The District has embarked on a water meter replacement (WMR) program to replace existing water meters that are 20 years and older. The goal of the WMR program is to replace over 3,600 water meters within the District that were installed before 1996. This meter replacement is expected to be completed in four (4) years or by June 2016.

The District will re-assess the program to determine the next set of meters that will be replaced, after the initial four year replacement period is completed in 2016.

The District will be replacing the old water meters with a new meter that employs the latest technology to measure water flow without moving parts within the water meter. This translates to higher durability, minimal wear on the meter and increased accuracy to measure water flow.

**What is the purpose of a water meter?**

To measure and track the amount of water delivered through the water distribution system. More importantly, a water meter registers the amount of water delivered to a customer so an appropriate bill for that water can be charged. That charge determines the amount of revenue the District receives.

Water that is not registered through inefficient meters is considered "lost water" or unaccounted for water. A goal of the WMR program is to account for all of the water that is dispersed through the District’s distribution system.

Lost water has a fiscal impact on the District because lost water does not generate revenue but still costs the District to pump, purchase, treat, and distribute the water and thus the ratepayers ultimately have to pay for it.

**How will the water meter replacement program help with "lost water"?**

The American Water Works Association (AWWA) sets guidelines for water system audits to minimize lost water. Among benefits of a strong water loss control program is that it produces fiscal benefits by optimizing revenue recovery and promoting equity among ratepayers.

The District is a member of the California Urban Water Conservation Council (CUWCC) and one of its Best Management Practices (BMP’S) for conserving water is to institute a water loss control program.

The goal of the program is to reduce the annual percentage to at least 7% to 8% per year. Currently the District operates at nearly a 10% lost water per year. The WMR program will be
a key element in reducing the District’s lost water percentage, thereby saving money and bringing cost equity to rate payers.

**How long does a water meter last?**

The existing water meters are mechanical devices and retaining their overall accuracy depends on many factors, such as the quality of the water being passed through the meter, the rate of flow and the total quantity of water that has been measured over time.

Various conditions that water meters are exposed to prevent any exact time frame for water meter deterioration due to differences in water chemical composition, temperature and humidity.

Most studies that have been performed by the water industry have concluded that residential meters should be replaced after 15 to 20 years.

At this age the accuracy would have diminished to the point that the cost of meter replacement is less than loss of revenues with continued use of the old meter.

**Why does the accuracy of a water meter diminish?**

A water meter like any other mechanical device is subject to wear and deterioration over time. The deterioration would be accelerated by poor water quality such as corrosive or abrasive water.

Water meters can over register but this rarely occurs because wear on internal meter parts generally causes lower measurements. It can be assumed that after a certain age the inaccuracy of the meter due to deterioration becomes an economical liability.

The potential for revenue loss can be staggering if the system has a large number of meters significantly under-registering. A comprehensive meter replacement program not only benefits the water distributions system by creating a more efficient operation but allows the District to maintain the lowest possible water rates.

**When will my meter be replaced?**

The District will begin the meter replacement program in October 2012. The oldest meters from 1970 to 1976 will be replaced first. The District currently has approximately 8,170 meters of which 3,600 are 20 years or older. At a rate of about 30 per week, it is expected to take four (4) years to finish replacing the first group of 3,600 meters.

**What happens when my meter is replaced?**

A resident will be notified in writing from the District at least two (2) weeks prior to the replacement of a customer's meter. Prior to the installation, the meter box will be cleaned and inspected. If you are home on the day of the replacement, a District representative will inform you before work begins and let you know that your water service will be interrupted for approximately 15-30 minutes.

Upon completion, the District representative will let you know that your service has been restored. If you are not home, a representative will leave a door hanger that will let you know that the work has been completed and provide additional information about your new meter.

As in most construction projects, the work will create a certain amount of unavoidable public inconvenience. Your cooperation in making this project successful will be greatly appreciated.

If you have any questions or comments concerning this program, please contact the District office at (818) 248-3925.
WATER METER REPLACEMENT PROGRAM

Frequently Asked Questions & Answers

Q: Why is CVWD replacing the water meter?
The District has begun a water meter replacement program for those water meters that are over 20 years old and have reached the end of their useful life. Water meters typically have a useful life of 15 to 20 years. The mechanics of a water meter slow down over time due to age and wear which results in the water meter not registering water usage accurately.

This is a long-term project and will be on-going over the next four (4) years. There is no charge to CVWD water customers for the meter replacement and work is being performed as part of CVWD's routine maintenance schedule.

Q: Where is the water meter?
All meters are below ground in concrete meter boxes with lids. Meter boxes are typically located near the sidewalk or curb at the front of the house.

Q: What does the water meter measure?
Meters are mechanical devices that record the volume of water passing from District water supply lines to your property. The register on the meter is similar to a car odometer. Just as a car's odometer will not progress if the vehicle doesn't move, the numbers on a water meter register will not move unless there is water flowing through the meter.

Q: How is the water meter read?
Meters are read manually by meter reader professionals who take great pride in accurately reading the usage indicated on the meter. Meter readers are equipped with a handheld device which allows the meter reader to enter the reading found on the meter. As an accuracy measure, the device is not equipped with the previous reading of any meter. The property's usage is later calculated in the office when the readings are downloaded to the District's billing system.

Q: Are the new meters the same as the ones being replaced?
No, the existing water meters which were mechanical devices will be replaced with a new Magnetic (MAG) meter that employs the latest technology to measure water flow without moving parts, which translates to higher durability, minimal wear and increased accuracy to measure water flow.

Q: Is this an Automated Reading Meter (AMR) system?
No, not at the present time. The new water meter has the ability to record and store water usage data up to 30 days and can be retrieved by connecting to a laptop computer to the meter to extract the data, but there are no signals being transmitted. The new water meter has the ability to be upgraded in the future when CVWD makes the decision to invest in a District wide AMR system for all District water meters.

Q: Will the District be able to identify if I have a leak?
No, leaks can only be determined when a District service person has been dispatched to the service address to inspect the meter. The customer is responsible for all piping and leaks on the customer's side of the meter.

Q: Will my water bill increase?
As meters age, they tend to run slower and may not measure all the water passing through the meter. The new meters will simply record consumption more accurately and depending on the age and accuracy of your existing meter, you may experience higher consumption due to the accuracy of the new meter.
Q: Will my water service be interrupted during the installation?
Yes, there will be a temporary service interruption for typically 15 to 30 minutes while the
meter is replaced. CVWD will send a notification letter to your residence at least one week
prior to the installation. A CVWD representative will attempt to contact each resident on the
day the new meter is installed.

Q: Do I need to be home for the meter replacement work?
No, you don’t need to be home. A CVWD representative will leave a notice at your door after
the work is completed.

Q: What should I do after the new meter is installed?
You should take this opportunity to check around your property for leaks. Dripping faucets,
toilets that leak, and dripping hose bibs have the potential to use a lot of water. You may also
want to check your sprinkler timers to be sure you are not over-watering and test each station
to see if sprinkler heads are missing or clogged as this too can waste water.

Q: What's involved in replacing the water meter?
When a CVWD representative arrives at your home or business to change your water meter
this will require your water service to be off for approximately 15 to 30 minutes. The process
is simple: your service is turned off, the old meter is removed, the new meter is installed, and
then your water service is turned back on. A CVWD representative may turn on an available
hose spigot to release air from your water line, and will notify you once your water service
has been restored, if you are at home. Otherwise, the CVWD representative will leave a door
hanger notification that the water meter has been replaced.

Q: How will I know the person installing the meter works for CVWD?
All CVWD representatives wear uniforms, drive a District vehicle with the CVWD logo and
carry picture identification badges. If you have any concerns about the person doing the
work, please contact the District Office at (818) 248-3925. CVWD representatives will not
ask to enter your house.

Q: What about the plumbing from the water meter to my house?
The customer is responsible for the repair of defective plumbing or deteriorating pipes on the
customer side of the meter. When such conditions prevent the meter replacement, the
customer will be advised of the repairs needed.

Q: How will I know if my meter was replaced?
CVWD will leave a notification at your door that the water meter has been replaced.

Q: What powers the water meter?
The meter is powered by a battery and the expected life of the battery is 20 years which
coincides with the expected life of the new meter.
How to Read Your New Meter and Check for Leaks

Water Meter – Starting Read at 9548.10

Water Meter – End Read at 9550.65

(9550.65 – 9548.14 = 2.55)

2.55 gallons passed through the meter

Leak Detection - Far Right Digit = 1/100th of gallon of water going through the meter.

If this digit is moving while all indoor and outdoor water is off, then there is a leak.