

GOOD FINANCIAL MANAGEMENT IS THE KEY TO SUCCESS\$

How are your financial skills related to managing your public water supply system? Sound financial management will either make you or break you. Cities can have some advantages over RWDs, in some respects, since they have other sources of income to rely upon, such as tax revenue, and sometimes other revenue streams such as electricity sales, which I have found to be generally profitable.

I am often amazed when I ask managers what the system's cost of water production are and how they arrived at the number. Most cannot even give me a number, much less explain how they arrived at it. My next question is how anyone determined the current water rates. I get it. When I first became involved in city management, I too, couldn't tell anyone what those

numbers were. Charged with the task of managing, however, the costs should be understood. And system managers, clerks, RWD boards and city councils ought to know what their rates and why they are at the level they are, and the methodology that was used to develop them. The customers deserve such information.

I recall instances where city managers use reserves from the electric fund or the general fund to cover any shortfalls in the water department. This seems to be poor management. In my opinion, each department should stand on its own. A RWD doesn't have that crutch since they have no other way to generate revenue beyond its rate structure.

I've seen systems increase rates purely on emotion and just because

they have not had an increase for a while. Or they raise rates just because everything else is more expensive. Or they try to set rates after checking what neighboring communities are charging. Rates are going to be system specific and should be based on the costs to operate the utility.

The first thing I like to do when assisting a public water supply system with its rates is to evaluate current rates versus production costs. For that, I like to use the past three to five years' worth of expenses and the amount of water produced in each corresponding year compared to those expenses. Whatever is paid for out of the water fund, even if it was used for something in another department, would be a water expense to be plugged into the production costs. I then like to average out those costs to determine their average cost of production. Once the most recent historical cost of production is determined, you have a starting point and some useful facts to work with.

Large ticket items such as a new well or expensive machinery need to be amortized over the typical life expectancy of the item and then broken down into a monthly or annual payment cost. The next thing I like to do is a system assessment. What are the strengths and weaknesses, and what equipment or part of the system needs to be replaced? Is it something that needs to be replaced within the next two years? Or ten years? And how much will it cost? I look at each water system component, including pumps, motors, buildings, distribution system, elevated storage tanks, meters, and all other equipment and machinery the



City of Inman, Kan. City Superintendent Rod Boerger and City Clerk Barb Tuxhorn with KRWA Tech Jon Steele review water rates and the city's capital improvement budget.

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system has. All components and their current condition should be evaluated to develop a replacement or maintenance plan.

The rates must reflect all of the costs to operate, maintain, and sustain the system going forward. For instance, if you know your water metering system is decades-old and needs to be upgraded, perhaps to an automated system which can cost \$300 per meter, and that new system is good for 20 years, then that is \$1.25 per month per unit. If the system is supposed to last for 20 years ($\$300 / 20 / 12 = \1.25). If there is cash available to pay for the new meters, then any increase in rates can go towards replenishing the reserve fund.

One item that seems to catch a lot of public water supply systems off guard is that an elevated water storage tank maintenance is a costly, big-ticket item. Maintenance gets neglected or put off for years and then suddenly, expensive issues are found during an inspection report. The average life expectancy of the tank coating system is anywhere from ten to twenty years, so you should plan accordingly. I like to split the difference and use 15 years. So, if it is going to cost \$100,000, and you have 600 customers, or in other words, then your rate should include and reflect that expense. That approach would cost each customer \$166, or approximately \$1.00 per month on their bills. Each component and expense of the water system should be evaluated and planned for in this manner so that the rates reflect those costs.

My opinion is that any debt service should be covered in the minimum charge and that the cost per thousand gallon charge should cover all other

expenses. That doesn't always work so some fixed costs may need to be included under variable costs which would typically determine the charge for water. If no debt service exists, the minimum can be used to fund the Capital Improvement Plan for future improvements and upgrades. I know of a system that installed a new well, a new elevated water storage tank, and a mile of new transmission line. The total cost of those upgrades was more than \$1 million; they wrote a check from cash reserves. Not many small systems of 550 service connections can do that. That requires years of good financial management.

Rates can be shaped and tailored for your particular needs. Some other possible things to consider would be

source of supply or water rights issues. For instance, do you lack production capability or perhaps lack of distribution ability leading to low pressure? These issues may mean you need to develop a rate that encourages conservation or some increasing block rate. On the other hand, you may be blessed with plenty of water, a robust production system, and adequate delivery capability. In that case, there is no need for strict conservation.

Once there is an understanding of all of the considerations that go into developing a water rate, then tailoring a rate tailored to your specific needs can be a rewarding experience. Taking that approach, it will be easy to answer any question anyone might have how your system's rates were developed – and remove the emotions that are often involved.

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