

## **How Do I Compare?**

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During my travels across the state visiting various water systems, one question that I have often been asked is “How do I compare to this town?” This is a very difficult question to answer because there are so many different things that need to be considered when comparing systems. Systems, especially towns, want to be compared to the town down the road, and this is not always possible because that would be like comparing apples to oranges. Systems can be compared based on infrastructure, water rates, operator pay and benefits and regulatory compliance issues. For each of these comparisons there are several factors that need to be considered for each of the systems in question.

When comparing the infrastructure of two separate systems it is important to keep in mind the age of the systems. A system built in the 1920s will likely be lacking in infrastructure when compared to a system constructed in the 1960s. In addition to the age of the system, you must take into account any improvements that have been completed. Some systems may have grown to the point that new transmission or distribution mains were required, giving the system an advantage in the condition of the infrastructure. Sometimes the growth and the additional capacity are provided by a developer at little or no cost to the system. Other systems may have had major system replacement projects that have replaced portions of the original system over the years. Still other systems have only completed routine maintenance and repairs to the system and still have the original mains in service. You must also consider whether there is any treatment involved in the systems being compared. A treatment plant installed for the removal of contaminants, whether regulated or not, will affect the condition of the system infrastructure as a whole. Another consideration is the system storage capacity. It is a good idea for a system to have 24 hours of storage during peak usage times. Many systems were designed with this in mind, but growth in the system and higher demand from existing customers may have reduced this storage time.

In comparing rates for neighboring systems, there are many differences in the systems that need to be taken into account. The main consideration for most systems is the cost of providing service. This will depend on whether a system produces its water or purchases it from another system. Generally speaking it is cheaper to produce water than to purchase it. Most systems that purchase water do so because either there is no water available within a reasonable distance or the quality of the water is unacceptable. Another cost of service is running a treatment plant if there is one. Treatment plants require power, chemicals and personnel to run. There should also be funding set aside for repair and replacement of the treatment plant. Well-run systems will have a reserve fund or a replacement fund that will grow and can be used for system improvements as needed. Systems borrowing funds for improvements are required to have a reserve fund. We also need to consider the customer base when comparing rates for systems. The cost of maintaining a pump house is the same whether you use 10% of the pump capacity or 70% of it. A system with 100 customers will have a higher base charge for this well than a system with 300 customers. The same applies to treatment plants and most other infrastructure. A healthy system will have the system components required to serve its

customers and some reserve capacity in case of an emergency or scheduled downtime for system maintenance. Another thing that needs to be considered is the debt of the system. Systems that have completed improvements and are repaying the loan for the improvements will need more income to retire that debt than systems that have never improved or replaced any of the original components of the system.

Closely related to rates is the comparison of pay and benefits that system operators receive. The customer base of the system and the water rates that are charged will have a great impact on the ability of the system to pay wages and benefits to its employees. Those systems that have very low water rates will not be able to raise an adequate amount of revenue to pay competitive wages and benefits. Systems that do not meter their customers also have a disadvantage in that large water users do not pay their fair share for the water used while small users will actively try to keep the water rates low so they do not need to pay an unfair amount for service. Wages will also be dependant on the duties expected of the operator and the experience he brings to the job. Many small systems expect the water operator to also run the sewer plant, patch and grade the streets, mow the park and often the cemetery, maintain the pool, plow snow, maintain and repair all city owned buildings and equipment and often even act as the dog catcher. These extra duties should be considered when setting up the wages for the operator, but often the operator is considered by the citizens of the system as a “maintenance man” rather than a certified water operator. In addition to being a certified operator, the experience of the operator should be taken into account. A person with one or two years of experience should not expect to get the same wages as a person with 15 or 20 years of experience and the subsequent intimate knowledge of the system and its components.

In comparing the regulatory compliance of separate systems you have to consider the quality of the source water for the systems. A system cannot necessarily control the rising nitrate level of the water. The age of the system and the steps that have been taken in the past to improve the infrastructure will also determine the compliance. An older system that has numerous leaks requiring constant repairs is more likely to encounter bacteriological contamination than newer system experiencing little or no breaks. The condition of the system storage facility can also affect the regulatory compliance of the system. An older storage tank that is not properly sealed can allow contamination into the system. A well-run cross connection control program can keep a system from experiencing backflow conditions as well. In the sanitary surveys of systems over the past three years, violations of the cross connection control requirements of state regulations is one of the major deficiencies noted and constitutes a large percentage of the violations noted.

With all of these things to take into consideration when trying to compare systems, it is understandable when someone hesitates to make that comparison. The best thing a system or a system operator can do is to make their system the very best that it can be regardless of the system next door. Remember that you cannot compare your system to another system without comparing all of the individual details that make up a system. Run your system the best that you can, planning for the needs of the future while setting your rates to produce the funding needed for the system and paying your operator what they are worth and you will have a water system to be proud of.