NWT Water Monitoring Bulletin

August 7th, 2025

Bulletin sur la surveillance des eaux aux TNO

7août 2025

Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

Introduction

NWT Water Monitoring Bulletins are posted monthly. These bulletins are intended to provide an update of water flow and level data at select NWT Hydrometric Network gauge stations across the Northwest Territories.

Where available, data from river sites are presented as flow (discharge) or water level and data from lake sites are presented as level. The figures in this report represent current conditions for this year, relative to historic minimum and maximum values, extreme values (10^{th} to 90^{th} percentiles) and the average range, which is calculated as the interquartile range.

The NWT Hydrometric Network is a partnership between Government of Northwest Territories – Environment and Climate Change (ECC) and Environment and Climate Change Canada (ECCC) and is operated by the Water Survey of Canada (ECCC). Both historic and real-time data for all stations are available at https://wateroffice.ec.gc.ca/index_e.html. All 2024 and 2025 data are considered provisional and may contain values that are later corrected.

Any questions regarding information contained in this Bulletin can be directed to NWTWaters@gov.nt.ca.

Introduction

Les Bulletins sur la surveillance des eaux aux TNO sont publiés mensuellement. Ces bulletins visent à fournir des mises à jour sur les données concernant l'écoulement et le niveau de l'eau à certaines stations de jaugeage du Réseau hydrométrique des TNO.
Si elles sont disponibles, les données sur les rivières et les fleuves sont présentées sous forme d'écoulement (débit) et celles des lacs sont présentées sous forme de niveau. Dans le présent rapport, les données font état des conditions de cette année et sont comparées aux valeurs minimales, maximales et extrêmes (10e au 90e centile) ainsi qu'à la moyenne (calculée en tant qu'écart interquartile).
Le Réseau hydrométrique des TNO est le fruit d'un partenariat entre le ministère de l'Environnement et du Changement climatique du gouvernement des Territoires du Nord-Ouest et Environnement et Changement climatique Canada (ECCC) et est exploité par la Division des relevés hydrologiques du Canada. Vous pouvez consulter les données historiques et les données en temps réel de toutes les stations au https://eau.ec.gc.ca/index_f.html. Toutes les données de 2024 et de 2025 sont considérées comme provisoires et peuvent contenir des valeurs qui seront ultérieurement corrigées.
Pour toute question sur le contenu du présent document, écrivez un courriel à l'adresse NWTWaters@gov.nt.ca.

Current status

- This report is our **Monthly Water Monitoring Bulletin**, which provides regular updates on water levels and precipitation in the NWT;

- Water levels and flow rates remain relatively low across most of the NWT.
    - Great Slave Lake water level is currently well below average and has been slowly decreasing since end of April 2025, as is normal for this time of year.
    - Slave River water level is below the average range for this time of year.
    - Hay River water level is well below average for this time of year.
    - Liard River water level is average for this time of year.
    - Mackenzie River water level, recorded at several stations along the river, is below average for this time of year.
    - Great Bear Lake remains at its lowest water level recorded for this time of year and flow rates on the Great Bear River are well below average for this time of year.
    - Exceptions to low water levels and flows include:
        - South Nahanni River (well above average)
        - Some smaller rivers in the Great Slave Lake basin, including:
            - Snare River (average)
            - Lockhart River (average)
            - Hoarfrost River (above average)
            - Taltson River (above average)

- Low water levels are the result of extreme drought conditions that began in the summer of 2022 and have persisted through 2023 and 2024. Water levels have since shown some recovery, but this has mostly been limited to small rivers and lakes.

- **July precipitation** across the NWT was generally below average with most communities, including Fort Smith, Hay River, Fort Simpson, Norman Wells, and Inuvik – receiving below to well below average rainfall. Only Yellowknife recorded approximately average precipitation. July rain events in the southwestern portion of NWT led to rises in flows on some rivers sourced in the Mackenzie Mountains, such as the South Nahanni River.

- **July temperatures** across the NWT were mostly below average. Fort Smith, Yellowknife, Norman Wells, and Inuvik experienced cooler temperatures than normal, while Hay River and Fort Simpson recorded normal temperatures.

- Water levels on Great Slave Lake and the Mackenzie River for the rest of the summer will be impacted by rainfall amounts in upstream basins, particularly in northern Alberta and British Columbia.

    - So far this spring and summer, precipitation in most of these areas has been below to well-below average.
    - Some parts of the Liard River basin had average and above average precipitation.

- Climate forecasts from ECCC for August to October indicate warmer than normal temperatures for most of the NWT, with the exception of the northwest along the Beaufort coast where it is expected to be colder than normal. Forecasts also show a 40-50% chance of above average precipitation for central and southern portions of the NWT, and average to above average precipitation in the west.

Situation actuelle

- Le présent rapport est notre **Bulletin mensuel sur la surveillance des eaux** qui fournit des mises à jour régulières sur les niveaux d'eau et les précipitations aux TNO.

- Les niveaux d'eau et les débits restent relativement bas dans la majeure partie des TNO.
    - Le niveau d'eau du Grand lac des Esclaves est bien inférieur à la moyenne et baisse lentement depuis le mois d'avril, ce qui est normal pour cette période de l'année.
    - Le niveau d'eau de la rivière des Esclaves est inférieur à la moyenne pour cette période de l'année.
    - Le niveau d'eau de la rivière Hay est bien inférieur à la moyenne pour cette période de l'année.
    - Le niveau d'eau de la Rivière Liard est près de la normale pour cette période de l'année.
    - Le niveau d'eau du fleuve Mackenzie, relevé à plusieurs stations le long de son cours, est inférieur à la moyenne pour cette période de l'année.
    - Le niveau d'eau du Grand lac de l'Ours demeure le plus bas enregistré à cette période de l'année et le débit enregistré le long de la rivière Great Bear est bien inférieur à la moyenne pour cette période de l'année.
    - Exceptions aux faibles niveaux d'eau et aux faibles débits :
        - Rivière Nahanni Sud (nettement supérieurs à la normale)
        - De plus petites rivières dans le bassin du Grand lac des Esclaves, y compris :
            - Rivière Snare (supérieurs à la normale)
            - Rivière Lockhart (près de la normale)
            - Rivière Hoarfrost (supérieurs à la normale)
            - Rivière Taltson (supérieurs à la normale)

- Les faibles niveaux d'eau sont attribuables à une sécheresse extrême qui a commencé à l'été 2022, et qui s'est poursuivie en 2023 et 2024. Depuis, les niveaux d'eau se sont quelque peu rétablis, mais cela s'est surtout limité aux petites rivières et aux lacs.

- Les **précipitations de juillet** ont été généralement inférieures à la moyenne sur l'ensemble du territoire, notamment à Fort Smith, Hay River, Fort Simpson, Norman Wells et Inuvik, qui ont reçu des précipitations inférieures et bien inférieures à la normale. Seule Yellowknife a reçu des précipitations à peu près dans la moyenne. Les précipitations enregistrées dans le sud-ouest des TNO ont entraîné une augmentation du débit de certaines rivières prenant leur source dans les montagnes Mackenzie, comme la rivière Nahanni Sud.

- Les **températures en juillet** dans l'ensemble des collectivités des TNO ont été généralement inférieures à la moyenne, notamment à Fort Smith, Yellowknife, Norman

Wells et Inuvik, qui ont reçu des températures inférieures à la normale. Hay River et Fort Simpson, quant à elles, ont vu des températures dans la normale.

- Pour le reste de l'été, les niveaux d'eau du Grand lac des Esclaves et du fleuve Mackenzie varieront en fonction des précipitations tombées dans le nord de l'Alberta et de la Colombie-Britannique.

    - Jusqu'ici, ce printemps et cet été, ces régions ont reçu des précipitations inférieures et bien inférieures à la normale.
    - Certaines parties du bassin de la rivière Liard ont connu des précipitations dans la normale et supérieures à la normale.

- Les prévisions climatiques d'ECCC pour les mois d'août à octobre indiquent des températures plus chaudes que la normale pour la plupart des TNO, sauf pour le nord-est du territoire le long de la côte de Beaufort, qui verra des températures plus fraîches que la normale. Les prévisions indiquent également une probabilité de 40 % à 50 % que les régions centrales et méridionales des TNO reçoivent des précipitations supérieures à la moyenne, et que l'ouest reçoive des précipitations dans la normale ou supérieures à celle-ci.

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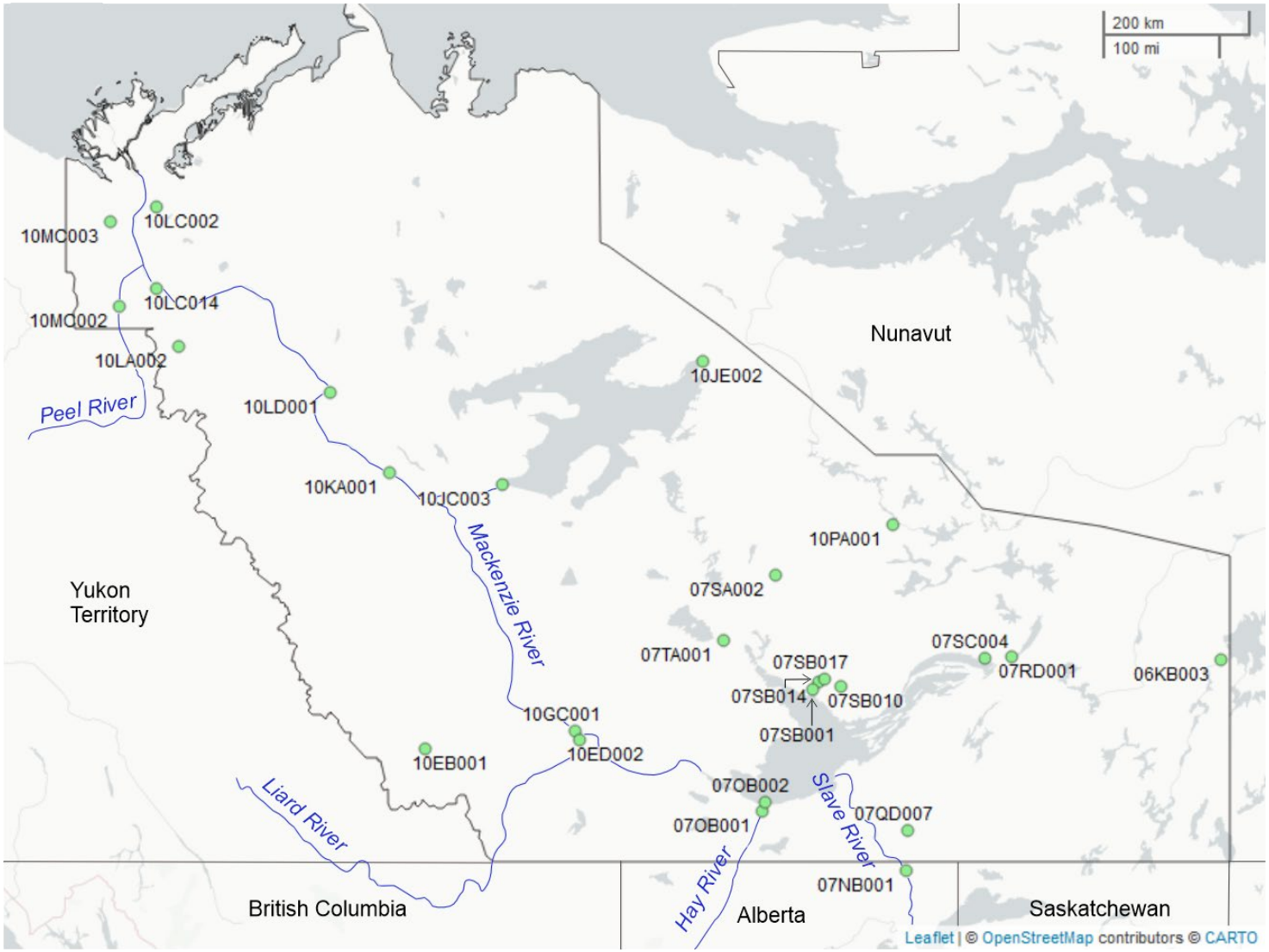
Hydrometric station map



Above – A map of the hydrometric stations included in this report.

Information on interpreting figures

Water level and flow figures

Note: Additional grey bands have been added to represent the 10th and 90th percentiles.

The light blue line shows water levels/flows from last year (2024), while the dark blue line shows current water levels/flows from 2025. The darkest grey band represents the average range (calculated as the interquartile range, which is the 25th to 75th percentile), the next lightest grey bands represent a wider range of values (10th to 90th percentiles) and the lightest grey bands represent the highest and lowest levels or flows on record. If the dark blue line is within the dark grey band, current conditions can be assumed to be normal.

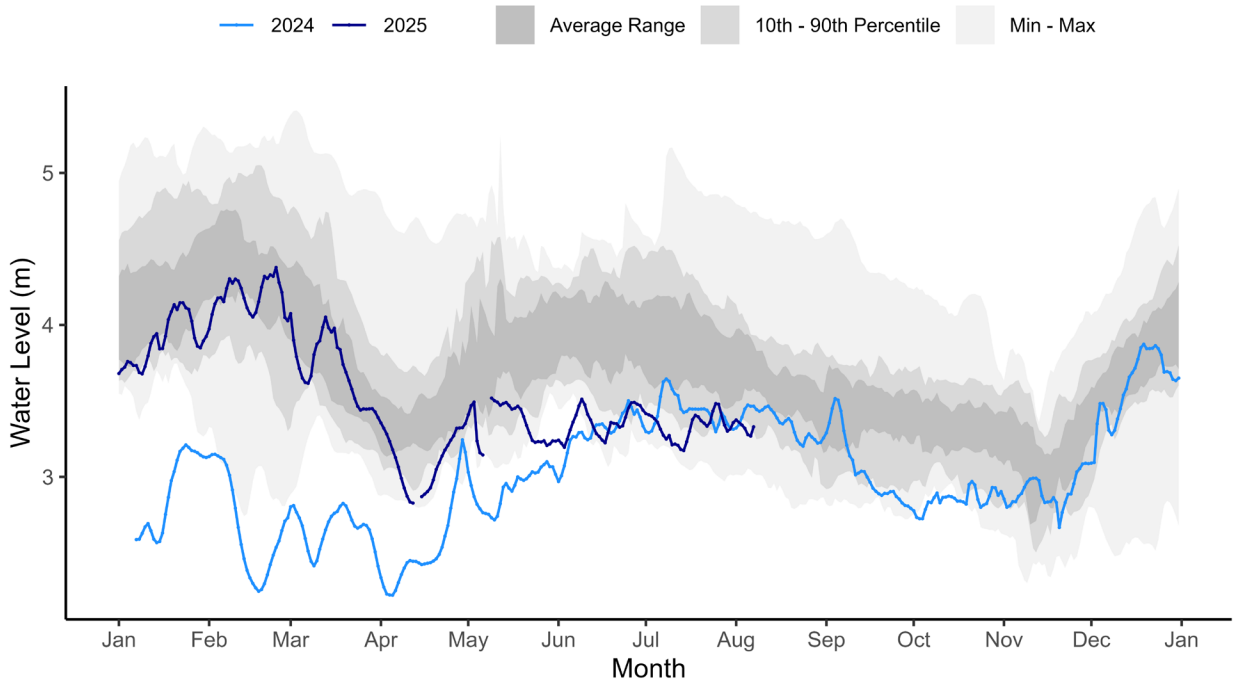
Note: The grey bands are calculated for data prior to 2024. If the line from 2024 or 2025 is above (or below) the grey band, it means that the water level or flow from that year was the highest (or lowest) on record.

Climate figures

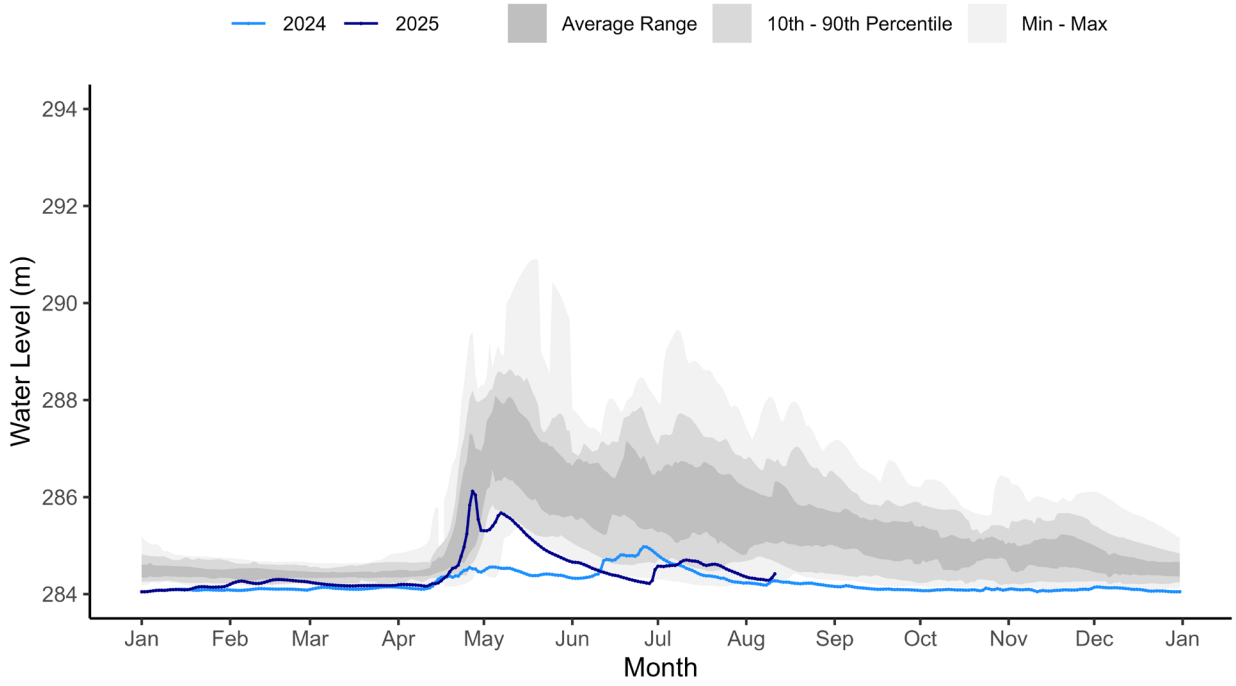
Monthly air temperature and precipitation data are displayed for six communities in the NWT (Fort Smith, Hay River, Yellowknife, Fort Simpson, Norman Wells, and Inuvik) and presented as box and whisker plots. The box in each plot represents the average range (calculated as the interquartile range) for each month, and the whiskers are the vertical black lines that represent the extreme values (10th to 90th percentiles). Each grey dot is the value from a previous year, beginning in 1950. The red or blue dots represent the values for the current year. These data are primarily acquired and managed by Environment and Climate Change Canada, but in some cases 2025 values have been infilled with GNWT climate station data when ECCC data are unavailable.

Water level and flow data

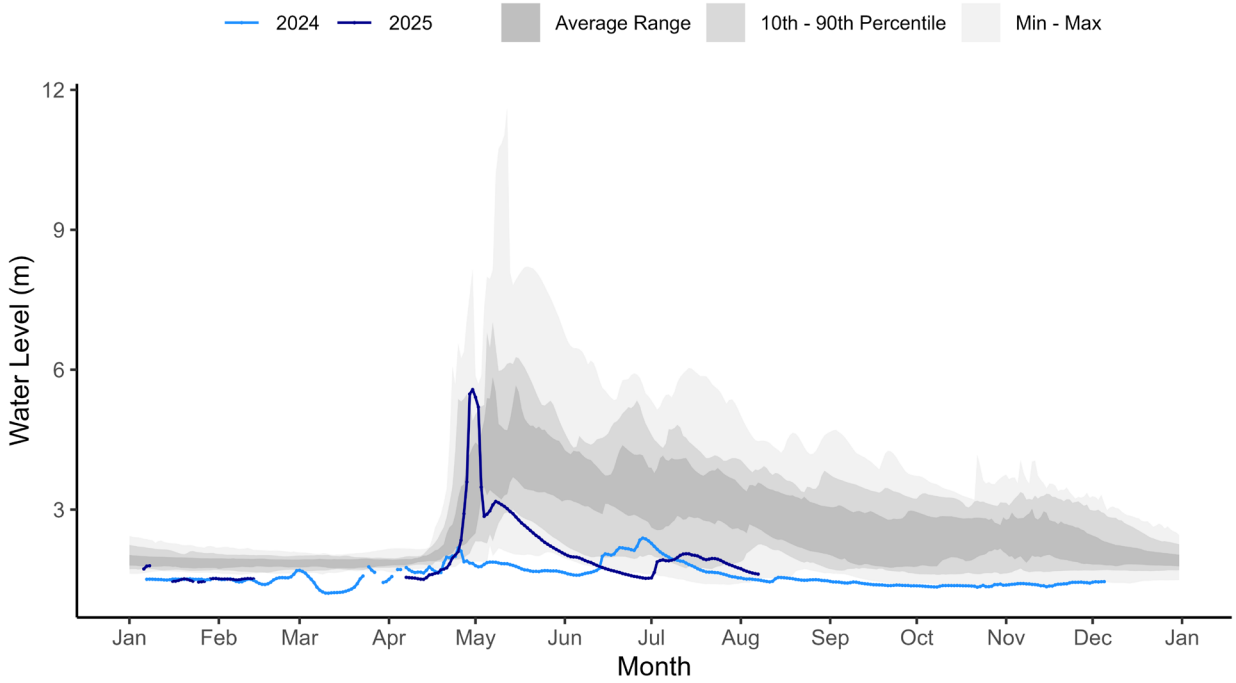
Slave River at Fitzgerald [07NB001]



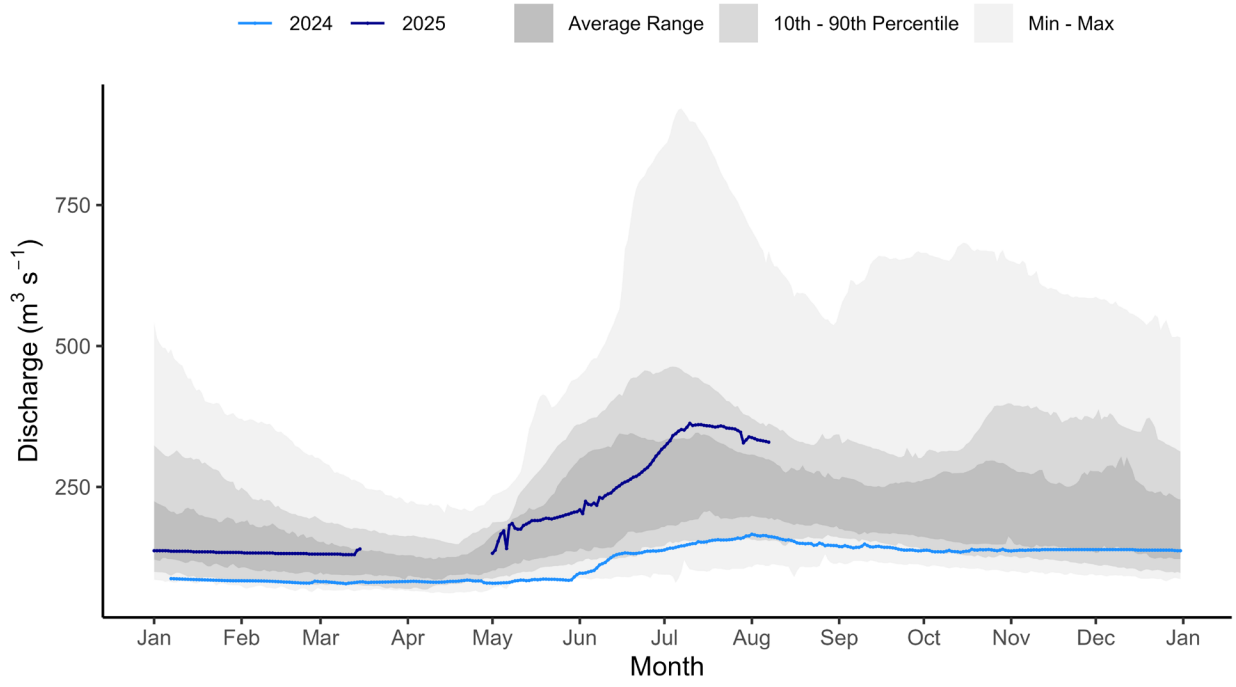
Hay River near Alberta/NWT Boundary [07OB008]



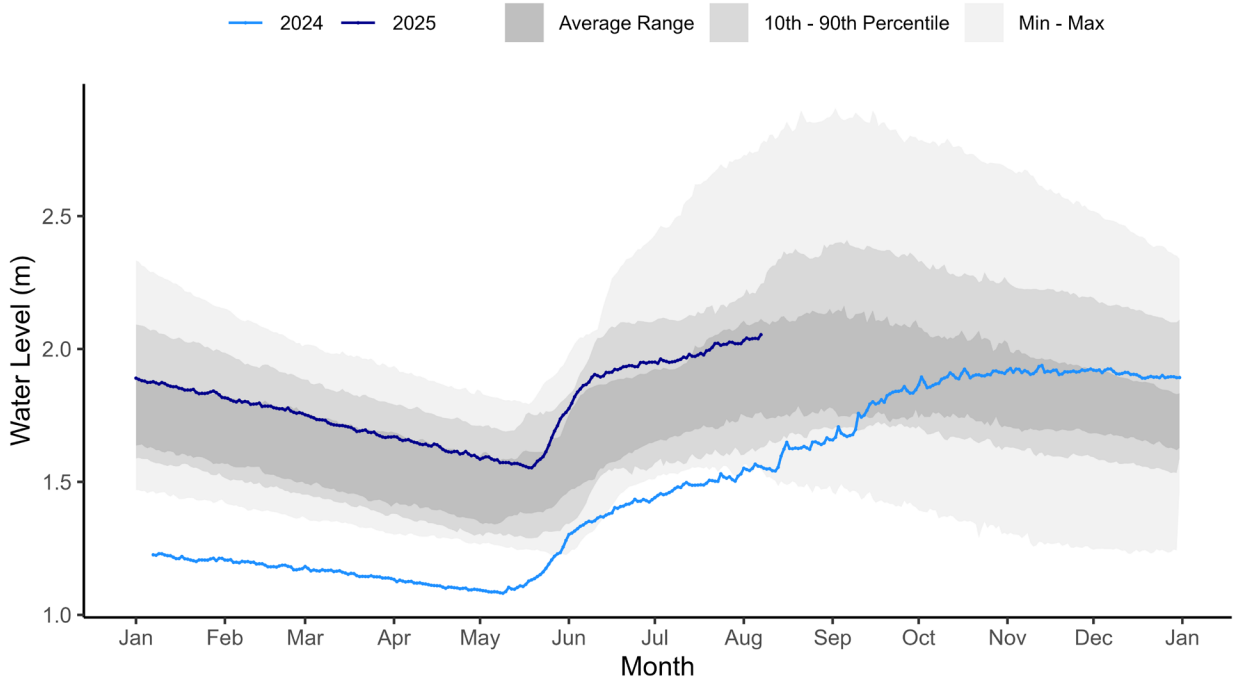
Hay River near Hay River [07OB001]



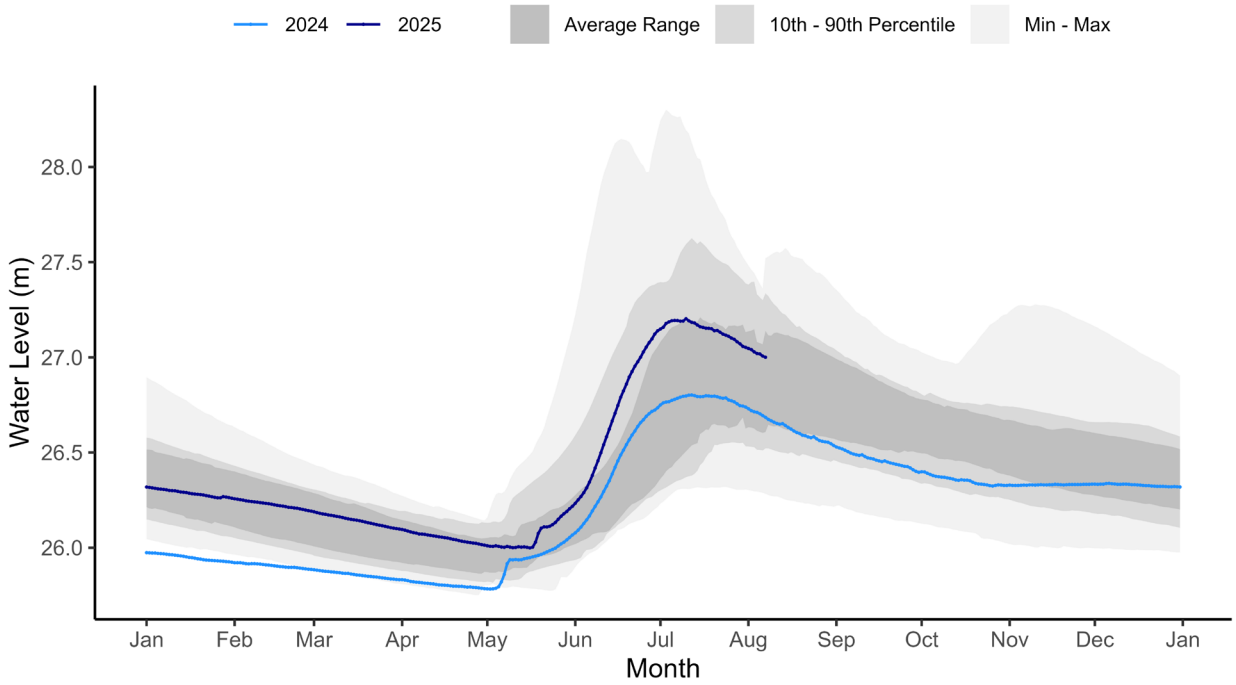
Taltson River below Hydro Dam [07QD007]



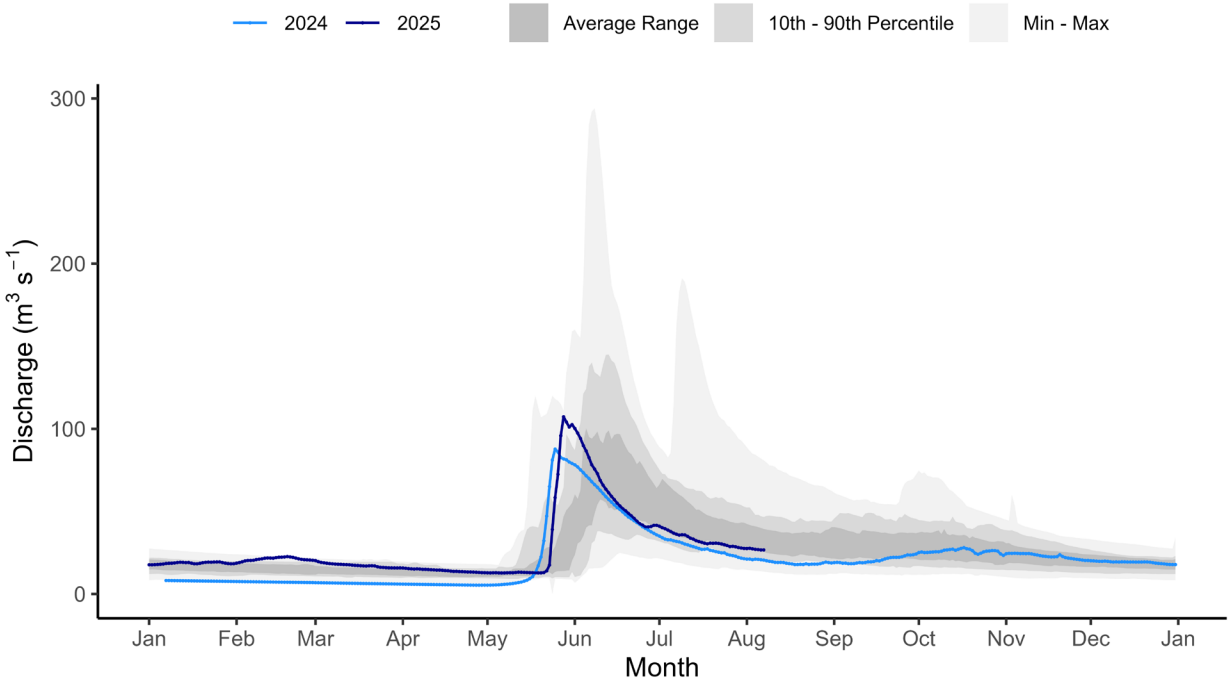
Lockhart River at outlet of Artillery Lake [07RD001]



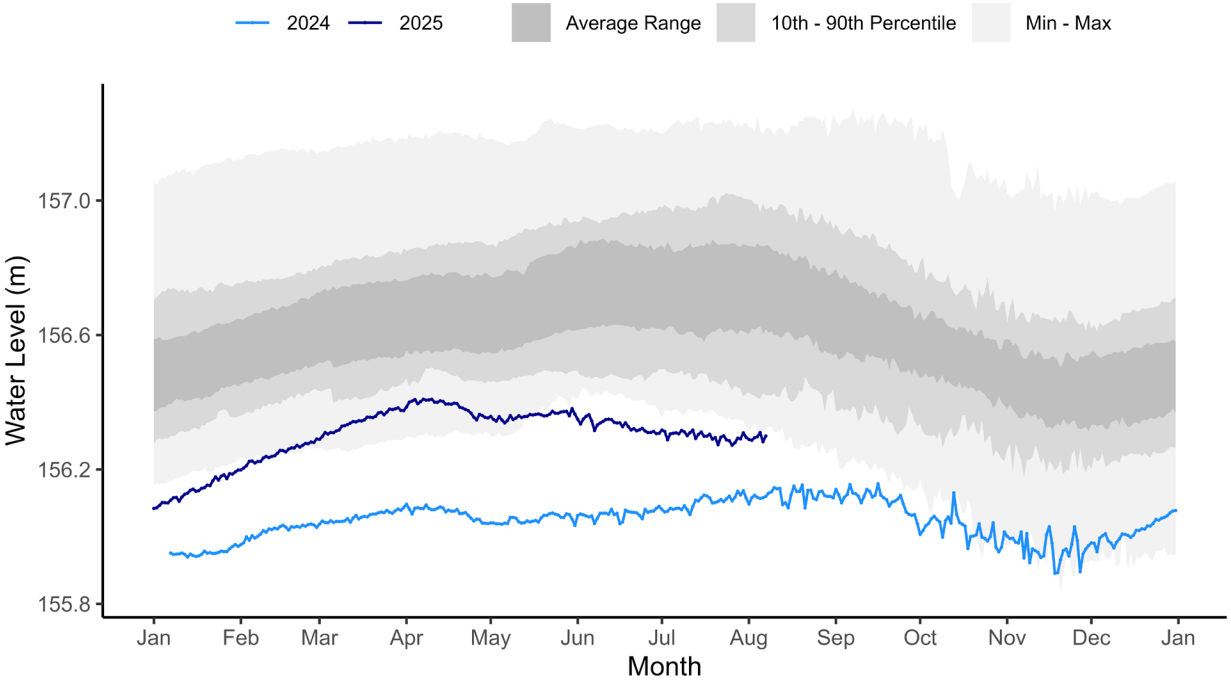
Snare River below Ghost Lake [07SA002]



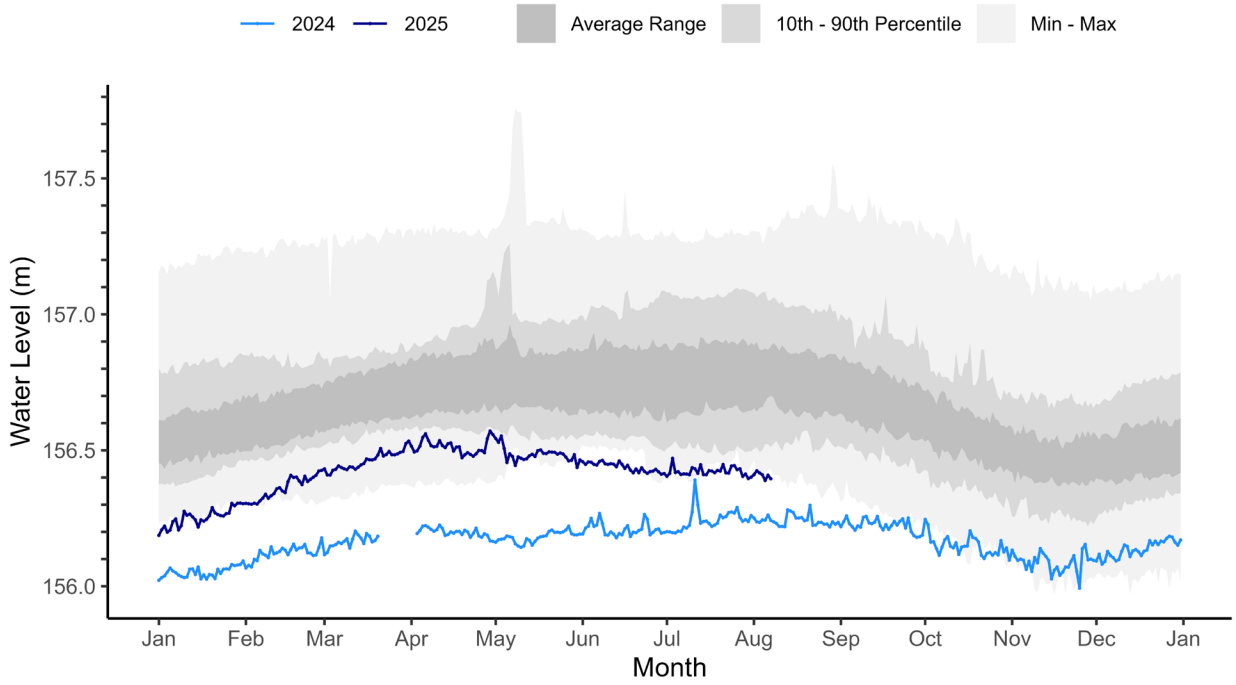
Coppermine River below Desteffany Lake [10PA001]



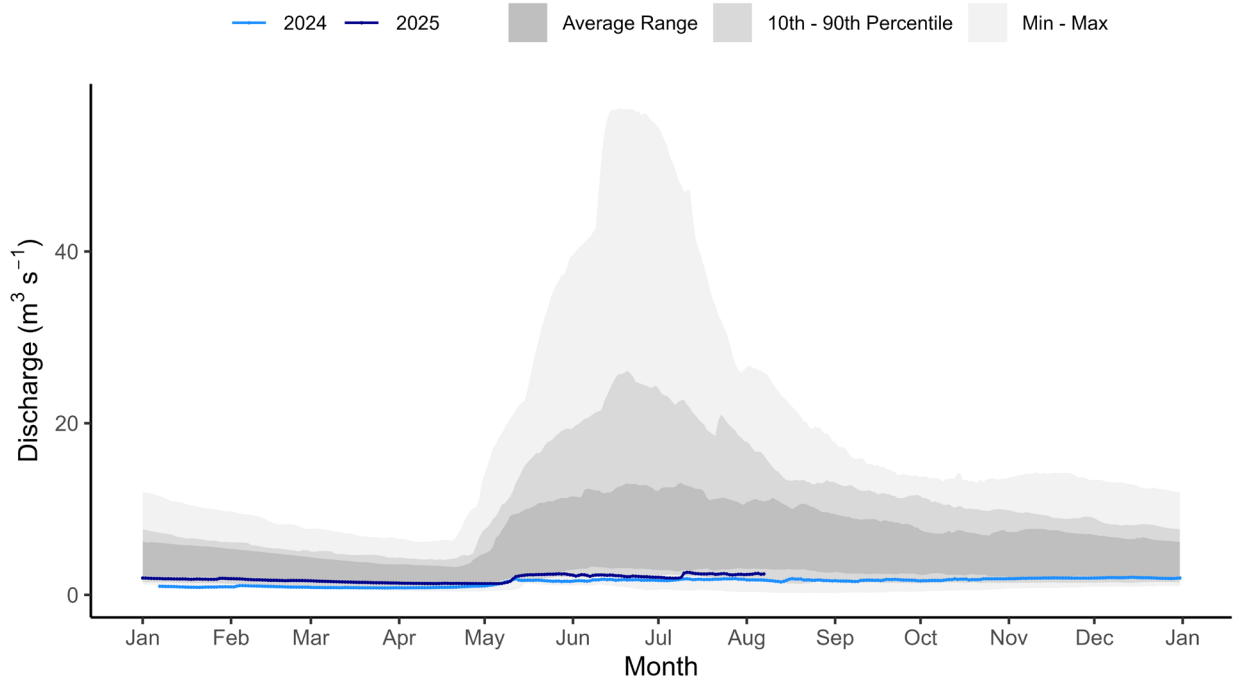
Great Slave Lake at Yellowknife Bay [07SB001]



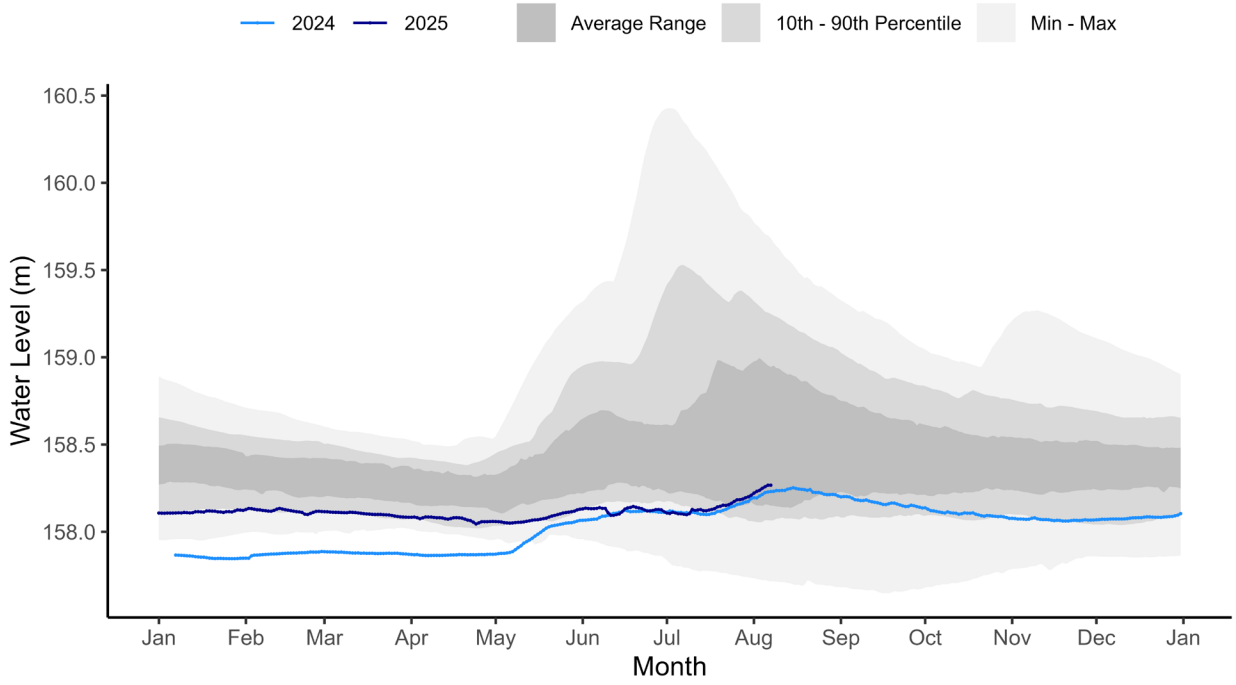
Great Slave Lake at Hay River [07OB002]



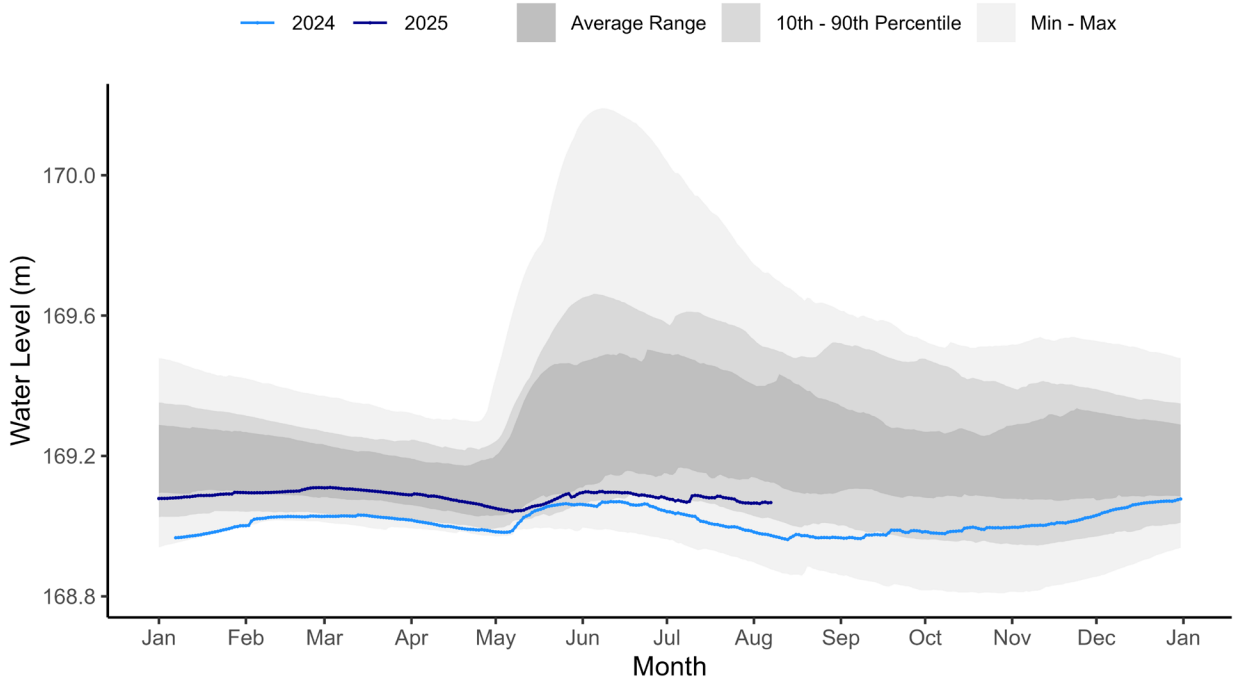
Cameron River below Reid Lake [07SB010]



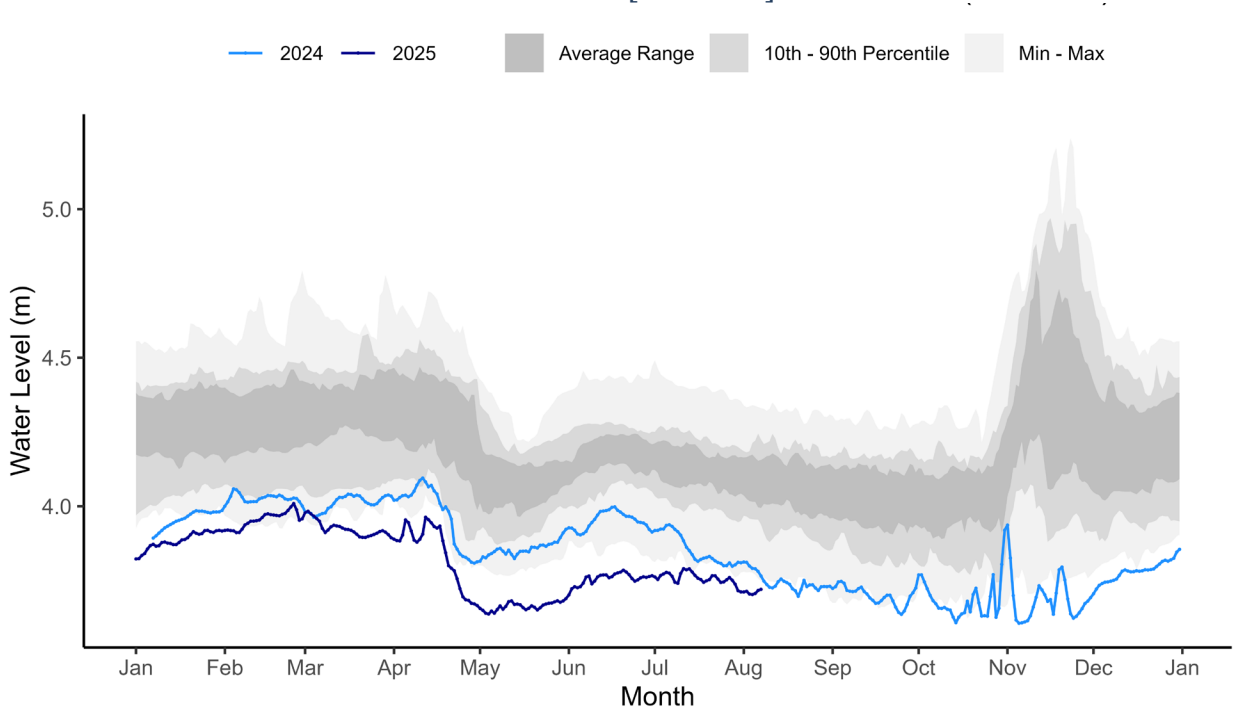
Prosperous Lake near McMeekan Bay [07SB014]



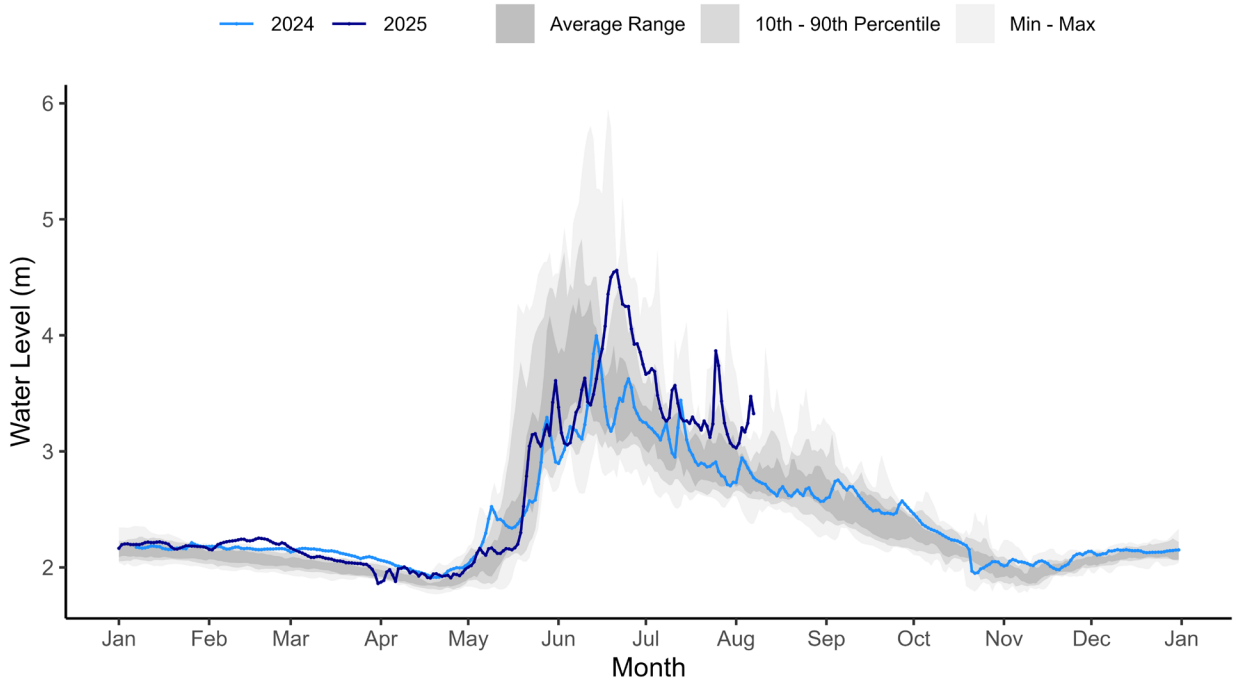
Prelude Lake near Yellowknife [07SB017]



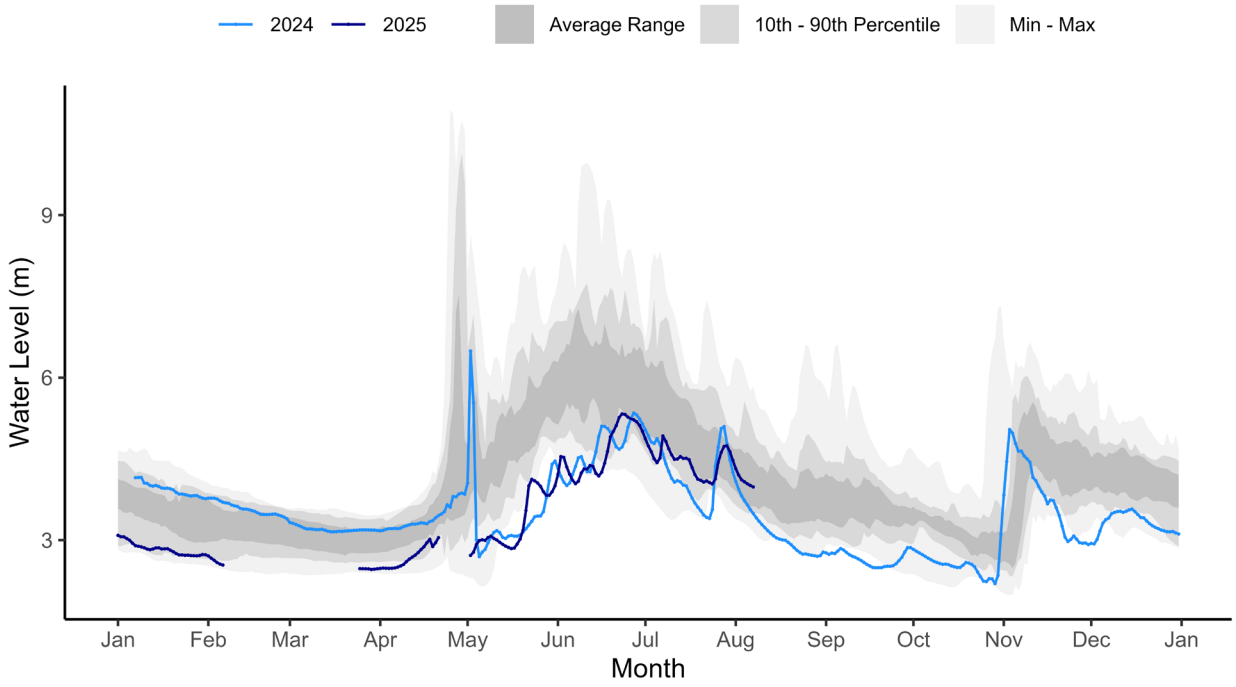
La Martre River below outlet of Lac La Martre [07TA001]



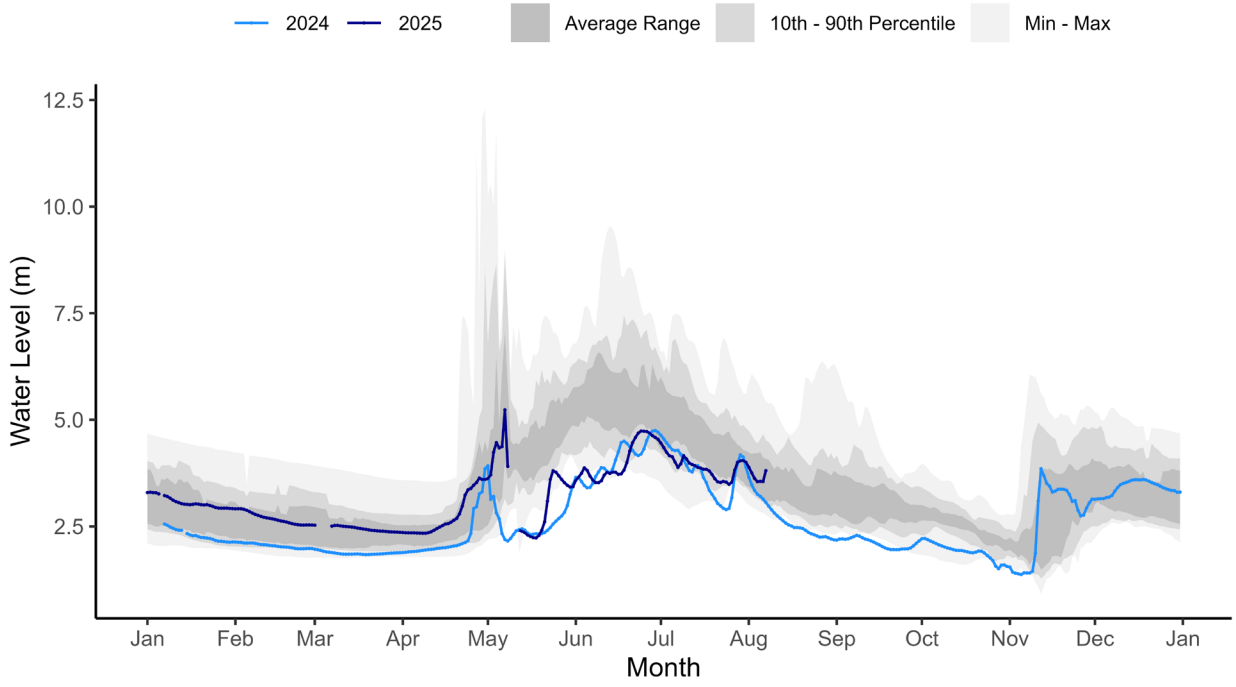
South Nahanni River above Virginia Falls [10EB001]



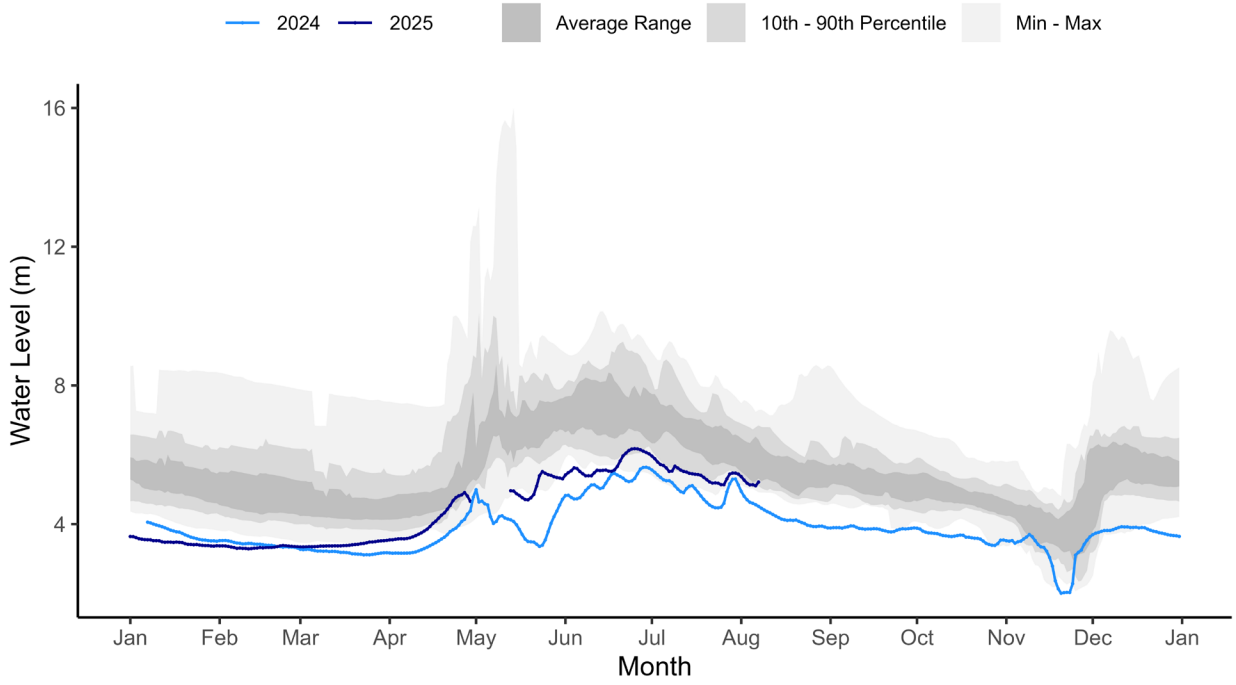
Liard River at Fort Liard [10ED001]



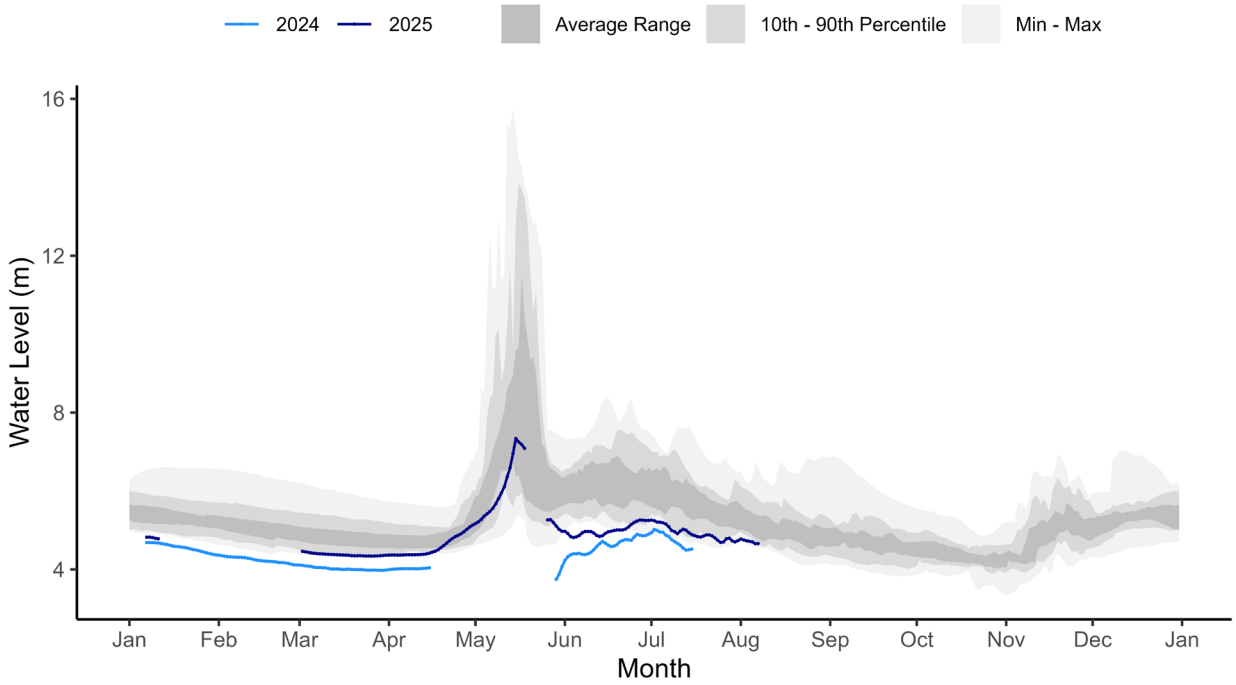
Liard River near the mouth [10ED002]



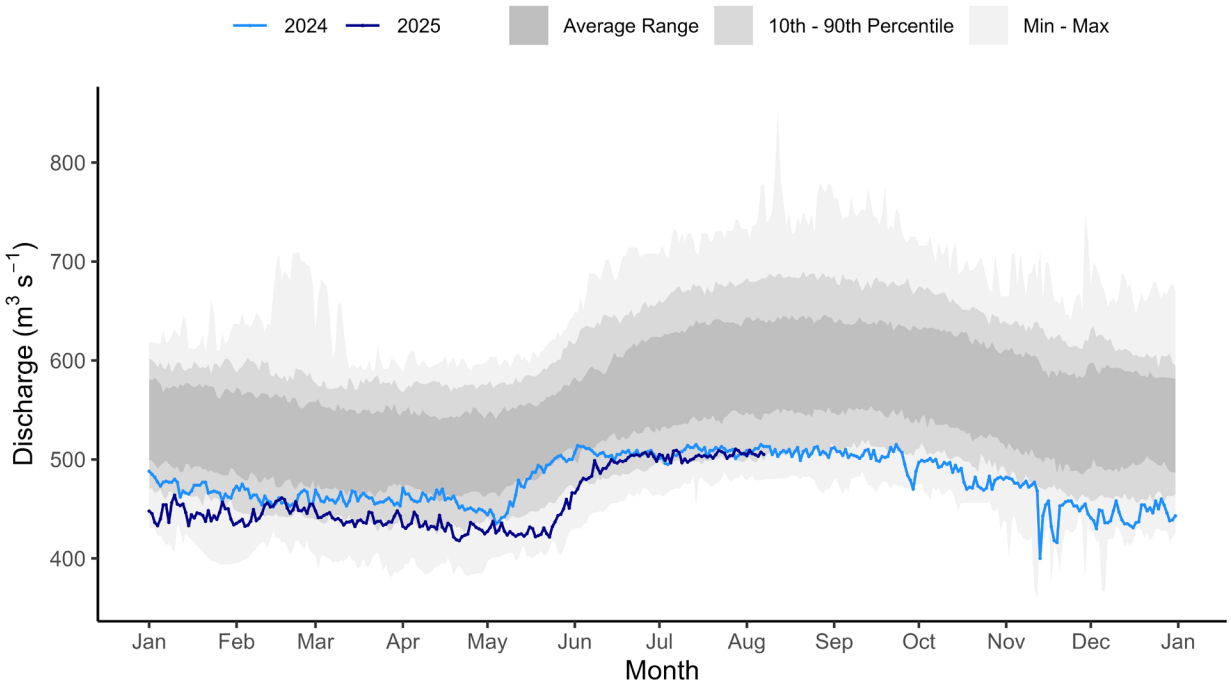
Mackenzie River at Fort Simpson [10GC001]



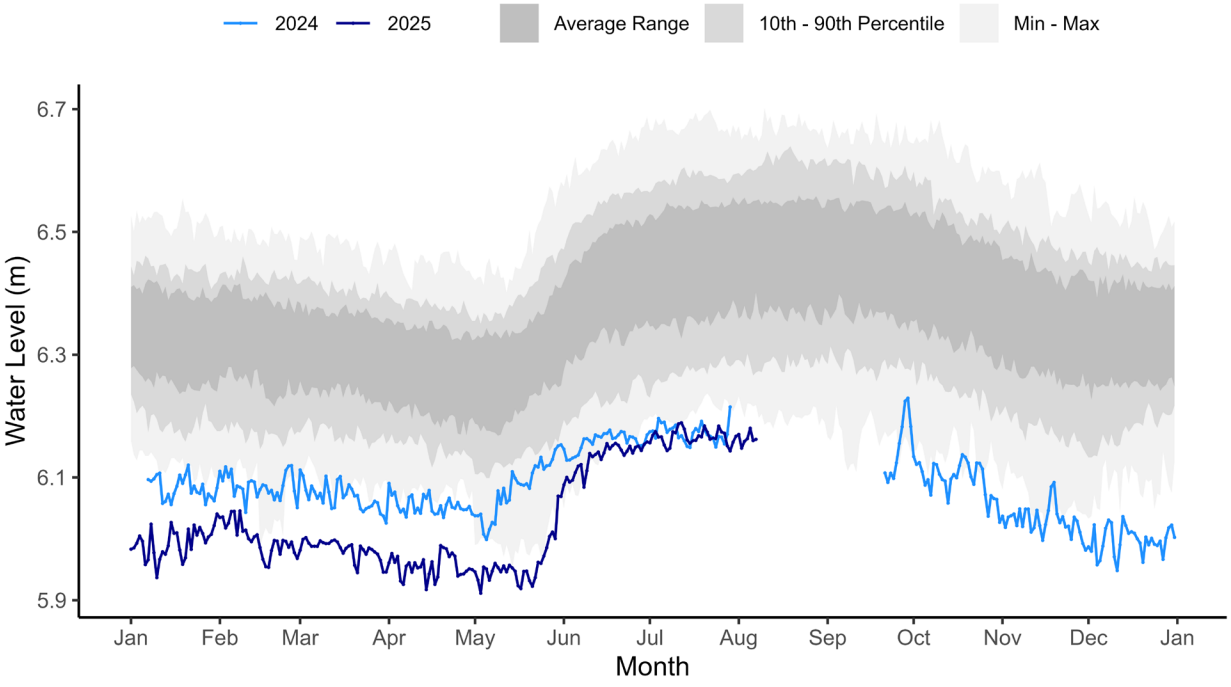
Mackenzie River at Norman Wells [10KA001]



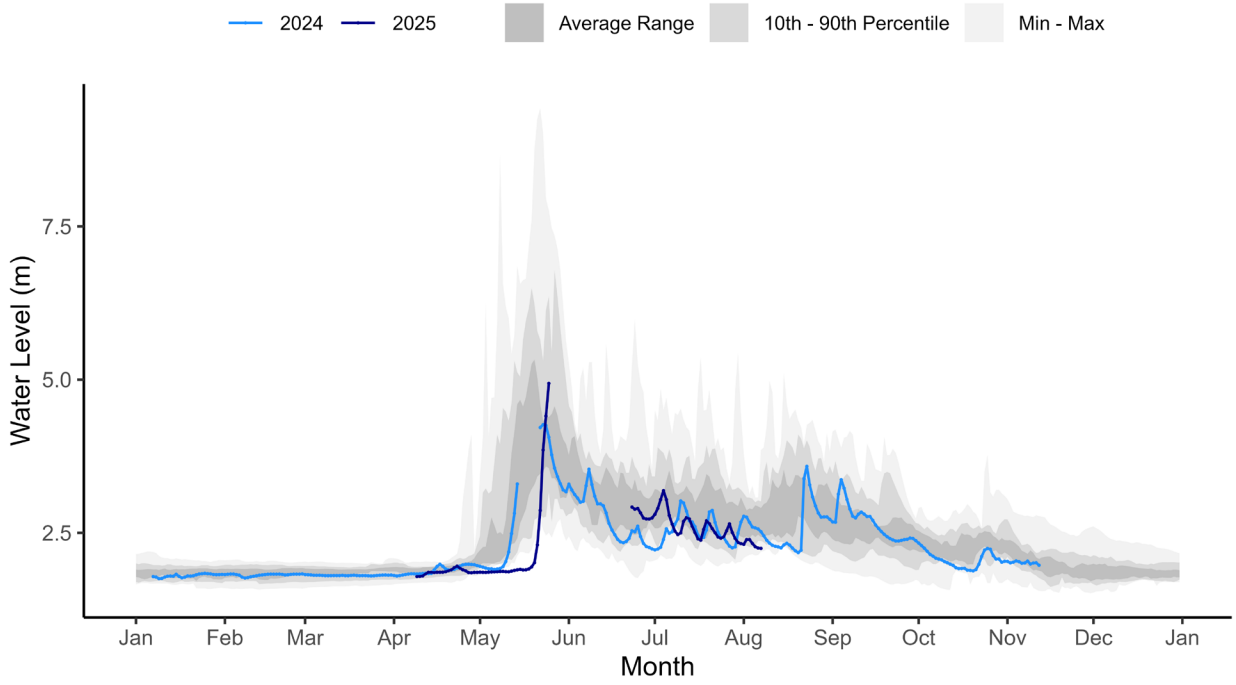
Great Bear River at outlet of Great Bear Lake [10JC003]



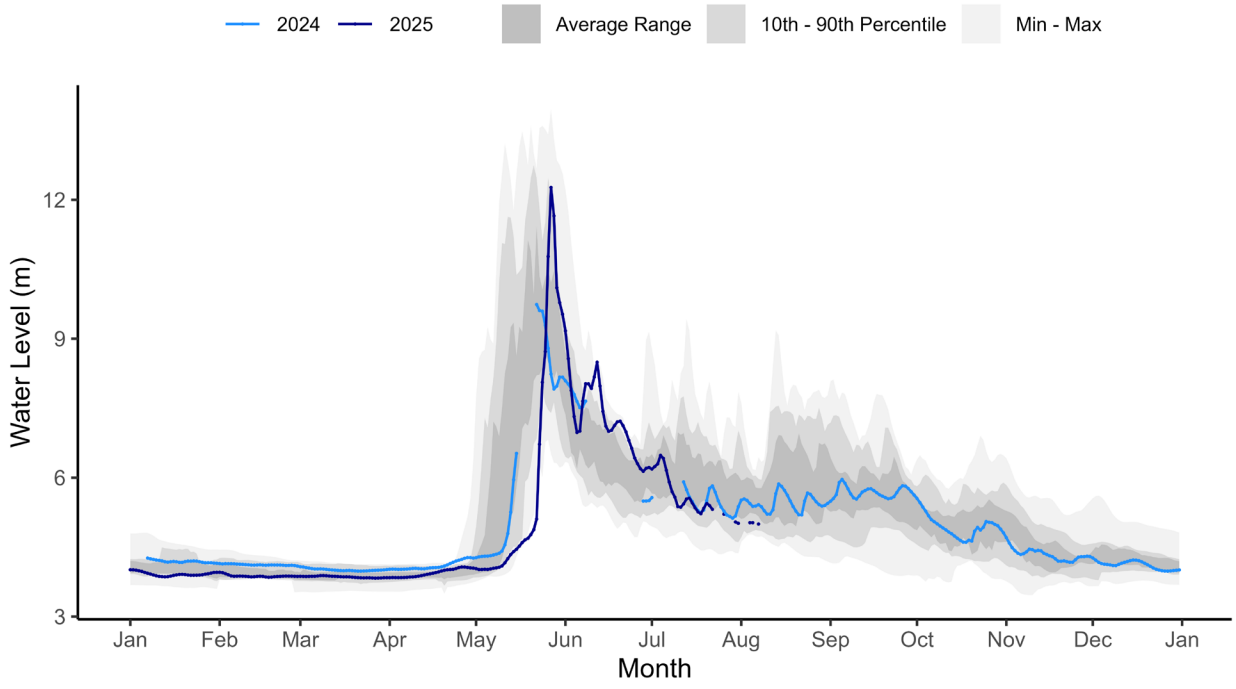
Great Bear Lake at Hornby Bay [10JE002]



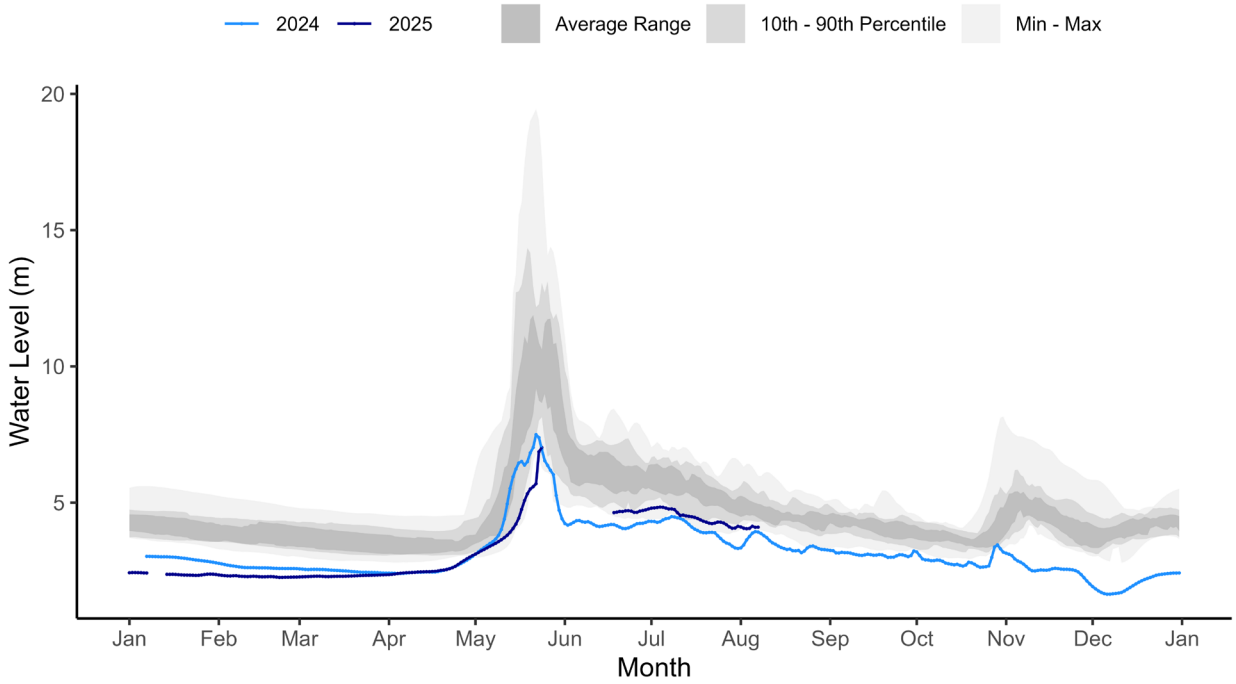
Arctic Red River near the mouth [10LA002]



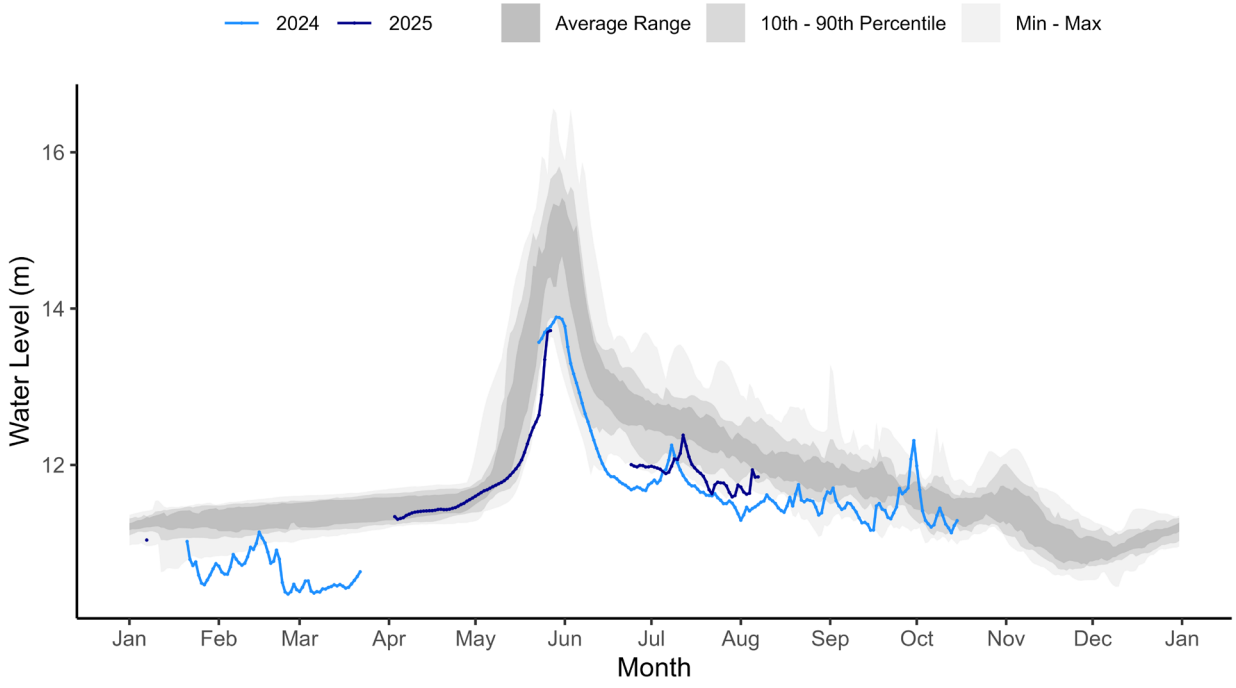
Peel River above Fort McPherson [10MC002]



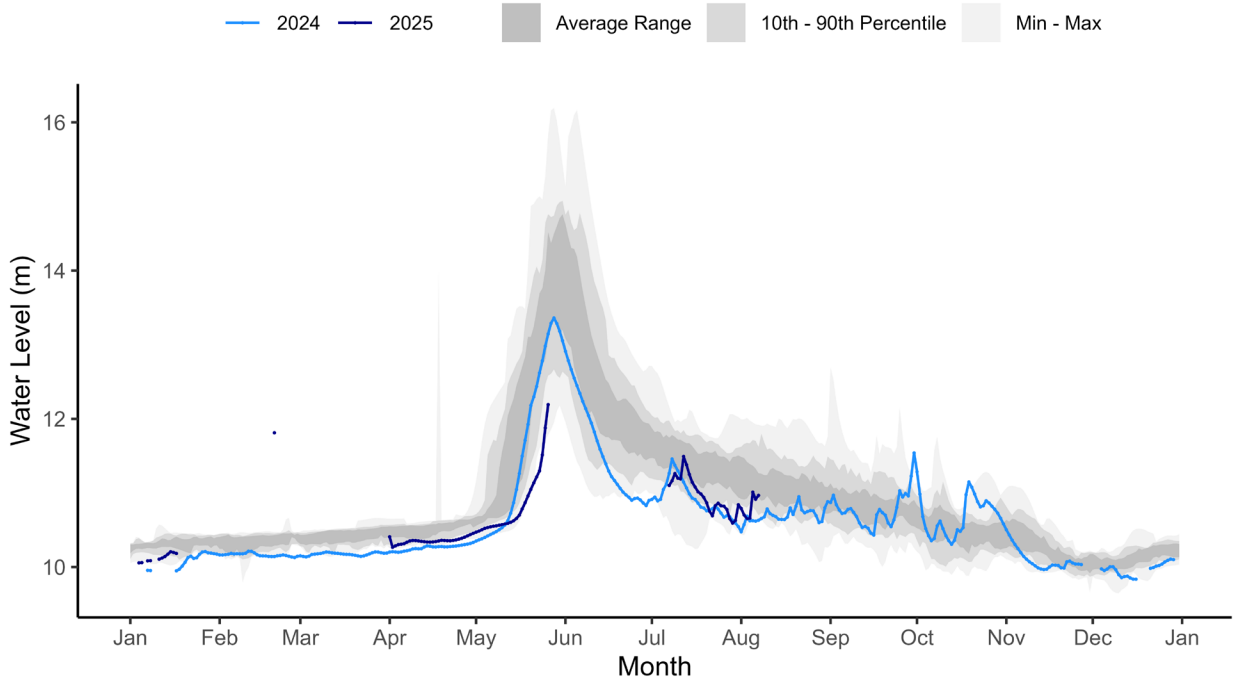
Mackenzie River at Arctic Red River [10LC014]



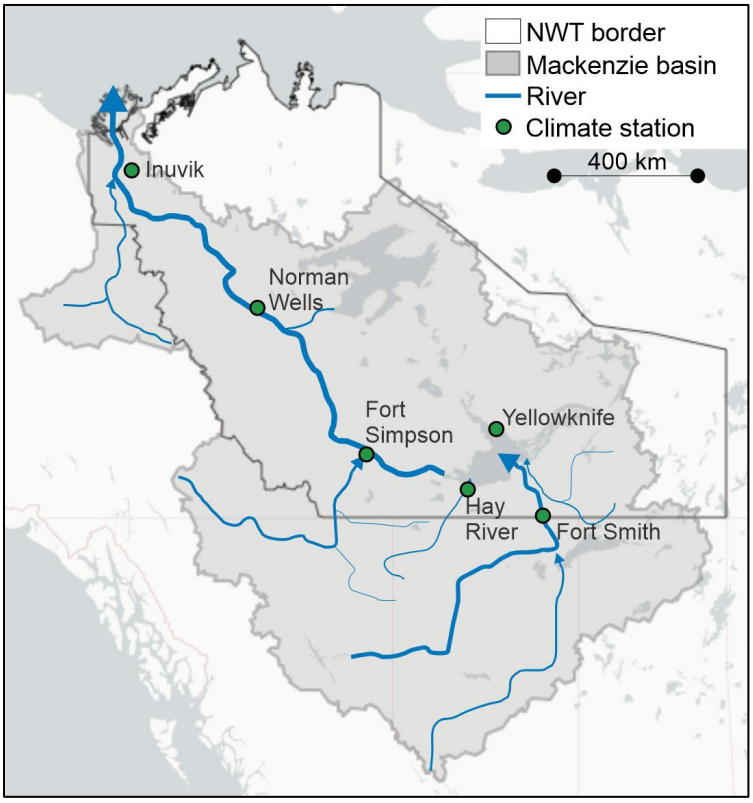
Mackenzie River (East Channel) at Inuvik [10LC002]

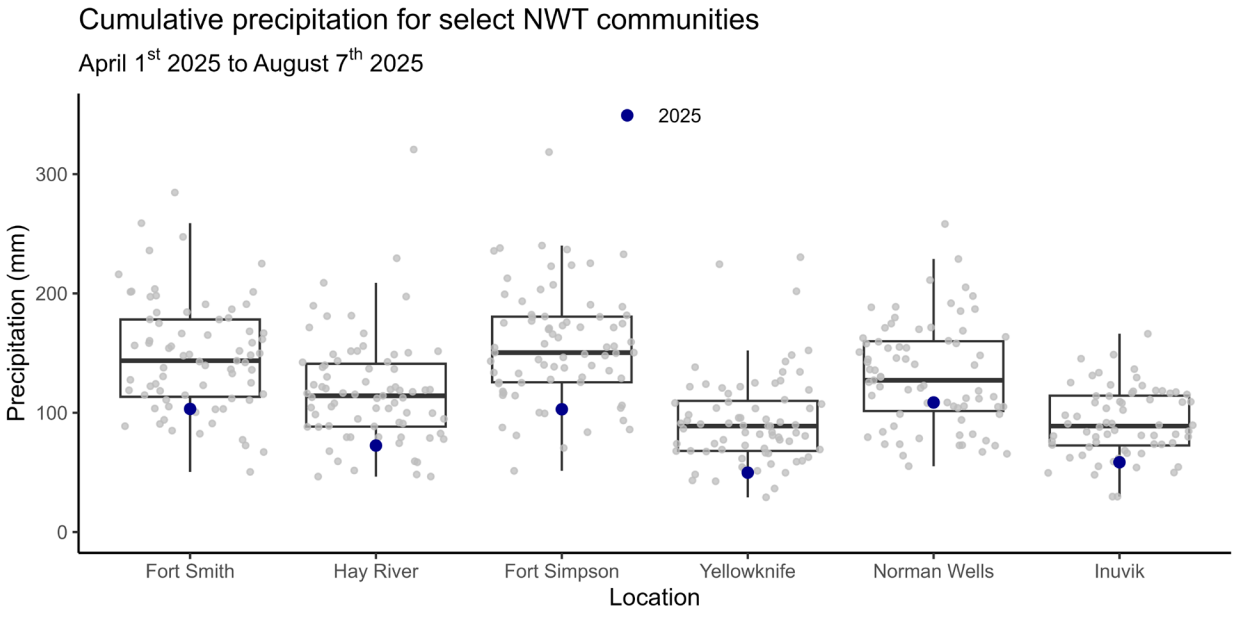


Mackenzie River (Peel Channel) above Aklavik [10MC003]



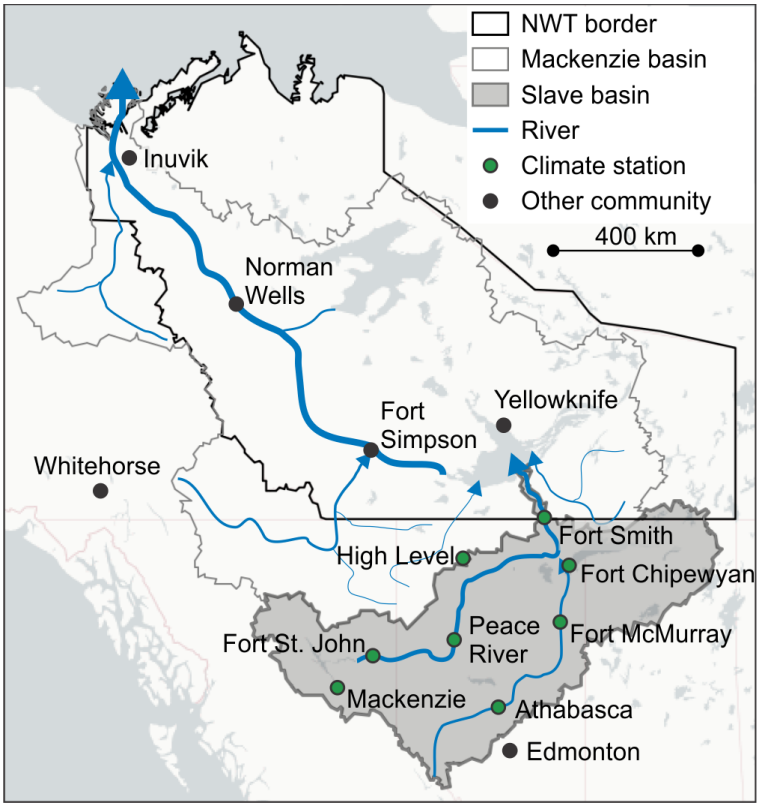
Climate Data
NWT communities

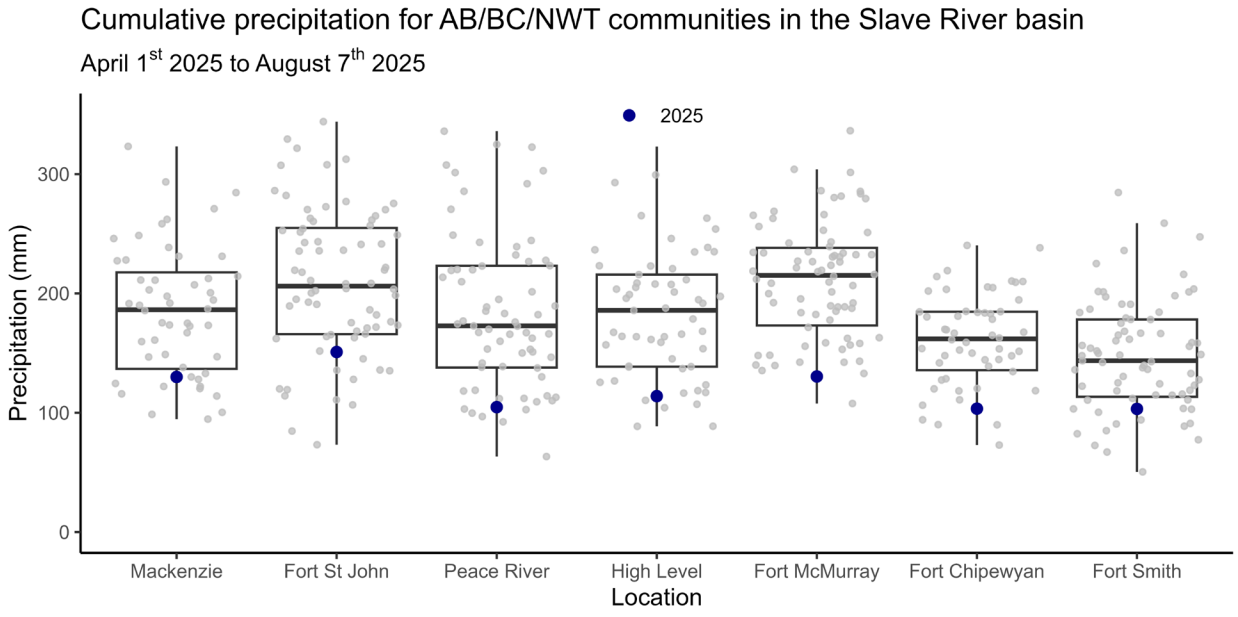




This figure shows total precipitation (rain and snow) that has fallen in select communities across the NWT from the start of April until August 7th. The blue dot is the current year, and the grey dots are all previous years from 1950 to present. See the map above for geographical context.

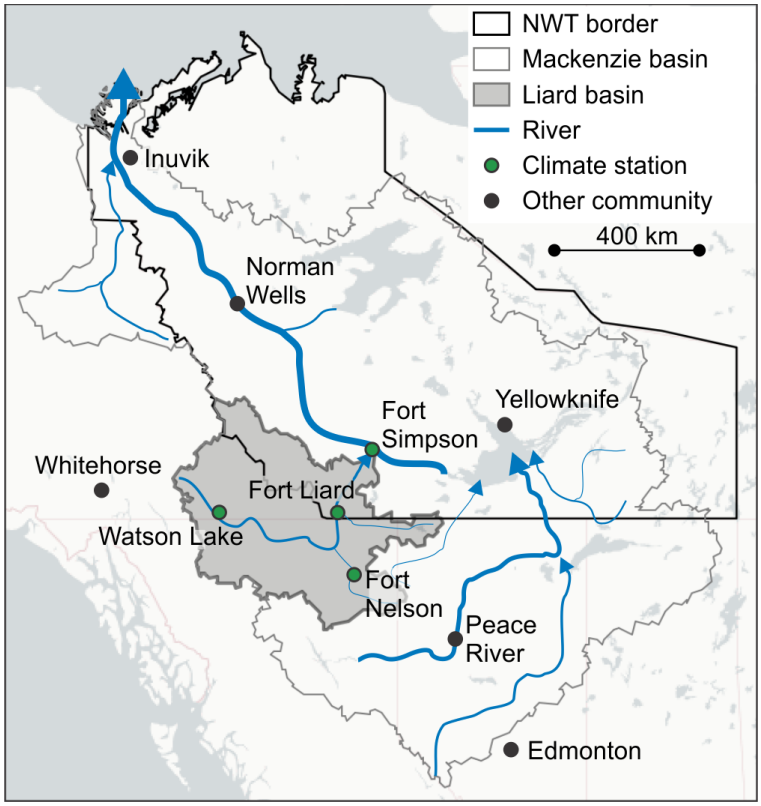
Slave River basin communities

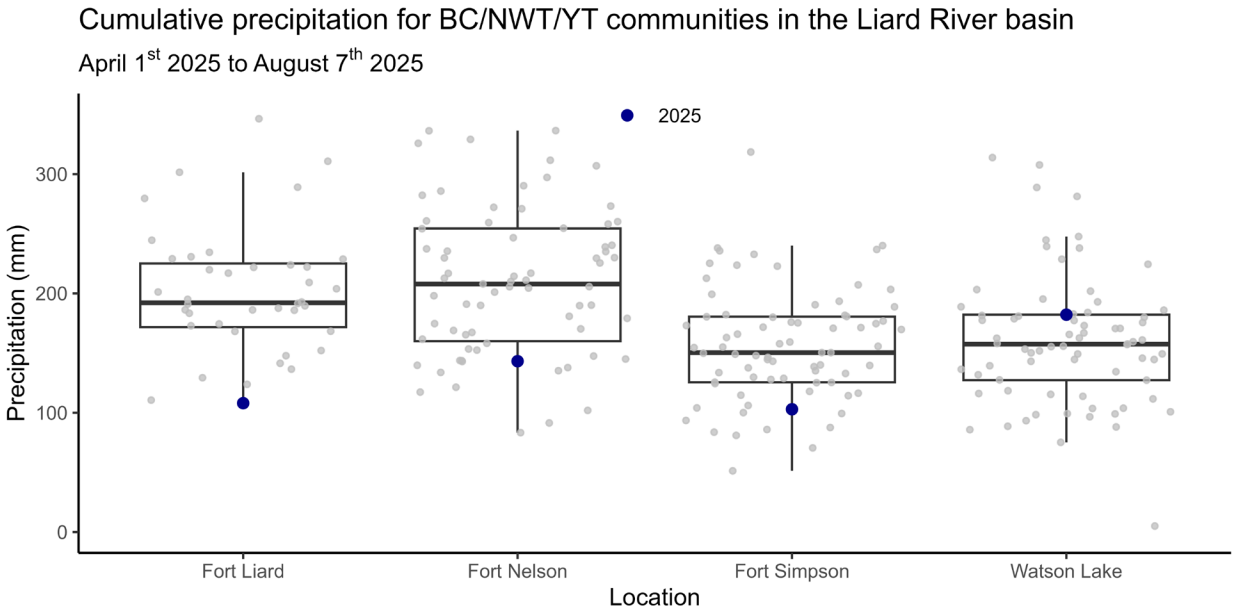




This figure shows total precipitation (rain and snow) that has fallen in select communities in the Slave River basin from the start of April until August 7th. The blue dot is the current year, and the grey dots are all previous years from 1950 to present. See the map above for geographical context.

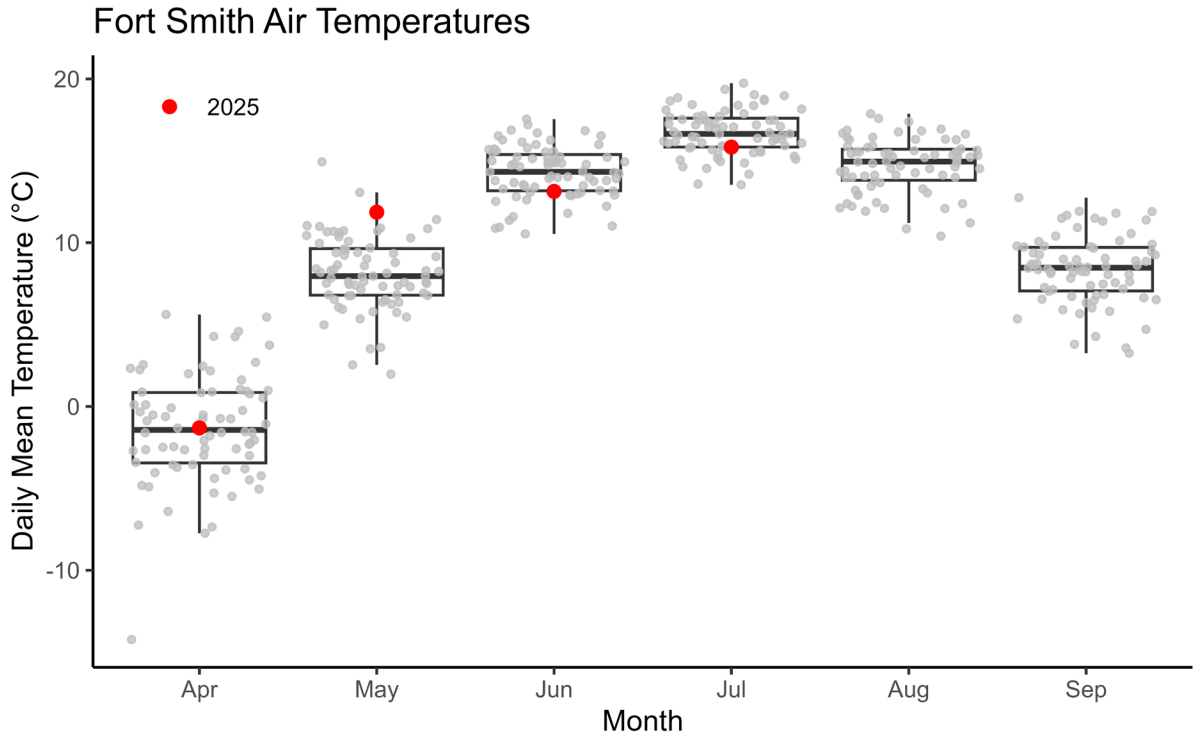
Liard River basin communities

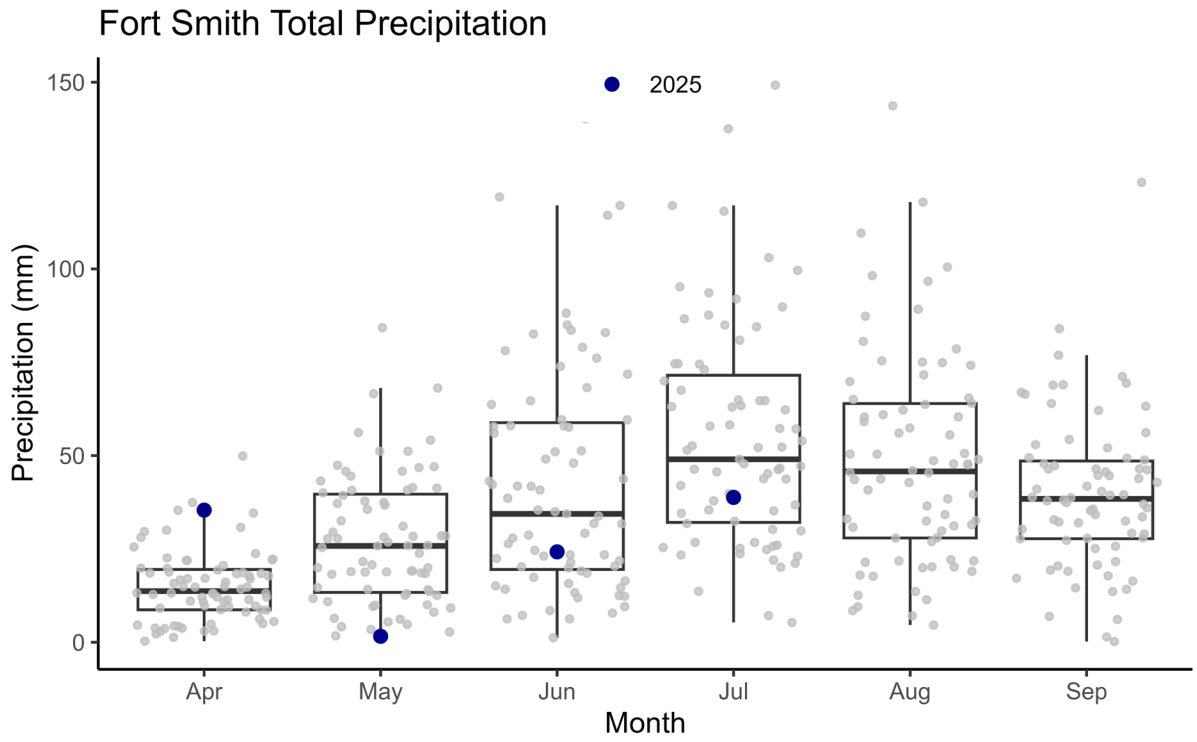




This figure shows total precipitation (rain and snow) that has fallen in select communities in the Liard River basin from the start of April until August 7th. The blue dot is the current year, and the grey dots are all previous years from 1950 to present. See the map above for geographical context.

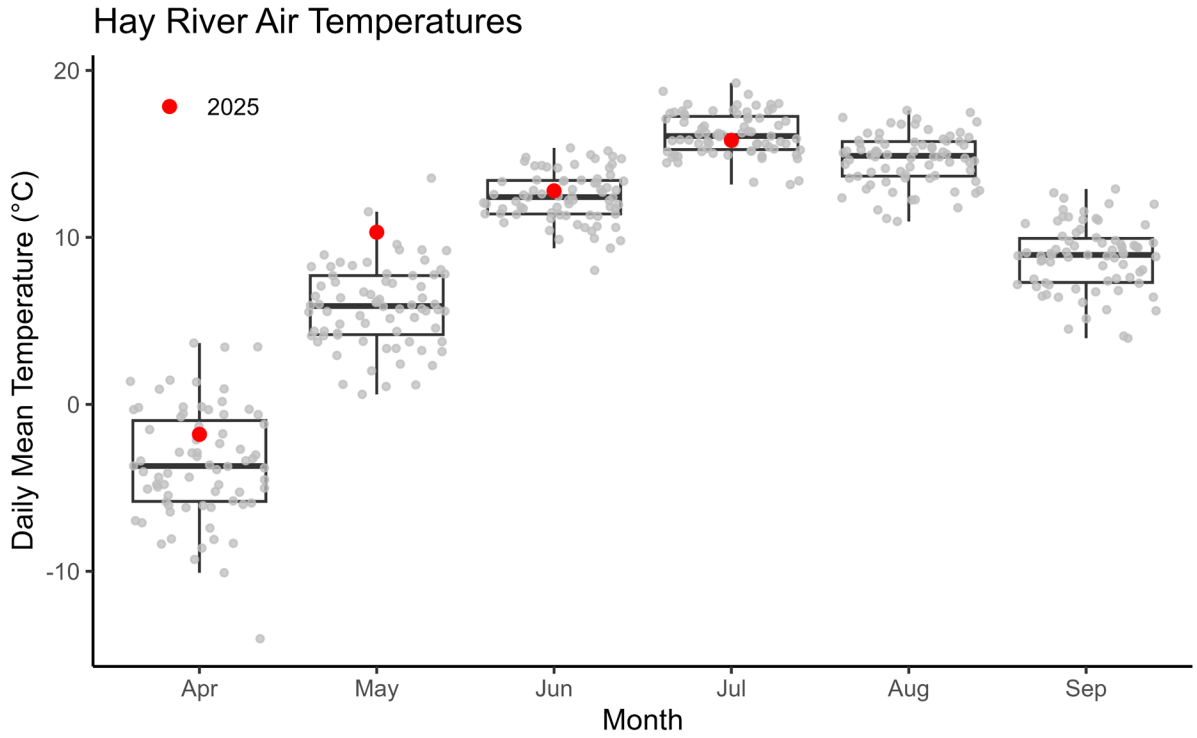
Fort Smith

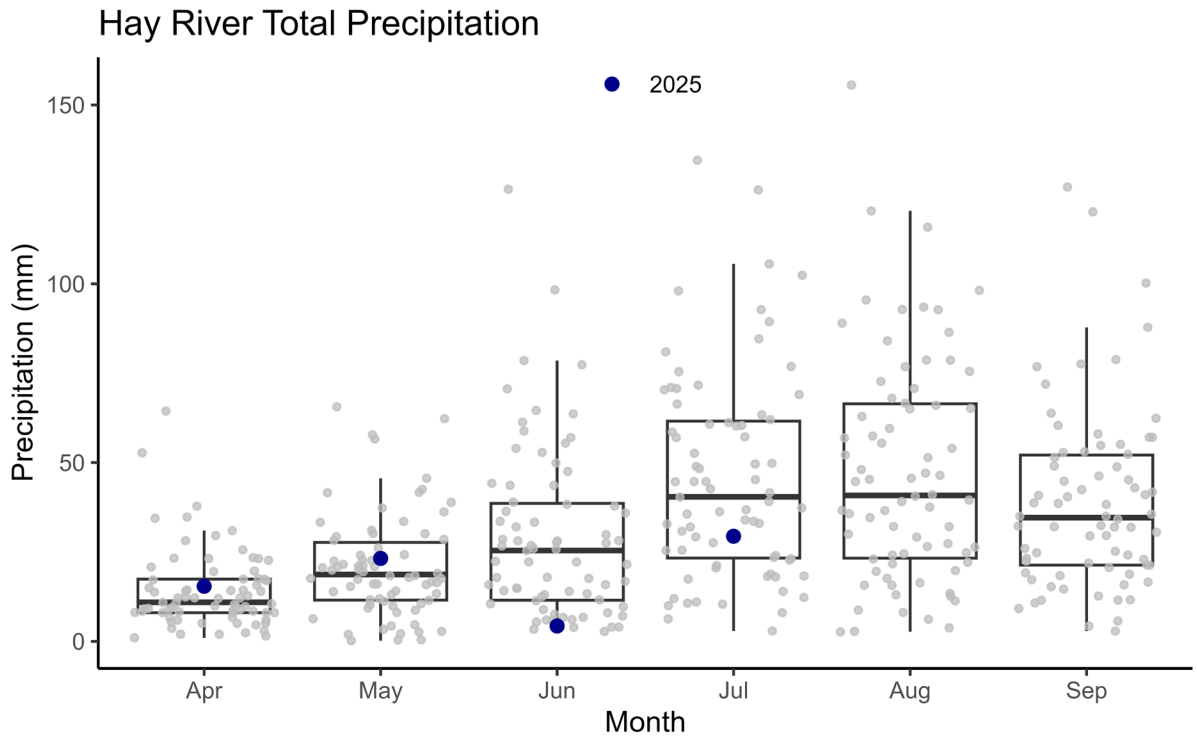




This figure shows mean monthly air temperature and total monthly precipitation for spring and summer 2025.

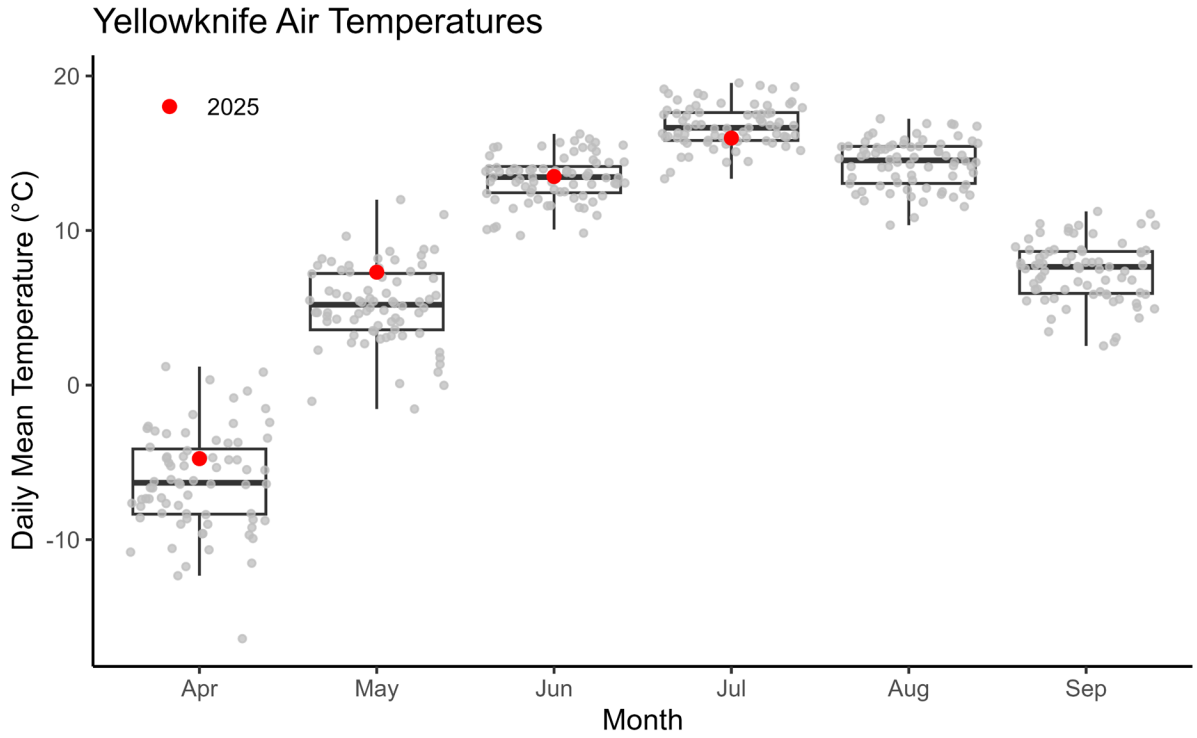
Hay River

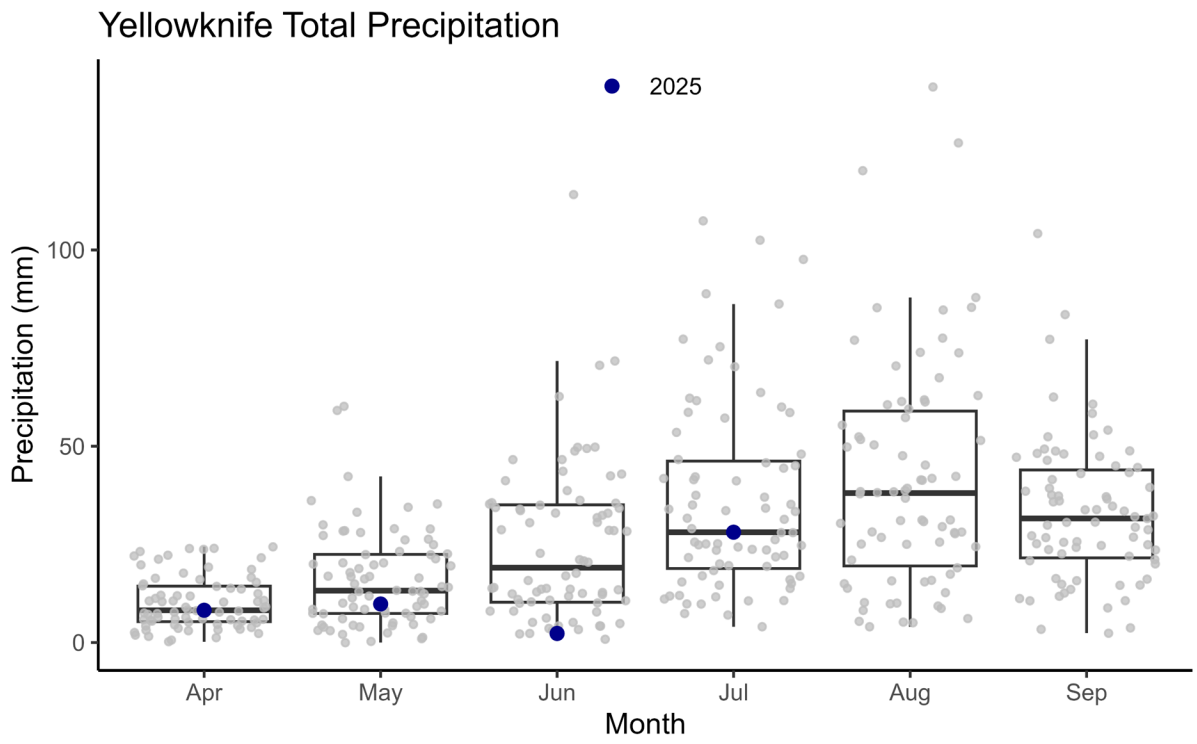




This figure shows mean monthly air temperature and total monthly precipitation for spring and summer 2025.

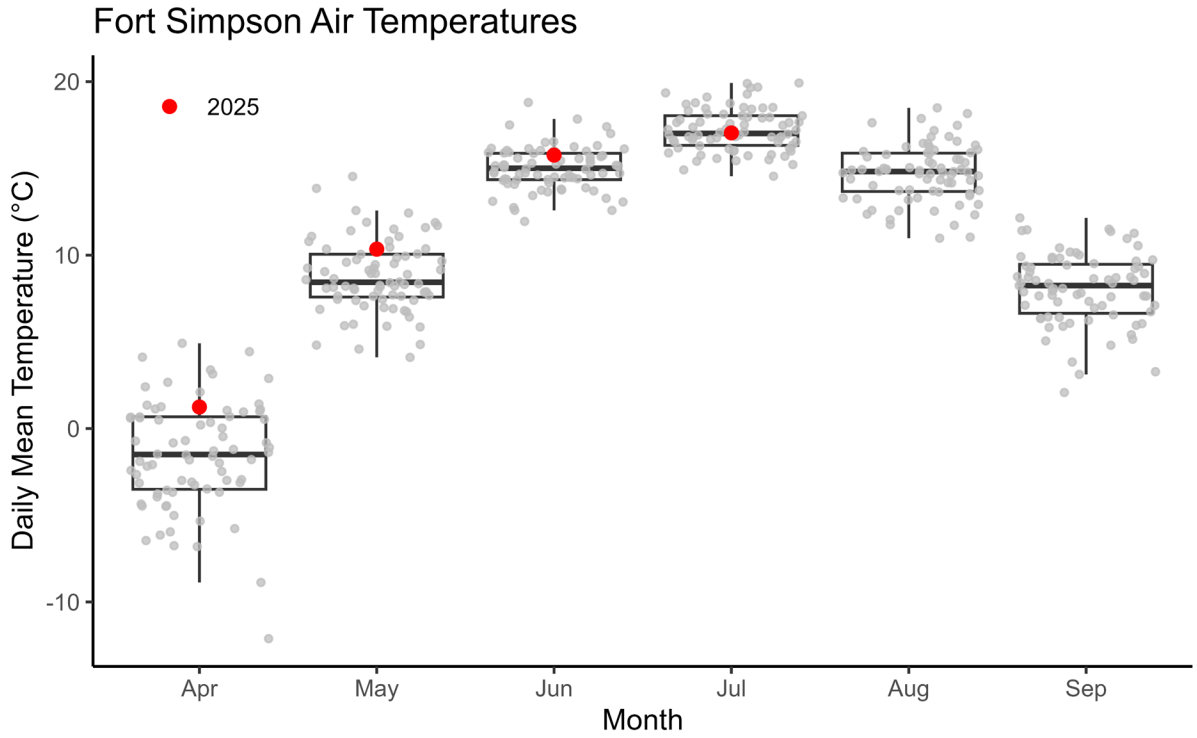
Yellowknife

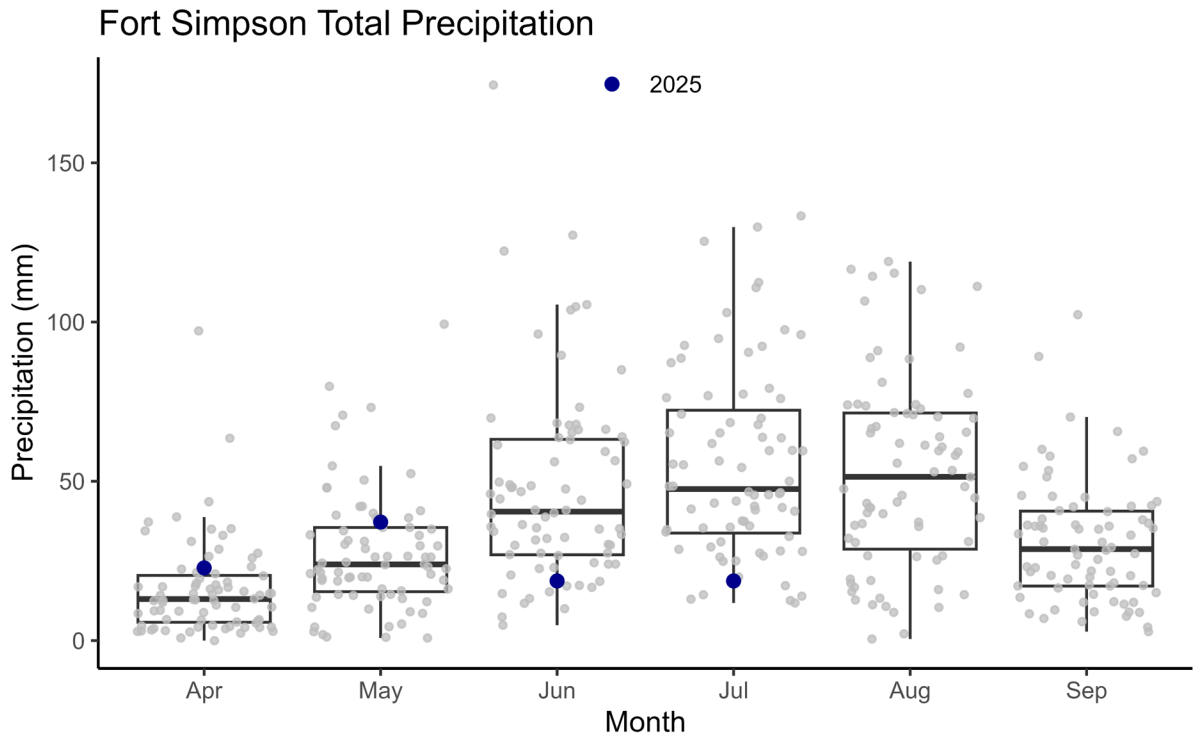




This figure shows mean monthly air temperature and total monthly precipitation for spring and summer 2025.

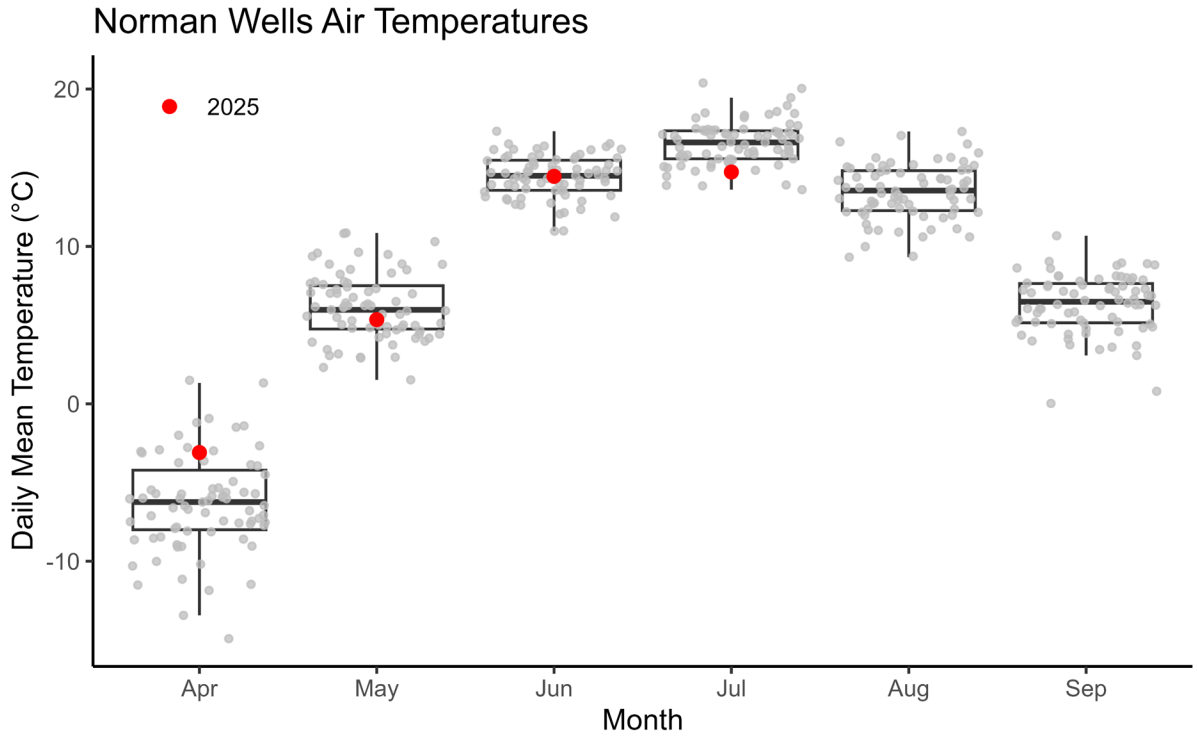
Fort Simpson

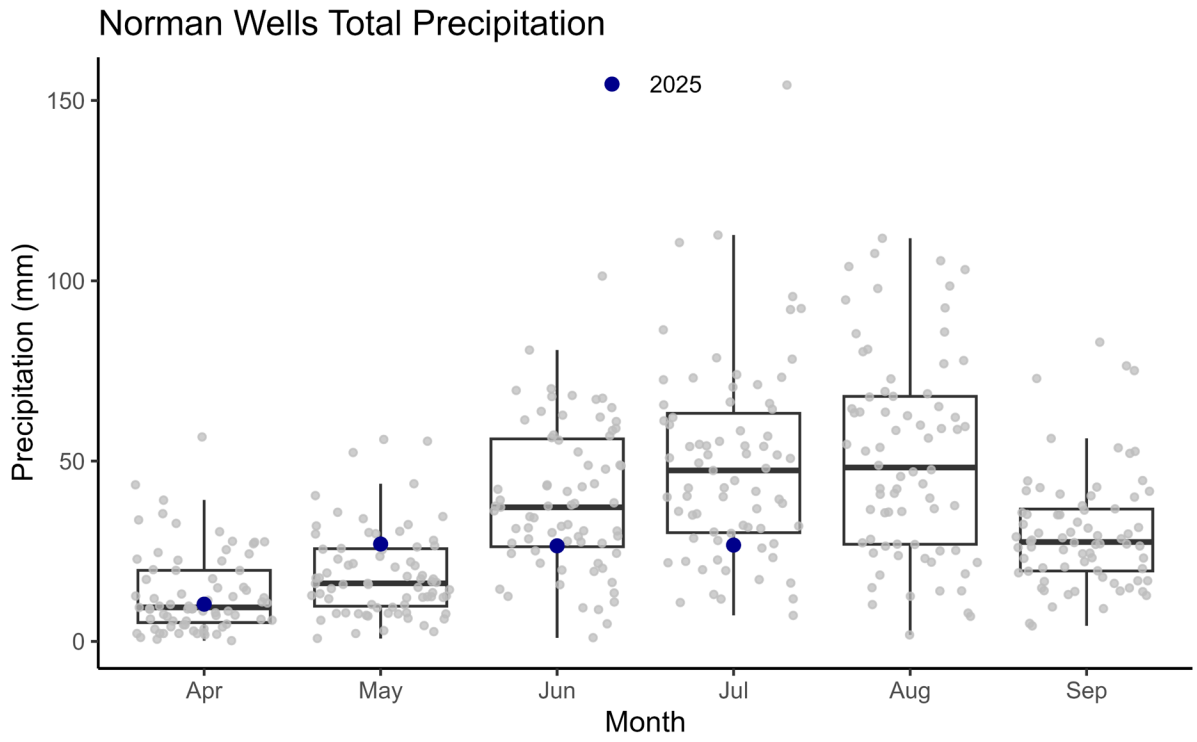




This figure shows mean monthly air temperature and total monthly precipitation for spring and summer 2025.

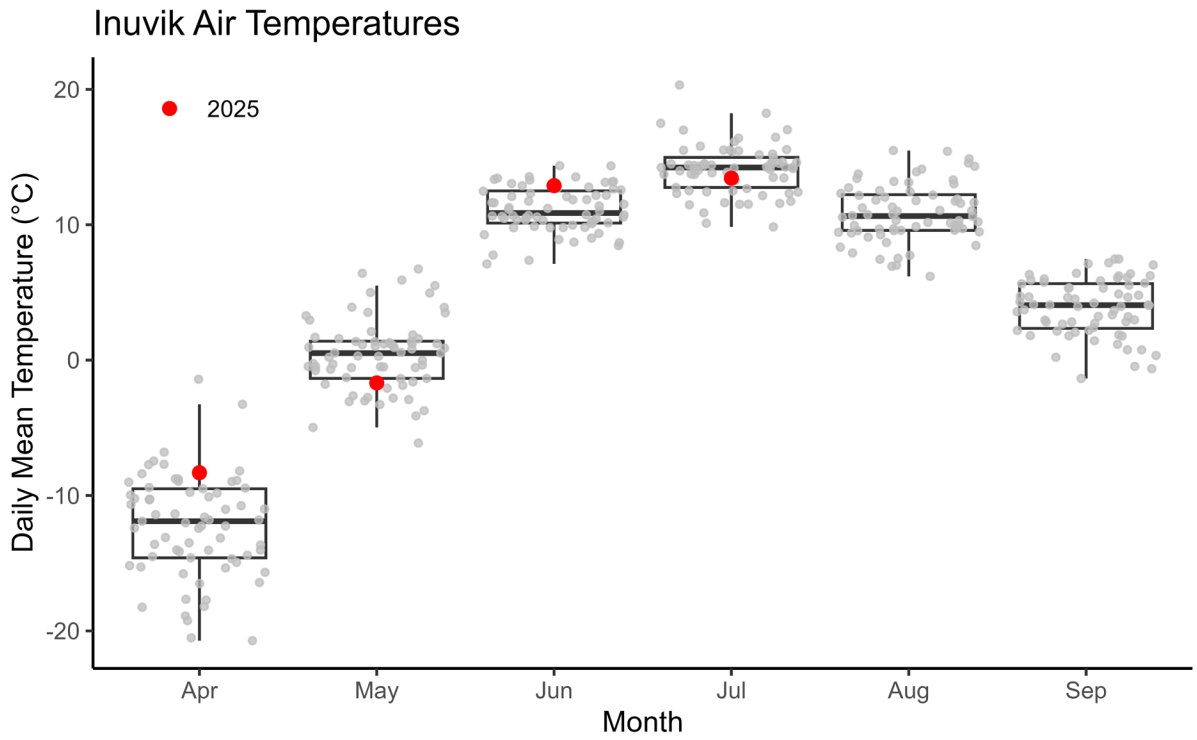
Norman Wells

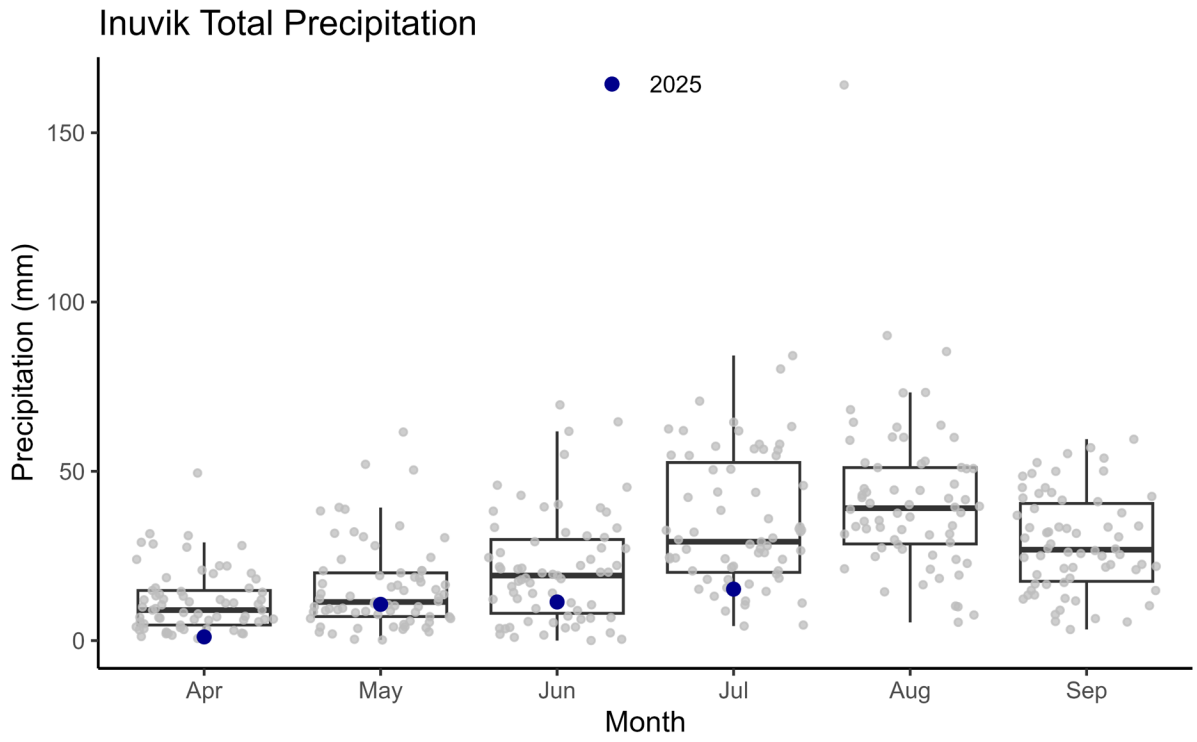




This figure shows mean monthly air temperature and total monthly precipitation for spring and summer 2025.

Inuvik





This figure shows mean monthly air temperature and total monthly precipitation for spring and summer 2025.