Olalla Water System

Information Meeting

September 11, 2025

Water quality concerns, outdoor water restrictions and the upcoming Universal Water Metering Pilot Program

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One Region Working Together

Olalla Water System

Olalla Water Service Establishment Bylaw No. 1690, 1996

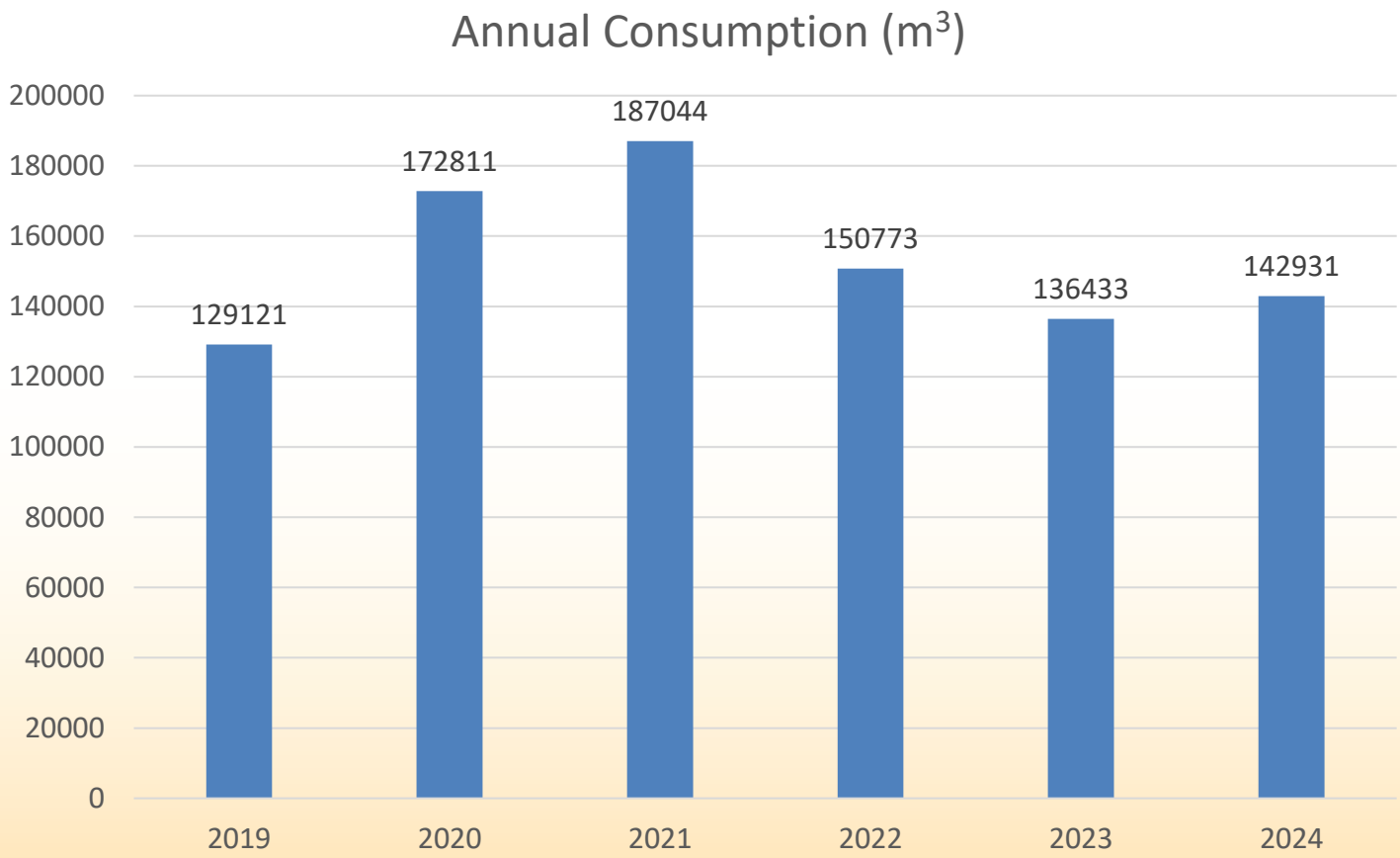
- Current well was drilled in March 1998 to a depth of 155 ft
- Draws out of Aquifer 935 – 5.2 km^2 confined sand and gravel
- 226 Connections – Residential, irrigation(non-ag) and commercial

System Classification

The system consists of a single deep source groundwater well, a storage reservoir, and a distribution system. Water is pumped from the well into the distribution system and to an elevated storage reservoir.

- Classified as a ‘Small Water system’- serves a community with less than 500 people
- 16 kms of water mains
- Reservoir Capacity: 385 m^3
- Time to empty: 6.3 hours

Annual Water Use



Licensed allocation is 250,000 m^3/yr

Regulations

- Drinking Water Protection Act outlines the rules water purveyors must follow to provide safe drinking water to users of the system
- Drinking Water Protection Regulation sets out more specific details to ensure safety measures are followed.

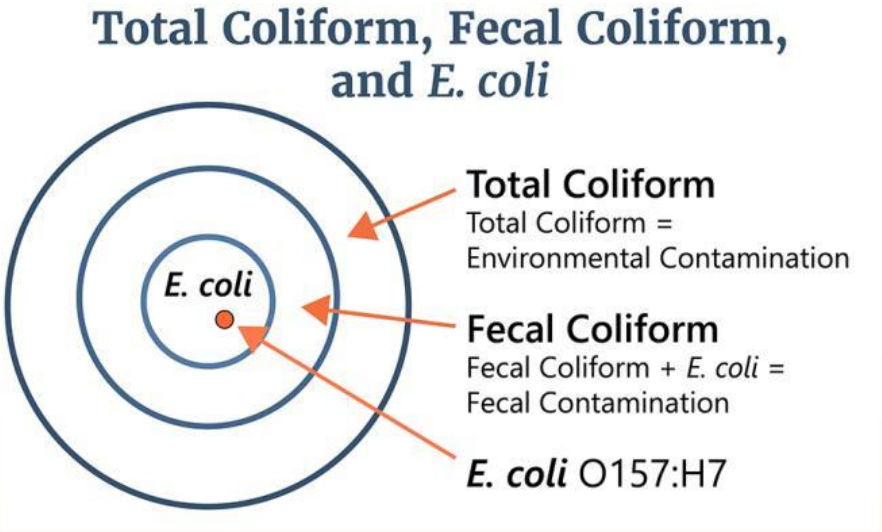
Total coliform bacteria (a) 1 sample in a 30 day period (b) more than 1 sample in a 30 day period	No detectable total coliform bacteria per 100 ml At least 90% of samples have no detectable total coliform bacteria per 100 ml and no sample has more than 10 total coliform bacteria per 100 ml

- The Ministry of Health administers the Act and develops policy related to drinking water.
- The regional health authorities implement the Act and provide monitoring of drinking water systems.

Bacteria of Concern

Total Coliforms

- A group of bacteria used to indicate a change in water quality.
- Naturally found on plants and in soil, water and intestines of humans and warm-blooded animals, which can make finding the source challenging.



Note: no positive results have been reported to-date for *Escherichia coli (E. coli)* or Fecal Coliforms.

Background bacteria

- All other bacteria.
- Typically indicate the overall "health" of a water system and help determine if flushing of the distribution system is needed.

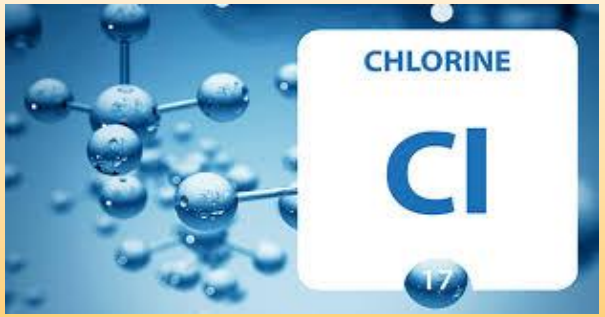
Water Quality Timeline and Response

Summer/Fall 2024

- First Total Coliform counts appeared in July 2024.
- Increased sampling frequency.
- Start of temporary chlorination implementation and removal.
- System flushed by operations staff.
- 3 different sampling stations across the system.

Spring 2025

- Sampling stations increased to 5 sites across the system.
- Boil Water Notice was issued as results showed increasing counts.
- Continued implementation and removal of temporary chlorine for accurate bacteriological testing.



Contamination Investigation Activities

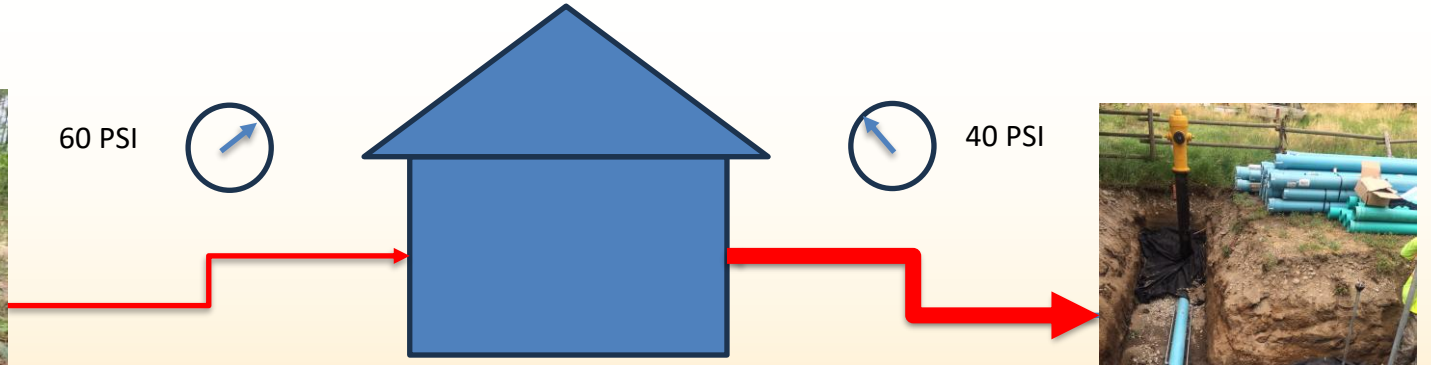
- Distribution system reconfigurations.
- Comprehensive in-field investigation of the distribution system.
- Inspection the Well, backup surface source, and Reservoir (with a remote operated vehicle, ROV).
- Cleaning and disinfection of the Olalla Reservoir.

Note: No sources of contamination were identified.

Cross Connections

What is a cross connection: Any actual or potential connection between the drinking water system and a non-treated source.
What is backflow: When the flow of water in a pipe reverses from the regular direction.
When a cross-connection and backflow occur together, the result is often a contaminant entering the drinking water system.

PRIVATE WELL SUPPLY



OLALLA COMMUNITY WATER SUPPLY

If you suspect you have a cross-connection on your property, please contact the RDOS to arrange for an inspection at NO CHARGE.

Universal Water Meter Pilot Project

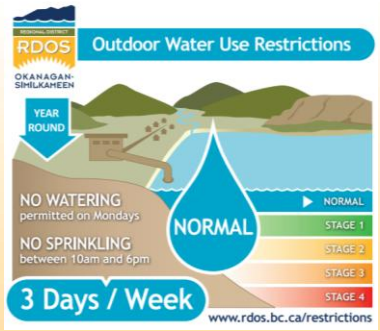
for Olalla, Willowbrook and Faulder

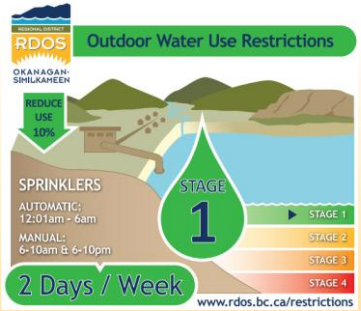
Why Meters? Why Now?

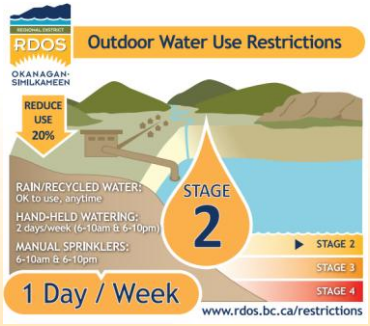
- The demand for water is constantly increasing. Longer growing seasons, hotter summers, milder winters and less precipitation to replenish our supplies are all adding pressure to this limited resource.
- Metering is proven to reduce residential use by ~30%
- Increasing population density means RDOS needs to focus carefully on creating the most efficient methods of service delivery
- Successful application to participate in a fully funded pilot project - ~$2M to cover the cost of purchasing and installing meters for 3 RDOS communities

Why Meters? Why Now? Con't

- Proactive vs reactive planning can reduce the costs associated with maintaining these utilities
- Water restrictions and managing limitations for supply

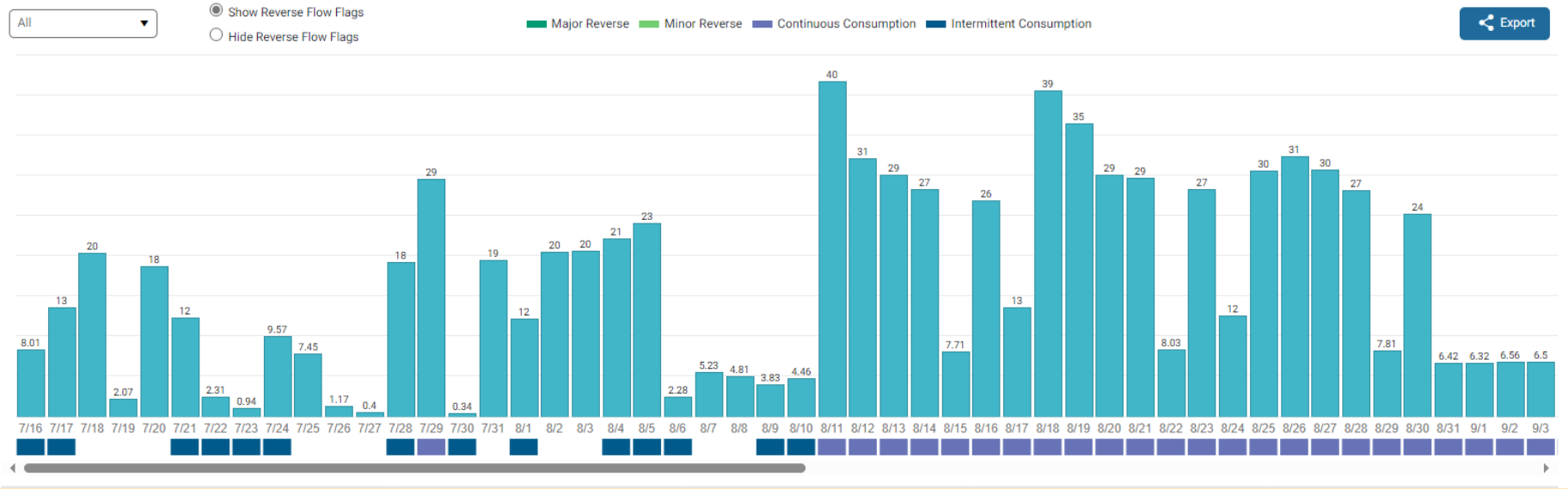






Leak Detection

- Moving to metered connections with the AMI capability, homeowners will be able to monitor and troubleshoot their own systems in near real time.
- Meters also allow operators to isolate mainline portions to identify leaks or breaks in the system, assess results of implementing water restrictions and developing a clearer understanding of connection capacity



Tiered Billing Structure

- A review of managed water systems across the Southern Interior support tiered water rates be incorporated into the plan to encourage residents to manage their consumption independently
- A mock billing period of 12 months will allow residents to adjust use to reduce consumption and get familiar with the new structure.

Next Steps

- Cost analysis for each water system to ensure tier rates and structure will be practical for operational costs as well as cost effective for residents
- Creating a ‘mock’ bill to inform users of detail consumption data and account access
- Host a dedicated training session with the users to review user portal features

Questions

From Part 1

Water Conservation

from a local government perspective

RDOS Water Systems

- The RDOS manages 10 small water systems within the region that focus mainly on residential use.

- Water Use Regulation Bylaw no. 2824, 2019 outlines responsibilities of the RDOS and applies to users of the managed systems.

Water Management in BC

- Working with other organizations

  Provincial Departments: Forests, Natural Resources, Environment, Municipal Affairs, Ag and Agri-Food

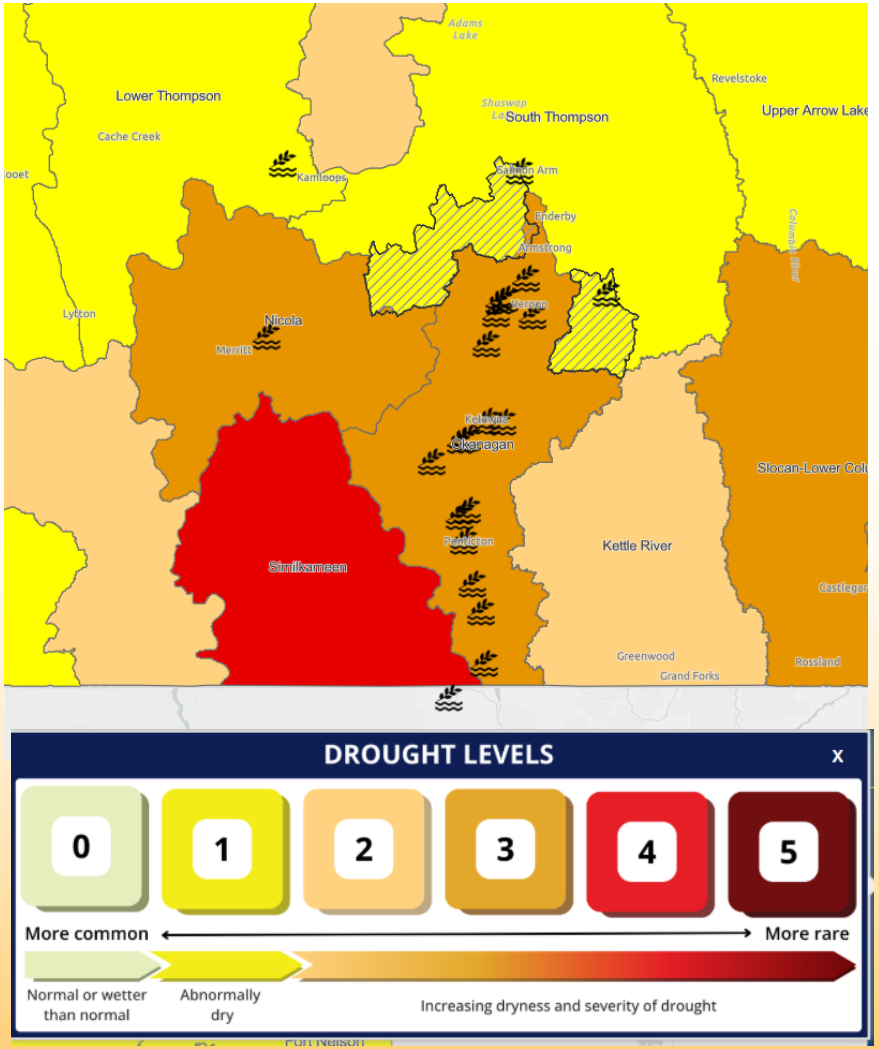
  Local purveyors: Irrigation and Improvement districts

  Municipal Governments: Penticton, Summerland, Princeton, Keremeos

  Regional organizations: OBWB – Make Water Work, Okanagan WaterWise

BC Drought Portal

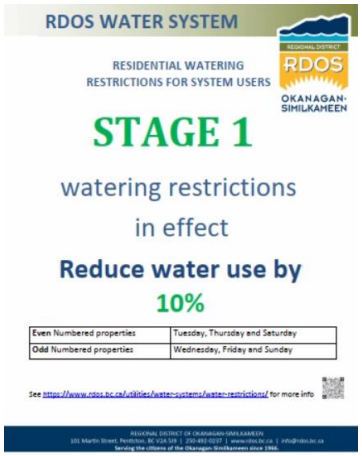
Information from multiple agencies contribute to the Drought level for a region. An update occurs weekly throughout the summer.

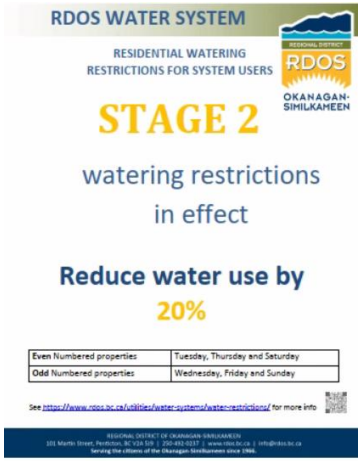


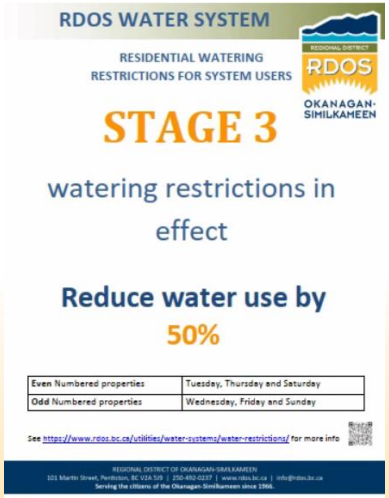
Water Restriction Stages

- A scale has been developed to indicate the level of concern conditions in the region:
  - snowpack, precipitation, freshet, groundwater recharge, infrastructure limitations, water quality and level of demand.
  - Users are asked to water on specified days based on even/odd civic address numbers.

Drought Progression







As restrictions escalate, signs will be placed throughout the community, on the RDOS website and social media platforms to inform residents of changing conditions.

Additional Info

RDOS website
https://www.rdos.bc.ca/utilities/water-systems/

RDOS Regional Connections
https://rdosregionalconnections.ca/water-conservation

Voyent Alert
https://www.rdos.bc.ca/newsandevents/notifications/

BC Drought Portal
https://droughtportal.gov.bc.ca/pages/drought-map

Questions

From Parts 1 & 2

Who to contact?

Questions related to water quality, the metering program or water restrictions:

250-490-4135

Utilities@rdos.bc.ca