

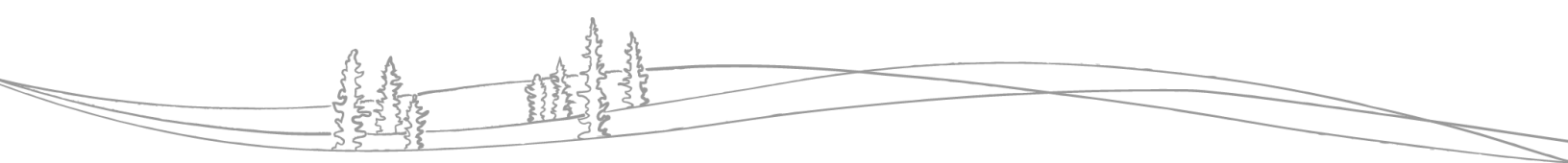
Government of Northwest Territories  
Gouvernement des Territoires du Nord-Ouest

# 2026 NWT Spring Water Outlook

Water Monitoring and Stewardship Division  
Environment and Climate Change (ECC)  
April 23, 2026

# Aperçu des eaux printanières aux TNO pour 2026

Division de la surveillance et de la gestion des eaux  
Environnement et Changement climatique (ECC)  
23 avril 2026



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# 1 Overview

This report is an outlook for anticipated 2026 spring water levels in the Northwest Territories (NWT). It presents data on snowpack, current water levels, and river ice conditions (inferred from winter air temperatures). These indicators provide an estimate of spring flow rates. Actual flow rates and water levels in the spring are dependent on weather conditions, which determine how quickly the snowpack melts, how river ice deteriorates, and where ice jams may occur.

As the melt season advances, the Department of Environment and Climate Change (ECC) will report regularly on current water level and river ice conditions and how break-up is progressing. This situational awareness relies on information from various sources including near real-time water level and flow data (always provisional), near real-time photographs of water levels and ice from cameras at water level gauge sites, near real-time interpreted satellite imagery of ice conditions, forecasted weather conditions, and reports from community flood watch programs.

## 1.1 Aperçu

Le présent rapport est un aperçu des niveaux d'eau prévus pour le printemps 2026 aux Territoires du Nord-Ouest (TNO). Il présente des données sur l'accumulation de la neige, les niveaux d'eau actuels et l'état des glaces fluviales (déduit des températures de l'air en hiver). Ces indicateurs fournissent une estimation des débits au printemps. Les débits et les niveaux d'eau réels au printemps dépendent des conditions météorologiques, qui déterminent la rapidité de la fonte du manteau neigeux, la détérioration de la glace fluviale et les endroits où des embâcles peuvent se former.

Tout au long de la saison de fonte printanière, le ministère de l'Environnement et du Changement climatique (MECC) publiera régulièrement des rapports sur les niveaux d'eau actuels et les conditions liées à la glace fluviale, ainsi que sur l'évolution de la débâcle. Nous résumons la situation sur la base de données provenant de diverses sources, notamment des données en temps quasi réel sur les niveaux et les débits d'eau (toujours provisoires), des photographies en temps quasi réel des niveaux d'eau et de la glace prises par les caméras installées sur les capteurs mesurant le niveau de l'eau dans les stations, des images satellites de l'état de la glace interprétées en temps quasi réel, des prévisions météorologiques, ainsi que des rapports des programmes de surveillance des inondations mis en place par les collectivités.

## 1.2 Current water levels

As the spring melt season begins, water levels across the territory, as of April 15, 2026, are generally lower than normal for the main waterbodies across the NWT, with some exceptions for mid-size and smaller rivers. The summer and fall of 2025 were warmer and drier than normal across most of the NWT. These warm and dry conditions have resulted in continued low water levels that have persisted since the late summer of 2022. Water levels at Great Slave Lake and Great Bear Lake are both currently much lower than normal. Similarly, the Mackenzie River recorded at several stations is much lower than normal.

Notable exceptions to low water levels include the South Nahanni River, Taltson River, Mountain River and some local rivers in the Great Slave Lake basin such as the Lockhart River and Hoarfrost River. Large river systems such as the Mackenzie are primarily driven by upstream basin conditions, whereas smaller tributaries respond more directly to local precipitation and snowmelt.

## 1.3 Snowpack

Snowpack accumulation across the territory from the winter of 2025-2026 is approximately normal, with some variability between regions. Snowpack accumulation is higher than normal in the southern and western portions of the territory. Snowpack accumulation is lower than normal across most of the North Slave Region and portions of the Sahtu Region.

Notably, the snowpack is higher than normal for southern basins that lie mostly in northern Alberta, northern British Columbia and the southeastern Yukon. These basins, including the Liard, Hay and Slave River basins, deliver large proportions of water to Great Slave Lake and the Mackenzie River.

Snowpack data are based on snow surveys conducted in late March by ECC in the NWT and by neighbouring jurisdictions. These surveys measure the volume of water that is produced when a snowpack melts – this is called snow water equivalent (SWE). The amount of SWE is based on both the depth of snow and its density.

Snowpack accumulation, including the amount of SWE, has also been assessed using a modelled climate product called ERA5-Land. ERA5-Land values for SWE compare well to those measured manually by ECC and other jurisdictions and are presented in this Outlook along with manual snow survey data.

Spring weather conditions will determine the timing of snowmelt, which is important because a quick, sudden snowmelt will cause a larger rise in water levels than would a prolonged snowmelt season.

## 1.4 River ice

The potential for ice jams to occur increases as river ice thickness increases because thicker ice breaks into larger, more resistant pieces that are more likely to accumulate and block flow during spring freshet.

Winter air temperatures directly influence the thickness of river ice, which can be estimated using a metric called Cumulative Degree Days of Freezing (CDDF). Other factors also play a role in river ice thickness, such as snow cover. Because physical measurements of river ice thickness are limited, CDDF is used as an indicator of river ice thickness.

Winter air temperatures across the NWT in 2025-2026 were variable, with colder than normal conditions in late winter likely leading to ice that is thicker than normal in some regions. In the Town of Hay River and at Fort Liard, CDDF values are higher than normal, suggesting relatively thick ice conditions. Similarly, in Yellowknife, CDDF values rank among the highest on record (following 1967 and 1962), indicating thicker than normal ice. In Fort Simpson, Norman Wells and Inuvik, CDDF values are approximately normal but remain higher than in recent years.

Overall, ice thickness is estimated to be approximately normal in northern and central communities and higher than normal in southern communities.

## 1.5 Flood risk

There are different types of flooding affecting communities in the NWT. The most common is ice-affected riverine flooding. This occurs when river ice changes the flow of water, causing water levels to rise. This is often caused by an ice jam. The risk of an ice jam flood is highest during spring break-up.

It is difficult to predict in advance how river ice break-up will occur, and if/where and for how long ice jams will form, because these factors are highly dependent on spring weather conditions. Ice jams during break-up typically form on north-flowing rivers, where warm weather and snowmelt cause ice to break-up earlier on the southern reaches of a river. As this ice flows north (downstream), it may meet a more solid ice cover. When this happens, sheets of floating ice run into the solid ice and can jam, which may cause water levels to rise rapidly behind it.

The primary driver of ice jam occurrence is weather conditions immediately before break-up and during break-up. Rapid warming and heavy rain can trigger “mechanical” break-ups (higher risk), while gradual warming can encourage a thermal decay of the ice in place

(lower risk). Over-winter conditions such as snowfall and winter air temperatures (which affect ice thickness) can also play a role in the occurrence of ice jams.

Ice jam flooding can happen in any year regardless of pre-existing water levels and snowpack. The potential severity of flooding, if an ice jam occurs, increases when water levels are already high, when snowpacks are large, and when river ice is thick.

ECC recommends that residents in communities that are susceptible to flooding follow the advice from Municipal and Community Affairs (MACA) to ensure that they are prepared for possible flooding every year.

## 2 Outlook by region

### 2.1 North Slave and Tłı̄chǫ Regions

ECC snow surveys show that the snowpack in the Yellowknife River basin and Snare River basin is approximately normal at 98% of normal (where 100% of normal = average), and lower than normal at 77% of normal, respectively, as of early April 2026 (Table A1). The snowpack at other North Slave and Tłı̄chǫ sites is approximately normal at 91% of normal.

Provisional flows on rivers (e.g. Cameron River and Yellowknife River) and water levels on lakes (e.g. Prosperous Lake and Prelude Lake) close to Yellowknife are either approximately normal or lower than normal. Flows on the Lockhart and Hoarfrost rivers, which drain into the East Arm of Great Slave Lake, are approximately normal and much higher than normal, respectively. Flows on rivers north of Yellowknife (e.g. Snare River, Coppermine River) are approximately normal. In the Tłı̄chǫ Region, water levels on the La Martre River and the Camsell River are much lower than normal, but higher than the record lows that were measured this time last year (April 2025).

A lower than normal to approximately normal snowpack in the North Slave and Tłı̄chǫ Regions will still contribute some moisture to recharge the soil. However, water levels on most local lakes and rivers are not expected to be significantly higher than in 2025, unless rainfall this summer is at or above normal levels. The snowpack in the North Slave and Tłı̄chǫ Regions will not have a strong impact on water levels on Great Slave Lake as inputs to the lake are primarily from the Slave River (see Great Slave Lake section below for more information).

There are no communities in the North Slave that are on MACA's list of communities that are susceptible to flooding.

## 2.2 Great Slave Lake and Slave River basins

ECC snow surveys show that the snowpack in the South Slave Region is higher than normal at 113% of normal.

The majority of the water (~75-80%) in Great Slave Lake comes from the Slave River basin, which includes large areas of northern British Columbia, Alberta, and Saskatchewan. The Slave River is primarily fed by the Peace River and Athabasca Rivers, with the Peace River contributing the majority of the flow.

ECC uses snow data acquired from neighbouring jurisdictions to estimate snowpack in our shared basins. These data show that snowpack across the Slave River basin is generally higher than normal to much higher than normal. For example, SWE values are higher than normal in the headwaters of the Peace River and exceed 200% of normal in the mid-reaches of the Peace and Athabasca rivers. Basin-averaged percent of normal for Slave River basin SWE is much higher than normal (see Appendix A-3). This means that Great Slave Lake will receive a much higher than normal snowmelt input this spring, with resultant increases in water levels that will also depend on spring and summer rainfall.

The water level on Great Slave Lake has been very low (<5<sup>th</sup> percentile) for the past three summers 2023-2025 (all three years being the lowest three years on record). Great Slave Lake water level is currently 17 cm lower than this time in 2025 and 16 cm higher than this time in 2024.

Water levels and flow rates on the Slave River have ranged from lower than normal to much lower than normal since December 2025 and are currently lower than normal. At present, water levels on the Peace River are variable depending on the location along the river, where levels are higher than normal at the Town of Peace River and much lower than normal downstream at Peace Point. This variability is likely reflecting a delayed response to upstream variations in outflows from the Bennett Dam. Water levels on the Athabasca River are similarly higher than normal near the headwaters and lower than normal further downstream near Fort McMurray. Water levels on Lake Athabasca are lower than normal and lower than this time last year.

There are no communities in the Slave River basin on MACA's list of communities that are susceptible to flooding.

## 2.3 Taltson River basin

Snow surveys show that snowpack in the Taltson and Tazin River basins is higher than normal at 118% of normal. Water levels on the Taltson and Tazin rivers are approximately normal. The Taltson and Tazin river basins recovered from low water levels in 2023 and have

since been an exception to widespread hydrological drought in the territory. Water levels on Tazin Lake are approximately normal.

There are no communities in the Taltson River basin that are on MACA's list of communities that are susceptible to flooding.

## 2.4 Hay River basin

Snow surveys show that the snowpack in the Hay River basin is higher than normal this year at 119% of normal. This includes two snow surveys conducted in Alberta, as most (94%) of the basin lies outside of the NWT. ERA5-Land snowpack values are much higher than normal at 166% of normal, which may be a better reflection of snowpack accumulation considering that snow survey locations are sparse in the Hay River basin.

The Town of Hay River and Kátt'odeeche First Nation are included in MACA's list of communities that are susceptible to flooding. Hay River, Kátt'odeeche First Nation, West Point First Nation, and Paradise Gardens all experienced severe flooding in 2022 when record-high water levels on the Hay River were combined with an average snowpack, a delayed spring melt, and a large precipitation event that occurred over the entire basin during break-up.

Water levels on the Hay River are much lower than normal and are at their lowest levels on record for some stations along the river. Cooler than normal weather in early April has delayed spring melt in the basin, and cooler than normal winter temperatures suggest thicker river ice accumulation. The combination of very low current water levels, higher than normal to much higher than normal snowpack, and early season cool temperatures **suggest that spring flows will be approximately normal**. There is always the possibility that anomalous spring weather conditions, such as heavy rainfall in the basin, will increase spring flows.

Ice jams can form under a range of conditions and may lead to elevated water levels and out-of-bank flooding regardless of flow, with greater potential for impacts when flows are elevated.

## 2.5 Dehcho Region

The Liard River basin is comprised of large areas in the southeastern Yukon and northeastern British Columbia. Government of Yukon snowpack SWE data for April 1st indicate that the snowpack SWE in the upper Liard basin is much higher than normal at 142% of normal. Further downstream, snow surveys by the Government of British Columbia show that SWE values are higher than normal at 118% of normal.

ECC snow survey data in the lower Liard basin in the NWT show higher than normal SWE values at 129% of normal. ECC snow surveys in the remainder of the Dehcho Region (outside the Liard River basin) also indicate that snowpack in the region is higher than normal at 115% of normal.

Liard River water levels have been low since the onset of drought conditions in 2023. Liard River water levels are currently lower than normal, as they have been during this past winter, and the basin has not yet seen any significant spring snowmelt inputs. Water level on the Mackenzie River at Fort Simpson is currently much lower than normal. Other smaller gauged rivers in the Dehcho (e.g. Petitot, Trout, and Jean Marie rivers) have water levels that are much lower than normal or the lowest levels on record.

In the Dehcho, MACA's list of communities that are susceptible to flooding include Fort Liard, Jean Marie River, Fort Simpson, and Nahanni Butte.

In Fort Liard, flooding has previously occurred when ice jams form on the Liard River downstream of the community, or when ice from the Petitot River jams on solid ice on the Liard River, causing water to back up. A higher than normal snowpack in the region and much lower than normal current water levels on the Liard River and Petitot River **suggest that spring flows will be approximately normal**. There is always the possibility that anomalous spring weather conditions, such as heavy rainfall in the basin, will increase spring flows.

In Jean Marie River, significant flooding occurred in 2021 when existing high water levels on the Mackenzie River were combined with a higher than normal snowpack and a delayed spring melt. This occurred when the Mackenzie River broke downstream of the community and backed up water levels at Jean Marie River. Much lower than normal current water levels on the Mackenzie River, combined with a higher than normal snowpack in the Slave River basin **suggest that spring flows will be approximately normal**, but this is highly dependent on spring runoff relative to soil and lake moisture deficits that have persisted for several years.

In Fort Simpson, significant flooding occurred in 2021 when high existing water levels on the Liard River and the Mackenzie River were combined with a higher than normal snowpack and a delayed spring melt. At Fort Simpson, the Liard River typically breaks up before the Mackenzie River, which causes Liard River ice to jam into intact ice along the Mackenzie downstream of the community. Lower than normal current water levels on the Liard River, combined with a higher than normal snowpack in the lower Liard River basin **suggest that spring flows on the Liard River will be approximately normal. Spring flows on the Mackenzie River may be approximately normal** considering the high snowpack in

the Slave River basin, but this is highly dependent on spring runoff relative to soil and lake moisture deficits that have persisted for several years.

Ice jams can form under a range of conditions and may lead to elevated water levels and out-of-bank flooding regardless of flow, with greater potential for impacts when flows are elevated.

In Nahanni Butte, significant flooding occurred in June 2012, when snowmelt from the mountains rapidly raised the water level of the South Nahanni River. The high water on the South Nahanni River flowed into high water levels on the Liard River and resulted in open water flooding in Nahanni Butte. The potential for flooding will depend on how quickly snow from higher altitudes melts, and if there are concurrent high rainfall events at that time. Higher than normal current water levels on the South Nahanni River, combined with much lower than normal current water levels on the Liard River, and a much higher than normal snowpack **suggest that the potential for flooding in Nahanni Butte in early summer will be average.** However, this will be highly dependent on rainfall events in the South Nahanni River basin in early summer, as well as water levels on the Liard River at that time.

## 2.6 Sahtu Region

In the Sahtu Region, ECC snow surveys show that snowpack SWE values are approximately normal at 104% of normal. Great Bear Lake water level is currently at its lowest level on record for this time of year and Great Bear River is also at its lowest level on record. Water levels on smaller gauged rivers in the Sahtu (e.g. Carcajou, Loon, and Whitefish rivers) are approximately normal or much lower than normal.

In the Sahtu Region, MACA's list of communities at risk of flooding include Tulita and Fort Good Hope.

In Tulita, flooding has previously occurred when ice from Great Bear River jams on the Mackenzie River and brings backwater into the community. Considering an approximately normal snowpack and much lower than normal current water levels, **spring flows may be lower than normal on the Great Bear River. Spring flows on the Mackenzie River may be approximately normal** considering the high snowpack in the Slave River basin, but this is highly dependent on spring runoff relative to soil and lake moisture deficits that have persisted for several years.

In Fort Good Hope, significant flooding occurred in 2021 when an ice jam downstream of the community caused water to back up along Jackfish Creek and create out of bank flows. This was caused by record high water levels on the Mackenzie River, higher than normal snowpack, and a delayed spring melt. Very low current water levels on the Mackenzie River at Fort Good Hope and a much higher than normal snowpack in the Slave River basin

**suggest that spring flows will be approximately normal** but this is highly dependent on spring runoff relative to the soil and lake moisture deficits that have persisted for several years.

Ice jams can form under a range of conditions and may lead to elevated water levels and out-of-bank flooding regardless of flow, with greater potential for impacts when flows are elevated.

## 2.7 Gwich'in and Inuvialuit Regions

ECC and Government of Yukon snow survey data for the Peel River basin show that the snowpack is higher than normal at 118% of normal. ECC snow surveys in the Inuvik Region also show that snowpack is also higher than normal at 125% of normal.

Fort McPherson is identified on MACA's list of communities that are susceptible to flooding.

Flooding occurred in 2023 in Fort McPherson when an ice jam formed downstream of the community and caused out of bank flows on the Peel River. The flooding was caused by a combination of high existing water levels, higher than normal snowpack, and a delayed spring melt which caused the snow to melt rapidly while the ice cover was still relatively thick.

Water levels on the Peel River are currently lower than normal. The higher than normal snowpack combined with lower than normal current water levels suggests that **spring flows will be approximately normal**. There is always the possibility that anomalous spring weather conditions, such as heavy rainfall in the basin, will increase spring flows.

Aklavik is identified on MACA's list of communities that are susceptible to flooding.

Water level on the Mackenzie River at Tsiigehtchic is much lower than normal for this time of year, and similar conditions are expected across much of the Mackenzie Delta although observations are limited due to ice-affected sensors. While current low water levels and a higher than normal snowpack throughout much of the Mackenzie River basin **suggest the potential for near-normal spring flows into the Delta**, outcomes remain highly uncertain and will depend on spring runoff relative to soil and lake moisture deficits, spring weather conditions, and how the ice breaks up and moves through the Delta.

Ice jams can form under a range of conditions and may lead to elevated water levels and out-of-bank flooding regardless of flow, with greater potential for impacts when flows are elevated.

### 3 Factors to watch

It is important to distinguish the difference between spring *flows* and the *water level* during break-up. The indicators presented here provide information about spring flows, which is the total amount of water that moves through a river during the spring. If snowmelt occurs very quickly and water moves to the rivers quickly, that volume of water will cause water levels to rise higher than if snowmelt is very slow. The rapid movement of snowmelt water to a river can also dislodge ice from the riverbank quicker, which increases the chance of strong ice jams. Generally speaking, lower spring flows reduce the potential for flooding, but they do not eliminate the risk. Communities should always prepare for the potential of spring flooding and be aware that water levels can rise quickly in response to ice jams.

The potential and severity of freshet flooding will depend in large part on the weather over the upcoming weeks and how quickly the snow and ice melt. The following variables are the primary factors that influence water levels and the potential for flooding:

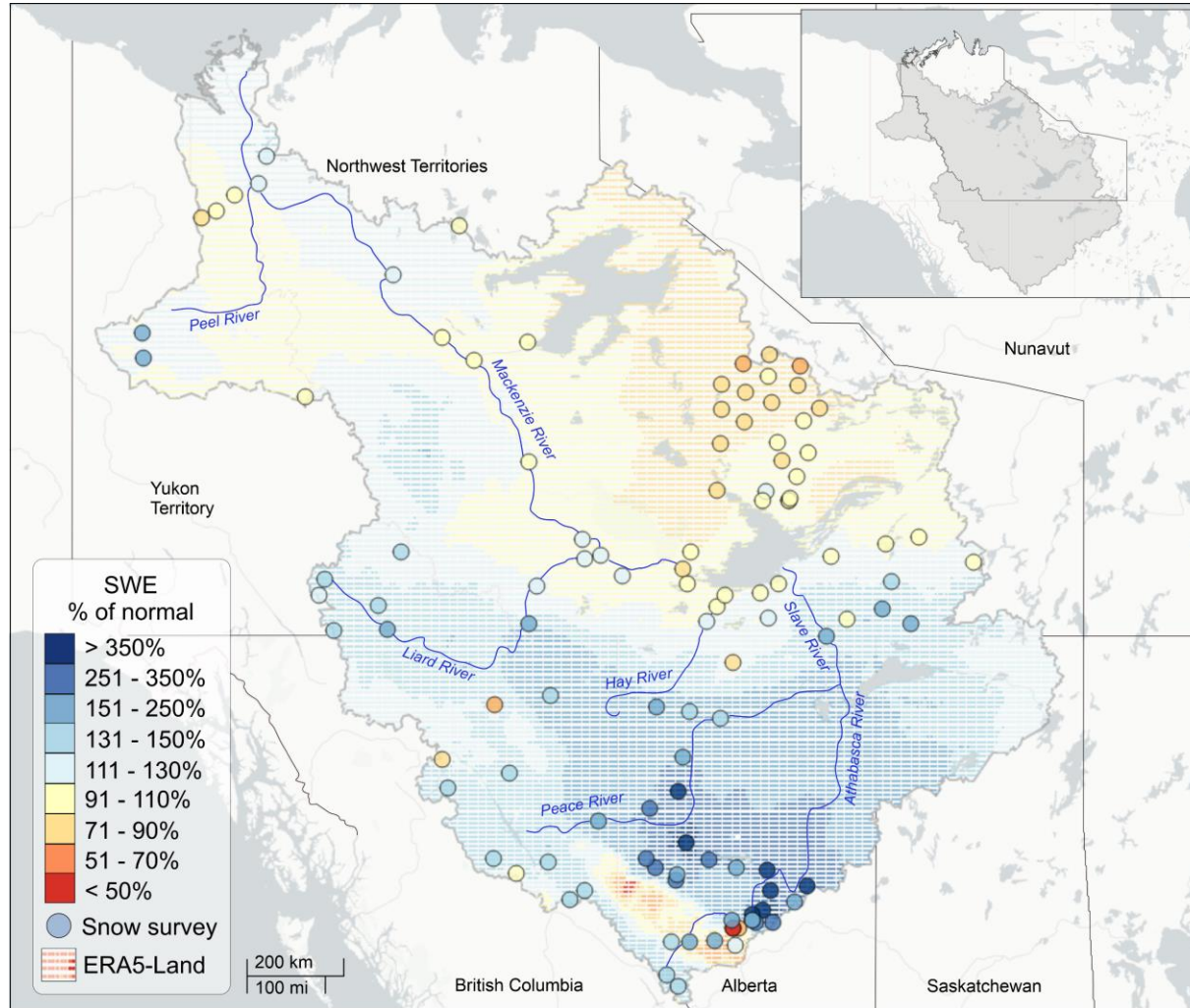
- Rate of snowmelt
  - Slow and steady onset of warm weather allows a progressive snowmelt and slow delivery of meltwater to the river network
  - Sudden extreme warm weather can cause a rapid snowmelt which can cause rapid increases in water levels
  - Rain on snow events can cause rapid snowmelt and can lead to rapid increases in water levels
- Rate of ice melt/break-up
  - Gradually warming weather across an entire basin allows ice to slowly degrade and melt (thermal break-up)
  - Very warm weather in upstream areas can cause rapid snowmelt and local ice break-up. If this ice flows downstream into a solid ice cover, the force of the ice can cause downstream ice to break- up and can lead to ice jams
- Spring precipitation events
  - Rainfall events during break-up have the potential to bring significant amounts of additional water to a basin and can be impactful if they occur simultaneously with ice jams
- Current water levels in lakes and rivers, and moisture in wetlands and soil
- Snowpack volumes (snow water equivalent - SWE)
- Winter temperatures
- Ice jam locations (primary cause of spring flooding in the NWT)
  - Can result in the back up of large amounts of water and can cause flooding (even when water levels are low)

Water level and flow data are part of the NWT Hydrometric Monitoring Network, funded by ECC and Environment and Climate Change Canada (ECCC), and operated by the Water Survey of Canada. Data can be seen and/or downloaded at:  
[https://wateroffice.ec.gc.ca/search/searchRealTime\\_e.html](https://wateroffice.ec.gc.ca/search/searchRealTime_e.html).

Water level and flow data are presented in Appendix B below. Flow data from smaller rivers are presented using a log scale on the y-axis to allow a better visualization of how current flows compare to historical data.

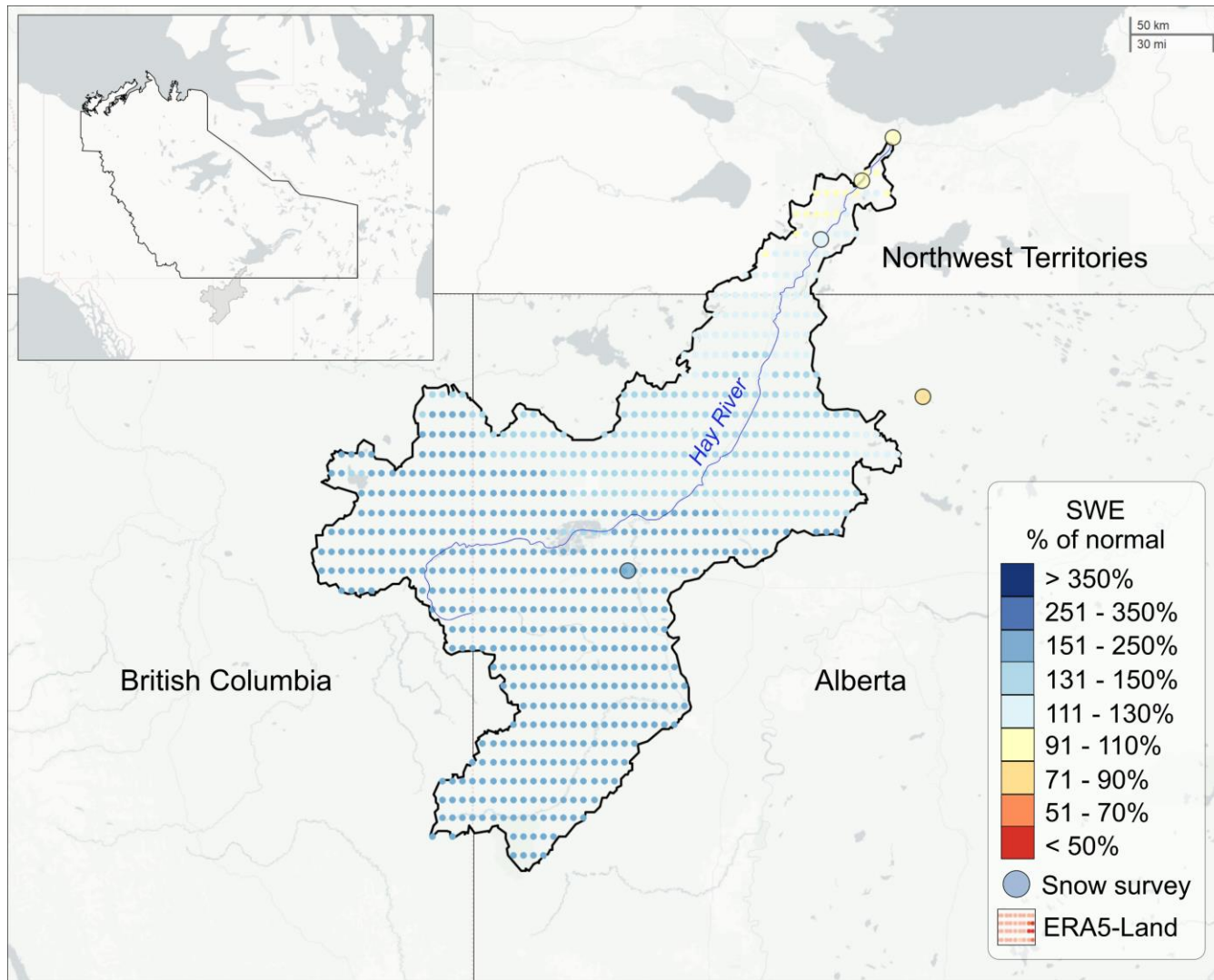
*Please be reminded that all real-time data are provisional.*

## Appendix A: Snowpack data for Spring 2026

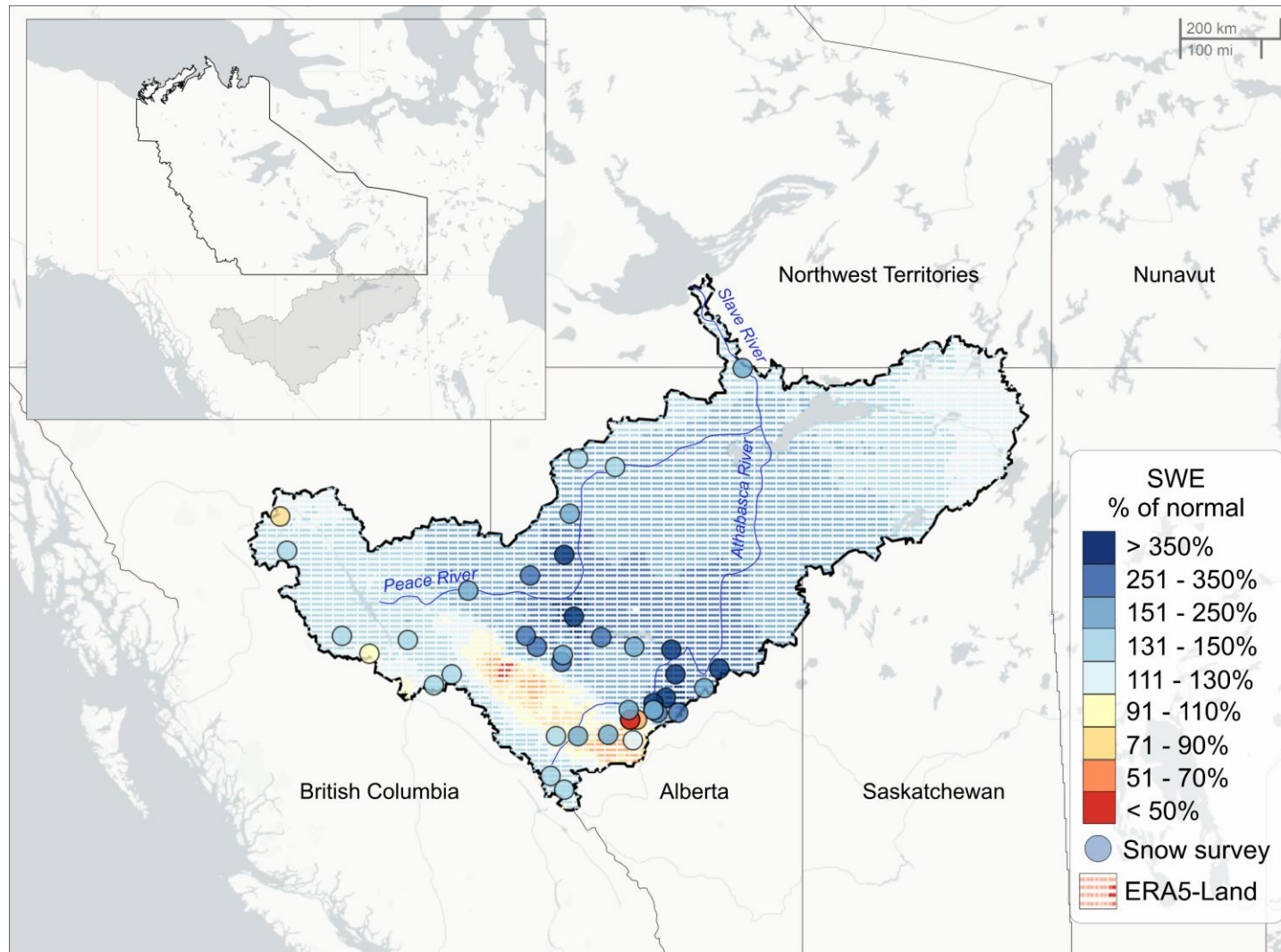


**Figure A-1:** End-of-season snow water equivalent (SWE, percent of normal) distribution in the Mackenzie River basin. Data from this map were compiled from ECC snow surveys (NWT) as well as snow survey data from neighboring jurisdictions. Gridded data sourced from ERA5-Land<sup>1</sup> are cropped to the Mackenzie River basin. Basin-averaged % of normal is 164 (snow survey data) and 134 (ERA5-Land dataset<sup>1</sup>).

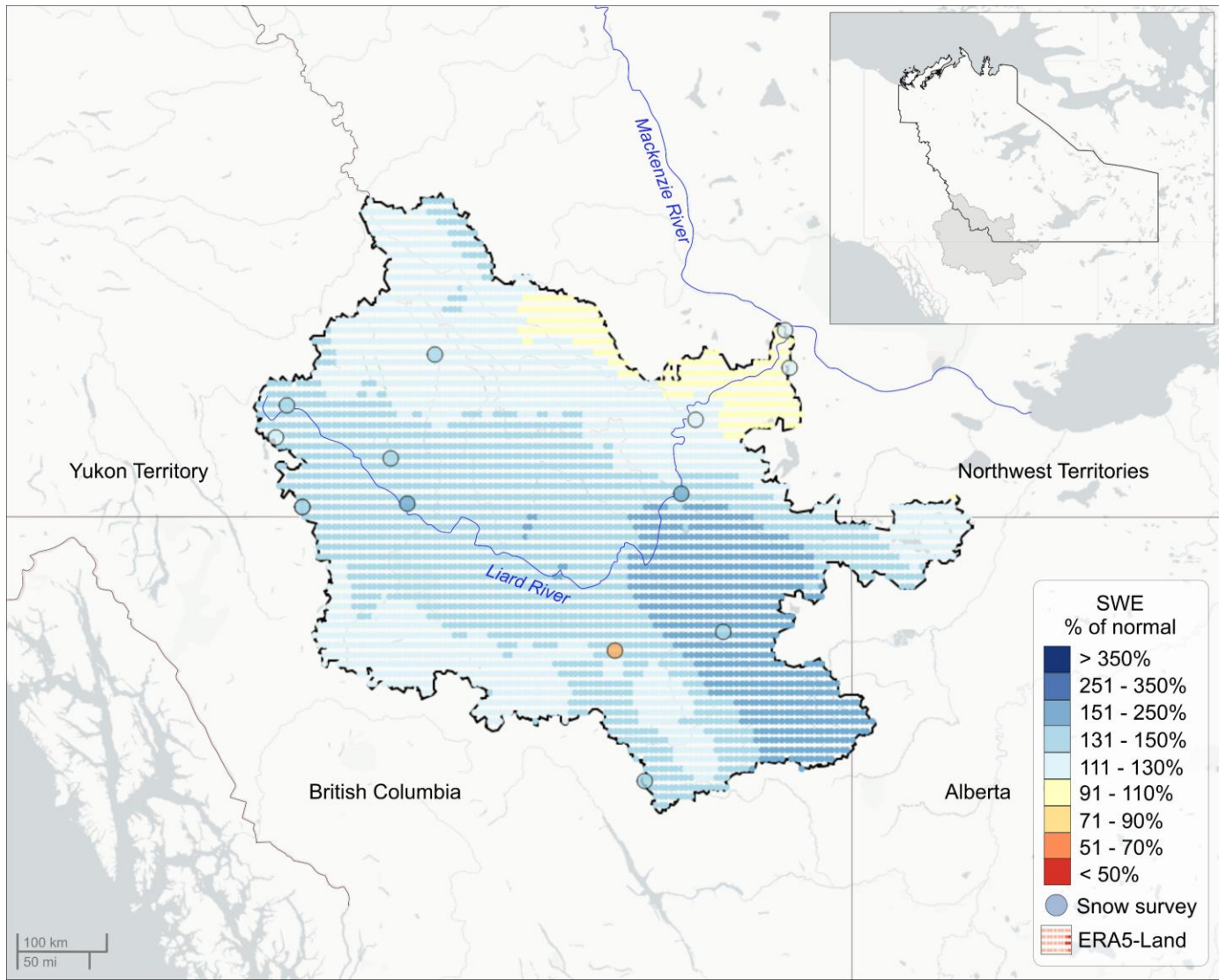
(1) Muñoz Sabater, J. (2019): ERA5-Land hourly data from 1950 to present. Copernicus Climate Change Service (C3S) Climate Data Store (CDS). DOI: [10.24381/cds.e2161bac](https://doi.org/10.24381/cds.e2161bac) (Accessed on 09-04-2026)



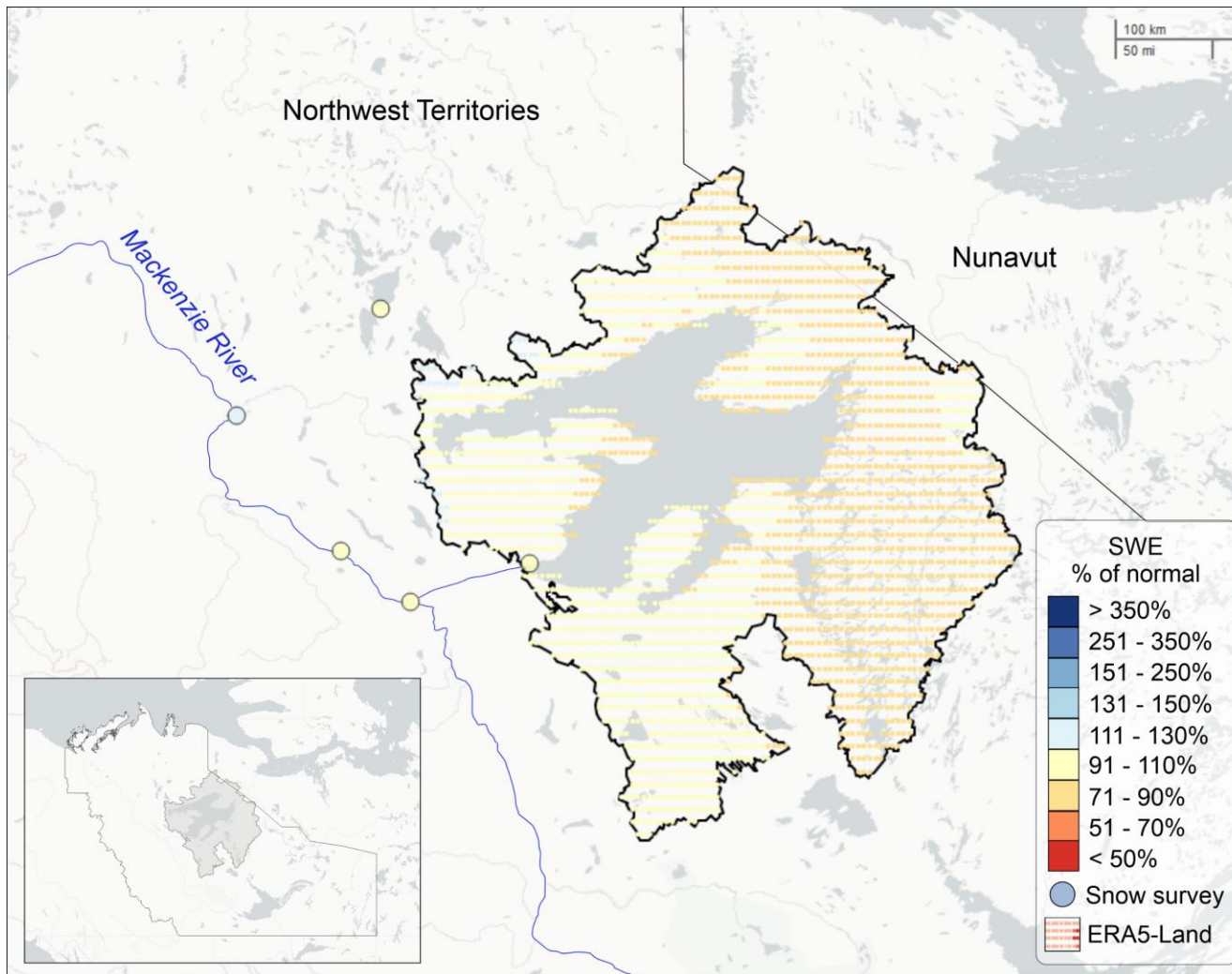
**Figure A-2.** End-of-season snow water equivalent (SWE, percent of normal) distribution in the Hay River basin. Data are mapped using ECC snow surveys as well as snow survey data from the Government of Alberta. Gridded data sourced from ERA5-Land are cropped to the Hay River basin. Inset map shows the basin (grey) relative to the NWT. Basin-averaged % of normal is 119 (snow survey data) and 166 (ERA5-Land dataset).



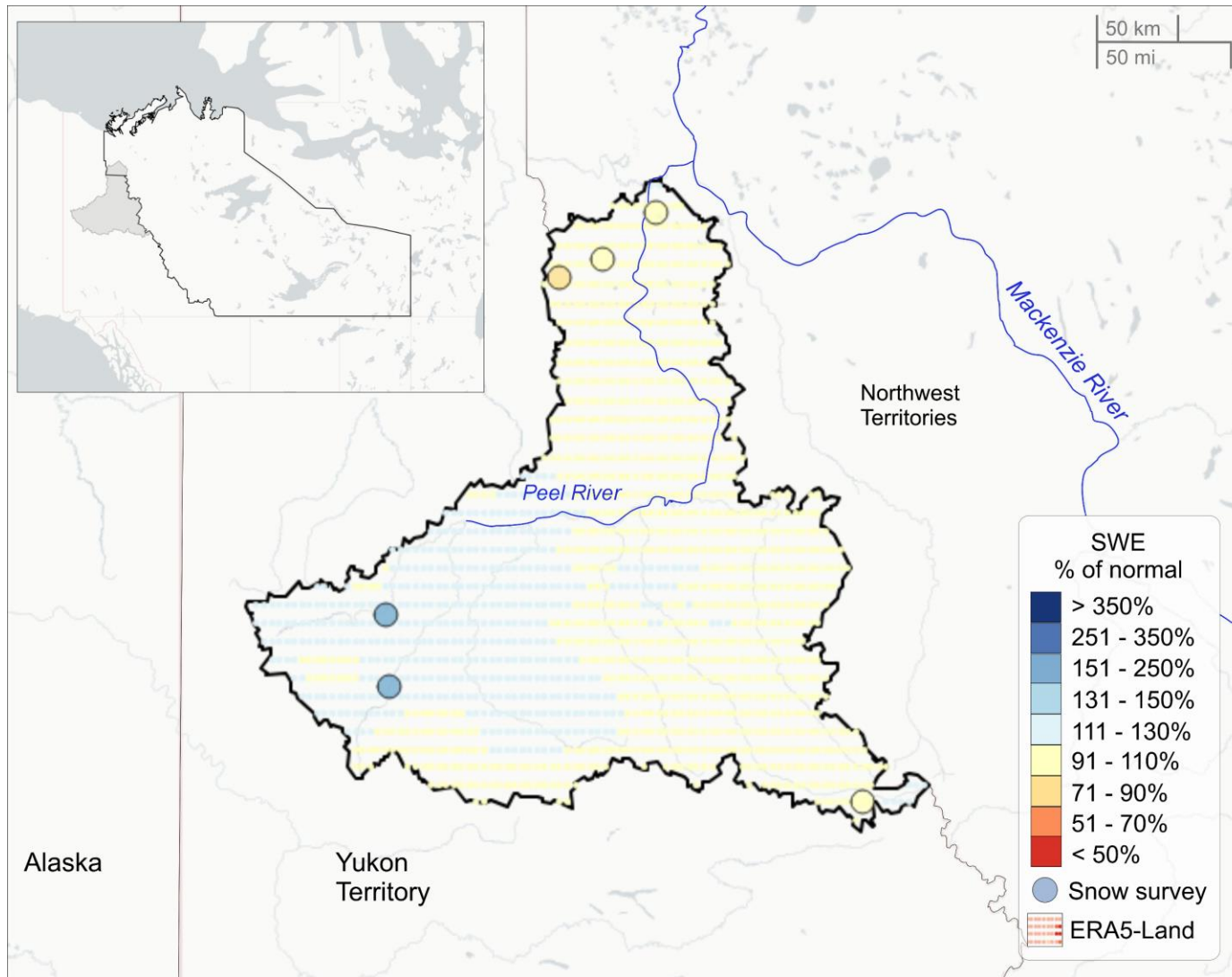
**Figure A-3.** End-of-season snow water equivalent (SWE, percent of normal) distribution in the Slave River basin. Data are mapped using ECC snow surveys as well as snow survey data from the Government of Alberta and Government of British Columbia. Gridded data sourced from ERA5-Land are cropped to the Slave River basin. Basin-averaged % of normal is 259 (snow survey data) and 177 (ERA5-Land dataset).



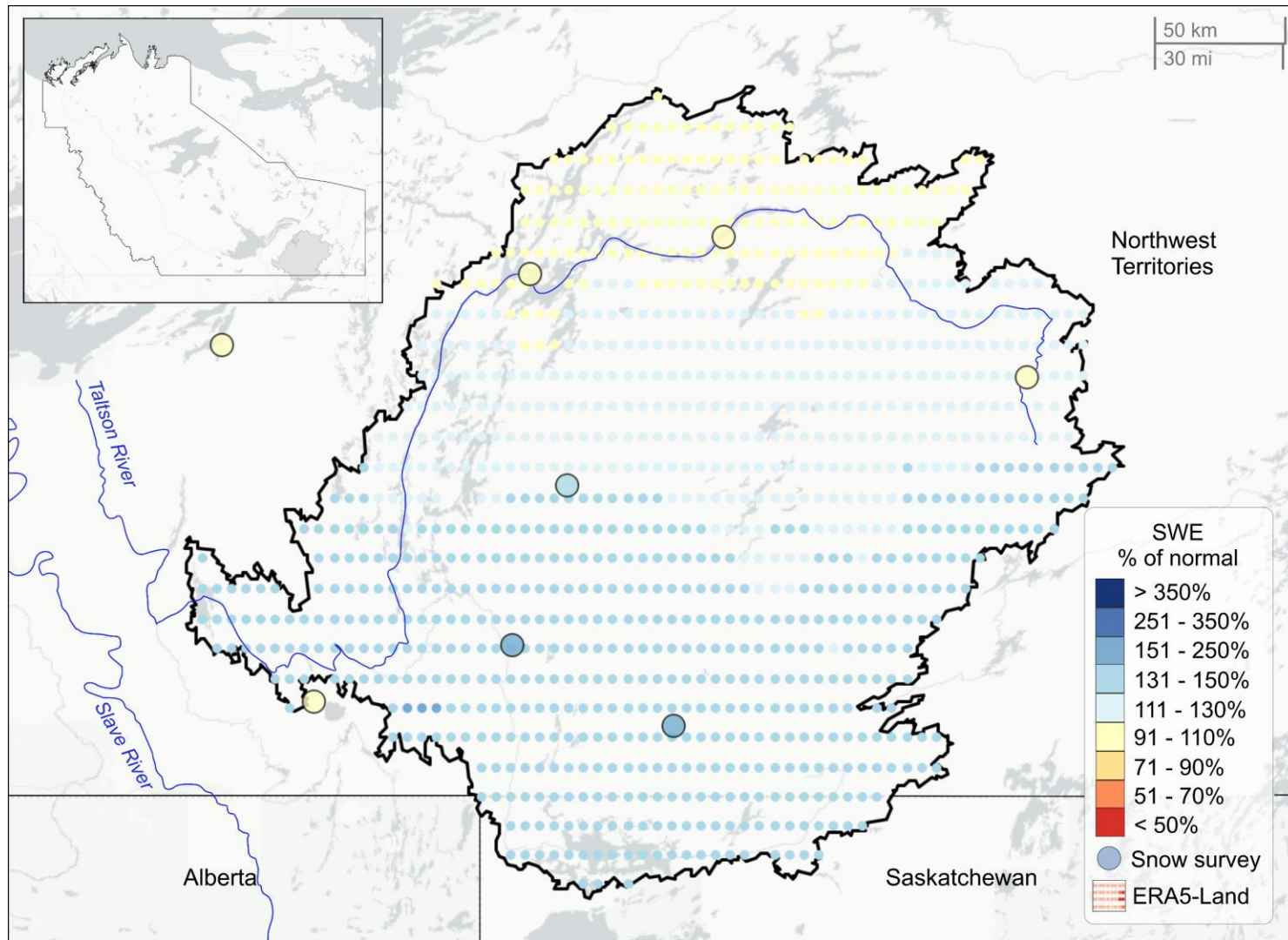
**Figure A-4.** End-of-season snow water equivalent (SWE, percent of normal) distribution in the Liard River basin. Data are mapped using ECC snow surveys as well as snow survey data from the Government of Yukon and the Government of British Columbia. Gridded data sourced from ERA5-Land are cropped to the Liard River basin. Basin-averaged % of normal is 134 (snow survey data) and 137 (ERA5-Land dataset).



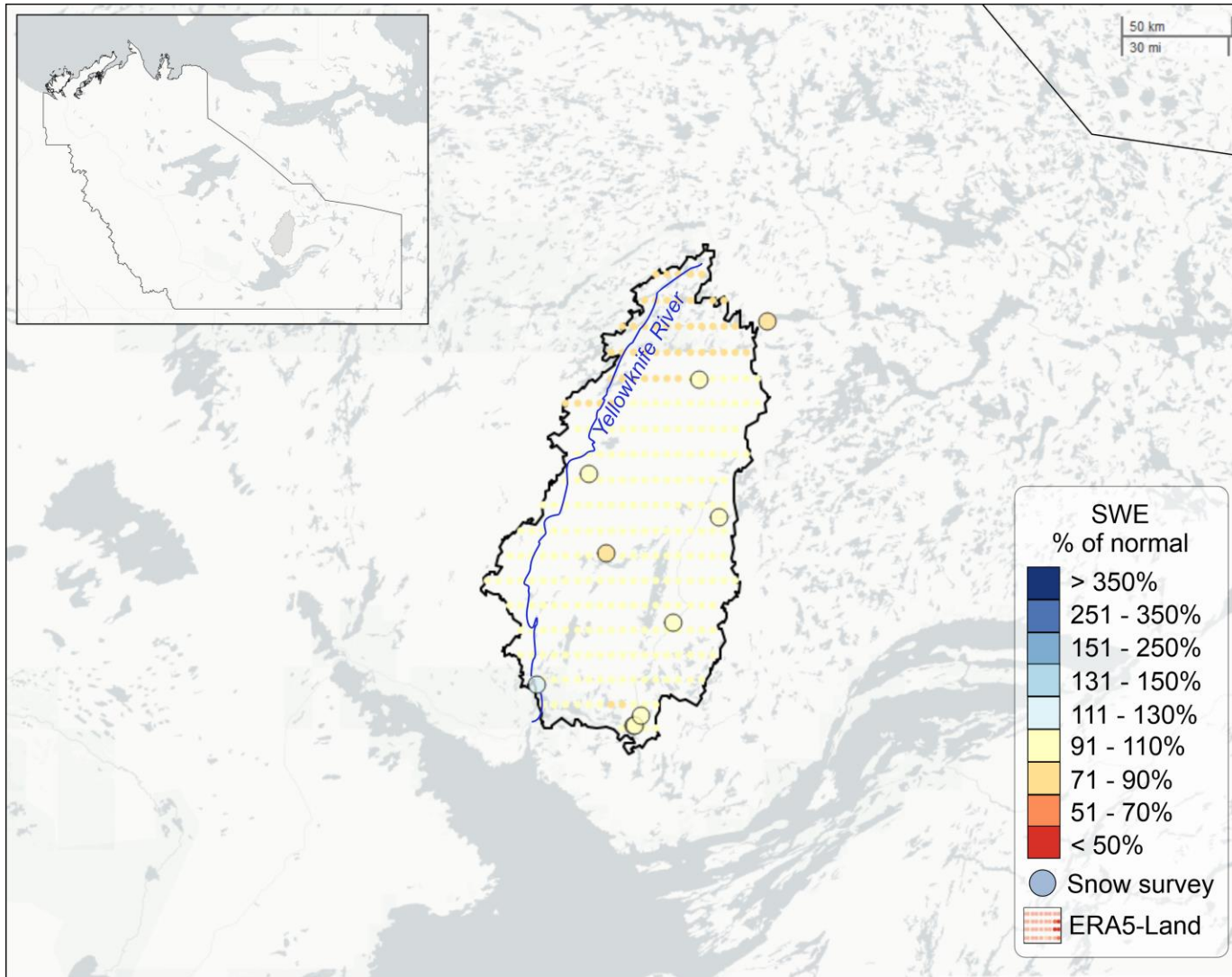
**Figure A-5.** End-of-season snow water equivalent (SWE, percent of normal) distribution in the Great Bear Lake basin. Data are mapped using ECC snow surveys. Gridded data sourced from ERA5-Land are cropped to the Great Bear Lake basin. Basin-averaged % of normal is 104 (snow survey data) and 90 (ERA5-Land dataset).



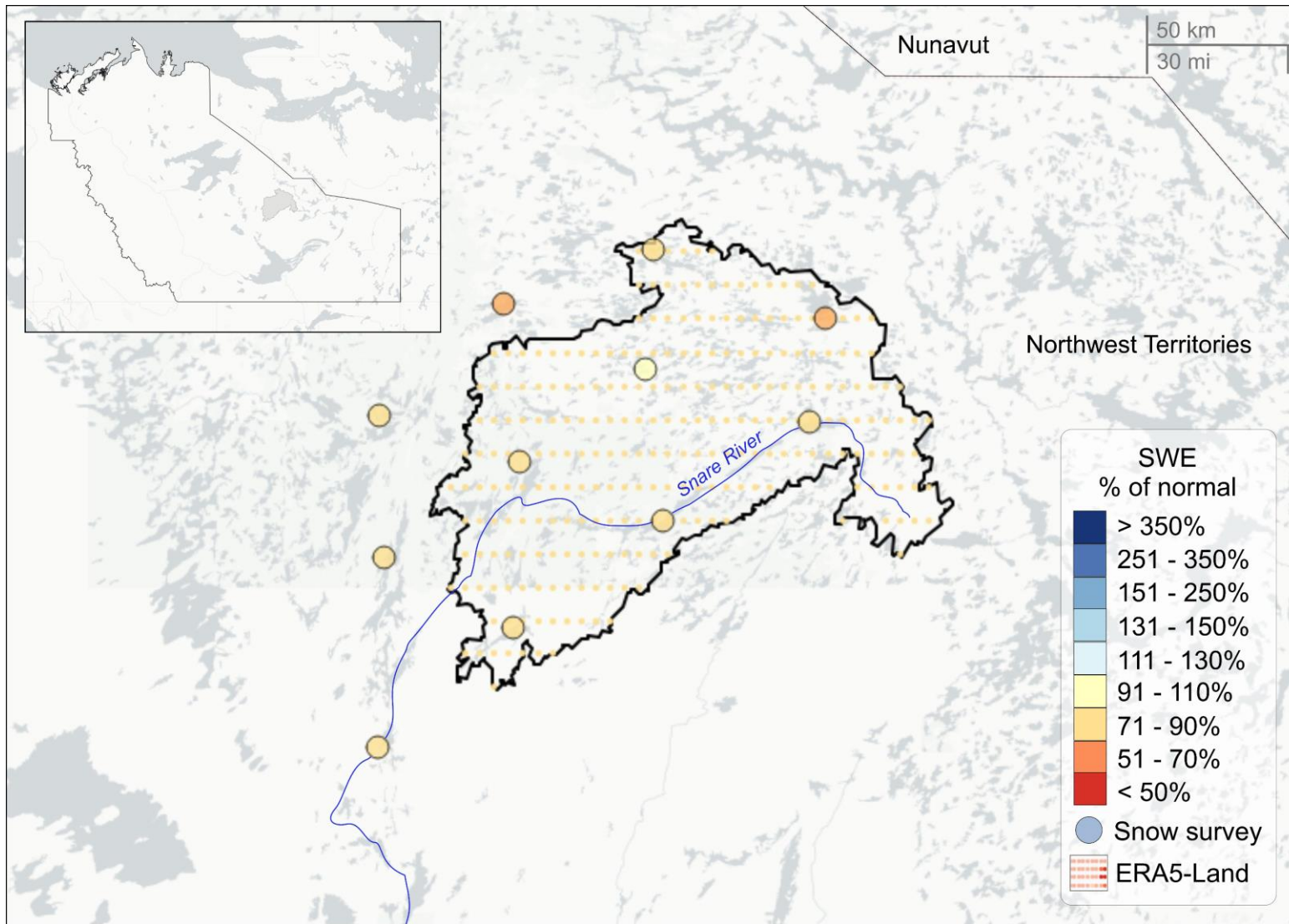
**Figure A-6.** End-of-season snow water equivalent (SWE, percent of normal) distribution in the Peel River basin. Data are mapped using ECC snow surveys as well as snow survey data from the Government of Yukon. Gridded data sourced from ERA5-Land are cropped to the Peel River basin. Basin-averaged % of normal is 118 (snow survey data) and 108 (ERA5-Land dataset).



**Figure A-7.** End-of-season snow water equivalent (SWE, percent of normal) distribution in the Taltson River basin. Data are mapped using ECC snow surveys. Gridded data sourced from ERA5-Land are cropped to the Taltson River basin. Inset map shows the basin (grey) relative to the NWT. Basin-averaged % of normal is 119 (snow survey data) and 128 (ERA5-Land dataset).



**Figure A-8.** End-of-season snow water equivalent (SWE, percent of normal) distribution in the Yellowknife River basin. Data are mapped using ECC snow surveys. Gridded data sourced from ERA5-Land are cropped to the Yellowknife River basin. Inset map shows the basin (grey) relative to the NWT. Basin-averaged % of normal is 98 (snow survey data) and 92 (ERA5-Land dataset).



**Figure A-9.** End-of-season snow water equivalent (SWE, percent of normal) distribution in the Snare River basin. Data are mapped using ECC snow surveys. Gridded data sourced from ERA5-Land are cropped to the Snare River basin. Inset map shows the basin (grey) relative to the NWT. Basin-averaged % of normal is 77 (snow survey data) and 76 (ERA5-Land dataset)

**Table A-1:** Detailed ECC snow survey data by location. Full dataset available upon request. f = Forestry site. *Note: Rank of Current SWE = where 1 is the highest snow year on record, and larger rank values represent low snow years.*

Site	Long	Lat	Length of Record (years)	Entire record Mean SWE (mm)	Current Mean Depth (cm)	Current Mean SWE (mm)	Rank of Current SWE	2026 % of Normal (%)
<b>Yellowknife River basin</b>				<i>italics: &lt;20 years</i>				
Allan Lake	-113.05	62.93	38	87.2	55.4	94.0	15	107.8
Bluefish Hydro	-114.25	62.68	31	82.2	59.6	96.0	8	116.8
Denis Lake	-112.64	63.35	39	109.9	58.3	100.6	23	91.5
Ingraham Trail km 64 NW	-113.40	62.51	44	85.8	46.8	81.5	24	95.0
Ingraham Trail km 64 SE	-113.39	62.51	28	81.32	51.0	87.5	8	107.6
Jolly Lake	-112.21	64.12	14	124.8	43.2	95.0	12	76.2
Little Latham Lake	-113.65	63.21	39	97.8	53.1	87.0	25	89.0
Nardin Lake	-113.80	63.52	39	105.5	55.0	100.5	20	95.2
Sharples Lake	-112.81	63.90	39	108.6	60.9	102.0	24	93.9
Tibbitt Lake	-113.34	62.55	27	84.9	50.4	90.0	9	106.0
<b>MEANS</b>					<b>53.4</b>	<b>93.4</b>		<b>97.9</b>
<b>Snare River basin</b>								
Big Lake	-112.92	64.80	29	111.9	33.9	60.6	28	54.1
Big Spruce Lake	-116.01	63.51	48	101.4	51.2	81.0	37	79.9
Castor Lake	-115.99	64.52	49	112.3	49.5	82.0	41	73.0
Christison Lake	-114.16	64.65	32	107.1	47.9	98.0	17	91.5
Ghost Lake	-115.07	63.88	49	104.6	55.9	87.2	36	83.4
Indin Lake	-115.03	64.38	48	110.0	54.3	89.0	35	80.9
Mattberry Lake	-115.96	64.09	49	98.2	47.7	81.5	36	83.0
Mesa Lake	-115.14	64.85	49	121.3	37.5	63.5	47	52.4
Snare Lake	-114.04	64.20	48	110.7	46.7	81.0	41	73.1
White Wolf Lake	-114.11	65.00	31	118.0	42.7	102.0	22	86.4
Winter Lake	-113.03	64.50	47	82.4	43.4	70.0	29	85.0
<b>MEANS</b>					<b>46.4</b>	<b>81.4</b>		<b>76.6</b>

**Other North Slave Region**

Mosquito Creek	-116.15	62.70	27	101.5	54.8	89.0	21	87.7
Pocket Lake	-114.37	62.51	28	97.1	54.5	90.5	15	93.2
<b>MEANS</b>					<b>54.6</b>	<b>89.9</b>		<b>90.5</b>

**South Slave Region**

Boundary Lake	-115.55	59.49	32	160.8	81.3	141.1	24	87.8
Crown Fire <sup>f</sup>	-117.15	61.58	9	89.6	52.9	92.5	5	103.2
Enterprise <sup>f</sup>	-116.15	60.56	9	112.1	70.0	123.0	2	109.8
Fort Providence <sup>f</sup>	-117.46	61.26	12	101.6	63.1	91.1	9	89.7
Fort Smith	-111.91	60.00	43	90.1	74.4	143.5	1	159.3
Hay River <sup>f</sup>	-115.84	60.77	12	104.8	66.9	105.0	7	100.2
Kakisa River	-117.27	61.00	45	106.5	70.6	114.0	18	107.1
Little Buffalo Tower	-113.79	60.99	44	118.9	69.8	108.8	26	91.5
Nyarling River	-114.17	60.34	43	105.5	69.8	119.0	14	112.8
Pine Point	-114.46	60.82	44	136.8	73.0	147.0	17	107.4
Swede Creek	-116.56	60.27	43	94.1	70.0	105.5	9	112.1
<b>MEANS</b>					<b>69.3</b>	<b>117.3</b>		<b>107.3</b>

**Taltson River basin**

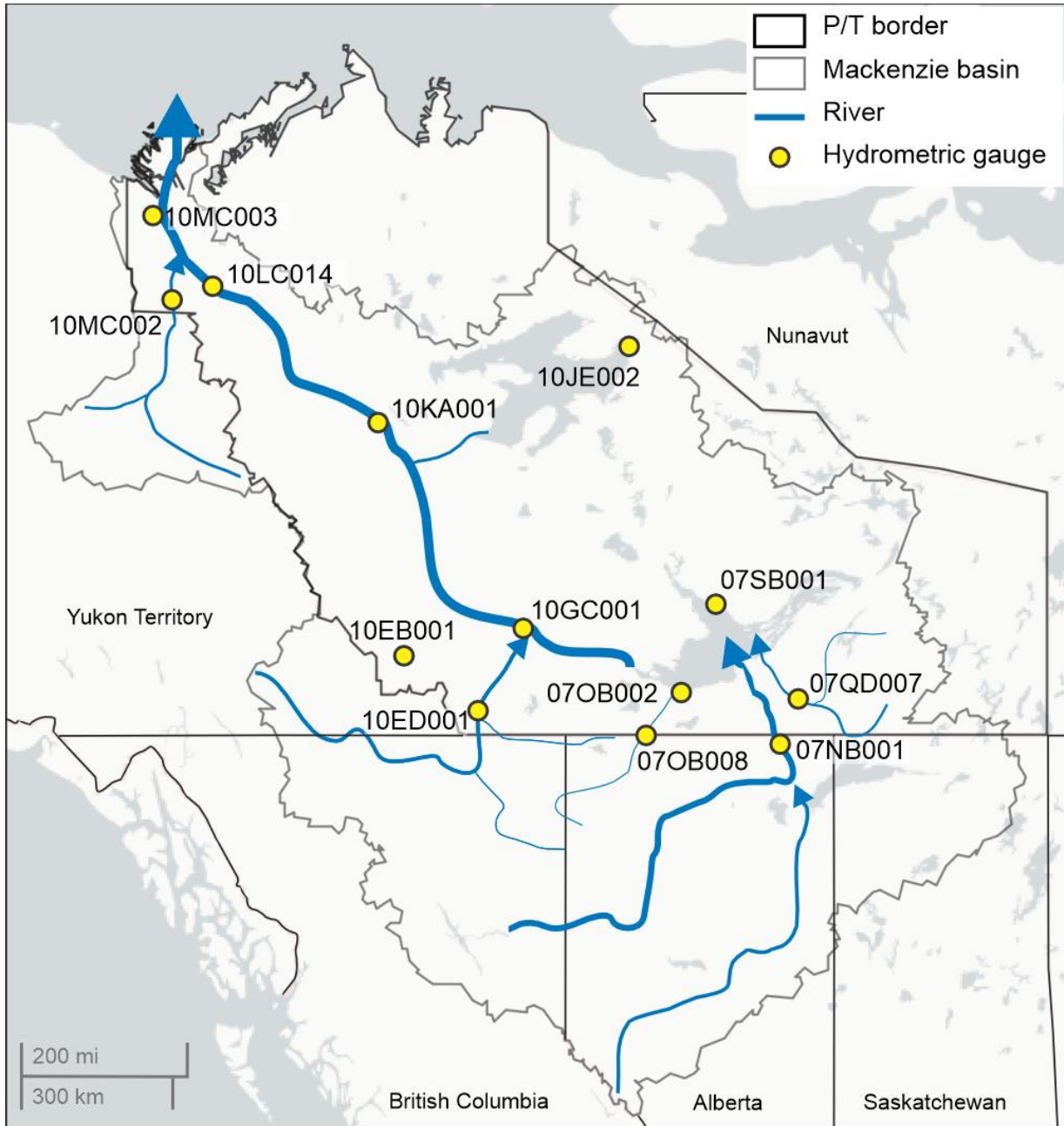
Dymond Lake	-106.28	61.40	55	119.8	65.1	124.5	21	104.0
Gray Lake	-108.35	61.85	58	108.1	57.4	111.5	26	103.1
Hill Island Lake	-109.79	60.51	55	97.5	70.1	149.0	3	152.8
Nonacho Lake	-109.66	61.73	56	106.1	58.0	109.0	24	102.7
Piers Lake	-111.14	60.32	41	106.1	57.3	110.5	15	104.2
Powder Lake <sup>f</sup>	-109.41	61.04	11	113.3	71.9	147.5	2	130.2
Thubun Lake	-111.76	61.50	40	92.5	52.4	95.5	16	103.3
Whirlwind Lake	-108.69	60.24	54	100.3	73.2	150.5	2	150.0
<b>MEANS</b>					<b>63.2</b>	<b>124.8</b>		<b>118.8</b>

**Dehcho Region**

Checkpoint	-121.25	61.45	31	106.2	56.6	123.3	10	116.1
Fort Liard <sup>f</sup>	-123.40	60.23	12	92.2	74.0	153.0	2	166.0
Fort Simpson	-121.33	61.80	31	96.4	56.6	108.0	9	112.0
Jean Marie River <sup>f</sup>	-120.65	61.52	12	96.3	60.7	113.0	4	117.4

Nahanni Butte <sup>f</sup>	-123.11	60.95	12	<i>104.5</i>	67.7	128.0	3	122.5
Trout Lake <sup>f</sup>	-119.81	61.14	12	<i>100.1</i>	66.2	124.0	4	123.8
Wrigley <sup>f</sup>	-123.41	63.20	12	<i>88.4</i>	64.1	91.3	5	103.2
	<b>MEANS</b>				<b>63.7</b>	<b>120.1</b>		<b>123.0</b>
<b>Sahtu Region</b>								
Colville Lake	-126.06	67.02	11	<i>94.9</i>	61.0	104.0	4	109.6
Deline	-123.43	65.19	10	<i>104.1</i>	55.8	105.0	6	100.9
Fort Good Hope	-128.61	66.27	10	<i>113.2</i>	72.5	129.0	4	113.9
Norman Wells	-126.76	65.28	11	<i>98.0</i>	53.3	88.9	8	90.7
Tulita	-125.53	64.90	10	<i>101.4</i>	56.7	105.0	5	103.5
	<b>MEANS</b>				<b>59.9</b>	<b>106.4</b>		<b>103.7</b>
<b>Inuvialuit/Gwich'in Regions</b>								
Caribou Creek	-133.48	68.05	41	121.4	79.9	157.0	6	129.3
Fort McPherson	-134.74	67.47	13	122.3	66.6	124.0	8	101.4
James Creek	-136.00	67.14	11	93.2	35.3	66.0	8	70.8
Midway Lake	-135.44	67.23	11	152.8	82.9	163.0	5	106.7
Rengleng River	-133.83	67.64	41	128.3	77.5	155.0	8	120.8
	<b>MEANS</b>				<b>68.4</b>	<b>133.0</b>		<b>105.8</b>

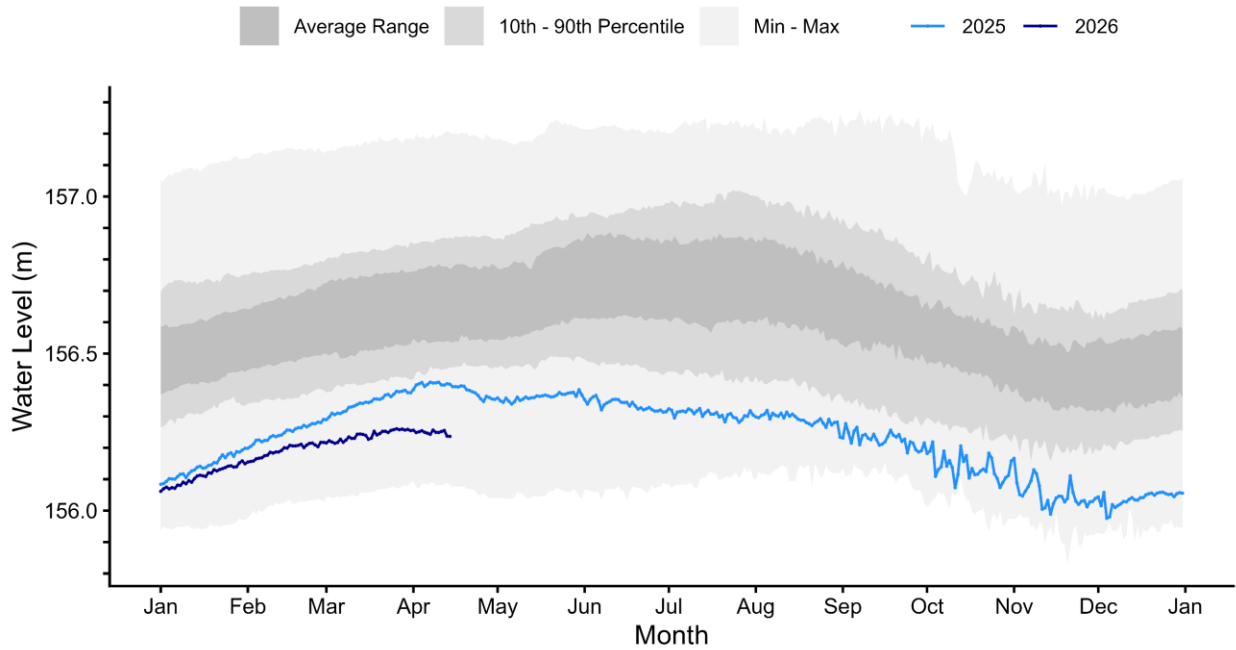
Appendix B: Provisional water level and flow plots (as of April 14, 2026)



Above - A map of the hydrometric stations included in the plots below.

### GREAT SLAVE LAKE AT YELLOWKNIFE BAY (07SB001)

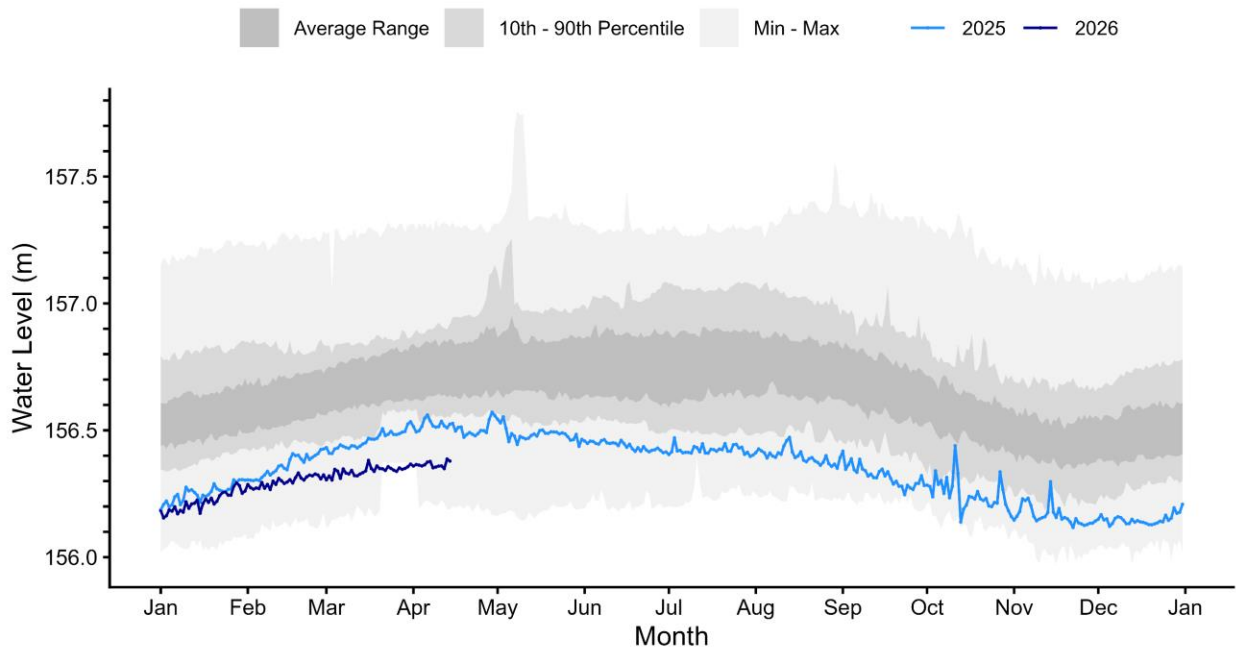
Record Length: 91 years | Period of Record: 1934-1935; 1938-2026



**Figure B-1:** Water levels (m) on Great Slave Lake at Yellowknife Bay for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### GREAT SLAVE LAKE AT HAY RIVER (07OB002)

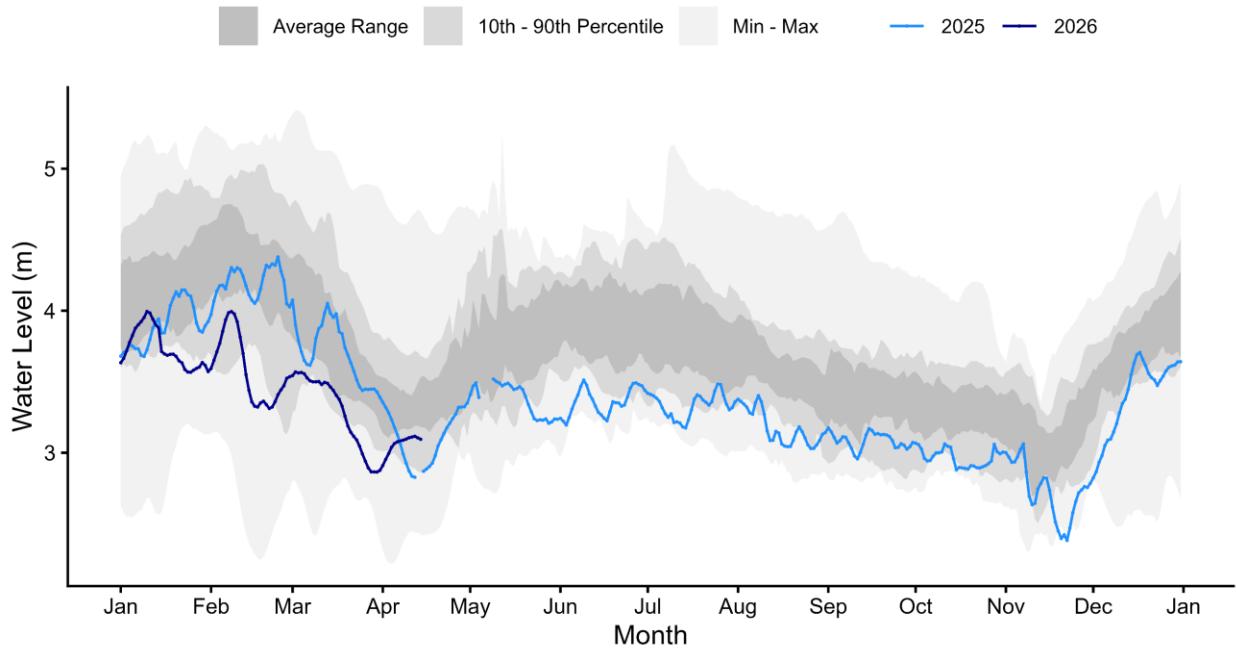
Record Length: 56 years | Period of Record: 1959-1970; 1983-2026



**Figure B-2:** Water levels (m) on Great Slave Lake at Hay River for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### SLAVE RIVER AT FITZGERALD (ALBERTA) (07NB001)

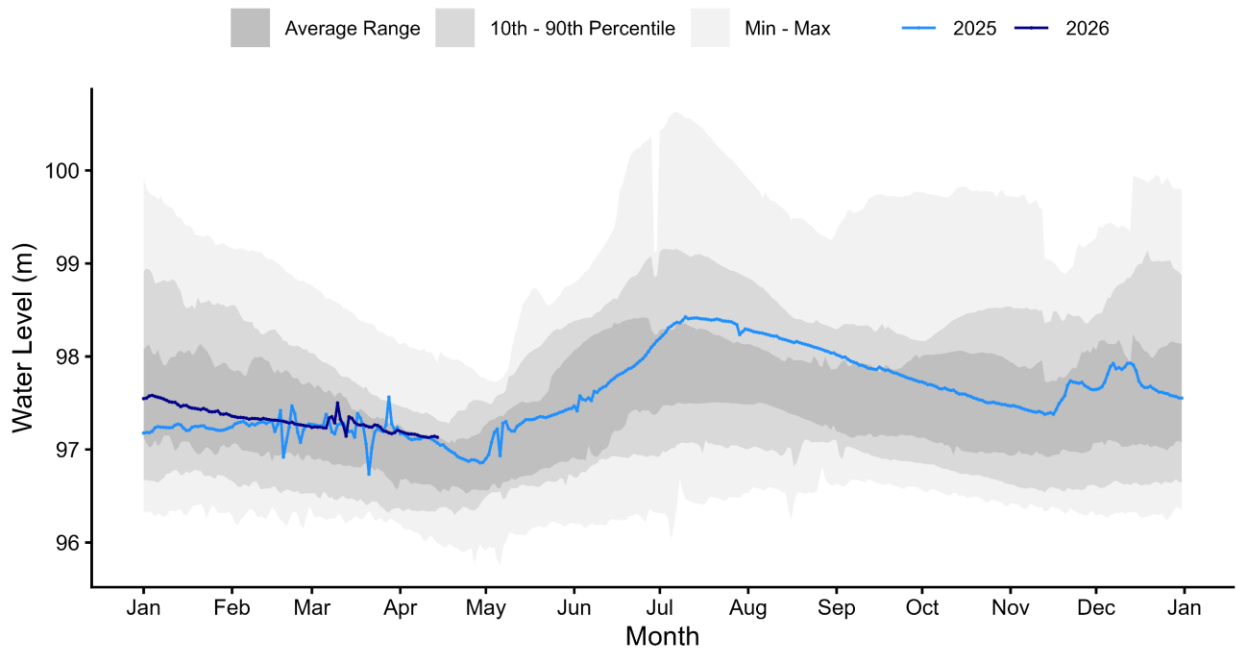
Record Length: 25 years | Period of Record: 2002-2026



**Figure B-3:** Water level (m) on the Slave River at Fitzgerald for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### TALTSON RIVER BELOW HYDRO DAM (07QD007)

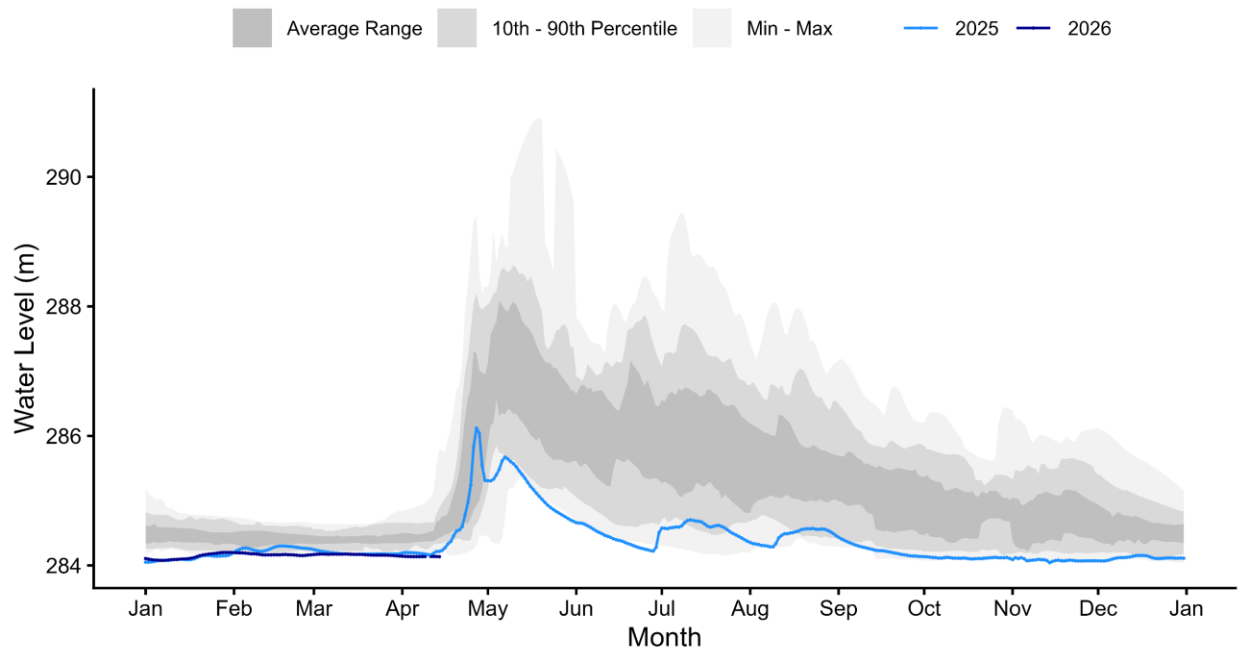
Record Length: 24 years | Period of Record: 2002-2008; 2010-2026



**Figure B-4:** Water level (m) on the Taltson River for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### HAY RIVER NEAR ALTA/NWT BOUNDARY (07OB008)

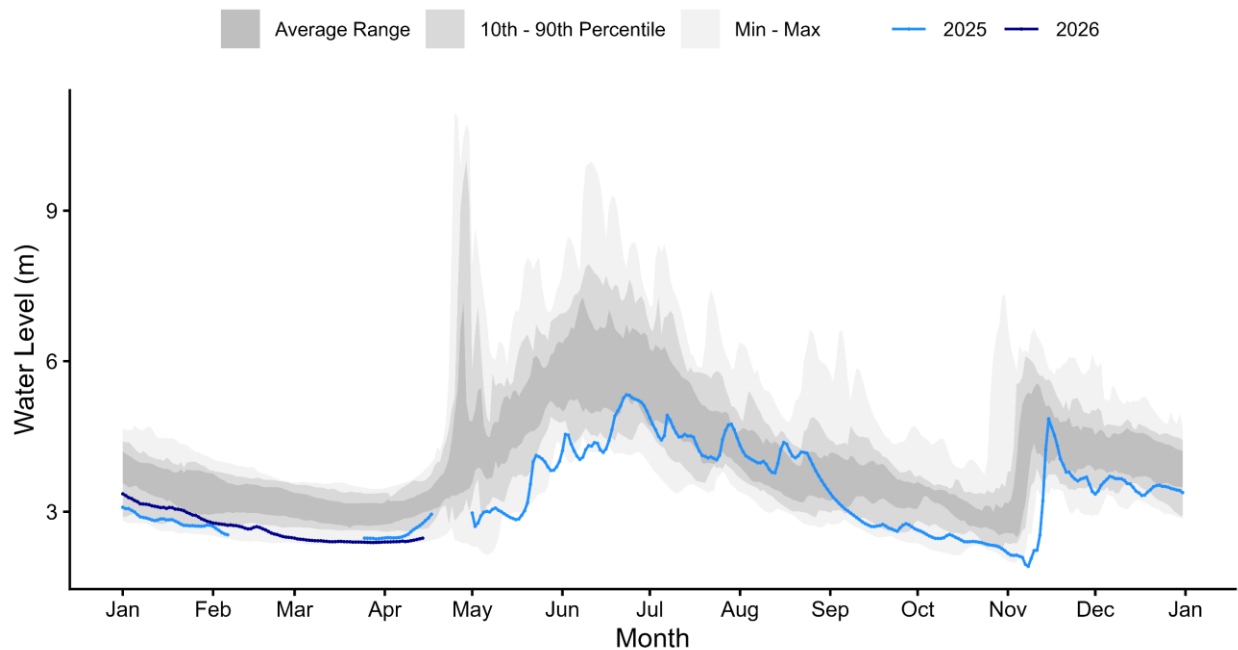
Record Length: 36 years | Period of Record: 1986-1998; 2004-2026



**Figure B-5:** Water level (m) on the Hay River near the Alberta/NWT boundary for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### LIARD RIVER AT FORT LIARD (10ED001)

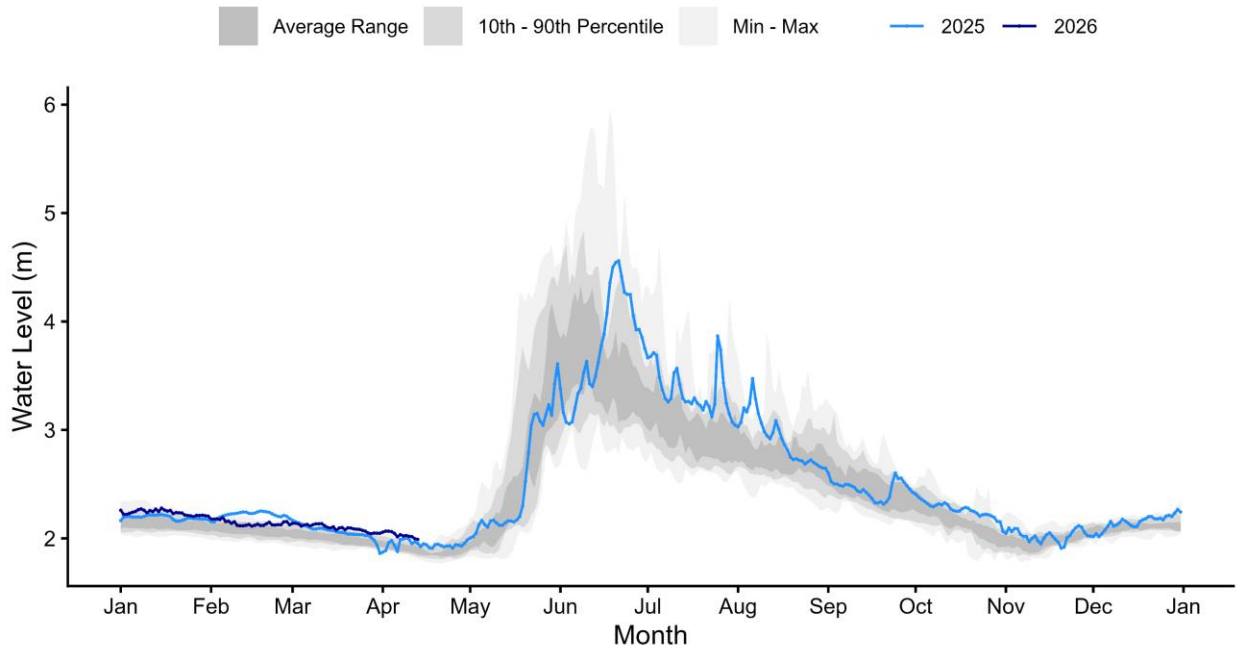
Record Length: 25 years | Period of Record: 2002-2026



**Figure B-6:** Water level (m) on the Liard River at Fort Liard for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### SOUTH NAHANNI RIVER ABOVE VIRGINIA FALLS (10EB001)

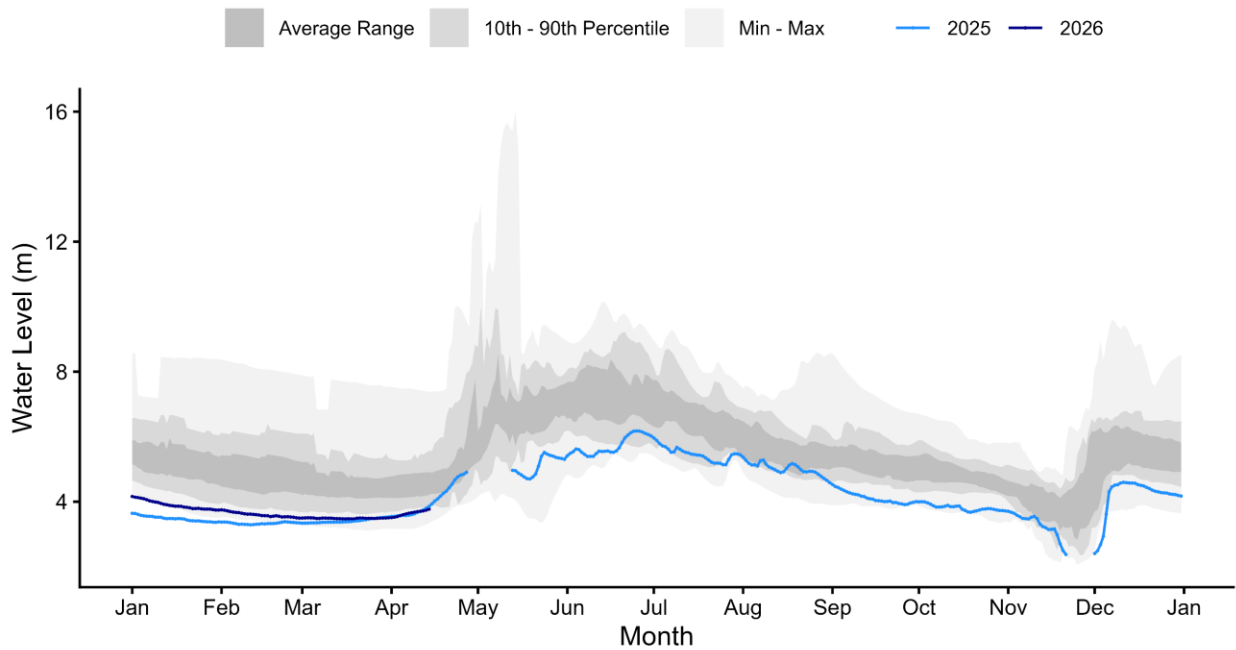
Record Length: 21 years | Period of Record: 2002-2019; 2024-2026



**Figure B-7:** Water level (m) on the South Nahanni River above Virginia Falls for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### MACKENZIE RIVER AT FORT SIMPSON (10GC001)

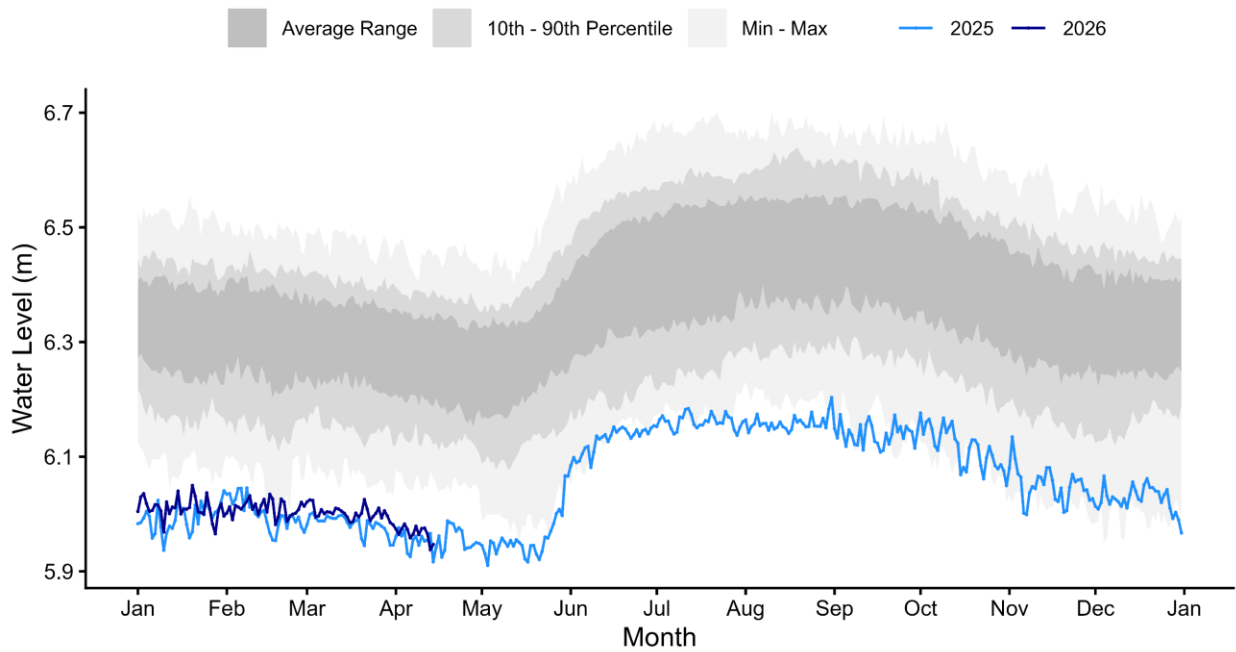
Record Length: 26 years | Period of Record: 2001-2026



**Figure B-8:** Water level (m) on the Mackenzie River at Fort Simpson for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### GREAT BEAR LAKE AT HORNBY BAY (10JE002)

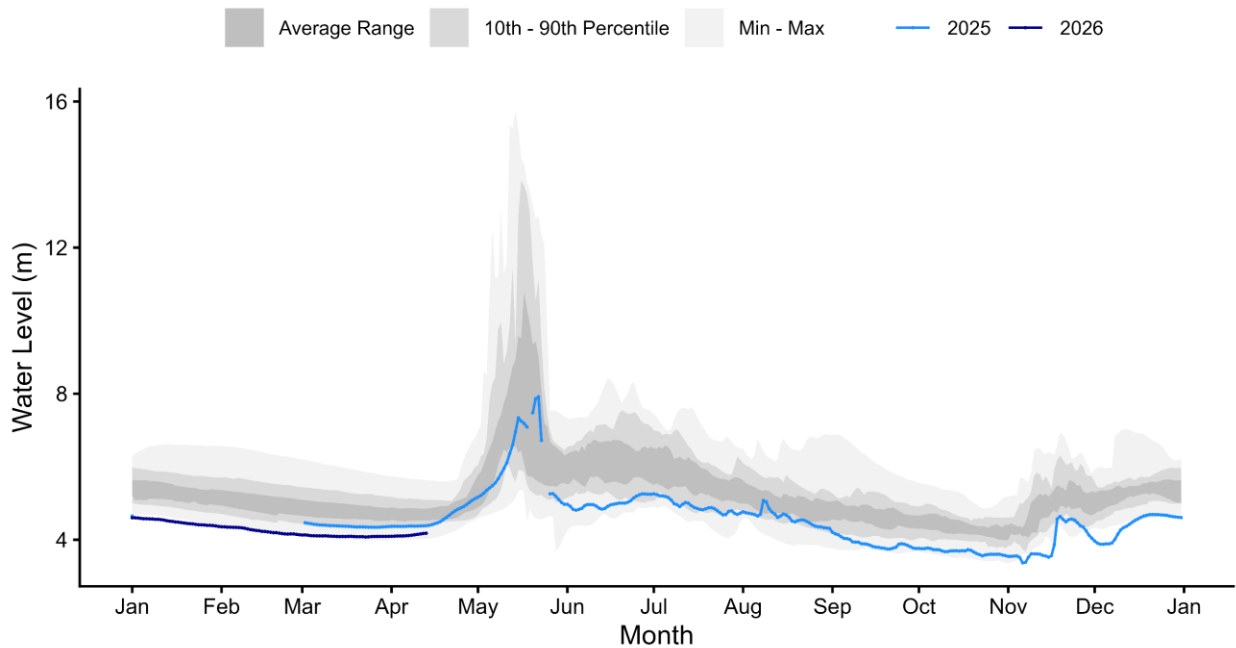
Record Length: 43 years | Period of Record: 1984-2026



**Figure B-9:** Water level (m) on Great Bear Lake for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### MACKENZIE RIVER AT NORMAN WELLS (10KA001)

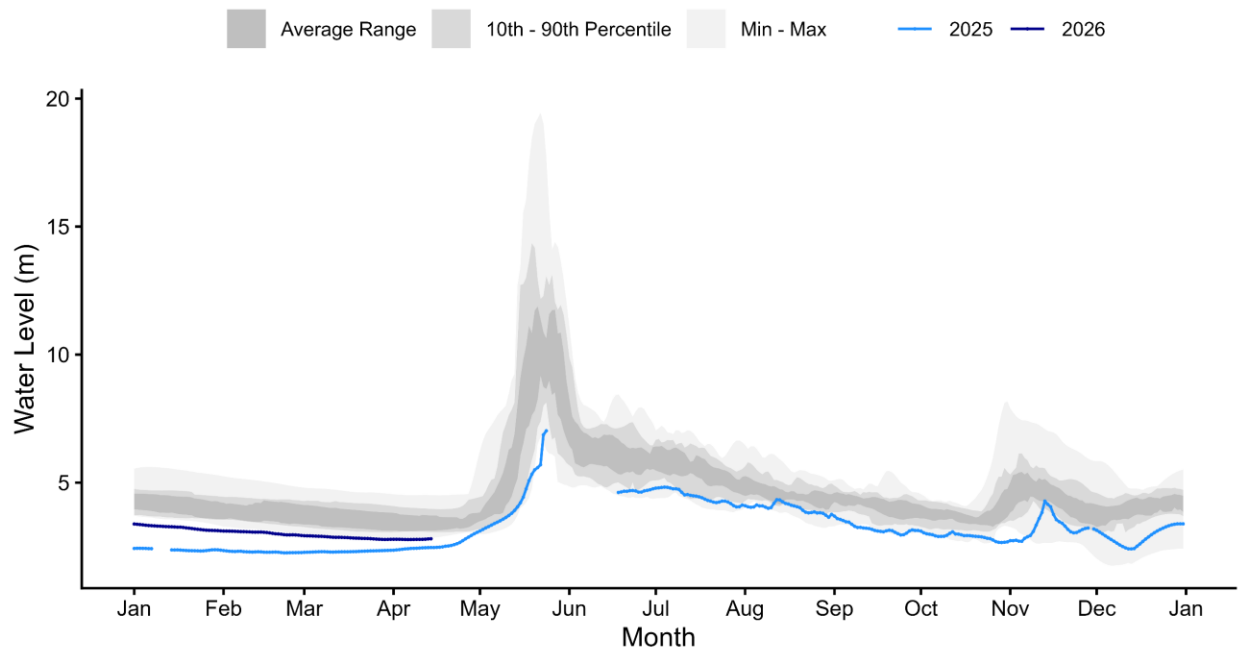
Record Length: 25 years | Period of Record: 2002-2026



**Figure B-10:** Water level (m) on the Mackenzie River at Norman Wells for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### MACKENZIE RIVER AT ARCTIC RED RIVER (10LC014)

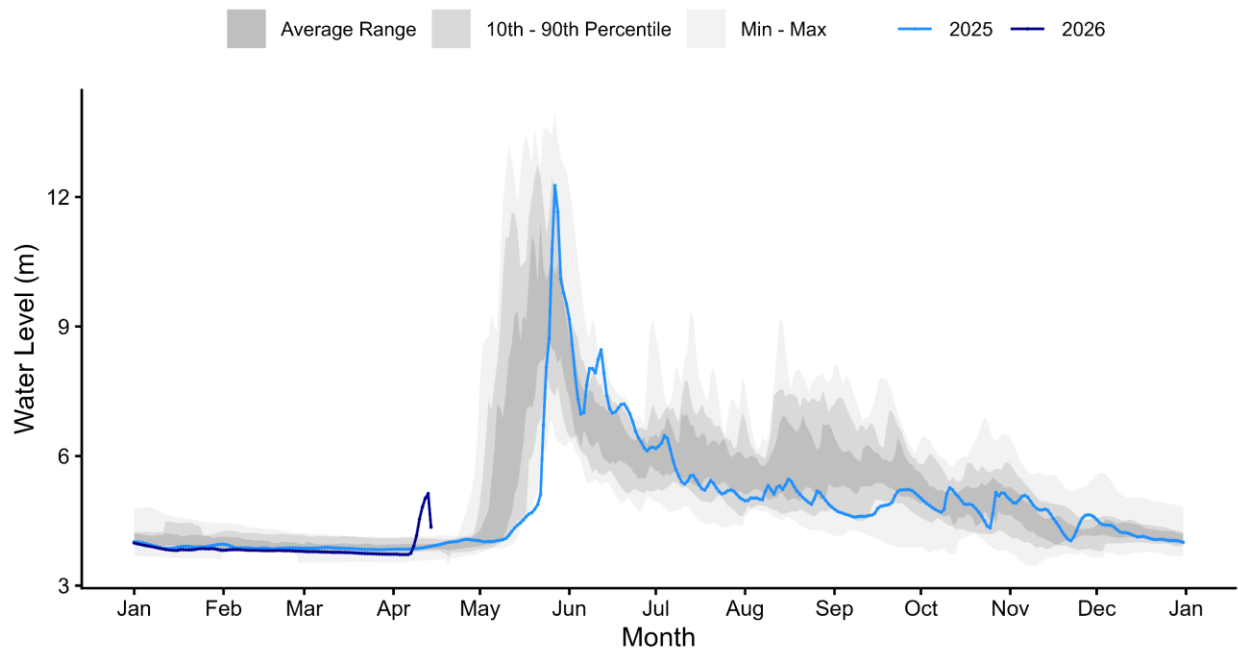
Record Length: 21 years | Period of Record: 2002-2019; 2024-2026



**Figure B-11:** Water level (m) on the Mackenzie River at Tsiigehtchic (Arctic Red River) for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

### PEEL RIVER ABOVE FORT MCPHERSON (10MC002)

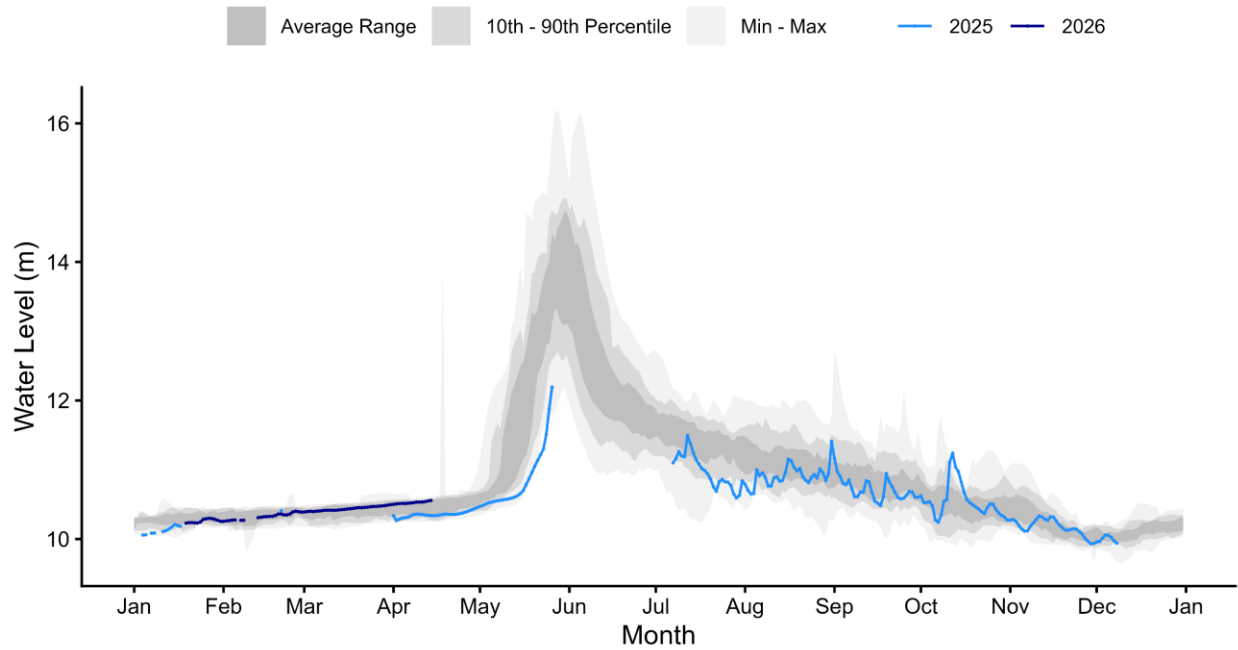
Record Length: 20 years | Period of Record: 2002-2018; 2024-2026



**Figure B-11:** Water level (m) on the Peel River above Fort McPherson for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums. Note – the recent spike is likely due to ice movement and should be interpreted with caution.

### MACKENZIE RIVER (PEEL CHANNEL) ABOVE AKLAVIK (10MC003)

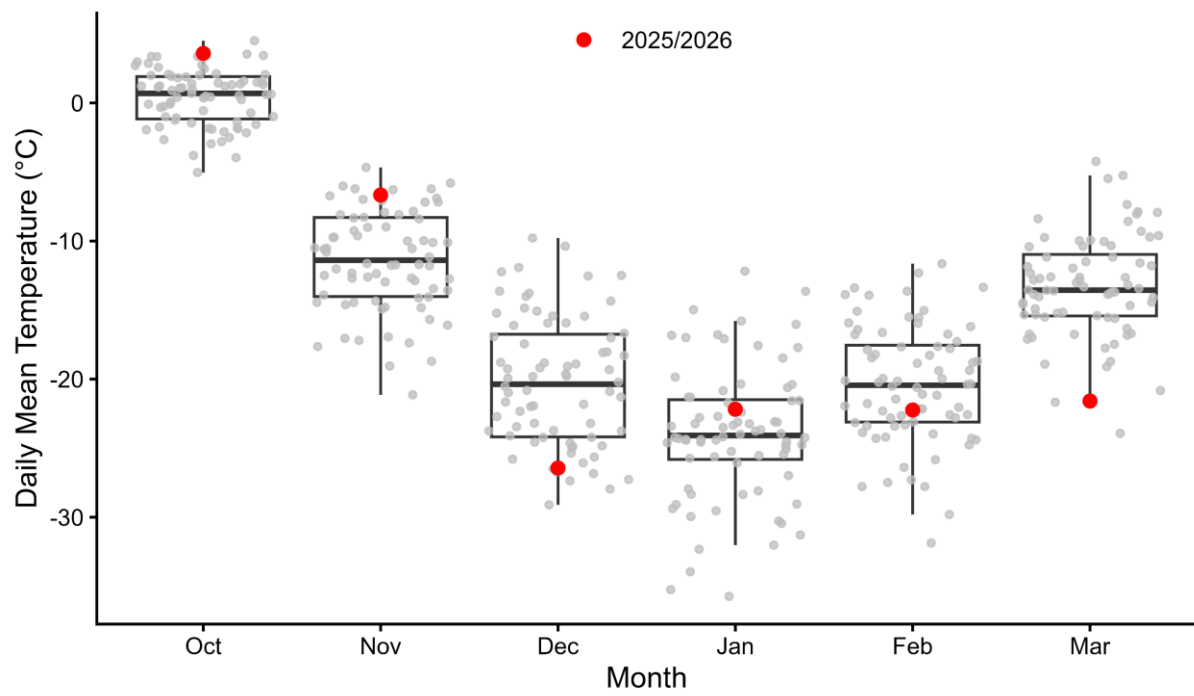
Record Length: 37 years | Period of Record: 1982-1986; 1991-2019; 2024-2026



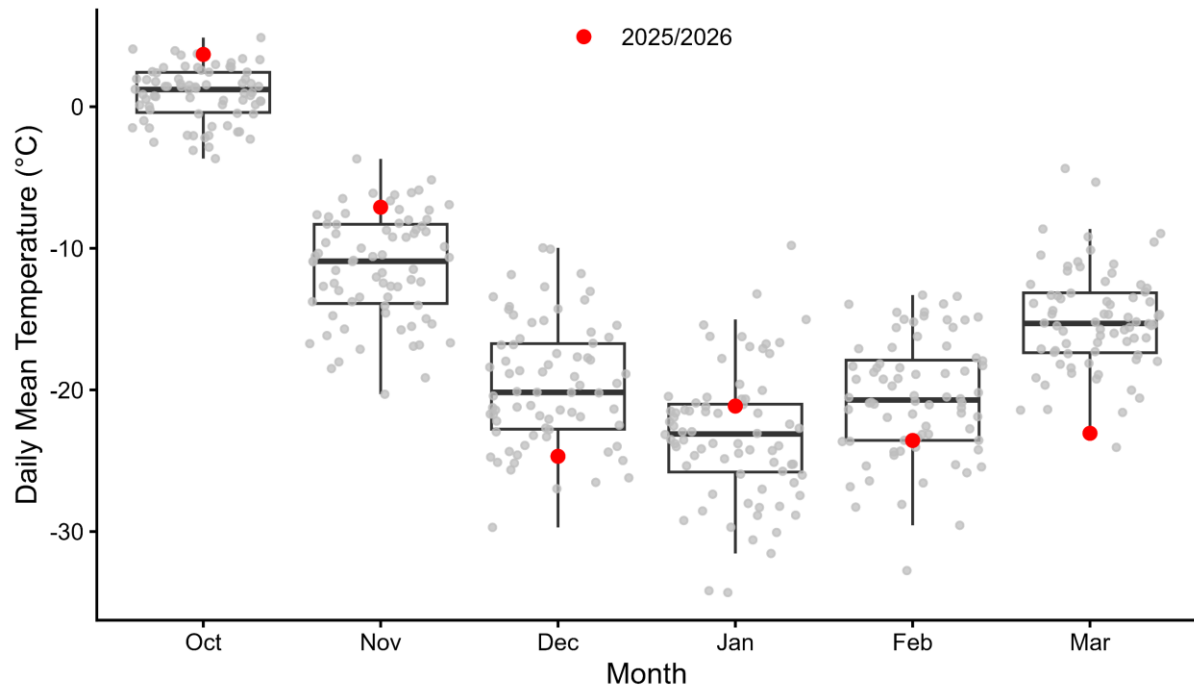
**Figure B-12:** Water level (m) on the Mackenzie River (Peel Channel) above Aklavik for 2025 and 2026, relative to the historic average range (defined as the interquartile range) and historic maximum and minimums.

## Appendix C: Climate data for select NWT communities

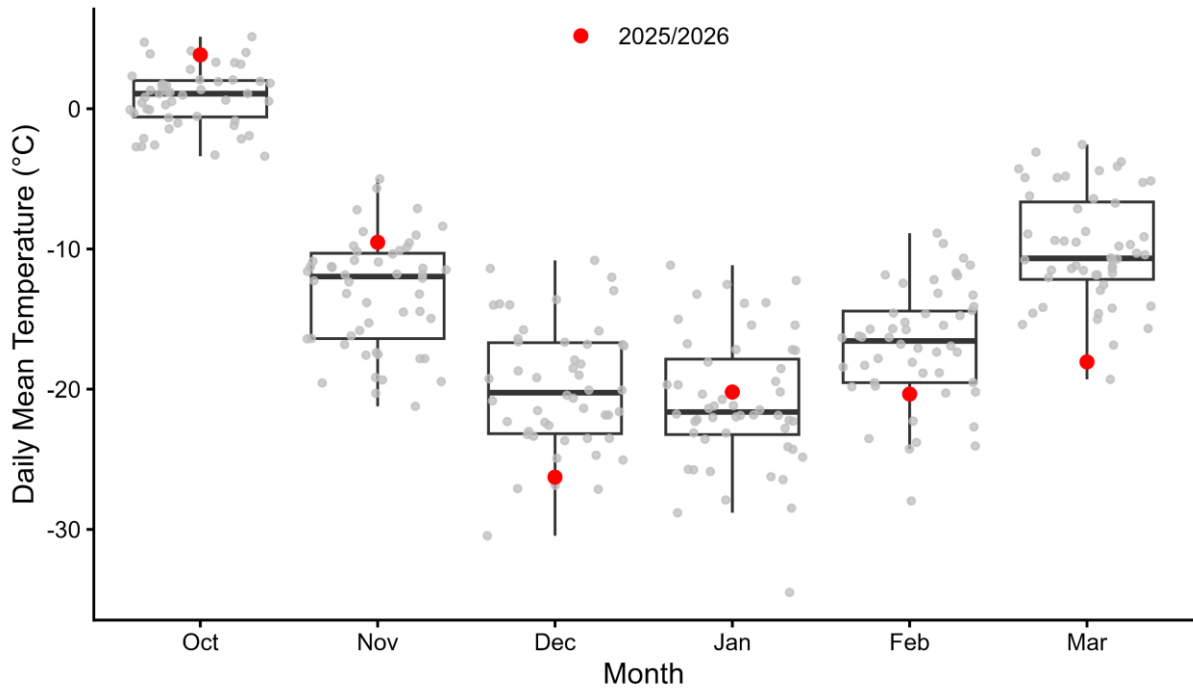
### Fort Smith Air Temperatures



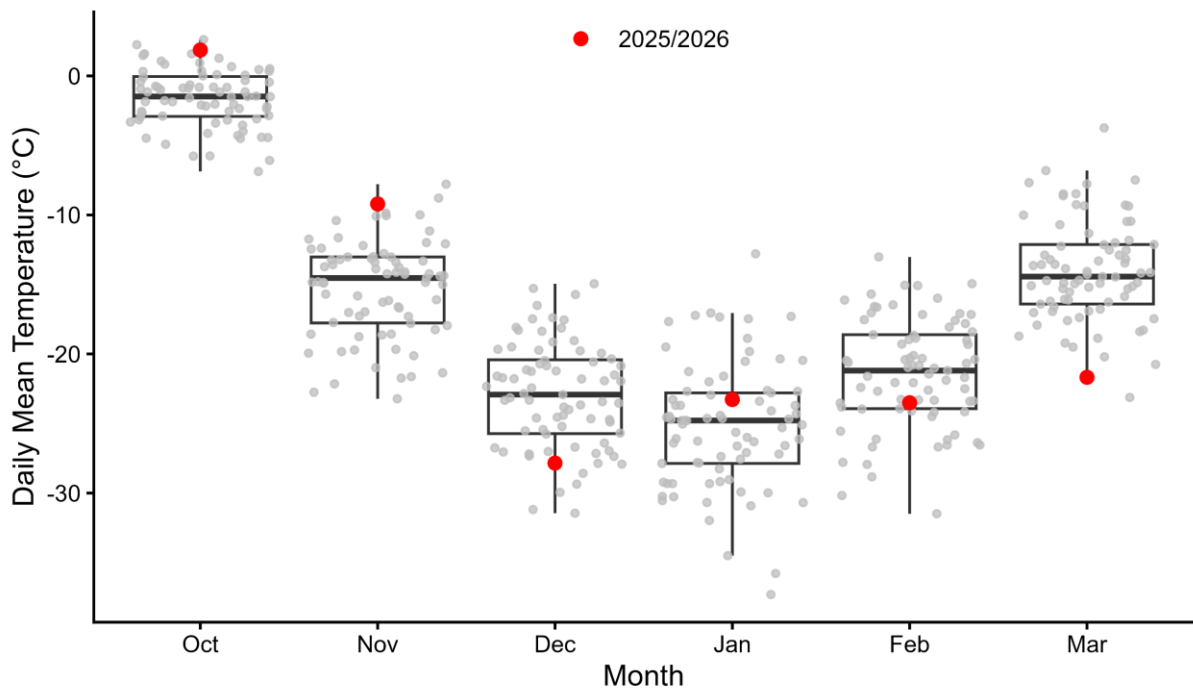
### Hay River Air Temperatures



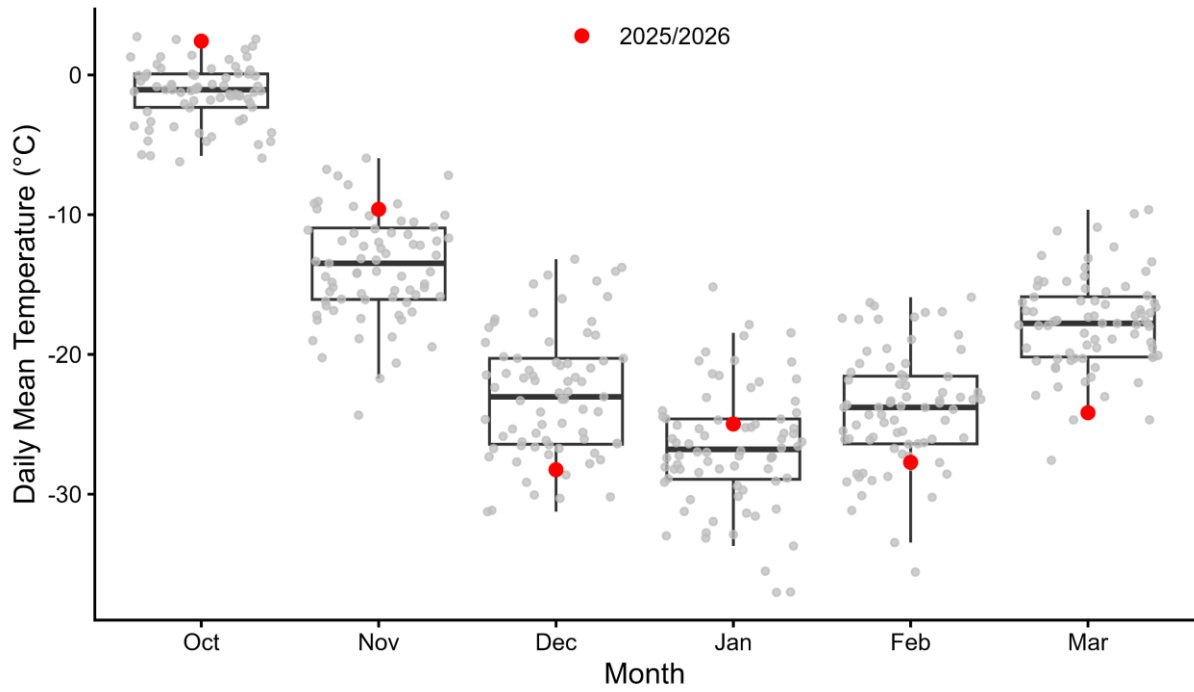
### Fort Liard Air Temperatures



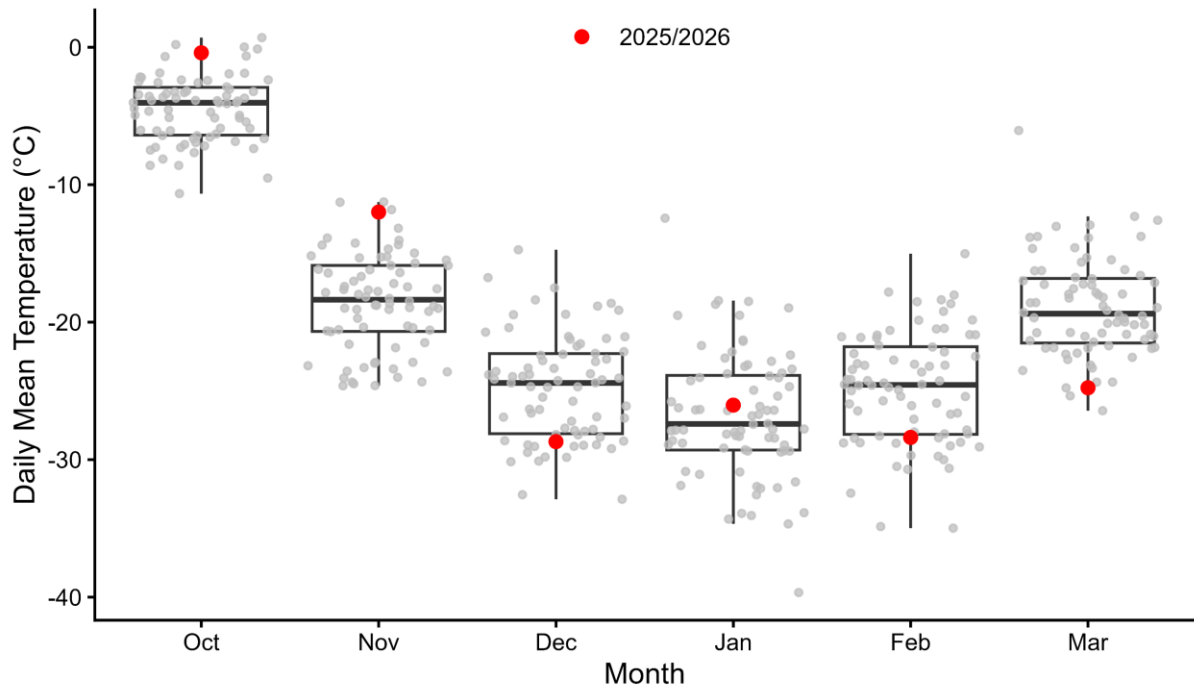
### Fort Simpson Air Temperatures

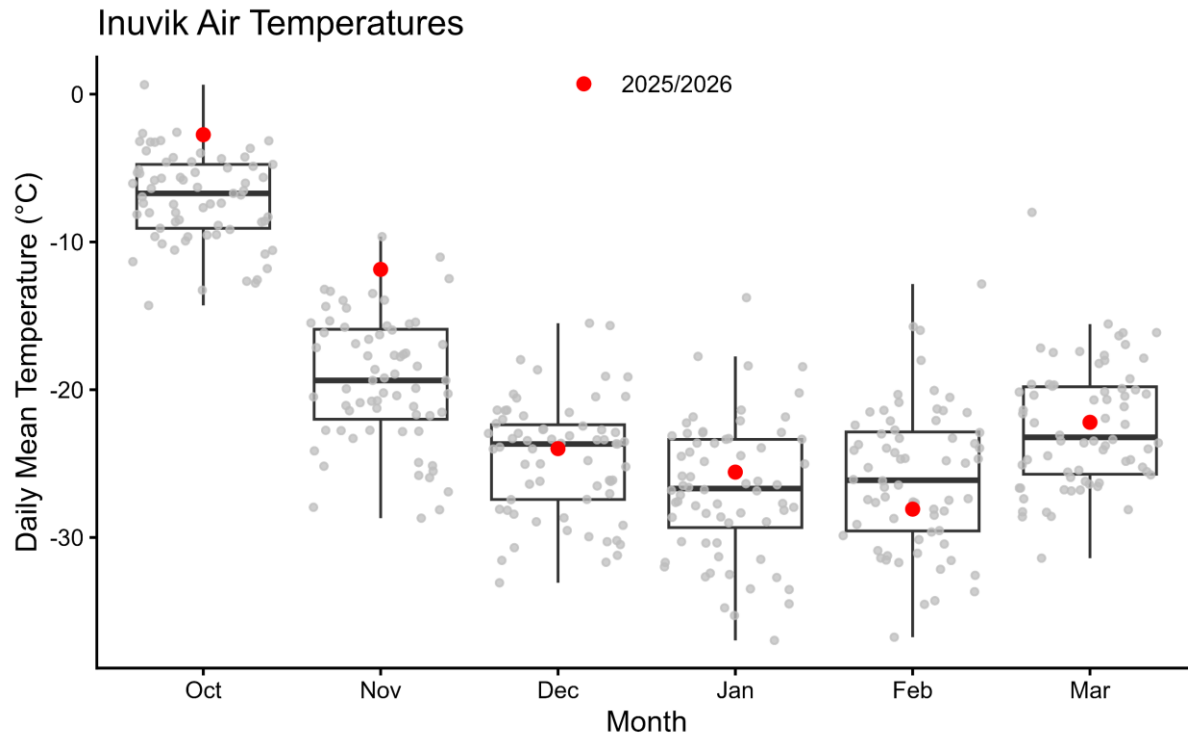


### Yellowknife Air Temperatures



### Norman Wells Air Temperatures





**Figure C-1 to C-7:** Mean monthly air temperatures (°C) for the winter of 2025/26 in Fort Smith, Hay River, Fort Liard, Fort Simpson, Yellowknife, Norman Wells, and Inuvik. Data were collected at automatic climate stations operated by Environment and Climate Change Canada. Light grey dots represent values from previous years on record (1950 - 2024), when available. The thick horizontal black line is the median value, while the other horizontal lines represent the interquartile range.

## Appendix D: Other resources

- Additional Information on ERA5-Land [ERA5-Land hourly data from 1950 to present](#)
- Yukon Snow Surveys <https://yukon.ca/en/snow-surveys-and-water-supply-forecasts>
- Yukon Flood Awareness Maps  
<https://experience.arcgis.com/experience/bda2a6203f18451d8e9c521d0b23bfb7>
- BC Snow Surveys <https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/drought-flooding-dikes-dams/river-forecast-centre/snow-survey-water-supply-bulletin>
- BC River Forecast Centre <https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/drought-flooding-dikes-dams/river-forecast-centre>
- Alberta River Forecast Centre <https://rivers.alberta.ca/#>
- Saskatchewan Water Security <https://www.wsask.ca/lakes-rivers/provincial/>
- MACA Be Ready: For floods <https://www.maca.gov.nt.ca/en/services/be-ready-emergencies/be-ready-floods>