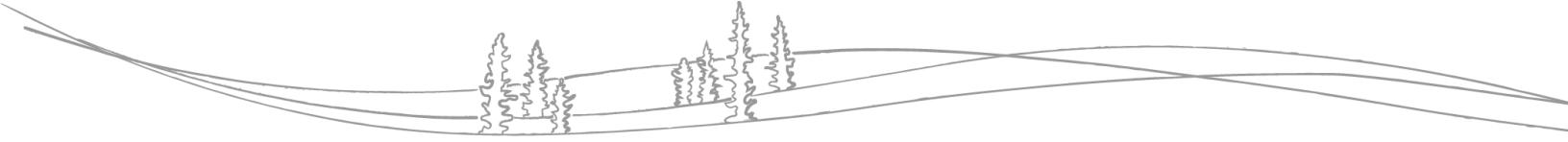




Government of
Northwest Territories

NWT Water Monitoring Bulletin

– Jan 17, 2025



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 (10th to 90th 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.

Current status:

- Winter water levels and flow rates remain very low across most of the NWT.
 - Great Slave Lake water level is currently at its second-lowest on record for this time of year, second only to the level from this time last year, which was the lowest ever recorded.
 - Flow rates on the Slave River are well below average and are similar to those recorded this time last year.
 - Flow rates on the Hay River are well below average for this time of year.
 - Flow rates on the Liard River are at their lowest recorded value for this time of year.
 - Flow rates at most locations along the Mackenzie River are 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 normal for this time of year.
 - Exceptions to low water levels and flows include:
 - Arctic Red River
 - Flow rates on the Arctic Red River are at their highest recorded value for this time of year.
 - Peel River
 - Flow rates on the Peel River are approximately average for this time of year.
 - South Nahanni River
 - South Nahanni River water level is approximately average for this time of year.
 - Some smaller rivers in the Great Slave Lake basin

- Low water levels continue to be the result of extreme drought conditions that began in the summer of 2022 and have persisted through 2023 and 2024.
- **December precipitation** across the NWT was generally near or above average, except Inuvik, which received below average precipitation.
- **December temperatures** across the NWT were warmer than average for all communities except Inuvik and Norman Wells, where temperatures were approximately average.
- Water levels on Great Slave Lake and the Mackenzie River are strongly influenced by precipitation received in northern British Columbia, Alberta, Saskatchewan, and southern NWT.
- Precipitation in the Great Slave Lake basin in northern British Columbia and Alberta has been approximately average this winter (October 1st to present), with some variability between communities.
 - Located near the headwaters of the Peace River, the community of Mackenzie, British Columbia has received record high cumulative precipitation this winter.
 - This region (the mountainous headwaters of the Peace River) usually receives the highest amount of precipitation in the

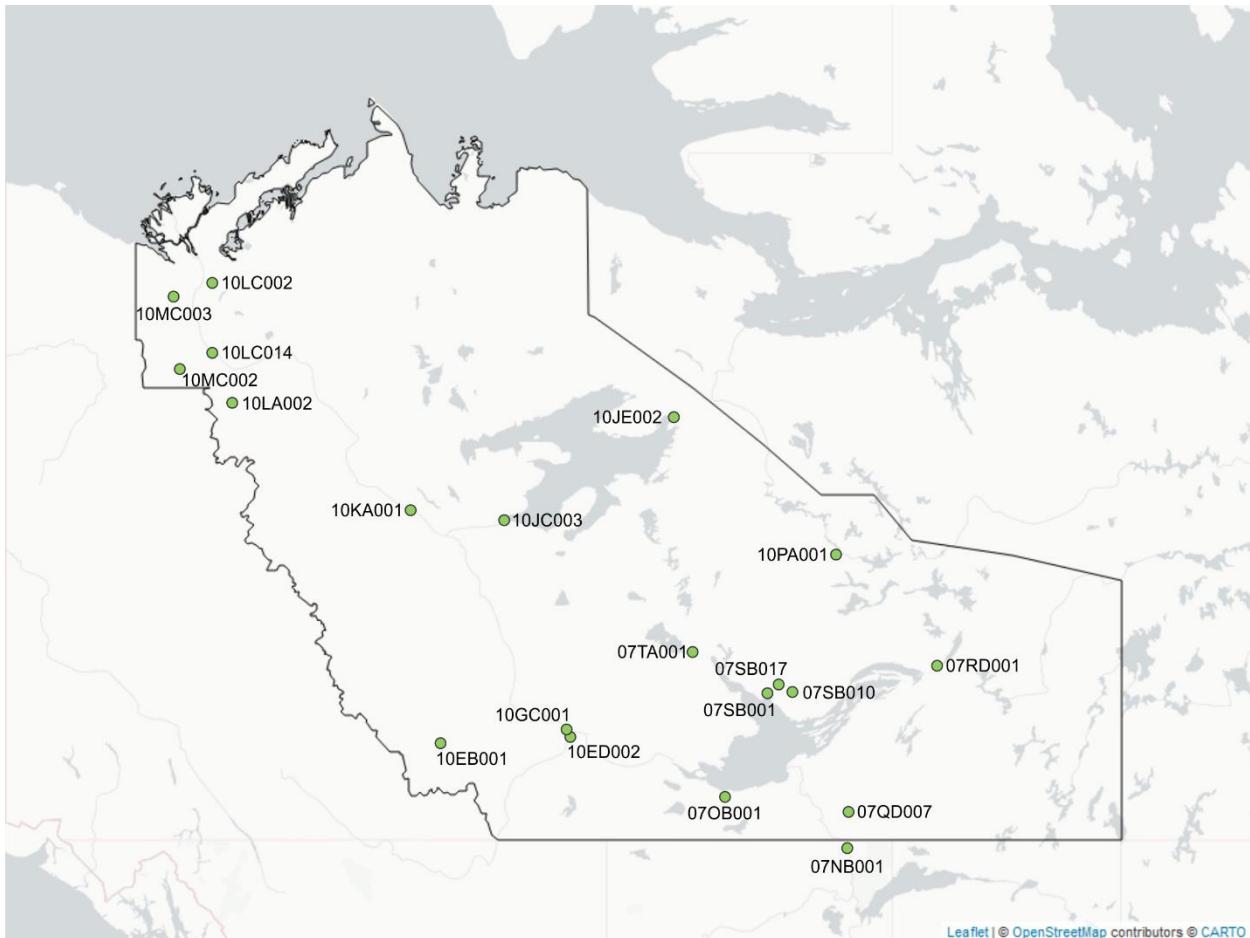
Mackenzie River basin and is therefore an important contributor to water levels on Great Slave Lake and the Mackenzie River.

- Climate forecasts from ECCC for the next three months (January, February, March) indicate near normal precipitation for most of the NWT and the Mackenzie River basin, with some areas in the southern portion of the basin showing above normal precipitation.

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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.

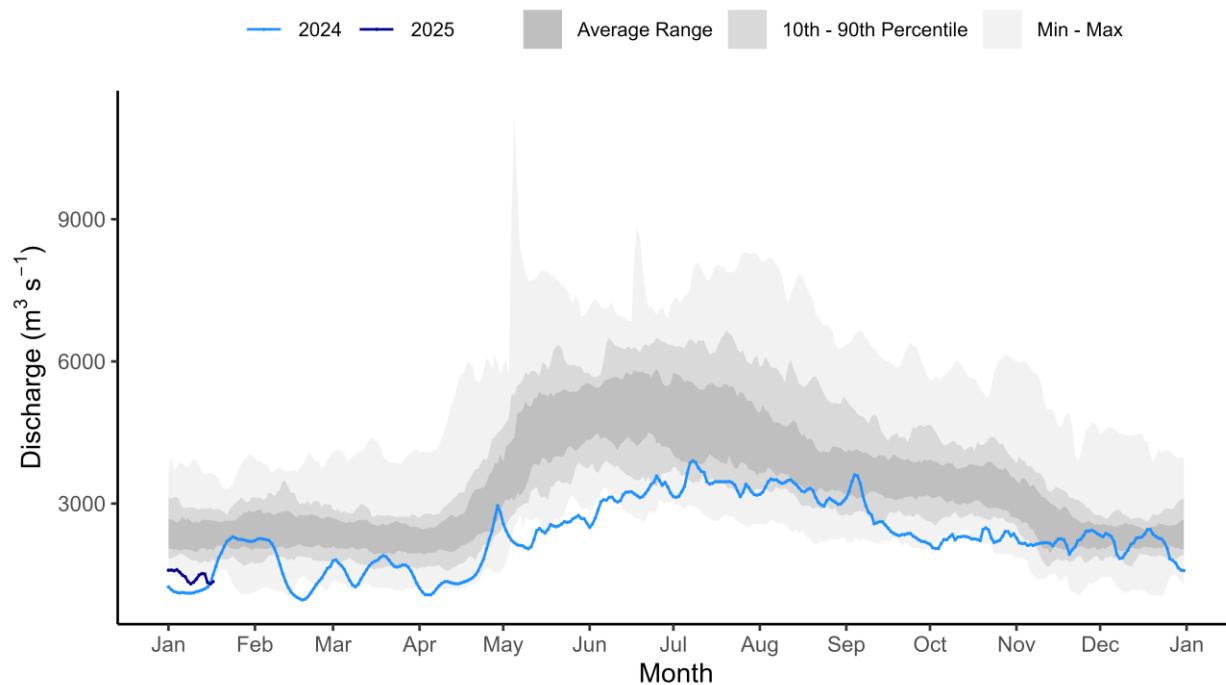
Climate figures:

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:

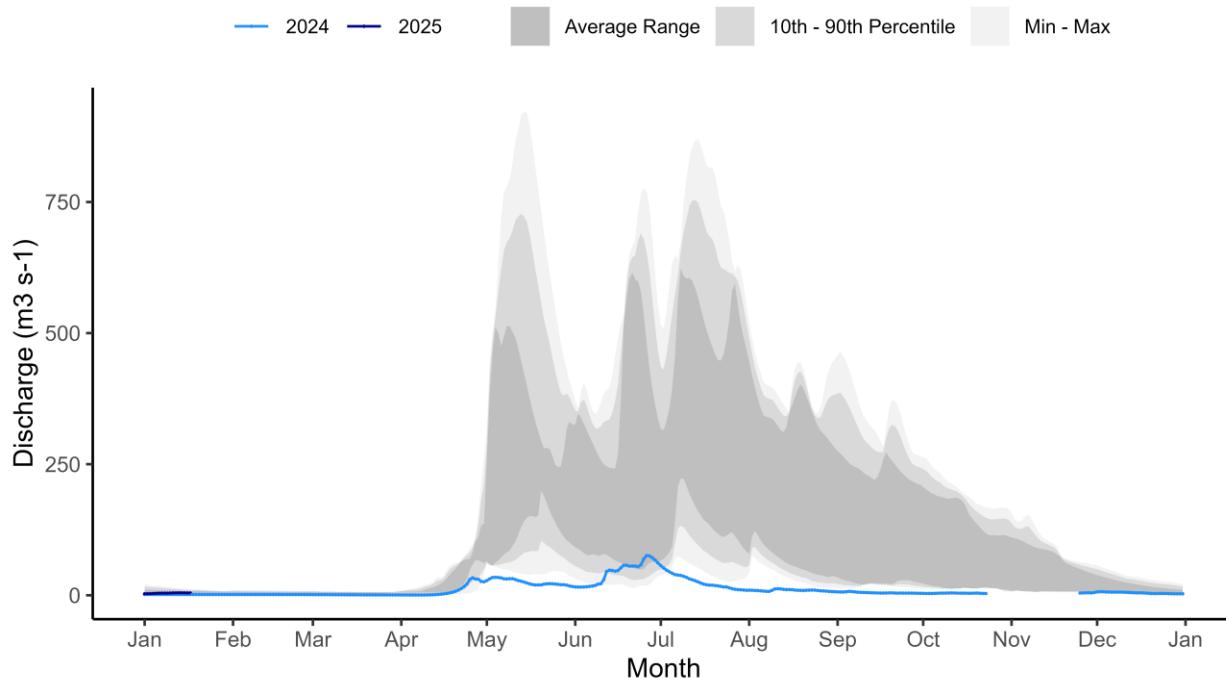
Slave River at Fitzgerald [07NB001]

SLAVE RIVER AT FITZGERALD (ALBERTA) (07NB001)



Hay River near Alberta/NWT Boundary [07OB008]*

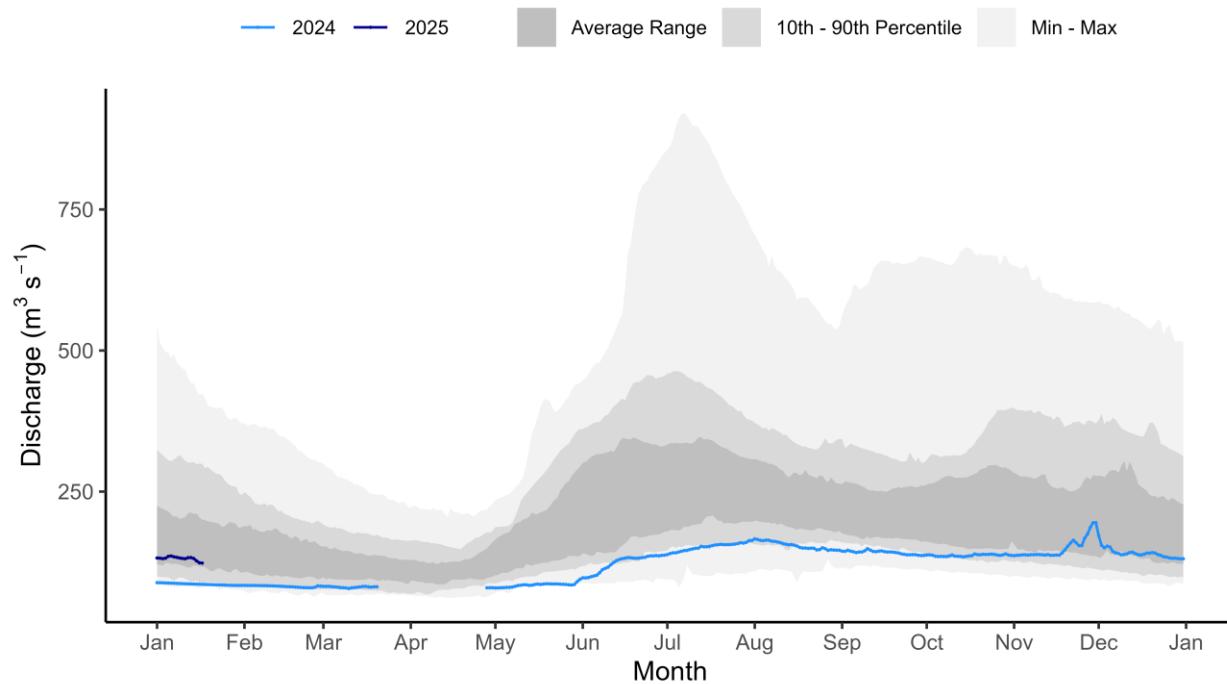
HAY RIVER NEAR ALTA/NWT BOUNDARY (07OB008)



*The Hay River near Hay River gauge (07OB001) is currently experiencing technical issues.

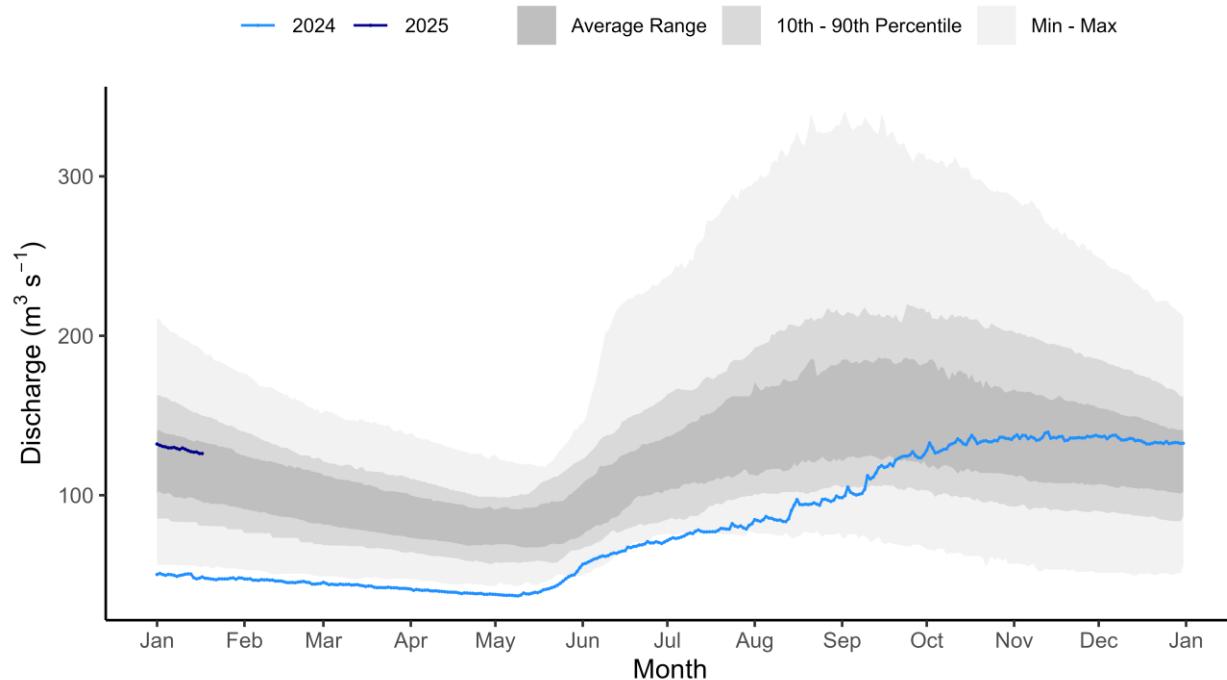
Taltson River below Hydro Dam [07QD007]

TALTSON RIVER BELOW HYDRO DAM (07QD007)

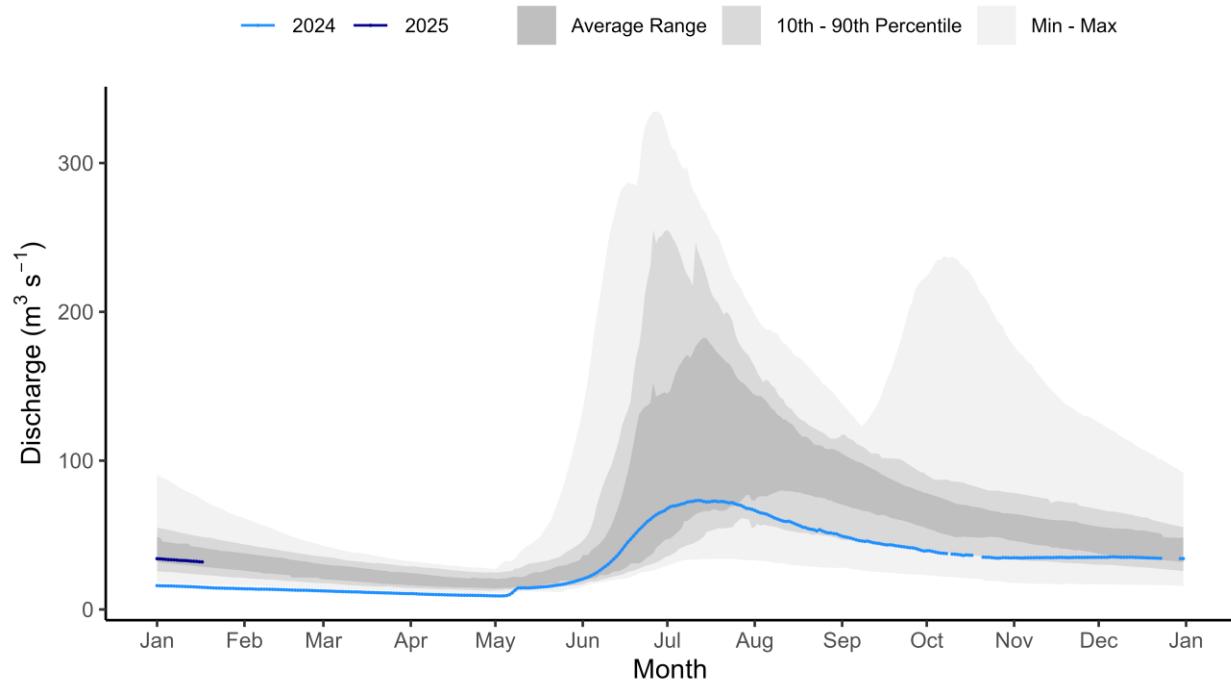


Lockhart River at outlet of Artillery Lake [07RD001]

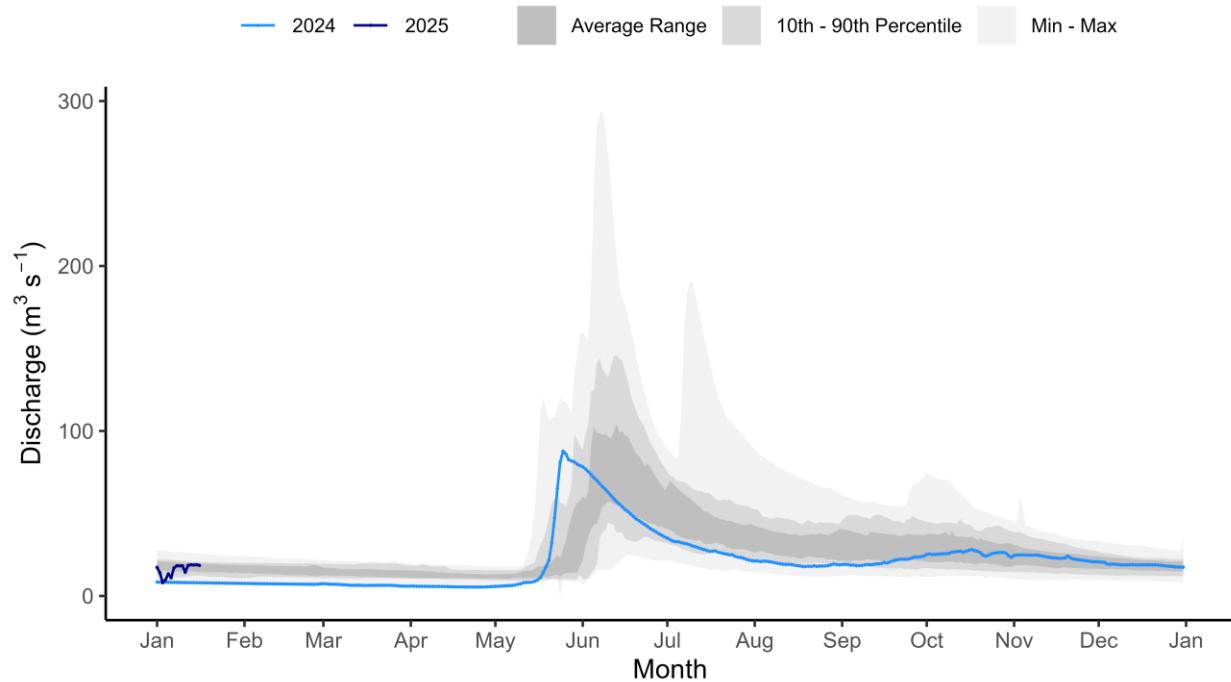
LOCKHART RIVER AT OUTLET OF ARTILLERY LAKE (07RD001)



Snare River below Ghost Lake [07SA002]
SNARE RIVER BELOW GHOST RIVER (07SA002)

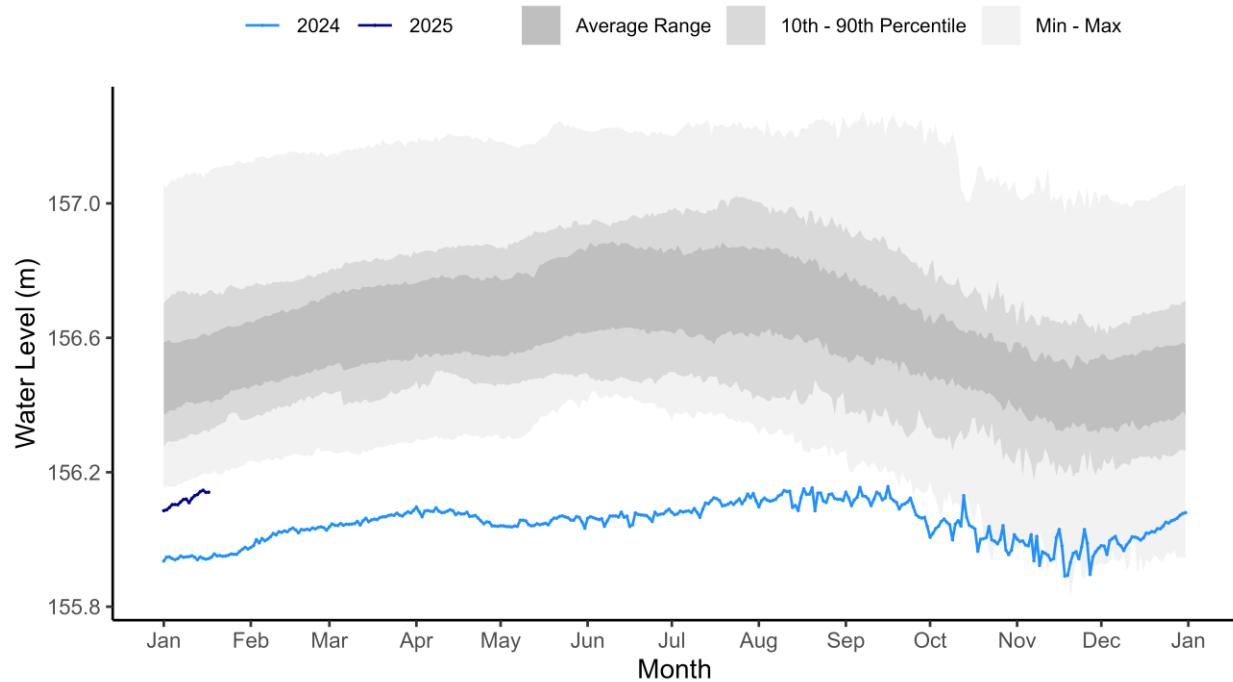


Coppermine River below Desteffany Lake [10PA001]
COPPERMINE RIVER BELOW DESTEFFANY LAKE (10PA001)



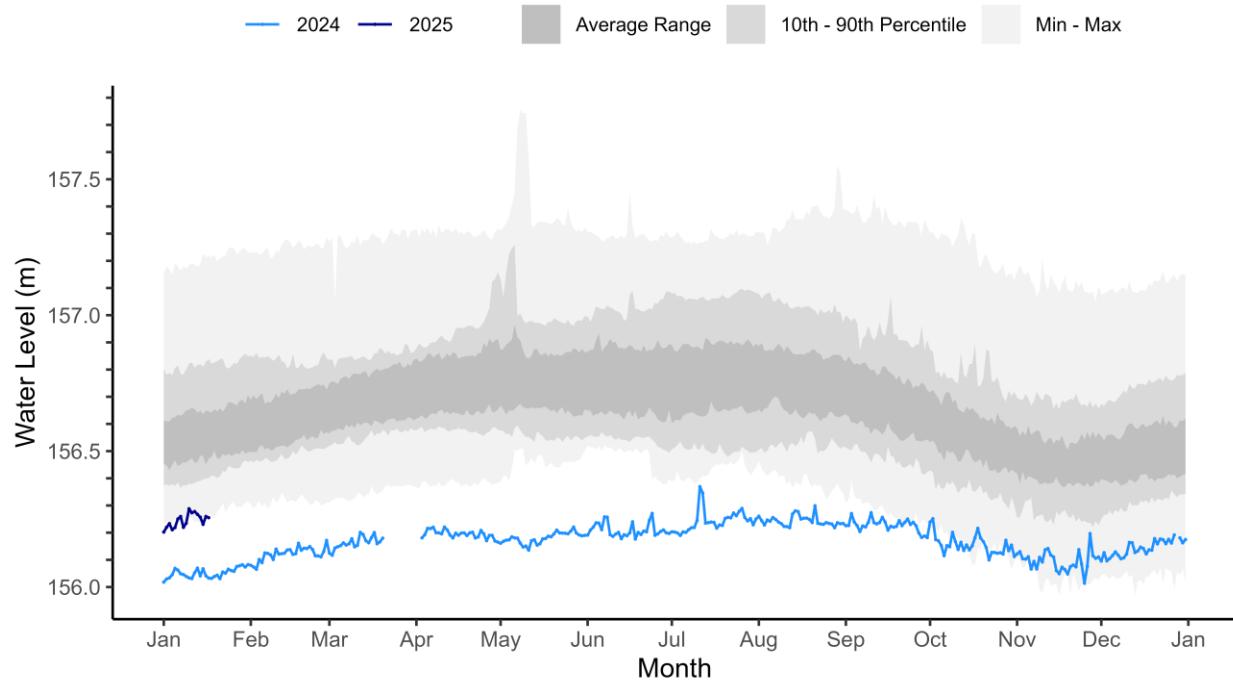
Great Slave Lake at Yellowknife Bay [07SB001]

GREAT SLAVE LAKE AT YELLOWKNIFE BAY (07SB001)



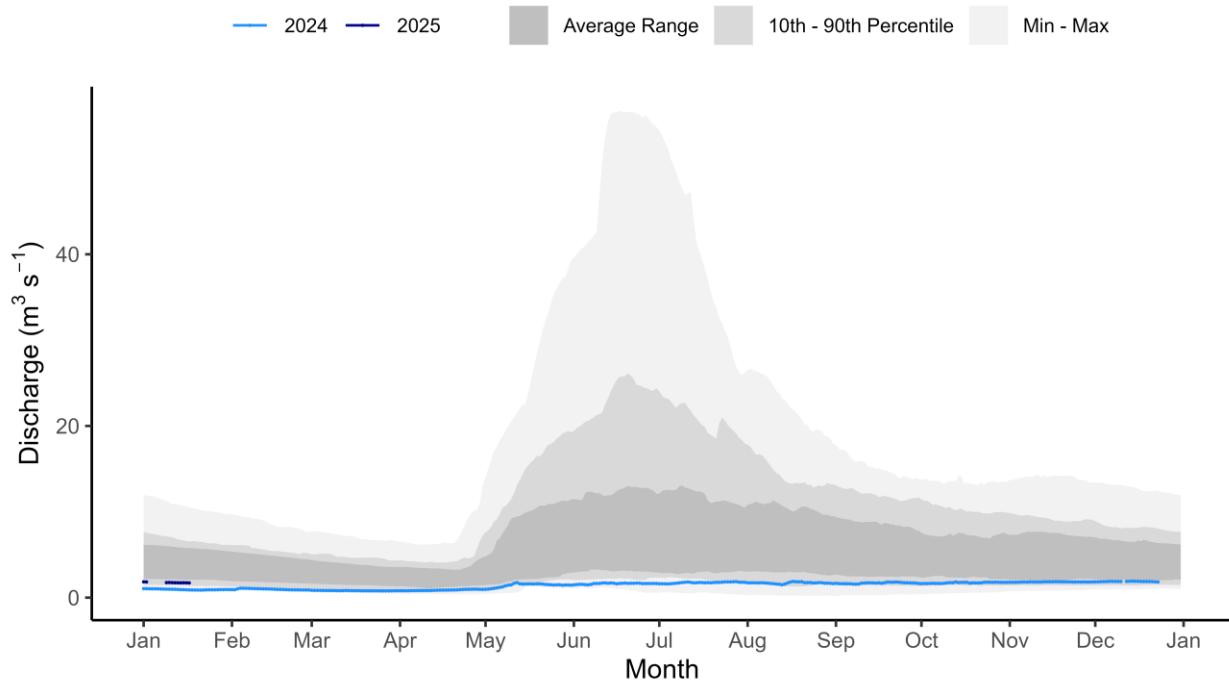
Great Slave Lake at Hay River [070B002]

GREAT SLAVE LAKE AT HAY RIVER (070B002)



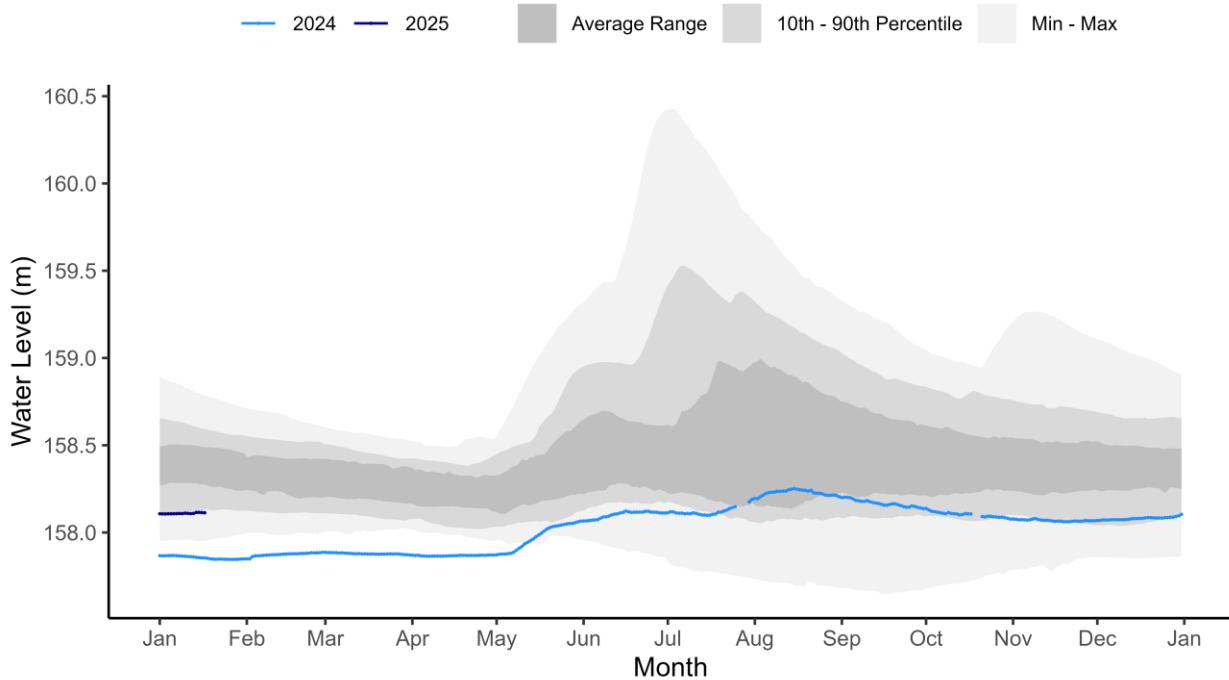
Cameron River below Reid Lake [07SB010]

CAMERON RIVER BELOW REID LAKE (07SB010)



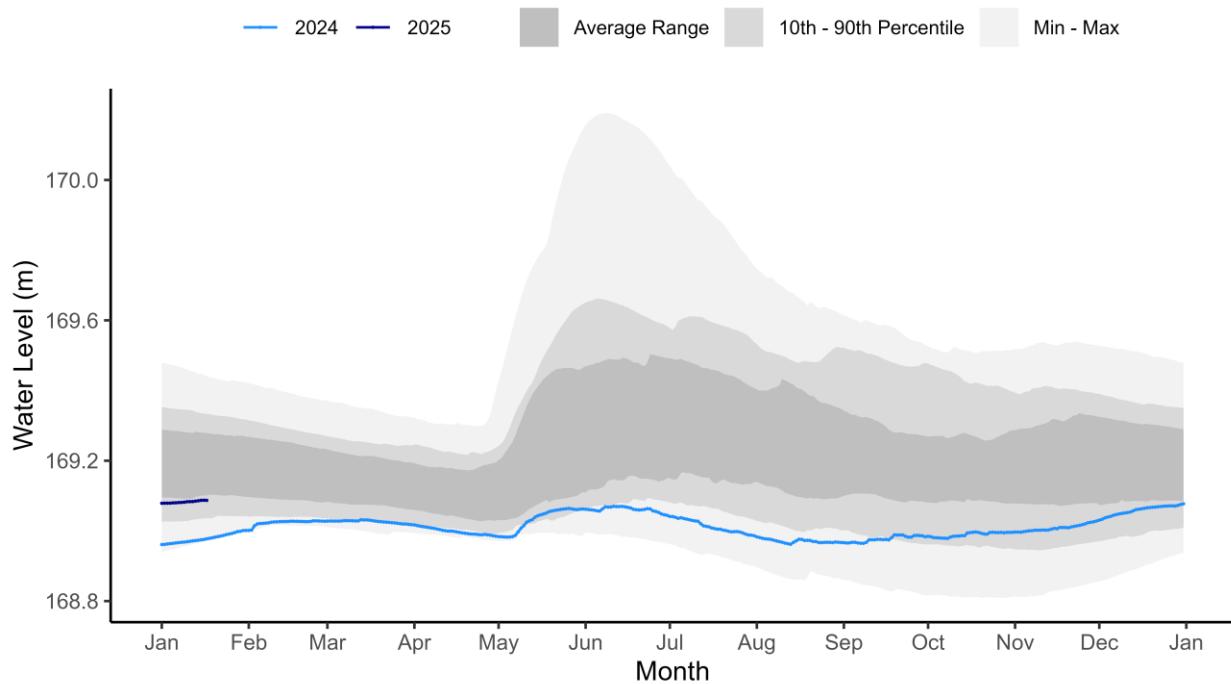
Prosperous Lake near McMeekan Bay [07SB014]

PROSPEROUS LAKE NEAR MCMEEKAN BAY (07SB014)



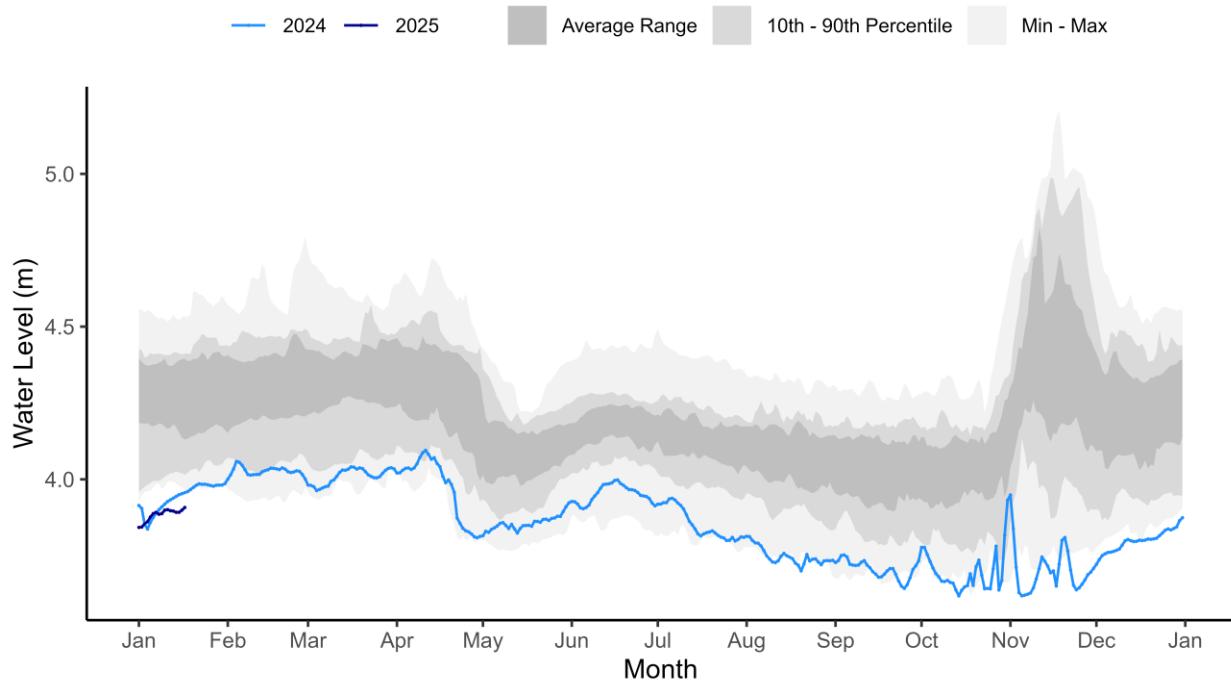
Prelude Lake near Yellowknife [07SB017]

PRELUDE LAKE NEAR YELLOWKNIFE (07SB017)



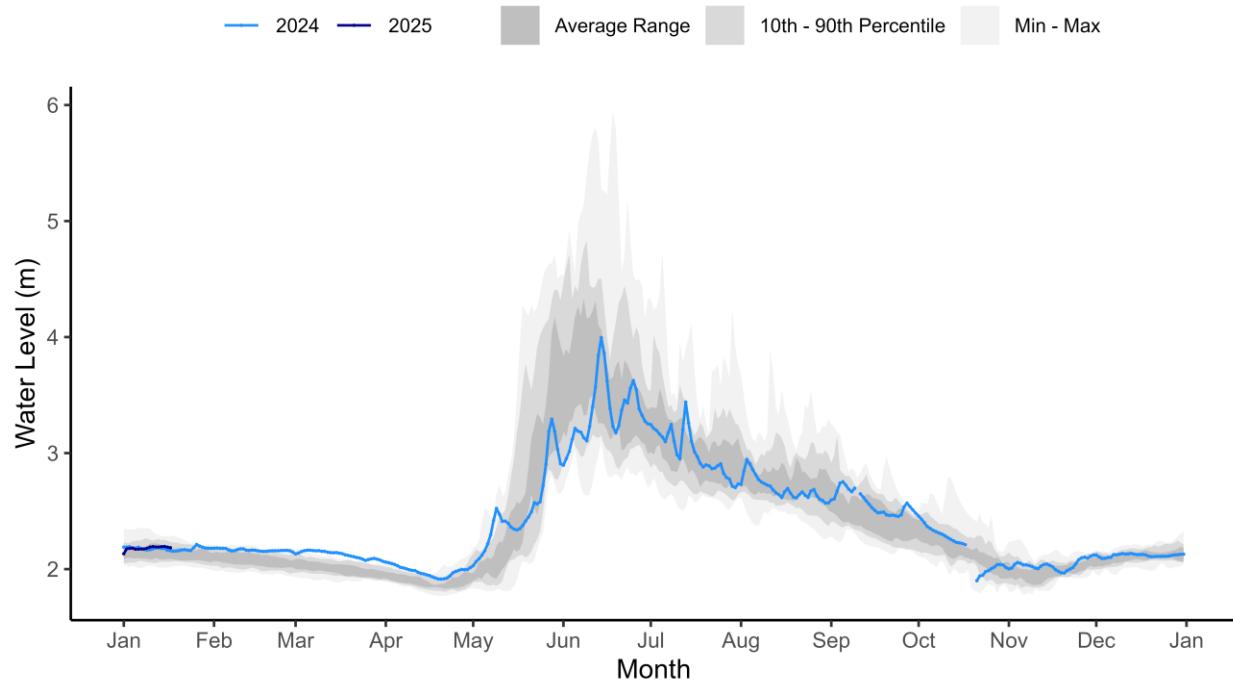
La Martre River below outlet of Lac La Martre [07TA001]

LA MARTRE RIVER BELOW OUTLET OF LAC LA MARTRE (07TA001)



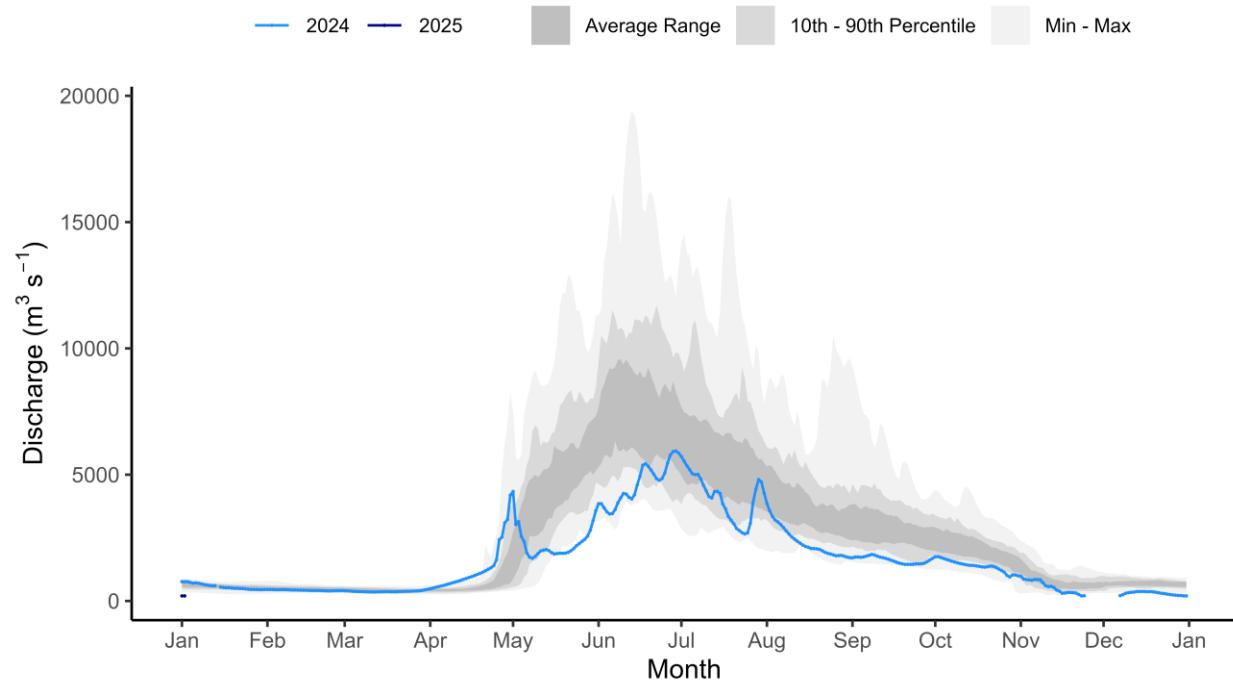
South Nahanni River above Virginia Falls [10EB001]

SOUTH NAHANNI RIVER ABOVE VIRGINIA FALLS (10EB001)



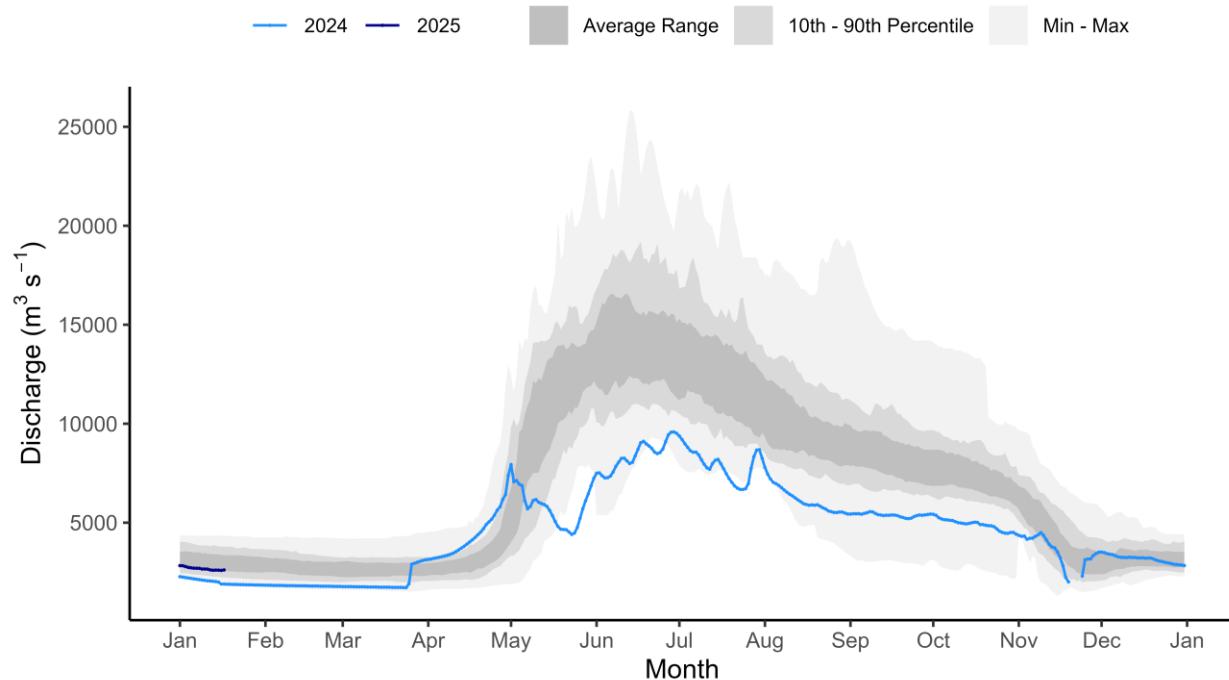
Liard River near the Mouth [10ED002]

LIARD RIVER NEAR THE MOUTH (10ED002)



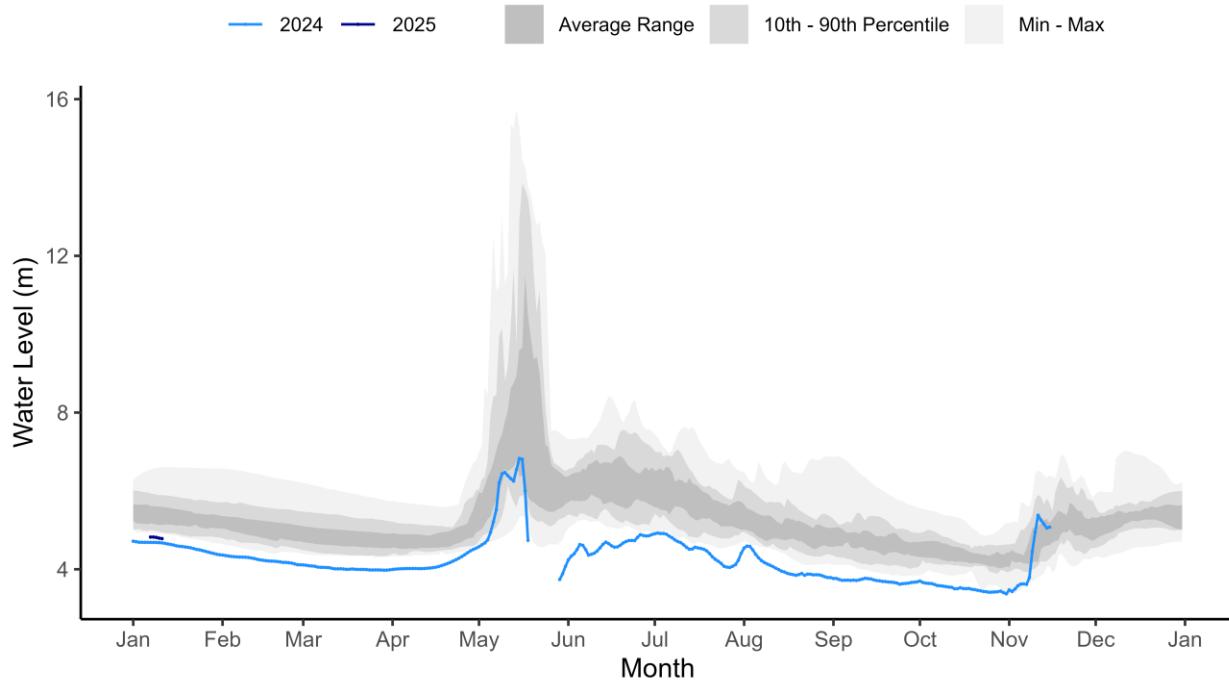
Mackenzie River at Fort Simpson [10GC001]

MACKENZIE RIVER AT FORT SIMPSON (10GC001)



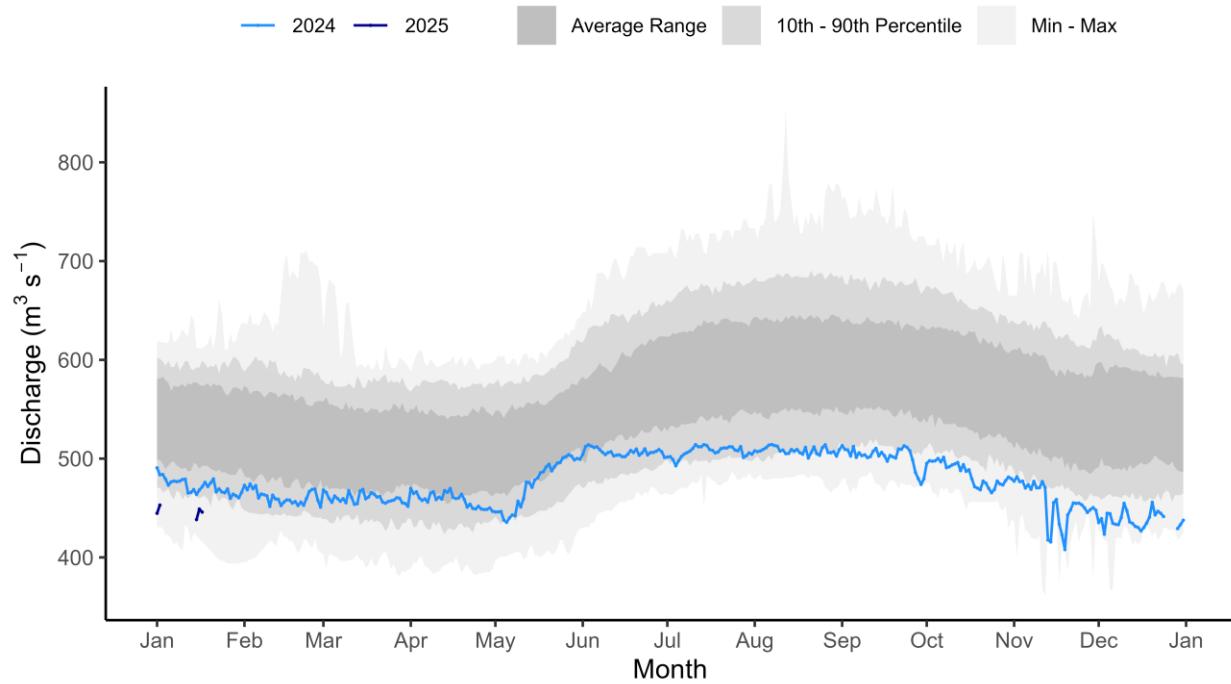
Mackenzie River at Norman Wells [10KA001]

MACKENZIE RIVER AT NORMAN WELLS (10KA001)



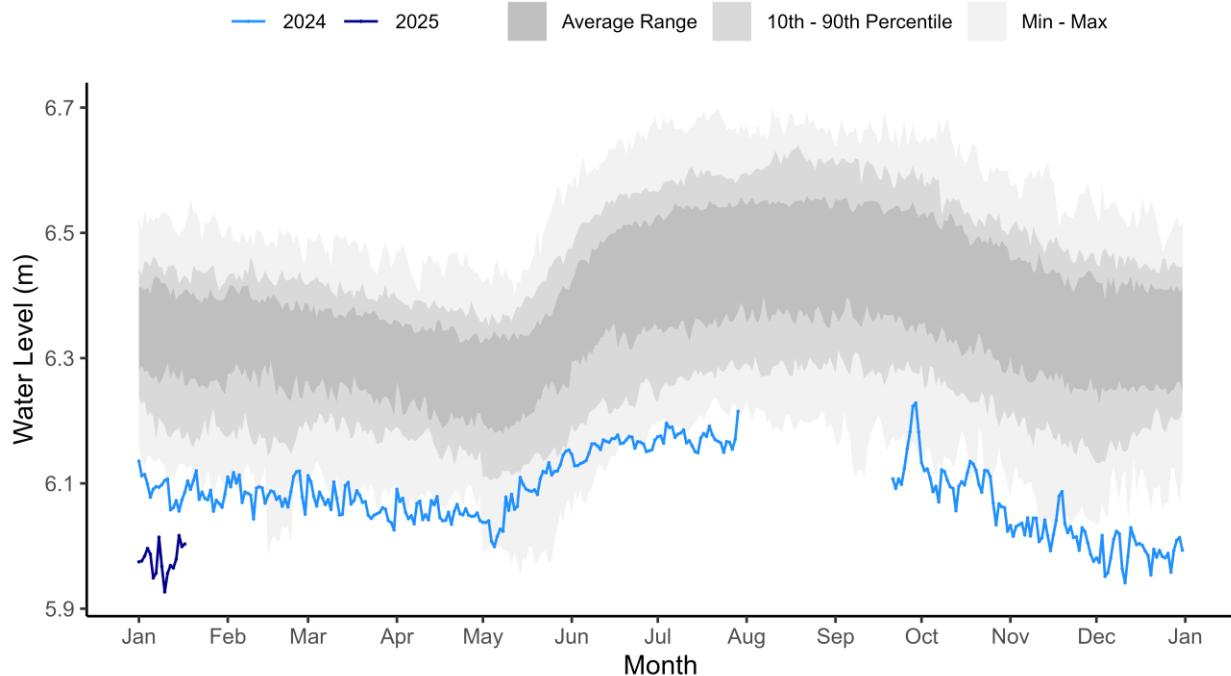
Great Bear River at outlet of Great Bear Lake [10JC003]

GREAT BEAR RIVER AT OUTLET OF GREAT BEAR LAKE (10JC003)



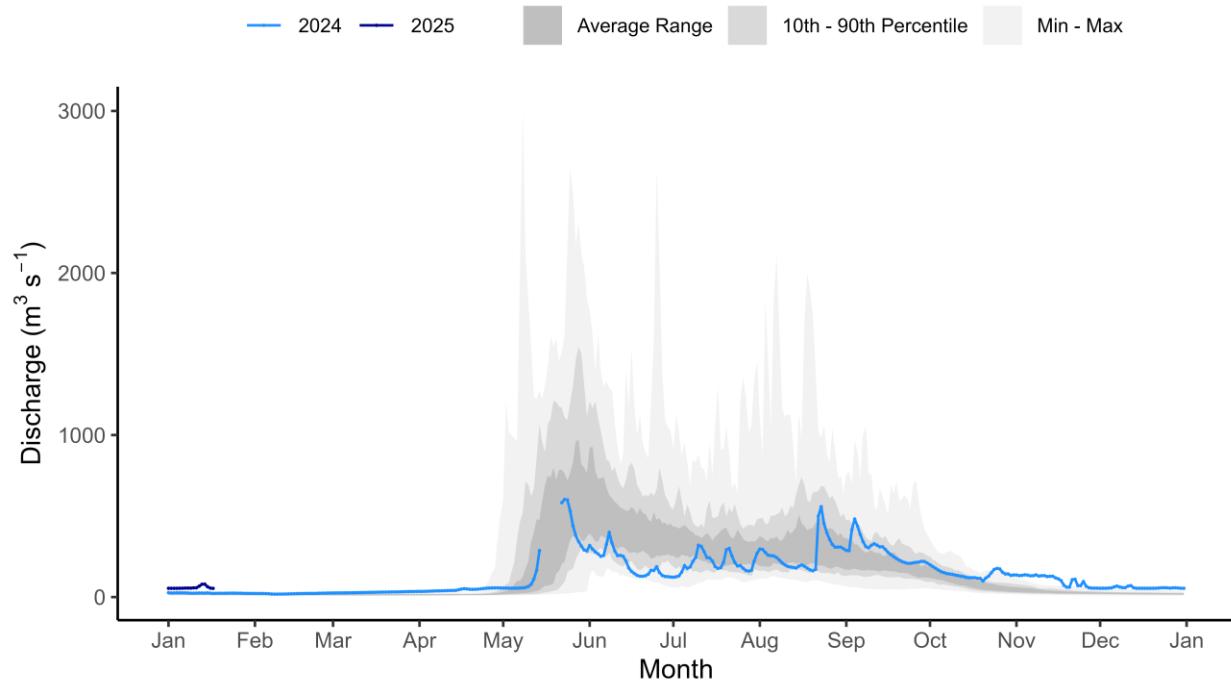
Great Bear Lake at Hornby Bay [10JE002]

GREAT BEAR LAKE AT HORNBY BAY (10JE002)



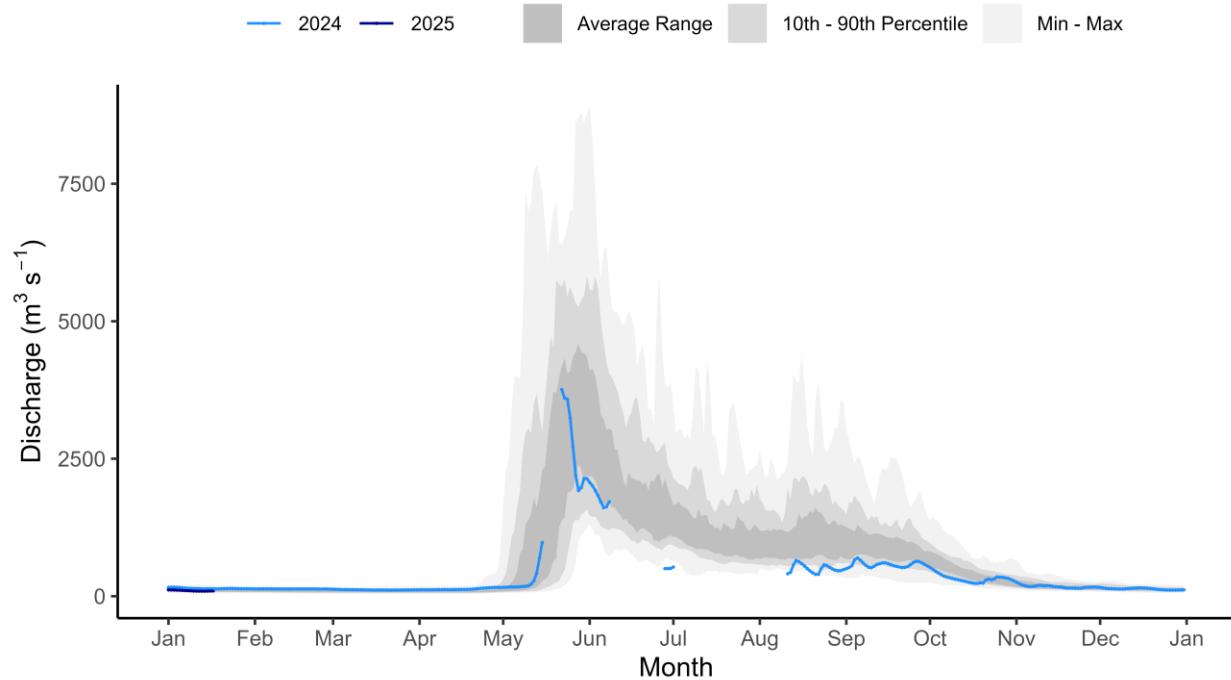
Arctic Red River near the mouth [10LA002]

ARCTIC RED RIVER NEAR THE MOUTH (10LA002)



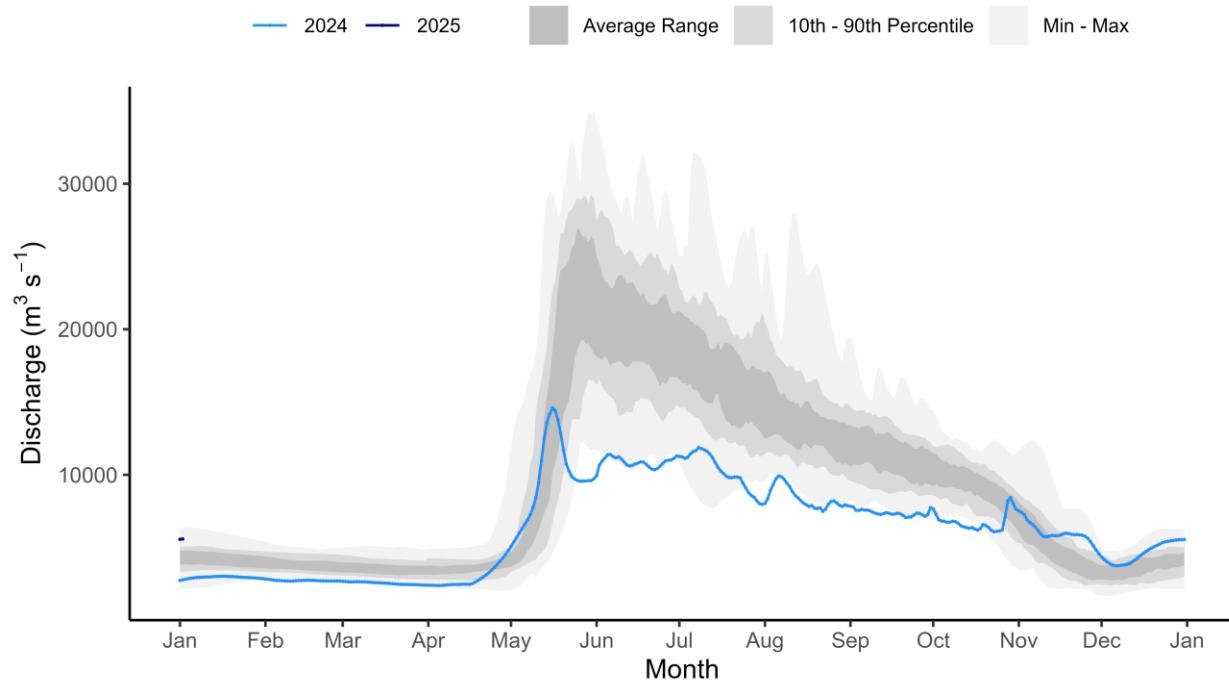
Peel River above Fort McPherson [10MC002]

PEEL RIVER ABOVE FORT MCPHERSON (10MC002)



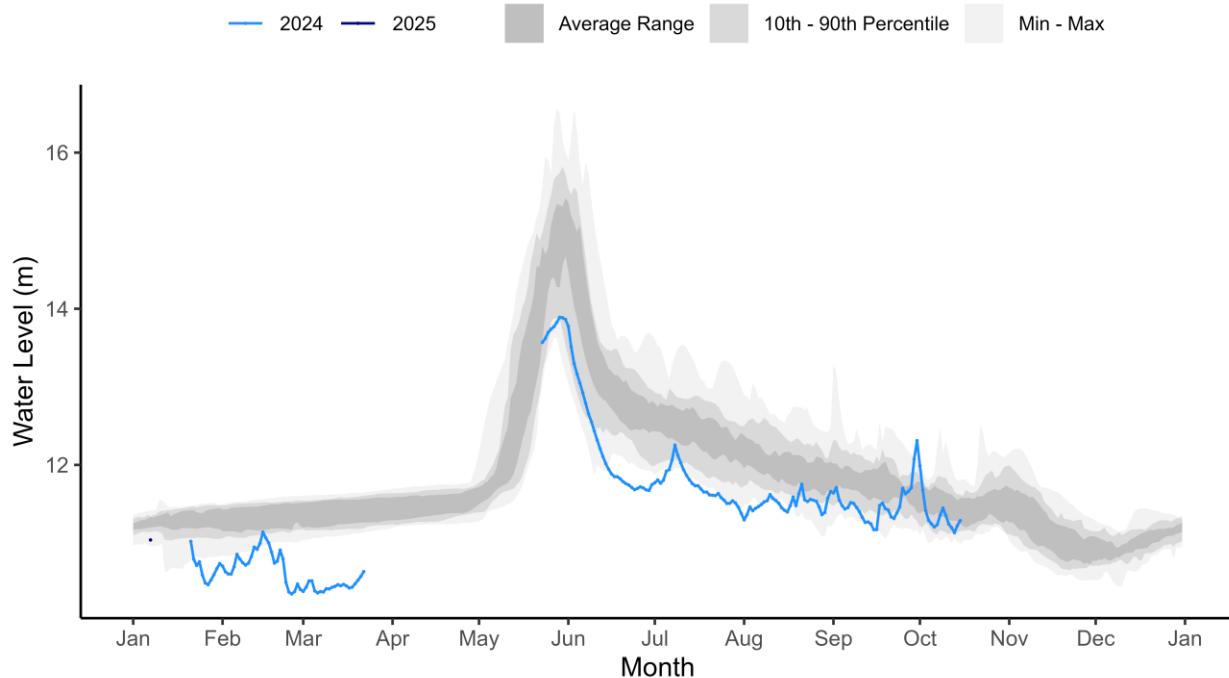
Mackenzie River at Arctic Red River [10LC014]

MACKENZIE RIVER AT ARCTIC RED RIVER (10LC014)

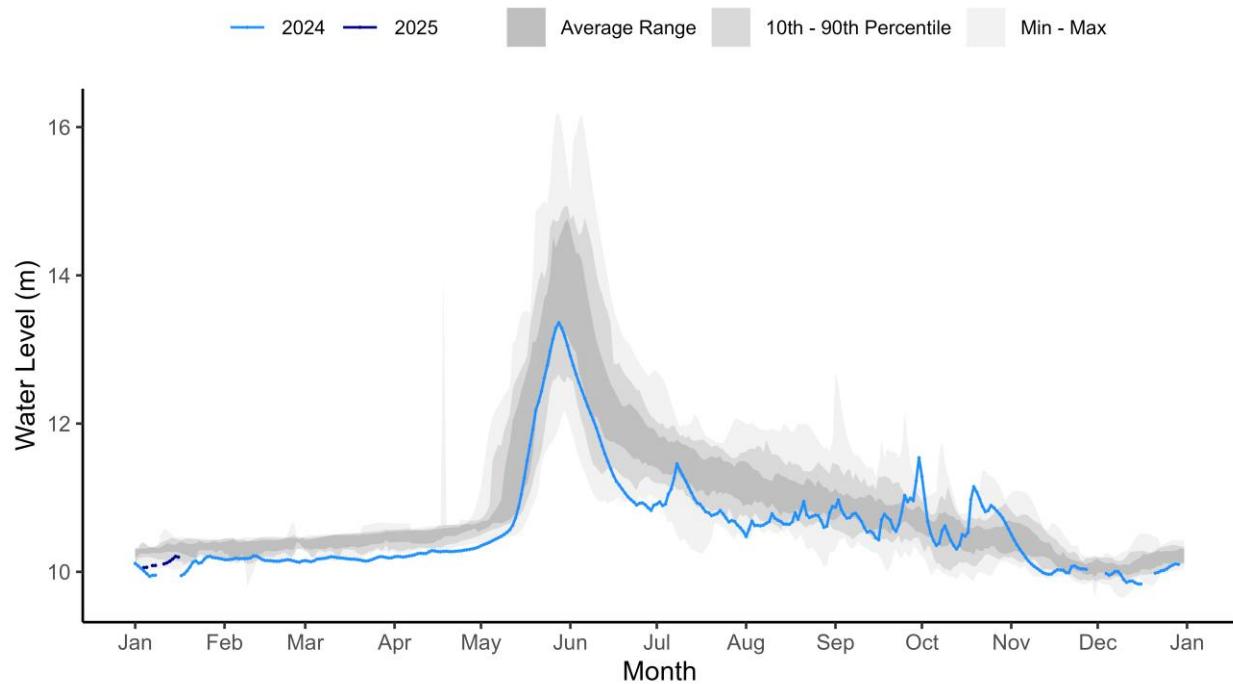


Mackenzie River (East Channel) at Inuvik [10LC002]

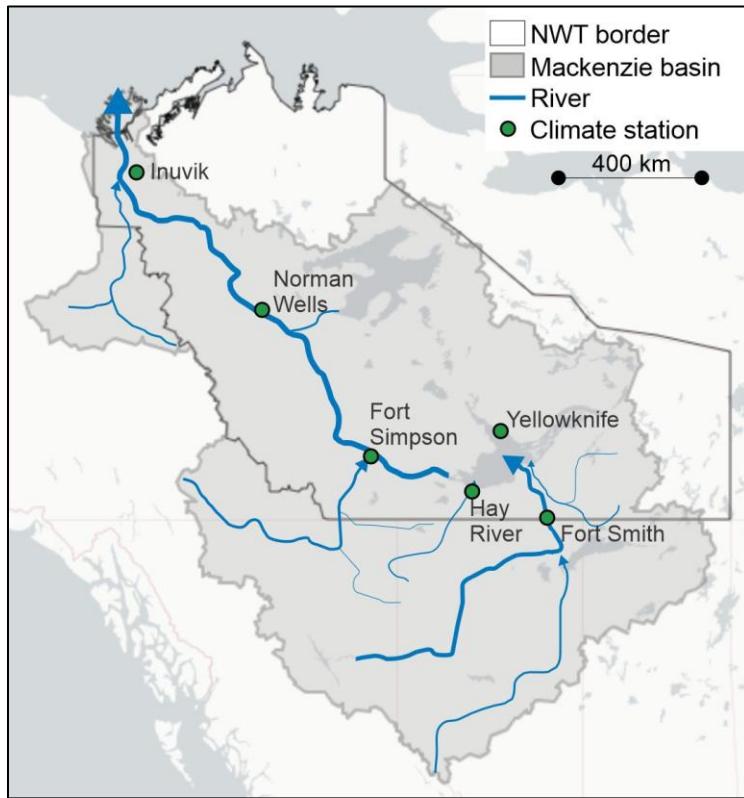
MACKENZIE RIVER (EAST CHANNEL) AT INUVIK (10LC002)



Mackenzie River (Peel Channel) above Aklavik [10MC003]
MACKENZIE RIVER (PEEL CHANNEL) ABOVE AKLAVIK (10MC003)

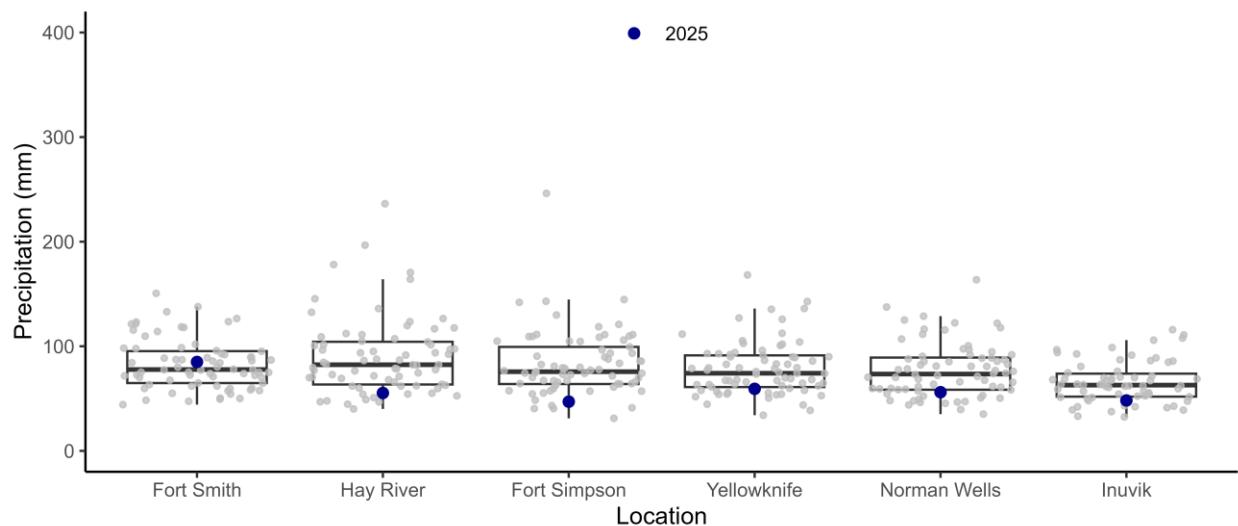


Climate Data:
NWT communities:



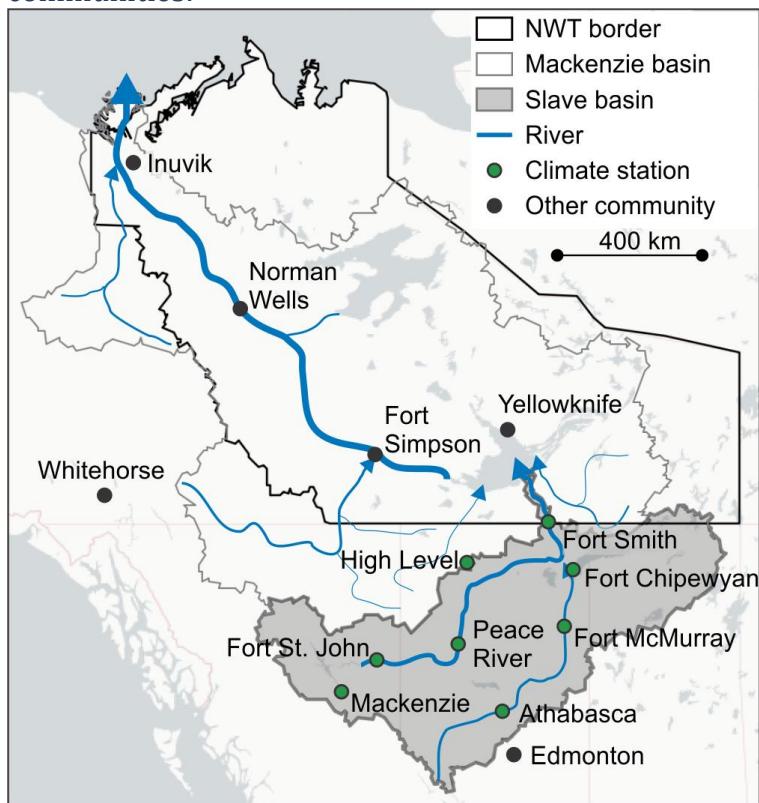
Total Precipitation for NWT communities

Oct. 1st, 2024 to Jan. 17th, 2025



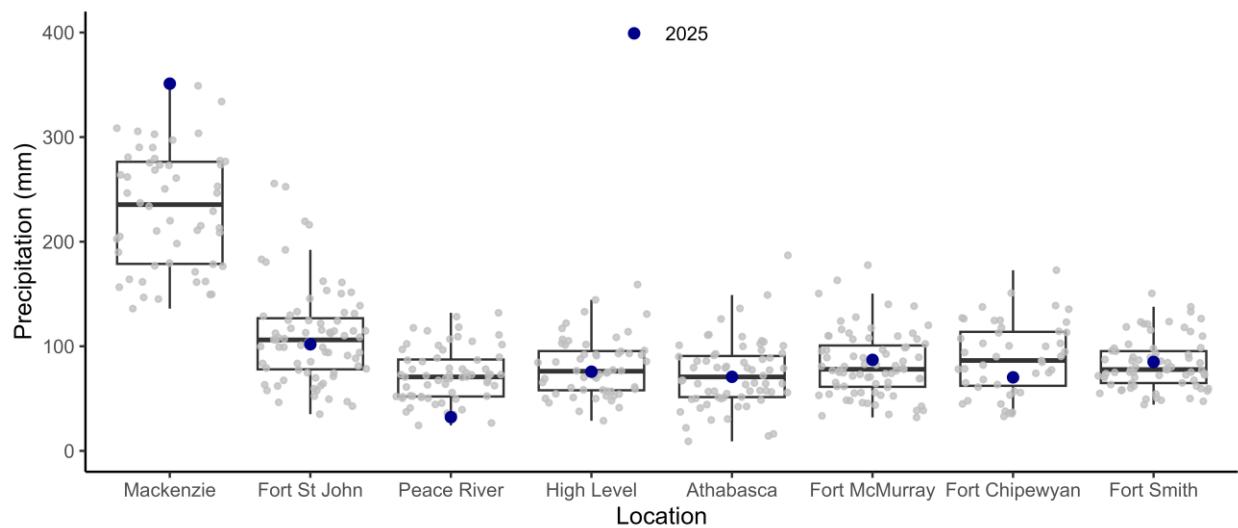
This figure shows total precipitation (rain and snow) that has fallen in select communities across the NWT from the start of October until January 17th. The blue dot is the current year, and the grey dots are all previous years from 1950 to present. A map of the Mackenzie River basin is provided for context.

Slave River basin communities:



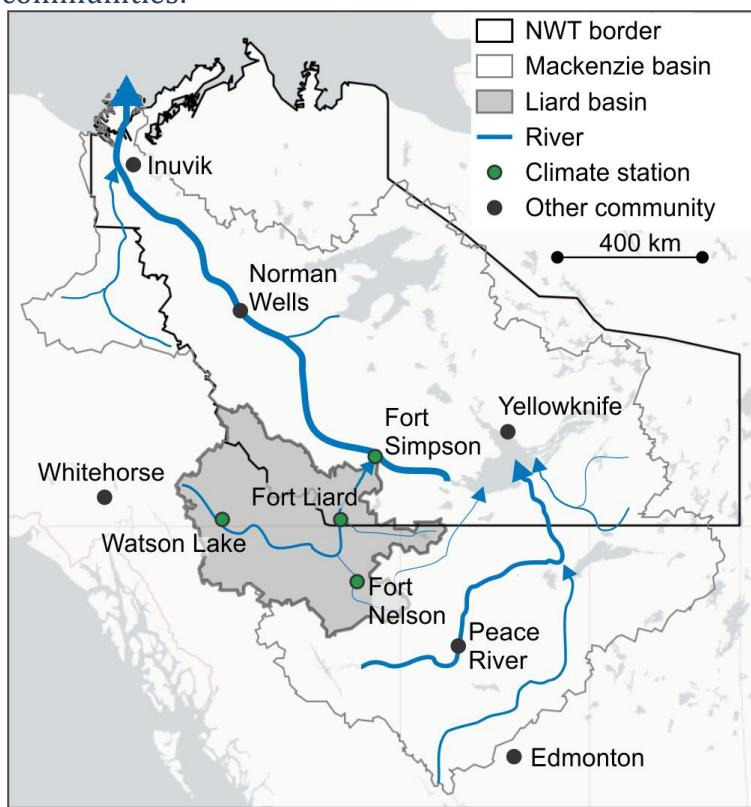
Total Precipitation for BC/AB/NWT communities in the Slave River Basin

Oct. 1st, 2024 to Jan. 17th, 2025



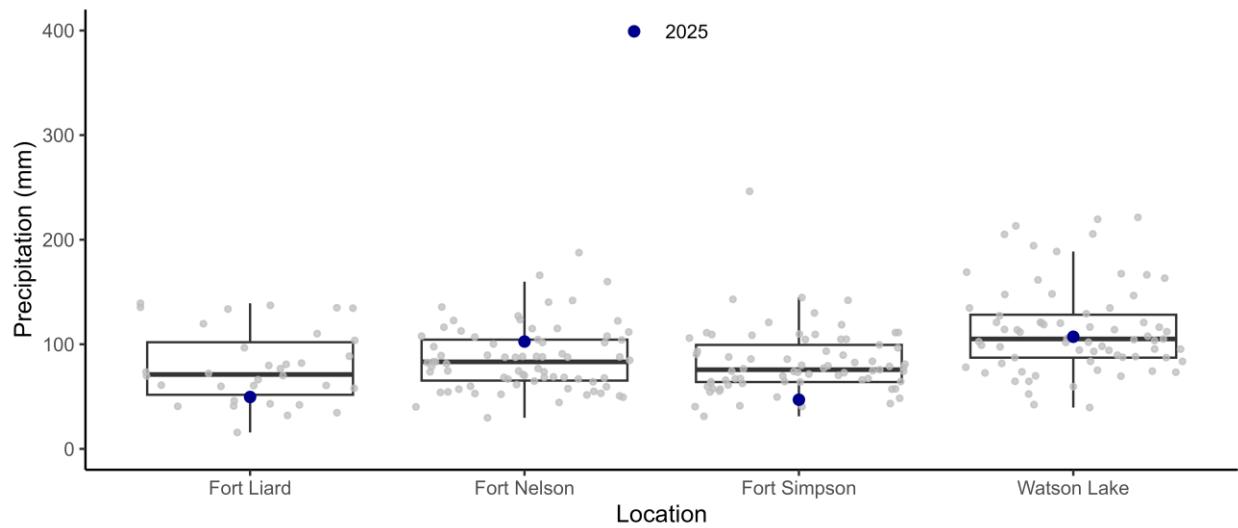
This figure shows total precipitation (rain and snow) that has fallen in select communities in the Slave River basin from the start of October until January 17th. The blue dot is the current year, and the grey dots are all previous years from 1950 to present. A map of the Mackenzie River and Slave River basins is provided for context.

Liard River basin communities:



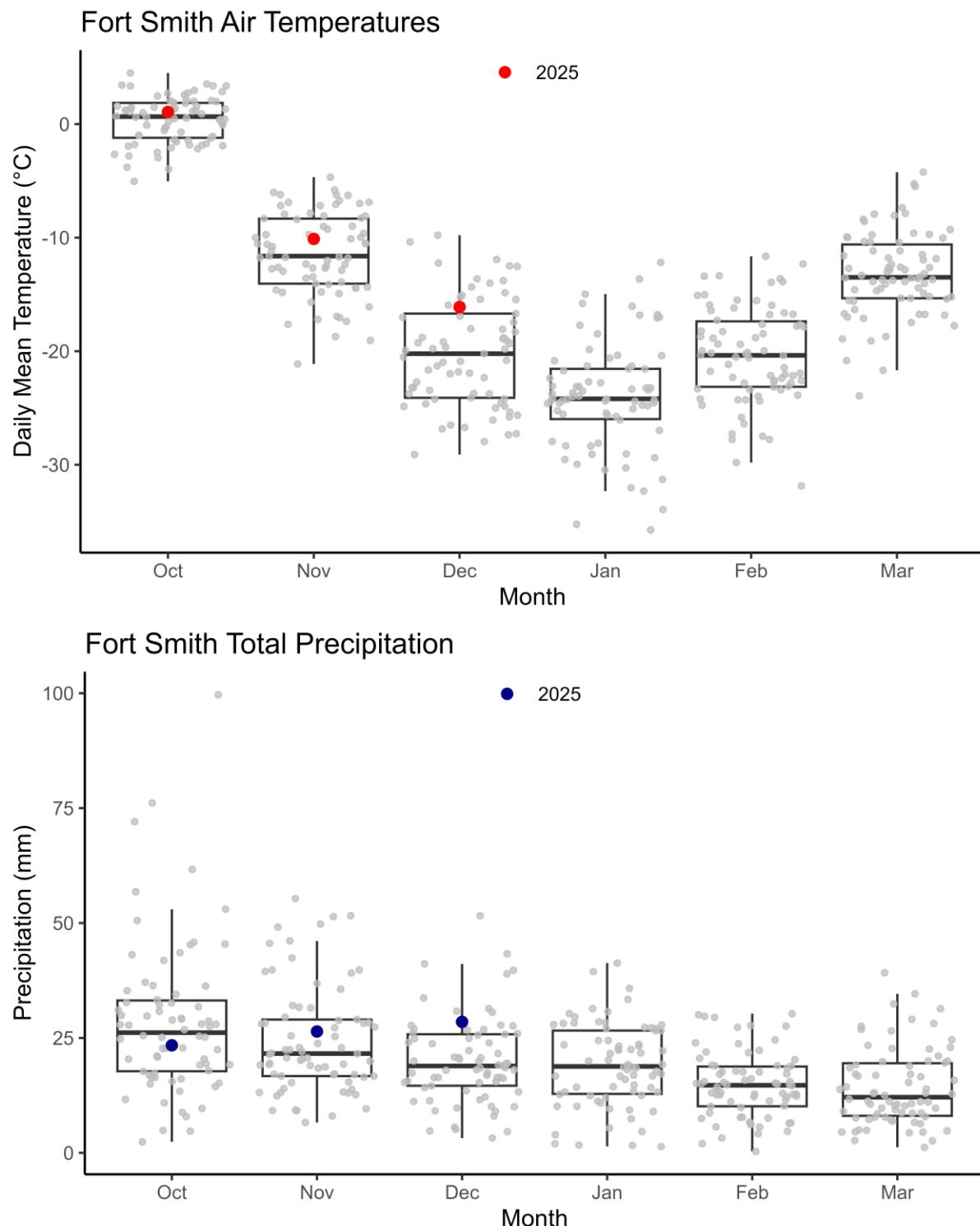
Total Precipitation for BC/NWT communities in the Liard River Basin

Oct. 1st, 2024 to Jan. 17th, 2025



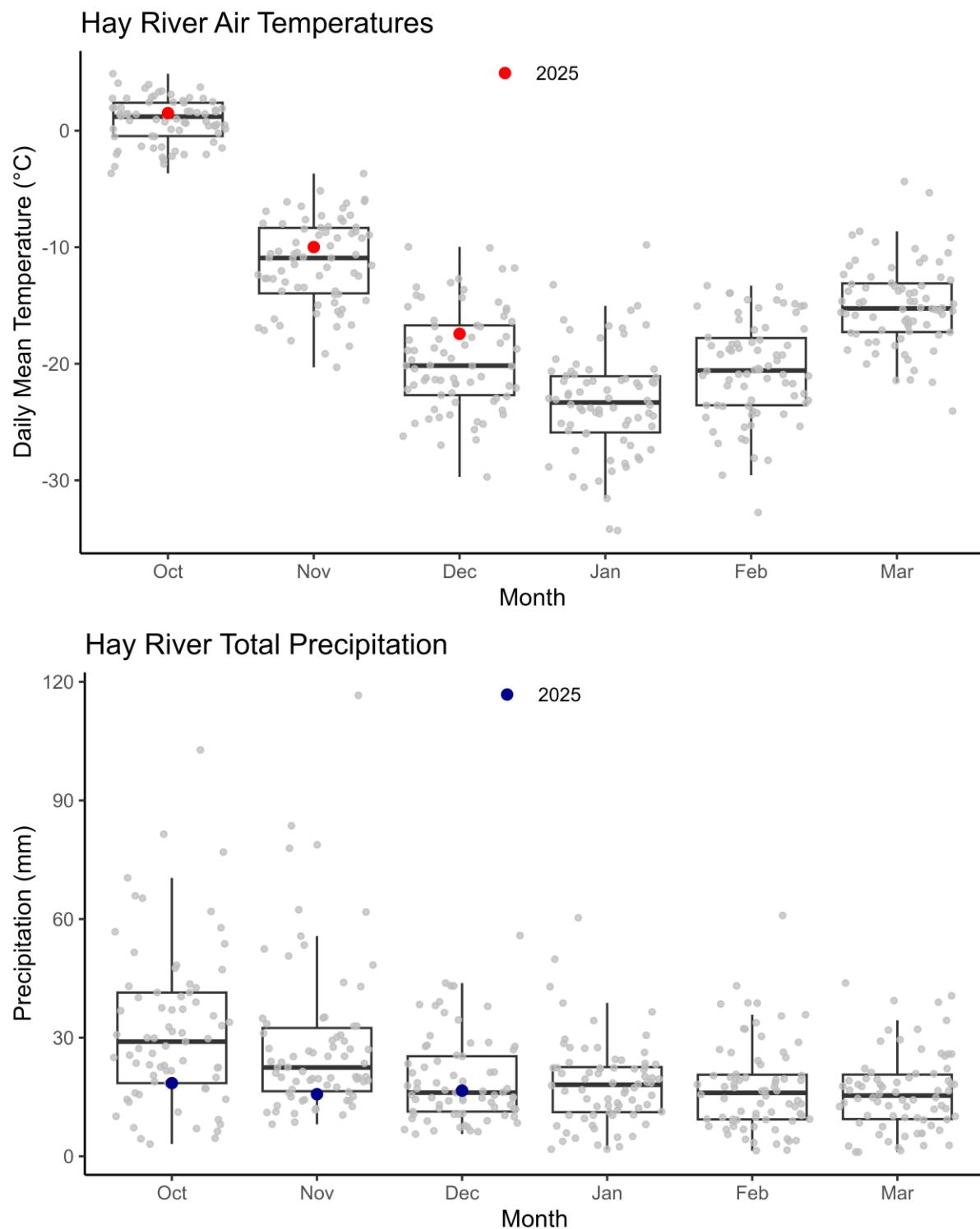
This figure shows total precipitation (rain and snow) that has fallen in select communities in the Liard River basin from the start of October until January 17th. The blue dot is the current year, and the grey dots are all previous years from 1950 to present. A map of the Mackenzie River and Liard River basins is provided for context.

Fort Smith



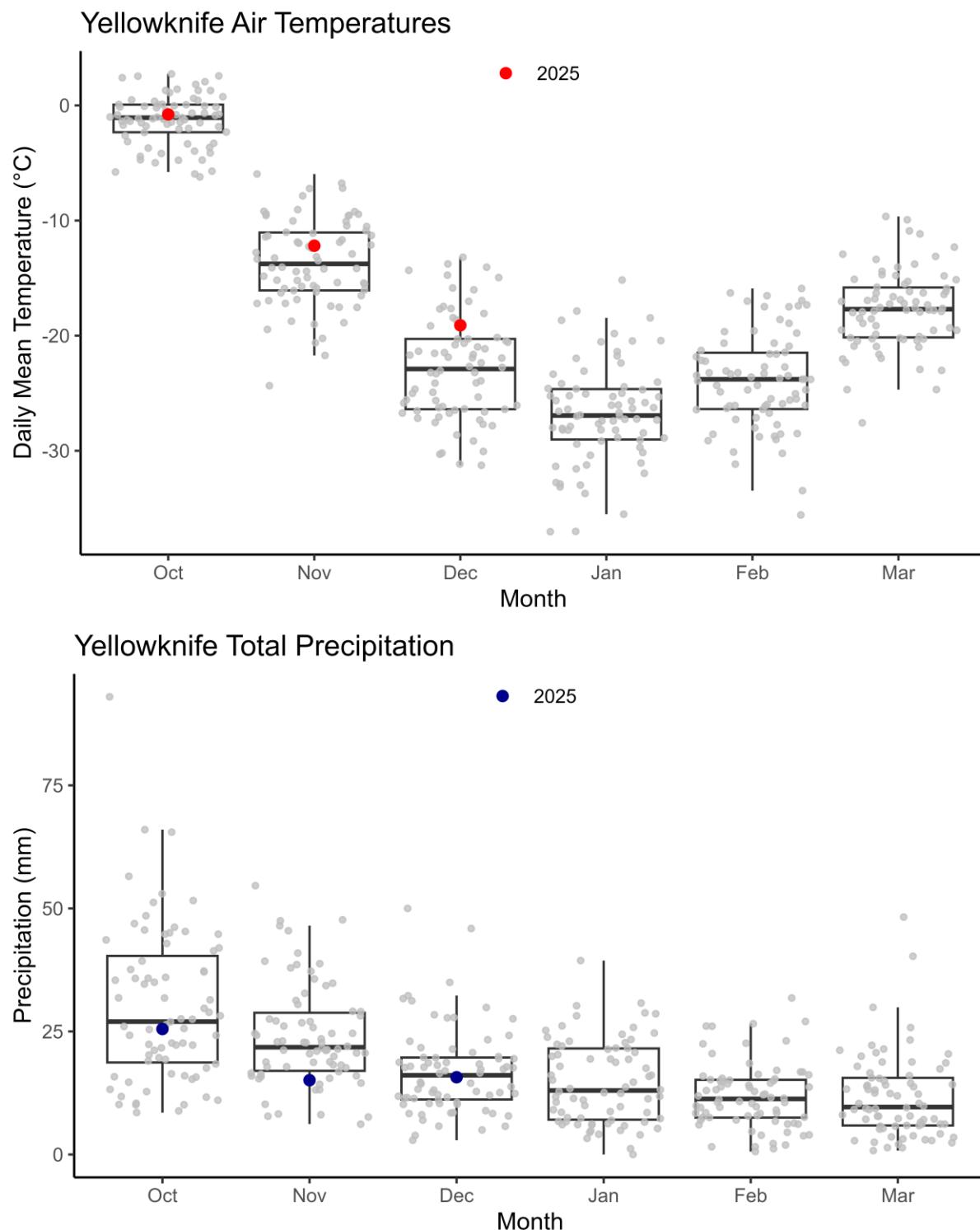
This figure shows mean monthly air temperature and total monthly precipitation for the fall and winter of 2024/2025.

Hay River



This figure shows mean monthly air temperature and total monthly precipitation for the fall and winter of 2024/2025.

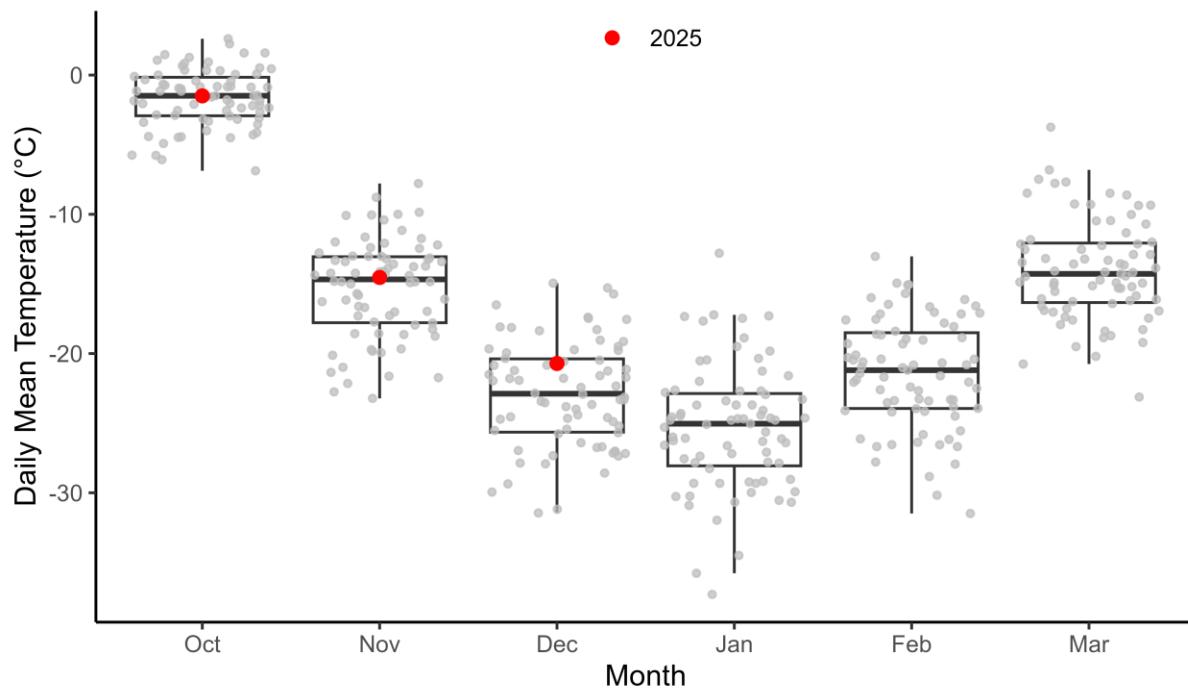
Yellowknife



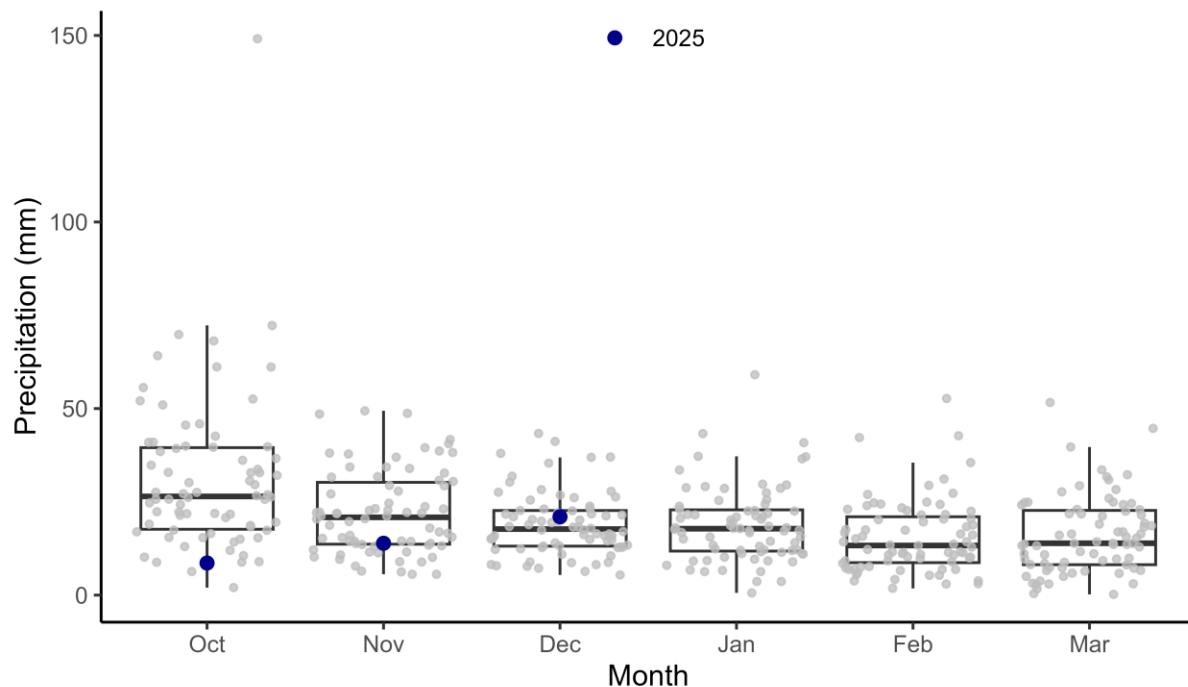
This figure shows mean monthly air temperature and total monthly precipitation for the fall and winter of 2024/2025.

Fort Simpson

Fort Simpson Air Temperatures



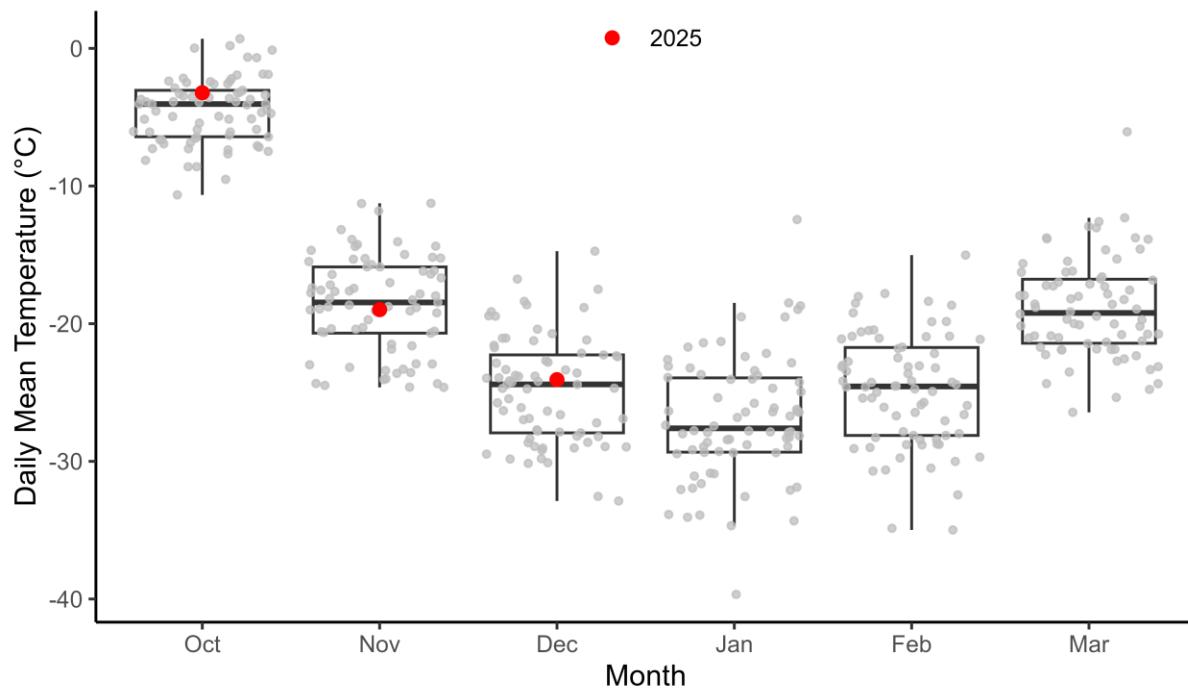
Fort Simpson Total Precipitation



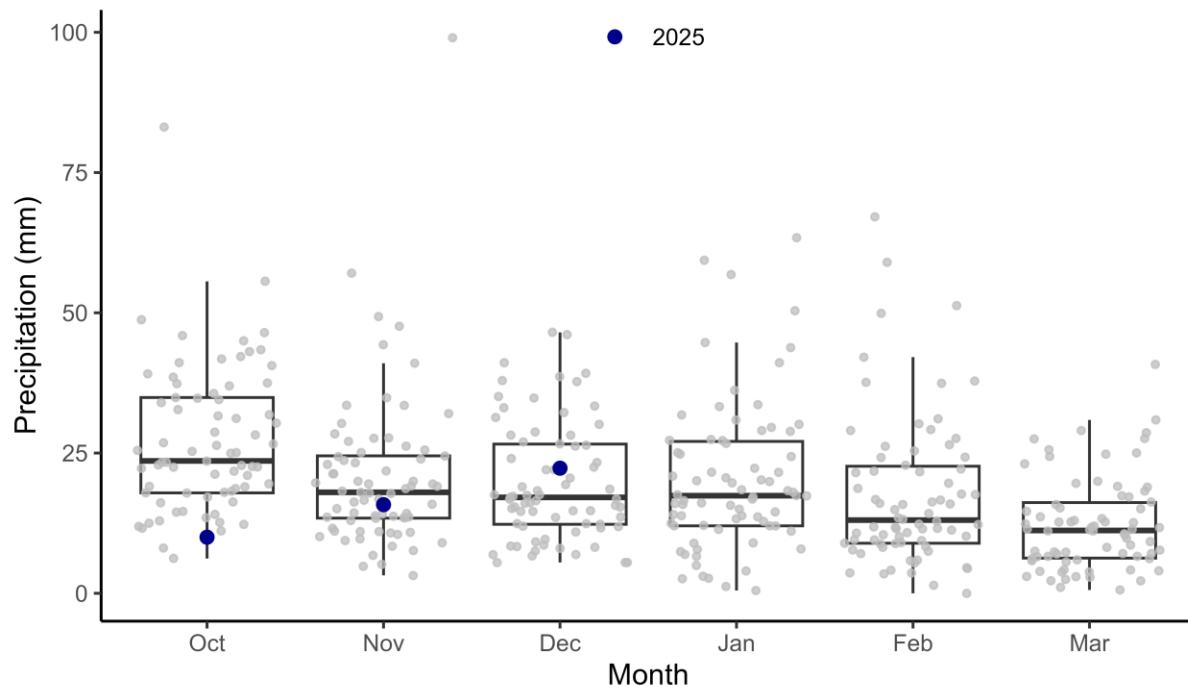
This figure shows mean monthly air temperature and total monthly precipitation for the fall and winter of 2024/2025.

Norman Wells

Norman Wells Air Temperatures

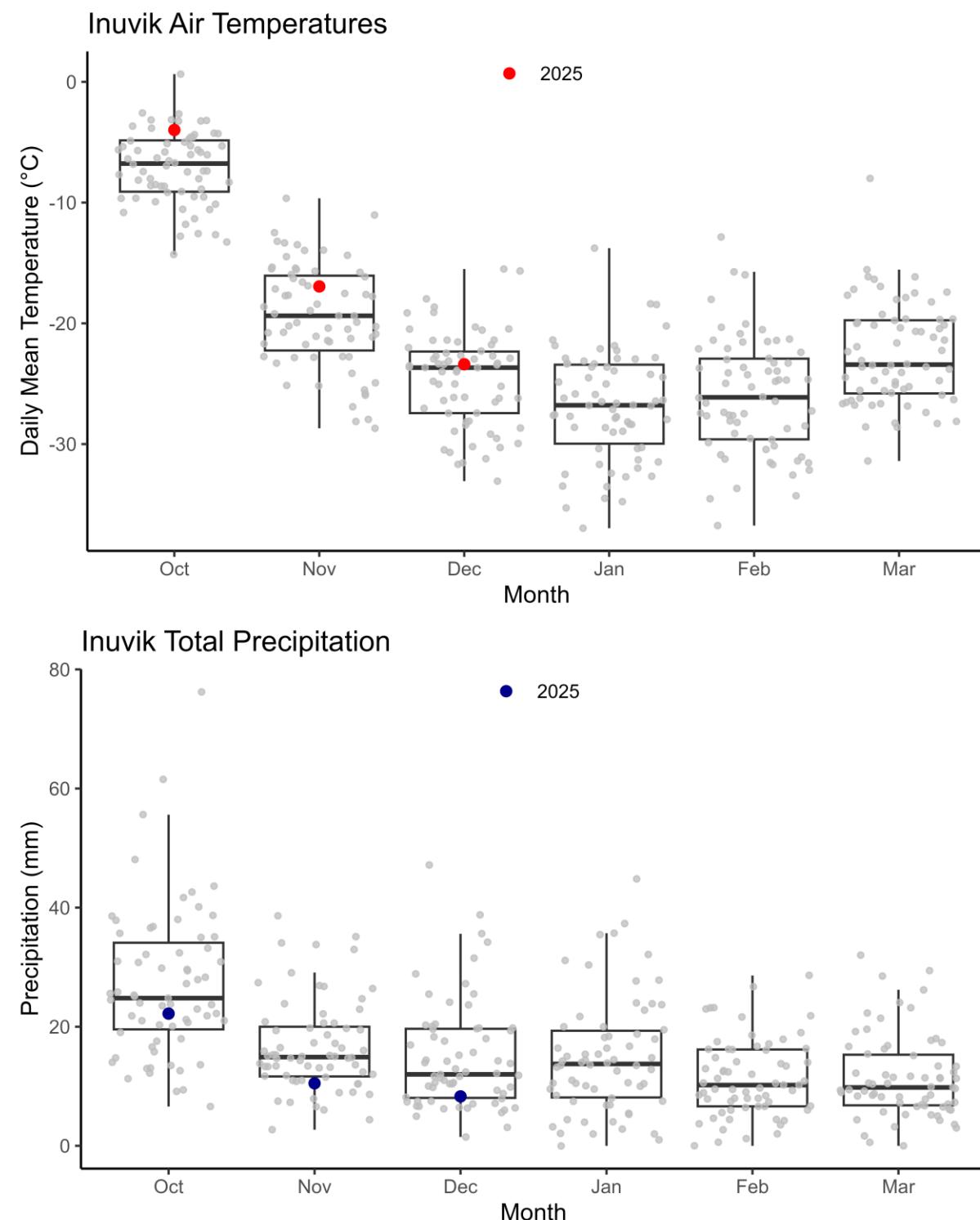


Norman Wells Total Precipitation



This figure shows mean monthly air temperature and total monthly precipitation for the fall and winter of 2024/2025.

Inuvik



This figure shows mean monthly air temperature and total monthly precipitation for the fall and winter of 2024/2025.