



REGIONAL
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METERING PROGRAM FREQUENTLY ASKED QUESTIONS

WHITEVALE WATER UNIVERSAL WATER METERING PROGRAM

The Regional District of North Okanagan (RDNO) – Whitevale Water (WVW) is beginning a Universal Water Metering Program in 2026. The program entails installing water meters in meter pits near the property line on existing water services. These new meters will use Automatic Meter Reading (AMR) technology. AMR uses wireless radio frequency technology to collect meter reading data remotely using low-frequency radio waves, which are generated by a battery-powered device called an Encoder-Receiver-Transmitter (ERT). All MLW water meters will be outfitted with an ERT, which is typically mounted on the inside of the meter pit lid.

Once the majority of existing water services have water meters installed, volumetric water rates will be implemented.

If a customer objects to a meter installation during this project, they will be put on an escalating unmetered rate when volumetric water rates are implemented. When a future water meter is installed, it will be at the customer's expense.

FREQUENTLY ASKED QUESTIONS

1. Why is the Universal Water Metering Program being initiated?

It has been identified that WVW high water consumption is an issue affecting service and infrastructure longevity, especially during the summer months, and it is recommended that universal metering at property lines and volumetric water rates be implemented. Metering at property lines will also reduce the risk of on-site service leaks as these leaks would quickly be detected and could be repaired in a timely manner.

One of the reasons to reduce high water consumption is to create more capacity in the water system and delay costly water infrastructure upgrades.

WVW received grant funding which will be used to fund a majority of the meter installations.

2. Will this Universal Water Metering Program impact my internal plumbing?

It is recommended to consult with a plumber regarding internal plumbing. The installation of the meter and check valve at the property line will cause each property to be a closed water system. Property owners should consider thermal expansion impacts prior to the meter and check valve installation, which is estimated to begin in spring 2026.

Thermal Expansion is explained in these sections of the BC Plumbing Code below:

2.6.1.11. Thermal Expansion

- 1) *Protection against thermal expansion shall be required when a check valve is required by Article 2.6.1.5., a backflow preventer by Article 2.6.2.6., or a pressure-reducing valve by Article 2.6.3.3. (See Note A-2.6.1.11.(1).)*



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A-2.6.1.11.(1) Thermal Expansion.

To accommodate the increase in pressure caused by thermal expansion within a closed water distribution system, one of the following should be installed:

- (1) a suitably sized diaphragm expansion tank designed for use within a potable water system,*
- (2) an auxiliary thermal expansion relief valve (T.E.R. valve) conforming to CSA B125.3, "Plumbing Fittings," set at a pressure of 550 kPa or less and designed for repeated use, or*
- (3) other means acceptable to the authority having jurisdiction.*

3. Will I be billed based on my water use?

Once the majority of existing water services have water meters installed, volumetric water rates will be implemented.

WVV is a regional water utility, it legally cannot run a deficit. Each year's expenses, including operation, maintenance, construction, and reserve contributions, must be recovered directly from user fees during that year or be funded from reserves. WVV is a true user-pay service and does not gain any revenue from property taxes.

Rates will be approved by the RDNO Board of Directors.

4. What impact will this have on my property?

The RDNO will complete surface restoration and landscaping in the construction areas within reason. The curb stop must be accessible for this project. Any curb stops that are not accessible due to private property use (i.e. paving over, damaging and burying during landscaping, etc.) will have access restored with the works required billed to the customer. The curb stop and meter pit must remain accessible in the future.

5. What if my property is not connected to the water system?

If your property is not connected to the water system, you will not have a water meter installed and this metering program does not apply to you.

6. What will it cost?

There is no charge to the customer for this phase of the installation of the water meter, ERT and meter pit. The first phase of this project is fully funded by grant funding with no additional cost to WVV customers.

7. When will the meter installations occur?

This project is planned to begin in spring 2026 and is expected to be completed by the end of 2027.

8. How long will a meter installation take?

The ERT and meter installation will typically take about three (3) to four (4) hours per property and will require a brief interruption of water service. Customers will be notified by letter when installations will occur at their property.



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9. How are the meters and ERTs installed?

An RDNO contractor will install the ERT and meter by digging up the earth after the WWV curb stop (water shut off for the property) to expose the service line. The meter pit will then be installed after the curb stop near the property line. A meter and ERT will be installed inside the meter pit.

Water to the property will be turned off at the curb for a few hours during the meter pit installation. To complete the work, we require access to the curb stops and the service lines immediately after the curb stops.

10. Does someone need to be home for the installation of the meter and ERT?

No.

11. Will my water service be interrupted during the installation?

Yes, there will be a temporary interruption during the installation. We estimate the water will be off for three (3) to four (4) hours. Customers should flush their water after installation until it runs clear.

12. Who will be doing the meter and ERT installations?

The RDNO will hire a contractor to perform this work. Meter and ERT installations require personnel with expertise in water works, wiring, and meter and ERT installation.

13. How can you prepare your property for the meter and ERT installation?

To enable this work to be performed with the least amount of inconvenience to you, please be sure that a 3 m² area around the curb stop is clear and accessible. Check your internal plumbing to ensure it is ready to become a closed-loop system.

14. If I have a new meter, does this project impact me?

If your property had a water meter installed in 2024 or later, you will not have a water meter installed during this project.

15. What if my property is a rental?

It is the owner's responsibility to communicate with their tenants. You may want to notify your tenants of the water interruption once you receive the letter. As the work will all be completed at the property line, access to the house is not necessary.

16. What is Automatic Meter Reading (AMR) technology?

AMR uses wireless radio frequency technology to collect meter reading data remotely using low-frequency radio waves. These radio waves are generated by an ERT. ERTs are a battery-powered device that transmits the meter reading data and has an expected battery life of 20 years. ERTs are typically mounted to the inside of the meter pit. The ERT is a safe technology (information provided at www.itron.com) being used at other RDNO water utilities.



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17. Is the new AMR system safe?

ERTs use wireless technology to communicate with data readers in much the same way household devices such as cordless phones, cell phones, baby monitors, garage door remotes, radio stations and wireless internet routers work. These devices transmit signals through radio frequency (RF), which is all around us. The low-frequency radio waves transmitted by an ERT are less than the signals transmitted by other day-to-day devices. The transmitter will not interfere with other household devices and in most cases, the ERT is mounted inside the meter pit, away from the occupants.

AMR wireless technology is regulated by the Canadian Radio-Television Telecommunications Commission to ensure ERTs transmit with extremely low power (less than 1/100th of a watt). Each radio transmission lasts less than one (1) second. Health Canada says exposure to this kind of wireless radio technology does not pose any public health risk.

The frequency used is the same as short wave radios (902-928 MHz) and the amount of radio waves that reach a building's occupants are considered negligible as the ERT transmits in short intervals at very low power (less than 1 watt). In comparison, a cell phone emits 800 times more energy than an ERT. A cell phone transmission is continuous during its operation unlike an ERT which transmits intermittently with each transmission lasting less than one (1) second. The ERT radio transmissions occur on a frequency different from those used by television signals, cordless phones, garage doors and pacemakers and will not interfere with these devices.

Read more about radio frequency guidelines at:

<https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/types-sources/radiofrequency-fields.html>

External Website: Health Canada

For more information on ERTs:

<https://na.itron.com/radio-frequency-resource-center>

External Website: Itron

18. How do I know that you have my meter reading and not someone else's?

Each ERT has a unique identification number, which is transmitted along with the meter reading. The unique ERT identification number will be linked to your utility bill account number stored on a secure server.

19. How big is the ERT and how is it attached to my home?

ERTs are small grey boxes and are attached to the meter pit lid using a plastic harness.





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20. What about privacy?

The privacy of customers is a priority for the RDNO and WVW. When the data is sent from the meter to the meter reader, there is no personal profile information connected to that data. The only information transmitted is the ERT identification number and the meter read. The information goes to a central collector, which is then downloaded to a secure server at the RDNO on behalf of WVW where the ERT identification number is linked to customers' accounts. The RDNO's Information Services department ensures there are security protocols in place to protect the data.

21. Will I be able to read my own meter?

Yes, meters will have a display so the water consumption can be read directly. Consumption reads of the meter for utility billing purposes must be performed by RDNO staff.

22. Can I decline having the water meter or ERT installed?

If a customer objects to a meter installation during this project, they will be put on an escalating unmetered rate when volumetric water rates are implemented. When a future water meter is installed, it will be at the cost of that customer.

For more information about the metering requirements for WVW customers and for the current rates, please refer to the Small Utilities Rates and Regulations Bylaw on the RDNO website at www.rdno.ca under the Bylaws link or on the WVW page at www.rdno.ca/wvw.