Financial Sustainability: Preparing Now for the Hereafter!

t is no longer enough for professionals in the water industry to preserve public health and protect the environment in the here and now. Our service in the present must extend into the future, building a foundation upon which future professionals will be able to provide the same high level of service currently being provided by our industry.

Water professionals can achieve that end by addressing the issue of sustainability—the ability of a firm or industry to continue to provide its goods and services long into the future, after accounting for the direct and indirect effects of its production patterns. Whether the focus is narrow ("Can our utility continue to operate this way?") or broad ("What impacts are we having on the future of humanity on the globe?"), asking questions about sustainability can lead to positive changes in any organization's behaviors and practices.

This article briefly addresses the concept of financial sustainability for water and wastewater utilities. Financial sustainability refers to the ability of a utility to acquire and manage financial resources sufficient to allow it to meet its mission over the long term.

The phrase "long term" is the critical part of the equation. It is relatively easy to weather the financial storms of this week and next week, and not usually too terribly hard to make it through the end of the year. The true test of effective financial management comes when the manager retires and his or her successor sits down to take stock. Sustainable financial management requires addressing the inter-generational implications of today's decisions today.

True financial sustainability requires that a utility operate in a healthy, forwardlooking mode in four critical aspects of its operations:

- 1) its financial operations (the checkbook)
- 2) its customers
- 3) its assets
- 4) its employees (the troops).

Here is a brief introduction to sustainability, followed by an outline of these four critical management areas.

Sustainability Issues

Data processing professionals sometimes say that their critical applications have to be available $24 \times 7 \times 52 \times$ forever (24 hours per day by 7 days per week by 52 weeks per

William B. Zieburtz Jr.

year by all eternity). If we consider the magnitude of the financial transactions relying on the Internet, such as banking, airlines, and online auction sites, it is easy to appreciate the critical nature of both instantaneous and long-term reliability in these applications.

Water industry managers understand that this vision of long-term reliability is a suitable paradigm for their operations. Addressing the very long term is a significant challenge, but it is vital to acknowledge that water and wastewater utilities need to survive in some form forever. Prudent planning, careful spending, adequate funding, and appropriate financial controls are all required to create a sustainable financial plan.

Sustainability is necessarily defined differently for different purposes, but a frequently adopted, useful framework can be found in a report from the World Commission on Environment and Development:

"Humanity has the ability to make development sustainable - to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits - not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activity."

G.H. Brundtland (Chair), Our CommonFuture, World Commission on Environment and Development, Oxford University Press, New York, 1987.

The concept of "meeting the needs of the present without compromising the ability of future generations to meet their own needs" fits the water industry well. It provides a prudent starting point that is neither shortsighted nor apocalyptic – seeking not to harm future generations, but not attempting to meet their needs in the present.

Sustainability touches on all key aspects of utility operations. An obvious starting point is assuring the long-term adequacy of the supply of water. Many utilities and state regulatory bodies have done good work in planning for the future needs of their customers. Usage of lakes, rivers, and groundwater resources is at sustainable levels in many areas, with withdrawal and discharges in balance with replenishment by the water cycle.

This is not the case in other areas, where

William B. Ziebertz Jr. is director of financial consulting services for the environmental engineering firm Jordan, Jones and Goulding in Norcross, Georgia. This article was presented as a technical paper at the Florida Section AWWA Fall Conference in November 2006.

growing demands may be reaching long-term resource limitations. Sustainability requires that we recognize the long-term demands posed by population growth and anticipate these demands in our current planning. With this perspective in mind, consider the following elements of financial sustainability.

Financial Operations: "The Checkbook"

The target of operating in a financially sustainable manner is a hard one to hit. Financial sustainability requires that sufficient financial resources need to be available to address whatever comes up, whenever it comes up, for as long as people need water from a source of public water supply. This is an extremely long planning horizon, much in excess of the 30- or 50-year plans that serve as typical timeframes for water utilities.

To further complicate matters, financial sustainability may involve some counterintuitive concepts, particularly for managers used to attempting to hold down costs to help minimize necessary rate increases.

Sufficiency of resources is the first issue, and perhaps the most fundamental issue related to financial sustainability. Water and wastewater utilities routinely operate with less access to capital and operating resources than operators and managers desire. The ability of many in the water industry to get by when resources are scarce is something in which they can take legitimate pride. That being said, operating over the long term without sufficient cash to invest in operations and infrastructure is guaranteed to leave future generations of managers and customers with larger-than-necessary bills to pay.

The questions are many: How much cash to have on hand? How much in reserve? How much access to capital?

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The answer, unfortunately, is that it depends. It depends on the size of the community you serve, the wealth of the community, the local economy, the diversity of your customer base, and the condition of your assets. These and many other factors unique to each utility determine the appropriate objectives, standards, and requirements. General guidelines of use to everyone are limited in many respects, but here are three that potentially could be of use to some:

- 1. Have enough cash "in the checkbook" so that you never, never, never, worry about making payroll.
- 2. Have enough room in the annual budget so that you are able to pay with current dollars for one quarter to one half of the rehabilitation projects which legitimately could be funded through debt, according to appropriate accounting guidelines.
- 3. Have enough access to cash beyond the checkbook so that if the largest capital project you ever completed went over budget by 10 percent, you would be able to cover the cost comfortably.

These thoughts may help, but the key is to analyze your own situation and develop guidelines that make sense for your utility.

Effective debt management is worth comment. This is another area where guidance is varied, and appropriately so. Generally, water utilities benefit from appropriate use of debt. Well-managed utilities can access capital at favorable rates, and longterm debt helps to time the payments for your assets with the use of those assets.

Several debt ratios can be useful, but as with other metrics, it is hard to provide guidance to all utilities. One possibly helpful thought: Don't see a required minimum debt service coverage ratio as an allowable minimum. Establish a higher target to provide more financial strength generally and to help you continue to obtain solid evaluations from the rating agencies.

Pricing of water and wastewater services

is a critical aspect of any sustainability plan. Many water and wastewater utilities have a long tradition of pricing their services at rates lower than required to meet the sum of fully allocated operating costs and anticipated capital needs. Since long-term planning typically will involve utilizing resources at increasing unit costs, sustainable operations must anticipate these costs and allow for proper funding of future needs.

Very few utilities are pricing their services at levels high enough to materially impact users. Many utilities are pricing so low that they are consuming the capital they previously invested in their systems. While particular situations are varied and recommendations must be customized to local conditions, the fundamental need in the industry is to stop apologizing for charging the fully allocated costs to provide water and wastewater services.

The price of water and wastewater services should communicate the true costs of providing water and wastewater services to customers so their consumption decisions will reflect those true costs. Without true fullcost pricing, how is a consumer to understand the societal resources committed to providing these necessary services? How is a consumer to understand that conservation is an important issue? If the water industry matters – and it does – and if water and wastewater assets matter – and they do – then our prices should reflect our costs to provide service.

Customers

How do customers relate to effective, sustainable financial management? First, customers pay for everything that your utility does. Day to day, it is easy to forget that customers pay for everything that gets done, but their support – both financially and "socially" – is crucial.

Conservation is one example. For some utilities, particularly in Florida, water conservation is a critical component of a sustainable water supply plan. Your customers can either support such efforts or make conservation objectives almost unattainable. Wise utility managers with a long-term orientation will invest now in building a relationship with customers that consists of more than sending them a regular bill.

Customers affect the costs of operations in many ways, both dramatic and subtle. Their behavior can either help control costs or contribute to cost problems.

One example is the timeliness of payments. Customers who pay on time are true partners in effective management. Late payment penalties are often inadequate to reflect the true costs, allowing this behavior to negatively affect the utility's income statement.

An involved public can populate workgroups, serving as an adjunct to utility staff when special issues arise. An aware, appreciative public can serve as an extended set of eyes and ears for the utility to help monitor a distributed distribution and collection system.

Finally, your customers also can serve as advocates for the rate increases and spending required to achieve effective management. This statement may sound surprising in light of the sometimes insurmountable barriers that customers can place in the way of necessary projects or rate increases, but the reverse is also true.

Customers sometimes can get in front of elected officials and help them see the future value of appropriate expenditures or facilities in the present. Sometimes people can appreciate the logic of prudent management decisions and be far beyond where their elected representatives expect them to be. A utility that invests the time of its senior management team in effective outreach might just build a support network stronger than any other.

Assets

Recent years have seen many articles, books, videos, and entire conferences on the effective management of utility assets. Lifecycle cost analyses, predictive maintenance, CMOM requirements, massive database solutions – the list of asset management activities is endless. This level of activity is a response, (perhaps somewhat overblown in some cases), to a historic lack of attention to water and wastewater infrastructure.

So the question then becomes: What must a manager do to build a utility's financial sustainability over the long term? Or more helpfully: To what goal must a manager aspire in order to take all appropriate steps to achieve financial sustainability? In one word, the answer is "optimal."

It isn't required that all assets be brand new, nor that every preventive or predictive maintenance routine be followed. It is required that the utility strive toward optimal use of its assets.

This objective is lofty and complex. It is lofty because it's hard to optimize any

process, let alone any process as complex as utility asset utilization. It is complex because utility operations and asset utilization are complex; nevertheless, optimization remains an appropriate and useful objective.

Optimal use of a utility's assets suggests that assets are sufficiently well maintained to achieve their full economic lives. "Economic lives" refer to the desirable life cycle of a particular class of asset, or even to a particular asset.

Extending an asset's life beyond its "economic life" is neither required nor desirable. Investing increasing amounts of staff time, effort, and creativity to avoid purchasing a replacement asset is not wise economically, but allowing an asset to deteriorate through inattention so that its useful life is shortened inordinately is clearly foolish.

It is beyond the scope of this article to describe effective asset management procedures, but it is important to explain that effective management is required for financial sustainability, and to note that effective asset management requires effective utility management.

A utility manager who seeks to achieve financial sustainability will face two difficult challenges related to asset management. The first will be to determine the appropriate type of technology and level of investment required to meet the utility's mission over time, and to sell his or her thoughtful conclusion to the utility's governing body. Optimum asset utilization requires that appropriate assets be put in place. While these are not always the most expensive solutions, they are not usually the least expensive solutions.

The second challenge will be to instill a stewardship mentality in employees. The sense of taking care of something on behalf of someone else or of future generations is crucial to achieving effective asset management behaviors over the long term.

Employees: "The Troops"

How does financial sustainability require that we bring up human resource management? The answer, though indirect, is obvious upon reflection. Employees are the way the work of a utility gets done. This is more than definitional, and it is particularly important for members of a utility governing body to understand. People are at the core of a utility's ability to provide service, and your people need to be at their best for your utility to function well.

Discussing employees is a step removed from the financial management comments earlier in this article, but a high degree of management success is necessary for a utility to achieve a high degree of financial success. People matter, and this is especially true for a utility seeking to achieve excellent performance.

Over the long term, financial success is conditioned upon creating a work environ-

ment where performance is expected, where creativity is rewarded, and where mistakes are corrected. Short-term financial success can be achieved in spite of a poor work environment, but long-term success will only occur where employees are able to thrive.

Success in managing employees requires that they find leadership at all levels in the organization. Without leadership, employees lose focus and are in danger of drifting into non-productive or counter-productive behaviors. Your best employees will continue to think creatively, but perhaps not in strategic directions. Your average employees will continue to do their jobs as described in the manual, or perhaps even at a higher level than required in the manual, but they won't be everything they should be. Your below-average employees will fail to accomplish their work and will begin to spread their negative attitudes and behaviors throughout the organization. Leadership is required to emphasize positive work patterns and to correct negative ones.

Managers who "watch the books" to the exclusion of everything else are not likely to be presiding over a truly financially sound organization. Cash balances may be adequate and debt may be in balance, but these positive readings may be hiding an organization where efficiencies are not being exploited, where employees are being pressured to take shortcuts, or where assets are deteriorating to unsafe conditions. Financial success isn't possible over the long term without balance, and balance is not achieved if a utility is preoccupied with financial results to the exclusion of everything else.

The similarities between financial sustainability and long-term success in managing human resources are interesting to explore. A utility that views employees as interchangeable and replaceable components to be obtained at the lowest immediate cost is similar to a utility where there is no concern about the world beyond the water industry. A utility whose primary objective is to operate at the lowest possible monthly user charge over the near-term is likely one that would see little value in supporting employee growth and development.

A utility that intends to grow and thrive in the future must embrace its employees as partners in the process. Sustainability for a complex enterprise such as a water or wastewater utility requires that talented, creative staff members be present and engaged in their duties. It requires that these employees find challenges sufficient to provide the stimulation they need and flexibility to find and implement new approaches and solutions.

Financial sustainability leans on human resource sustainability, and human resource sustainability requires that organizations recognize and value the contributions of their professionals. Utilities increasingly will need to find highly skilled employees with the ability to exercise a high degree of judgment in their daily jobs.

It is these skilled workers who are most mobile and most likely to move on if they are not satisfied with their work environment. As a result, a financially sustainable operation is one where utilities know they are appreciated and want to stay on board to help the utility succeed in the future.

Conclusion

Sustainability is a concept that the water industry can not afford to ignore. Someone will address these issues, and there is no group better positioned to do so intelligently than utility managers.

Financial sustainability is a necessary component of any sustainability plan, and in turn, it rests on sustainable management of financial resources (the checkbook), customers, assets, and employees (the troops). The intent of this article was to introduce these issues to managers and to help support positive decisions today to build a foundation for success for the very long term.

The present is the only time we have to work with. We have to prepare now if we are to be ready for the hereafter! \diamond