

Water Meter Replacement Project



The meter replacement project will include the installation of an unmeasured flow reducer (UFR), manufactured locally by A.Y. McDonald Manufacturing. The UFR allows measurement of flows below ¼ gallon per minute - such as leaks and drips - that have been previously unmeasurable, even by new meters. Dubuque will be the first city in Iowa to install UFRs. Pilot studies have shown an average increase of five to 10 percent of measured water for each UFR installed.

According to national research, 30 percent of households have water leaks (faucet, toilet, etc.). The new system will allow water customers to identify waste and consider corrective measures which will translate into smarter water use and increased energy savings for residents. As part of the water meter replacement project, the City is also creating a grant program for costs associated with repairing leaks identified by the new system. The City will budget \$10,000 annually in matching funds to fix leaks and reduce costs for water customers.

The City has contracted with Northern Water Works Supply (NWWWS) to install the new meters. All NWWWS installers have completed training and background checks and will have identification, wear identifiable uniforms, and drive marked vehicles.

The replacement of meters began in January 2010 and requires access to basements of homes and businesses where most of the meters are located. Customers will be contacted in advance to schedule appointments for replacement/installation. This project is being coordinated by the Water Department and Finance/Utility Billing Department. For additional information, visit www.cityofdubuque.org/watermeters or call 589-4144.

What is it?

By the end of 2011, each of the approximately 22,500 water meters in Dubuque will be replaced with new meters which will greatly increase metering accuracy and feature automated meter reading (AMR) abilities, eliminating the need to manually read each meter every month -- saving the City more than \$144,000 per year.

Why is my meter being replaced?

Water meters and their registers often lose accuracy as they age; therefore, they must be replaced every 15 to 20 years. In addition, the new system will include Automatic Meter Reading (AMR) technology that will save labor time, prevent recording errors, minimize wear and tear on vehicles, minimize the need for City employees to go on the private property of residents, and potentially allow water line leaks to be identified earlier by analysis of data collected. AMR technology will also streamline the process of transferring responsibility for an account when a customer moves in or out.



What does it mean for me?

The new system, an example of the City's ongoing sustainability initiative, will allow water customers to identify waste and consider corrective measures which will translate into "smarter" water use and increased energy savings. More efficient water use will also reduce the use of both energy and chemicals in treating and delivering water.

When will my meter be replaced?

The meters will be installed by geographic "zones" over the next 18 months. Customers will receive notification letters when it is time for them to schedule an installation appointment for their property.

What do I need to do?

This is a mandatory program. You will receive a letter asking you to schedule an appointment with Northern Water Works Supply (NWWWS) for your water meter replacement. Installation appointments will be scheduled in two-hour "windows" of time, such as 8-10 a.m., for example. A NWWWS representative will arrive during that time and will require access to the water meter inside the home or business. Each installation will take approximately 60 minutes.



Frequently Asked Questions

How does Automatic Meter Reading (AMR) work?

A small box, called a Meter Interface Unit (MIU), is installed on the exterior of your home. It is connected to your new water meter and transmits a radio signal to a data collector which relays the information to the City's Utility Billing Office. The system will provide hourly readings, but you will still be billed monthly.

What exactly will be installed at my property?

Two existing components will be replaced with new equipment. Your current water meter will be replaced with a new water meter including an unmeasured flow reducer (UFR) to more accurately record water use and assist in identifying leaks. Your existing water meter is connected to a component located on the exterior of your property. That component will be replaced with a radio frequency meter interface unit (MIU), which collects meter usage data and remotely transmits the information to data collectors. The MIU and water meter work as a unit to detect intermittent leaks, continuous leaks, reverse flow situations and zero usage situations.

What if there is a leak at the meter or any other problem after the meter is replaced?

The installer will explain procedures for problems prior to leaving your residence. An emergency number will be provided by the installer.

Can I cover up my meter after the install?

No. Access needs to be available at all times. Dubuque City Code requires that "all meters shall be installed horizontally between one foot (1') and four feet (4') above the basement floor. A suitable place shall be provided for the meter so as to keep it dry and clean and readily accessible at all times to the meter reader and inspectors of the City."

Is there any special care or maintenance that I need to do to my new meter?

No, your meter does not require any maintenance by the homeowner. As before, the City will take care of all maintenance; however, you should be careful not to damage the meter or allow it to freeze.

Will I pay more for water as a result of the change?

Your water rate will not change at the time the new meter is installed. Any future water or sewer increases/decreases will be the result of budgeting decisions.

Does this mean my bill will be increasing?

Not necessarily. In some cases, your bill may increase if your current meter is underreporting usage. Presently, the majority of residents are paying for the water they are actually using, while due to outdated technology, a few residents are only paying for a portion of the water. This condition is not fair to all customers. The new system will ensure fairness and equality for all the residents and businesses from this point forward.

Will the appearance of my monthly bill change?

Bills will change due to billing in gallons as opposed to units of 100 cubic feet (748 gallons).

What will be the timeframe for future bills?

Bills will continue to be generated monthly; however, the first bill after installation may reflect a longer reading period. This one-time occurrence is necessary to provide near real-time billing and to implement the automated meter reading technology.

How much will the system cost me?

There is no charge for installation, and this system does not increase the cost of water service to you. Automatic Meter Reading (AMR) is designed to help control costs by increasing meter reading accuracy and efficiency.



How accurate is the system?

Meter readings obtained over radio frequency transmissions are 100% accurate.

How often will you read my meter?

The radio frequency can provide as many as 24 reads per day, which is hourly. However, you will still be billed on a monthly basis.

Does Automatic Meter Reading (AMR) have any other benefits for me?

Yes! Automatic Meter Reading (AMR) will allow us to detect possible leaks in your plumbing faster and notify you of problems before they become serious...and costly. We'll eliminate the need for manually reading meters monthly. Accuracy will improve. In addition to speed and reliability, we won't have to enter your home, except for periodical maintenance or replacement of system components, when needed. Monthly reads at your residence will not be required.

Will I be able to read my own meter?

Yes, the new meters will have a digital display so meters can be read manually. Shine a light on the meter to activate the LCD readout. It will show a meter reading and then, after six seconds, it will show the rate of flow. A flashing faucet icon on the readout represents an intermittent leak. A constant faucet icon represents a constant leak.

How is this project being funded?

Funding for this \$8.7 million project is provided by a \$7.7 million State Revolving Fund (SRF) loan and a \$1 million American Recovery and Reinvestment Act (ARRA) forgivable loan.



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