

Columbia Basin Water Hub

A Transboundary Water Data Solution for the Columbia Basin

A project facilitated by
Living Lakes Canada



COLUMBIA BASIN WATER HUB

Fresh water is critical to our health, our communities and our economic future.

Yet the global supply of fresh water is under constant threat from increasing demands for human and industrial uses and climate change impacts. In the face of these mounting pressures, monitoring water use and distribution is essential to balance the fresh water needs of citizens, industry and ecosystem services.

Through the Columbia Basin Water Hub, critical water data is being made readily available in order to facilitate informed decision making around the Columbia Basin's fresh water supply.

Visit www.cbwaterhub.ca

CONTACT THE COLUMBIA BASIN WATER HUB TEAM

SANTIAGO BOTERO
Applied Innovation & Technology Manager
santiago@livinglakescanada.ca



PAIGE THURSTON
Database & Community Outreach Coordinator
paige@livinglakescanada.ca

Thank you to our funders and supporters:



What is the Columbia Basin Water Hub?

The Water Hub is a central place where water-related data relevant to Columbia Basin can be collected and stored by community groups, industry, and local, regional, provincial, federal and First Nations governments.

Throughout this database, a range of datasets, from water quantity and quality, groundwater and snow surveys to glacier studies, Indigenous place-based Traditional Knowledge, wetland-related literature and studies can be included. In this way, data collected over the years will be housed in a central repository and not get lost or disappear once a data collecting project has completed.

The Columbia Basin Water Hub is also one of the hosts of the main database for Foreshore Integrated Management Planning data collected in partnership with the Department of Fisheries and Oceans.

Why is it needed?

In hydrology, a **Water Balance** equation can be used to describe the flow of water in and out of a system. Through the Columbia Basin Water Hub, water data is made readily available to support the development of a Basin-wide water balance approach for subsequent water budgeting needed by decision makers for watershed management in an era of climate impacts to hydrological flows and water quality. Water data and water budgeting is becoming increasingly important given the mounting pressures on fresh water, for not only human and industrial uses, but also for functioning ecosystems.

In addition to water balance data, other types of watershed-related data collected can be stored on or linked to the Water Hub as well. Overall, the Water Hub supports a better understanding of the 10 hydrologic regions in the Columbia Basin and, ultimately, improved watershed management by decision makers.



Types of Dataset File Formats

There are **no limits** to the types of file formats that can be uploaded to the Water Hub. A dataset could be as little as one PDF report with the associated metadata required to provide context to the report and to make it searchable. Examples of file formats include:

- PDF
- JPEG
- XLS, CSV
- HTML link
- Shape file
- Zip file
- Video recordings
- Lidar
- Orthophoto aerial imaging

“Water monitoring efforts within the Basin have been taking place for a long time and unfortunately over the years, some data may be getting lost between the cracks. Our aim is to be a container for all the past information collected as well as for current and future water data. We want to ensure access and longevity for the data and by providing a platform for storing data and curating with quality control. We aim to empower a water-literate constituency, putting a focus on water issues that affect specific communities and areas in a basin with varied topography, climate, water bodies, and cultures.”

Santiago Botero, Columbia Basin Water Hub Manager

