

Village of Weston

Automated Meter Reading with Advanced Metering Infrastructure Project (AMR/AMI)

and

Cross Connection Control Inspections

- **Why is Weston replacing water meters?** The Public Service Commission of Wisconsin requires utilities to maintain meter accuracy standards by testing or replacing meters at specified frequencies. Weston qualifies for a 20-year meter replacement program on 1” and smaller meters. (Wisconsin Administrative Code, PSC 185, Subchapter VII – Meter Testing).
- **Is other work being done? Yes**, in addition to meter changes, Weston Utilities will also be performing the following work:
 - Cross connection inspections as required by the Department of Natural Resources based on the level of risk associated with different types of customers. (Wisconsin Administrative Code, NR 810.5).
 - For residential customers an inspection is required once every 10 years or on a schedule matching meter replacement.
 - Installation of Automated Meter Reading (AMR) “smart points” to enable meters to be read from a central location on demand.
- **What do the meter and “smart point” look like?** The Utility is installing Sensus iPERL meters for all applications needing a 1” or smaller meter. The Meter Interface unit (or smart point) will install over the existing touch read pad on the exterior of your home or building.



iPERL Meter



Sensus Meter Interface Unit (MIU);
a.k.a. “smart point”

- **Who will be completing the work?** The Utility has chosen to partner with HydroCorp, a company which specializes in cross connection control inspections and execution of meter change out programs. HydroCorp is working under the authority of Weston Municipal Utilities for this project. HydroCorp employees will be carrying identification badges for customers to be assured who they are.
- **How do customers schedule their appointments?** Customers will be receiving a mail notice from HydroCorp that will include a telephone number and website link with instructions about scheduling their appointment.
- **What is the notification process?** Notices are being mailed to customers in a systematic progression throughout the Utility's service area.
 - If the initial notice is not responded to within 2 weeks, a second notice will be mailed.
 - If the 2nd notice is not responded to within 2 weeks, a shut-off notice printed on pink paper will be posted at the premises. The Utility will also attempt to contact those customers by telephone.
 - If there is still no response, water will be shut-off between 11 and 20 days after the posting. Shut-off can be avoided by simply scheduling an appointment to allow the Utility/HydroCorp access to the premises to complete the necessary work.
- **My neighbor received a notice but I haven't? When will I receive a notice?** The date you receive a notice may not match up with your neighbor's for a couple of reasons.
 - If your home or business has an older meter with no "smart point," you will be having a meter change, "smart point" installation and cross connection inspection. For recordkeeping your notice will identify you as being in a QUAD with a number.
 - If your home or business already has the new meter, either with or without a "smart point," you will have a "smart point" installed or an existing "smart point" re-programmed in addition to a cross connection inspection. For recordkeeping your notice will identify you as being in an AREA identified with a letter.

The difficulty in predicting when customers will receive notices is due to the work in QUADS vs. AREAS progressing at different rates and the response rate from customers. The Utility's best guess of first notice and start of work is shown on the QUAD and AREA maps. www.westonwi.gov/QUAD and www.westonwi.gov/AREA.

- **Are customers required to allow utility representatives access to their premises? YES.**
 - **Your terms of service with the Utility require that a Utility representative be provided access to the water meter upon reasonable notice and to verify the safety of the public water supply. (Wisconsin Statutes 196.171(1)).**
 - **Failure to comply with the Utility's attempts to gain access to your premises can result in the Utility turning off water service until you comply (PSC 185.37(2)(f) and (h) for the purposes of this project). HydroCorp and the Utility have included this information in the notification letters to emphasize the necessity of scheduling an appointment to permit the project to be completed in as short of a time frame as possible.**
 - **Please be aware it is not the Utility's desire to disconnect any customer's service, but completing the project within the estimated budget depends on the work being completed on time.**

- **What are my obligations to the Utility?**
 - Allow the Utility or its representative access to your property to perform a cross connection inspection, replace the water meter, and/or install a meter smart point.
 - Have someone over the age of 18 present at the time of the inspection and installation.
 - Make sure your water meter is accessible.
 - Make sure your water meter has working shut-off valves on the inlet and outlet sides.

- **Can I elect not to have a radio unit (smart point) installed at my home?**
 - **NO.** The utility is implementing Automated Meter Reading to improve its ability to read meters and provide access to information from the meters to all customers.
 - The Utility is not offering customers the option to eliminate the smart point (radio box) at their home or business. If such an option were to be considered, the Utility would seek a special tariff from the PSC for continuing to read those meters manually. The tariff would reflect the estimated actual cost to accomplish these readings and billings. The Utility estimates this would be between \$25 and \$45 per reading, in addition to any other charges for water and sewer usage.

- **Will the Utility be able to turn-off my water service remotely after this project is completed?**
 - **NO**, the technology being installed does not include the ability to turn off a customer's water remotely. The Utility is still subject to the provisions of PSC 185 before turning water off. Those provisions require advanced notice and offering repayment arrangements to customers before disconnecting service.

- **Will the Utility share my water usage information with 3rd parties with the new technology?**
 - **NO**, by law, the Utility is not allowed to share a customer's information including billing and consumption history with 3rd parties without the customer's authorization.

- **How does this project improve my level of service?** The Utility currently reads meters and sends bills for its 5,300± customers on a staggered quarterly basis, such that roughly 1/3 of customers are read in each of 3 consecutive quarters on a rotating basis through the year. The Automated Meter Reading system and the Advanced Metering Infrastructure will:
 - Eliminate the need for an employee to travel to a customer's premises to make meter readings on regular quarterly intervals and for "special reads."
 - Allow the Utility and the customer to access information about their water usage, providing consumption of amounts as low as 1 gallon over time intervals.
 - Allow the customer and the Utility to catch leaks which could go undetected for as long as 90 days under the current quarterly billing frequency. (See the leak example discussed below)
 - The AMR/AMI system will allow both the Utility and the Customer to drill down to see when water is used at a home or business and help determine the cause.
 - The AMR/AMI system will make it economical for the Utility to change its billing cycle from quarterly to monthly, like other utility bills and, the majority, of other bills received by customers. This will result in a more manageable level of a bill

Leak Example: The utility often receives customer calls questioning the validity of meter readings and doubting that the indicated volumes of water metered could possibly have been used. A leak as small as 1 cup (1/16 gallon) per minute amounts to 90 gallons per day or 8,000 gallons in a quarter. Small leaks like this are difficult to detect, but can commonly occur in a toilet tank. At the current, lowest, residential rates this translates to \$16.00 for water and \$24.00 for sanitary sewer on a quarterly bill.

- **Is the radio reading technology safe?**

- In the interest of transparency, the Utility recognizes there are many sources of information claiming the radio transmission of meter readings is either harmful or harmless. People are exposed to radio waves from sources voluntarily implemented (e.g., microwave ovens, cellular telephones) and involuntarily implemented (e.g. radio meter reading, FM radio and TV signals). A report from the Environmental Defense Fund indicates the exposure to radio frequencies from smart meters 3 feet away is between 250 and 1,250 times less than holding a cell phone to a person's ear, assuming the smart meter is transmitting continuously. When the distance is 10 feet the exposure essentially drops to zero. The reality is that smart meters only transmit for a few seconds each day. Follow this link from the Utility's meter technology provider, Sensus, to the Environmental Defense Fund report: <http://go.sensus.com/rs/306-CJR-109/images/EDFFactSheetSmartMeters.pdf>
- Additional resources are linked to the Sensus site at <https://sensus.com/rf/>
- **The Utility concludes that this technology is safe.**

- **How much do I need to pay for the work being done?**

For situations where a customer's plumbing is sound condition and complies with Utility and plumbing codes, there is no cost to customers. However, some unforeseen issues can arise.

- All customers are responsible for the plumbing beyond the curb stop (shut-off valve on the utility service near the street right-of-way line) into and throughout the home or business. The only exception to this is the meter itself. If the valves on either side of the meter are not in good working condition or even if they break, the customer is responsible for any costs to repair or replace those components. HydroCorp and Utility technicians are careful when working on customers' plumbing, but some problems do occasionally arise.
 - **If the technicians see a problem with the plumbing of your meter setting, they may require you to replace components and re-schedule your appointment.**
 - **If work is performed and a valve is broken, the Utility may replace it at their discretion and bill the customer the cost of a replacement valve. This may also involve advising the customer of the need for further work, but avoids your being without water.**
- Customers are responsible for plumbing changes and/or any devices required to comply with cross-connection regulations. The only exception is the vacuum breakers being provided by the Utility.

- The Utility is within its authority to charge customers for re-connection (turn on of water) following a turn off situation. For situations arising in response to this meter replacement and cross-connection project, the Utility is not charging this fee which is \$45.00 between 7:00 AM and 3:00 P.M. weekdays and \$60.00 during other hours and non-business days. The Utility will waive this charge during normal business hours for any plumbing work to repair meter valves or install cross connection devices through May 31, 2018, or the conclusion of the project, whichever is later.
- **What is a cross connection?** A cross connection is a pathway for water from a non-potable (undrinkable) location to the potable water inside the pipes in your home or the public water supply. Cross connections can allow water from the non-potable source to flow to the potable system by higher pressure or siphoning.
 - Most cross-connections at residential properties are relatively minor. A common cross connection situation is created simply by having a hose attached to a faucet with the other end placed in a sink or drain. These are corrected either by eliminating the hose or with simple devices called vacuum breakers (which are furnished by the utility during the site visits).
 - The Utility has purchased a quantity of vacuum breakers for residential customers to install on their interior and exterior hose bibbs. To avoid causing any damage to your private plumbing, HydroCorp does not install these devices. Customers are advised to install these devices to protect the water supply inside their own home as well as the public water supply.



○ Exterior Hose Bibb Vacuum Breaker



Interior Hose Bibb Vacuum

- **I already had my appointment and I have been notified that there is a cross connection violation, what should I do?**
 - There are some more hazardous situations that require devices other than vacuum breakers. HydroCorp will inform the customer of the specific device(s) or measures needed to comply with Wisconsin Plumbing Code (SPS 382). The Utility advises customers to work with a plumbing professional to complete any required corrective measures, other than vacuum breaker installation.
- **Who should I call if I have questions about cross connections and compliance?**
 - The Utility has partnered with HydroCorp for this work because of their expertise and knowledge of cross-connection compliance needs. HydroCorp Technicians are providing an informational brochure to all customers during their inspections. Any further questions regarding compliance, required devices, required corrective work, etc., should be addressed to HydroCorp at 800-315-4305.
- **How much time will I be given to comply with a cross connection violation?**
 - Customers will be given 30 days to comply and must schedule a follow-up inspection, to verify they have achieved compliance, once they have completed the required work. HydroCorp will send customers a separate notice to schedule this appointment.

Additional Information

- The following link takes you to the PSC's Construction Authorization docket for the Utility's project:
http://apps.psc.wi.gov/vs2010/dockets/content/detail.aspx?dockt_id=6420-CW-105
- See the Village of Weston website information at:
<http://westonwi.gov/CivicAlerts.aspx?AID=193>
- See November/December issue of "The Wire" newsletter at
<http://westonwi.gov/DocumentCenter/View/3946>
- The Utility has also been routinely and repeatedly publishing notices on social media sites, "Facebook" and "Next Door."