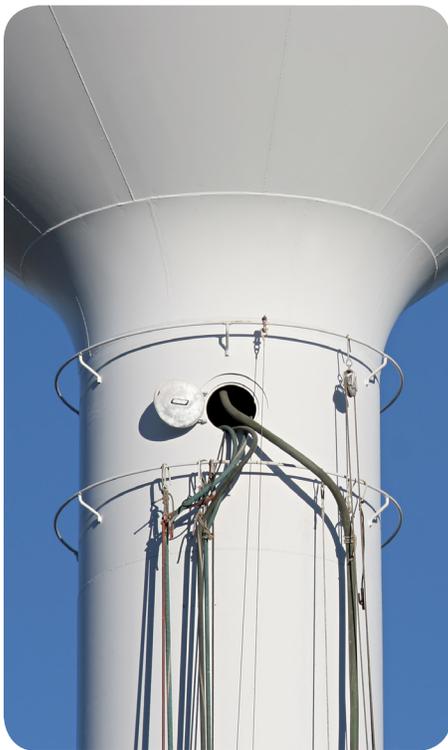


# BRIGHT LINES

## Asset Management: A Tool to Preserve Water Storage Facilities

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The Texas Commission on Environmental Quality (TCEQ) rules generally require drinking water utilities to demonstrate possession and use of adequate facilities, equipment, and regular operations and maintenance procedure. These conditions not only help to ensure that water storage facilities comply with applicable regulatory requirements, but also that the utilities are continually and reliably meeting customer's expectations.

The compliance process requires that utilities conduct an inventory of system assets, provide adequate staffing and training, perform preventative maintenance, and demonstrate adequate funding. In order to meet these requirements, a city or utility must identify its needs and costs, and develop long-term financial plans.

### **Proven Methodology for Success**

To better address these requirements, today many utilities are implementing asset management programs in various aspects. However, Texas—along with the entire U.S.—is playing “catch-up” to leading water utilities in the United Kingdom and Australia, where asset management has been at the forefront of delivering high levels of customer service and efficiencies within the industry for years.

An efficient asset management program represents a proven methodology for water utilities to maximize ratepayers' return on investment (ROI), extend asset life, and reduce life-cycle costs.





In plain terms, an asset management framework allows a utility to determine:

- What condition its water storage facilities are in
- How these water storage facilities are performing
- What services they currently deliver, and what they need to deliver in the future
- What risks there are to the storage facilities and areas they serve
- What will it cost to maintain the water storage facilities over their planned life
- When water storage facilities need to be repaired or replaced and how
- What may need to be done differently in the future

### **Balancing Various Factors**

This framework requires a holistic evaluation of all assets and resources, using life-cycle analysis to determine the economic impacts of potential rehabilitation and replacement activities. Social and environmental objectives must often be considered along with financial factors. Achieving a balance of these factors isn't easy. While beneficial results can be identified in isolation, the best balance is found through big-picture evaluation.

For example, in various aspects it is considered a success when a tank painting program approach results in extended exterior life of the asset and enhanced community pride. Equally important, however, is the recognition that the program may have detrimental impacts on structural rehabilitation, water quality, and internal performance of the asset due to the negligence of the tank system as a whole.

### **Planning is the Key to Prioritization**

As the capital costs of adding new storage facilities or processes can be significant, it's no surprise that meeting regulations and replacing other critical infrastructure tend to take top priority when budgets are tight. While making holistic decisions can prove challenging in light of these factors, a successful asset management program can better resolve and ultimately reduce these pressures.

The Asset Management Plan is the first critical step in developing comprehensive solutions for reducing costs, preserving assets, enhancing performance, and improving services related to reliability and regulatory concerns.

Continue the conversation with **Freddie Guerra** at [aguerra@kleinfelder.com](mailto:aguerra@kleinfelder.com).

