City of Bellaire

Water Meters

The City of Bellaire utilizes an Advanced Metering Infrastructure (AMI) water meter system. This reliable and proven technology allows us to provide more accurate reads and better customer service than with an analog system utilizing monthly manual reads and it supports our water conservation efforts in the community.

AMI System

The system consists of a small, low-power radio frequency transmitter integrated into the register which is connected to your water meter. It sends readings to a network of receivers throughout the city. These receivers provide all relevant billing information and eliminate the need for water meter readers to go door-to-door on a monthly basis to manually take a meter reading. The AMI system provides automatic meter reading as well as more accurate and responsive water consumption information to assist the city and customers in managing water use. With the AMI system the city receives multiple reads per day instead of a single read per month. The frequent reads can help identify abnormal water use such as a leak.

Safety

There is no personal data transmitted, only the meter read and the transmitter number. Once received by the city, this data is paired with your billing account information and processed to create your bill.

The Meter Interface Unit (MIU) transmits a signal for only a few micro seconds at a time, throughout the day. The radio frequency that is transmitted is significantly less than many other devices that you may
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have in your home. These can include wireless routers, laptop computers, televisions, and cell phones. Radio frequency exposure is very low, much like that of AM or FM radio broadcast signals. The device installed at your home is the Neptune R900, which has been in production since 1999. Over 9 million of these devices are deployed on water meters today, throughout North America. The transmitting devices operate in compliance with FCC 47 CFR Part 15 regulations, which require coexistence with other Part 15 certified devices.

Reading Your Water Meter

The city pulls reads from your meter for billing purposes, but should you wish to monitor your own consumption, here’s how:

- Your meter is located inside an in-ground utility box. Typically, the box is in your front yard near the street with a removable plastic lid.
- Once the box lid is removed, you will need to open the register lid on your meter.
- Continually shine a flashlight over the solar panel (located on the register) to activate the LCD display.
- Take a reading at a set time of the day.
- Take a second reading at the same time the next day.
- The difference between the two readings is your daily water consumption.

Note: When the register display is first activated with a flashlight, all icons will be briefly displayed followed by internal software information. The register display will then toggle (every 8 seconds) displaying the meter reading - measured in gallons - and then the flow rate – measured in gallons per minute (GPM). When the display indicates “RATE”, the flow rate is being displayed.
Leak indicator
Circled in yellow on the left

- Off – indicates no leaks
- Flashing – water usage for more than 50% of the time, may indicate a leak
- Continuous on – there is most likely a leak in your home

Flow indicator
Circled in red on the right

- On – water in use
- Off – water not in use
- Flashing – water is running slowly
- (-) – indicates reverse flow
- (+) – indicates forward flow