

Asset Management

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What is Asset Management?¹

- “maintaining a desired level of service for what you want your assets to provide at the lowest life cycle cost.”
- Getting the most out of your assets at the lowest cost to you.



1. "Asset Management: A Best Practices Guide." *Environmental Protection Agency*. 1 Apr. 2008. Web. 20 Jan. 2016.

What is the OEPA doing when it comes to Asset Management?

- Legislative/Rules
- SB 333
 - Intending to implement rules that would require ALL public water systems to have an asset management program.
 - This program would be used to evaluate capability of water systems getting SRF loans, enforcement cases and otherwise obviously struggling water systems

SB 333 Provisions

- An inventory and evaluation of all assets
- Operation and maintenance programs
- An emergency preparedness and contingency planning program

SB 333 Provisions

- Criteria and timelines for infrastructure rehabilitation and replacement
- Approved capacity projections and capital improvement planning
- A long-term funding strategy to support asset management program implementation

Draft Asset Management Rules

- To mesh with the proposed statutory change and our existing capability rules, we have drafted rules to address the managerial, technical and financial capability of all water systems
- Requires a written asset management program available for inspection on-site

Managerial Capability

- Ownership accountability
- Brief non-technical description
- Operating plan
- Written demonstration of addressing complaints, violations, etc.
- Inventory of contacts
- Purchasing procedures



Technical Capability

- Map of water source, treatment, storage, and distribution
- Inventory of assets
 - Name, age, status, location
- Evaluation of assets
 - Condition, maintenance and repair history, RUL, criticality
- Ranking of assets

Likelihood

	Low	Medium	High
High	Yellow	Red	Red
Medium	Green	Yellow	Red
Low	Green	Green	Yellow

Impact



Level of Service

- What level of service do my stakeholders and customers demand?
- What do regulators require?
- What is my actual performance?
- What are the physical capabilities of my assets?
- Quantity, Quality, Reliability
- Ability to measure success

Technical Capability cont.

- Operation and maintenance programs
- Adequate maintenance log
- Emergency and contingency planning
- Approved capacity projections



Metering

- Meters are your cash registers
- Necessary to determine Non Revenue Water
- Ensures everyone pays their fair share
- Run your water system like a business

Rehabilitation & Replacement → Capital Improvement Plan

- Criteria and timeline for rehabilitation and replacement
 - What are the costs of repair, rehabilitation, and replacement for critical assets?
- Capital Improvement Plan
 - Project description, cost, funding sources



Long-term Funding Plan

- Funding for CIP and operations
- Do we have enough funding to maintain our assets for our required level of service?
- Is what we charge for water sustainable for our system's long-term needs?
- Reserve funds

Long Term Implementation

- Reviewing levels of service
 - These will be unique to each water system
 - Suggestions differ by type of water system
- Review of metrics
 - List of required metrics differing by type of water system
 - Want to see that the system is continuing to make improvements
 - Example: Non Revenue Water

Examples of Level of Service

- Community
 - Cost/MG
 - Actual Operating Expenses
 - Testing/Maintenance Tasks per Year
- Transient Non Community/Non Transient Non Community
 - Operating Budget (Operating Ratio)
 - Testing/Maintenance Task per Year
 - Reserve Funds

Examples of Level of Service

- Testing/Maintenance Task per Year

Our system will test all valves once a year. We will document the time and date we test. We will record the direction and number of turns for each valve. We will do one side of town in the spring and the remaining in the fall.

- Reserve Funds

Our goal is to have a fund by year's end totaling \$XXX. To meet this goal we will plan to set aside \$XX each month from our revenue. We will track the amount set aside each month to see if for next year the amount each month should be adjusted due to seasonal changes.

Examples of Metrics

- Community
 - Operating Budget (Operating Ratio)
 - Non-revenue Water (Meters are your cash registers!)
 - Summary of completed projects from CIP
- Transient Non Community/Non Transient Non Community
 - System Pressure
 - Reserve Funds
 - Number of days unable to serve water

Examples of Metrics

- Non Revenue Water (AWWA M36 Manual, free water audit software)
 - < 20%
- Operating Ratio = (Operating revenue/Operating Expenses)
 - Ex: 1.2
- System Pressure
 - 20 psi

Summary

- Asset management can help you address issues while they're small
- Don't let small problems turn into big ones!

Questions



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