



## WATER METER PROGRAM SUMMARY



BETTER WATER MANAGEMENT | CONSERVATION | FAIR BILLING

### Our Community Values Water

Many Sunshine Coast residents practice water conservation throughout the year. Residents demonstrate the value of our shared drinking water systems, from saving water in the summer, to fixing leaks and watering gardens with rainwater.

The Sunshine Coast Regional District (SCRD) is working to ensure a safe and sustainable water supply, now and in the future for our growing communities. Community values are at the heart of the SCRD's integrated approach to water management, to develop new sources, promote conservation, and improve operations.

### Water Meters

A fully implemented water meter program includes customer access to water use data, a leak notification program that provides guidance for fixing leaks, and the option to review the current rate structure. Installing water meters on every water service connection would maximize the benefits of a water meter program.

Water meters can improve our water supply system by:

- ✓ Promoting water efficiency and conservation through best management practices.
- ✓ Identifying leaks early, preventing property damage and water losses.
- ✓ Offsetting the future cost of water infrastructure projects.
- ✓ Offering the opportunity for fair billing, so you pay for what you use.



604-885-6806 | [infrastructure@scrd.ca](mailto:infrastructure@scrd.ca) | [scrd.ca/water-metering](http://scrd.ca/water-metering)

# Benefits of Measuring our Water Use

## BETTER WATER MANAGEMENT

Detailed water use information helps with the planning and operation of drinking water supply, treatment, and distribution infrastructure.

The treatment and distribution of water can be expensive. Reducing water losses means our water systems operate efficiently and are cost-effective.



Installation of water meters in all areas will help measure and address total system losses, and reduce costs.

## WATER CONSERVATION

Water customers can access their water use data online to inform decisions about everyday water use.

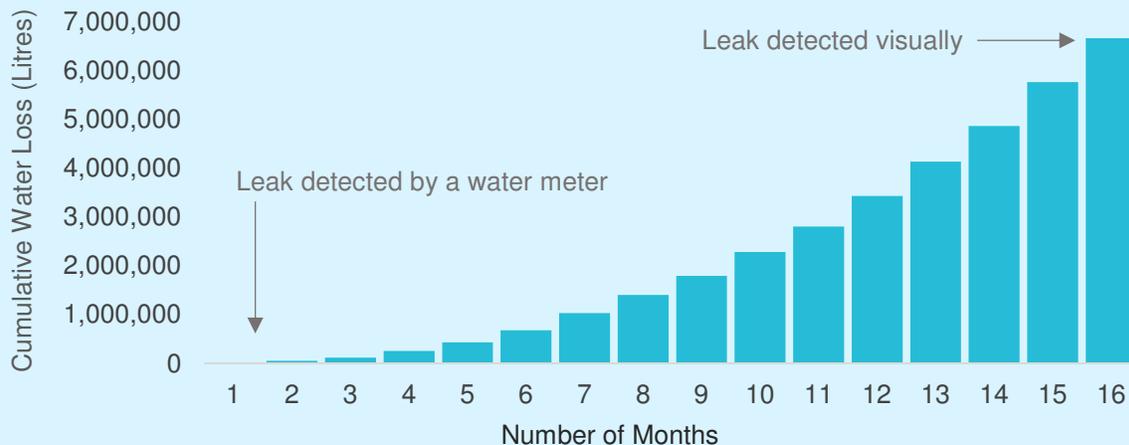
Detailed water data helps the SCRD assess the effectiveness of water conservation measures.

Underground water leaks can be invisible for months, and even years. With a water meter, residents, businesses and the SCRD can quickly identify leaks, and avoid the unnecessary loss of drinking water.



Water meters have helped the community fix two leaks per day since 2017.

### Hidden Water Loss of a Household Leak



## FAIR BILLING

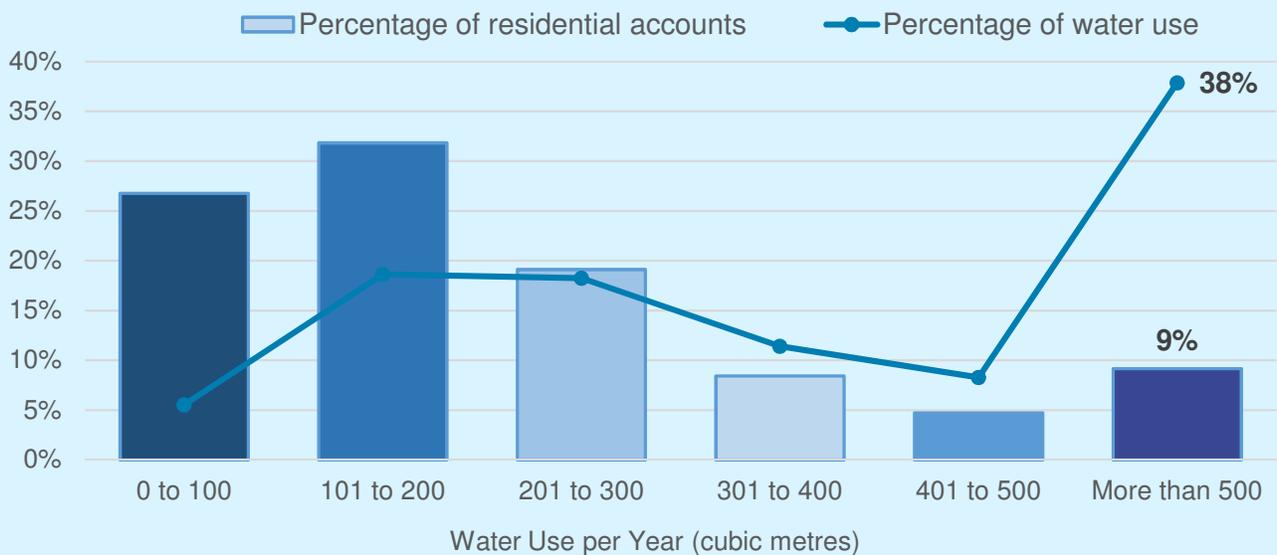
SCRD residential water customers pay a flat rate, regardless of how much water they use. If a water meter program is fully implemented across the region, the SCRD could consider incorporating a pay-by-use rate structure, to increase fairness in our community.

Rate structures would be set by the SCRD Board with community input. For example, different rate structure options for low-income households or other incentives could be considered.



Residents can sign up for a monthly e-mail to receive their water use data. E-mail [infrastructure@scrd.ca](mailto:infrastructure@scrd.ca) with your name, address and utility account number.

### 2020 Residential Water Use (Properties with Water Meters)



***A small number of households use more water than average.***

## Measured success in neighbouring communities

- Canadian households with water meters used 65% less water than unmetered households with fixed rates. (Environment Canada 2011)
- District of West Vancouver reduced summer demand by 30% with the installation of residential water meters. (BCWWA Annual Conference Presentation 2008)
- Town of Gibsons reduced per capita water use by more than 40% between 2008 and 2017, through water conservation initiatives like water metering. (Town of Gibsons 2017)



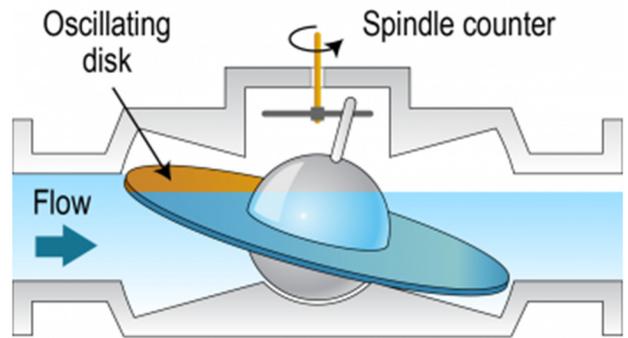
# How Do Water Meters Work?

Residential water meters have three components.

A **flow measuring device** that measures exactly 320 millilitres of water with each spin.

A **flow register** counts the number of disc spins and volume of water used. If the disc spins continuously, 24 hours per day, it indicates a leak.

A **transmission device** communicates total water use and leak notifications. Monthly readings are collected from the roadway through a medium range radio signal.



Nutating disc type residential water meter.

Image source: *Technical Water Meter Selection Guidelines*, Energy.gov



▶ Visit [scrd.ca/water-metering](https://scrd.ca/water-metering) to learn more about water meter technology and installations.

## SCRD Water Meter Program Timeline

Established	Water rates by volume for Industrial, Commercial and Institutional (ICI) properties.
2013	The Comprehensive Regional Water Plan identifies water metering as an important tool to complement supply expansion.
2014 - 2015	Meters installed in North and South Pender Harbour Water Systems.
2016 - 2017	Meters installed in Regional Water Systems. <i>This includes the areas of Egmont, Earls Cove, Secret Cove, Halfmoon Bay, Roberts Creek, Elphinstone and West Howe Sound (including Keats Island).</i>
2017	The leak notification program launched to alert home and business owners of water leaks on their properties.
2018	SCRD initiated an Alternative Approval Process (AAP) to authorize a long-term loan for the final phase of installation in the District of Sechelt and Sechelt Indian Government District. The community did not authorize the loan at that time.
2019	The Board adopted the SCRD Strategic Plan target to complete development and implementation of a water meter program by 2023, including completion of meter installations, customer access to water use data, the leak notification program, and the option to review the current rate structure.
2021	Through the leak notification program, staff have contacted over 2,500 residential properties about water leaks, and in so doing, preventing property damage and avoiding the unnecessary loss of drinking water.



# Neighbouring Communities with Water Metering

Each water utility faces its own unique requirements for its water systems, making the transition to water metering different in every community.

The SCRD is learning from neighbouring communities. The following jurisdictions use water meters.

- Town of Gibsons
- Bowen Island Municipality
- Comox Valley Regional District
- Regional District of Nanaimo
- Capital Regional District
- District of West Vancouver
- City of Vancouver
- City of Richmond
- City of Burnaby
- City of New Westminster
- City of Surrey
- City of Port Coquitlam
- City of Langley
- City of Maple Ridge
- City of Abbotsford
- District of Squamish

## Resources

American Water Works Association

<https://www.awwa.org/Policy-Advocacy/AWWA-Policy-Statements/Metering-and-Accountability>

Environment Canada. (2011). 2011 Municipal water use report: Municipal water use 2009 statistics. Government of Canada.

Federation of Canadian Municipalities InfraGuide: National guide to sustainable municipal infrastructure

<https://fcm.ca/en/resources/mamp/infraguide-national-guide-sustainable-municipal-infrastructure>

Metro Vancouver (2019). Residential Water Metering in Metro Vancouver: Best Practices for Local Governments

<http://www.metrovancouver.org/services/water/WaterPublications/ResidentialWaterMeteringinMV-BestPracticesGuide.pdf>

Office of Energy Efficiency and Renewable Energy: Technical Water Meter Selection Guidelines

<https://www.energy.gov/eere/femp/technical-water-meter-selection-guidelines>

Stantec (2002). Sunshine Coast Regional District Universal Water Metering Master Plan

Town of Gibsons, Water Conservation.

<https://gibsons.ca/sustainability/the-gibsons-aquifer/water-conservation/>

