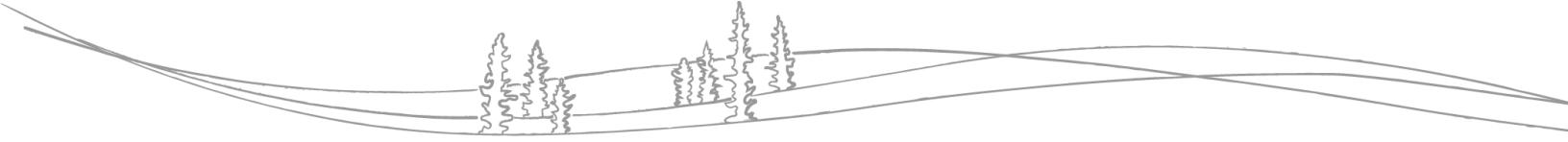




# NWT Water Monitoring Bulletin

## – July 04, 2023



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) and data from lake sites are presented as level. When flow data are unavailable, data from river sites are presented as level. The figures in this report represent current conditions for this year, relative to historic minimum and maximum values, as well as the average range, which is calculated as the interquartile range.

The NWT Hydrometric Network is a partnership between ENR 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](https://wateroffice.ec.gc.ca/index_e.html). All 2022 and 2023 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](mailto:NWTWaters@gov.nt.ca).

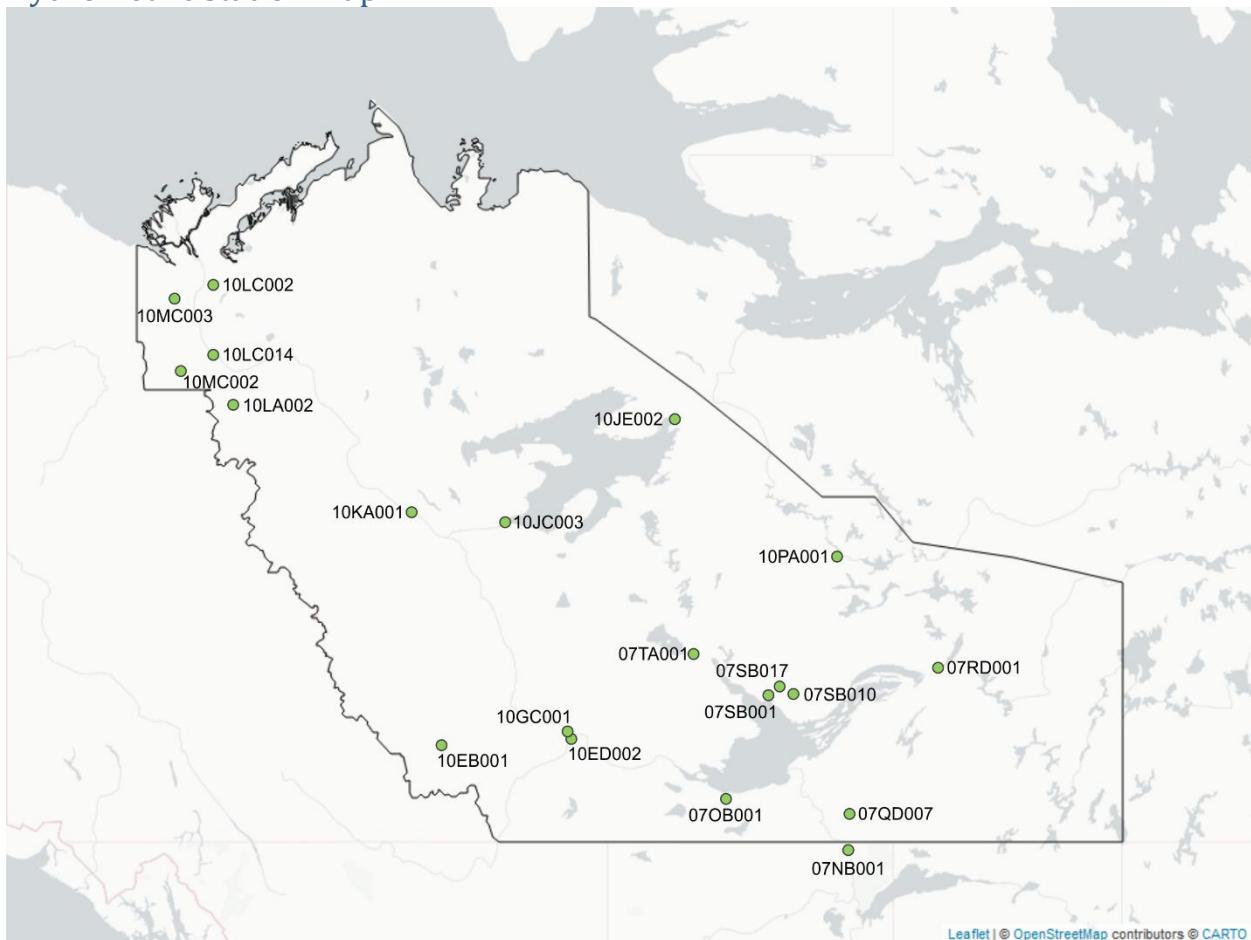
**Current status:**

- Great Slave Lake and Mackenzie River water levels are very low, largely due to hot and dry conditions in northern Alberta and British Columbia.
- In the South Slave and Dehcho, the start of summer has been very hot and dry. May was exceptionally dry across the southern NWT, but rainfall amounts were generally closer to normal during June.
  - Many rivers in the South Slave and Dehcho are extremely low, including:
    - Hay River
    - Kakisa River
    - Trout River
    - Petitot River
- The North Slave region has also been hot and dry during May and June.
  - Water levels and flows on lakes and rivers in the North Slave region are lower than normal, including:
    - Cameron River
    - Yellowknife River
    - Prelude Lake
    - Prosperous Lake
    - Snare River
- Rivers draining the Mackenzie Mountains to the west bank of the Mackenzie River are very responsive to individual rainfall events and are highly variable.
  - A large rainfall event from June 30 to July 2 produced near record high water levels on the Keele River.
- Temperatures in the Sahtu region have been warmer than average with about average precipitation during May and June.
  - Water levels and flows on rivers in the Sahtu are about average, including:
    - Great Bear River
    - Great Bear Lake (slightly below average)
    - Loon River
    - Hare Indian River
- The Beaufort Delta region was warm and wet during May and June.
  - Water levels and flows on local rivers in this region are generally about average, including:
    - Peel River
    - Rengleng River
    - Travailant River
  - Water levels in the Mackenzie Delta are lower than normal as a response to low water levels on the Mackenzie River

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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:

The light blue line shows levels/flows from last year (2022) and the dark blue line shows current levels/flows from this year (2023). The dark grey band represents the average range (calculated as the interquartile range), while the light 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.

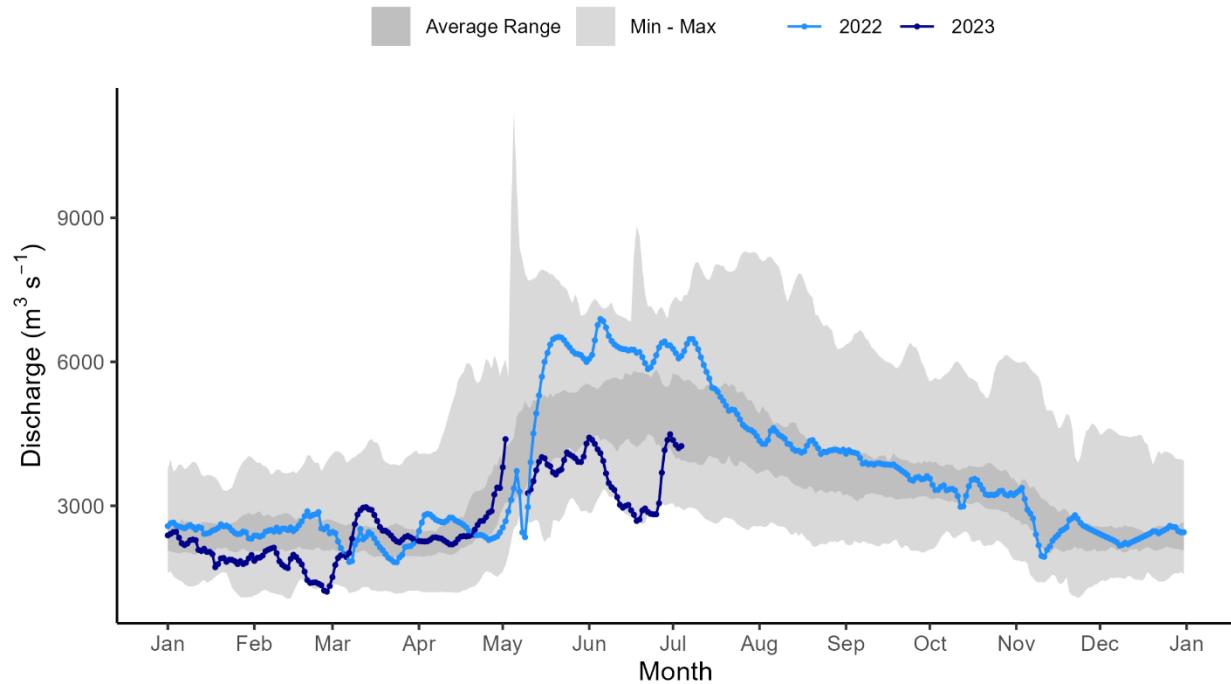
### Climate figures:

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 (10<sup>th</sup> to 90<sup>th</sup> percentiles). Each grey dot is the value from a previous year. The red or blue dots represent the values for 2023.

## Water level and flow data:

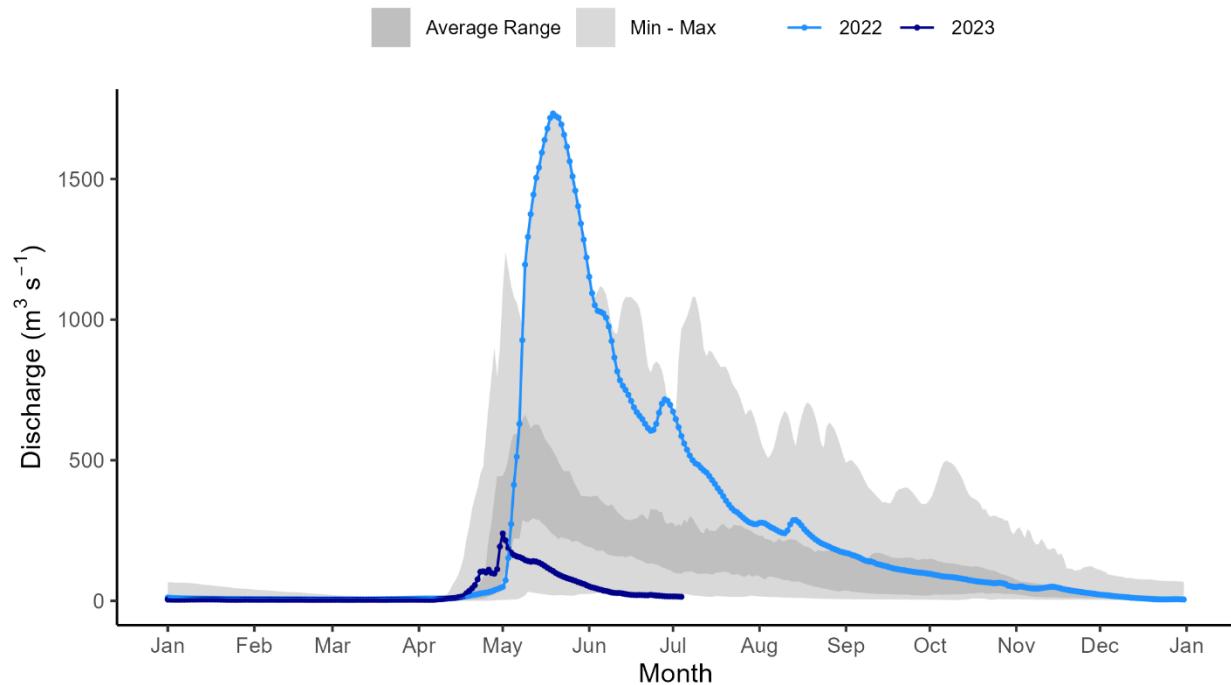
Slave River at Fitzgerald [07NB001]

SLAVE RIVER AT FITZGERALD (ALBERTA) (07NB001)



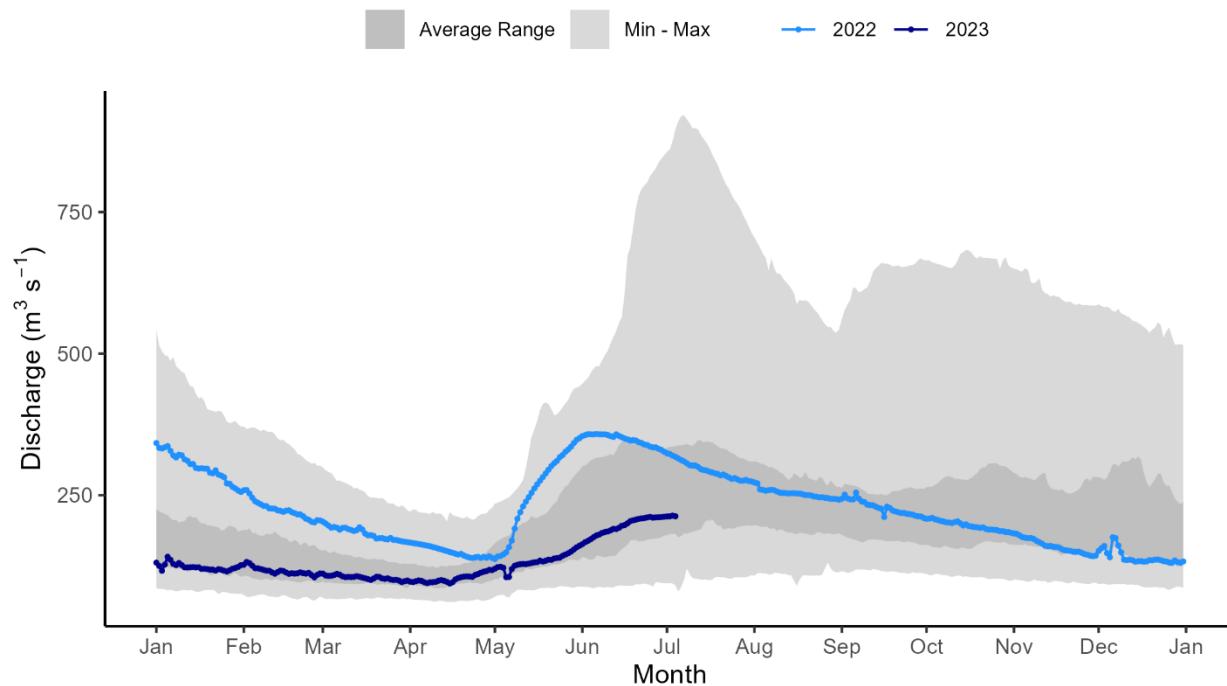
Hay River near Hay River [07OB001]

HAY RIVER NEAR HAY RIVER (07OB001)



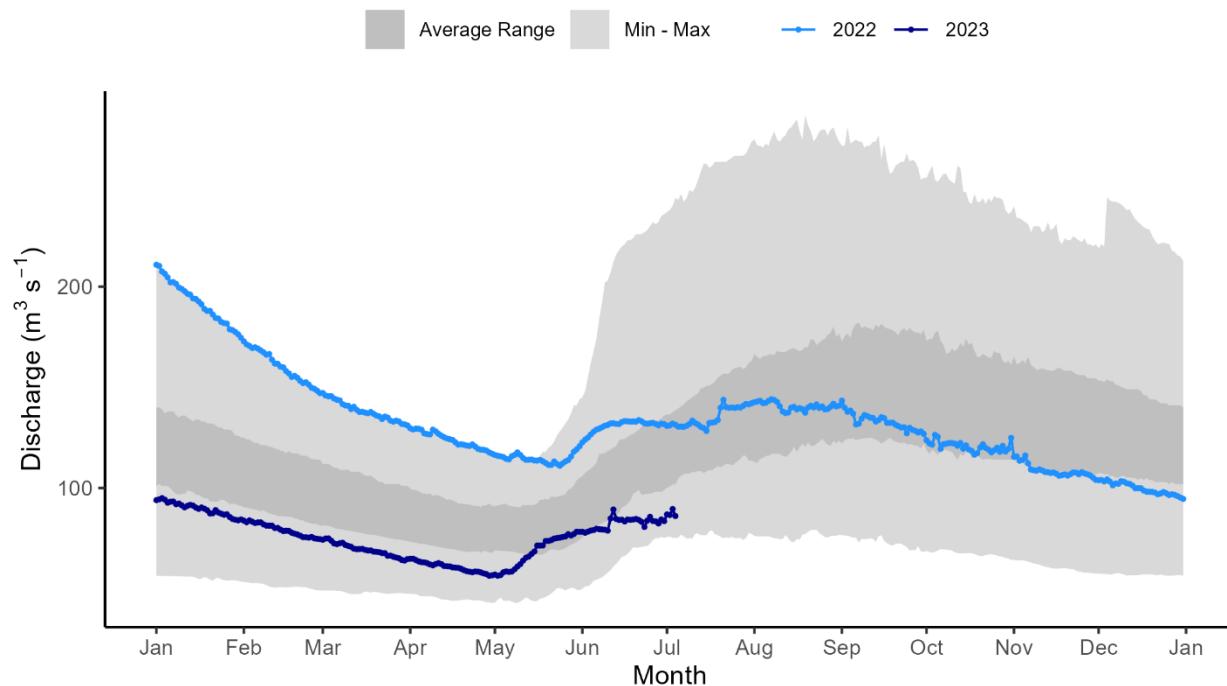
### Taltson River below Hydro Dam [07QD007]

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



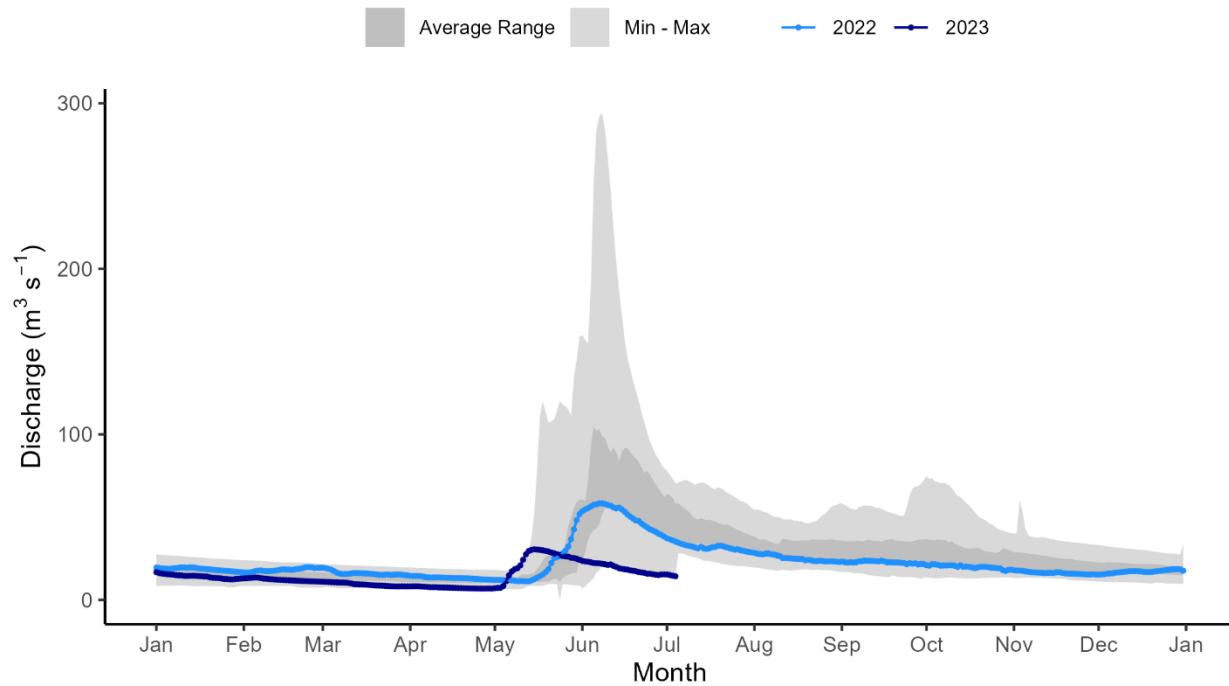
### Lockhart River at outlet of Artillery Lake [07RD001]

#### LOCKHART RIVER AT OUTLET OF ARTILLERY LAKE (07RD001)



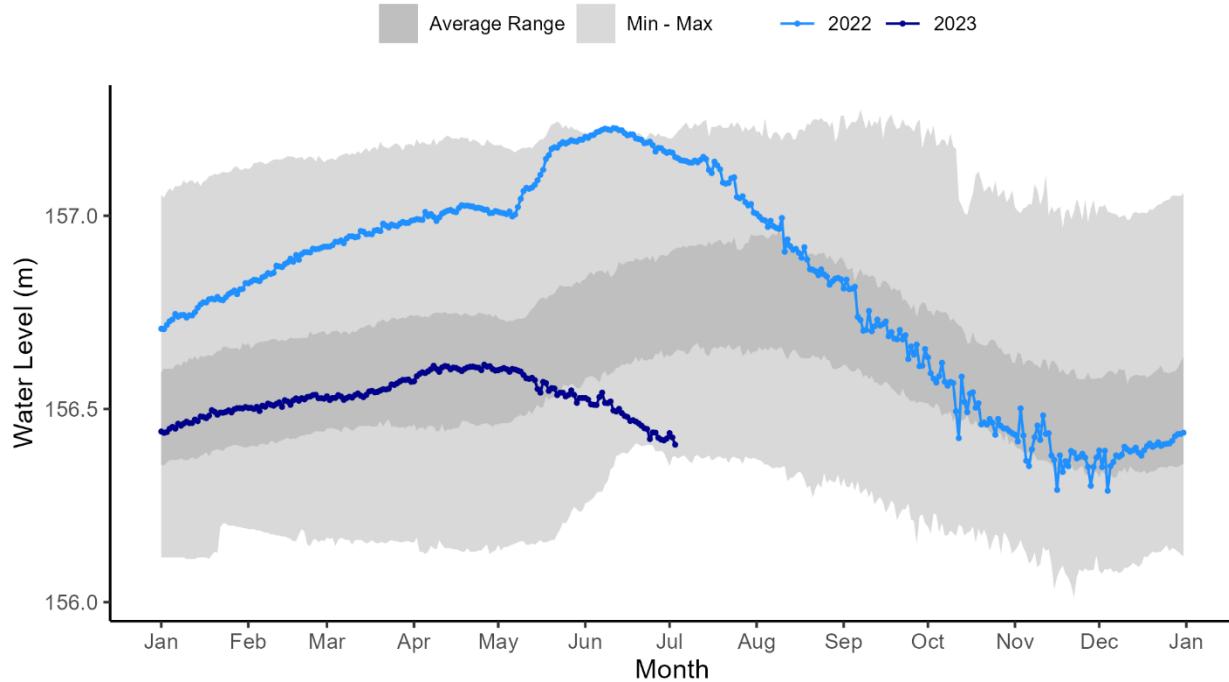
Coppermine River below Desteffany Lake [10PA001]

COPPERMINE RIVER BELOW DESTEFFANY LAKE (10PA001)



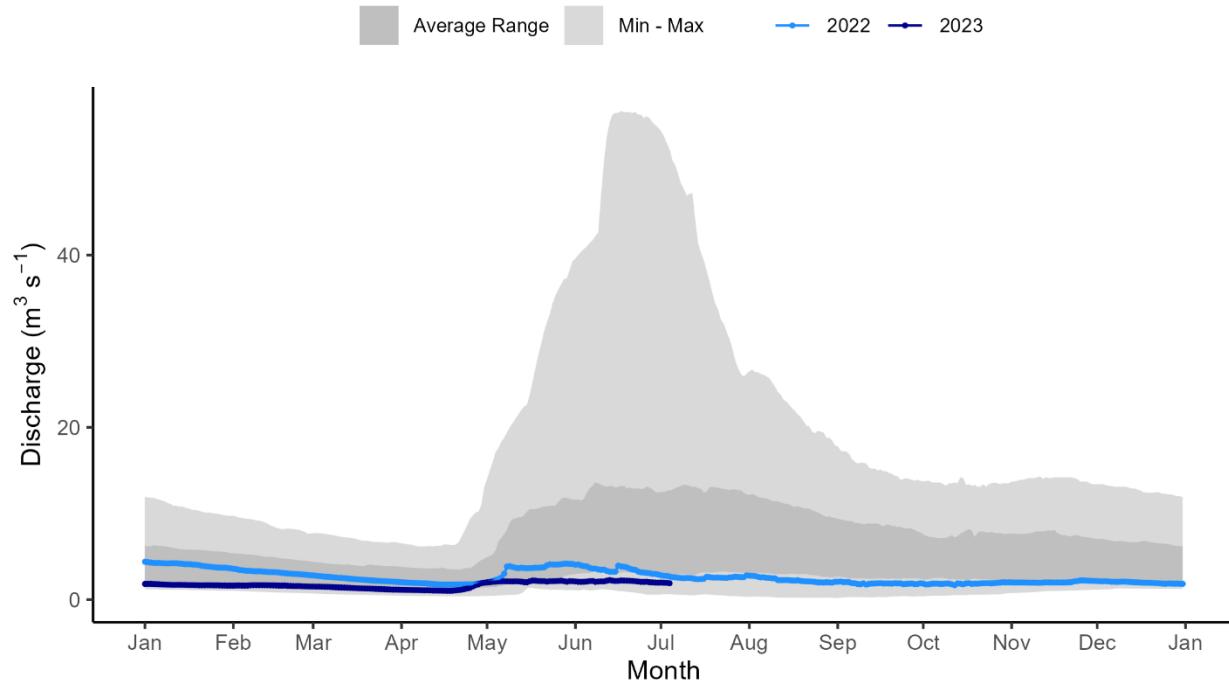
Great Slave Lake at Yellowknife Bay [07SB001]

GREAT SLAVE LAKE AT YELLOWKNIFE BAY (07SB001)



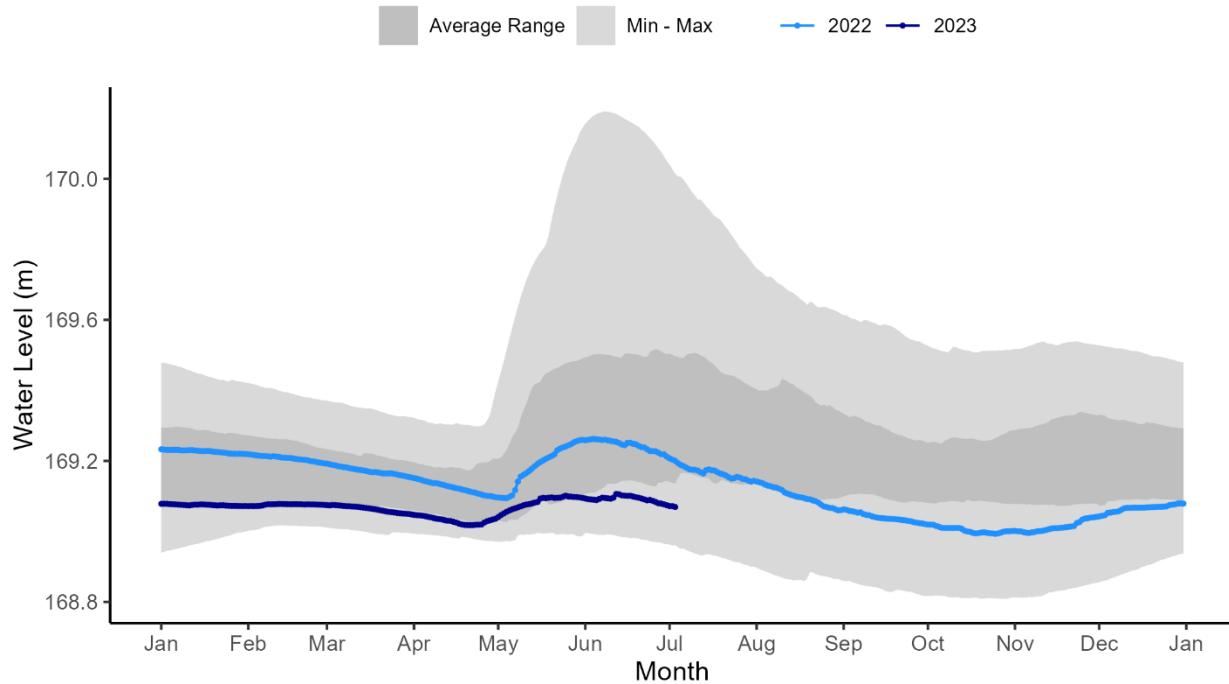
Cameron River below Reid Lake [07SB010]

CAMERON RIVER BELOW REID LAKE (07SB010)



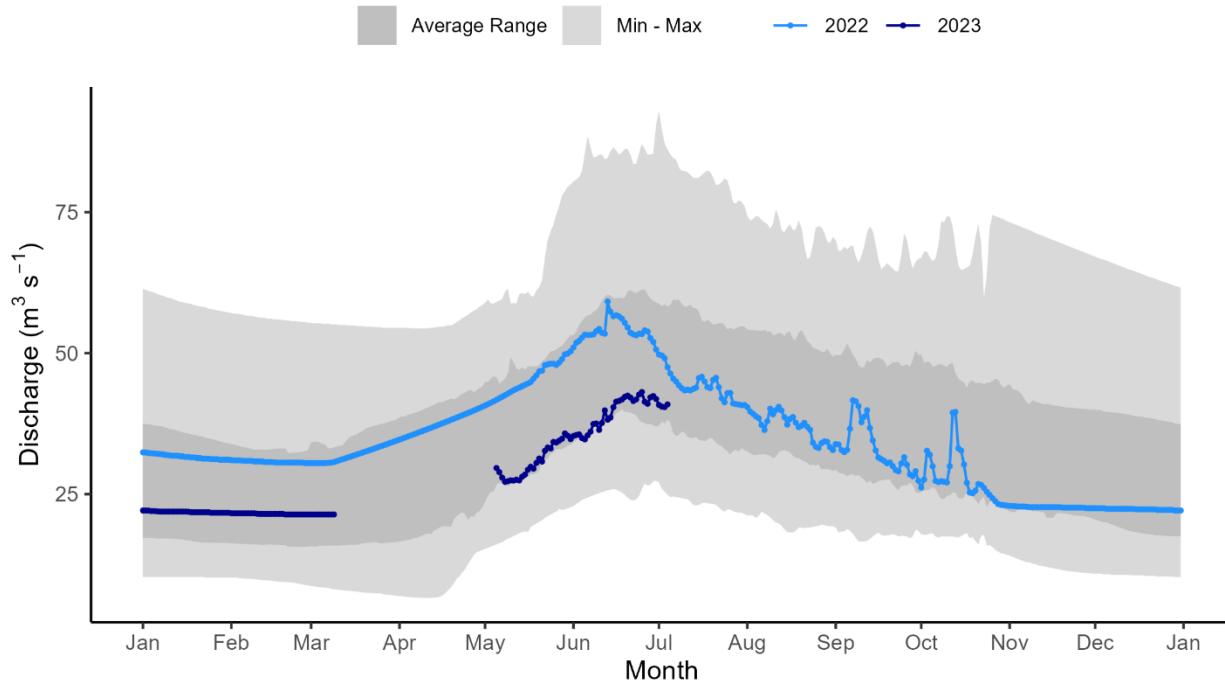
Prelude Lake near Yellowknife [07SB017]

PRELUDE LAKE NEAR YELLOWKNIFE (07SB017)



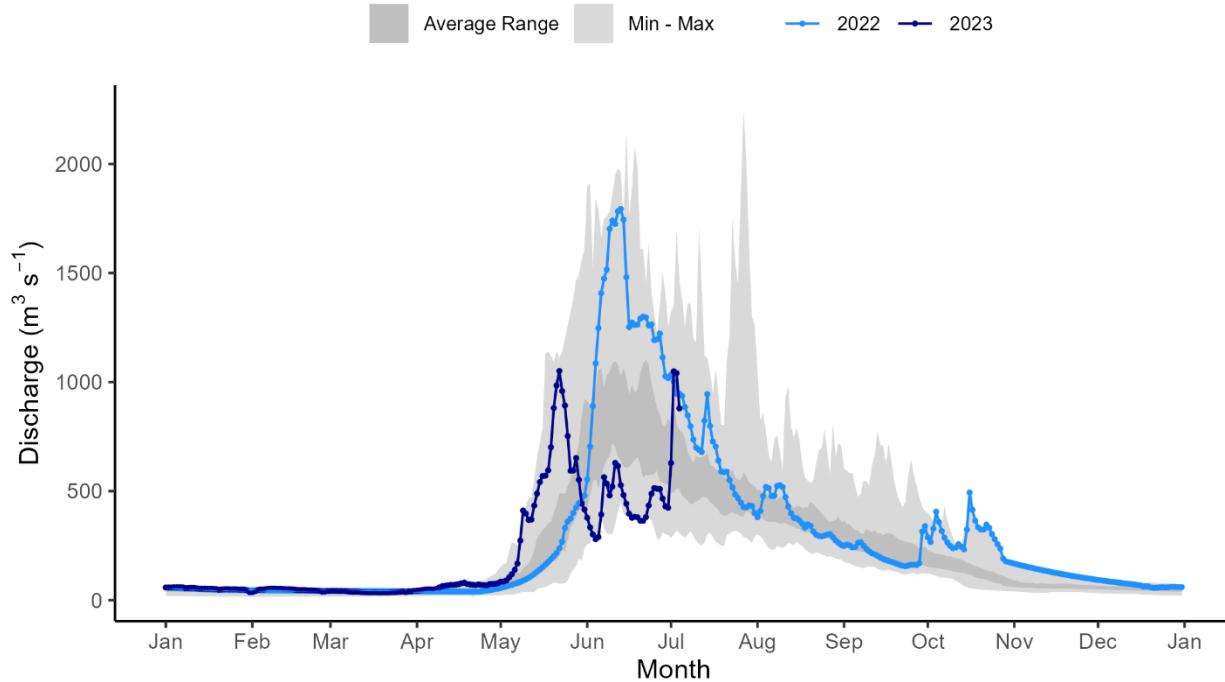
La Martre River below outlet of Lac La Martre [07TA001]

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



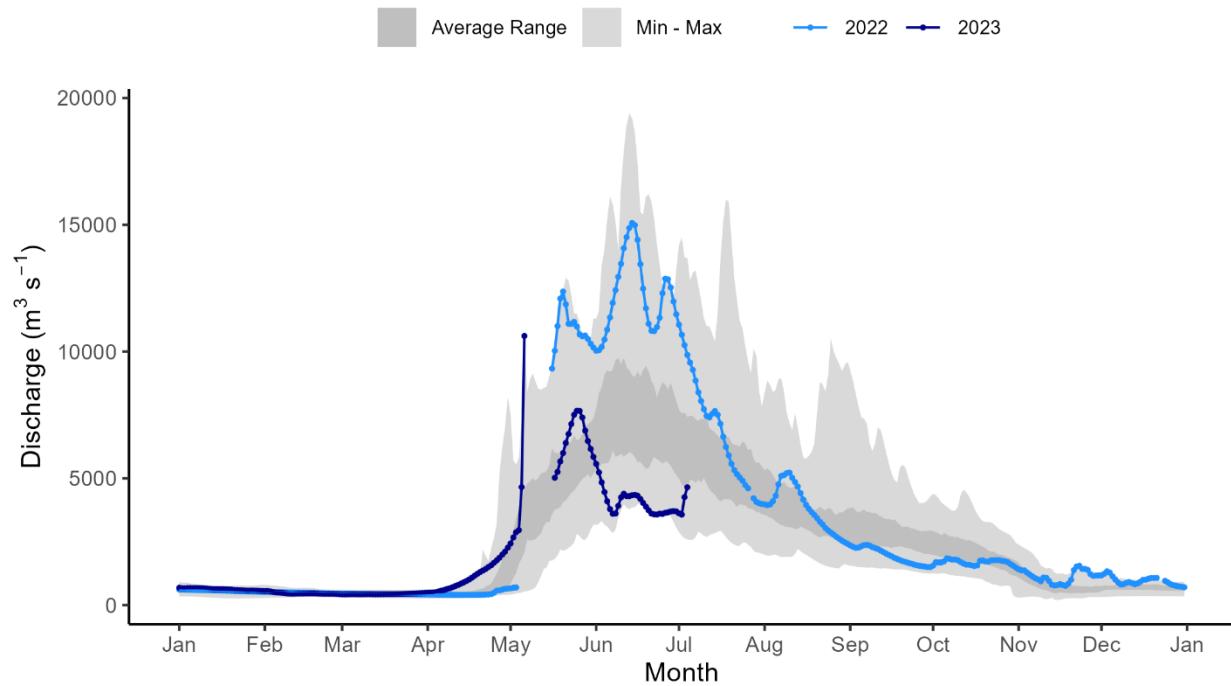
South Nahanni River above Virginia Falls [10EB001]

SOUTH NAHANNI RIVER ABOVE VIRGINIA FALLS (10EB001)



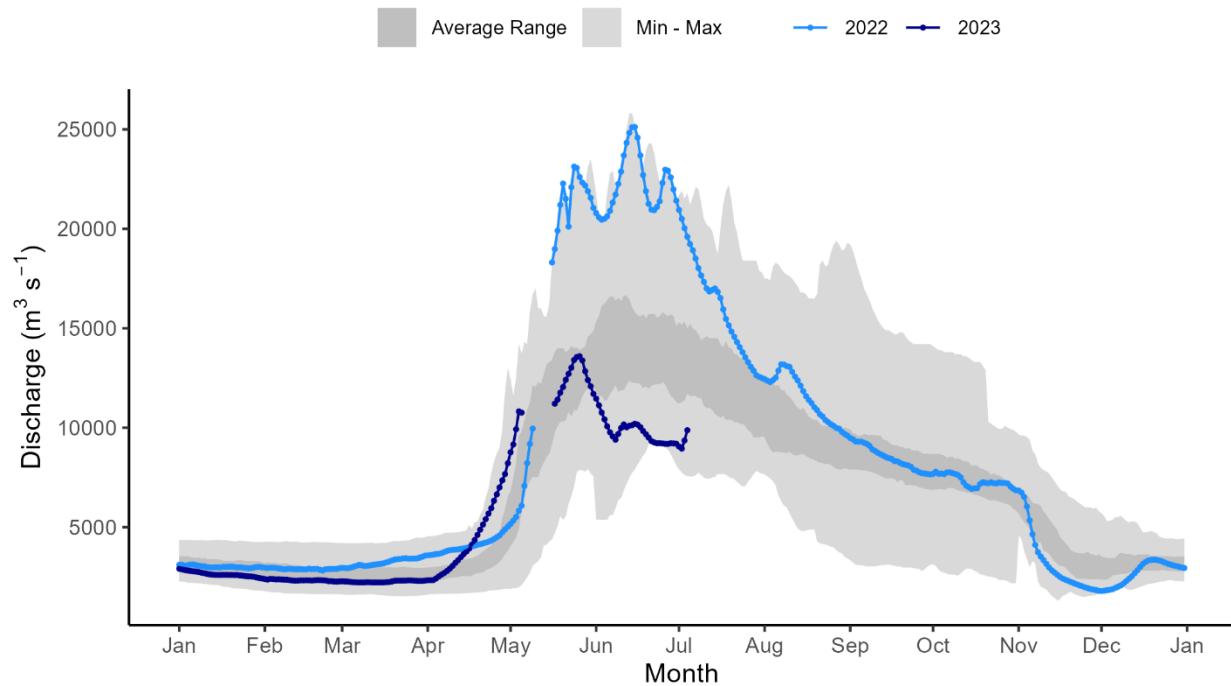
### Liard River near the Mouth [10ED002]

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



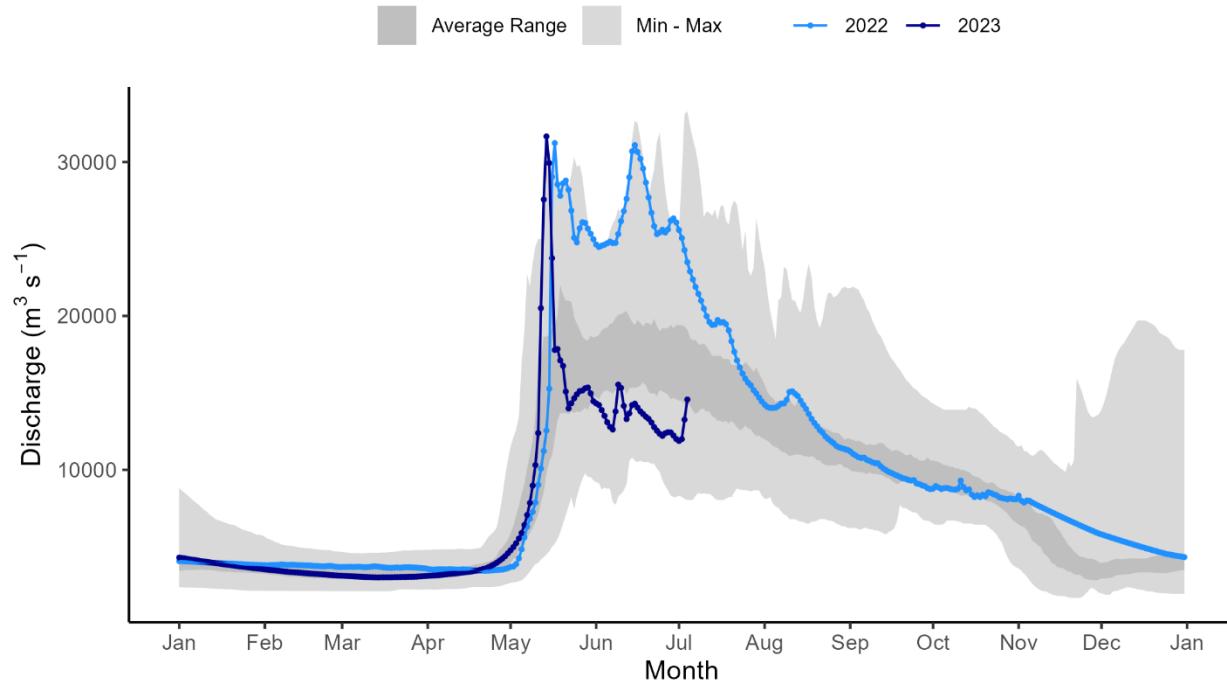
### Mackenzie River at Fort Simpson [10GC001]

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



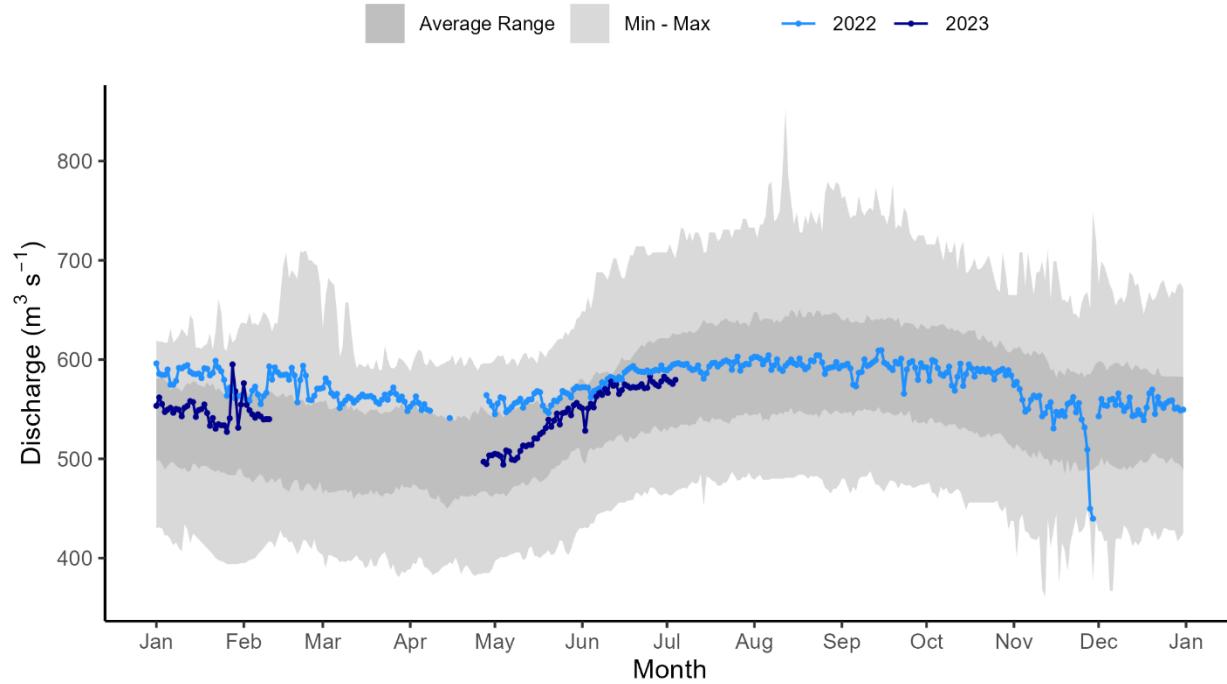
Mackenzie River at Norman Wells [10KA001]

MACKENZIE RIVER AT NORMAN WELLS (10KA001)



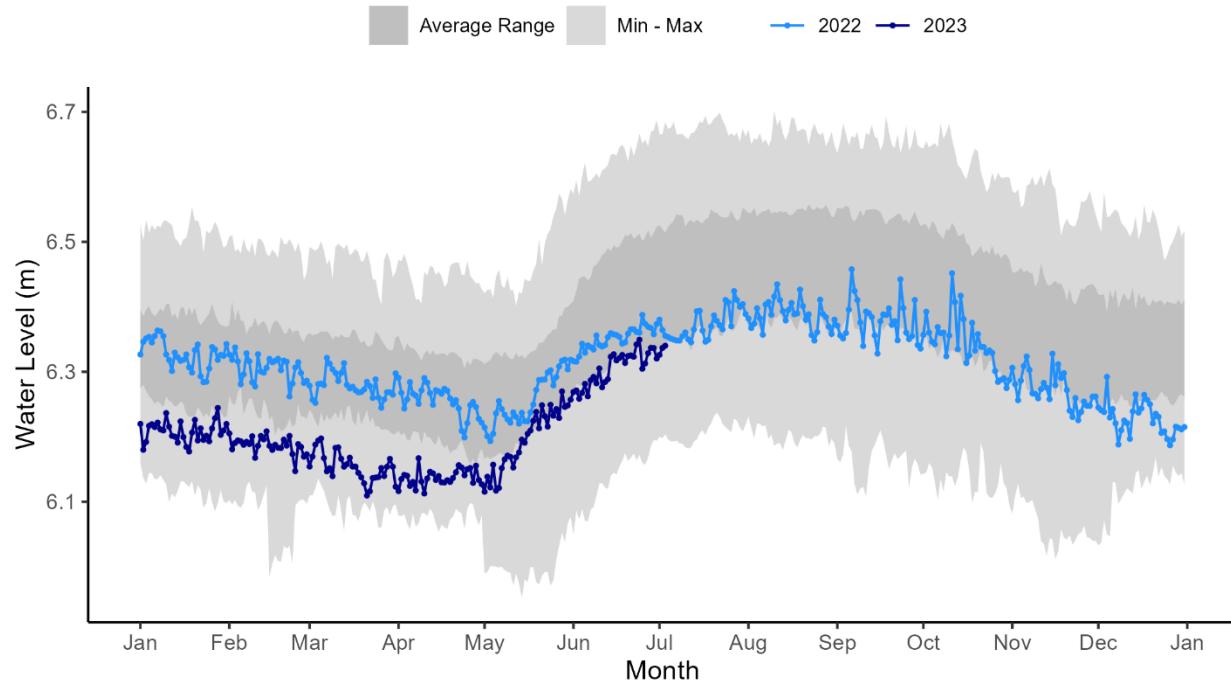
Great Bear River at outlet of Great Bear Lake [10JC003]

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



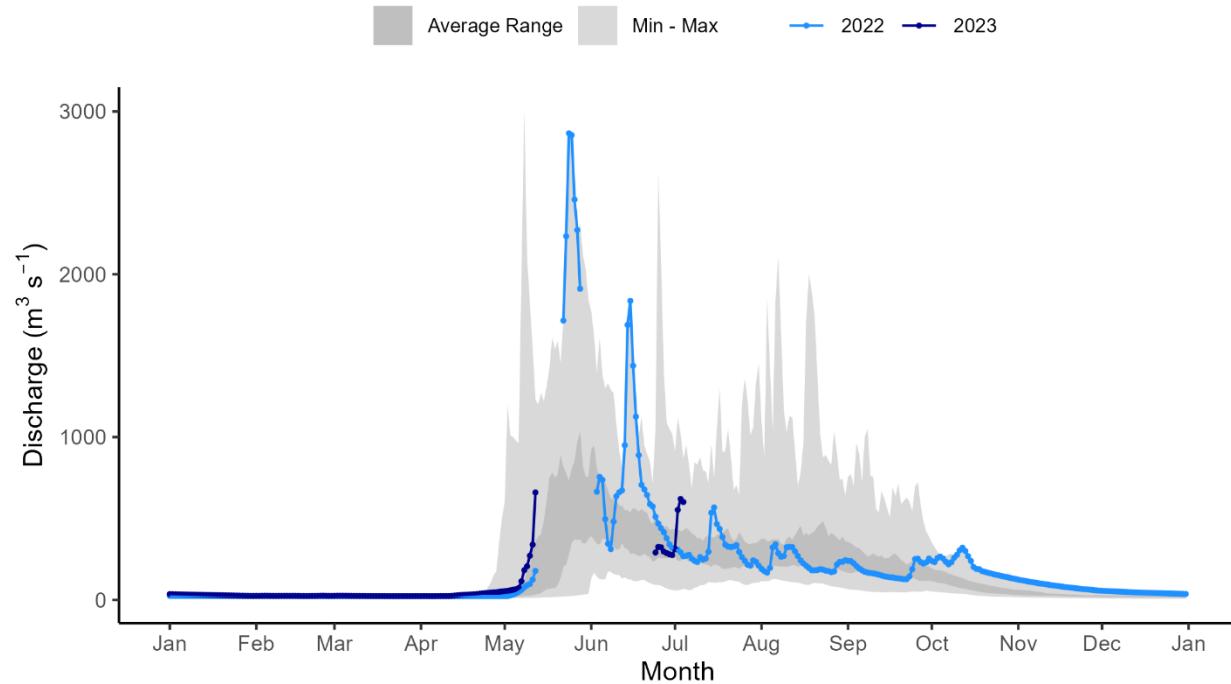
### Great Bear Lake at Hornby Bay [10JE002]

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



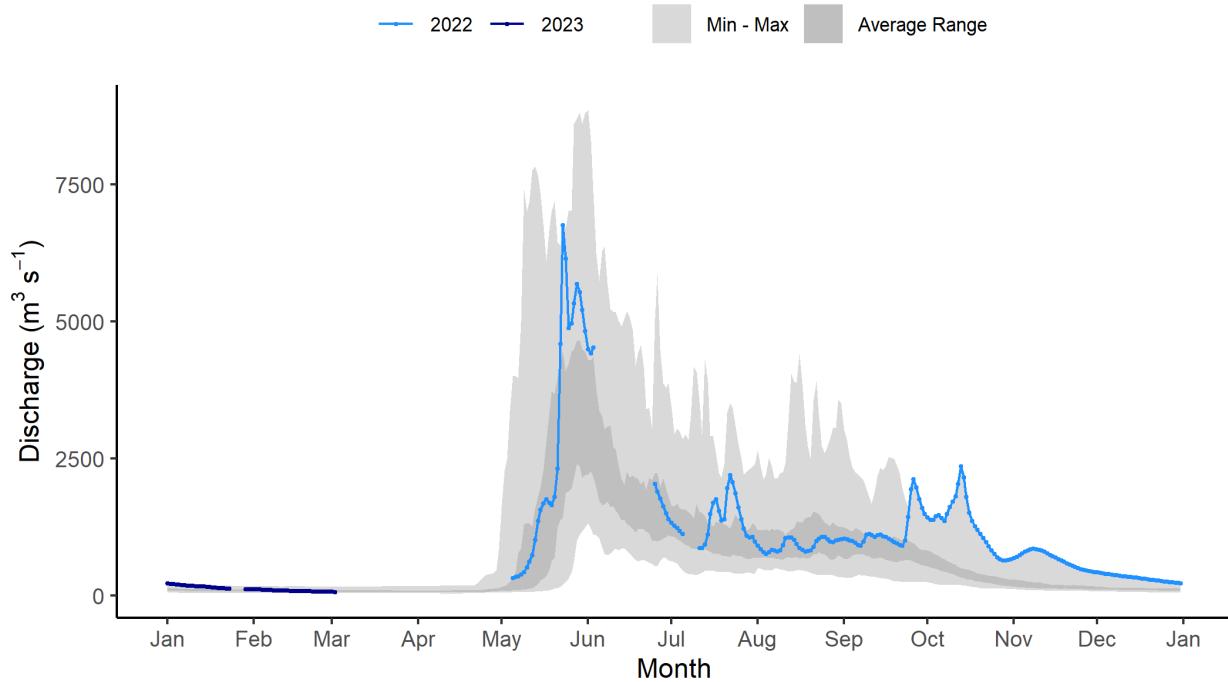
### Arctic Red River near the mouth [10LA002]

#### ARCTIC RED RIVER NEAR THE MOUTH (10LA002)



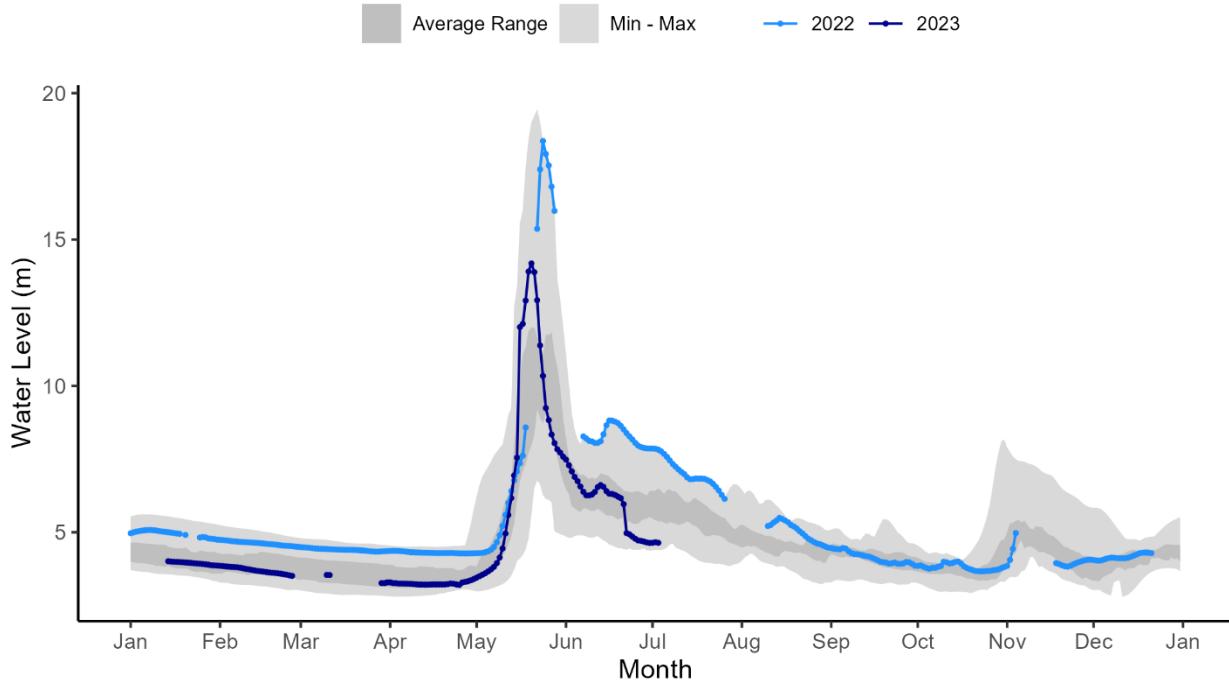
Peel River above Fort McPherson [10MC002]

PEEL RIVER ABOVE FORT MCPHERSON (10MC002)



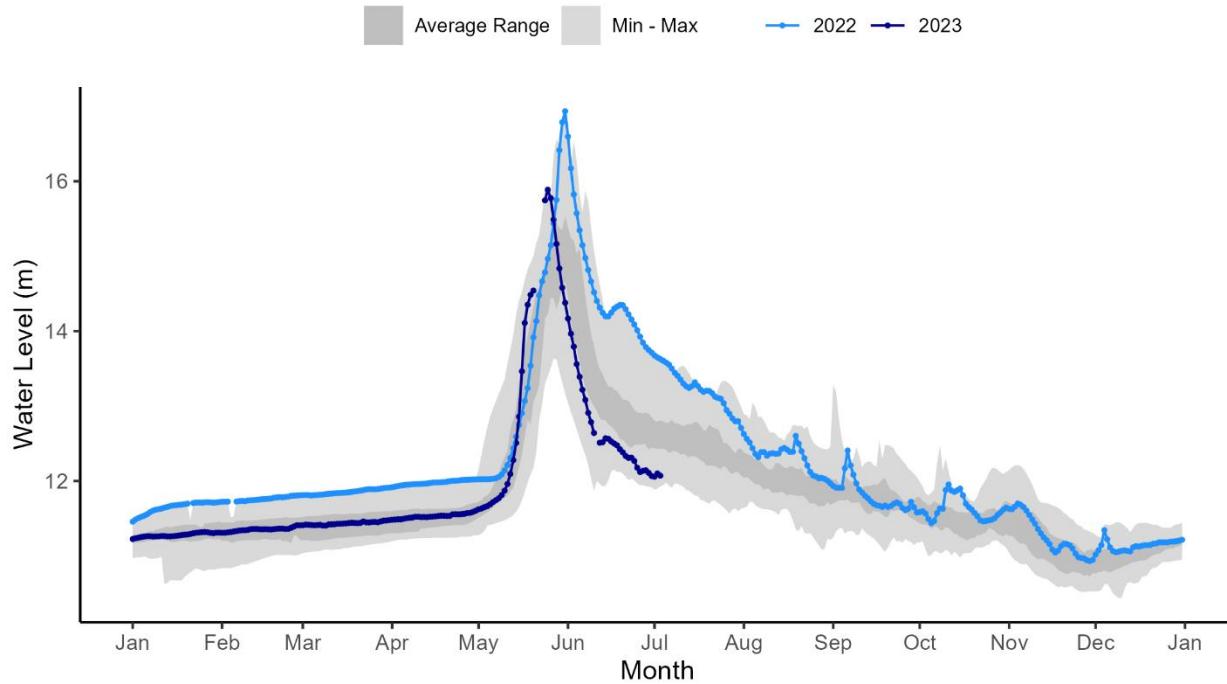
Mackenzie River at Arctic Red River [10LC014]

MACKENZIE RIVER AT ARCTIC RED RIVER (10LC014)



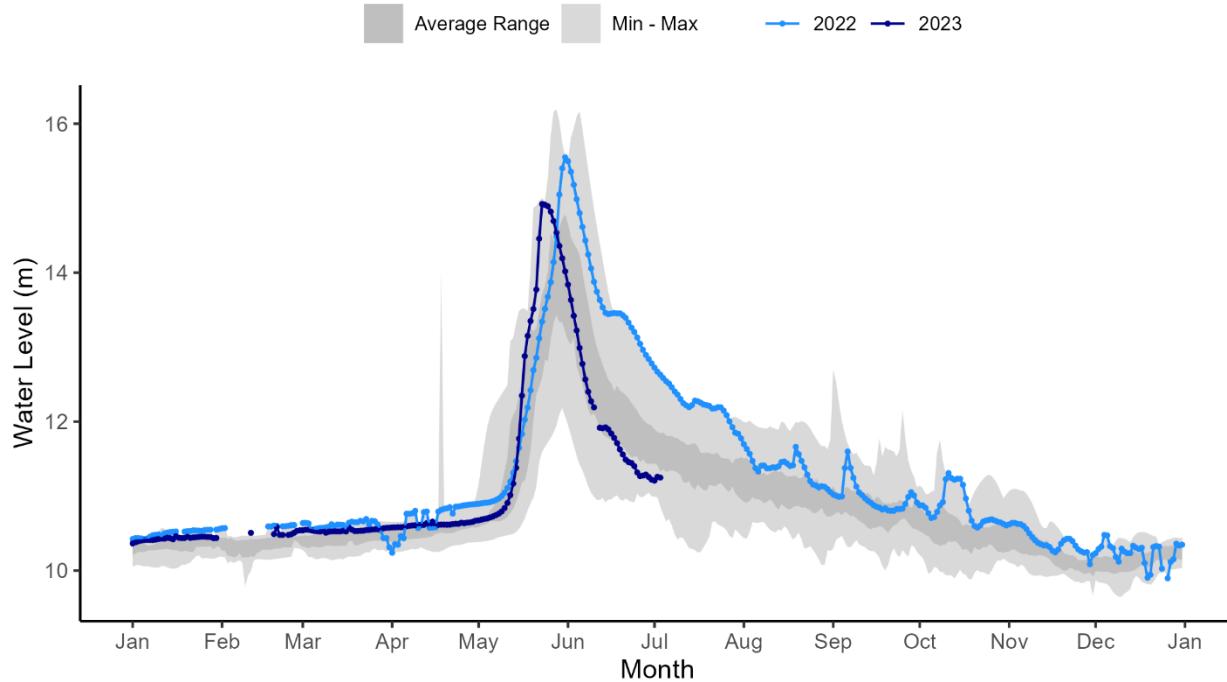
Mackenzie River (East Channel) at Inuvik [10LC002]

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

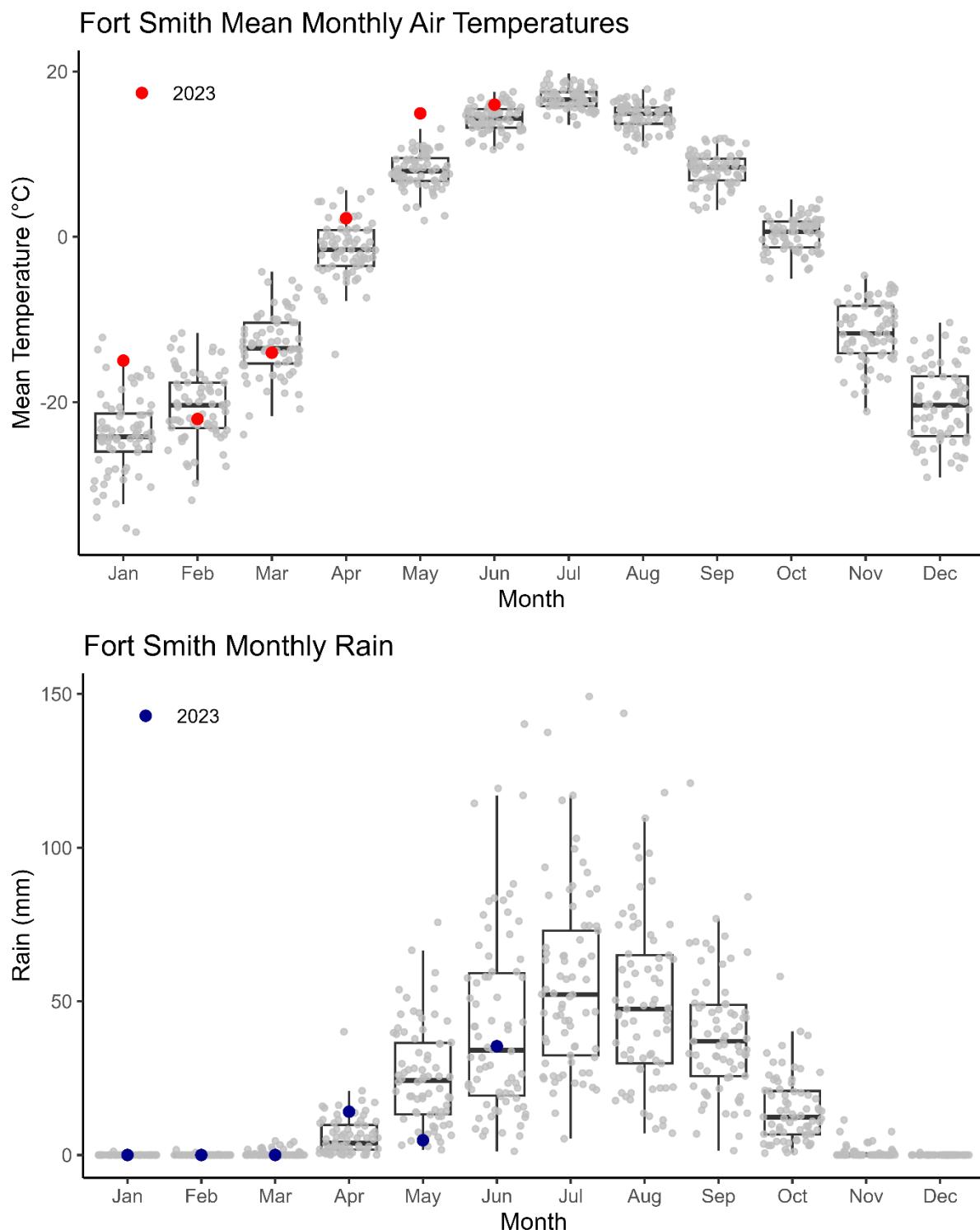


Mackenzie River (Peel Channel) above Aklavik [10MC003]

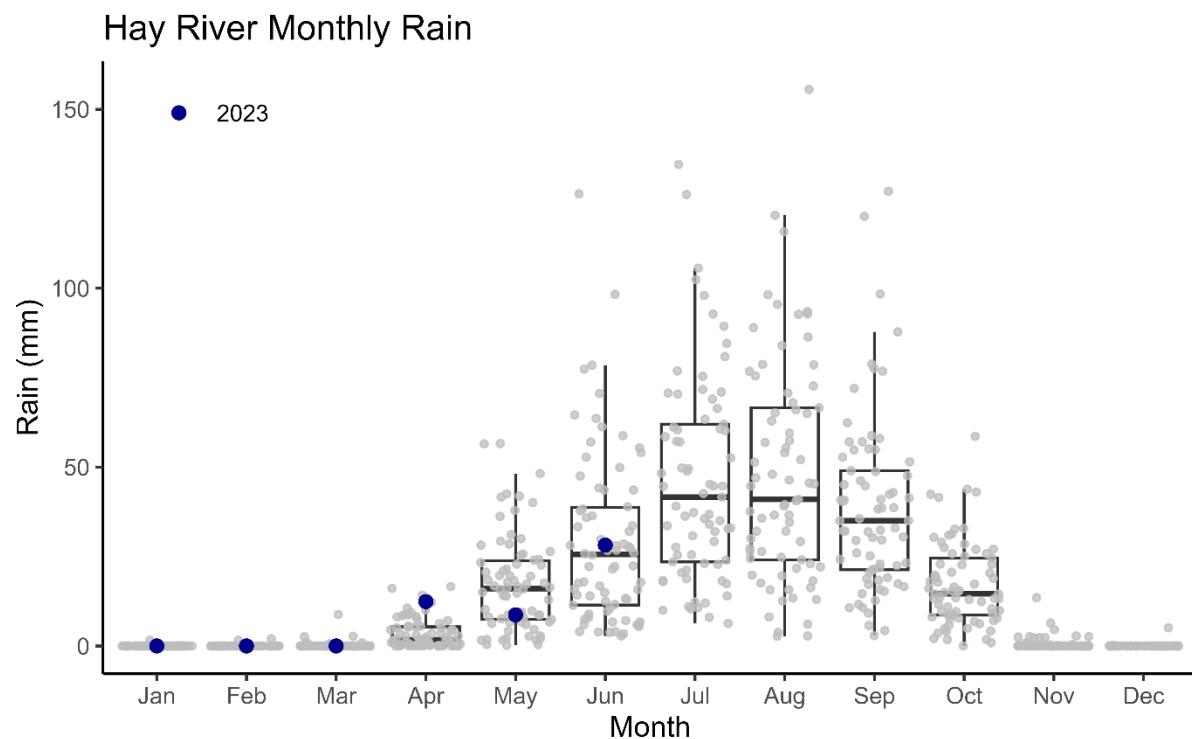
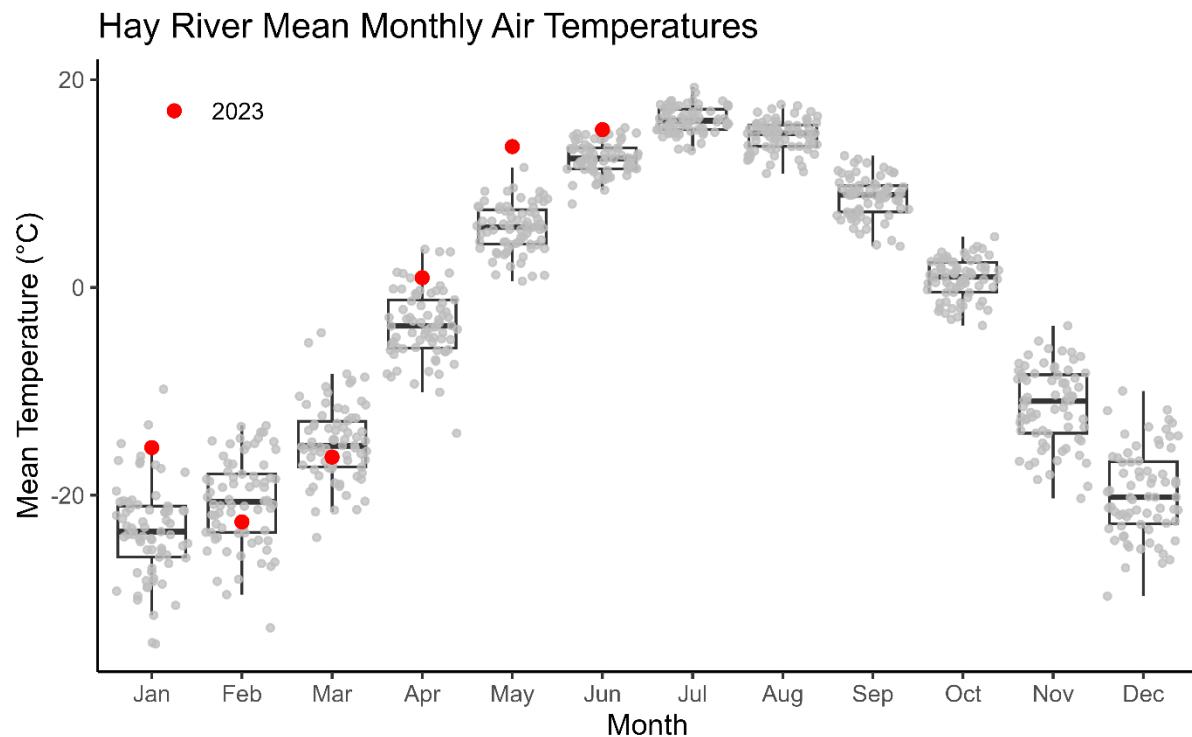
MACKENZIE RIVER (PEEL CHANNEL) ABOVE AKLAVIK (10MC003)



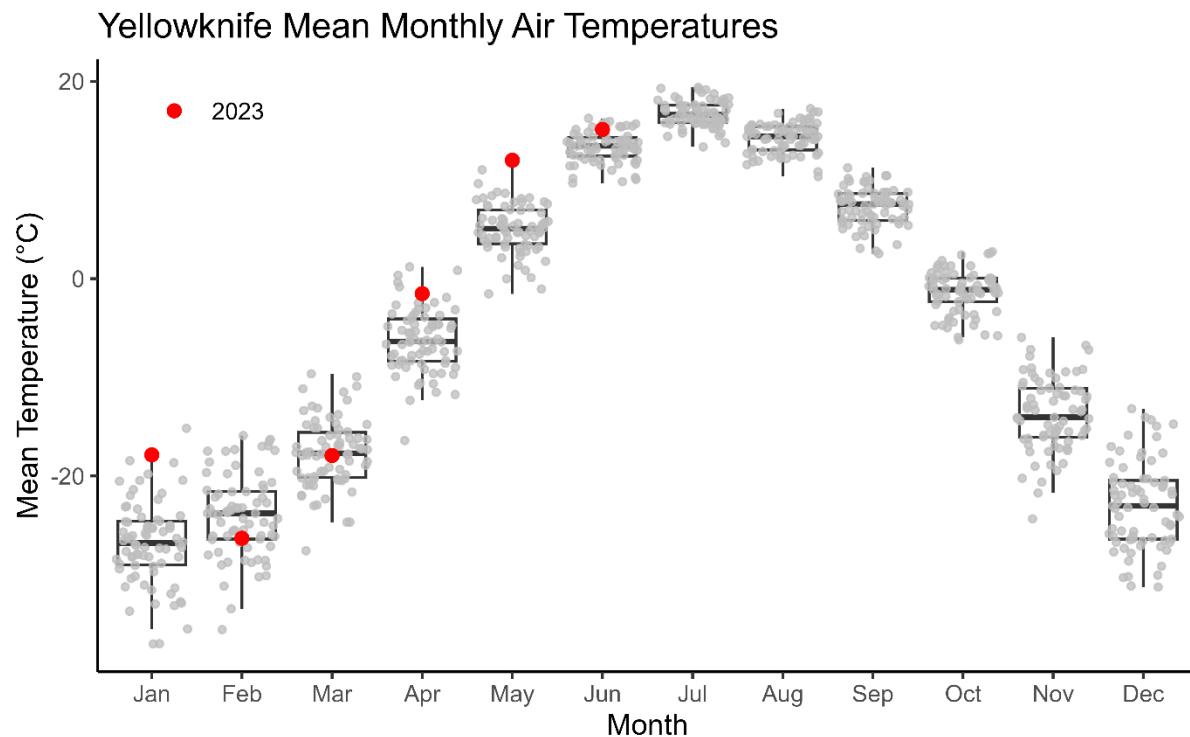
Climate Data:  
Fort Smith



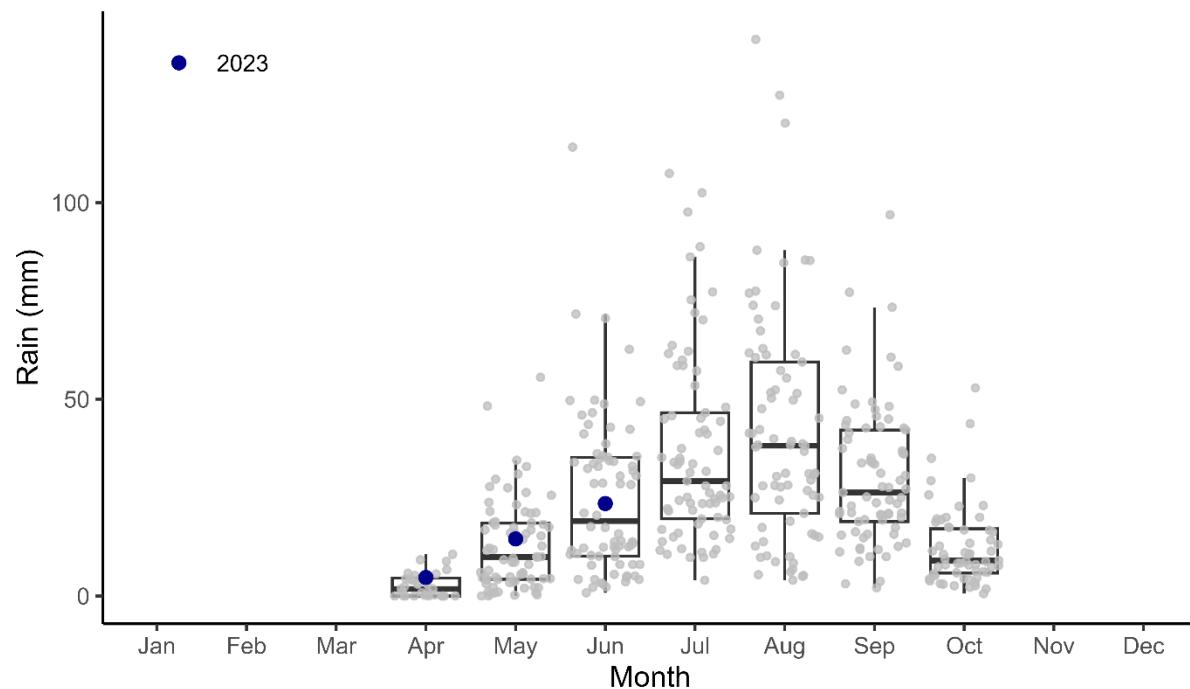
## Hay River



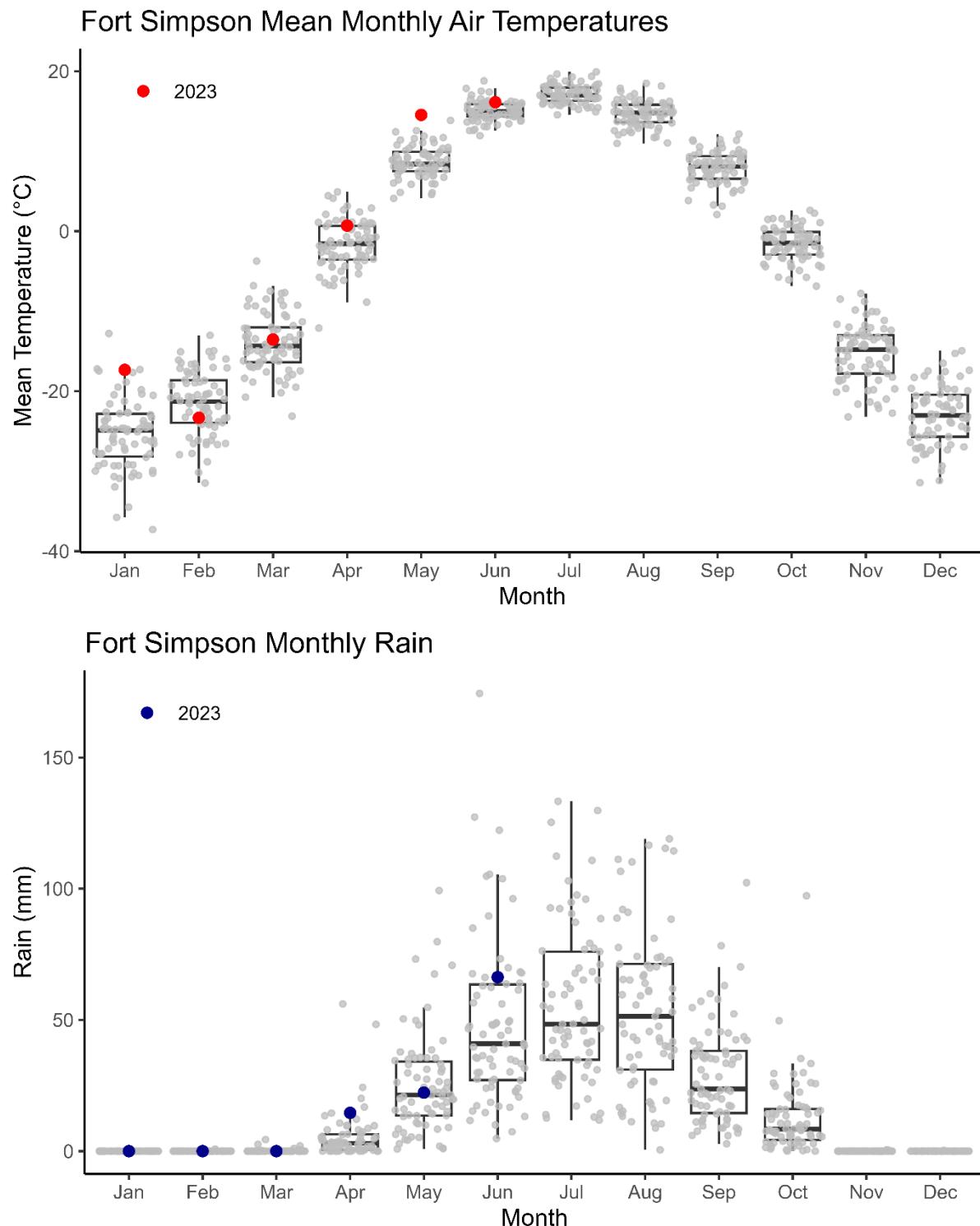
## Yellowknife



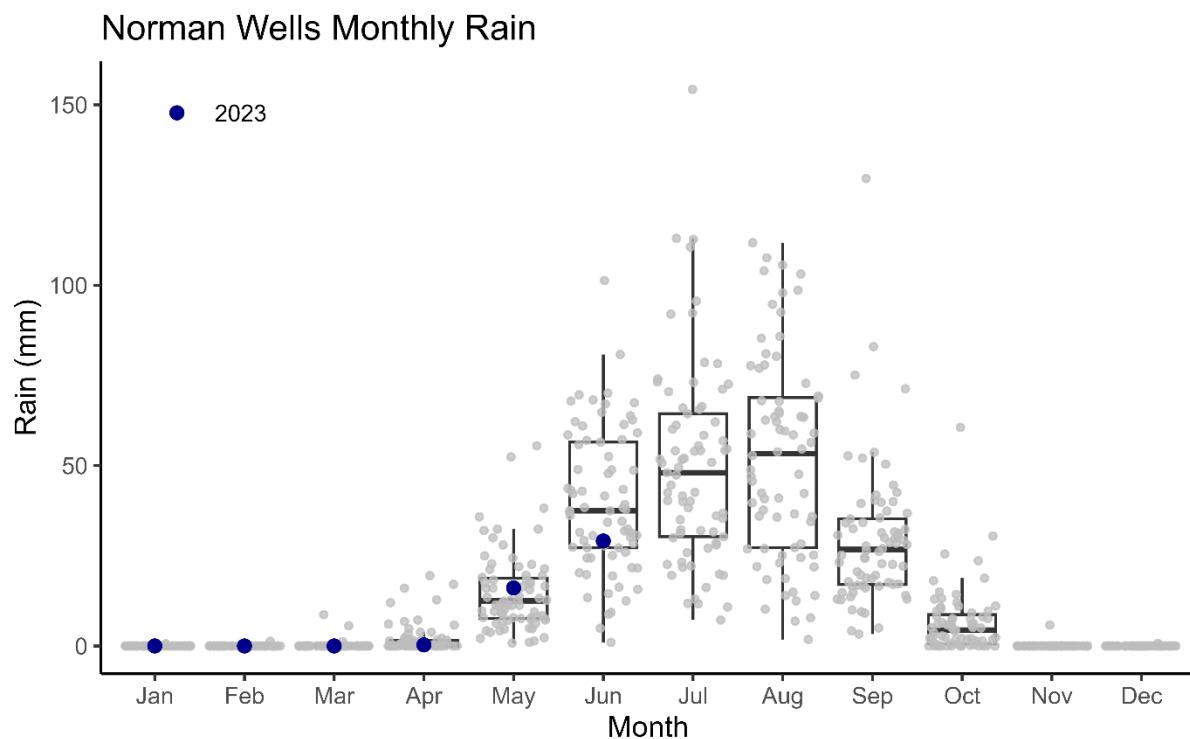
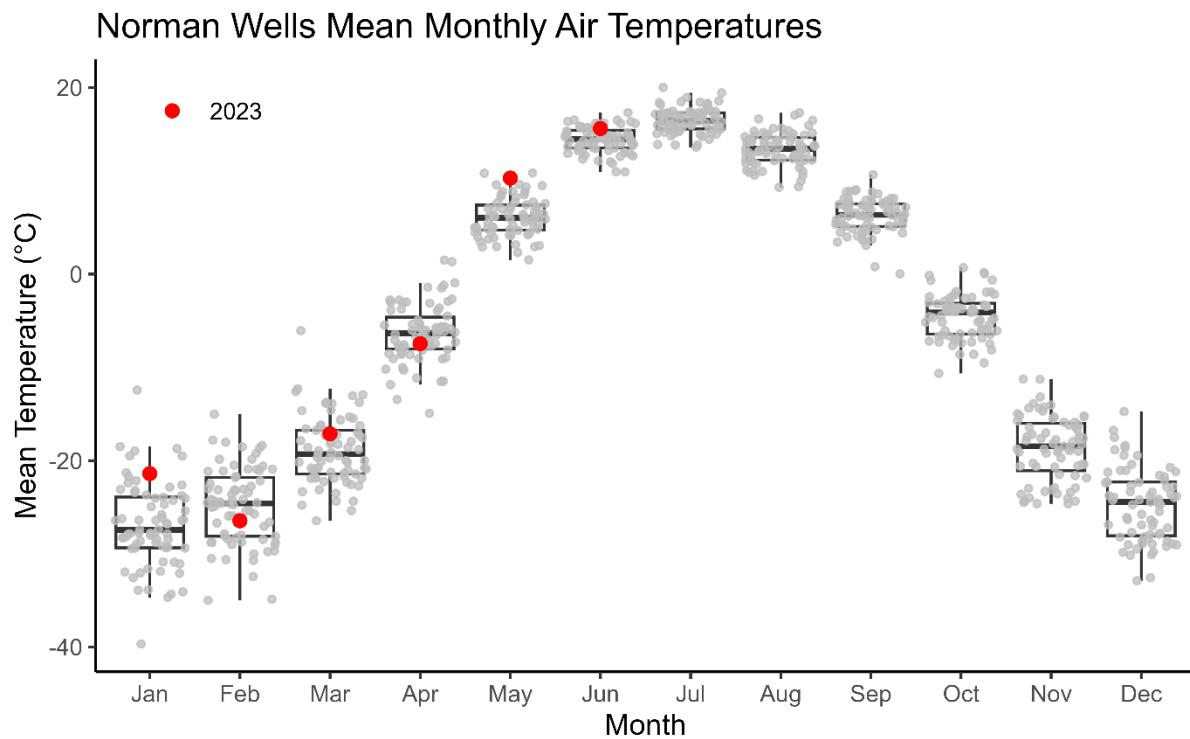
### Yellowknife Monthly Rain



## Fort Simpson



## Norman Wells



## Inuvik

