



To Meter or Not Meter: That is the Question

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Most public water and sewer systems in the U.S. are metered. That is, customers pay fees based upon the metered volume of water or sewer service they receive. However, some systems, particularly the smaller and more rural ones, do not meter for their service. Instead, they charge customers a flat fee or bill them through property taxes.

Generally, unmetered systems “graduate” to metering at some point in their maturation. The decision of when to graduate should be based upon several important factors. Perhaps the easiest way to determine when a system should graduate is to know when it makes more sense to not graduate and remain unmetered.

Not metering makes the most sense when most of these conditions exist:

- The system is small and probably serves fewer than 100 users.
- It is fairly new and watertight so little volume is lost to leakage.
- The source water requires little or no costly treatment.
- All users are very similar, probably residential of about the same family size with no industrial or large commercial users.
- All the users draw on water and sewer services in about the same way.
- There is a functional “peer pressure” system in the community that serves to encourage those who otherwise would waste or use lots of water to conserve.
- The water supply is adequate to handle some wasteful or excessive use.
- Although the system is well-run and maintained, the rates are relatively inexpensive, probably below \$15 per month or about 0.3 percent of the median household income. For a community that averages \$30,000 in household income per year, the monthly water or sewer bill would then be \$7.50 or less.

Like a Kid in a Candy Store

A water system can be likened to a candy store. The normal business model for such a store is basically this: Customers browse the merchandise. They bring their purchases to the counter. A clerk totals the sale, and collects payment based upon what the customers buys. There is a cost to the checkout process, but that process equates the volume and value of each customer’s purchase with their payment. The storeowner may suffer some petty shoplifting, but wholesale theft is unlikely. This model keeps control

of the operating costs in the hands of the storeowner, a necessary step if risks are to be managed well.

This candy store owner could also choose a different business model to avoid the checkout cost. The owner could take monthly flat fee subscriptions from customers to shop at the candy store as often as they like, taking as much candy as they like each time. While the checkout costs have been eliminated, loss of product, a major operating cost, is a very real concern.

Without the price signal to cease taking candy, some customers would be wasteful. The storeowner could raise the subscription price to cover excessive use by some customers. However, the stereotypical “little old lady, widowed, on social security” who just wants one to two pieces of candy each month will have to pay the same fee as the customer who takes candy by the bagful everyday.

Water, at least in the eastern U.S., is free. As long as you can find access, you take a bucket to the river and dip out all you want. But, if you want it pumped out of the ground or the reservoir, treated, stored, and piped into your home ready to use whenever you want, that will cost you. If a water or sewer system is to remain financially sound, it usually needs to meter the volume of service it provides to each customer.

What should your system do now?

If your system is unmetered, but it doesn’t satisfy most of the criteria listed at the beginning of this paper, you should find help to get meters installed and to place a metered water and sewer rate structure into operation. This is a larger task than it would appear because you would be moving your business model to a much higher level of operation. Fortunately, many assistance providers, such as Rural Community Assistance Partnership, Rural Water Associations, private consultants, engineers, and others can help you do that. Contact a service provider and be careful to get the assistance required to make this change successfully.

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