

## Reading your Water Meter

*“What is not measured cannot be improved”*

It’s a good idea to learn how to read your water meter. Aside from checking the accuracy of the meter readings we use for billing, you can use your water meter to check for leaks in your plumbing and find out how much water it takes to water plants, wash clothes, shower, etc. You may be surprised by how much, or how little, some things use.

1) First, locate your water meter. If you already know where it is, skip to the next step. Your meter should be in a box that’s more or less buried, with a flat rectangular top that’s a couple of feet long. I’ve included some pictures to help you recognize water meters. If you are lucky, your meter is in front of your house near the road. But your meter could be in your driveway, your neighbor’s driveway, next to your house, on a different street, or some other hard to find place. Meters for homes on Austin Creek Rd. are the hardest to find. There is no water line under Austin Creek Rd, so those homes are supplied by the water line that runs under Silvia Dr. Some of these meters are on the property of homeowners on Silvia Dr. Sometimes two meters will be side by side, and it may not be obvious which one is yours and which is your neighbor’s. If it isn’t obvious where your meter is, send me an email and I will help you find it.



*Water meter boxes in the wild*

2) The next step is getting the top off the meter box. The lightweight plastic tops are easy to get off, the heavy cement ones are not so easy. There should be a hole near the edge. You will need to hook something in the hole to lever the top out of its seat. A big screwdriver works, but if you have something with a hook on the end that might work better. Be careful not to drop the top on the meter, it could break. Also, be prepared for bugs, especially wasps. Once you get the top unseated, lift it up and put it to its side.



*Getting the cover off the box. Watch your fingers and watch out for critters*

3) If you opened the right box, there will be a water meter inside, although it may be buried in dirt. It is not a bad idea to remove some of that dirt. There are two shutoff valves, one on the water company's side of the meter that can be locked and the other on your side. Someday you might want to get to those valves in a hurry, and it will be easier if they aren't buried. There is a protective cap over the meter, which flips open.



*Inside the box. You never know what you will find inside!*



4) Now you are ready to read the meter! At this point, I recommend you use your smartphone (if you have one) and take a picture of the meter. It is easy to read a water meter, and it's also easy to read it incorrectly. If you have a picture, you can take your time and you also have a permanent record. Check the picture to make sure you can read all the numbers and the position of the red needle on the dial. Feel free to send me a picture of your meter, I will add it to my collection.

5) All our meters are read basically the same way, but there are some differences. They work like the old mechanical odometers in cars. The first digit is for millions of gallons, and the last is gallons. However, the last digit doesn't move, it's just a zero printed on the dial. To get the actual gallons digit, look at the red needle. One spin around the dial is ten gallons. The numbers on the dial are gallons and the tic marks between them are tenths. The first dial shown below is easy: 1,020,245.4 gallons. Notice the little red triangle to the left of the needle. That's the low flow indicator, useful for seeing if you have leaks. If there is even a little bit of flow through the meter the triangle will spin around. Now look at the second dial, does it read 827,788.5? No! the correct reading is 827,778.5. The digit for tens of gallons is creeping from 7 to 8, and until the needle gets to the top of the dial it is still a 7. This is a difference in brands, because the Recordall meter on the left doesn't show the same "digit creep".



*Two brands of water meters, your mileage may vary.*

In this picture of the same Sensus meter, the creep of the tens digit is more obvious because the 2 is still clearly visible. The hundreds digit is also showing a little bit of creep on its way from 9 to the 0. If you see a number that is starting to roll, the number on top is the correct one. That's usually the smaller number, unless it's a 9 rolling over to 0.



6) The number of gallons shown on your meter is how much water has been used since the meter was first used. To find out how much water you used over a given span of time, you need to take one reading at the start and another at the end and subtract the first from the second.

You may be wondering about the accuracy of our water meters. They are usually not bad, although as they get older, they tend to slow down (underread). Their accuracy also depends on how fast water flows through them. If you want to find out if your meter is accurate, use a bucket or tub to measure a few gallons of water from a faucet or hose bib while watching your meter. I have one that holds about 3 gallons that you are welcome to borrow. A professional test of a water meter checks accuracy at different flow rates, but the bucket test is a good start.

I hope this guide is helpful to you. It's based on the best of my knowledge and unlike guides I found on the internet, it's geared specifically to the types of meters we have. However, I make no guarantees. I'm providing this document as a service to Austin Creek Mutual Water Company, free of charge. I give no warranty and accept no responsibility or liability for the accuracy or the completeness of the information in this document.

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