Asset Management

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Overview

- Senate Bill 2
- Benefits of Asset Management
- Rule Making
- Implementation Plan
- Funding

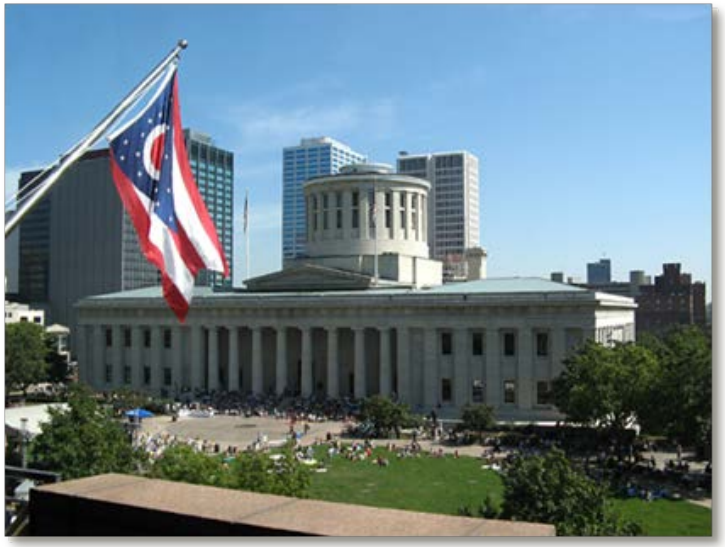

Image courtesy of the Capitol Square Review and Advisory Board

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Drinking Water Issues In Senate Bill 2

- Asset Management required at all public water systems
- Expanded escrow and added financial assurance flexibility
- Set up receivership process

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SB2 Asset Management Provisions

- Components:
  - Inventory and evaluation of all assets
  - Operation and maintenance programs
  - Emergency preparedness and contingency planning program
  - Criteria and timelines for infrastructure rehabilitation and replacement
  - Approved capacity projections and capital improvement planning
  - Long-term funding strategy to support asset management program implementation

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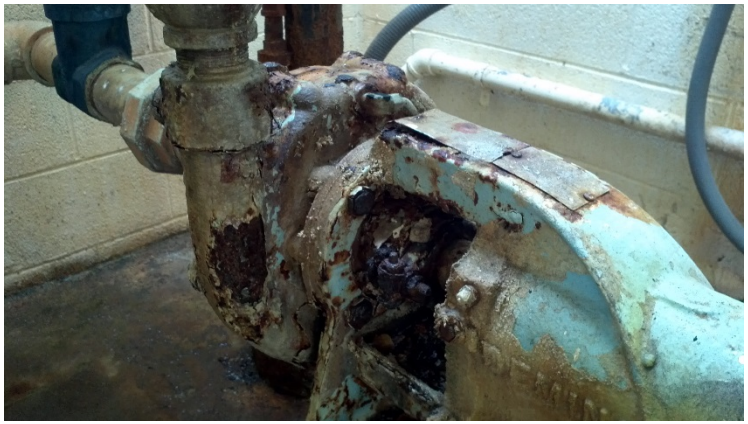
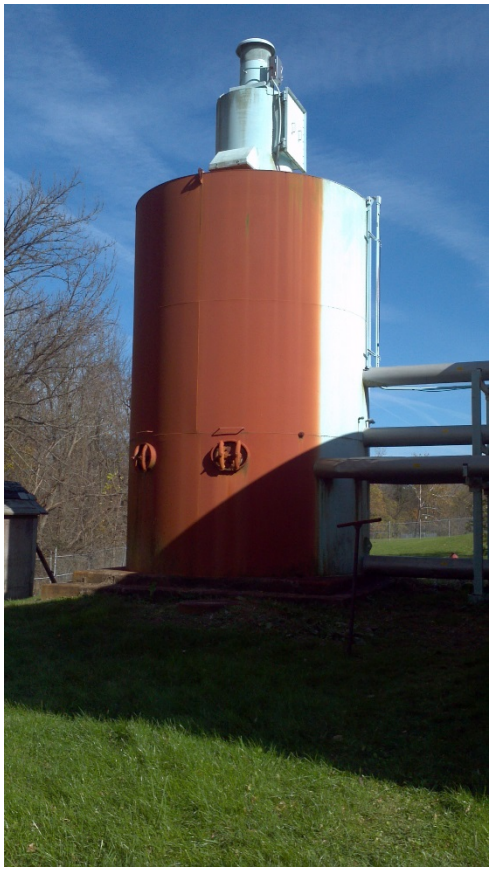
Why Do Asset Management?





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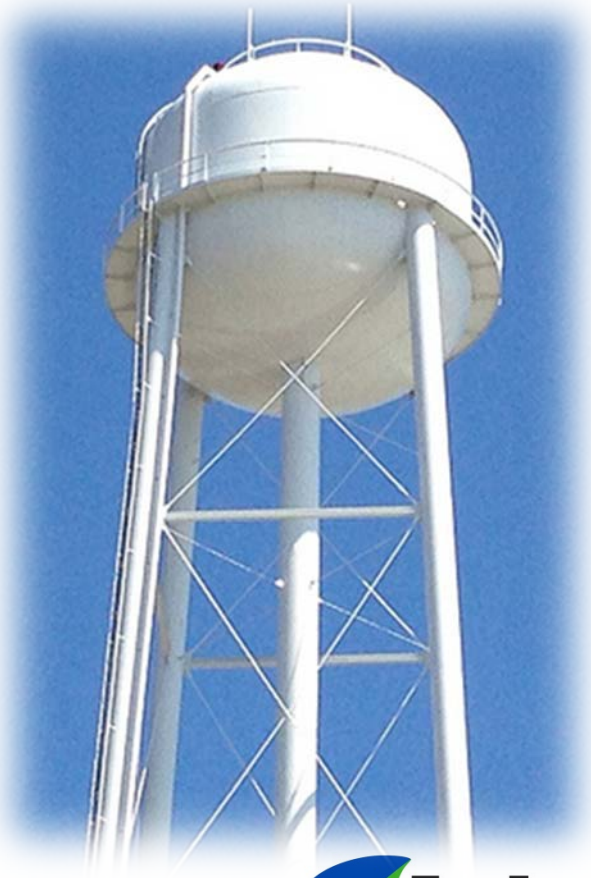
What is Asset Management?[1]

- “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.



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

What Can Asset Management Do for a Water System?

- Can help raise capital to improve infrastructure
- Operation and maintenance on a frequency that makes sense to get the maximum life of the assets ($1 spent on proactive maintenance saves $6-$10 on rehab or replacement)
- Replace assets when condition warrants it, not just because they're old, helps prioritize projects

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What Can Asset Management Do for a Water System?

- Allows a system to plan ahead for future improvements and adjust rates gradually to meet future financial needs
- Allows a system to adequately address the health, safety and welfare of their customers
- Establishes real costs of infrastructure if replacement needed, adequate insured $$$

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What Can Asset Management Do for a Water System?

- Set aside reserves to replace critical infrastructure in emergencies
- Make staying in compliance easier
- Save the system money!
- Leads to readiness for economic development (more/better jobs)

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Draft Asset Management Rules

- We have drafted rules to address the managerial, technical and financial capability of all water systems
- We are following our typical rulemaking process. Draft rules will be available soon for interested party review.
- Written asset management programs required by October 1, 2018 for all water systems
- Submission of the written asset management program will only be upon the Director's request.

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Capability

- Asset management will be used as a demonstration of capability
- Capability of a water system is broken down into three parts: managerial, technical and financial

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Managerial Capability

- Documentation of ownership
- Documentation of a certified operator
- Brief non-technical description of the water system

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Managerial Capability

- Operating plan
- Written procedures
- Inventory of external contacts
- Internal contracting and purchasing procedures (routine and emergency)

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Technical Capability

- Map – use the lead map they already have and build on it!
- Inventory of assets
- Evaluation of assets
- Level of service goals
- Metrics

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Technical Capability

- Operation and maintenance programs
- Approved capacity projections
- Criteria and timeline for rehabilitation and replacement
- Capital improvement plan (5, 10 and 20 year projections for major asset replacements, with cost estimates and funding plan)

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Financial Capability

- Systems need to have an operating budget ratio greater than 1.0
- Operating budget ratio is defined as the revenues received divided by the cost of operation of the water system
- Current water rate ordinance and triennial water rate evaluation
- Documentation of all customers billed per metered water usage

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Pulling It All Together

- Most systems have a lot of this information, they just need to write it down and gather it in one place
- Systems can do a lot of this without outside help, saving them money and helping them understand their program better
- An asset management program is more than just a tracking system
- They don't have to have a software system to track everything, but it helps for more complex systems

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Who Will We Check?

- Prioritizing systems requesting SRF loans, systems under enforcement and systems with obvious capability issues
- These systems will undergo a capability screening to identify areas of deficiency
- The systems' asset management program will need to address these areas

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Purpose of Capability Screening

- We want to get all responsible parties for the water system in the same room so they all hear the same thing
- We also want them to understand where each of them fits into the overall operation of the water system and understand their respective responsibilities

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Capability Screening Tool

- Tool has 12 categories of questions for community water systems: governing body, O&M/preventative maintenance, source water protection, water supply and demand, emergency preparedness, asset management, budgeting, rates, reserve accounts, water system policies, compliance and water loss

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Capability Screening Tool

- Governing Body:
  - Does the governing body hold meetings that are open to the public and announced in advance?
  - Is there an organizational chart for the governing body with clearly defined job duties and assigned individuals?
  - Do operators, the governing body and other employees regularly attend training to enable them to maintain their skills?
  - Is the governing body informed and responsive to issues related to drinking water such as production, capacity, water loss, O&M, water quality or compliance?

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Capability Screening Tool

- O&M/Preventative Maintenance
  - Does the system have an up-to-date and written O&M plan?
  - Does the system implement an adequate preventative maintenance plan, including exercising valves, flushing water mains, and inspecting/cleaning storage tanks (as applicable)?
  - Does the system routinely maintain, repair or replace equipment prior to failure?
  - Does the system experience routine failures (e.g., chlorinator, leaks, low pressure or main breaks)?

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Capability Screening

- Source Water Protection
  - Does the system actively utilize an up-to-date source water protection plan/protective strategies checklist?

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Capability Screening

- Water Supply and Demand
  - Does the system regularly monitor water supply and demand and update projections on a regular basis?
  - Is the system's approved capacity/contract adequate to meet demand over the next five years?
  - If long term (>5 years) projections or other available information shows that the system will exceed approved capacity, is the system planning for this shortfall?
  - If the system loses its primary water source, will the combined capacity of all remaining water sources meet demand under normal demand conditions?

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Capability Screening

- Emergency Preparedness
  - Does the system have an adequate, up-to-date contingency plan that is regularly practiced and implemented when necessary?
  - Does the water system have an operational emergency or standby electrical power source sufficient to run critical system components?
  - Does the water system have accurate maps of the distribution system?
  - Does the water system have an established emergency or supplemental water supply available, such as an interconnection with a neighboring system, or a second source?

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Capability Screening

- Asset Management
  - Does the system have a comprehensive Asset Management Plan, updated within the last five years, that includes:
    - asset inventory;
    - criticality analysis;
    - condition assessment protocols;
    - criteria and timeline for replacement; and,
    - O&M and funding source(s)?

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Capability Screening

- Budgeting
  - Does the system have an annual budget that includes necessary reserve funds?
  - Does the system have a capital improvements plan and a multi-year projection that addresses future expenses?

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Capability Screening

- Rates
  - Are all customers billed per metered water usage?
  - Are rates and rate structures evaluated on a routine basis (i.e., at least every 3 years) and adjusted as necessary?
  - Does the water system's current rate structure produce enough income to cover current expenses (i.e., operations and maintenance), future costs and all necessary reserves?

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Capability Screening

- Reserve Accounts
  - Does the water system have funding available to cover the system's most expensive or critical component if it should fail?

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Capability Screening

- Water System Policies
  - Has the system adopted written policies on:
    - security;
    - use of system equipment;
    - routine billing, including a backup billing system;
    - customer deposits and payments;
    - collections, customer service disconnection and shutoff notices;
    - connection charges;
    - customer complaints; and,
    - purchasing authority?

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Capability Screening

- Compliance
  - If the system has/had a significant deficiency, has it been addressed or is it on an acceptable schedule to be addressed?
  - Have all requirements cited in previous survey letter(s) or other correspondence been addressed?
  - Is the system in compliance with the certified operator requirements of Chapter 3745-7 of the Administrative Code?
  - Is the system in compliance with the backflow prevention requirements of Chapter 3745-95 of the Administrative Code?
  - Has the system received MOR violations or deficiency letters in the previous twelve months?
  - Is the system in compliance with the plan approval requirements of Chapter 3745-91 of the Administrative Code?
  - Has the system obtained a license to operate in each of the last 5 years?
  - Is the system in compliance with all monitoring requirements?

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Capability Screening

- Water Loss
  - Does a recent water audit show less than 15% unaccounted-for water loss?
  - Are steps being taken to detect and address leaks?

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Implementation Plan

- At the time of sanitary surveys, inspectors will initially be asking to see some basic components, such as asset inventory, maps, level of service goals, metrics, etc.
- We are developing guidance for systems, expectations will vary based on system type and complexity
- We are developing templates for very small systems

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Starting an Asset Management Program

- Establish and asset inventory and condition assessment
- Prioritize capital needs of water system
- Determine if funding is in place to accomplish capital improvements. If not, put together a plan to do so
- Evaluate management structure to put the system in best position for success

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Lessons Learned via Asset Management

- System realizes they don't have the staff and finances to adequately run the water system
- System runs more efficiently
- System management becomes more invested in the operation and maintenance of the water system
- System becomes an selling point for businesses to relocate to the community

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Shared Services

- Better economy of scale (bulk chemicals)
- Small systems can share resources such as operators, maintenance equipment, billing systems and save money
- Still have the responsibility of owning and maintaining the water system

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Regionalization

- Dollars spent operating a water system can be used for other community priorities
- Capital improvement projects costs spread over a much larger base
- Can result in decreased cost of water for consumers
- Increased efficiency of operations

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Positive Outcomes

- Fewer water system, but more capable systems, better managed
- Systems are shovel ready for economic development
- County isn't burdened with taking over failing systems

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Funding for Asset Management

- Planning loans are available
- Terms of 5 years at 0% interest
- Potential for $10,000 in principal forgiveness

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Asset Management Webpage

- http://epa.ohio.gov/ddagw/pws.aspx#113435168-asset-management
- All things asset management
- Coming soon: draft rules and small system templates
- Down the road: Guidance for system expectations

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Questions?

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