

Asset Management

Susan K. Schell
Environmental Manager
Ohio EPA Division of Drinking and
Ground Waters

Overview

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



Image courtesy of the Capitol Square
Review and Advisory Board

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

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
- 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 rating

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

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?

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
- We are developing templates for very small systems

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!

Funding for Asset Management

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

Questions?

Susan K. Schell

Manager, Engineering & Infrastructure
Section

(614) 752-9725

Susan.Schell@epa.ohio.gov

