



Columbia Basin Groundwater Monitoring Program

**BC Groundwater Association Convention
April 14th 2023**

Presented by Carol Luttmer

Land Acknowledgement

Living Lakes Canada's water stewardship work takes place on many Indigenous territories across Canada. In the Columbia Basin we acknowledge the traditional, ancestral, and unceded territories of the Ktunaxa, Lheidli T'enneh, Secwépemc, Sinixt and Syilx Nations.



Living Lakes Canada is a non-profit organization that bridges the gap between science and action to foster community-based water stewardship.



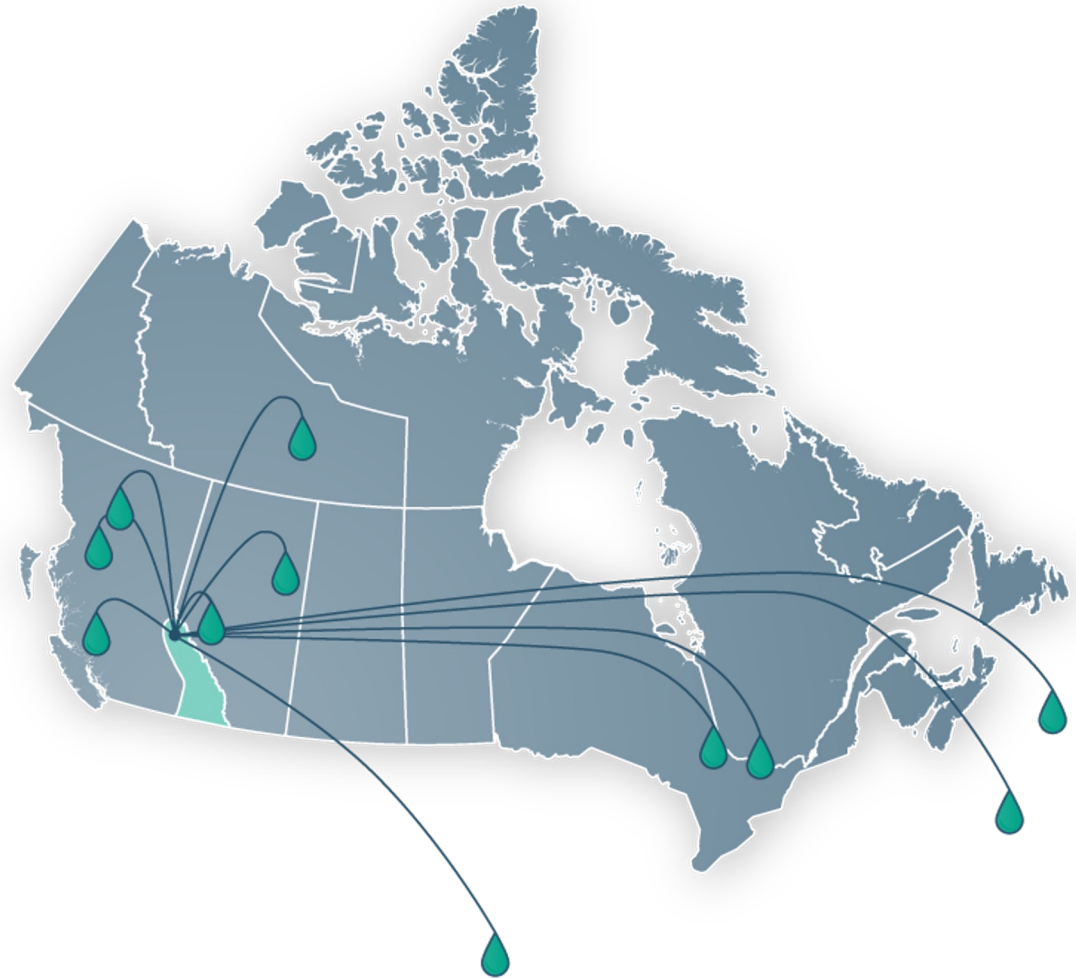
Living Lakes Canada Programs

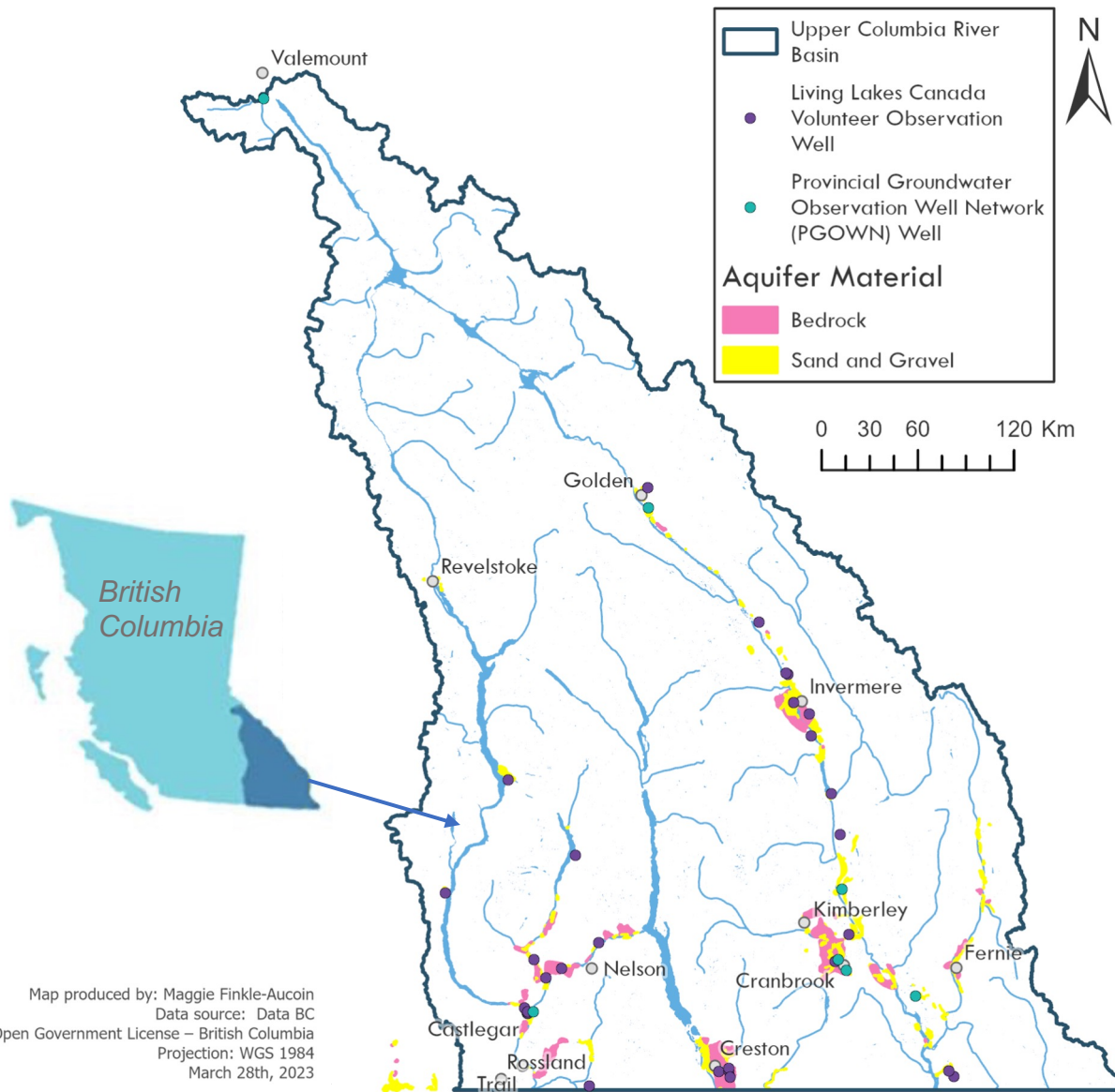
National

- Member of BC and Federal Water Coalitions
- National Lake Blitz
- STREAM (Sequencing The Rivers for Environmental Assessment and Monitoring)
- CABIN (Canadian Aquatic Biomonitoring Network)
- iTrackDNA (Targeted Environmental DNA Research)

Regional

- Columbia Basin Water Monitoring Framework
- Columbia Basin Water Hub
- Columbia Basin Groundwater Monitoring Program
- Foreshore Integrated Management Planning
- High Elevation Monitoring Program
- Kootenay Watershed Science
- Eastern Slopes Aquatic Monitoring Collaborative
- Yukon Lakes Monitoring





Upper Columbia Basin

- 183 provincially mapped aquifers
- 7 Provincial Groundwater Observation Well Network (PGOWN) wells
- 32 Living Lakes Canada Volunteer Observation Wells

<https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/groundwater-wells-aquifers/groundwater-observation-well-network>

Map produced by: Maggie Finkle-Aucoin
 Data source: Data BC
 Open Government License – British Columbia
 Projection: WGS 1984
 March 28th, 2023

Groundwater Program Objectives

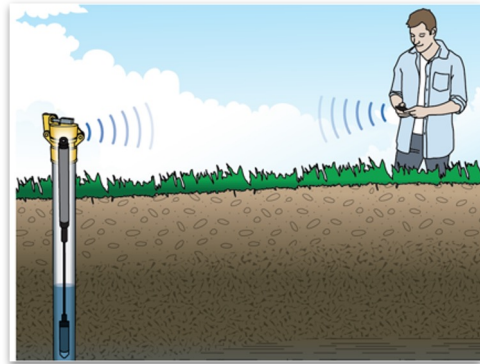
1. Collect hourly groundwater level measurements to determine how levels change seasonally and from year to year;
2. Engage citizens and youth in data collection and share data in easy to interpret formats to increase knowledge and awareness around groundwater; and
3. Share data publicly for others to use.



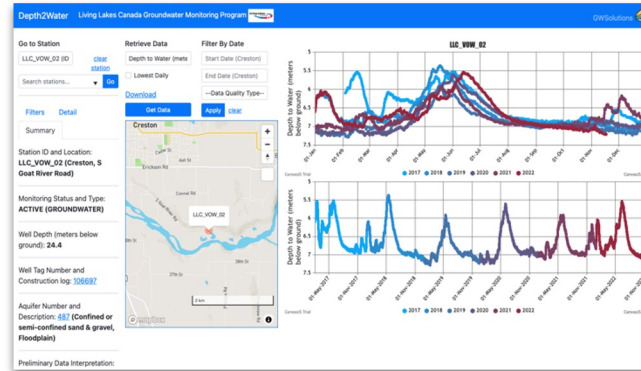
How the program works



Identify suitable existing wells to monitor



Install & maintain groundwater level data loggers to collect hourly water level measurements



Review, store, and manage the data in a database system (Depth2Water)



Share data publicly on Columbia Basin Water Hub: www.cbwaterhub.ca & BC Realtime Water Data Tool: <http://aqrt.nrs.gov.bc.ca/>

Volunteer Observation Wells

Criteria

- Meet construction standards
- Likely available for 10+ years
- Well owner agrees to share data
- Provides data on annual/seasonal trends and/or can contribute to water management



Education, Outreach & Community Engagement



Monitoring



Data Sharing

Depth2Water Living Lakes Canada Groundwater Monitoring Program
GWSolutions

Go to Station

LLC_VOW_02 (ID) [clear station](#)

Search stations...

[Filters](#) [Detail](#)

Summary

Station ID and Location:
LLC_VOW_02 (Creston, S Goat River Road)

Monitoring Status and Type:
ACTIVE (GROUNDWATER)

Well Depth (meters below ground): **24.4**

Well Tag Number and Construction log: [106697](#)

Aquifer Number and Description: [487](#) (Confined or semi-confined sand & gravel, Floodplain)

Preliminary Data Interpretation:

Retrieve Data

Depth to Water (mete)

Lowest Daily

[Download](#)

Filter By Date

Start Date (Creston)

End Date (Creston)

--Data Quality Type--

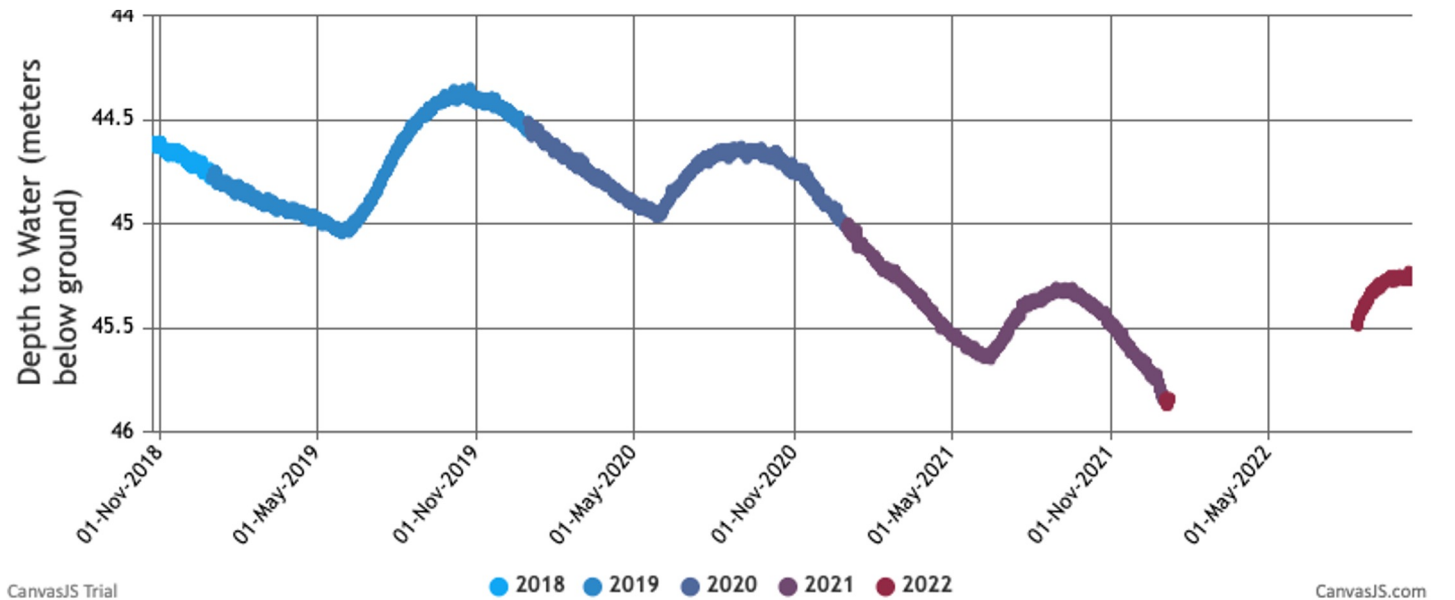
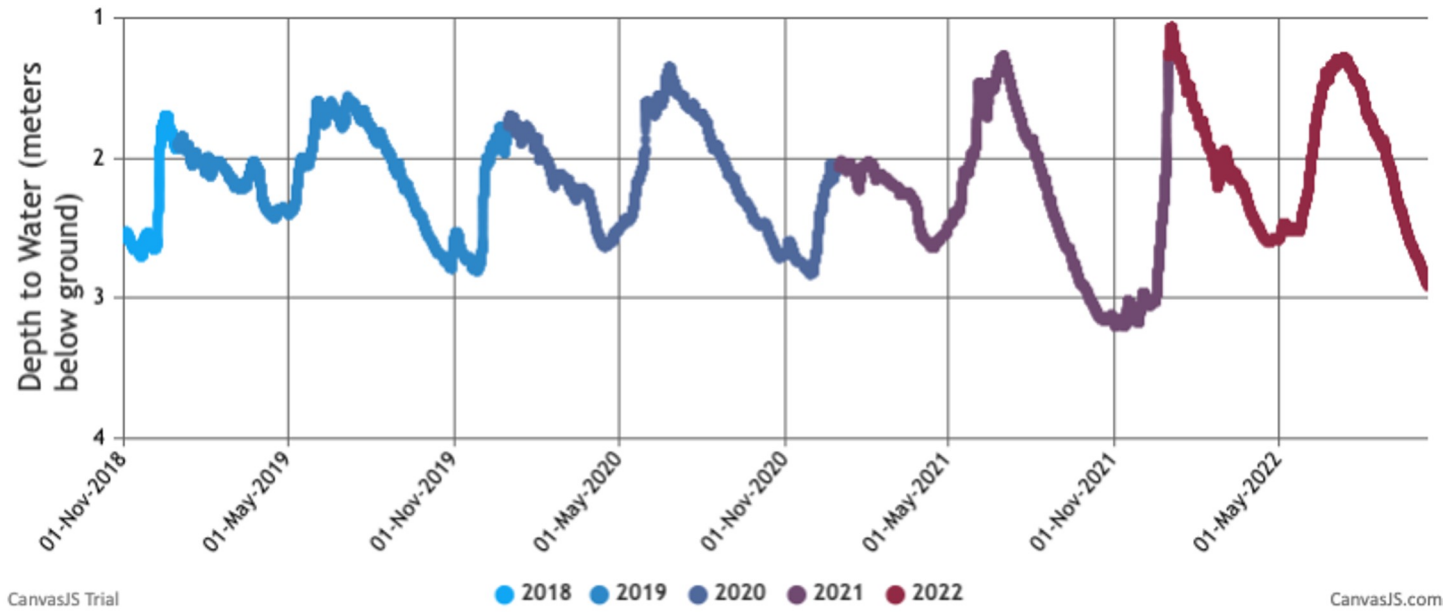
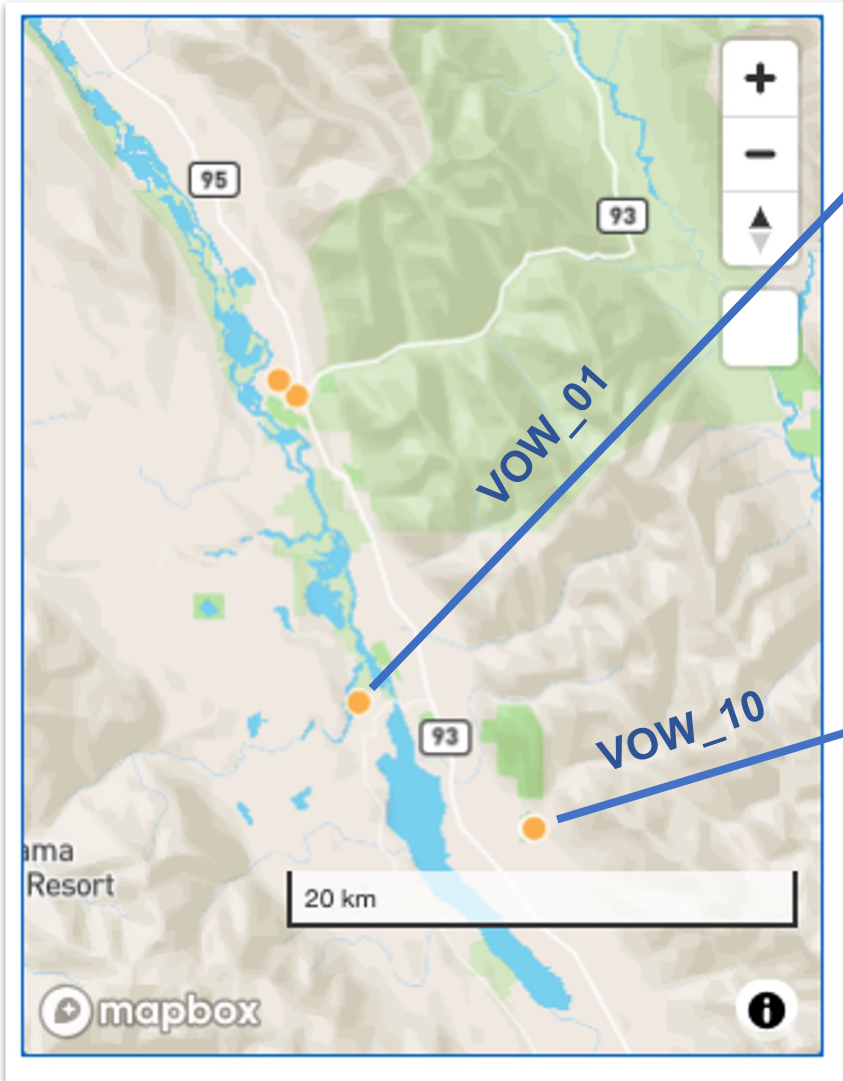
[clear](#)

LLC_VOW_02

CanvasJS Trial CanvasJS.com

CanvasJS Trial CanvasJS.com

Depth to Water Data



Check out our data:



<https://data.cbwaterhub.ca/dataset/groundwater-program-reports-and-resources>

Email us & provide feedback:

groundwater@livinglakescanada.ca

Stay up-to-date:



Thank you to our program funders and supporters...



TD Friends of the Environment Foundation



Watersheds BC



StrongerBC
for everyone



ONSET



Solinst®



JR DRILLING LTD



Living Lakes
CANADA