

# Building a Better Water Rate



In December 2022 and January 2023, I have been contacted by at least two dozen cities and rural water districts that want to evaluate the adequacy of their water rates. Several were also wanting an “outsider” opinion on their wastewater rates.

The one common thing among these cities and RWDs is that more than half of them have not conducted a water or wastewater rate review for nearly 20 years. Several others have a policy of conducting a rate review annually.

So is there a correct or improper way to schedule a rate review? Depending upon who I visit with on the city council, RWD board, or their staff – there will be an equal number of opinions.

Water rates need to be designed to adequately fund the operations of the utility and maintain compliance with federal laws and regulations. Generally, rate adjustments (increases) are not popular with utility customers. What really hits home for ratepayers is when a utility has not updated rates and then is faced with the prospect of needing to develop a new supply or make other major improvements that subject ratepayers to nothing short of ratepayer shock.

Recently, as I was going through the archives of *The Kansas Lifeline* magazines, I located an article by John Bailey, then with the engineering firm of Professional Engineering Consultants. The title of the article is

“Water Rate Structuring – Is It an Art, Science or Politics?” The article was printed in the November 1, 1986 issue beginning on page 18. The synopsis of the article is that city officials and rural water directors must realize the necessity of setting into place a well-conceived rate structure. That structure needs to incorporate policy objectives that will support continued investment in the water utility infrastructure, whether for maintenance or growth.

# Ford Meter Box

**Simply Seals!**

Rated to 305 psi

MJTS

MJSC

MJBE

No field trimming required!

260-563-3171  
fordmeterbox.com

**FORD**  
Celebrating 125 Years

**Fully encapsulated for the most challenging applications.**

- Tapping Sleeves
- Couplings
- Bell Joint Encapsulators

KRWA provides basic rate reviews at no charge to water and wastewater systems. Here is an example of the allocation between “fixed” and “variable” charges on a recent project. In this case, the RWD decided to increase the allocation of salaries from 25 percent fixed to 50 percent fixed.

Cost Item	Annual Cost	% Fixed	Fixed Cost	Variable Cost	Monthly Minimum Charge	Unit Charge / 1,000 Gallons
Administration Salaries, Benefits, etc.	\$35,000	100%	\$35,000	\$0	\$4.02	\$0.000
Office-related Expenses (Rent or amortized value, utilities, computers and software, etc.)	\$20,000	100%	\$20,000	\$0	\$2.30	\$0.000
Water Testing	\$1,500	100%	\$1,500	\$0	\$0.17	\$0.000
Insurance, Legal, Accounting, Technical Support, Similar Personal Services	\$8,000	100%	\$8,000	\$0	\$0.92	\$0.000
Travel and Training	\$4,000	100%	\$4,000	\$0	\$0.46	\$0.000
Bad Debt	\$200	100%	\$200	\$0	\$0.02	\$0.000
Permitting Agency Fee	\$700	100%	\$700	\$0	\$0.08	\$0.000
Operations Staff Salaries, Benefits, etc.	\$60,000	50%	\$30,000	\$30,000	\$3.45	\$0.556
Rolling Stock	\$1,000	50%	\$500	\$500	\$0.06	\$0.009
Vehicle, Operating Equipment Purchase and Maintenance	\$10,000	50%	\$5,000	\$5,000	\$0.57	\$0.093
Miscellaneous Operating Supplies	\$40,000	50%	\$20,000	\$20,000	\$2.30	\$0.370
Annual Payment to Operating Reserve	\$40,000	25%	\$10,000	\$30,000	\$1.15	\$0.556
Engineering for Capital Improvements	\$10,000	50%	\$5,000	\$5,000	\$0.57	\$0.093
Capital Improvements Paid With Cash	\$40,000	50%	\$20,000	\$20,000	\$2.30	\$0.370
Existing Loan Payments for Capital Improvements	\$185,000	50%	\$92,500	\$92,500	\$10.63	\$1.713
Debt Reserve Payments	\$0	50%	\$0	\$0	\$0.00	\$0.000
Annual Payment to Capital Improvements Reserve	\$40,000	50%	\$20,000	\$20,000	\$2.30	\$0.370
Annual Payment to Replacement Fund	\$0	50%	\$0	\$0	\$0.00	\$0.000
One-time Payment to Replacement Fund	\$0	50%	\$0	\$0	\$0.00	\$0.000
Treatment Chemicals, Supplies and Equipment	\$14,000	0%	\$0	\$14,000	\$0.00	\$0.259
Purchased Water	\$0	0%	\$0	\$0	\$0.00	\$0.000
Electricity to Run System	\$70,000	0%	\$0	\$70,000	\$0.00	\$1.296
Other Cost	\$0	0%	\$0	\$0	\$0.00	\$0.000
Other Cost	\$0	0%	\$0	\$0	\$0.00	\$0.000
Other Cost	\$0	0%	\$0	\$0	\$0.00	\$0.000
Other Cost	\$0	0%	\$0	\$0	\$0.00	\$0.000
Other Cost	\$0	0%	\$0	\$0	\$0.00	\$0.000
Other Cost	\$0	0%	\$0	\$0	\$0.00	\$0.000
Grand Totals	\$579,400		\$272,400	\$307,000		

  

Cost Percentages and Resulting Minimum and Unit Charges	47%	53%	\$31.31	\$5.69
Unbilled-for Water Statistics				
54,000,000 Estimated Billable Flow (Gallons) During Test Year				
23% Unbilled-for Water Percentage				
\$90,963 Retail Value of Unbilled-for Water				

The principles and policy objectives of most public utilities remain constant. The people governing the water and wastewater utilities have not had much of a change in attitude either over the decades. The primary goal is to provide good quality water at the most affordable cost to consumers.

### Don't set rates based on the neighbors' rates

When discussing improvement needs and the potential impact on rates, someone is likely to ask, “What are the neighboring cities’ or RWDs’ rates?” It’s hard to just not say, “None of that matters to this system.” Setting rates

based on what the neighboring systems charge is not how rates should be set. Those criteria will not work when determining what rate adjustment (if any) is appropriate. There is also no “one-size-fits-all approach that will work. Any water rate structure needs to generate whatever revenue is required to fund the existing debt service and the operation and maintenance needs.

Something that frequently happens is that the customers who are responsible for the city or RWD needing to make expansions seem to end up not paying a fair share. Generally, revenues should be gained from those responsible for the system having to install additional

wells or pipelines. Ratepayers who have consistently used the monthly minimum or lower usage are not responsible for the system to expand capacity. The situation can be particularly lopsided when a few substantial customers are the reason for the need for a significant additional capacity investment. It is more pronounced when the rate is on a declining block structure. Likewise, the design of a water rate should also consider an evaluation of the effect of the proposed rate on water demand and expected revenues. It’s not necessarily an easy challenge to determine the “right” rate. Setting a rate should involve a thorough review vs. just bumping the monthly minimum on all customers.

KRWA staff welcome the opportunity to share experiences in setting water and wastewater rates. Give KRWA a call.

### Learn at the Annual Conference

The upcoming 54th Annual Conference & Exhibition offers a full-day program entitled “Tools and Tech for Business Continuity in Public Works”. This session covers rate analysis, asset management, and much more. The trainers will review business processes, resource requirements, emergency response and crisis management. The trainers are Carl Brown, President, Gettinggreatrates.com and Arnab Bhowmick, founder and CEO of AKTIVOV Asset Management. This is one of nine preconference sessions on Tuesday, March 28. Attending this and other sessions will be the best investment of time to benefit cities, rural water districts, etc.

Greg Metz joined KRWA as a Technical Assistant in July 2009. He previously worked at the city of Washington for 13 years where he was involved in city utilities including the power plant, streets, water and wastewater. He also served as purchasing agent for those utilities.





# Visit [www.krwa.net](http://www.krwa.net)

## Check out the resources and training opportunities today!

### *The Kansas Lifeline Magazine*

*The Kansas Lifeline* is mailed to all members with four complimentary copies to each member utility. Additional subscriptions are available to others in the member city or RWD. *The Lifeline* is mailed to all Associate Members, state and federal legislators, water and wastewater related agencies, and other friends. Approximately 5,800 copies are printed and mailed. A digital version of *The Lifeline* is available online at <https://krwa.net/ONLINE-RESOURCES/Lifeline-Magazine>.



### WEBSITE [WWW.KRWA.NET](http://WWW.KRWA.NET)

KRWA has a very robust website that is loaded with scores of links. From the training calendar to a host of downloads to more than 8,500 letters to utilities posted online.



**KANSAS RURAL WATER association**  
KRWA E-News

#### Kansas Governor and Speaker of the House Might Agree on Funding Water Plan

If you thought eliminating the state's sales tax on groceries was the biggest piece of news from last week's State of the State, you were wrong. Kansas Governor Laura Kelly used her annual State of the State address, in part, to propose funding a state water plan abandoned by previous administrations. Her proposed budget restores full funding for the [Kansas Water Plan](#) for the first time in 15 years, which provides a five-year blueprint to ensure a reliable water supply for Kansas communities and farmers. The plan is one of the primary tools used by various local, state and federal agencies to address current water resource issues and to plan for future needs. If there's only one thing that Democrats and Republicans could agree upon, with election-year politics in mind, this might be it. Although Kansas House Speaker Ron Ryckman slammed the governor over taxes, spending and policies, during his rebuttal to the governor, he likewise highlighted the need to protect access to safe, reliable water for agricultural, industrial and residential consumption while also addressing contamination

### ENEWS

A weekly "E-News" is provided by direct emails to all the contacts that KRWA has addresses for. E-News covers topics of interest to KRWA members and others. As of January 1, 2023, KRWA email groups contact nearly 4,000 addresses.

*KRWA Provides education and leadership necessary to enhance the effectiveness of Kansas' water and wastewater utilities.*