



# **Grand Forks Water Meters Frequently Asked Questions**

Updated: March 7, 2016

#### **The Water Meter Program**

#### 1. What is a water meter?

A water meter is a device used to measure the volume of water being used at any given water connection. Typically, water meters are installed near the main water shut-off valve in your home so they can measure the actual amount of water you use. Water meters are a proven and widespread way to conserve water — they have been shown to reduce water consumption by nearly 25 per cent.

## 2. Why is the City of Grand Forks expanding the water meter program to residential homes?

Water meters have been used successfully by businesses and industries in the City of Grand Forks since 2008. Currently, residential customers can use as much water as they like, despite limited water resources and the need to conserve now for future generations. Voluntary water conservation has not been shown to be effective. Homeowner will have the ability to better manage how much water they use, allowing them to conserve and save more.

In Grand Forks, all of our drinking water (or water for household use) comes from groundwater sources and, like many communities in southern BC, we face drought and water supply issues during the hot summer months and very high energy costs for pumping water during high demand. Our water infrastructure, the system that treats and delivers water to our homes and businesses and removes wastewater, will need millions of dollars of upgrading and expansion to keep up with current demand unless we take steps to reduce and better manage our precious water resources.

In the City's Sustainable Community Plan, a water metering program for all residential users is recommended to ensure the long-term sustainability of Grand Forks' infrastructure and to maximize the potential of the City's water supply. This Plan went through extensive public consultation between 2007 and 2011.

The Kettle River Watershed Management Plan has also identified water meters as a solution to conserving more water.

### 3. What about industrial, commercial and multi-family properties? Do they have water meters?

In Grand Forks, all commercial and industrial customers received water meters in 2008. Institutional water meters were installed in 2008 and almost all multi-family properties are metered to help them conserve and manage water use.

#### 4. Has the City studied the use of water meters?

Three separate engineering studies on our water system have recommend water meters as a key water-saving tool. Water meters have also been recommended as a key watersaving measure in several of our community plans that were developed through extensive public consultation, such as the Asset Management Plan and the Sustainable Community Plan. The Kettle River Watershed Management Plan has also identified water meters as a solution to conserving more water. Water meters have become common practice as a way to better understand water consumption across the city, identify leaks, promote water conservation and save most customers money.

#### 5. Why has the city had three separate engineering studies?

Water meters have been on Council's agenda since 1999 as a way to conserve water. The initial engineering study was completed for this purpose in 2000.

In 2005, the city received funding to complete a Drought Management and Conservation Plan. In 2010, Kerr Wood Leidal was the lead engineer on the City Park Lift Station project. The City was required to complete a Water Conservation Plan specifically for the project in order to receive grant funding for the project. In Grand Forks, all commercial and industrial customers received water meters in 2008.

#### 6. Do other communities have water meters?

Many communities in BC and across Canada already use water meters. As of 2009 in Canada, about 72 per cent of single family residential homes have a water meter. Other communities in BC using water meters include West Kelowna, Oliver, Penticton, Summerland, Peachland, Lumby, Chase and Enderby. All City of Vernon residents and those supplied by the City of Kelowna water utility are on water meters, and Kamloops is in the process of installing them.

#### 7. What are the benefits of water meters?

Water meters are a proven and widespread way to conserve water — they have been shown to reduce water consumption by nearly 25 per cent. Water meters help you manage your own household costs based on how much water you use, which makes it fairer for everyone. Reducing the amount of water you use with a few simple steps in the home and garden can help you save money on your utility bill. Water meters also help the City reduce spending on water and wastewater facility upgrades and help to better detect leaks.

#### 8. Why do we need water meters?

• Better water conservation - proven to help reduce water demand to a level that can be supported by the local groundwater sources.

- Fairer way to bill water meters help you manage your own household costs based on how much water you use, which makes it fairer for everyone, the same as energy conservation.
- Reduces capital costs by using less water, the City can reduce the need to spend millions of dollars upgrading and expanding its water and wastewater facilities.
- Detect leaks this helps save water as well as lower water and pumping demands which then reduces energy consumption costs.

## 9. We don't have a water shortage because we live next to the Kettle River. So why do we need to conserve water?

All of our drinking water (or water for household use) comes from groundwater sources and, like many communities in southern BC, we face drought and water supply issues during the hot summer months and very high energy costs for pumping water during high demand.

Like many BC rivers, the Kettle River often flows very high in the spring when the snow melts in the mountains and fills the downstream creeks and rivers. These high flows are significantly reduced by mid-summer when demand from water users increases.

With climate change, water supply and flow for fish has decreased. Projections indicate warmer annual average temperatures, less rainfall in the summer and a decrease in snowfall as more of the winter/spring precipitation falls as rain. As a result, stream flows from late fall to early spring are expected to be slightly greater, while flows in late spring, summer and early fall are expected to be smaller, thus adding to the current constraints on fish and water users in late summer. Spring run-off will likely occur sooner on average and annual total water yield will likely increase.

In 2012, the Kettle River was listed the fourth most endangered river in British Columbia.

#### **Costs and Installation Process**

#### 10. What is the cost of the water meter program?

The City of Grand Forks was successful in obtaining \$1.3 M in funding through the Federal Gas Tax program. This is expected to cover the cost of installation – a huge benefit for our community. This is also a key reason why the City is not required to hold a referendum to ask to borrow the money, unlike some other communities in BC.

#### 11. Who will be installing the water meters?

During the Spring of 2016, the Inside Water Meter Installations will be completed by Mainstream Mechanical Ltd. The identified pit meter installations will be completed by Argosy Construction Group Inc.

#### 12. How much will it cost to have a water meter installed in my home?

During the installation phase of the program, there will no charge to Grand Forks residents to have a water meter installed inside the home, as this project will be funded through the Federal Gas Tax Fund.

#### 13. Will citizens have a choice whether to have a water meter installed?

The residents can choose to have a pit meter installed at the curb but will have to pay the difference between the house install and the curb install. It is expected that most meters will be installed inside the house.

## 14. Will there be a limit on water rates and how much rates can increase over time?

Water rates will be discussed by council in 2016, after residents have had the opportunity to see how much water they are using on the "mock bills." That information will be used to develop a sustainable rate structure that meets the needs of our water system and our community.

#### Meter Reading and Billing

#### 16. How will my meter be read?

The meters are read by City staff with a handheld receiver or manually in some cases.

#### 17. What about the impact from WiFi in the meter?

It's expected that the meter will include remote (wireless) communication that uses radio frequency technology, the same technology that is used in other household appliances such as cordless phones, garage door openers, microwaves, internet routers and TV/VCR/DVD remote controls. Health Canada has determined that exposure to this level of radio frequency does not pose any health concerns.

#### 18. When will I receive my first bill?

Once water meters are installed, "mock billing" will begin. Water meters will track the amount of water you use and send a "mock" bill to show you how much water you use and how much it costs. During this time, you will continue to be billed at a flat rate and your water utility bills will remain the same as they are now.

#### 19. When will mock billing end?

Once the City has water use data from mock billing, they will be able to determine a more accurate estimate of just how much water Grand Forks residents are using. It is expected that Council will review the rates used for mock billing before it determines the final rate structure. It is estimated that once Council approves the rates, the "real" billing will start in 2017.

#### 20. What will the impact be on homes with swimming pools?

It may seem like swimming pools use a lot of water but remember, they are typically only filled once a year. Let's use Peachland as an example. In Peachland, the water rates are

\$0.30 per cubic metre (m3) of water. If the overall amount of water used during four months exceeds 400 m3, the rate increases to \$0.50 / m3. A large pool (30 feet by 50 feet) holds about 62,500 US gallons, or 237 m3, of water. The cost to fill this pool in Peachland would be \$71.10.

Grand Forks council has not yet determined its residential water rates and will set the rates after mock billing is completed.

## 21. I own a small business that uses a lot of water. Will I see a break in my costs?

Water meters have been used successfully in all of our local businesses and industries since 2008 to help them conserve and manage water use.

## 22. Our water used to be free and it won't be any more with water meters. Why? Despite the perception that our water is free, it has never been free of charge.

It costs money to build and maintain the system of pipes that bring it to your home, the electricity to pump the water from deep underground and to your home and to treat it to meet health requirements.

Currently, all homes pay the same for water, regardless of how much they use. With water meters, all homes will pay a flat rate to cover the cost of delivery and a variable amount based on the amount of water they use. That way, you can save money by simply conserving more, similar to your electricity or natural gas bill. If you leave the lights on constantly, you will pay more for power than a neighbour who shuts them off when not in use.

#### 23. Where do I find the Water Bylaw?

http://www.grandforks.ca/wp-content/uploads/bylaws/Bylaw-1973-A1-Water-Regulations.pdf

### 24. How can I find out more information about the project as it moves forward?

Watch for updates on our website, news releases, and notices in your utility bills as the process unfolds. You can also sign up for our water email updates. Simply email us at <a href="mailto:update@grandforks.ca">update@grandforks.ca</a> to have your email added and we'll keep you informed.

#### 25. Who do I contact if I want more information?

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