



It's Not All Fluff – Developing a Long(er) Range Plan is Just Plain Smart

visit many wastewater systems throughout the year. The one thing that I find most small systems have in common is the lack of any long-range plan that includes funding for improvements. Where do you begin? Well, the plan should first establish what the goals are and a reasonable timeframe to complete them. The plan should be reviewed every year to make sure it is on track. It should be amended as needed since the system may have unexpected repairs. An annual review is important for new council or board members so that they can learn about the plan and what the goals are. Some systems have the money in a reserve account. A new council member may only see dollar signs. That new council member might think it would be just plain cool to spend those dollars intended for the

wastewater system on a new slide for the kids at the park or some other immediate project.

But, “We’re just a small town!”

I hear the excuse that “We’re a small town and we can’t afford it! We can’t raise rates because our customers are older and on fixed incomes.” I completely understand why governing body members might say that. However, if your city or utility does not have some funds available, there will usually be a major rate increase to pay for the project that was not planned for. I have heard of wastewater rates that have been increased from a \$10 flat fee to \$25 plus a usage charge per month – all in one adjustment! It would have been more reasonable to increase monthly rates by \$0.50 or \$1 annually. Shorter range needs can also be included in the

long-range plan. Examples of shorter term needs would be the purchase of a smoke testing machine or hiring a consultant to evaluate the smoke testing and collection system videos to further develop a long-range plan.

A long-range plan is usually based on known needs and costs to help develop a plan for future. Cost estimates can be obtained by discussing project costs with other systems, contractors or engineers. Or this can be as simple as the following example. Suppose a system’s lift station costs \$100,000. The two pumps cost \$10,000 each; they are expected to last 15 years before replacement is needed. Funding the replacement would mean having a reserve of at least \$20,000, plus cost increases. It may be appropriate to be conservative and fund the replacement up to \$30,000. Bottom line, this means up to \$2,000 annually

needs to be set aside for 15 years so that new pumps can be purchased. Other repairs will also likely be needed.

A long-range plan for a wastewater system needs to include the collection system and lift stations, and treatment plant upgrade or replacement to meet changes in permit limits. It may be impractical to save enough to replace the treatment works, but at a minimum, reserve funds should allow for the design and some of the work. Still, I see many systems today with the same rate schedule that was in effect when those systems were constructed thirty or more years ago. I don’t mean to



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frighten anyone, but an estimate I obtained from a sludge removal contractor a couple of years ago for sludge removal was \$0.05 per gallon. That means it can cost at least \$65,000 for sludge removal from a 2-acre cell containing two feet of sludge.

A long-range plan can also be the catalyst to be proactive in the repair and replacement of the collection system or planning for treatment upgrades. Sometimes failure to meet permit limits is not due to the age of treatment plant but deteriorating collection systems, allowing excess inflow and infiltration that the plant is not designed to treat. A long-range plan to clean and video the entire system can be helpful in the evaluation of the collection system. Sometimes, wastewater systems have one-third cleaned each year. I also recommend that systems televise those sections. Doing one-third of the project annually results in the entire system being evaluated after three years. Long-range planning can then be conducted with confidence of the needs of the collection system.

Having a long-range plan in place, and following it may also reduce chances of receiving a schedule of compliance from EPA or KDHE for permit limit violations or incidents of sanitary sewer overflows. I know of several systems with populations less

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than 3,500 that have received a schedule of compliance from KDHE due to either permit limits being exceeded or having too many bypasses and no corrective action taken by the utility to make repairs.

The great thing about a long-range plan is that the system's decision makers and, hopefully, with input by operators, decide what to do and when. These plans can include work over five to twenty years, or even longer. In contrast, a schedule of compliance mandates when the system is to have a plan in place, when the engineer needs to be hired, when the preliminary study needs to be completed and when the

work will be completed. This is usually in the two-year time frame from start to completion.

The long-range plan should address the collection and treatment systems as well as the purchase of equipment such as vehicles, generators, backhoes and sewer cleaning equipment. Even systems with non-discharging lagoons need to be just as prepared as a system that has several lift stations or an activated sludge treatment plant.

I hope you will give KRWA a call or send an email if you have any questions or concerns about your wastewater system. KRWA can help you sort through what your priorities should be and where to place the focus of your long-range plan development.

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