



# How Rural Water Systems Can Pursue Successful System Expansions

**M**unicipalities and rural water districts have many issues in common. But when it comes to system expansion, rural water systems have a different set of challenges to face. Partly legislative and partly engineering, rural water districts have unique characteristics that make it more difficult for a rural water system to plan and execute a successful system expansion. Even though the downturn in the economy has decreased system expansion in rural areas, eventually rural water districts will face an increased demand for new services. This article presents a few ideas to think about now, so that when those requests for

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service come, districts will be ready to make thoughtful and informed decisions on system expansion.

Hopefully, districts will have been able to use this economic lull to get ahead on system planning, because this is the first step in a successful system expansion. I have preached this for years: every water system, municipal or rural, should have two key items on hand before any system expansion is ever considered. The first is a system map. The second is a long-term plan. With a long-term plan in hand, the governing body can evaluate a request for service and determine whether or not that request fits within the capabilities of the water district's system. In fact, ideally, a water district should never be surprised to receive a request for new service. Hopefully, the district will have a good idea of where people will logically want new service and the manager of the district will have started a dialogue with potential customers before those applicants ever attend a board meeting and request service. Because of course, unlike cities, water districts may choose to refuse to serve a new customer. One of the fundamental differences between cities and water districts is that cities must serve all customers within the city limits.

That is worth examining, because the basic nature of cities and water districts is very different and by necessity, this drives their respective approaches to growth. Cities are multi-purpose political subdivisions that have the power to require everyone residing within their boundaries to receive city services. If you choose to live within city limits, by and large, you forfeit the right to drill a well for drinking water or install a septic system. But this is a double-edged sword. Cities must provide those services (along with fire, police, trash, etc.) to all residents. This means that most cities have clearly defined policies on new connections and generally build in a certain degree of excess capacity into any system expansion so that future customers within an area can be served.

Water districts have never had that type of structure. Districts were created by law as single interest political subdivisions. They provide drinking water. And they provide drinking water to people who chose to receive it. That means no mandatory connection policy. Districts, just like rural electric co-ops, have never had the authority to require people to connect to their system just because they reside within it. The flip side of no mandatory connection policy is no mandatory service policy. Water districts do not

have to provide service to a new customer. A board can refuse a request for service if the proposed customer is located in an area without infrastructure or if it is too expensive to build distribution lines out to a new customer. This means that unlike cities, that are required to serve residents, water districts have always needed to do a cost/benefit analysis as part of a system expansion. And such an analysis cannot be performed without a system map and a long-term plan. Knowing what the water district's existing capabilities are and where growth can be used to leverage system improvements are critical to effective growth.

So the first question that a district should be able to answer, when responding to a request for service, is not simply "how much will we charge to provide service?" It should be "HOW DOES THIS FIT INTO OUR LONG TERM PLAN"? I witnessed a great example of this approach recently. A small water district with one well had suffered with iron issues and bad odor in their water for many years. The water was drinkable, but it was not particularly pleasing. The system wasn't looped, which only added to the problems. The district did however have a long-term plan to install a second well, and due to regulatory pressure, a short-term plan to build an emergency interconnect with a neighboring city. The district had actually considered obtaining a USDA loan in order to drill a second well and with this long-term goal in mind, they had prepared a preliminary engineering report, but shelved it due to the increased rates involved with such an expansion. The long-term plan gathered dust and the district drug it heels a bit on building the emergency interconnect due to cost.

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**I would like to respond to those of you who say that it is not feasible or a waste of time for a water district to develop a long-term plan, because unlike cities, water districts are too spread out and do not have predictable growth patterns. That's nonsense! First, pull out the system map and identify system weaknesses such as dead end lines or areas that have chronic low pressure. Then get a plat book and look at the logical growth areas along your main distribution lines. Plat books will remind the board of who owns what tracts of land and will help start a comparison of system needs and possible growth areas. Ask most residents of a rural area, and they can tell you where new growth tends to occur, due to roads, schools, a local employer, geography. Add a little common sense combined with a sense of existing district needs and you have the outline of a long-term plan. Think of it as a wish list. Has water pressure always been low on the north side of town? Is a large farm with road access near the new school on that side of town going through probate? Is it common knowledge that the heirs do not farm? Are there rumors that a highway expansion may be funded? The very nature of rural communities leads to reasonable speculation that it is possible that some or part of that farm might be purchased and used for a new subdivision. So it might be logical to take steps on paper towards a future engineering solution that could provide service to a future subdivision and also solve water pressure problems. Think of a long-term plan as an outline for development that can be changed and adapted at little or no cost. Even if a water district doesn't create a written document, it is still a great exercise to discuss future expansion because it creates an awareness of the needs and possible solutions**

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KRWA encourages rural water districts to obtain subsequent financing to expand service to new customers. This is a practical approach when there are significant extensions to reach multiple new customers.

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Then a nursing home approached the water district and requested service in order to build a new assisted living facility. Technically, the district could have provided water with its existing well and as we all know, it did not need to provide fire flow. So, the district could have just told the nursing home how much it would charge for a line extension and a master meter and provided somewhat smelly but drinkable water. However, the board was smart enough to think about the request in terms of its long-term plan. And the board decided to address several issues at the same time. It

basically proposed a joint venture with the developer, who had future plans of building senior apartments near the nursing home. The district agreed to borrow money to drill a new well and to provide fire flow for both hydrants and a sprinkling system. The developer agreed to pay additional sums of money towards the project based on the savings he would make in insurance due to a better ISO rating. This allowed the district to avoid dipping into its cash reserves in order to fund the project start-up costs, such as an updated preliminary engineering report. The developer also agreed to pay the difference in cost for larger distribution lines near the nursing home, which would be used for the possible senior apartments, subject to a written reimbursement agreement that tracked new residential connections along the new line. This occurred because as part of the long-term plan, the board had tracked people who had requested water service but had been unwilling to pay for the cost of a distribution line for only themselves. The board reached out to people in that area and solicited new connections. Water districts cannot force people to connect, but they can certainly solicit customers!

The icing on the cake? The district heard that the neighboring town was also considering drilling a second well. The district offered to foot the bill for the emergency interconnect as an inducement to get the town to enter into a wholesale water agreement in lieu of drilling a new well. As a result, the water district got two new revenue streams: 1) a safer home for its senior citizens; and, 2) an emergency interconnect and better quality water for all its customers with a smaller rate increase. Clearly, the planets were aligned on this project, but it would not have fallen so neatly into place without a board with the ability and the tools to ask, “How does this fit into our long-term plan”?

Even if requests for new service do not always fit so neatly into a long-

term plan, water district boards must also ask “HOW SHOULD THE AGREEMENT FOR NEW SERVICE BE STRUCTURED”? This is a foreign concept for many districts, which may not even have a line extension agreement in writing. Of course, after the decision in Rural Water District No. 1, Ellsworth County, Kansas v. City of Wilson, Kansas, 243 F.3d 1263 (10th Cir. 2001) water districts in Kansas are certainly aware that the cost of calculating new service must be documented and justified. However, there are other factors that should be considered as part of a written line extension agreement for individual service. If an individual is going to shoulder the cost of extending a water line to an underserved area, then the district should definitely explore upsizing the line in order to address future growth. In addition, the district should agree that the initial customer should be reimbursed pro rata for any other new customers who want to connect to the line during a reasonable period of time.

But another concept to consider is one of locking in new customers as part of system expansion. Any water district that is facing possible territorial challenges should consider a policy for all new customers that requires them to permanently agree to remain as water district customers. This may seem bizarre, but it is actually just a logical extension of policies that are already required for rural sewer projects in many states. For example, one of the requirements of SRF funding is that a sewer use ordinance must be enacted that specifically states that once a customer connects to the sewer system, they must remain a sewer customer. In addition, water districts in states where these same systems also provide sewer service, require that all sewer customers become and remain water customers, so that billing and shut-offs can be handled consistently. In both of these situations, the customer does not get to disconnect from sewer and go back to a septic system. Water districts

should examine similar restrictions on water service line extension agreements. If there is a landowner who wants water service, why not ask them to sign a binding agreement that states that in exchange for water service they agree to remain customers of the district? If such service agreements were filed as record-like easements, then any future landowner would be bound by them. I know of at least two water districts that fended off encroachment from neighboring cities because they required that the developer of a new subdivision include language like this in the subdivision restrictions and plat. The cities decided that it was too complicated to drag the landowners into a legal battle. If the city unilaterally took over the accounts, then the users would be in violation of the recorded restrictions that ran with the land. Even though the cities offered lower rates, it was a simple matter for the district to send out letters reminding the customers that just as they had other subdivision restrictions

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that needed to be adhered to, they could not change water service providers. Think of it as creating a voluntary, mandatory connection policy.

An additional issue that must be addressed in a line extension agreement is construction standards. Often a water district will not have equipment for line installation or even line repairs. It is very common for smaller water districts to contract with a local backhoe company for line repairs or installations. For that reason, it is not at all uncommon for resourceful rural customers to request that they be allowed to install the service line to their residence or even install portions of the new

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distribution line in order to save on costs! Water districts should definitely create a written policy on line extensions and agree in advance whether or not they want to handle all line extensions themselves, which involves getting bids, meeting state labor requirements, etc. or whether or not they will allow the new customer to install his own service line. Even local contractors who install service lines may not be familiar with district policies on things such as backflow prevention devices and construction inspection policies. But you can be sure that the new customer will be the first to call if there is a leak in the new line or a problem with service! A written set of specifications for new construction will allow the district to maintain oversight over service line installation and to designate who is responsible for ownership and repair of service lines. Water districts also should make sure that the contractor that they say must be used for extensions is competitively priced.

There have been some sad situations where the contractor for the district has taken advantage of those required to pay for new extensions.

This becomes even more of a challenge when districts are asked to provide service to new subdivisions. This is a potentially lucrative area of system expansion, but this can also be a disaster for water districts that do not have a written policy for multi-family development.

Water districts have to be careful when they negotiate system expansion agreements with developers for residential or commercial projects. These can be complex contractual relationships with significant legal ramifications. Unlike municipalities, many water districts may not have a specified construction standard and may not have ever negotiated a complex construction agreement. This is especially important during this uncertain economic period, because a district may be left financially responsible if a developer goes under and the district may have no legal

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recourse, unless the development agreement is very thorough. I will discuss examples of agreements with developers in more detail in a future article. However, no water district should consider entering into a development agreement for multiple customers unless it has a clear idea of how that project will impact system capacity and where that project fits into its long-term plan.

During this period of economic uncertainty, it is easy for water districts to hunker down, refuse to increase rates and just maintain the status quo. And few water districts will spend money on a system map or have an engineer prepare a written long-term plan. But this is an excellent time to start reviewing system capacity and beginning a dialogue about future development. It costs nothing to begin a series of informal discussions with board members about the current condition of the system, identifying strengths and weaknesses, and areas that could use improvement. Just creating an awareness of these issues is a helpful exercise. So is holding discussions on where future growth might occur. This is the foundation of a long-term plan. With this information, a water district will be better prepared to manage new development instead of reacting to it with surprise.

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