

# **Asset Management**

**Emily Pohlmeier**

**Environmental Specialist**

**Ohio EPA Division of Drinking and  
Ground Waters**

# Overview

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



Image courtesy of the Capitol Square

# What Can Asset Management Do for You?

- Can help raise capital to improve infrastructure
- Operation and maintenance on a frequency that makes sense to get the maximum life of the assets
- Better response to emergencies (contingency plan)
- Sets aside reserves to replace critical infrastructure in emergencies

# What Can Asset Management Do for You?

- 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 \$\$\$

# What Can Asset Management Do for You?

- Having an asset management program can give a system bonus points when their loan nomination is scored
- Make staying in compliance easier
- Save the system money!

# Ohio Senate Bill 2

- Requiring Ongoing Asset Management Efforts by Public Water Systems
- Strengthening Efforts to Protect Lake Erie
- Encouraging Better Use of Dredge Materials
- Requiring Financial Assurance for Privately Owned Water Systems
- Ensuring Responsible Disposal of Construction and Demolition Debris
- Strengthening the State's Ability to Clean Up Abandoned Landfills

# 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

# 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
- SB 2 became effective October 6, 2017



# 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
- We will follow our typical rulemaking process, including stakeholder outreach and public comment
  - Public comment period ended February 16<sup>th</sup>
- Written asset management programs required by October 1, 2018

# Managerial Capability

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

# Managerial Capability

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

# Technical Capability

- Map
- Inventory of assets
- Evaluation of assets
- Level of service goals
- Metrics

# Technical Capability

- Operation and maintenance programs
- Approved capacity projections
- Criteria and timeline for rehabilitation and replacement
- Capital improvement plan

# Financial Capability

- Pro-forma statements (5 years previous and 5 years projected)
- Income statement
- Balance sheet
- Statement of cash flow

# Financial Capability

- Amortization schedule for outstanding debt
- Capitalization terms of debt
- Current water rate ordinance and triennial water rate evaluation
- Documentation of all customers billed per metered water usage
- Information demonstrating bond or credit ratings

# 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



# Implementation Plan

- 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

# 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

# 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.
- Submission of the written asset management program will only be upon the Director's request.

# Implementation

- We are developing guidance for systems, expectations will vary based on system type and complexity
- Templates available for non-communities and MHP/Homeowners Associations

# 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

# 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?

# 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)?

# Capability Screening

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



# 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?

# 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?

# 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)?

# 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?

# 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?

# 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?

# 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?

# 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?



# 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?

# Funding for Asset Management

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

# Questions?

**Emily Pohlmeier**

Environmental Specialist

Ohio EPA Division of Drinking and

Ground Waters

(614) 644-2755

*[Emily.Pohlmeier@epa.ohio.gov](mailto:Emily.Pohlmeier@epa.ohio.gov)*

