

ADVANCED METERING INFRASTRUCTURE (AMI)



ABOUT AMI

Advanced Metering Infrastructure (AMI) is a system of electronic water metering which records hourly meter readings and uploads them to cloud storage, where the information can be accessed by the sanitary district and the customer. This is an upgrade from our current Drive-By Advanced Meter Reading (AMR) system which requires District staff to drive by each meter to pick up a single monthly meter read.

HOW DOES IT WORK?

- For about 98% of our customers, the existing AMR Meter Transmission Unit (MTU) on your water meter will be replaced with a new Master Meter Allegro™ MTU. The MTUs collect hourly water consumption information and sends it twice per day to a Data Collection Unit (DCU) via radio frequency transmission. The MTUs also send leak alerts upon detection of a suspected leak.
- About 2% of our customers will receive a new meter fitted with an AMI MTU. Most of these whole meter replacements will apply to commercial customers with larger meters sized 1.5 - 6 inches.

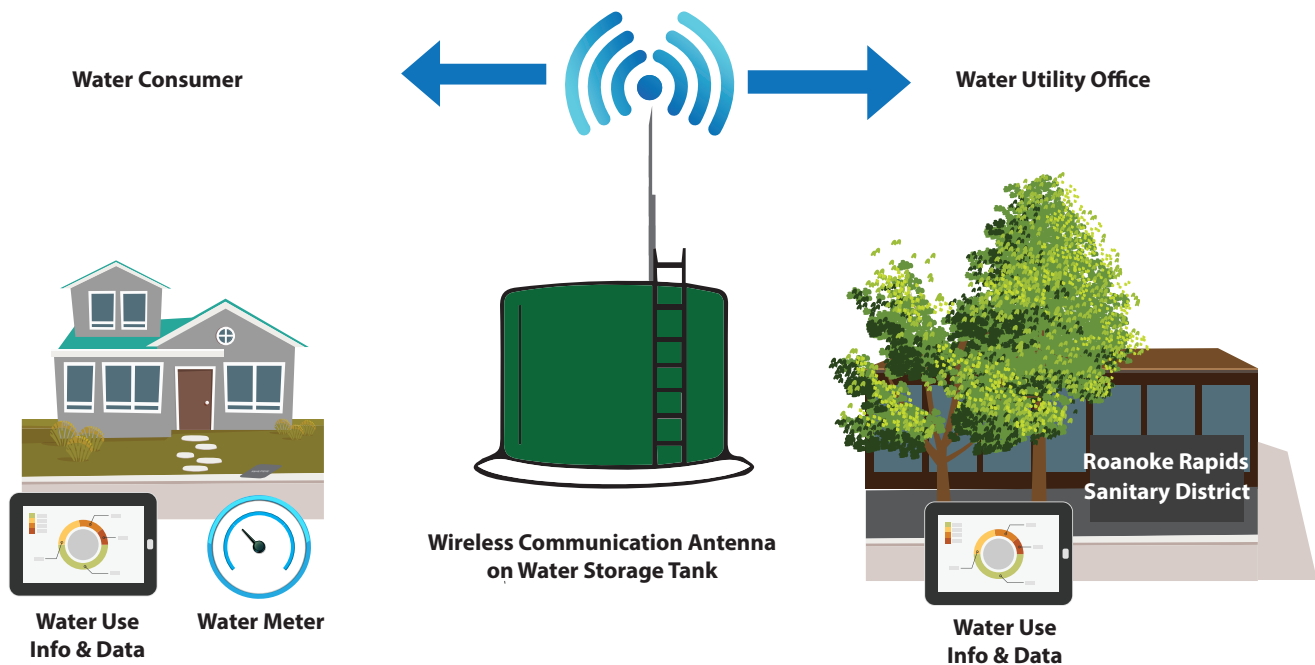
- Data Collection Unit (DCU) antennas will be installed at several existing District facilities to collect transmissions from MTUs in the surrounding area.
- Water consumption data and leak alerts from the DCUs are sent to us for billing purposes and to provide leak notification to customers.

BENEFITS OF AMI

Increased Leak Detection – Leaks are expensive and a waste of precious resources. A small toilet leak can waste thousands of gallons over a month if left undetected. AMI can detect leaks daily which leads to faster leak detection and customer notification.

Learn how/when you use the most water – Once the AMI system's online customer portal is available, you can see how much water you are using hourly, daily and monthly! A great way to see if you have a misbehaving irrigation timer or to investigate a high bill.

Better control over your bill – You will be able to set customized alerts via the customer portal when you reach a certain amount of water used or if your bill is forecasted to exceed a set amount.



FREQUENTLY ASKED QUESTIONS

Why is the District installing AMI?

Two core District values are customer service and environmental stewardship. Installation of AMI will allow us to provide a higher level of customer service by providing almost real-time leak detection and high usage alerts and tools for customers to better manage and understand their day to day water use. Earlier leak notification will reduce water waste and help protect our water supply.

Is AMI safe?

Yes, our AMI system exceeds all health & safety standards set by the Federal Communications Commission (FCC). The radio frequency (RF) energy emitted by the AMI Meter Transmission Units (MTUs) is much less than other common household devices such as microwaves, televisions, cellular and cordless phones, and Wi-Fi routers. In addition, RF energy exposure from AMI is reduced further due to the location of the meter (typically near the street) and the very brief period of transmission (less than 1 second per day).

Is AMI data secure?

Yes. Our AMI system transmits on a private FCC-licensed channel that can legally only be used by the District. For additional security, the system uses end-to-end encryption and only transmits non-personal customer data such as the meter identification number and water consumption data. Personal customer or account information is not transmitted.

When will my meter be upgraded?

The metering system upgrade will begin in January 2021 and is projected to end in 2022.

Who will be performing the upgrade?

RRSD staff will replace existing MTUs with new AMI MTUs. Complete meter replacements will be performed by District staff also. All RRSD employees will be in marked vehicles, wearing uniforms and carrying identification. They will not be asking customers for information or making customer contact.

Will you need to turn off my water?

The vast majority of customers are only having their existing MTU replaced and will not need water turned off. If your service is scheduled for a complete meter replacement, which will require water to be turned off, the District will contact you prior to replacement.

How will I know that I received the AMI upgrade?

You can see if your meter has already been upgraded by lifting your meter lid and taking a look. If your meter read is shown on a digital display, it has been upgraded.

When will I get access to the online customer portal?

We anticipate launching the online portal in 2022 and will notify customers once it is available. In the interim, District staff will monitor the system daily and provide leak notification to customers.

Will this affect my bill?

If you are only having an MTU replaced, the upgrade should not affect your bill as the mechanism for measuring water flow through the meter is unchanged. The only difference is that the meter reads will be automatically transmitted to the District. As meters age, their accuracy begins to decline and they under-measure water use. The new meter will accurately reflect your consumption. If you have any questions about your bill, please contact us.

How is this project funded?

This project is funded through fees charged through District rates.

Who do I contact if I have more questions?

You can check our website at www.rrsd.org which has additional information on the project. Or, you can call us at (252) 537-9137.