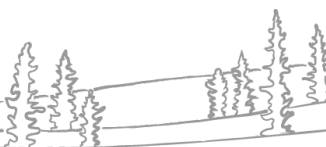


# NWT Water Monitoring Spring Break-Up Report

May 1, 2026 at 14:00

## Surveillance de l'eau aux TNO Rapport sur la débâcle

1er mai 2026 à 14 h



NWT break-up reports will be published routinely as break up unfolds. These reports will focus on regions with active snowmelt and ice break-up. The geographic focus of the report will shift as conditions change. Additional information about basin conditions can be found in the 2026 Spring Water Outlook, [available here](#). If you have any photos or information about break-up in your community, feel free to reach out to us: [nwtwaters@gov.nt.ca](mailto:nwtwaters@gov.nt.ca).

### Current Status:

- This is the first break-up report for 2026.
- After a delayed start to spring, snowmelt is ongoing.
- River ice is currently intact on the Hay River and Liard River in the NWT.
  - o Break-up along the Hay River and Liard River north of the NWT border is thermal so far (ice is primarily melting in place).
- In the Hay River basin, cooler-than-normal spring temperatures have delayed break-up and slowed the rise in water levels. Water levels have increased minimally and remain well below average for this time of year.
- Water levels have begun to rise under ice on the Liard River, and at Fort Liard are now within the typical range for this time of year.
- Continued above-freezing temperatures (day and night) will support ongoing snowmelt and river ice degradation.

Nous publierons régulièrement des rapports sur la débâcle aux TNO au fur et à mesure de l'évolution de la situation. Ces rapports se concentreront sur les régions où la fonte des neiges et la débâcle sont en cours. Nous changerons de région géographique en fonction de l'évolution de la situation. Vous trouverez des informations complémentaires sur l'état du bassin dans l'Aperçu des eaux printanières 2026, [disponible ici](#). Si vous avez des photos ou des renseignements en lien avec la débâcle dans votre collectivité, n'hésitez pas à communiquer avec nous à l'adresse suivante : [nwtwaters@gov.nt.ca](mailto:nwtwaters@gov.nt.ca).

### Situation actuelle

- Il s'agit du premier rapport sur la débâcle de la saison de la crue printanière de 2026.
- Après un printemps qui a tardé à s'installer, la fonte des neiges est en cours.
- La glace fluviale est actuellement intacte sur la rivière Hay et la rivière Liard, aux TNO.
  - o La débâcle de la rivière Hay et de la rivière Liard au nord de la frontière des TNO continue d'être thermique (c.-à-d. que la glace fond principalement sur place).
- Dans le bassin de la rivière Hay, les températures printanières plus fraîches que la normale ont retardé la débâcle et ralenti la montée du niveau de l'eau.
- Les niveaux d'eau ont très peu augmenté et restent bien en dessous de la moyenne pour cette période de l'année.

- Le niveau de l'eau a commencé à monter sous la glace de la rivière Liard et se situe désormais, à la hauteur de Fort Liard, dans la fourchette habituelle pour cette période de l'année.
- Les températures qui restent supérieures à zéro (de jour comme de nuit) favoriseront la poursuite de la fonte des neiges et la dégradation de la glace fluviale.

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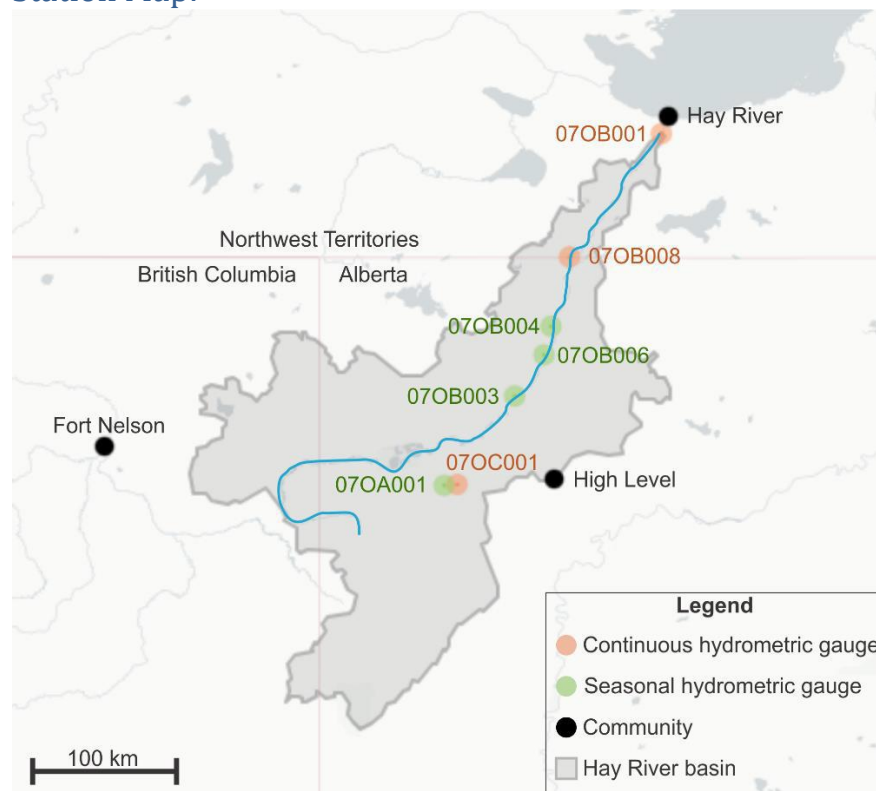
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## Hay River

### Current Status:

- Snowmelt is underway in the Hay River basin after a delayed start to spring.
  - The initiation of water level rise and spring break-up on the Hay River is later than normal due to cooler than normal spring temperatures.
- Water levels have started to rise slowly on the Hay River and its tributaries.
  - The rate of water level rise is low.
  - Water levels remain well below average for this time of year.
- Ice appears to be degrading thermally along the Hay River so far (ice is primarily melting in place) and should progress over the next few days.
  - River ice along the mainstem of the Hay River appears to be intact both north and south of the border.
- Sustained above-freezing temperatures over the next few days will continue to degrade the ice.
- Refer to the [Town of Hay River website](#) for the most up-to-date information, as well as webcam images of current conditions.

### Station Map:



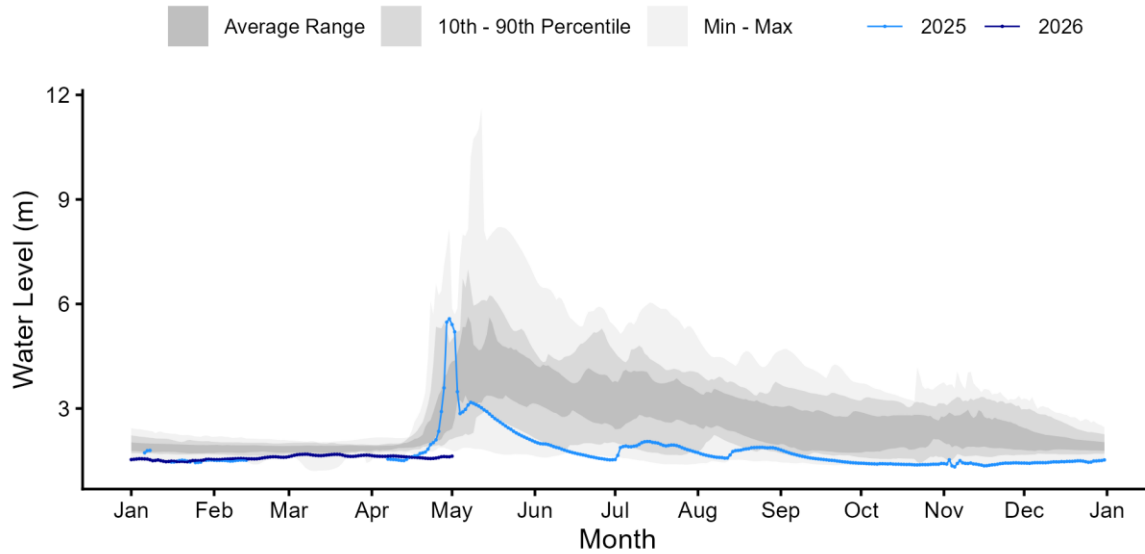
Above: Map of hydrometric stations in the Hay River basin. Some of these stations (and their station numbers) are shown in the water level plots below.

## Hydrometric Data:

Hay River near Hay River [07OB001]

### HAY RIVER NEAR HAY RIVER (07OB001)

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

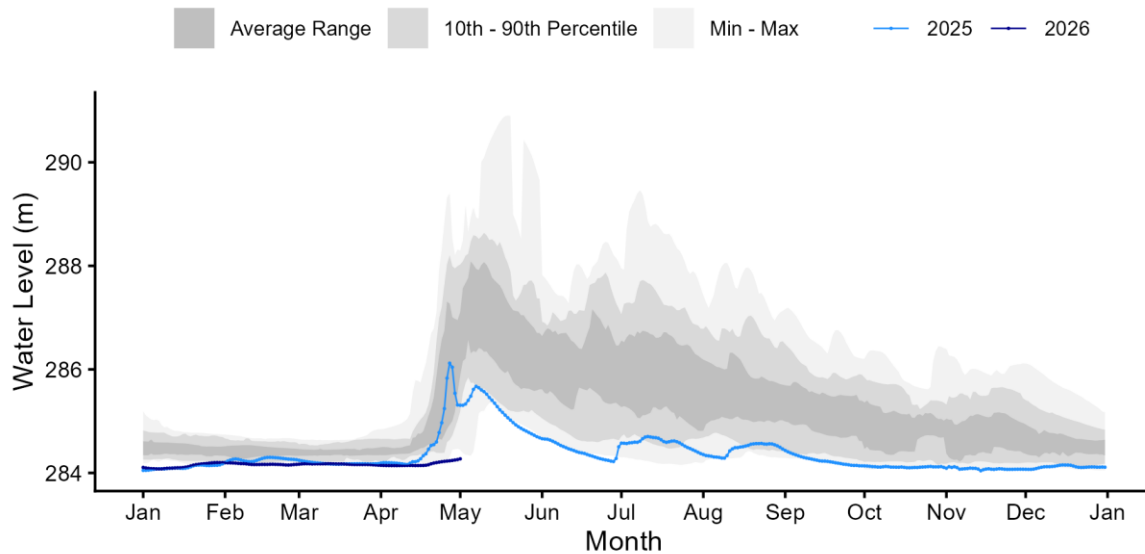


Above - Water level data for Hay River near Hay River [07OB001]. Daily average levels for the previous year also are shown here.

Hay River near Alta/Nwt Boundary [07OB008]

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

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

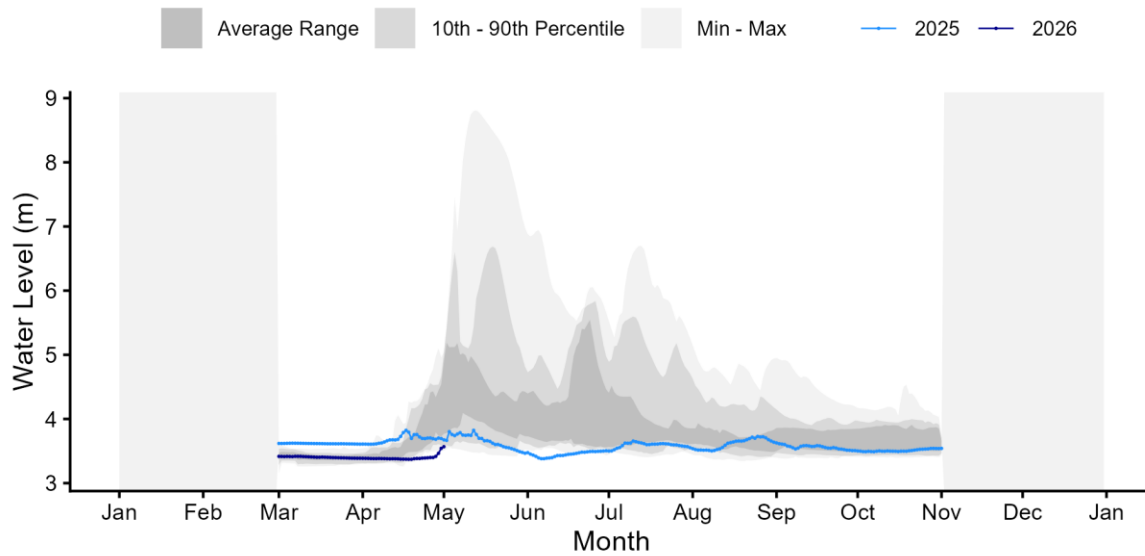


Above - Water level data for Hay River near Alta/Nwt Boundary [07OB008]. Daily average levels for the previous year also are shown here.

### Steen River near Steen River [07OB004]

#### STEEN RIVER NEAR STEEN RIVER (07OB004)

Record Length: 15 years | Period of Record: 2012-2026

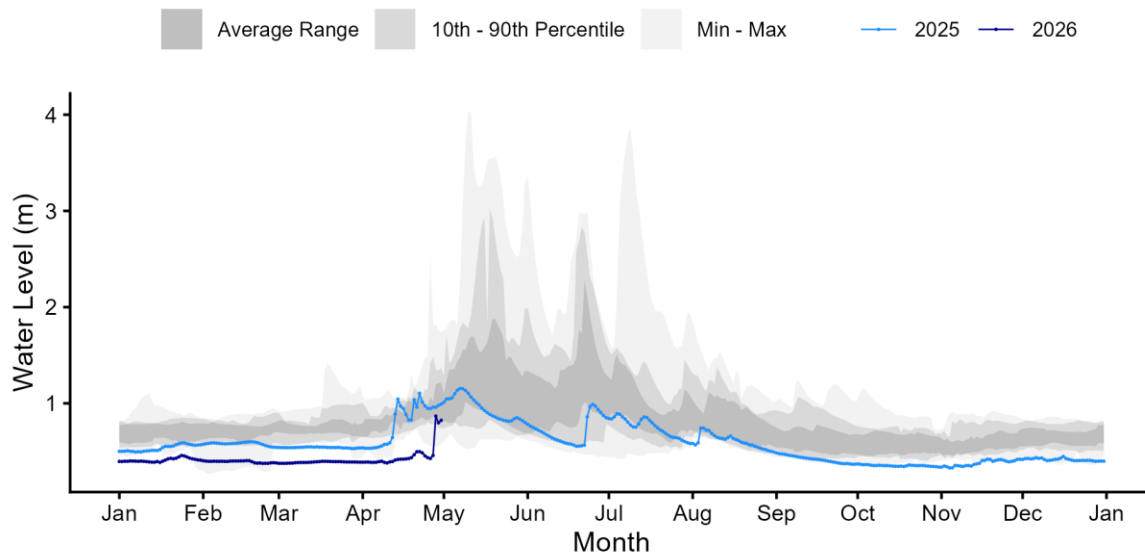


Above - Water level data for Steen River near Steen River [07OB004]. Daily average levels for the previous year also are shown here.

### Chinchaga River near High Level [07OC001]

#### CHINCHAGA RIVER NEAR HIGH LEVEL (07OC001)

Record Length: 15 years | Period of Record: 2012-2026



Above - Water level data for Chinchaga River near High Level [07OC001]. Daily average levels for the previous year also are shown here. Note - this station has been affected by ice as of April 30 and not currently useful.

## Gauge photos:

### Hay River near Hay River [070B001]



*Above* - Hay River near the Town of Hay River [070B001] hydrometric gauge photo from May 1 at 09:01. Photo courtesy of Water Survey of Canada and GNWT.

### Hay River near Alta/Nwt Boundary [070B008]



*Above* - Hay River near Alta/Nwt Boundary [070B008] hydrometric gauge photo from May 1 at 12:01. Photo courtesy of Water Survey of Canada and GNWT.

## Liard River

### Current Status:

- Spring temperatures in the Liard River basin have been near normal. Snowmelt across the Liard River basin is ongoing.
- Water levels have started to increase underneath the ice on the Liard River.
  - At Fort Liard, water levels are now within the average range for this time of year.
- Ice remains intact on the Liard River within the NWT.
  - Break-up is underway in the Liard River headwaters; recent observations along the Nelson River show cleared ice and established sections of open water.
- In the basin, daytime temperatures will continue to be in double digits, and nighttime lows well above freezing, over the coming days.

### Station Map:



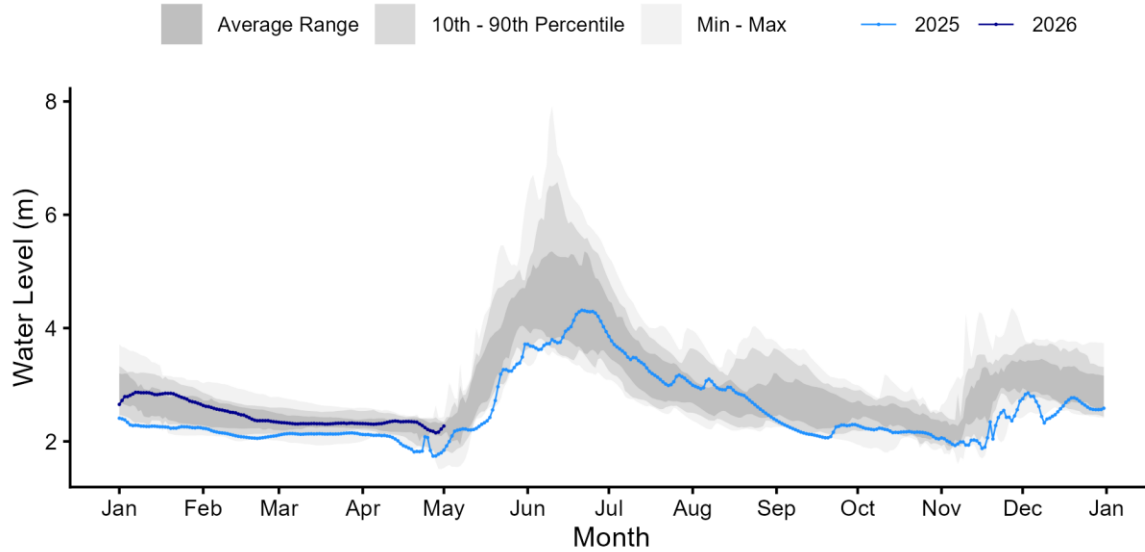
*Above:* Map of hydrometric stations in the Liard River basin. Some of these stations (and their station numbers) are shown in the water level plots below.

## Hydrometric Data:

### Liard River at Upper Crossing [10AA001]

#### LIARD RIVER AT UPPER CROSSING (10AA001)

Record Length: 16 years | Period of Record: 2011-2026

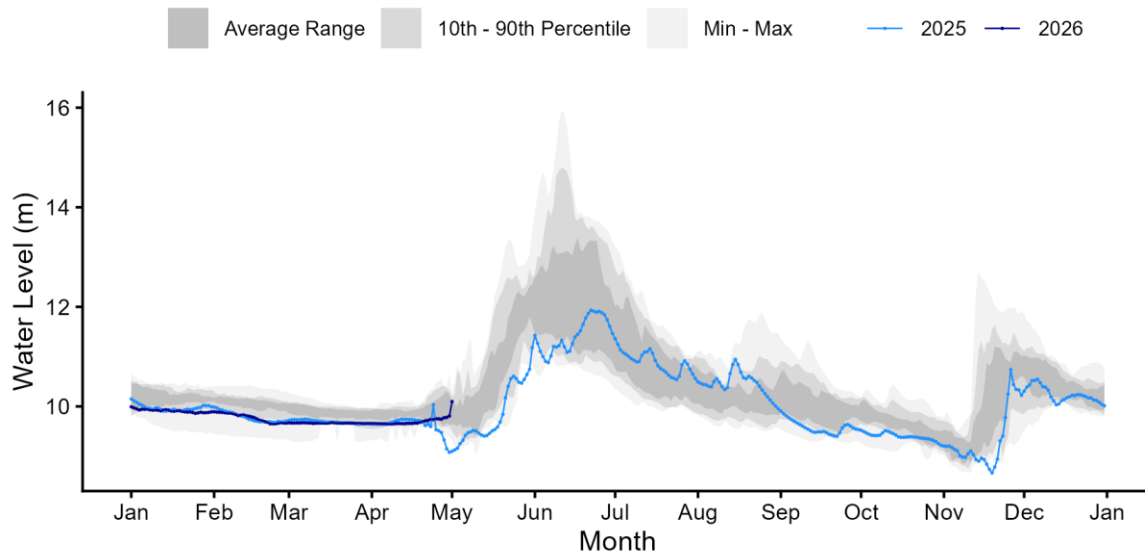


Above - Water level data for Liard River at Upper Crossing [10AA001]. Daily average levels for the previous year also are shown here.

### Liard River at Lower Crossing [10BE001]

#### LIARD RIVER AT LOWER CROSSING (10BE001)

Record Length: 16 years | Period of Record: 2011-2026

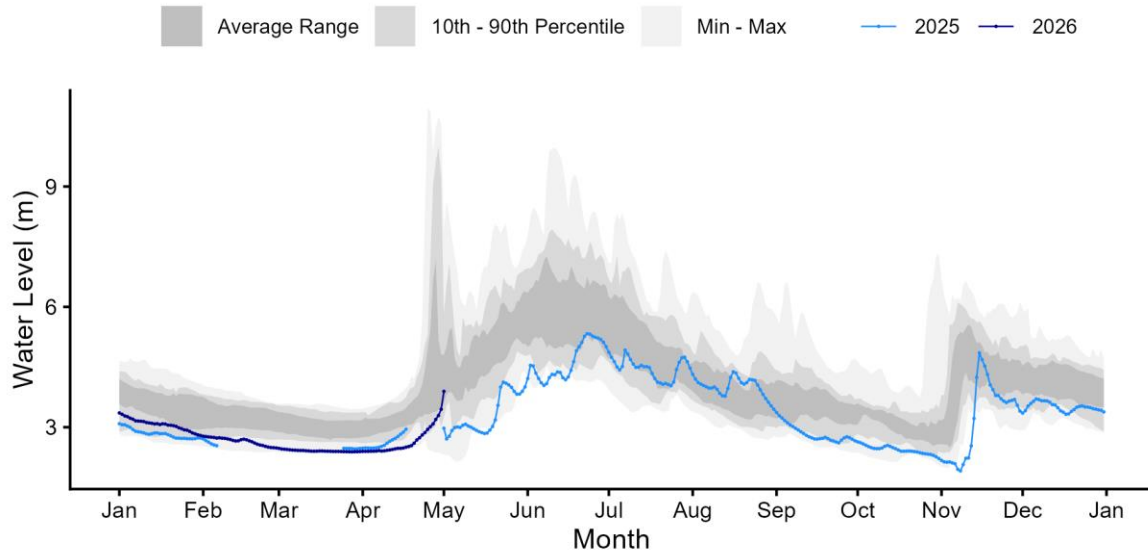


Above - Water level data for Liard River at Lower Crossing [10BE001]. Daily average levels for the previous year also are shown here.

### Liard River at Fort Liard [10ED001]

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

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

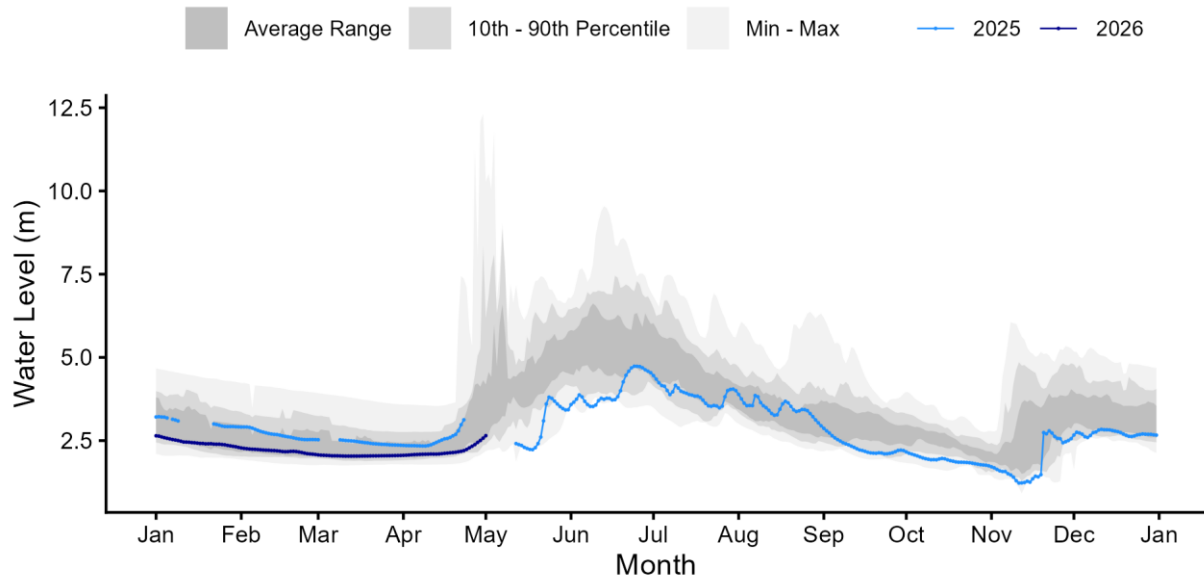


Above - Water level data for Liard River at Fort Liard [10ED001]. Daily average levels for the previous year also are shown here.

### Liard River near the Mouth [10ED002]

#### LIARD RIVER NEAR THE MOUTH (10ED002)

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



Above - Water level data for Liard River near the Mouth [10ED002]. Daily average levels for the previous year also are shown here.

## Gauge photos:

### Liard River at Upper Crossing [10AA001]

10AA001 2026-05-01 15:01:58 UTC 60.05078, -128.90686 13.1V 4.0C P



*Above* - Liard River at Upper Crossing [10AA001] hydrometric gauge photo from May 1 at 08:02. Photo courtesy of Water Survey of Canada and Government of Yukon.

### Liard River at Fort Liard [10ED001]

10ED001\_FortLiard 2026-05-01 18:01:14 UTC  
60.24141, -123.47554 13.8V 20.0°C P



*Above* - Liard River at Fort Liard [10ED001] hydrometric gauge photo from May 1 at 12:01. Photo courtesy of Water Survey of Canada and GNWT.

## Liard River Near the Mouth [10ED002]

10ED002\_LiardMouth 2026-05-01 19:01:14 UTC  
61.74268, -121.22789 12.4V 15.5°C P



*Above* - Liard River near the moth [10ED002] hydrometric gauge photo from May 1 at 12:01. Photo courtesy of Water Survey of Canada and GNWT.

### Mackenzie River at Strong Point [10FB006]

10FB006\_MackStrongPoint\_2026-05-01\_19:01:14 UTC  
61.81647, -120.79188 14.3V 18.0°C P



*Above* – Mackenzie River at Strong Point [10FB006] hydrometric gauge photo from May 1 at 12:01. Photo courtesy of Water Survey of Canada and GNWT.

### Mackenzie River at Fort Simpson [10GC001]

10GC001\_MackSimpson\_2026-05-01\_19:01:14 UTC  
61.86802, -121.35837 14.3V 27.0°C P



*Above* – Mackenzie River at Fort Simpson [10GC001] hydrometric gauge photo from May 1 at 12:01. Photo courtesy of Water Survey of Canada and GNWT. Note – gauge photos are automatically edited for privacy.

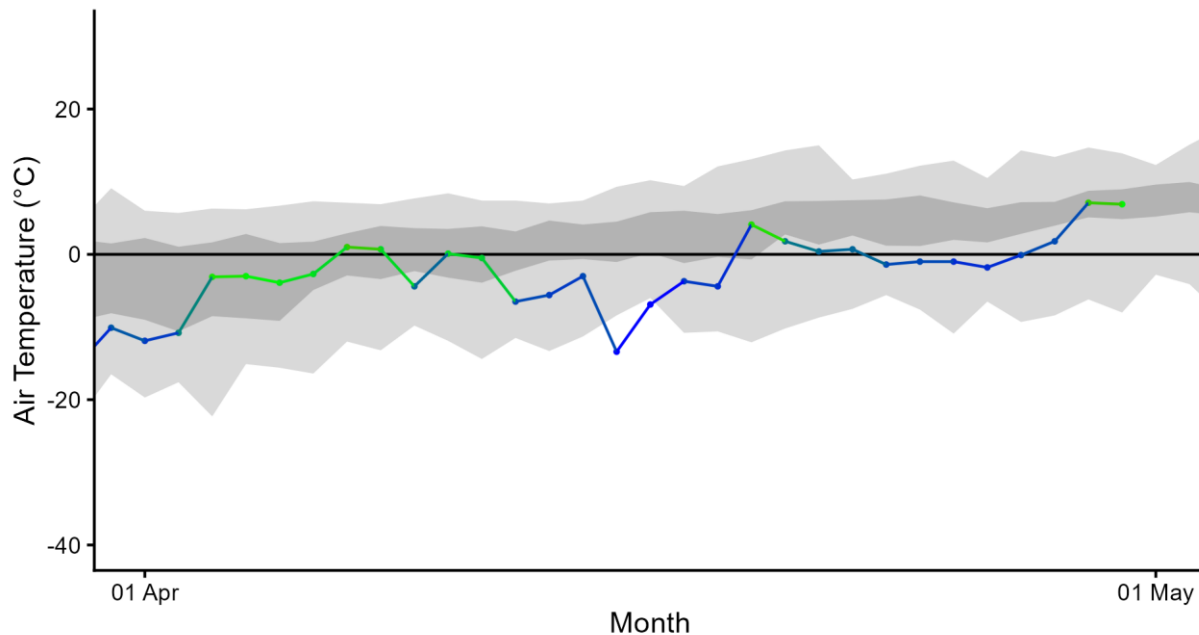
## Weather Data:

Weather information informs how snow and ice will melt and provides information about how this spring is unfolding relative to previous springs. Warmer than normal conditions early in the spring allow for additional energy to melt the snowpack and soften river ice. Rain-on-snow events can cause rapid melt of snowpacks and facilitate quick delivery of snowmelt water to rivers. Locations included here cover basin areas that feed into NWT rivers that are currently undergoing break-up.

This first set of figures show how temperatures have been relative to average (dark grey band) this spring. Following that are weather forecast data for the next seven days from Environment and Climate Change Canada (ECCC).

### High Level Air Temperature

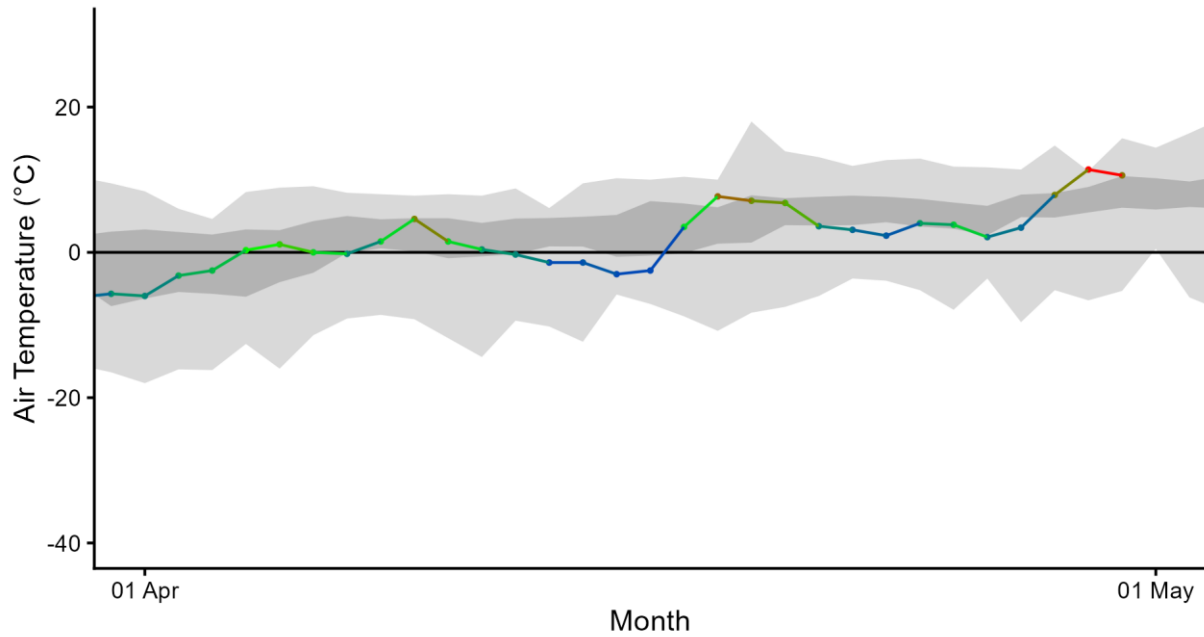
2026 High Level Daily Mean Air Temperatures



Above - Daily mean air temperature for High Level. Shaded areas represent the historical range (1991-2025).

### Fort Nelson Air Temperature

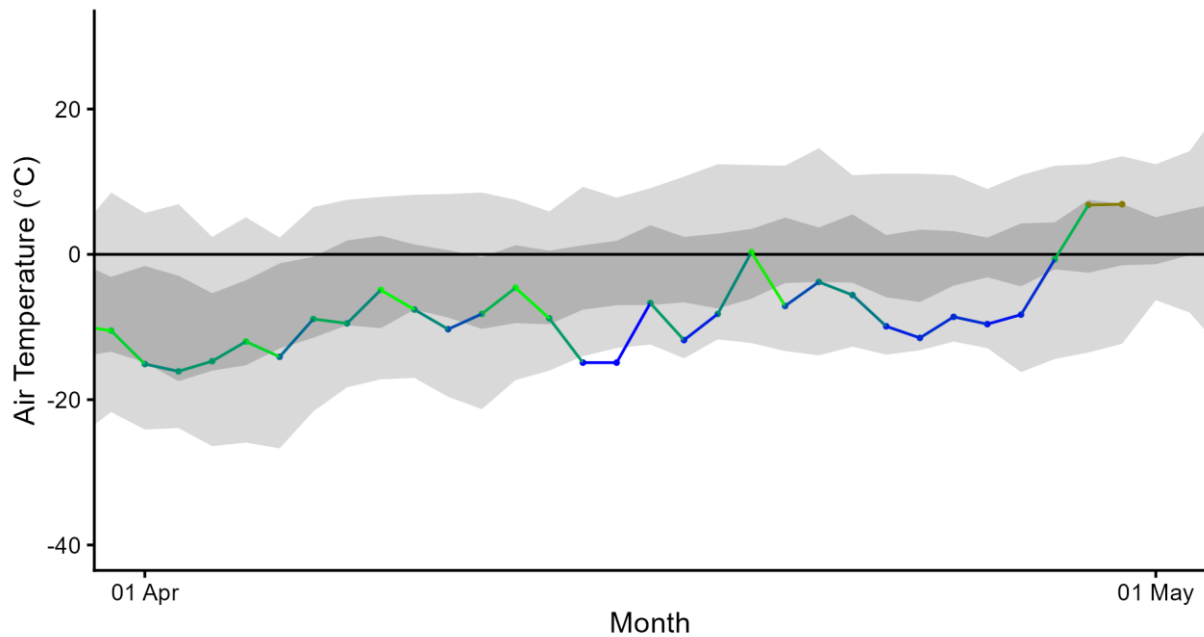
#### 2026 Fort Nelson Daily Mean Air Temperatures



Above - Daily mean air temperature for Fort Nelson. Shaded areas represent the historical range (1991-2025).

### Hay River Air Temperature

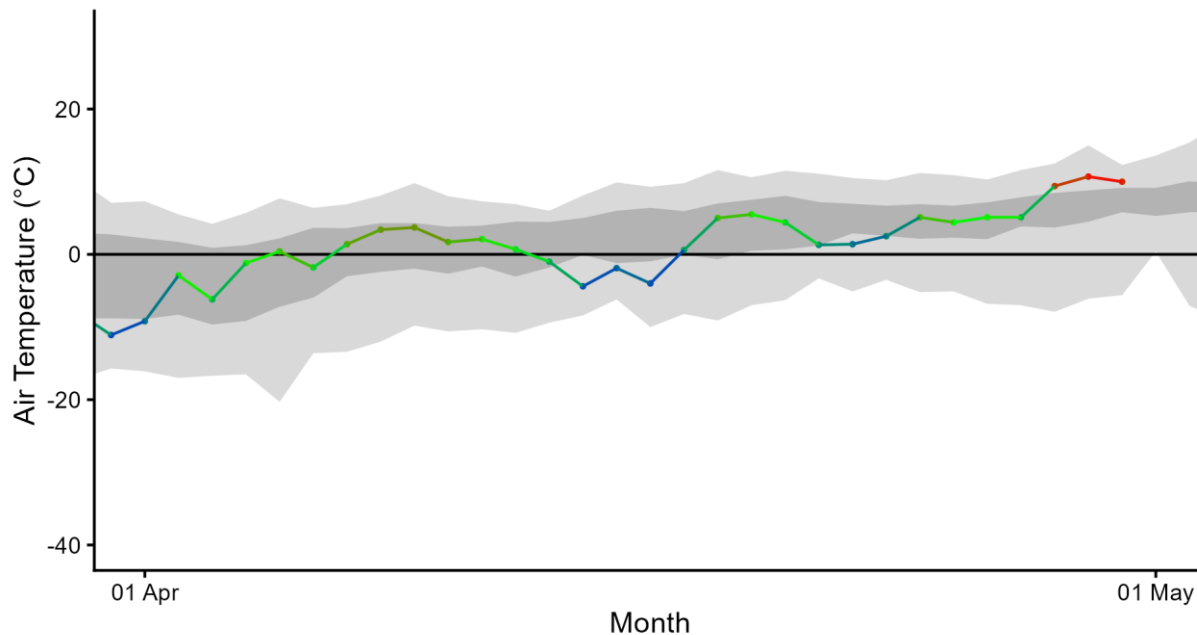
#### 2026 Hay River Daily Mean Air Temperatures



Above - Daily mean air temperature for Hay River. Shaded areas represent the historical range (1991-2025).

## Fort Liard Air Temperature

### 2026 Fort Liard Daily Mean Air Temperatures
















*Above* - Daily mean air temperature for Fort Liard. Shaded areas represent the historical range (1991-2025).

### Weather forecasts:














The Hay River and Liard River basins show consistently double-digit daytime highs over this weekend and for the next week, nearing 20°C in parts of the basins' headwaters. Overnight lows hover near 0°C. These temperatures indicate significant thermal input to the respective river basins over the next week, following a cooler than average spring, which will continue to erode river ice. Rapid warming, particularly in headwaters, can increase the chance of mechanical break-up. Despite the late spring, in comparison to other years, the 7-day forecast does not indicate unusually rapid warming.

There is minimal precipitation forecasted for the coming week, in either basin. Very light precipitation of 1mm or less is possible in the upper reaches of the Liard River basin but are not anticipated to impact water levels in the NWT. Updated forecasts will be provided in the next break-up reports.














### High Level seven-day weather forecast:

Fri 1 May	Sat 2 May	Sun 3 May	Mon 4 May	Tue 5 May	Wed 6 May	Thu 7 May
 13°C Sunny	 15°C Mainly sunny	 13°C A mix of sun and cloud	 14°C Sunny	 16°C Sunny	 20°C Sunny	 19°C Sunny
Tonight	Night	Night	Night	Night	Night	
 -10°C Clear	 2°C Clear	 -4°C Clear	 -1°C Clear	 1°C Clear	 2°C Clear	














### Fort Nelson seven-day weather forecast:

Fri 1 May	Sat 2 May	Sun 3 May	Mon 4 May	Tue 5 May	Wed 6 May	Thu 7 May
 18°C Mainly sunny	 21°C Mainly sunny	 18°C Sunny	 19°C Sunny	 22°C Sunny	 22°C A mix of sun and cloud	 18°C A mix of sun and cloud
Tonight	Night	Night	Night	Night	Night	
 2°C Clear	 7°C Cloudy periods	 1°C Clear	 4°C Clear	 7°C Cloudy periods	 4°C Cloudy periods	

### Hay River seven-day weather forecast:

Fri 1 May	Sat 2 May	Sun 3 May	Mon 4 May	Tue 5 May	Wed 6 May	Thu 7 May
 8°C Mainly sunny	 10°C Sunny	 8°C Sunny	 8°C Sunny	 13°C Sunny	 12°C Sunny	 11°C Sunny
Tonight	Night	Night	Night	Night	Night	
 -4°C Clear	 1°C Clear	 -4°C Clear	 -2°C Clear	 2°C Clear	 2°C Clear	

Fort Liard seven-day weather forecast:

<b>Fri</b> <b>1 May</b>	<b>Sat</b> <b>2 May</b>	<b>Sun</b> <b>3 May</b>	<b>Mon</b> <b>4 May</b>	<b>Tue</b> <b>5 May</b>	<b>Wed</b> <b>6 May</b>	<b>Thu</b> <b>7 May</b>
 18°C Sunny	 20°C Mainly sunny	 18°C Sunny	 20°C Sunny	 23°C Sunny	 18°C A mix of sun and cloud	 18°C A mix of sun and cloud
<b>Tonight</b>	<b>Night</b>	<b>Night</b>	<b>Night</b>	<b>Night</b>	<b>Night</b>	
 4°C Clear	 7°C Clear	 2°C Clear	 4°C Clear	 3°C Cloudy periods	 2°C Cloudy periods	

## Factors to Watch:

It is important to note that much of the water contributing to NWT rivers originates from outside of the NWT, which is why we also rely on information from the Yukon, British Columbia, Alberta and Saskatchewan.

The potential and severity of flooding will depend in large part on the weather over the upcoming weeks and how this interacts with existing ice conditions, water levels and snowpack amounts.

The primary factors that influence water levels in the spring are:

- Ice jams (can result in out-of-bank flows, even if there are below normal flows)
- Rate of melt of ice and snow:
  - Gradual vs quick melt
  - Rain-on-snow or -ice events (rain brings a lot of energy to help melt happen more quickly)
- Current water levels
- How wet the ground was in the fall
- Snowpack

### Spring Break-up on NWT Rivers: Mechanical vs Thermal

In any given year, spring flooding can occur in a number of NWT communities, including Hay River, Kát'odeeche First Nation, Jean Marie River, Fort Simpson, Fort Liard, Tulita, Fort Good Hope, Fort McPherson and Aklavik. Spring flooding is caused by ice jam-induced flooding and can occur irrespective of existing water levels. However, if existing water levels are high, the impact of an ice jam flood can be much worse.

Ice jams typically occur on north-flowing rivers where warm weather and snowmelt cause ice to break-up on the southern reaches of a river. As this ice flows north (downstream), it meets a more solid ice cover, hits the ground, or gets stuck in a river bend. When this happens, the pieces of floating ice jam can form a dam, which causes water levels to rise rapidly. This is called a **mechanical break-up**, whereby the ice downstream is broken up by the force of ice moving into it.

If there is warm and sunny weather throughout early spring, the ice may thermally erode and weaken. This provides less of a resisting force for ice and water moving down the river and will have less of a chance of causing water levels to rise behind an ice jam. This is called a **thermal break-up**.

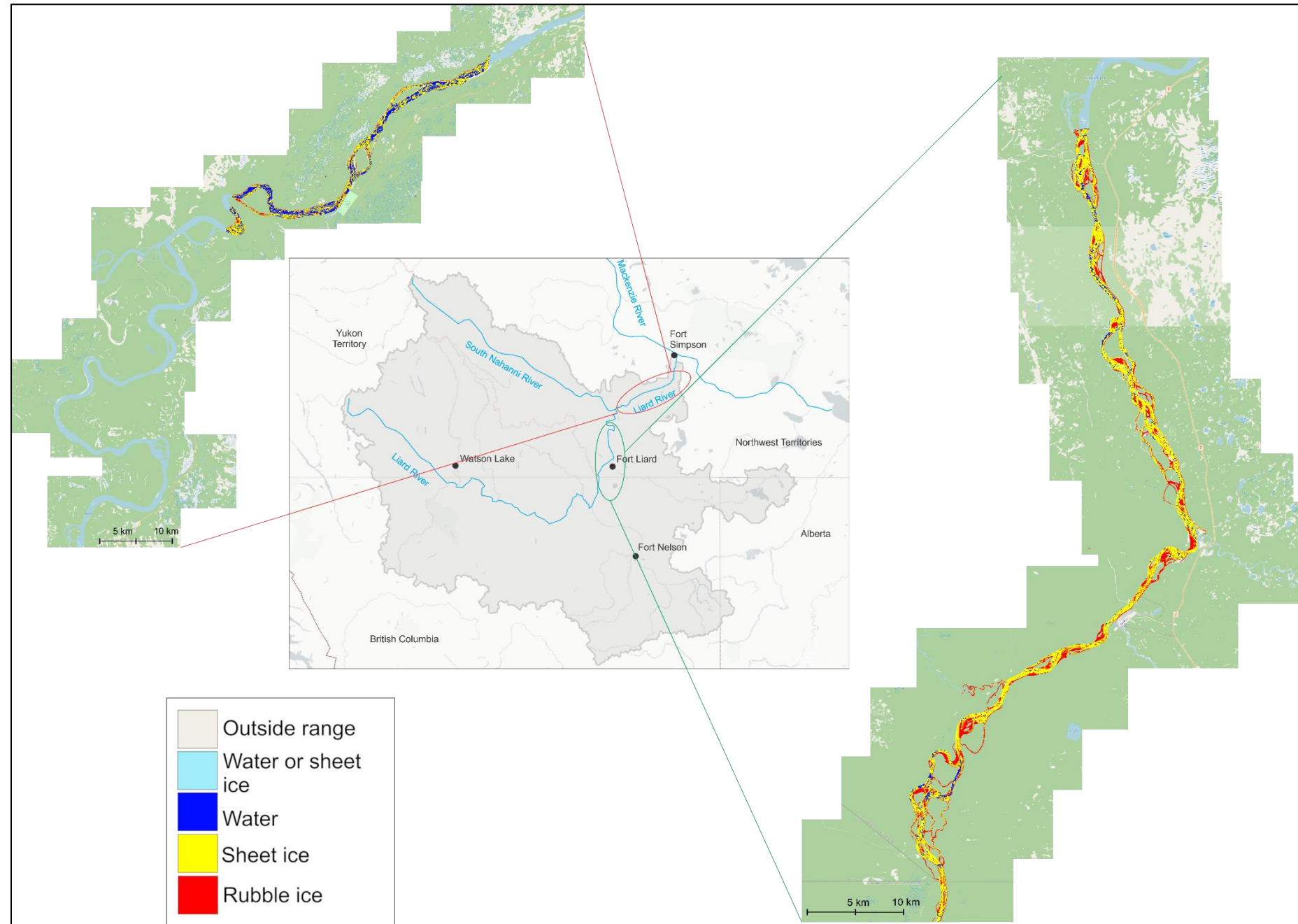
The causes of mechanical and thermal break-ups are usually dependent on the weather during early spring. Warm weather, sunshine, and rain on snow events are usually a good way to bring extra energy into the system to help melt the ice. Warm temperatures in the upstream part of a basin could also cause a rapid snowmelt and move water to the river very quickly. This could lead to ice-jam conditions downstream if the ice has not yet received

enough energy to degrade. Another important factor is the thickness of the ice. Thicker ice takes longer to melt and can increase the chances of ice jams. If an ice jam occurs, the location of the ice jam is also very important. Each river reach has different locations that are prone to ice jams. The location of the ice jam can be an important factor as to whether or not a community floods. Furthermore, ice will jam and then move again at multiple locations along a river as break-up progresses downstream. The timing and location of each jam can also influence if a community will flood.

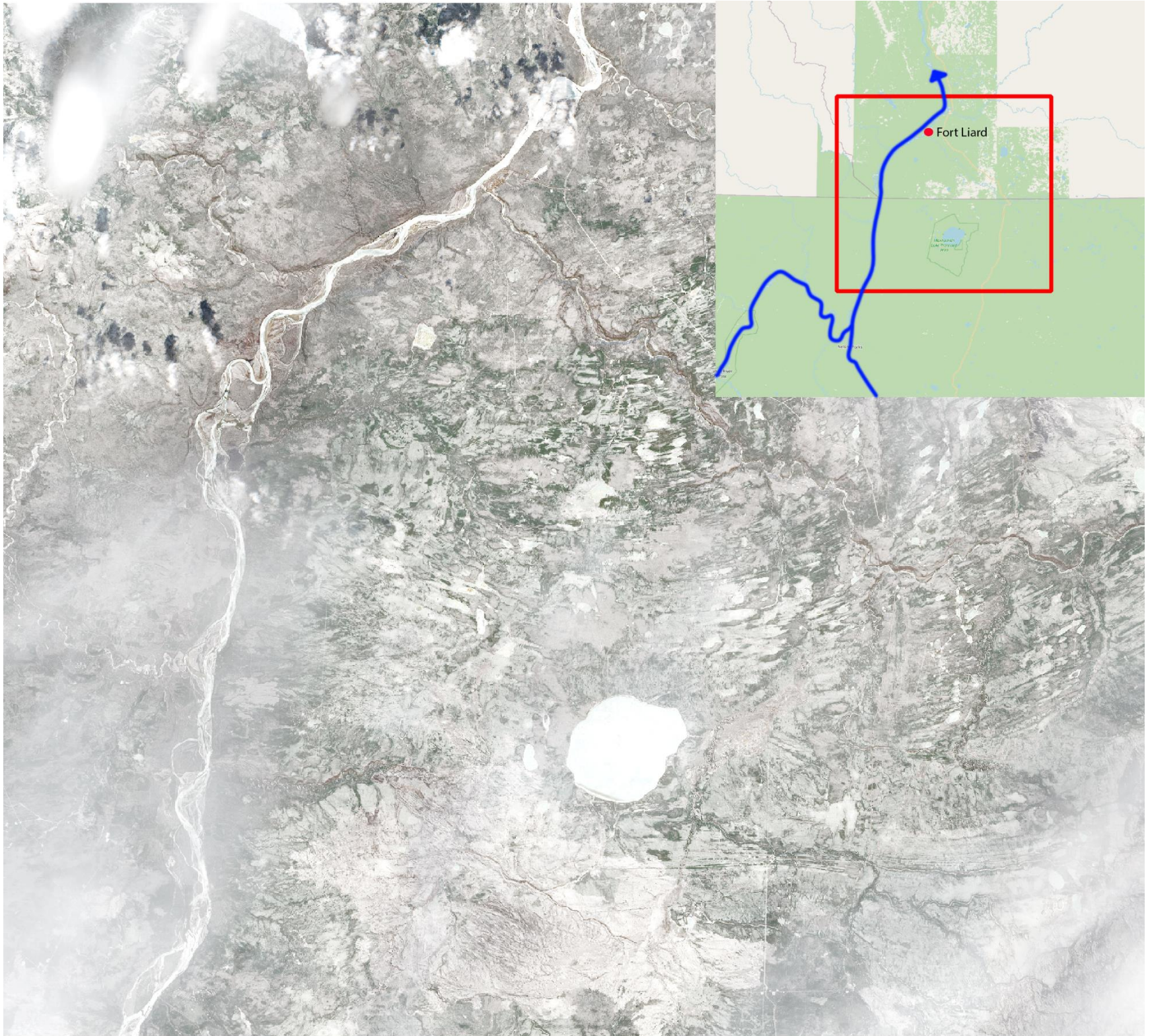
Technical Note:

- The figures in this report plot water levels. The values on the y-axis are (in most cases) relative to an arbitrary datum. This means that the values on each gauge can be compared to different years but should not be used to compare water levels from one location to the next.
- For example, the Hay River near the border gauge (070B008) records a level of about 288 m. The Hay River near Hay River gauge (070B001) usually records a level of about 4 m. This **does not mean** that the water level at the Hay River at the border site is 284 m higher than the water level at the Hay River near Hay River site.

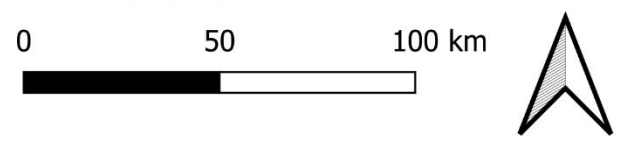
## Appendix A: River Ice Imagery



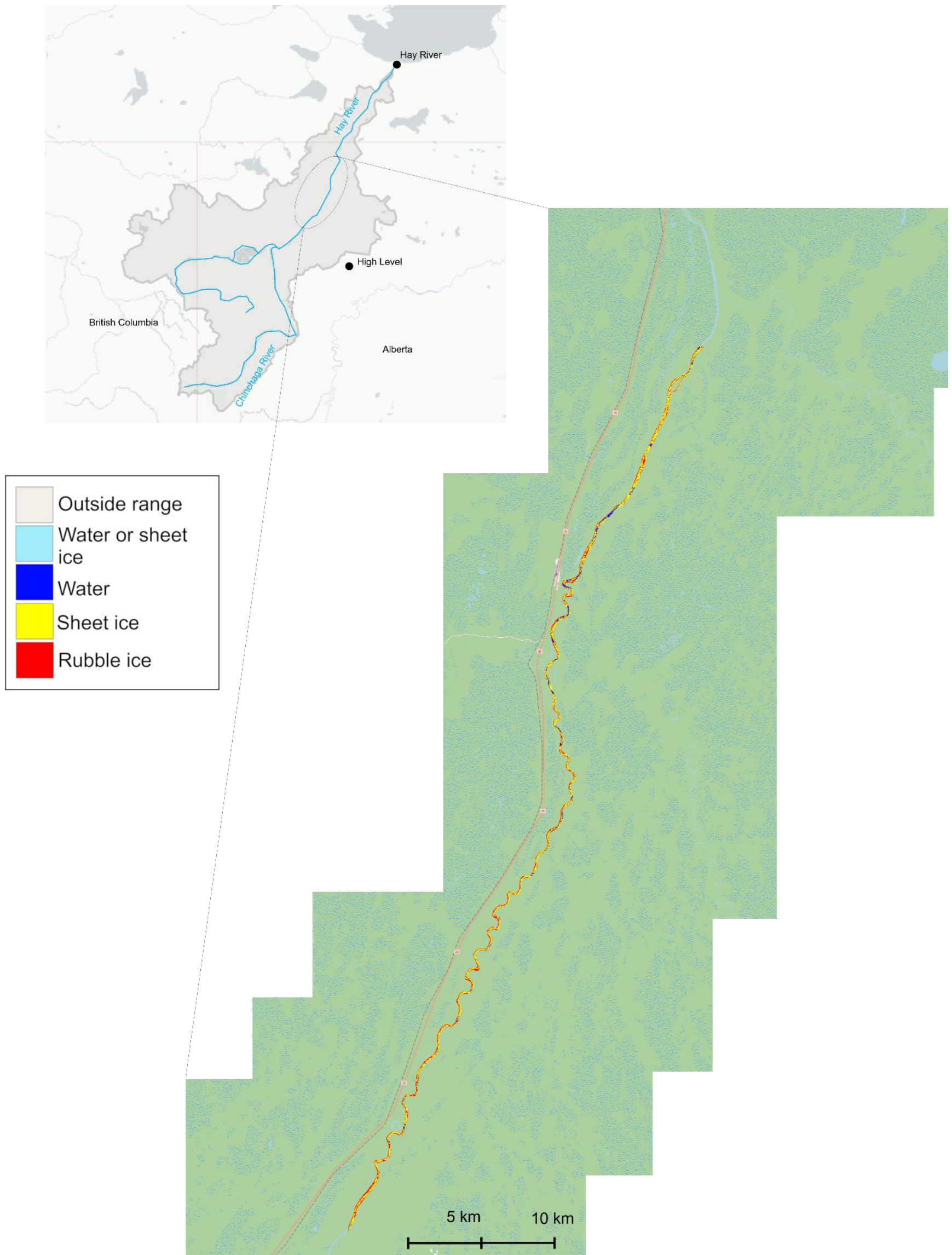
Above – Classified river ice image of the Liard River. The image shows predominantly intact ice (yellow) around Fort Liard, and intact ice with melt on the ice surface (yellow and blue) further downstream. The image was acquired via RCM satellite passes on April 30 (~19:30-20:00 MDT) and May 1, 2026 (~08:30 MDT), and is courtesy of the federal government's Government Operations Centre. The river ice classification was completed using IceBC algorithm.



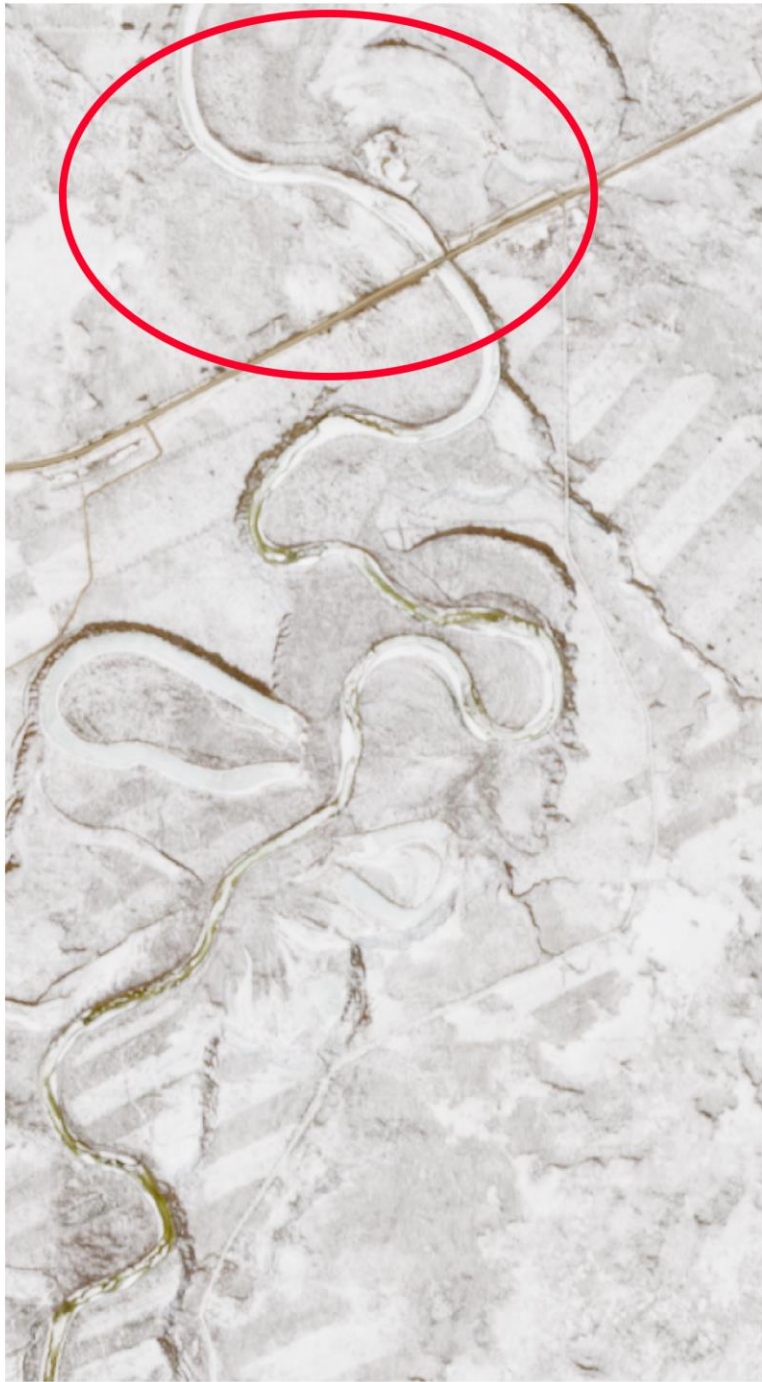
Liard River close to the BC/NWT/YT border, April 30, 2026.  
Image: Copernicus Sentinel-2



Above – optical satellite imagery from Copernicus Sentinel-2, showing the Liard River upstream of Fort Liard. The available imagery shows intact ice cover until the border, and extends well into the upstream reaches of the Liard River Basin. The image was acquired on April 30 at 1:30pm MDT.



Above – Classified river ice image of the Hay River upstream of the border with NWT. The image shows predominantly intact ice (yellow). The image was acquired via RCM satellite passes on May 1, 2026 (~08:00 MDT), and is courtesy of the federal government’s Government Operations Centre. The river ice classification was completed using IceBC algorithm.



April 27, 2026

Chinchaga River near AB Highway 58  
Source: Copernicus Sentinel-2



April 29, 2026

0 1 2 km



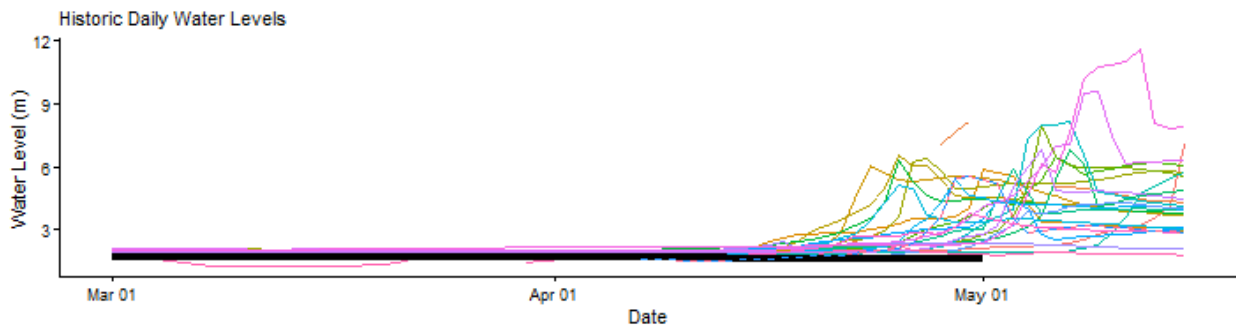
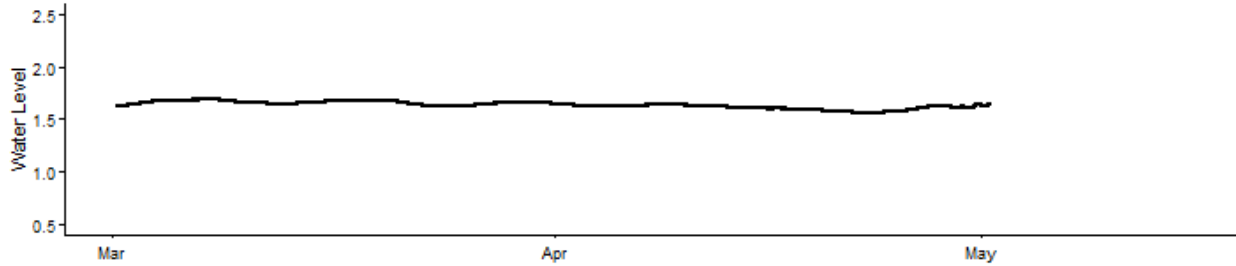
Above – optical satellite imagery from Copernicus Sentinel-2, showing the Chinchaga River at the Water Survey of Canada hydrometric gauge, near Alberta Highway 58. The Chinchaga is a significant tributary to the Hay River. The image shows meltwater pooling on the surface of the ice, gradually extending in the downstream (northward) direction. There is currently no evidence of significant ice movement. The image was acquired on April 29 at 1:00pm MDT.

## Appendix B: High resolution and historic water level plots

### Hay River Near Hay River (070B001)

HAY RIVER NEAR HAY RIVER (070B001)

2026 Water Levels (5 minute resolution)

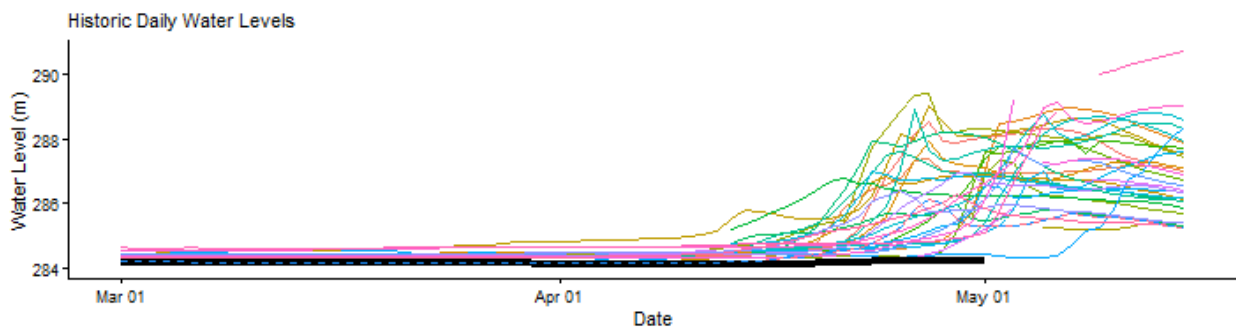
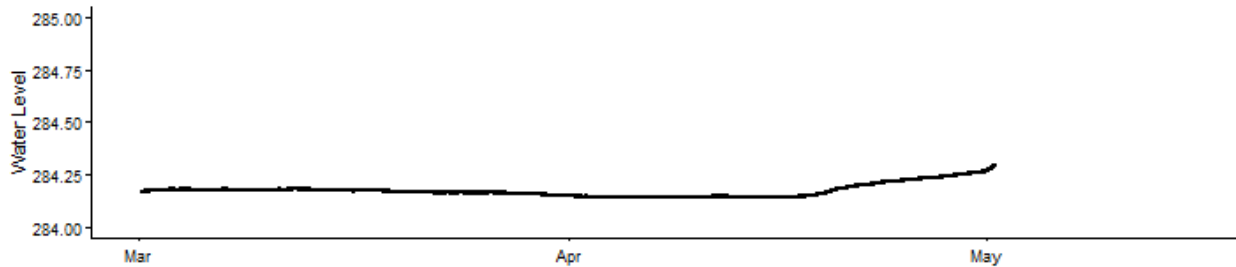


Above - The upper graph in the figure presents real time water level data at 5-minute resolution. The lower graph shows daily average levels relative to the previous 20 years.

### Hay River Near Alta/Nwt Boundary (070B008)

HAY RIVER NEAR ALTA/NWT BOUNDARY (070B008)

2026 Water Levels (5 minute resolution)

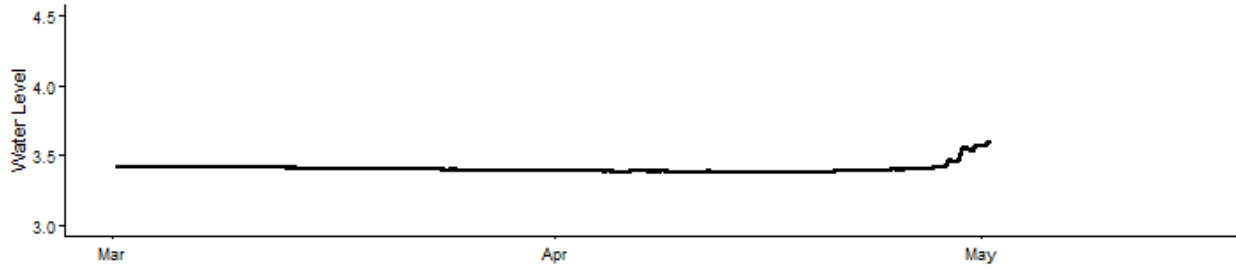


Above - The upper graph in the figure presents real time water level data at 5-minute resolution. The lower graph shows daily average levels relative to the previous 20 years.

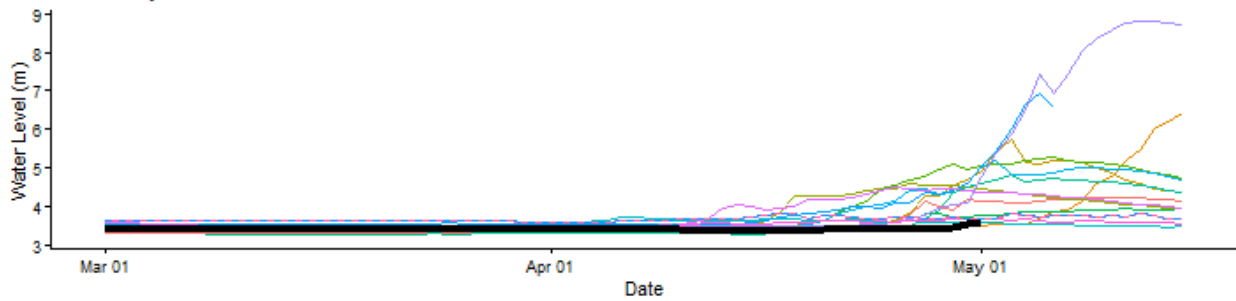
### Steen River Near Steen River (070B004)

#### STEEN RIVER NEAR STEEN RIVER (070B004)

2026 Water Levels (5 minute resolution)



Historic Daily Water Levels

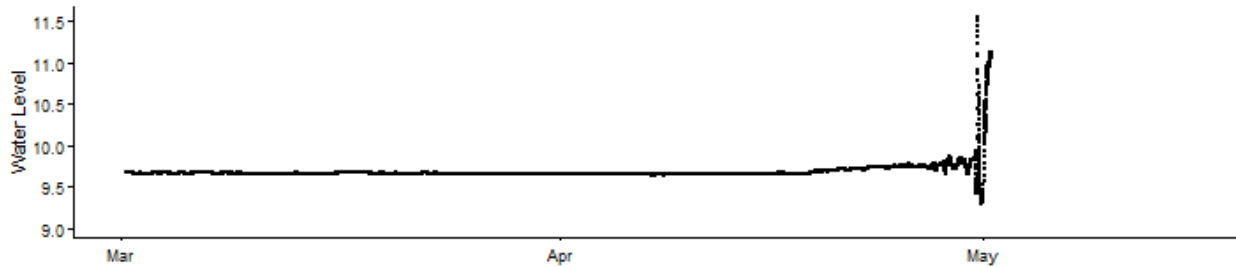


Above - The upper graph in the figure presents real time water level data at 5-minute resolution. The lower graph shows daily average levels relative to the previous 20 years.

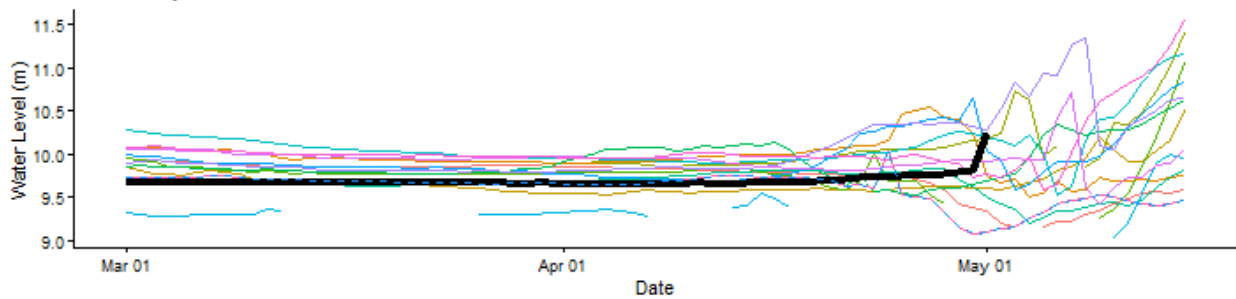
### Liard River At Lower Crossing (10BE001)

#### LIARD RIVER AT LOWER CROSSING (10BE001)

2026 Water Levels (5 minute resolution)



Historic Daily Water Levels

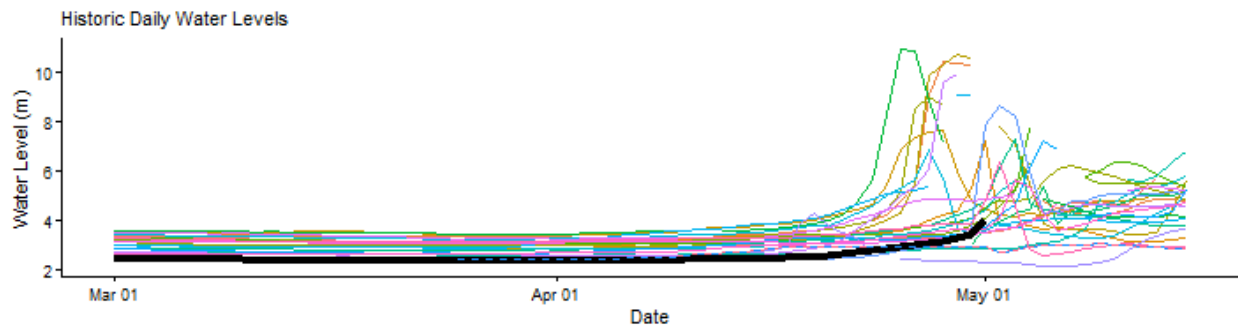
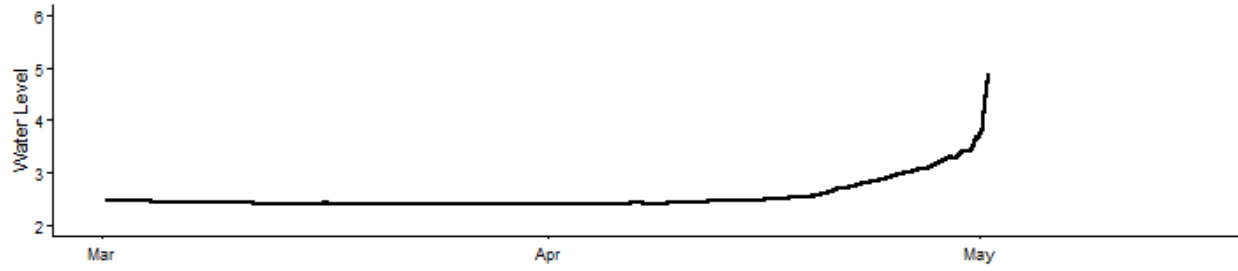


Above - The upper graph in the figure presents real time water level data at 5-minute resolution. The lower graph shows daily average levels relative to the previous 20 years.

# Liard River At Fort Liard (10ED001)

## LIARD RIVER AT FORT LIARD (10ED001)

2026 Water Levels (5 minute resolution)



*Above* - The upper graph in the figure presents real time water level data at 5-minute resolution. The lower graph shows daily average levels relative to the previous 20 years.