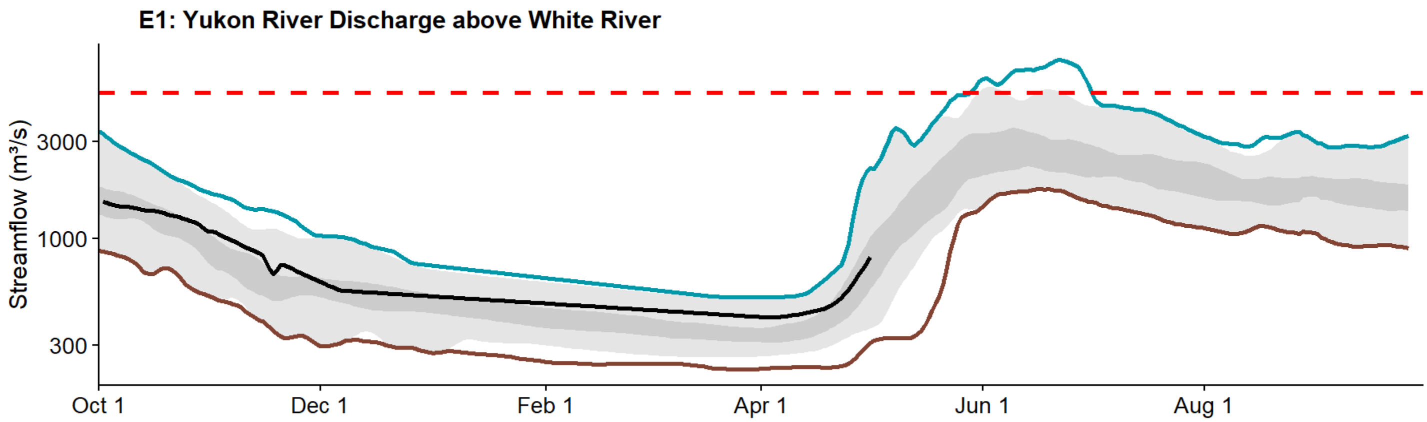


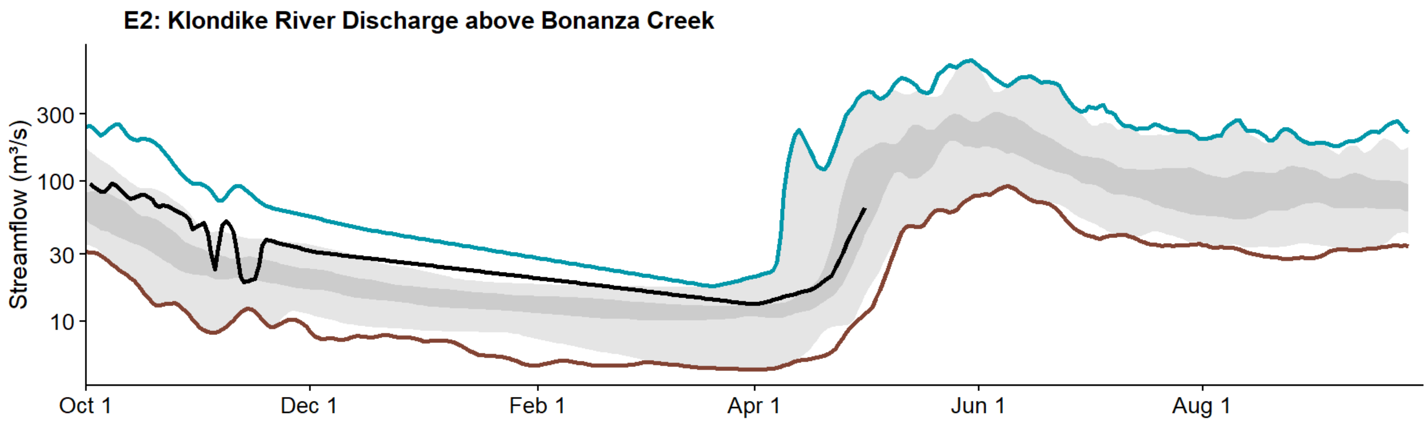
Precipitation at Dawson Airport has been **well above normal** from October through April (Figure D). Cumulative winter precipitation was **192%** of normal on May 1. Cumulative degree-days of freezing (CDDF) are **111%** of normal, with **3525°C-Days** on May 1 (Figure D). River ice breakup is currently underway on the Klondike River and the Yukon River at Dawson.





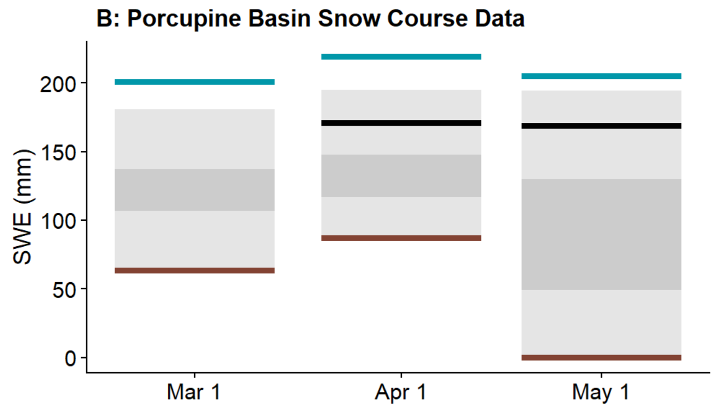
The estimated Yukon River discharge above White River is currently **close to normal** (Figure E1) while the estimated Klondike River discharge above Bonanza Creek is currently **close to normal** (Figure E2). On the Yukon River, the **well above normal** upstream snowpack suggests spring freshet flow volumes will be **well above normal**. On the Klondike River, the **well above normal** snowpack suggests spring freshet flow volumes will also be **well above normal**. Weather conditions over the next two months will play a role in determining peak water levels. Warm and/or wet weather will generate **high** runoff rates and peak flows, including for rivers and streams crossing the Klondike, Dempster and Top of the World Highways.



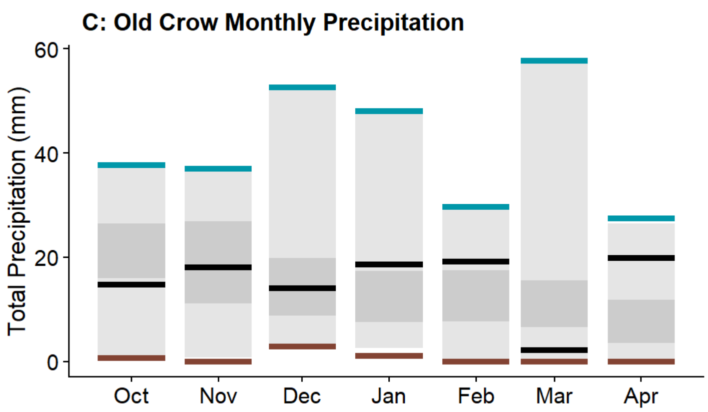


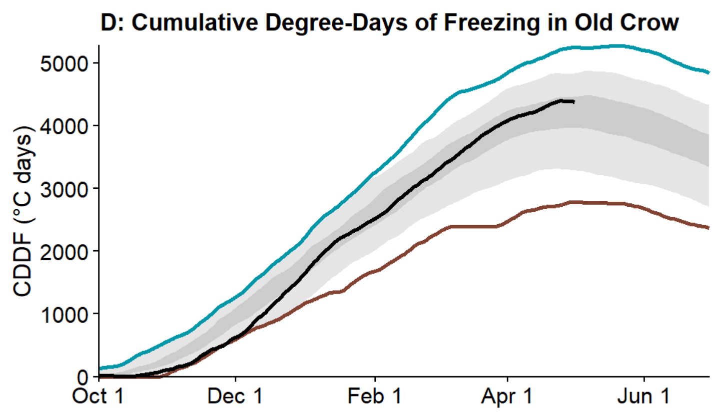
PORCUPINE RIVER BASIN

The Porcupine River Basin snowpack is **well above normal**. The basin-averaged Snow Water Equivalent (SWE) is estimated to be **161%** of normal, with **168 mm** as of May 1 (Figure B).

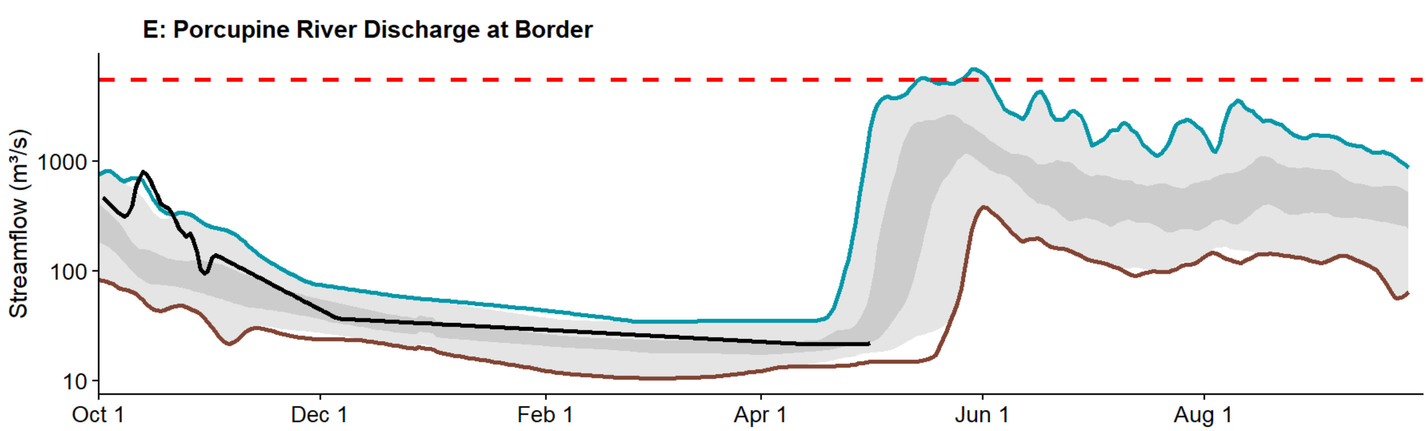


Precipitation at Old Crow Airport has been **close to normal** from October through April (Figure C). Cumulative winter precipitation was **108%** of normal on May 1. Cumulative degree-days of freezing (CDDF) are **103%** of normal, with **4380°C-Days** on May 1 (Figure D). The ice cover is degrading on the Porcupine River owing to warmer than normal temperatures and rain in the last week.



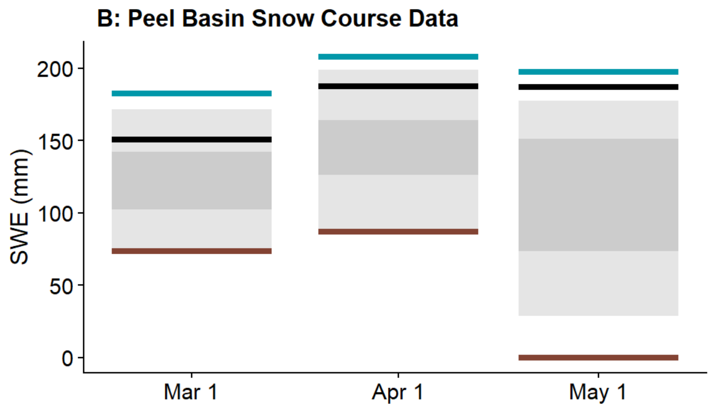


The estimated Porcupine River discharge is currently **below normal** (Figure E). The **well above normal** snowpack in the watershed suggests spring freshet flow volumes will be **well above normal.** Weather conditions leading to breakup and the spring freshet will play a critical role in determining potential ice jam severity and peak water levels. Warm and/or wet weather will generate **high** runoff rates and peak flows, including on rivers and streams crossing the Dempster Highway.

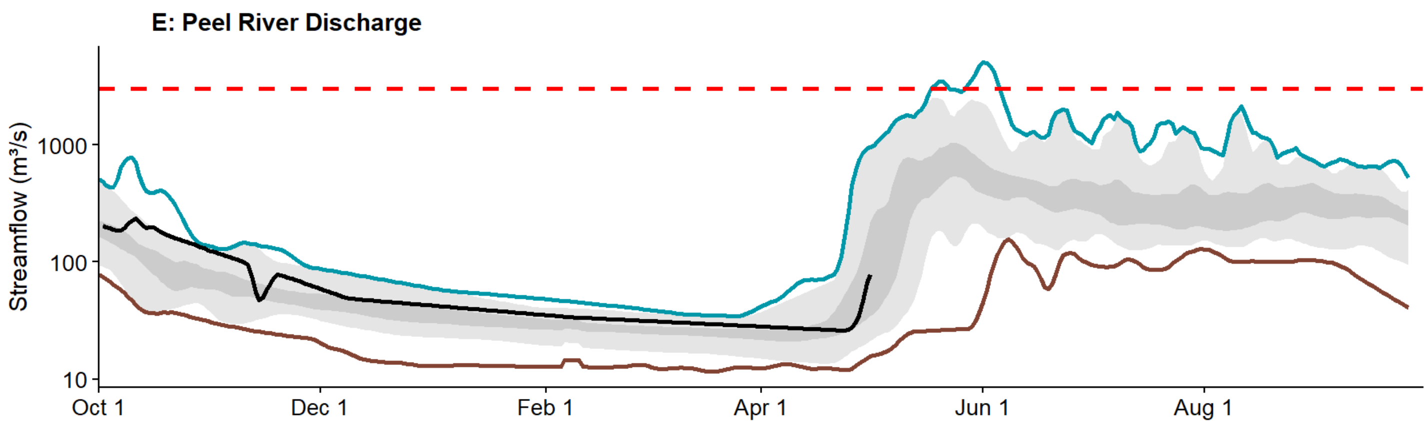


PEEL RIVER BASIN

The Peel River Basin snowpack is **well above normal**. The basin-averaged Snow Water Equivalent (SWE) is estimated to be **170%** of normal, with **187 mm** as of May 1 (Figure B).

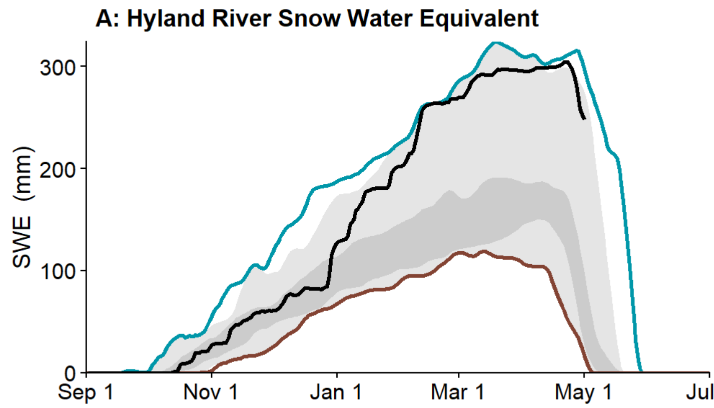


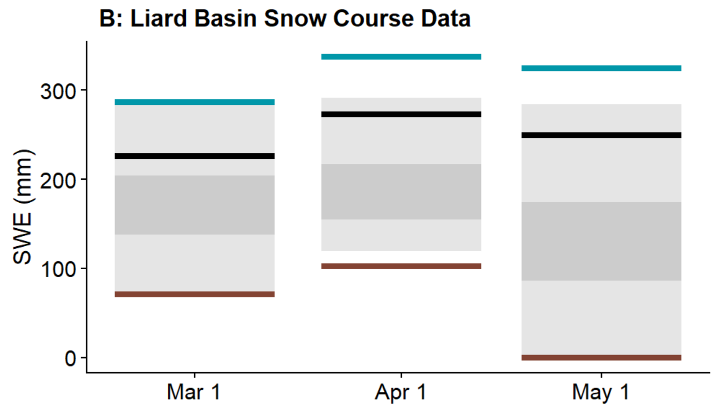
The estimated Peel River discharge is **close to normal** (Figure E). The **well above normal** snowpack suggests spring freshet flow volumes will be **well above normal**. Warm and/or wet weather will generate **high** runoff rates and peak flows, including on rivers and streams crossing the Dempster Highway.



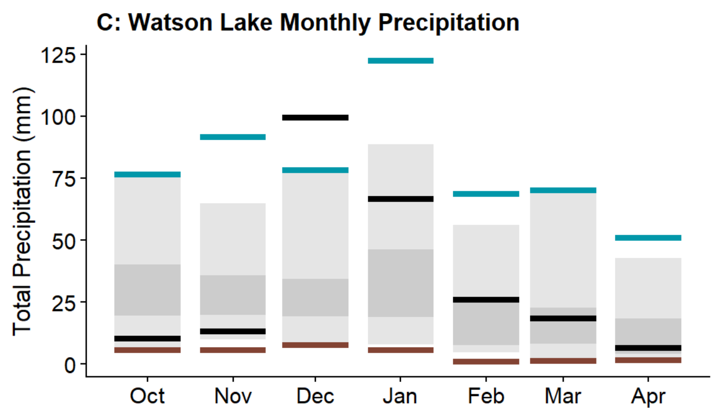
LIARD RIVER BASIN

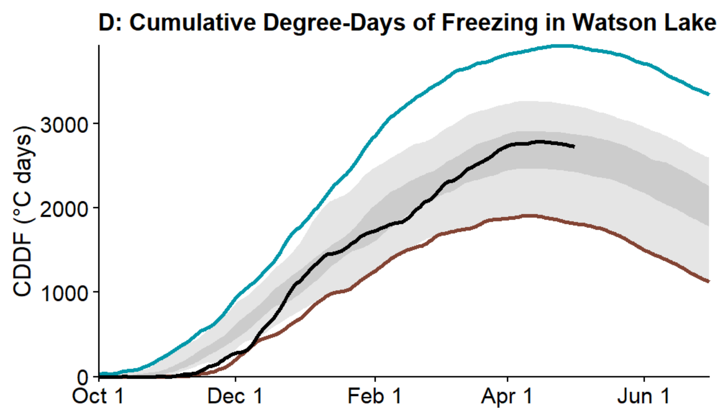
The Liard River Basin snowpack is **well above normal**. At Hyland Meteorological Station, Snow Water Equivalent (SWE) is estimated to be **365%** of normal (Figure A). The basin-averaged SWE is estimated to be **180%** of normal, with **249 mm** as of May 1 (Figure B).



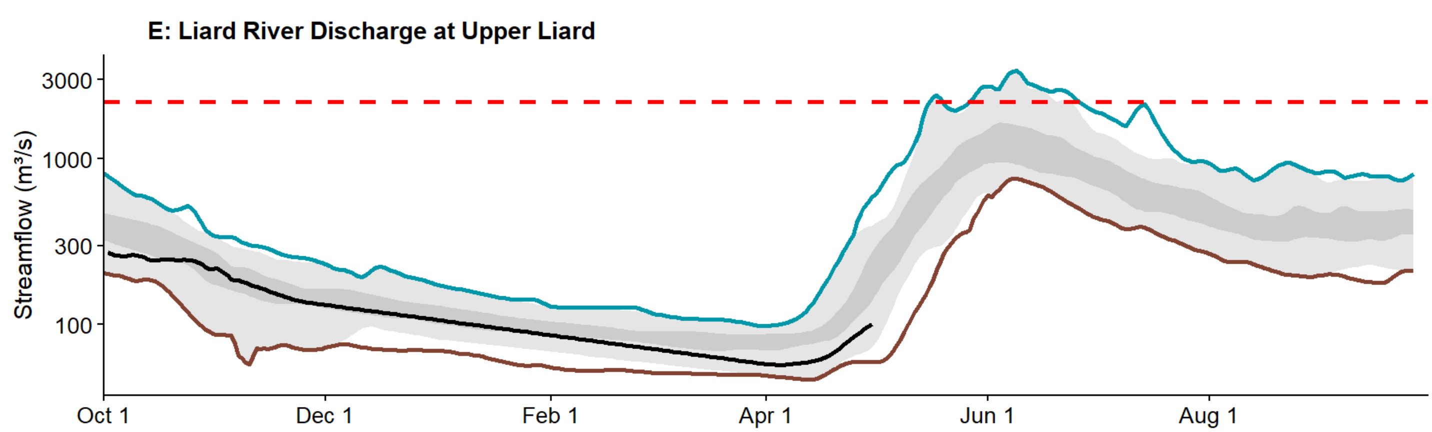


Precipitation at Watson Lake Airport has been **above normal** from October through April (Figure C). Cumulative winter precipitation was **134%** of normal on May 1. Cumulative degree-days of freezing (CDDF) are **105%** of normal, with **2729°C-Days** on May 1 (Figure D). River ice breakup is complete on the Liard River.



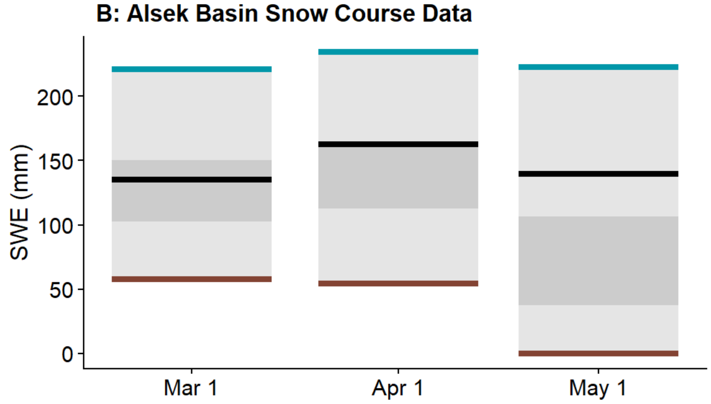


The estimated Liard River discharge at Upper Liard is currently **well below normal** (Figure E). The **well above normal** snowpack in the watershed suggests spring freshet flow volumes will be **well above normal**. Weather conditions over the next two months will play a role in determining peak water levels. Warm and/or wet weather will generate **high** runoff rates and peak flows, including on rivers and creeks crossing the Alaska and Robert Campbell highways.



ALSEK RIVER BASIN

The Alsek River Basin snowpack is **well above normal**. The basin-averaged Snow Water Equivalent (SWE) is estimated to be **195%** of normal, with **140 mm** as of May 1 (Figure B).



The estimated Alsek River discharge is currently **below normal** (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 **well above normal** freshet flow volumes. Warm and/or wet weather will generate **high** runoff rates and peak flows, including in rivers and streams crossing the Alaska Highway and the Haines Road.

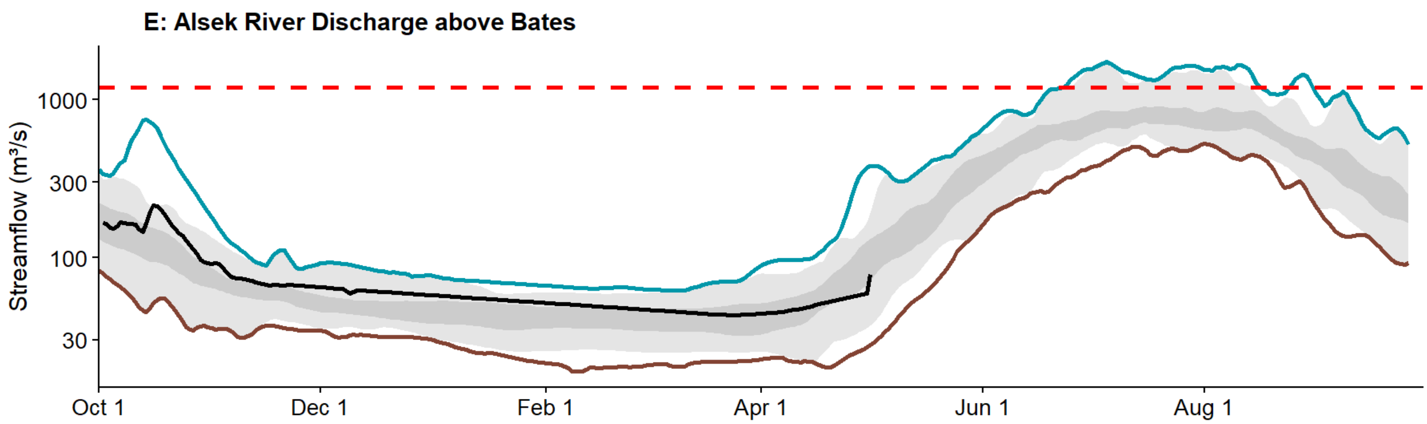


TABLE 1: SNOW SURVEY RESULTS BY DRAINAGE BASIN

Name	Identifier	Elevation (m)	Date of Survey (mm-dd)	Snow depth (cm)	Water content (SWE) (mm)	% of median SWE	Last year SWE (mm)	Median historical SWE (mm)	Years of record
Upper Yukon River Basin									
Tagish	09AA-SC01	1,080	04-28	83	219	186	138	118	50
Montana Mountain	09AA-SC02	1,020	04-28	82	206	172	78	120	50
Log Cabin (B.C.)	09AA-SC03	884	04-29	128	476	133	274	358	68
Atlin (B.C.)	09AA-SC04	730	04-27	49	138	-	0	0	58
Mt McIntyre	09AB-SC01B	1,097	05-01	76	242	168	154	144	51
Whitehorse Airport	09AB-SC02	745	04-29	55	170	1700	66	10 C	59 C
Teslin Big Salmon River Basin									
Meadow Creek	09AD-SC01	1,235	04-28	128	416	148	254	282	50
Jordan Lake	09AD-SC02	930	04-29	59	159	171	38	93	37
Morley Lake	09AE-SC01	824	04-30	62	238	294	110	81	39
Pine Lake Airstrip	10AA-SC03	995	04-27	101	336	168	198	200	50
Central Yukon River Basin									
Mount Berdoe	09AH-SC01	1,035	04-27	55	155	277	67	56	50
Satasha Lake	09AH-SC03	1,106	04-27	55	146	730	46	20	36
Williams Creek	09AH-SC04	914	04-27	51	141	282	52	50	29
Pelly River Basin									
Twin Creeks	09BA-SC02	896	04-29	72	225	152	148	148 C	49 C
Hoole River	09BA-SC03	1,036	04-29	78	228	253	4	90	49
Burns Lake	09BA-SC04	1,112	04-29	100	320	142	217	226	40
Finlayson Airstrip	09BA-SC05	988	04-29	45	118	223	10	53	39
Fuller Lake	09BB-SC03	1,126	04-28	85	225	106	161	212	40
Russell Lake	09BB-SC04	1,060	04-28	100	263	117	N.S.	225	38
Rose Creek	09BC-SC01	1,080	04-30	57	185	402	50	46	32
Pelly Farm	09CD-SC03	472	04-28	15	43	614	45	7	40
Stewart River Basin									
Plata Airstrip	09DA-SC01	830	04-28	68	195	131	147	149	47
Withers Lake	09DB-SC01	975	04-28	93	243	110	249	221	40
Rackla Lake	09DB-SC02	1,040	04-28	79	181	90	187	200	39
Mayo Airport	09DC-SC01	548	04-27	24	66	-	0	0 C	55 C
Edwards Lake	09DC-SC02	830	04-28	69	168	112	137	150	39
Calumet	09DD-SC01	1,310	04-27	87	187	103	143	181	46
White River Basin									
Mount Nansen	09CA-SC01	1,021	04-27	36	96	-	16	0	49
MacIntosh	09CA-SC02	1,160	04-27	55	158	416	16	38	48
Burwash Airstrip	09CA-SC03	810	04-29	0	0	-	0	0	49
Beaver Creek	09CB-SC01	655	04-29	61	180 E	-	0	0	51
Chair Mountain	09CB-SC02	1,067	N.S.	-	-	-	N.S.	51	15
Casino Creek	09CD-SC01	1,065	04-27	77	215	173	114	124	47

Name	Identifier	Elevation (m)	Date of Survey (mm-dd)	Snow depth (cm)	Water content (SWE) (mm)	% of median SWE	Last year SWE (mm)	Median historical SWE (mm)	Years of record
Lower Yukon River Basin									
King Solomon Dome	09EA-SC01	1,070	04-28	70	233	178	260	131	51
Grizzly Creek	09EA-SC02	975	04-27	68	194	137	243	142	51
Midnight Dome	09EB-SC01	855	04-28	67	204	141	204	145	51
Boundary (Alaska)	09EC-SC02	1,005	N.S.	-	-	-	N.S.	-	-
Porcupine River Basin									
Riff's Ridge	09FA-SC01	650	04-27	70	200	146	97	137	39
Eagle Plains	09FB-SC01	710	04-27	82	229	154	185	149	41
Eagle River	09FB-SC02	340	04-27	73	178	165	95	108	41
Old Crow	09FD-SC01	299	04-30	44	143 E	136	143	105	41
Crow Mountain	09FD-SC02	440	04-30	49	137 E	-	168	-	1
Peel River Basin									
Blackstone River	10MA-SC01	929	04-27	60	159	204	81	78	50
Ogilvie River	10MA-SC02	595	04-27	73	183	213	81	86	49
Bonnet Plume Lake	10MB-SC01	1,120	04-28	86	207	108	172	191	40
Liard River Basin									
Watson Lake Airport	10AA-SC01	685	04-27	51	160	800	0	20	61
Tintina Airstrip	10AA-SC02	1,067	04-29	91	291	150	151	194	49
Ford Lake	10AA-SC04	1,110	04-29	84	250	145	141	172	38
Frances River	10AB-SC01	730	04-27	59	184	216	0	85	51
Hyland River	10AD-SC01	880	04-28	73	256	198	129	129 C	50 C
Alsek River Basin									
Canyon Lake	08AA-SC01	1,160	04-27	43	108	300	20	36	48
Alder Creek	08AA-SC02	768	04-28	52	165	243	67	68	44
Aishihik Lake	08AA-SC03	945	04-27	42	102	300	15	34	32
Haines Junction Farm	08AA-SC04	610	04-28	0	0	0	0	31	26
Summit	08AB-SC03	1,000	04-28	95	288	135	235	213	46
Coastal South-East Alaska Snow Courses									
Eaglecrest	08AK-SC01	305	05-01	84	378	97	0	388	40
Moore Creek Bridge	08AK-SC02	700	04-29	147	584	115	249	508	29

Date notes:

N.S. – No survey.

B – Survey date is outside of valid sampling range.

SWE notes:

E – Estimated results from snow depth readings and average snow densities observed in historical record.

R – New record (historical maximum or minimum).

Median historical SWE and Years of record notes:

C – Composite historical record. measurements are combined with historical record from another nearby location. Historical median from composite can include adjustments to account for variation between the paired sampling locations:

- **Whitehorse Airport** (09AB-SC02) combines records from the old Whitehorse Airport snow course located within the airport grounds with new measurements taken a few hundred meters to the west of the airport. Two years of overlapping records exist (2023-2024). The new snow course uses historical SWE records from the old location (1965-2022) without any adjustments.
- **Twin Creeks** (09BA-SC02) record is based primarily on measurements at Twin Creeks A snow course located at the west end of the Twin Creeks air strip since 1977 up to now. Concurrent measurements taken at the east end of the air strip (Twin Creeks B) fill a 2017-2020 data gap. Six years of overlapping records (2016 and 2021-2025) are used to adjust the historical SWE transferred from course B into course A (a correction factor of 1.201 applies to 2017-2020 SWE data).
- **Mayo Airport** (09DC-SC01) consists of a union of two five-point courses. Current results consist of a simple average of both courses. Historical median is composed of the following results: 1968-1986 records come solely from 09DC-SC01A (Mayo Airport A); 1987-2025 records come from the average of 09DC-SC01A and 09DC-SC01B (Mayo Airport B).
- **Hyland River** (10AD-SC01) combines records from the old Hyland River snow course located near the Hyland River air strip with new measurements taken 6 kilometers to the north of the old station since 2018. Five years of overlapping records (2018-2022) were used to adjust the historical SWE transferred from the old location into the new one (a correction factor of 1.092 applies to the 1976-2017 SWE results).

Median SWE used to calculate the percent of median in Table 1 is based on the entire historical record of each station, including any adjustments for composite stations. Consequently, the percent of SWE values in Table 1 may differ from the percent of median SWE values shown in Map 3.

MAP 4. SNOW COURSE LOCATIONS