

# COMMUNITY STREAM MONITORING PROJECT NEWSLETTER

WINTER 2023

AN UPDATE ON THE  
PACIFIC SCIENCE  
ENTERPRISE CENTRE  
(PSEC) COMMUNITY  
STREAM MONITORING  
(COSMO) PROJECT



Photo: Decorative ice formations in Brothers Creek, North Vancouver

## SCIENCE COMMUNICATION: SPREADING THE WORD ABOUT COSMO DATA

The CoSMo data are already being used by UBC/SFU/BCIT as part of the collaborative Road Salt and Salmon Project, by Masters students at SFU and BCIT, as well as by some of our municipal government partners, but we don't want the data sharing to stop there. As such, efforts were made this winter to spread the word about the CoSMo project to other potential end-users, including Metro Vancouver, local not-for-profit organizations, and other DFO programs.

Those involved in the CoSMo project recognize the benefit of open data, which are data that are freely available and accessible by anyone. When data are collected and then left to sit on a proverbial (or literal) shelf, what results is redundant data collection and wasted time and resources by the scientific community. Similarly, if data are made publicly available but there is insufficient communication that the data exist/how to access them, the result is missed opportunities for collaboration and data sharing. We are working to ensure neither of these situations occur with the CoSMo data.

## CONTENTS

**01** *SCIENCE  
COMMUNICATION:  
SPREADING THE  
WORD ABOUT  
COSMO DATA*

**02** *A LOOK AT THE  
COSMO DATA:  
EFFECTS OF  
ROAD SALT  
APPLICATION*

**03** *NEXT STEPS:  
KICKING OFF  
THE 2023  
FIELD SEASON*

**A LOOK AT THE COSMO DATA: EFFECTS OF ROAD SALT APPLICATION**

The CoSMo conductivity data revealed similar trends across creeks this winter. Dramatic increases in conductivity (a proxy for potential salt contamination) are seen in several creeks, correlating with snow and ice events experienced in the Lower Mainland region this winter. Figure 1 shows an example of the increases in conductivity experienced by three creeks that are monitored as part of the CoSMo project: Mossom Creek, which is located in Port Moody, and Peach Creek and Luckakuck Creek, which are both located in Chilliwack.



*Photo: a conductivity logger installed in a North Vancouver creek*

The CoSMo data are publicly available on the DataStream platform; click [HERE](#) or copy the following DOI into your internet browser: <https://doi.org/10.25976/0gvo-9d12>

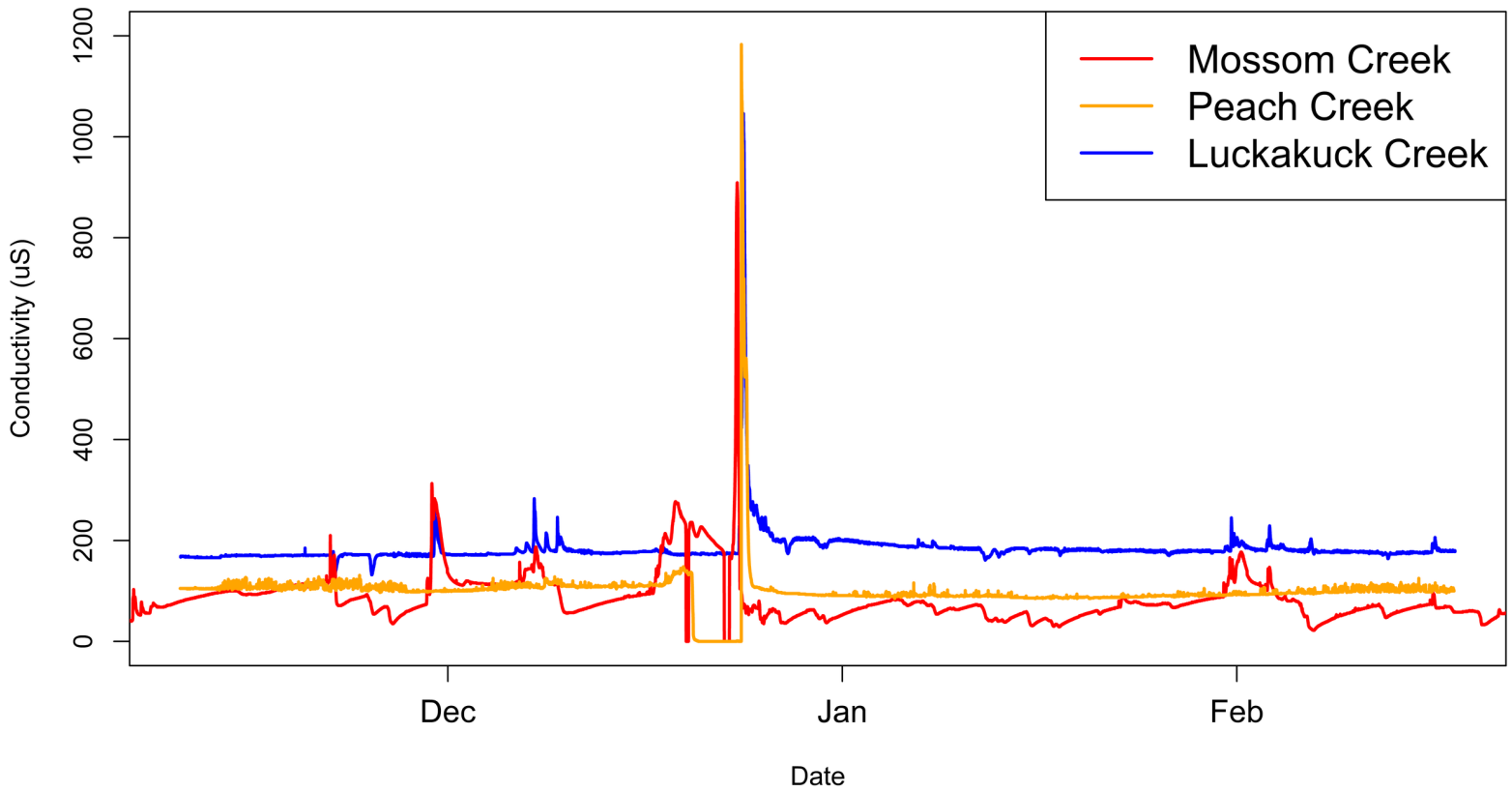


Figure 1: Conductivity data collected in Mossom Creek (Port Moody), Peach Creek (Chilliwack), and Luckakuck Creek (Chilliwack) in December 2022 and January/February 2023 as part of the CoSMo project.

## **NEXT STEPS: KICKING OFF THE 2023 FIELD SEASON**

As the weather starts to warm, we bid farewell to winter and welcome the start of the 2023 field season, which is already underway for some! The next couple months will be spent doing a round of downloads and maintaining/replacing any loggers that didn't survive the winter storms. Afterwards, we'll be working with our partners to install additional loggers in more creeks across the Lower Mainland.

For anyone looking to get involved in the CoSMo project, we have a total of 13 loggers that are available to be adopted. Loggers only need to be accessed 3-4 times per year, at your convenience, which takes about 10 minutes per site. If anyone who stewards the following streams is interested in adopting one or more loggers, please reach out to Nikki Kroetsch!

- Brothers Creek (3 sites), Larson Creek (1 site), Lawson Creek (1 site), Rodgers Creek (1 site), and McDonald Creek (3 sites) (West Vancouver)
- Willband Creek (4 sites) (Abbotsford)

In addition to expanding the CoSMo logger network, our next (and ongoing) steps include:

- Continue to provide guidance and support to stewardship groups by (1) helping deploy loggers, (2) providing instructions on how to download data, (3) managing the data received from volunteers, and (4) providing regular updates
- Engage with new partners and potential data end-users

Lastly, going forward, **we will be transitioning from quarterly CoSMo newsletters to biannual newsletters**, but will be incorporating project updates for the Road Salt and Salmon Project. So stay tuned for exciting news on both projects!

If you have questions, would like to provide feedback, or if you have any photos of yourself or other volunteers participating in CoSMo that you would like featured in the next newsletter, please email **Nikki Kroetsch** (PSEC Community Engagement Coordinator) at [Nikki.Kroetsch@dfo-mpo.gc.ca](mailto:Nikki.Kroetsch@dfo-mpo.gc.ca).



Photos: (top) Sue, a volunteer with the Yorkson Watershed Enhancement Society in Langley, downloads the data from a temperature logger in Yorkson Creek; (bottom) a crayfish that made a home out of the logger housing

*Thank you to the  
dedicated volunteers  
and collaborators who  
make CoSMo possible.  
You are a constant  
source of motivation  
and inspiration, and we  
are so grateful for your  
ongoing support.*