Nechako IRC NEWSLETTER

June 2023 | Volume 5 Issue 2

NSERC/Rio Tinto Industrial Research Chair

“To better understand and quantify the roles of climate variability, climate change, and water management on the long-term water security of the Nechako Watershed."

Territorial Acknowledgement

Working on traditional First Nations territories in a scientific context is a humbling and deeply appreciated privilege. The opportunity to work hand-in-hand with Indigenous communities is a gift for which we are sincerely grateful. This collaboration not only enriches scientific understanding but also fosters mutual respect and cultural exchange. We are grateful for the trust and partnership extended to us, and we strive to approach this work with the utmost gratitude and responsibility. We acknowledge that our work takes place within the unceded traditional lands of 15 First Nations:

- Binche Whut'en
- Cheslatta Carrier Nation
- Lake Babine Nation
- Lheildli T'enneh
- Nadleh-Whut'en
- Nak'azdli Whut'en
- Nee-Tahi-Buhn Indian Band
- Saik'uz
- Skin Tyee Band
- Stellat'en
- Takla Lake
- Tl'azt'en
- Ts'il Kaz Koh (Burns Lake) Band
- Wet'suwet'en First Nation
- Yekooche First Nation

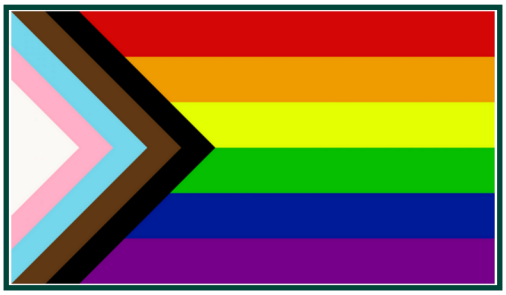
Netja koh (Nechako River) at Cottonwood Island Nature Park in Prince George

The Nechako River is referred to as **Netja koh**, meaning **'Big River'** in the traditional language of the Dakelh nations

CONTENT

Spring reflections

In this issue of the Nechako IRC newsletter you will find updates from the current team of researchers. We continue to make progress on many fronts and are well underway for the busiest summer field season yet!



Happy Pride Month! Celebrate love, diversity, and acceptance across the region.

Happy Summer Solstice!

An introduction from the project leader

While summer will soon be upon us, summer-like conditions prevailed during most of May in Prince George and the Nechako Watershed. Although ice persisted on Ness Lake until early May, it quickly vanished in the midst of an intense thunderstorm on May 5th. Thereafter, air temperatures remained warm and peaked at 30.7°C on May 15th, a record high for the day at Prince George Airport. With the warm temperatures and dry conditions came the wildfires and smoky air to northern BC. Thankfully, a prolonged rainstorm on May 22nd and 23rd brought some relief to the wildfire situation while cleansing the air.

This early and rapid onset of the warm season is cause for concern, especially if these conditions persist through the summer in response to the developing El Niño in the tropical Pacific Ocean. The evolving situation highlights the importance of continued monitoring and sustained research on how climate change is affecting seasonal transitions in the Nechako Watershed. Thus UNBC's Northern Hydrometeorology Group (NHG) continues its efforts to improve knowledge on the impacts of the climate crisis on water security in the Nechako.

The early onset of warm conditions and low water levels has helped kick-start our field season. Nearly 15 field sites have already been visited by the field crew, allowing critical data downloads and equipment repairs. As well, we successfully deployed a new weather station on Cheslatta territory in mid-May. This will allow us to better understand the unique meteorological conditions in the area and to track their influence on Cheslatta Lake water temperatures. We are most grateful to Cheslatta Carrier Nation and local residents for supporting this effort. There are ongoing efforts by the IRC team to better understand moisture advection and precipitation during atmospheric rivers that affect the upper Nechako Watershed (see the contribution from Bruno Sobral on page 15).

We continue our extensive outreach and dissemination efforts through public presentations, media interviews and conference presentations – see details on page 21 of the newsletter. The annual report for Year 4 of the IRC program of research is currently available (http://web.unbc.ca/~sdery/irc/outputs.php). Finally, we sincerely thank the members of the Science Advisory Board (SAB) for their participation in our progress meeting on May 24th. The SAB continues to provide critical feedback and guidance on our research and activities, ensuring the continued success of the team!

The members of the IRC team at UNBC wish everyone a very pleasant summer!

Stephen Déry

The Team

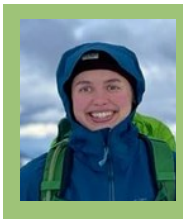
Industrial Research Chair members from the NHG

Stephen Déry

Project Leader

Justin Kokoszka

Research Manager
M.Sc. Candidate



Kirsten Calder-Sutt

Hydrometeorological Technician

Jade Reynolds

Research Skills Trainee
Database Technician

Laura-Anne Browning

Research Skills Trainee

Dylan Broeke

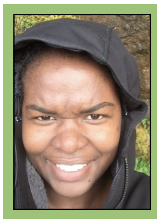
Research Skills Trainee

Jingwen Wu

Postdoctoral Fellow

Bruno Sobral

Ph.D. Candidate



Tamar Richards-Thomas

Research Skills Trainee

Farewell to Spencer Woyke:

We bid farewell to undergraduate student Spencer Woyke who completed his undergraduate thesis and environmental science program this April. For his thesis, Spencer analyzed three atmospheric river events that occurred during the Tahtsa Ranges Atmospheric River Experiment (TRARE) field campaign in autumn 2021. A surprising finding from this work is the nearly equal amounts of precipitation that accumulated in some of the events at Kemano, along the inland coast, up to more inland locations like Mt. Sweeney and Huckleberry Mine near Tahtsa Narrows.

Spencer Woyke

Research Chair

Heat Dome effects on water temperature

Two years ago, the Pacific Northwest of North America endured an intense heat wave – the so-called "heat dome" of late June 2021. The heat dome caused rapid snowmelt in alpine conditions while at lower elevations wildfires erupted after the record-breaking air temperatures. Water temperatures also responded across the entire region by warming quickly. Figure 1 shows the one-week increase in water temperatures through the heat dome at 556 sites across the Pacific Northwest. Averaged across the region, water temperatures rose by 2.7° C over seven days, with the maximum weekly increase reaching 8.5°C at Upper Aiken Creek in northeastern BC.

Across the Nechako Watershed (within the domain highlighted in the top inset map on the right, Figure 1), water temperatures warmed on average by 4.1°C. The largest water temperature increases (up to 6°C) occurred in smaller creeks and rivers (Otter Creek, Necoslie River) in the lower reaches of the Nechako Watershed. In contrast, headwater streams near Tahtsa Lake (Rhine Creek and Laventie Creek) showed modest responses due to rapid alpine snowmelt that suppressed the warming to ~1°C.

This shows the importance of comprehensive environmental monitoring efforts (such as our ongoing network of water temperature loggers) in the Nechako Watershed where local geographical features, climate and hydrology all influence water temperatures. Tracking water temperatures is crucial to assess water quality with impacts to aquatic species (for example, temperature-sensitive species like salmon and white sturgeon) and habitat. Thus, using these data, I continue exploring how extreme hydrometeorological events such as the 2021 heat dome affect freshwater temperatures in the Nechako Watershed and the entire Pacific Northwest in close collaboration with UNBC colleagues Drs. Eduardo Martins, Phil Owens and Ellen Petticrew. On behalf of my co-authors, I presented these and other research results at the 2023 meeting of the Canadian Geophysical Union in Banff, Alberta on May 10th (see details in the Outreach section of the newsletter).

Stephen Déry

"Across the Nechako Watershed, water temperatures warmed on average by 4.1°C. The largest water temperature increases (up to 6°C) occurred in smaller creeks and rivers...in the lower reaches of the Nechako Watershed. In contrast, headwater streams near Tahtsa Lake...showed modest responses due to rapid alpine snowmelt that suppressed the warming to ~1°C"

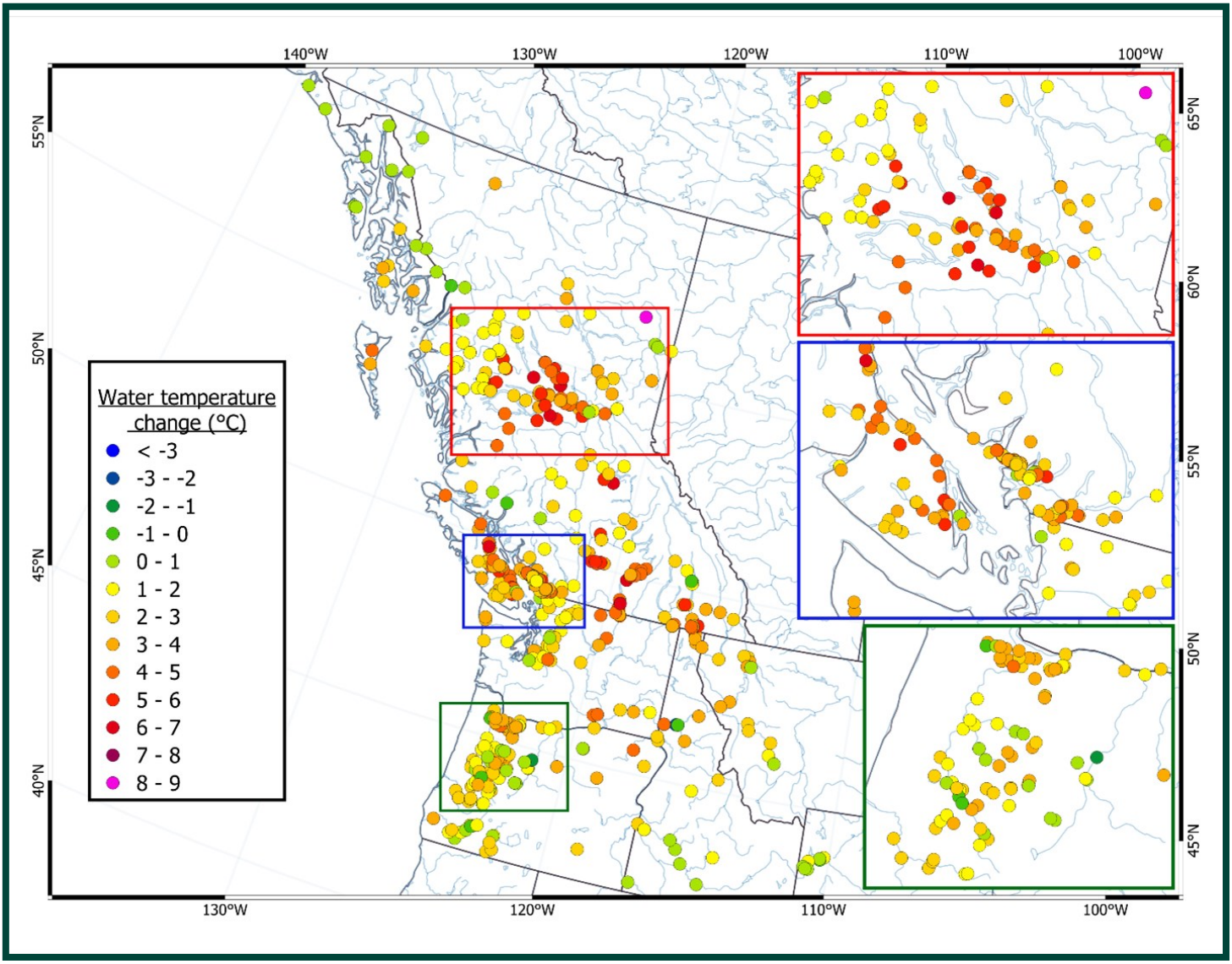


Figure 1: Weekly change (in °C) in freshwater temperatures across the Pacific Northwest of North America during the early summer heat dome of 2021 (June 25th to July 1st). The top inset map (red rectangle) encompasses parts of northern BC including the Nechako Watershed. Each dot represents a location where water temperatures are measured each hour by various agencies including the Water Survey of Canada, Fisheries and Oceans Canada and the United States Geological Survey, in addition to private industry (Rio Tinto) and our own monitoring network in the Nechako Watershed.

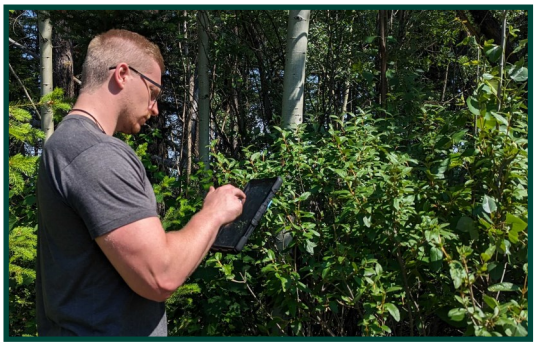
Data Management

Streamlining our data collection efforts

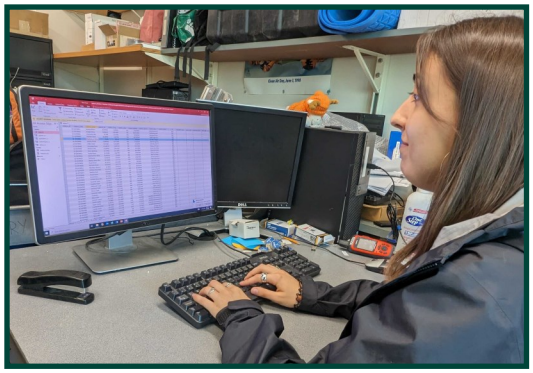
Step 1: Site visit

Step 2: Equipment inventory

Step 3: Recording metadata



Step 4: Database data entry



With winter well behind us and the spring season coming to an end, our team has fine-tuned our new data collection strategy. This new method allows our data to be collected alongside important metadata and equipment records. In summary, the new method includes four steps (depicted on the left) as summarized below:

Step 1 - Site visits:

a. Collecting data requires a visit to one of our monitoring sites.

Step 2 - Equipment inventory:

a. Each piece of equipment is then inventoried and labelled.

b. We give each equipment a unique code that can be transcribed into a QR-code. This allows scanning of equipment codes for faster data entry.

Step 3 - Recording metadata:

a. Sensor data are collected and metadata are recorded using our new field tablet and data form application.

Step 4: - Database data entry:

a. Sensor data and metadata are then entered into our database

This new method has streamlined our field work! As the summer season progresses we are well equipped to collect and manage our monitoring data to a standard of quality and shareability. This includes future data uploads to the Nechako Portal.

Justin Kokoszka

Field Work

How do we monitor the environment?

Stream temperature (31 sites)

We launch small HOBO data loggers in streams and lakes to measure stream temperature. The data loggers are just larger than the size of a loonie, and they are zip-tied to a piece of capped PVC pipe, which is then attached to a cinder block and tethered to rebar or trees on the shore.

Tipping bucket (6 sites)

Our tipping bucket rain gauges measure total rainfall. Water is funneled through the top of the specialized bucket, and a small tipping device inside fills with water and tips when it reaches an increment of 0.2 mm of rain. Each tip is recorded and added to the total on the attached pendant data logger.

Weather stations (4 sites)

Our weather stations record data on a multitude of meteorological parameters. Typical sensors include an anemometer (wind speed, wind direction), SR50 snow depth sensor, 109 temperature sensor (air/soil temperature), HMP (relative humidity and air temperature probe), and pyranometer (solar radiation).

Data are recorded with a Campbell Scientific data logger such as a CR1000, which must be wired and programmed for each specific station.

We are also exploring the utility of the ClimaVUE50, which is a compact weather sensor that measures air temperature, relative humidity, vapour pressure, barometric pressure, wind speed, wind direction, solar radiation, total precipitation, and lightning strike count.

Distribution of our monitoring network

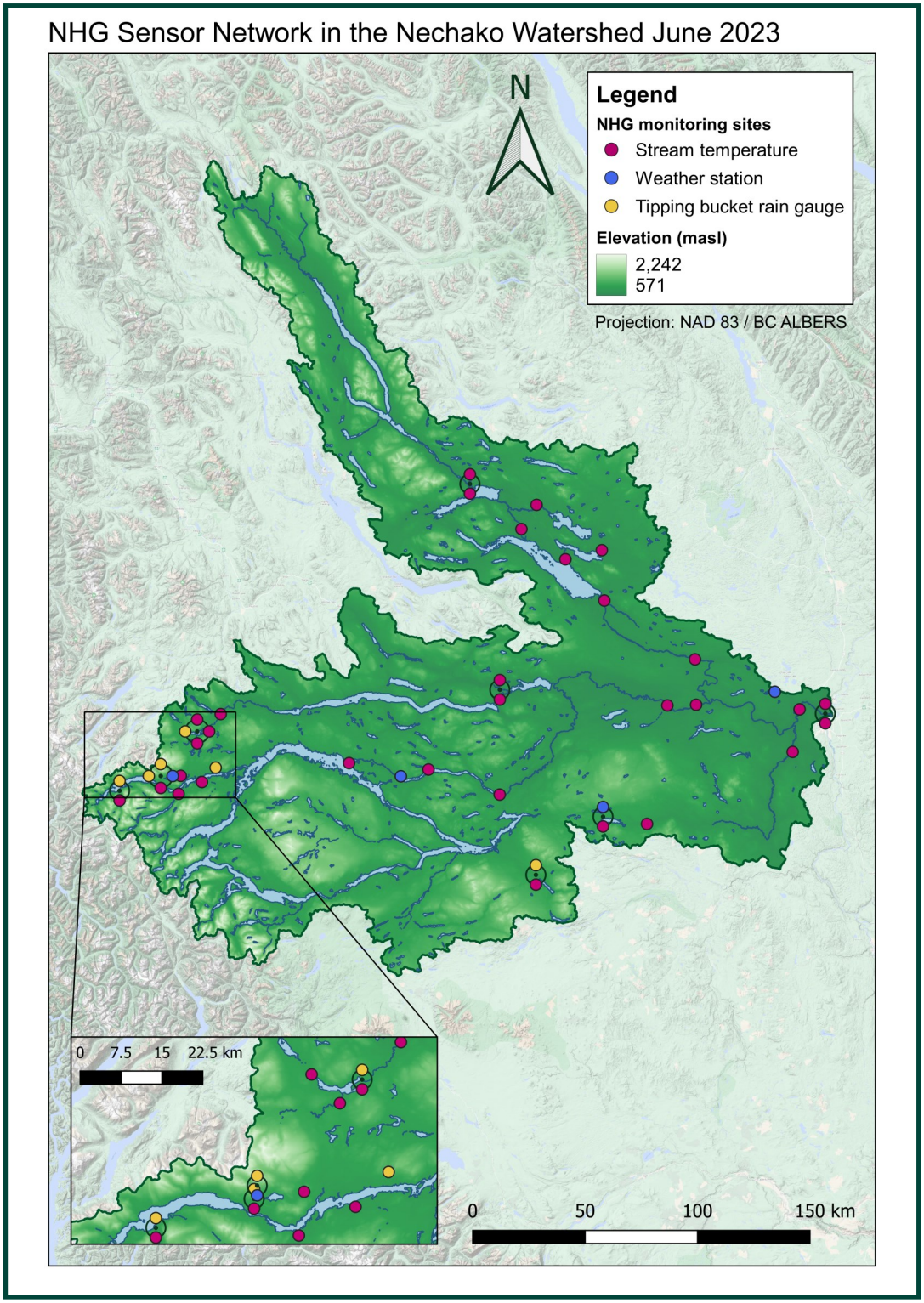


Figure 2: Spatial distribution of our monitoring network within the Nechako River Basin including: 31 stream/lake temperature monitoring sites, 4 weather stations, and 6 tipping bucket rain gauge sites.

Spring field work

Goodbye winter, hello summer! Fieldwork season is upon us, and we have already started to visit many of our sites! We have visited 14 sites (Figure 3) with a few re-visits in the last two months, including weather stations and stream temperature sites. We have deployed two new stream temperature loggers near Prince George as well as a new weather station near Cheslatta Lake. The Cheslatta Lake weather station deployment was the field crew's first major deployment of the year, and this was a tremendous success for the team! We are looking forward to collecting the data from our new sites to get more insight into the changing climate. Data collection was successful at all of our existing sites, albeit a few issues with the loggers themselves. In these cases, loggers were simply replaced at the sites. We are hoping to deploy more tipping bucket and stream temperature loggers around the Nechako Basin this summer, as well as a new weather station and other specialized meteorological equipment at Huckleberry Mines in the Upper Nechako.

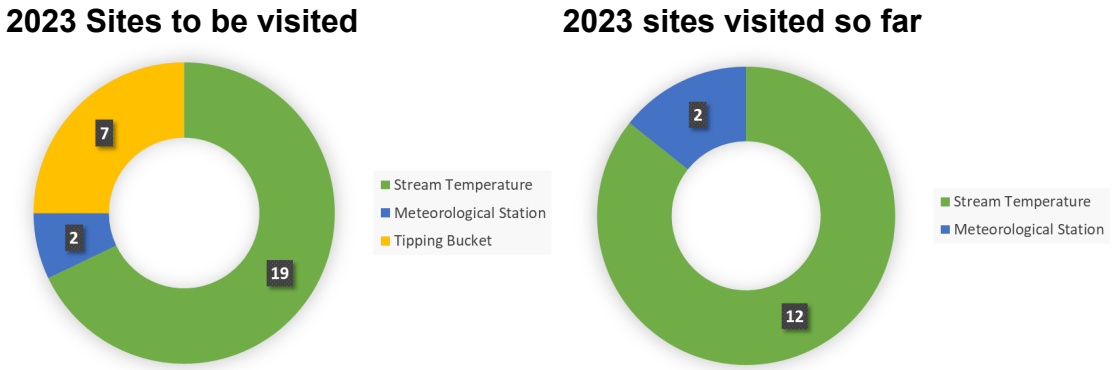


Figure 3: Remaining sites to be visited this summer and our progress thus far.

Kirsten at the Cheslatta Lake stream temperature monitoring site

Monitoring Extreme Weather!

Kirsten Calder-Sutt

Plans and preparations for the MECHE (Monitoring Extreme Climate and Hydrometeorological Events) Observatory are progressing well. The observatory will be deployed at the UNBC Northwest campus in Terrace and Huckleberry Mines south of Houston in mid-August. A project collaborator and experienced colleague from UQAM (Université du Québec à Montréal) will join the NHG for this deployment. Nearly all equipment has been acquired for this project, and my focus has now turned to programming the data loggers to ensure we capture exactly the data we would like for the duration of this project.

Check out the MECHE website! https://web.unbc.ca/~sdery/irc/meche.php

Spring Reflections

Thoughts and reflections from our field staff

Jade Reynolds, B.Sc.

Jade Reynolds

I have been working as a Research Skills Trainee alongside my team members to get the field season off to a great start! As I have been training the field crew on site visits and equipment uses, I have noticed that I am also providing myself with refresher training. I have also been learning data management processes and working with Justin to make these processes as efficient as possible. The field team has meshed beautifully, creating a positive, fun work environment that I am super grateful for. There have been many successful site visits done and I am looking forward to our future trips across beautiful BC!

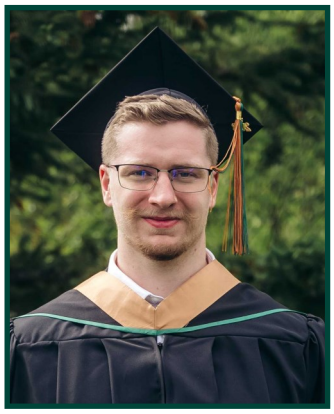
Laura-Anne Browning

Laura-Anne Browning, B.Sc.

I have been a Research Skills Trainee at the NHG for over four months and I feel like I have already learned so much! Throughout my time in this group, I have gained experience with the multitude of sensors associated with weather stations and stream temperature monitoring sites as well as how to access/interpret the data collected. I have also had the opportunity to understand processes like data-management and organization as well as how to use different geospatial tools. Finally, some of my favourite adventures with the NHG have been the opportunity to participate on trips across beautiful regions of British Columbia and to meet so many lovely people from diverse cultural and professional backgrounds. I can't wait to continue adding to these experiences.

Dylan Broeke, B.Sc

My work for the NHG so far has been very educational with the technical side of collecting the data as well as constructing weather stations. It has been very interesting learning what each station and sensor has unique to itself and how the data changes between sites. Being able to create graphs to showcase the data is a great way to visually represent and display the data for all to understand. Other training has included swift water level 2 which was very educational in how to be safe around fast-moving water



Dylan Broeke

Congratulations to our graduates!

Congratulations to Laura-Anne Browning on earning her Honours Bachelor of Science in Biology, Dylan Broeke on completing his Bachelor of Science in Geography, and Jade Reynolds on achieving her Bachelor of Science in Biology! Your hard work and dedication have paid off, and you should be incredibly proud of your accomplishments.

Kirsten Calder-Sutt

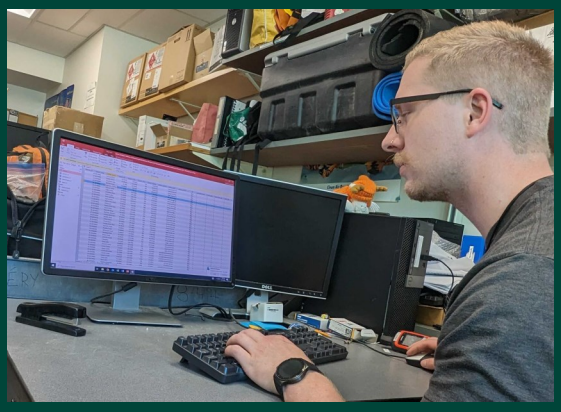
In my 7 months and counting with the NHG, I have gained a more nuanced and comprehensive perspective on the way hydrometeorological monitoring networks function. I have learned to wire, program, and of course, troubleshoot (!) both simple and complex sensors and data loggers. I now have a much greater awareness of the variety of techniques, tools, and equipment varieties available to work with in this field.

Kirsten Calder-Sutt

Justin Kokoszka

Justin Kokoszka

I have been with the NHG for over four years! During my time I have been working as the part-time Data Manager, and over the past 9 months I've been working as the part-tme Research Manager (RM). Through these roles I have been able to apply and improve my skills in data management, database operations, and project management. I've also been able to enhance my communication skills, gain valuable experience in staff training, and manage multiple projects. I am lucky to work with my colleagues whose knowledge and motivation has made my job so enjoyable. Thank you to everyone for making this work so enjoyable.



Above: Jade retrieving a stream temperature probe

Left: Dylan learning new database skills

Above: Dylan, Jade, and Kirsten deploying our new Cheslatta Lake weather station

Below: Dylan and Laura-Anne completing their swift water training certification

Nechako Research

Explore some of our research!

15 - Poster presentation

PhD candidate Bruno Sobral highlights his poster presentation from the Canadian Geophysical Union Annual Meeting, highlighting the significance of atmospheric rivers in the Nechako region.

16 - Weather in Prince George

Research Skills Trainee, Tamar Richards-Thomas, explores the unusually hot and dry and conditions in Prince George during the month of May.

17 - Spring streamflow

MSc student, Justin Kokoszka, presents a comparison of this year's spring streamflow conditions for the Nechako River, at Vanderhoof, as they relate to historical averages.

18 - Future streamflow

Post-doctoral Fellow, Jingwen Wu, shares his findings on future streamflow trends in the Nechako Reservoir between 2021 and 2100. His findings are accompanied by precipitation and air temperature trends which aid in explaining future changes in flow patterns.

20 - Stream temperature

Research Skills Trainee, Laura-Anne Browning, provides a short summary of her efforts in compiling stream temperature data across the Nechako River Basin.

Poster presentation

A poster presentation at the Canadian Geophysical Union (CGU) annual meeting

In this edition of the IRC Newsletter, I will provide a brief update on my participation in the Canadian Geophysical Union (CGU) Annual Meeting held in Banff from May 7-10, 2023. This conference was a long-awaited in-person gathering for experts and researchers from diverse disciplines associated with the natural sciences. I attended captivating sessions and shared some of my research as a Ph.D. candidate at UNBC.

On May 9, I had the privilege of presenting a poster titled "Atmospheric River Contribution to Hydroclimatic Variables in the Nechako Watershed" (shown below). The poster presented a portion of the findings from my dissertation at UNBC, specifically focusing on the influence of ARs on precipitation, rain, snow, and snow water equivalent (SWE) within the sub-basins of the Nechako River Basin. Key findings presented were that ARs contribute to approximately one-fifth of the precipitation in the region, more to total precipitation and rain in the fall than in the other seasons combined and are associated more frequently with mid and high-intensity daily totals in the Upper Nechako sub-basin.

Overall, the CGU Annual Meeting provided an enriching opportunity for knowledge exchange among professionals with varied areas of expertise. I am truly grateful for the opportunity to learn about cutting-edge research from fellow researchers worldwide while also sharing my findings. Looking ahead, I am excited about future conferences where we can continue sharing experiences and advancing our understanding of natural sciences.

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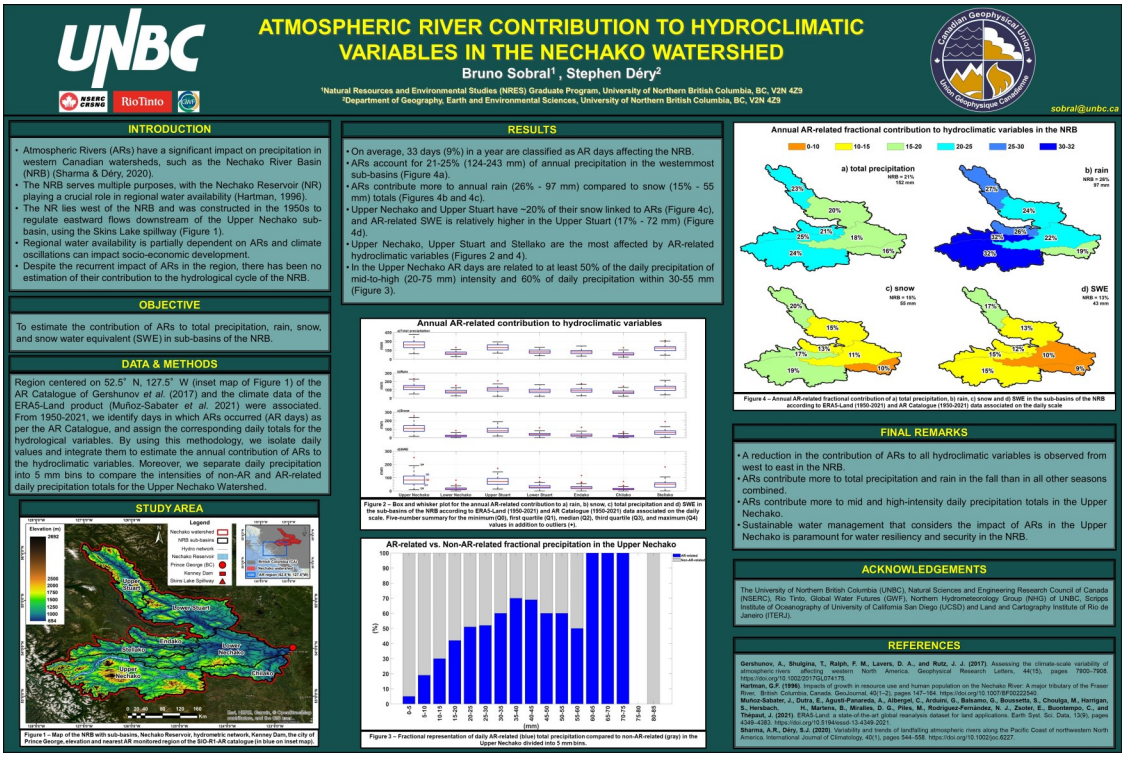
Bruno Sobral



Request Bruno's poster! sobral@unbc.ca

Weather in Prince George

Prince George Breaks Nearly 10 Decade Weather Record in May 2023

On Monday, 15 May 2023, temperature raised to a record high of 30.6 °C at Prince George Auto Airport (Figures 5a), respectively, breaking the long-lived (98-year-old) temperature record created on 15 May 1925 of 27.8 °C by up to 2.8 °C. This record increase in temperature is observed two months earlier than expected due to a ridge of high pressure. The minimum temperature of 1.5 °C was recorded at Prince George Auto Airport (Figure 5a), after the mid-May record breaking temperature.

Only 0.2 mm of precipitation as rainfall observed at Prince George Airport Auto on Monday, 15 May 2023 (Figure 5b). The total precipitation of 26.6 mm recorded for May 2023 is lower than the climate normals of 50.9 mm and 49.0 mm for May 1971 – 2000 and 1981 – 2010, respectively. However, a comparison of the total precipitation recorded for May in Prince George from 1942 to 2009 from Environment Canada shows that May 1972 recorded the lowest total precipitation of 4.6 mm. This result shows that the total precipitation for May appears to be >26.6 mm, and May 2023 is not the driest year on record since 1942.

There are missing temperature and precipitation data on 9 May 2023 for Prince George Auto Airport. The 2.8 °C record increase in temperature on Monday, 15 May 2023, as compared to that reported on the same day over the last 98 years in Prince George has gained the attention of the Northern hydrometeorology Group (NHG).

Tamar Richards-Thomas

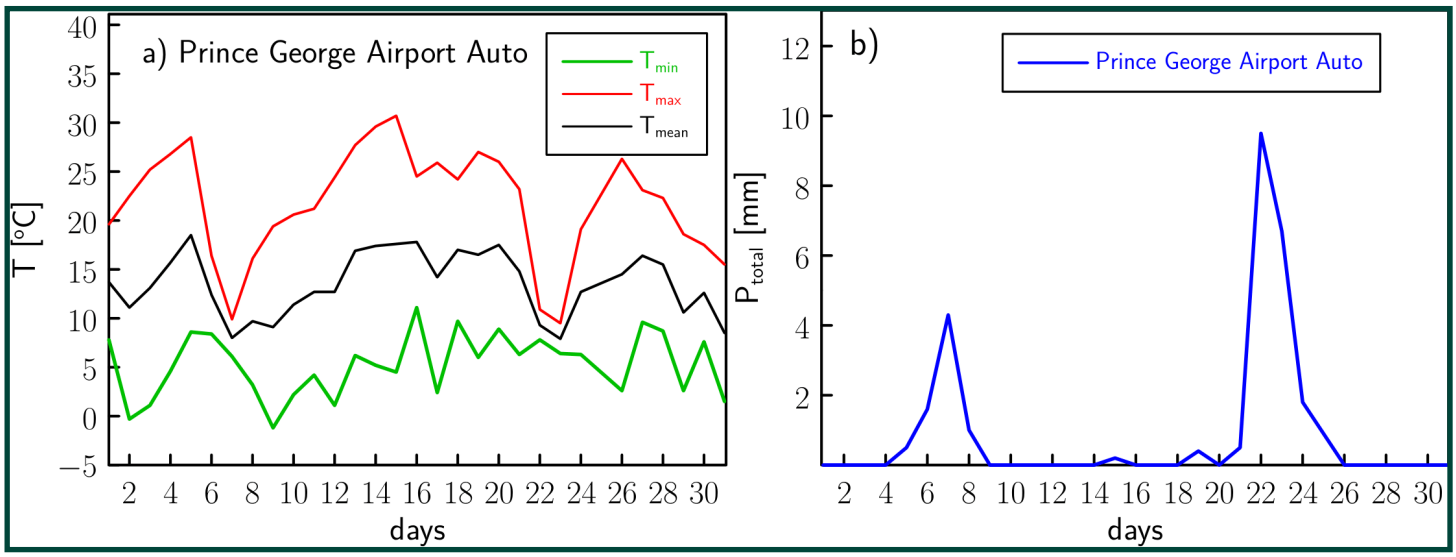


Figure 5: The figure shows the a) daily maximum (T_{max}, red solid), minimum (T_{min}, blue solid), and mean temperature (T_{mean}, black solid) in °C and b) total precipitation (P_{total}, mm) recorded at Prince George Airport Auto during May 2021.

Spring streamflow

A review of the spring flow conditions at Vanderhoof

The review of spring streamflow compared to historical averages from 1956-2022 indicates significant changes in hydrological patterns (Figure 6). Overall, there has been a lower magnitude of streamflow during the spring, with the peak-flow date occurring 13 days earlier (May 13th) compared to the historical average (May 23rd). Additionally, there has been a considerable 33.7% decrease in peak flow magnitude.

These findings can be attributed to a combination of factors. A dry and warm fall season reduced water availability in the region for the start of the winter season, while a relatively warm winter season likely supressed snow accumulation. The unusually warm spring kickstarted early and rapid snowmelt, further contributing to the early peak flow timing. These conditions are likely to translate to decreased flows during the summer season. In addition, the recent shift to an El Niño phase is likely to perpetuate these conditions into the future. El Niño events influence global weather patterns, including the hydrological cycle. As such, it is crucial to consider the potential continuation of lower streamflow, decreased earlier peak-flow dates, and decreased flow magnitudes into the coming years. This is especially true when considering the com-

Justin Kokoszka

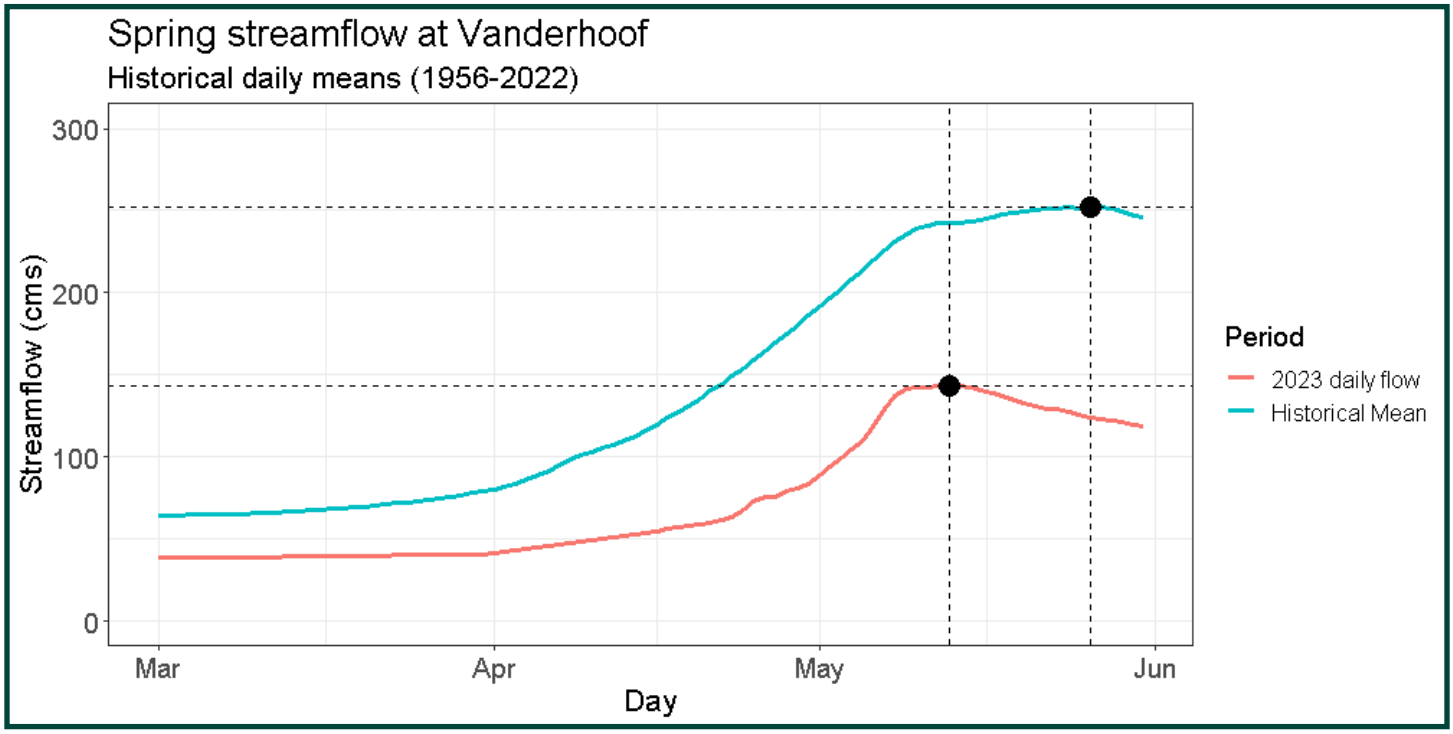


Figure 6: Spring streamflow, for the Nechako River at Vanderhoof, during the 2023 spring season and historical average (1956-2022). Flow units are in cubic metres per second (cms). Peak-flows are indicated by the black dots. The date of peak-flows are indicated by the vertical dashed lines and peak-flow magnitudes are identified by horizontal dashed lines.

Future streamflow

Future changes in spring streamflow in the Nechako River Basin

In this study, we investigate the future changes in annual spring streamflow across the Nechako Reservoir from 2021 to 2100. To conduct this analysis, we generated projected future spring streamflow data using the VIC (Variable Infiltration Capacity) hydrological model and the Canadian Earth System Model version 5 (CanESM5) general circulation model. The results clearly demonstrate a decreasing trend in spring mean flows (Figure 7a), with a deduction of 0.41 m^3/s per year. Additionally, the spring peak flow (Figure 7b) also shows a decreasing trend, with a deduction of 1.94 m^3/s per year.

Interestingly, despite an increase in spring precipitation (Figure 7c), most of it falls as snow, which does not generate immediate runoff. As a consequence, the snowmelt primarily occurs starting from the winter months. An earlier and prolonged snowmelt period, combined with rising spring temperatures (Figure 7d), has a significant impact on the overall spring mean flow. The gradual release of water from snowmelt, occurring over an extended period, results in a decrease in the spring mean flow. Additionally, the melted water gradually contributes to the overall spring flow by flowing into rivers, streams, and groundwater reservoirs. Consequently, this gradual release of water from snowmelt also leads to a decrease in the spring peak flow.

These findings highlight the complex dynamics between spring precipitation, snowmelt, and spring flow in the Nechako Reservoir. Understanding and monitoring these changes are crucial for effective water resource management, predicting potential impacts on ecosystems, and making informed decisions regarding water allocation and conservation strategies.

In summary, our analysis underscores the importance of considering the interplay between spring precipitation, snowmelt, and rising temperatures when assessing future changes in spring flow dynamics. These insights can guide sustainable water management practices and support the preservation of the Nechako Reservoir's water resources in the face of changing hydrological conditions.

Jingwen Wu

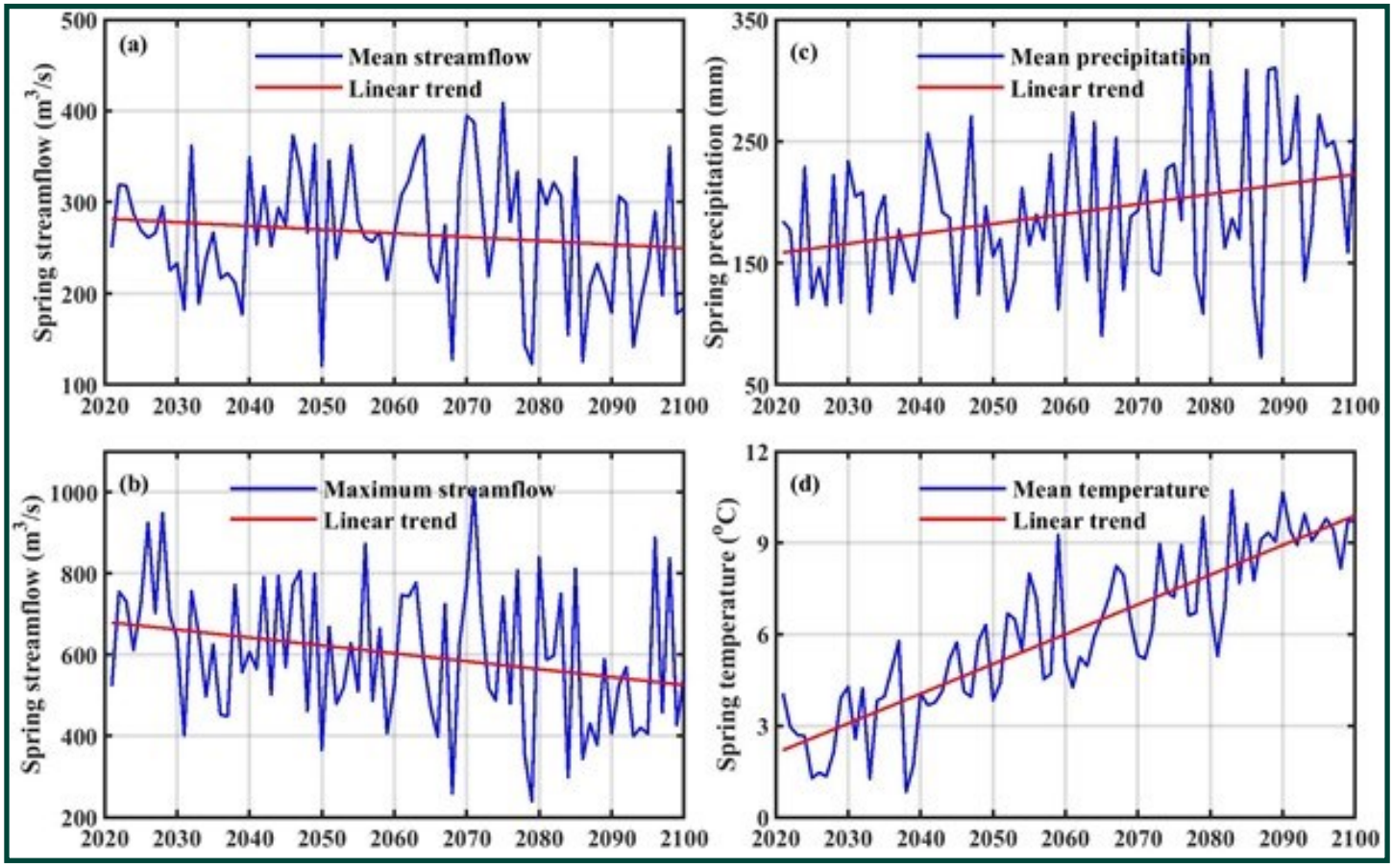


Figure 7: Future annual changes in spring mean flow (a), peak flow (b), mean precipitation (c) and mean temperature (d) in the Nechako Reservoir.

The Nechako River Basin, being a snow-dominated region with abundant snow accumulation during winter, experiences significant streamflows in the spring. Additionally, with the backdrop of global warming, the Nechako River Basin is projected to experience increasing temperatures in the future. Therefore, monitoring and understanding future spring flow in this region are crucial for effectively managing water resources, assessing ecosystem health, and making informed decisions regarding water allocation and conservation. By analyzing future spring flow, stakeholders can anticipate potential shifts in water availability, develop strategies to adapt to changing hydrological conditions, and ensure the sustainability of water-related activities in the Nechako River Basin.

Water temperature data

Compiling water temperature data within the Nechako River Basin

I am currently writing a report on the water temperature monitoring efforts in the Nechako Watershed. Bark beetle outbreaks, forestry, dams, and rising air temperatures are just some of the disturbances occurring in the watershed that have contributed to the changes of water temperature. Being able to document who is monitoring water temperature and where will facilitate sharing information across organizations as well as aid in locating important areas of the watershed that have not been monitored yet.

I have reached out to over 20 consulting firms, resource companies, government organizations, First Nations organizations and university researchers for information on water temperature monitoring sites. At this time, I have compiled information on over 130 sites across 13 different organizations. The goal is to finish the first version of the report by the end of the summer, but it will likely be a living document as more active and historic sites are added over time.

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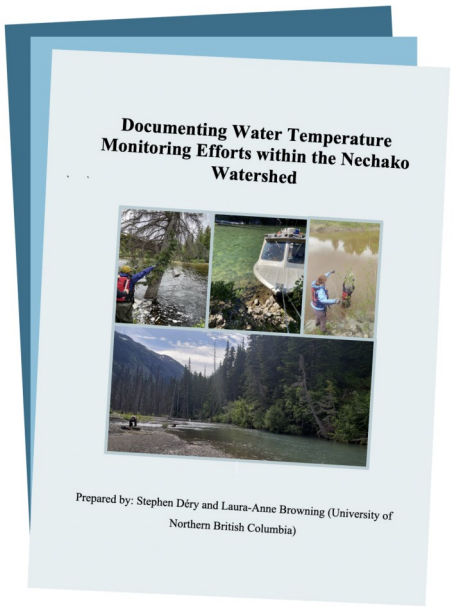

Laura-Anne Browning

Outreach

Communicating our findings through various means continues to be a top priority!

Public and conference presentations

- Woyke, Spencer: Multi-site analysis of peak storm events at Tahtsa Ranges using MRR and disdrometer data, Undergraduate thesis presentation, UNBC, Prince George, BC.
- 2023/05/10: Déry, S. J., Martins, E., Owens, P. and Petticrew, E., 2023: Freshwater temperature response to four extreme hydrometeorological events in 2021 across the Pacific Northwest of North America, 2023 annual meeting of the Canadian Geophysical Union.
- Déry, S. J., Gilbert, D. E., Morris, J. E., Kaveney, A. R., Kokoszka, J., Browning, L.-A., and Reynolds, J., 2023: Nechako Watershed stream temperature monitoring and research, 2019-2023, 2023 annual meeting of the Canadian Geophysical Union.
- Sobral, B. S. and Déry, S. J. 2023: Atmospheric river contribution to hydroclimatic variables in the Nechako Watershed, 2023 annual meeting of the Canadian Geophysical Union.

Meetings

- Stephen participated in meetings of the **Water Engagement Initiative (WEI) Technical Working Group** on April 12th, May 3rd, June 7th, and June 14th. He also attended the morning session of the **Nechako Watershed Roundtable's spring technical meeting** on May 24th in Prince George.
- Stephen continues to engage in the **UNBC-Nechako Valley working group** and attended its meetings on March 28th and May 30th, in addition to a special meeting convened to address weather monitoring in the Vanderhoof agricultural belt on May 16th and June 19th.
- Justin and Stephen participated in the **Koh Learning event** at Stellat'en First Nation on May 31st. A special thanks to the Stellat'en First Nation for hosting us on their traditional territory.

Media interviews

Mar 1 The recent abundant snowfalls in the Prince George area, CKPG News, CKPT (Prince George, BC).

Apr 12 Current low water levels in northern BC rivers, CKPG News, CKPG (Prince George, BC)

Jun 6 Current warm, dry forecast for Prince George, CKPG News, CKPG (Prince George, BC)

Special thanks to the Cheslatta Carrier Nation

On May 4th, our team was invited by the Cheslatta Carrier Nation to attend a presentation about the history of the Nechako Reservoir. The effects of the Kenney Dam on the Cheslatta Carrier Nation and their traditional territory were highlights of the presentation. We were blown away by the transformation of the landscape due to infilling of the reservoir which was visualized using geographic information software. Thanks to Mike Robertson and Jim D'Andrea for hosting the presentation and our sincerest gratitude for the opportunity to learn about the history of the region.

Contact Information

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