



MEMO

DATE: September 1st, 2021

TO: Interested Parties

RE: Groundwater Levels to Date for Living Lakes Canada Volunteer Observation Wells

Living Lakes Canada's Groundwater Monitoring Program has recently completed summer site visits to most of its Volunteer Observation Wells in the Columbia Basin. The Program is monitoring static water levels in different aquifers throughout the Basin to have long-term data sets for the assessment of seasonal and yearly trends. The Program now has several sites with multiple years of data (Table 1).

Graphs showing the preliminary water level data collected to date for sites with more than one year of data are posted below. For Volunteer Observation Wells (VOW) 01, 02, 03, 06, 09, and 10 data are presented by year. Time series are presented for VOWs 12, 14, 15, 18, 19, and 20, where less than two years of data are available. Note the different water level and time scales for each graph.

Data will be collected again in November. The data will be posted on the [BC Real-time Water Data Tool](#) and the [Columbia Basin Water Hub](#) this fall.

If you would like more information, please contact the Living Lakes Canada Groundwater Program Manager at carol@livinglakescanada.ca.

The Groundwater Monitoring Program has been made possible through funding and in-kind support from:



Living Lakes Canada is grateful to the well owners who have volunteered their wells for monitoring. This includes First Nations, local and regional governments, water supply system operators, land trusts, and private landowners.

Living Lakes Canada acknowledges our water stewardship work originated in the unceded traditional territories of the Ktunaxa, Lheidli T'enneh, Secwepemc, Sinixt and Syilx Nations who have stewarded these lands for generations.

Table 1: Volunteer Observation Wells in the Columbia Basin with more than one year of water level data.

Volunteer Observation Well #	Location	Well Tag Number ¹	Provincial Aquifer #	Aquifer Type ²
LLC_VOW_01	Althamer (Invermere) near Toby Creek	n/a	603 *	Unconfined sand & gravel – part of medium stream system (1b)
LLC_VOW_02	Creston near Goat River	106697	487 *	Unconfined sand & gravel - late glacial outwash (4a)
LLC_VOW_03	Blewett	87879	511	Fractured crystalline bedrock (6b)
LLC_VOW_06	ᑭᐱᐱᐱ, near St. Mary River	n/a	538 *	Unconfined sand & gravel – part of large river system (1a)
LLC_VOW_07	Cranbrook	n/a	524 *	Confined sand & gravel – glacial (4b)
LLC_VOW_09	Playmor Junction	49469	514 *	Confined sand & gravel – glacial (4b)**
LLC_VOW_10	Windermere	66814	453	Confined sand & gravel – glacial (4b)
LLC_VOW_12	Duhamel	107254	517 *	Confined sand & gravel – glacial (4b)
LLC_VOW_14	Westside Road between Fairmont & Invermere	103641	n/a	Confined sand & gravel – glacial (4b)**
LLC_VOW_15	Canal Flats	90231	816 *	Unconfined sand & gravel – part of large river system (1a)
LLC_VOW_18	Highway 93/95 (between Canal Flats & Skookumchuk)	122171	n/a	Confined sand & gravel – glacial (4b)**
LLC_VOW_19	South of Grasmere	93220	1065 ³	Confined sand & gravel – glacial (4b)**
LLC_VOW_20	South of Silverton	123182	n/a	Fractured crystalline bedrock (6b)**

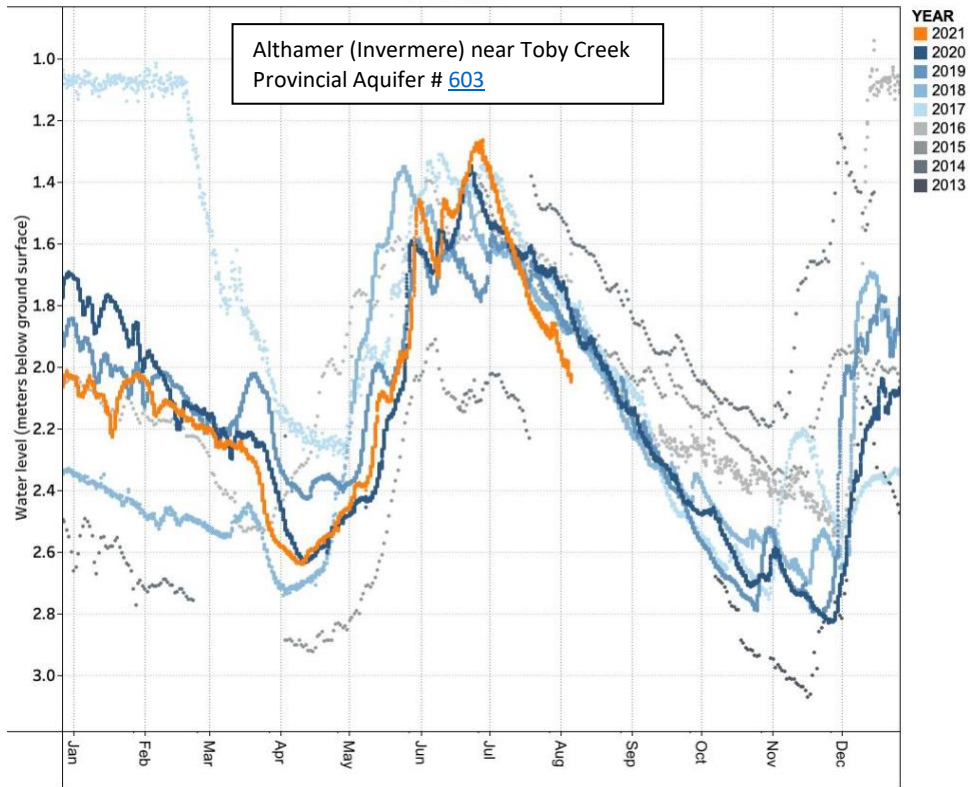
¹ Well tag number is a record number corresponding to the record for the well in the BC Provincial [GWELLS](#) database.

² Aquifer Type based on BC Provincial Aquifer Classification Subtypes:
<https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/groundwater-wells-aquifers/understanding-aquifers/aquifer-subtype-code-description>

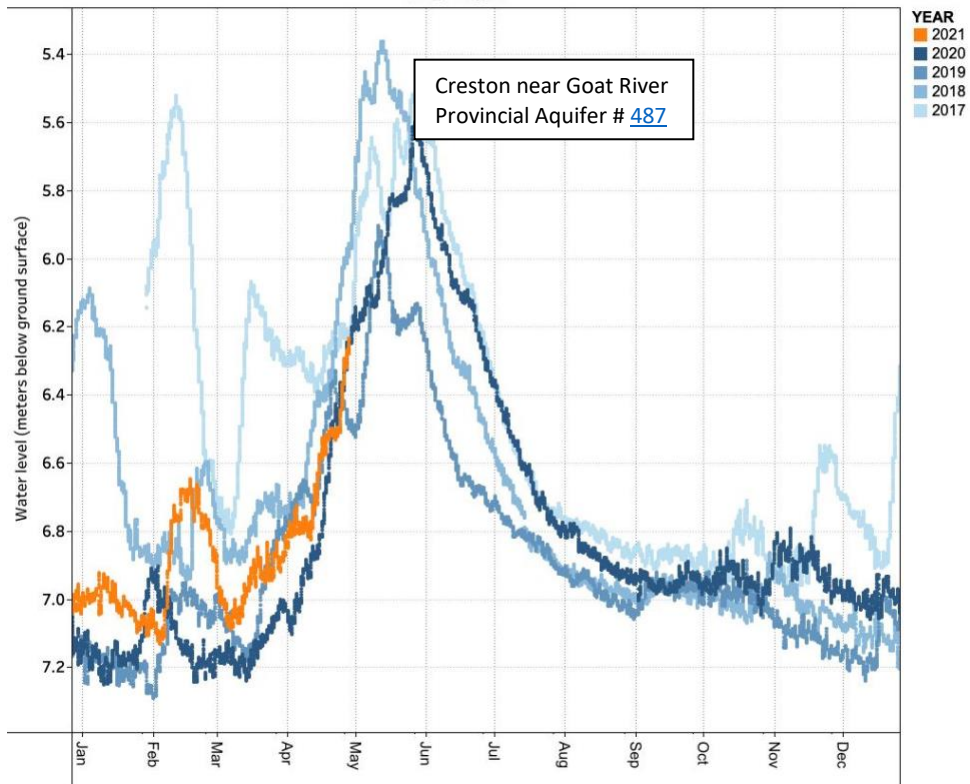
³ Further interpretation required to confirm well to aquifer correlation.

*Aquifer correlations and **aquifer type classifications interpreted by Mike Wei, Hydro-Geo-Logic.

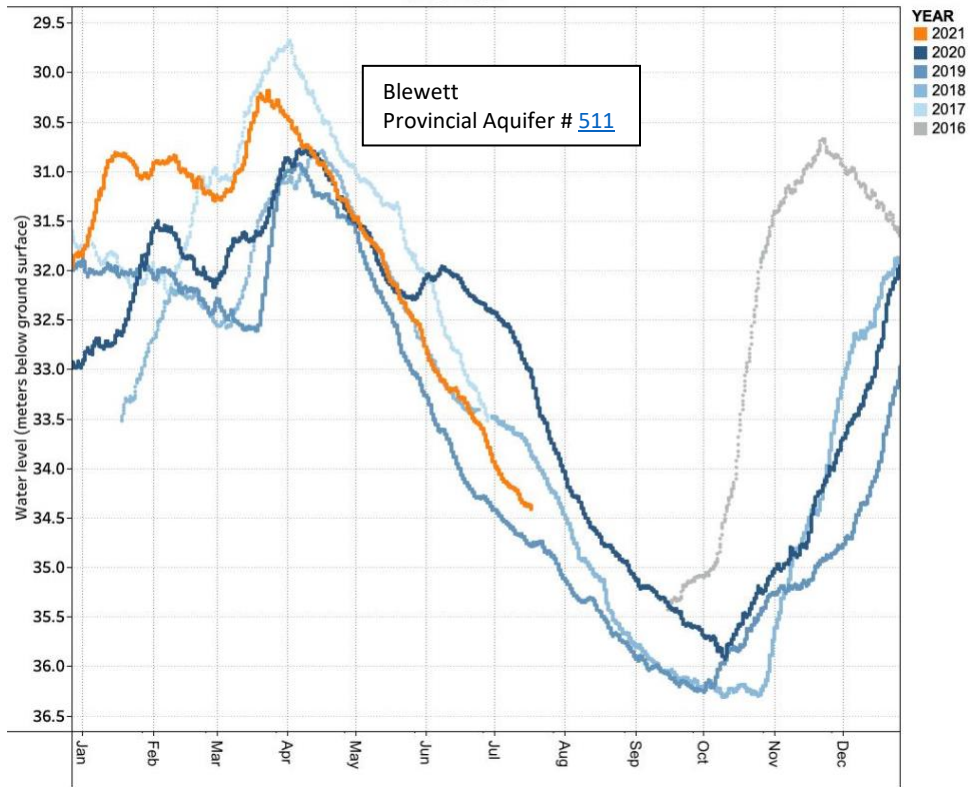
Water Level Yearly Comparison
LLC_VOW_01



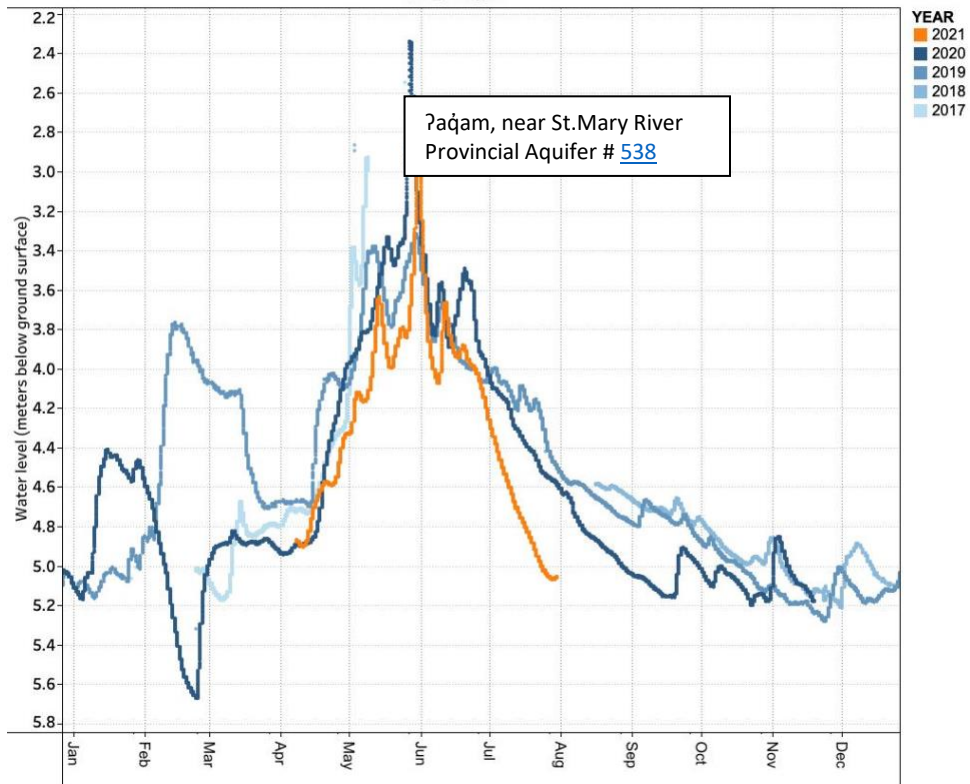
Water Level Yearly Comparison
LLC_VOW_02



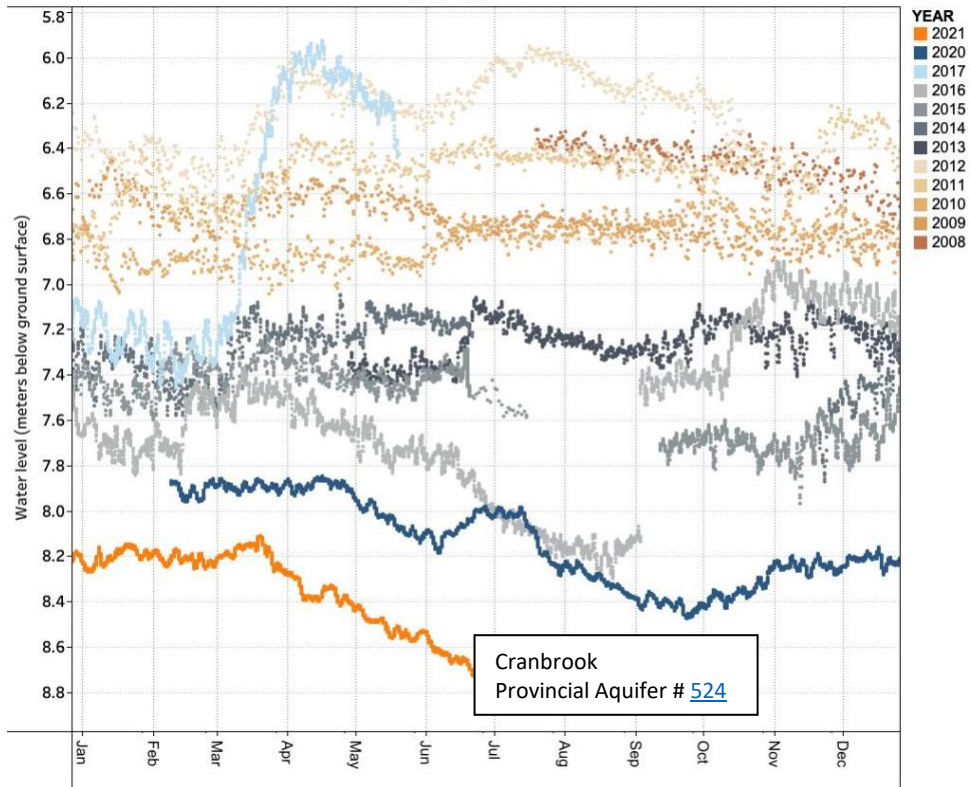
Water Level Yearly Comparison
LLC_VOW_03



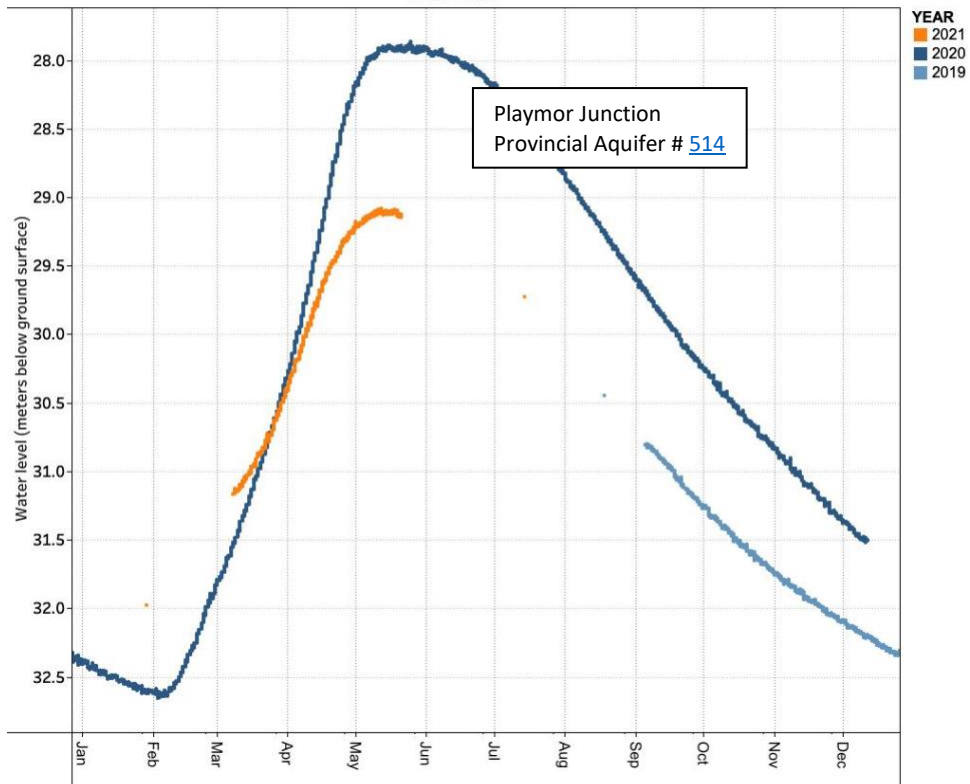
Water Level Yearly Comparison
LLC_VOW_06



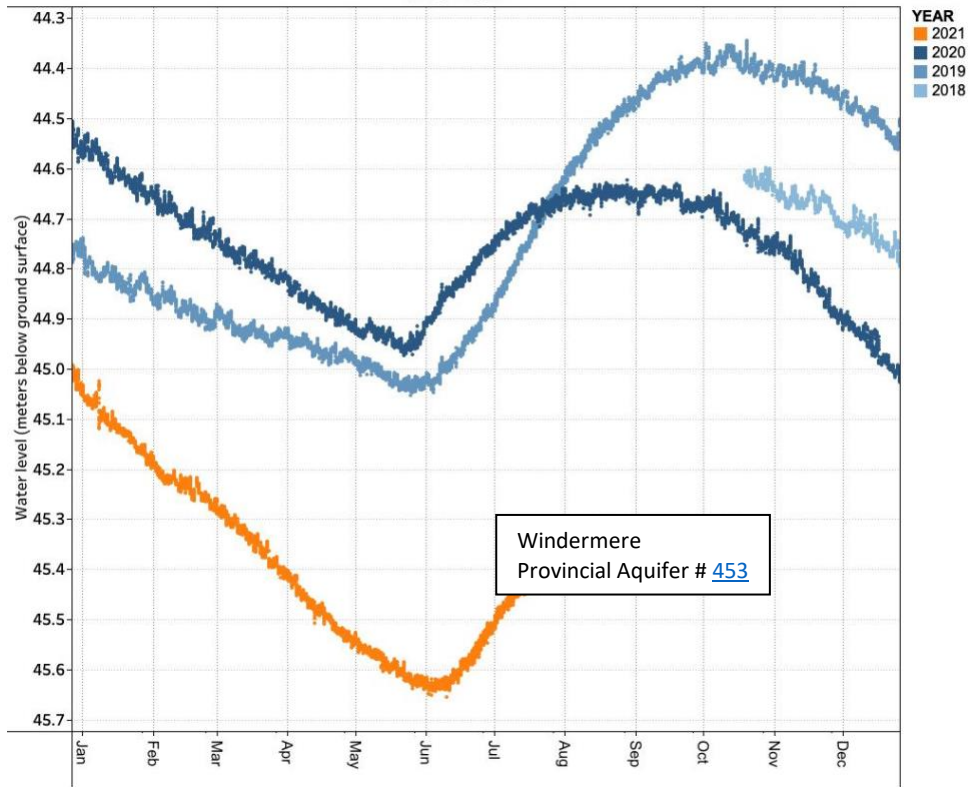
Water Level Yearly Comparison
LLC_VOW_07



Water Level Yearly Comparison
LLC_VOW_09



Water Level Yearly Comparison
LLC_VOW_10



Water Level
Station ID: LLC_VOW_12

