

Asset Management and Strategic Planning: good partners for your system's future

Over the last couple of years there has been much publicity over one aspect of the Safe Drinking Water Act. That aspect hits at the heart of every water system's existence and operation. It's called "Capacity Development."

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Why should we care about capacity development? First, it's your responsibility, whether you are a board/council member or

staff member. Boards and councils assume that responsibility when they are elected. Staff has that responsibility when they are hired. What is the responsibility? To ensure that your public water system delivers

safe and secure water to your customers.

Capacity development protects consumers

The 1996 Amendments to the federal Safe Drinking Water Act require states to develop and implement a capacity development program or strategy. Capacity development is the measure of a water system's ability to acquire and maintain adequate technical, financial and managerial capabilities. In the industry, the jargon is TFM – for technical,

financial and managerial. There are many resources on capacity development at the Kansas Department of Health & Environment's website at www.kdhe.state.ks.us/pws/capdev.html.

Asset Management, Strategic Planning?

Entwined in the technical, financial and managerial aspects of capacity development are two phrases that may be less known to public water systems. Asset Management and Strategic

plan to help you make management decisions. To be successful, they must work together to help your system accomplish its goals. What is your goal? Delivering safe drinking water to your customers. How do you accomplish that goal? By taking care of your water system's facilities and equipment and plan for any needed rehabilitations or replacements.

Asset Management is a review process that analyzes existing assets such as buildings

Asset Management reviews your system's present physical condition and evaluates your system's financial and managerial situation. Strategic Planning utilizes what you learn from your Asset Management plan to help you make management decisions.

Planning. These terms are not new to private utility systems or some public utility systems. But many public water systems don't consider them relevant.

Asset Management and Strategic Planning can be considered two separate processes – yet they must relate so that your city or RWD will benefit. Asset Management reviews your system's present physical condition and evaluates your system's financial and managerial situation. Strategic Planning utilizes what you learn from your Asset Management

and equipment used in the operation of your system. Asset Management also includes developing a plan to reduce costs while increasing the efficiency and reliability of your assets. If you are to be successful with Asset Management it also requires that you communicate with your customers about your system's future needs. Ultimately, you will need to develop a financing plan to meet your goals. Most systems have a water meter replacement plan – and beyond

that, systems often give little concern to replacements until the unit fails.

Where to begin?

The first step in developing an Asset Management and Strategic Plan is to conduct an inventory of all of the assets of the system. In preparing the inventory, the following information should be noted: 1) condition; 2) age; 3) service history; and, 4) useful life. The table at lower right illustrates what a typical inventory worksheet would look like.

The review process

The management of the water utility or board/council for systems should prepare the inventory worksheet annually. The expected useful life of the equipment can be obtained from the manufacturer or you might consult with your engineer or KRWA for suggestions. The adjusted useful life reflects whether the asset has been properly maintained. An asset that has been properly maintained may have a higher than expected useful life. An asset that has not been properly maintained will likely have a useful life than is less than expected.

The benefit in preparing the inventory worksheet? The utility system can better prioritize resources. When determining which assets might need to be replaced, management needs to know if any one asset needs to be prioritized higher than another. While it may seem obvious to experienced utility personnel, it is not always so with new board/council members or new staff.

Setting priorities

Consider this example. You are evaluating whether to construct a new 250,000-gallon

Developing an Asset Management Plan . . .

Here are five easy to follow steps in developing an Asset Management plan:

1. **Conduct a thorough asset inventory:** Do you know what your system's assets are?
2. **Prioritize your assets:** Make sure you allocate funds for any rehab or replacement in the order of your most important assets.
3. **Develop the plan:** Estimate how much money you will need to carry out your plan by developing a budget for the current year and future years.
4. **Implement the Asset Management Plan:** Be prepared to work with your customers and other agencies to make sure you have the technical and financial capabilities to deliver safe water to your customers.
5. **Review and revise the Asset Management Plan:** Use your plan to guide your operations; priorities may shift.

Example System Inventory Worksheet						
Date Worksheet Completed/Updated: 8/14/02						
Asset	Expected Useful Life	Condition	Service History	Adjusted Useful Life	Age	Remaining Useful Life
Well 1 (1993)	30	Good		30	9	21
Well 1 pump	10	Good	Rehab (1996)	10	9	1
Well 2 (1993)	30	Good		30	9	21
Well 2 pump	10	Good	Rehab (1998)	10	9	1
Pumphouse (1993)	30	Good		30	9	21
Electrical components	10	Some corrosion	Rehab (1994)	10	9	1
Chlorinator (1993)	10	Good	Rehab (1998)	5	3	2
Storage tank 1 (1993)	40	Good	Rehab (2000) - \$17,000	40	9	31
Storage tank 2 (1993)	40	Good	Rehab (2000) - \$17,000	40	9	31
Storage tank 3 (2000)	40	Almost new		40	2	38
Distribution System:						
Hydrants (15)	40	Unknown		40	9	11
Valves (45)	40	Unknown	6 valves don't work	40	9	11
6 inch (PVC)	60	Unknown		60	9	51
4-inch (PVC)	60	Unknown		60	9	51
2 inch (PVC)	60	Unknown	Repair breaks (2/year)	60	9	51

Source: *Asset Management: A Handbook for Small Water Systems*. United States Environmental Protection Agency.

storage tank and you only have one well that produces 75 gallons per minute. That would probably not be prudent use of funds. The facilities that are critical to the production or delivery of safe drinking water

and compliance with water regulations obviously need to be given the highest priority. Replacing the storage tank with a larger tank is probably less critical than having an adequate supply of water.

Seven steps in developing a Strategic Plan

There are seven steps in developing a Strategic Plan. They are:

- 1. Develop a roadmap:** What are you trying to accomplish and why?
- 2. Define your area of service:** Do you have options to purchase water or do you want to focus on producing water?
- 3. Review Technical, Financial and Managerial Capacity:** Review the assessment that KDHE provided to your utility. Don't know where it is? Have no idea of what it says? 97% of the systems in the state completed this survey voluntarily. If your board council is not aware of it, find it - and find out who completed it and responded to KDHE.
- 4. Identify options:** Determine what they are - from purchasing water to asking local law enforcement to increase security patrols.
- 5. Analyze and assess options:** Some options may require changes in an organizational aspect or management approach.
- 6. Implement your options:** Will staff need additional training or changes in personnel? Will new funding sources be needed?
- 7. Assessment and evaluation:** Be sure to monitor and evaluate whether your system is operating the way you want it to and needs to. Your planning process should enable you to respond in a creative fashion.

With the inventory worksheet completed, the next question is to determine how the system will generate the necessary revenues to meet the replacement time frame.

Where to get money

Hopefully, the utility system has reserves set aside to pay for any rehabilitation and replacement of assets. This is typically achieved through a depreciation account or capital improvement fund. If your system does not have such an account, then I encourage you to consider establishing a depreciation account – not just on paper – but one with real money in it. You do not want to put yourself in the position of

... if the system had \$100 in the bank at the end of the year, some of the directors or council members would suggest it was \$99 too much. There was little concern about replacement of assets. That would be the next guys' problem when, "I'm off the board or council."

having to borrow money to paint the water tower or perform other 'routine' maintenance. Every public water system should be making a monthly transfer to a depreciation account so that when the repairs are needed, the utility system will be able to obtain those services – and pay cash.

The prioritization of assets and funding requirements should be estimated for five years. The list should be updated and reviewed annually as there will likely be changes in the approach to projects.

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But we're "non-profit!"

Why all the attention to Asset Management? For too long, utility systems operated as non-profit entities, literally. Generally, the interpretation by local RWD boards and many city councils was that non-profit means having no reserves. In other words, if the system had \$100 in the bank at the end of the year, some of the directors or council members would suggest it was \$99 too much. There was little concern about replacement of assets. That would be the next guys' problem when, "I'm off the board or council."

Water systems that adopt and incorporate business aspects in their day-to-day activities will be better positioned to ensure compliance with safe drinking water standards and do so in a cost effective manner. By contrast, consider what the cost of non-compliance and infrastructure failure would be.

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Build on a plan

Strategic Planning takes Asset Management one step further. Many cities and rural water districts develop capital improvement plans (see related article in March 2003 issue of The Kansas Lifeline). These are often long term goals. What's often missing is that the utility may not have a plan to deal with changing conditions or consider how to improve operations or management. Strategic Planning is not capital improvements planning. Strategic Planning instead is aimed at improving decision-making and performance and the efficiency of the utility.

I encourage you to attend the 2004 Annual Conference & Exhibition at Century II, March 23 – 25. Due to total sell out of booth spaces, KRWA and the Kansas Rural Water Finance Authority intend to relocate their booth spaces to the side of EXPO Hall, adjacent to booth space 118. If you have questions about financing or funding options, water or sewer rates, I hope you will stop by to discuss your needs.

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