



Asset Management: Frequently Asked Questions

What is asset management?

The assets of a drinking water system include the natural and engineered components for providing water (e.g., source water, pumps, motors, storage tanks, treatment plants, pipes). Asset management is a process water utilities can use to make sure that planned maintenance can be conducted and capital assets can be repaired, replaced, or upgraded on time and that there is enough money to pay for it.

Why do water systems need an asset management plan?

To ensure the water system can:

- Maintain a desired level of customer service at the lowest life cycle cost
- Prolong asset life and improve decisions about asset rehabilitation, repair, and replacement
- Meet consumer demands with a focus on system sustainability
- Set rates based on operational and financial planning
- Create a budget focused on critical activities for sustained performance
- Meet service expectations and regulatory requirements
- Improve responses to emergencies and safety and security of assets
- Reduce overall cost for operations and capital expenditures

What is required for an asset management program?

Five Core Components of Asset Management

1. Current State of Assets
2. Level of Service
3. Critical Assets
4. Minimum Life Cycle Costs
5. Long Term Funding

Current State of Assets

Knowing what assets the water system owns, where assets are located, what condition assets are in, what are the assets' useful lives, what the assets' values are.

- Define an asset
- Use as-built record drawings to inventory assets
- Create maps and locate assets on a map
- Take pictures of assets
- Evaluate condition of assets
- Inventory tools

Level of Service

Level of service defines what the water system wants their assets to provide, how they should perform, and what customers expect and are willing to pay. The goals should be specific, measurable, attainable, realistic and time-based. Level of Service goals include public health and safety, customer service, system maintenance, response time, water loss control, drought and/or demand management and system management.

- Water quality
- Water quantity
- System reliability
- Regulatory requirements

Critical Assets

Critical assets are assets that sustain the water system's performance. Criticality of assets is based on an asset having high risk of failure, and major consequences (i.e., expense, system failure, safety, health) if it does fail.

- Analyze risk and failure of assets
- Identify costs to repair the asset
- Develop a ranking system according to how critical each asset is to system operation

Minimum Life Cycle Costs

Assets with higher risk are replaced sooner than the end of their predicted or estimated useful lives and those assets with lower risk are replaced after they fail.

- Evaluate current O&M program
- Move from reactive (crisis based) maintenance to a predictive (scheduled or preventative) maintenance
- Evaluate cost and benefit of rehabilitation versus replacement
- Develop a Capital Improvement Plan

Long Term Funding

Knowing the economic costs of operating and maintaining a water system, and the revenues generated by the water system determine the system's financial forecast. The financial forecast then helps the system decide what changes need to be made to the long-term funding strategy.

- Conduct a rate review
- Identify external funding sources
- Low interest loans through the Drinking Water State Revolving Loan Fund (DWSRF)
- Assess financial health using the [*SMART Management Financial Tool*](#) located on the [Public Water System Switchboard](#)

What are the benefits of an asset management plan?

- Better operational decisions
- Improved emergency response
- Greater ability to plan and pay for future repairs and replacements
- Increased knowledge of asset location and condition
- Increased understanding of which assets are critical to the utility
- More efficient operation
- Improved customer communication and service
- Easier rate-setting
- Rates based on sound information
- Increased acceptance of rates
- Better prioritization of capital improvement projects

How does the State of Idaho Encourage Asset Management?

- State Revolving Fund (SRF) priority points – Water systems can receive rating points on a drinking water loan or planning grant if they have implemented, or will implement as part of a proposed project, an asset management plan.
- Funding for Asset Management – DWSRF Set-Asides can be used for asset management planning if part of a fundable project.
- Technical assistance from third party providers to provide on-site and off-site assistance with asset management and plan development.
- *SMART Management Financial Tool* – This application has the potential to be used three ways:
 - Satisfy the financial capacity checklist question in the sanitary survey
 - Demonstration of financial requirement covering revenue sufficiency
 - Assist with DWSRF loan underwriting