



# Annual Water Report

2025

## Water System Description

The Alto Utilities Ltd. water system provides water for approximately 430 domestic unmetered connections, 1 school and 1 metered church (approximately 1000 people).

Untreated groundwater is drawn from two deep wells located on Lodge Road. These wells replenish three concrete reservoirs with a total capacity of over 1,700m<sup>3</sup>. The reservoirs are situated above the subdivision where gravity feeds the system through a series of mains, 30 fire hydrants, and two pressure reducing valve stations (PRVs).

Alto Utilities operates as required, and in accordance with the following programs:

- Environmental Operators Certification - Alto continues to provide Level II Operator oversight as per Alto's Operating Permit.
- Emergency Response Plans – Each year Alto reviews its Emergency Response Plan to ensure that it is prepared for any kind of emergency. This includes keeping emergency contact information current, as well as developing strategies for drought and wildfire situations.
- Water Quality Monitoring Plan – Alto maintains daily and weekly monitoring and weekly testing to ensure safe drinking water for its customers. Bacteriological testing is conducted weekly to ensure that the Drinking Water Protection Regulations continue to be met, and these results are reported each month to Alto Utilities' Health Officer.
- Treatment Plan – The 2022 Source Water Protection Plan determined that Alto's wells were *at risk for viruses* and recommended treatment. Amongst other objectives, the 2024 Long-term Asset Management Plan helped set rates that included water treatment. Currently, Alto Utilities is engaged in developing a Treatment Plan that will meet health requirements, improve water quality, and stay within financial constraints.
- Cross Connection Control Program – The cross-connection program was updated in 2021 and we will provide suggestions in future correspondence about ways that you can help protect your drinking water from cross connection dangers.

Conditions on Permit:

- Develop a water treatment and implementation plan – A Ground Water Protection Plan completed in July 2021 determined that Alto's two wells were at risk for viral pathogens. This plan determined that meeting the provincial drinking water objectives for viruses would require Alto to develop a water treatment and implementation plan. A Treatment Plan is currently being developed in conjunction with Carollo Engineering.
- Develop a Well Protection Plan – The purpose of the Ground Water Assessment was to improve understanding of the water source, document observed and potential hazards, identify the risks associated with natural and human-made hazards, and to inform the treatment design. The Ground Water Assessment is the basis for the development of a Well Protection Plan. The purpose of the Well Protection Plan is to identify areas and activities that could affect the quality and quantity of the drinking water source. Alto will use the recommendations from the Ground Water Assessment to develop a Well Protection Plan.



*Lodge Road Pump House*



*Inside the Lodge Road Pump House*

## System Improvements & Maintenance

The distribution system was originally constructed in 1970 and has seen many upgrades over the years and 2025 was no exception.

Increased frequency of catastrophic weather events, regularity of fires, aging infrastructure, and always present potential for contaminants entering Alto's system highlight the importance of communication in emergency situations. With this in mind, Alto installed a digital sign in the spring 2024 to improve communication in both emergency situations and non-emergency general communication.

Without the two wells that supply water to Alto's customers Alto Utilities is not a water system. Therefore, it is imperative that these wells be maintained with the utmost care and attention. With this in mind, Alto added a bypass inside the pumphouse to facilitate cleaning and maintaining the well screens. This bypass allows the wells to be flushed after work has been done.

In May, the drive on Alto's 30hp pump failed. The timing was good as it occurred before the summer peak water use. Alto used the opportunity to replace the direct on-line drive with a variable frequency drive. The VFD also reduces water hammer by allowing the motor to decelerate slowly. This reduces the stress on mainlines. Then in August the pump itself started to fail. This was an opportunity to upgrade the pump and pipe to meet new Health and Drinking Water Guidelines. All components were upgraded to Stainless Steel. While the pump was out of the well we also had an opportunity to put a camera down the well and examine the well casing and well screen. The well was cleaned with a strong acid and brushed before putting in the new components.

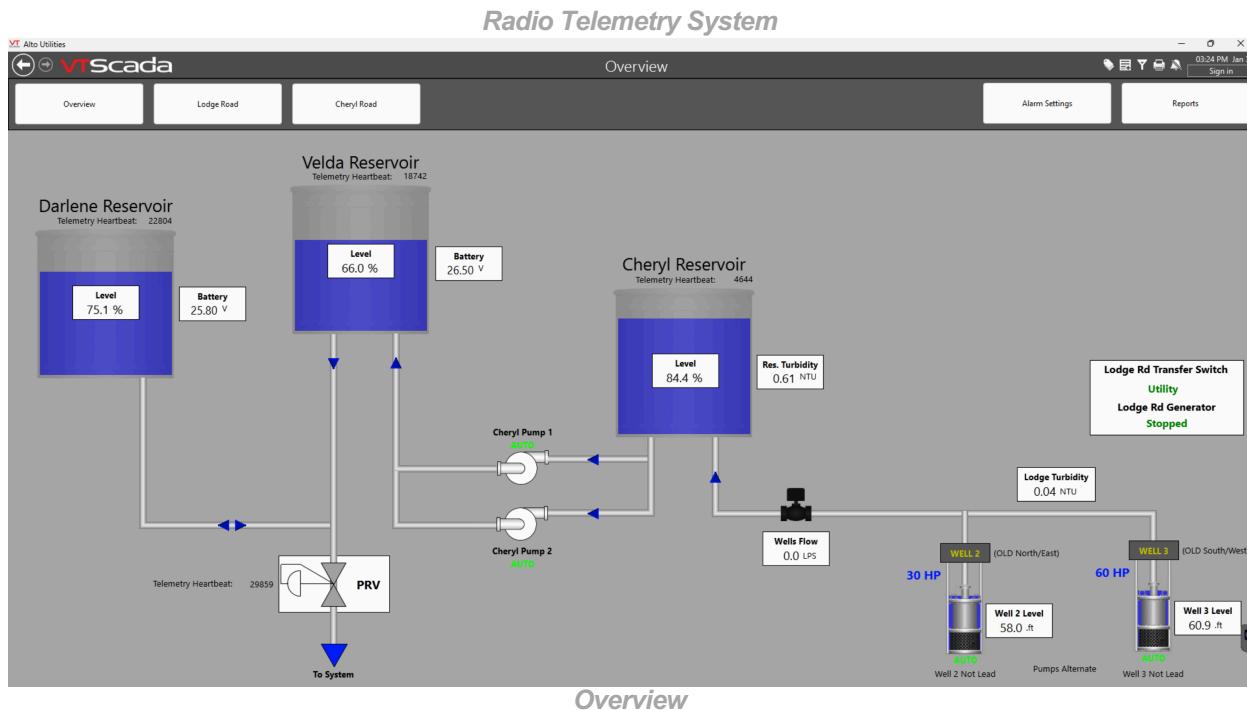
Since the completion of the Long-Term Asset Management Plan (LAMP) in 2024 Alto has been working towards the development of a Treatment Plan. One of the goals of the LAMP was to develop a funding structure for



treatment. With this new funding in place Alto Utilities has engaged Carollo Engineering to develop a treatment plan that should be completed by March 2026. This Treatment Plan will ultimately form the basis of a treatment facility in subsequent years.

The entire system is flushed semi-annually in to ensure water is refreshed and minor sediment within the pipes is removed. Monthly flushing is also performed on all ends of the system.

Billing continues to be streamlined with the introduction of an electronic billing system. We are thankful that so many of you have already taken this step and would encourage all of Alto's customers to help us reduce costs and use less paper.

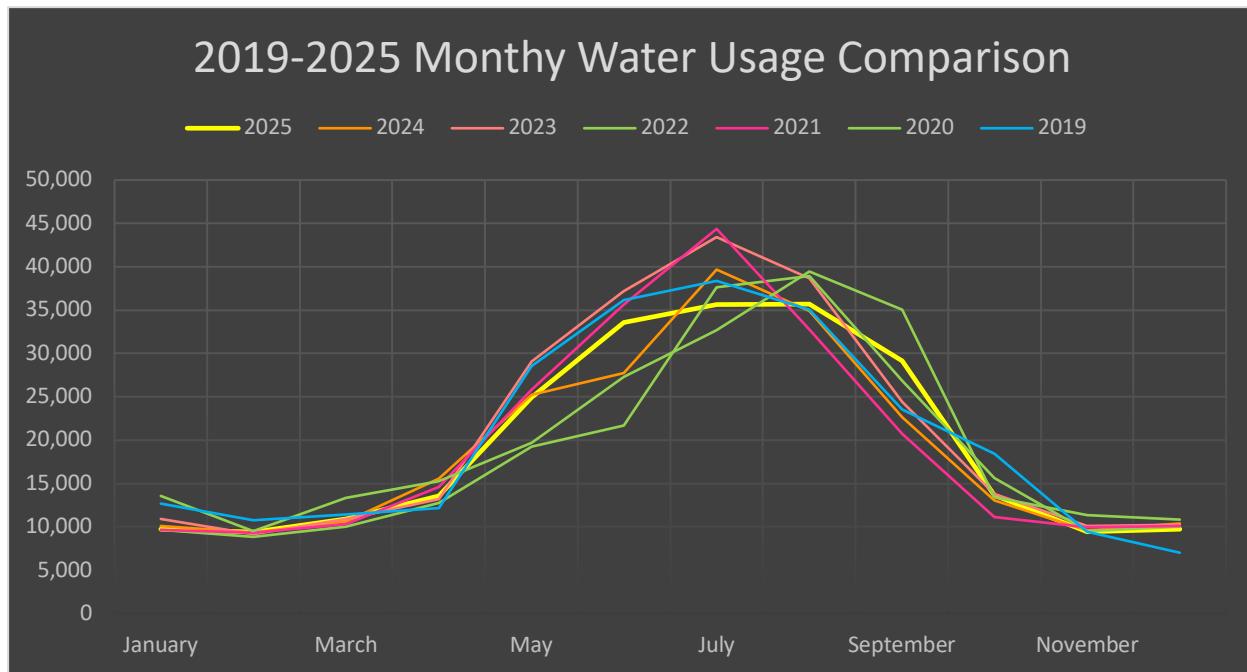


## Water Consumption

Below is the annual consumption for the last five years in cubic meters. Usage generally reflects weather patterns with highest usage occurring during the summer months.

2025	2024	2023	2022	2021	2020
235,353	228,880	251,155	220,698	234,379	241,517

The graph below shows the monthly water usage over the last five years.



## Water Sampling & Quality Monitoring

Every utility that supplies water to Canadians is governed and regulated by the *Guidelines for Canadian Drinking Water Quality*. These guidelines set both water quality parameters and priorities. As these guidelines state, "the highest priority guidelines are those dealing with *microbiological contaminants*", and in this regard Alto Utilities continues to meet the Canada guidelines for drinking water as it has done for the last 45 years without any water treatment.

Water samples are collected on a weekly basis and analyzed for indicator pathogens (*Escherichia coli* and *total Coliforms*). In addition to this, every Spring and Fall a comprehensive water analysis is performed to track water quality factors that change with seasonal conditions and to establish a baseline for the chemical parameters. Alto then submits monthly reports to Interior Health. Alto has four distribution points from which we collect and one source point; these are tested by an accredited laboratory. All bacteriological analysis in 2025 met the standards set out in the *B.C Drinking water Protection Regulation*.

It is true that in 45 years, Alto Utilities has never had to issue a Boil Water Advisory and has met all the requirements found in the *Guidelines for Canadian Drinking Water Quality*. However, the regulations are evolving and reflect the most recent water quality and health research. While Alto continues to meet these *Guidelines*, one



of Alto's wells slightly exceeds the limits for Manganese. Since Alto uses two wells to supply water to its customers the combined average is below the parameters found in the *Guidelines for Canadian Drinking Water Quality*. This is an issue that Alto takes seriously and is monitoring. One of the goals of the Asset Management Plan is to identify infrastructure upgrades and costs associated with them. The Water Treatment and Implementation Plan that Alto will begin in 2025 will determine the best course of action to continue provide safe drinking water to Alto's customers and will likely include chlorine treatment. Alto will continue to work with Interior Health, its engineers, and industry leaders to develop a strategy to continue to provide safe drinking water to its customers on into the future.

Alto Water System	Total # of samples in 2025	E. Coli	positive for Coliform
Source	23	0	0
Distribution	46	0	2*

\*No Total Coliform detected on resample

### Sample Locations

- Woodsdale Road Test Station
- Darlene Road Test Station
- Velda Road Test Station
- Peter Greer Elementary School
- Main Pump House, Lodge Road

In addition, a complete chemical analysis of each well source is completed every other year by an accredited laboratory in the spring and fall; the most recent one was completed in the fall of 2025.

If you are interested in the Comprehensive Analysis, these are available on Alto's website.