Water & Wastewater Board Management Training

Wednesday, July 22, 2026

This program is made possible under a cooperative agreement with US EPA.

Zoom Logistics

Audio/Webcam Settings

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Type questions into the chat box any time throughout the session

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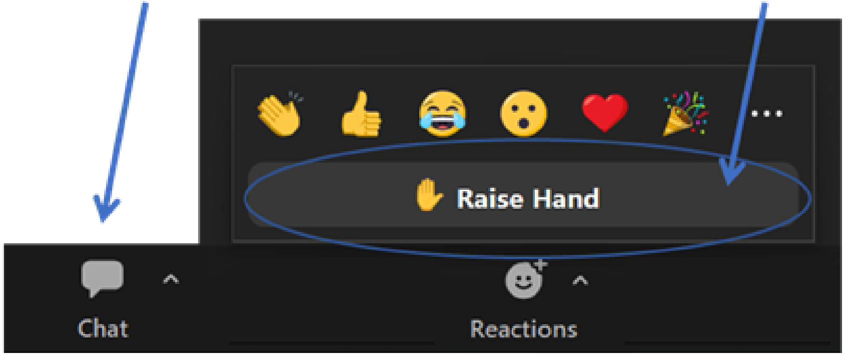

Continuing Education Credits

This session has been pre-approved for 2 CEU Hours by the South Dakota Board of Operator Certification.

To receive credit(s) and your EFCN Certificate of Attendance:

- You must attend the entire session
- You must register and attend using your real name and unique email address - group viewing credit is not accepted
- You must participate in all polling questions
- Certificates of Attendance will be sent via email within 30 days

If you have questions or need assistance, please contact smallsystems@syr.edu.

About Us

The **Environmental Finance Center Network (EFCN)** is a university- and non-profit-based organization creating innovative solutions to the difficult how-to-pay issues of environmental protection and water infrastructure.

The EFCN works collectively and as individual centers to address these issues across the entire U.S, including the 5 territories and the Navajo Nation. The EFCN aims to assist public and private sectors through training, direct professional assistance, production of durable resources, and innovative policy ideas.

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EFCN
environmental finance center network

YOU DON'T HAVE TO NAVIGATE WATER CHALLENGES ALONE.

Request Free Technical Assistance Today

Our team of partners can help you tackle your Technical, Managerial, and Financial (TMF) challenges head-on.

Areas of assistance include, but are not limited to:

- Funding & Financial Strategy
- Workforce Development
- Security & Cybersecurity
- Regulatory Compliance
- Rate Setting & Affordability
- Asset Management
- System Performance
- Public Engagement
- Utility Management
- Succession Planning

*efcnetwork.org/**get-help***


THE BUCK STOPS HERE

Duties & Responsibilities

The board is legally responsible for:

all aspects of the water and wastewater system. This includes employee supervision, finances, operations and maintenance, planning and compliance with safe drinking water and clean water regulations.

Fiduciary Responsibilities

- Protect water system finances
- Procure independent audit services
- Safeguard system assets
- Maintain adequate funding for necessary maintenance and inspection of system components
- Procure insurance coverage
- Require fidelity bonding and bonding of those employees dealing with system finances
- Prevent employee and customer theft
- Maintain relationships with customers

Procurement of Goods and Services

Purchasing goods and services for and through the system

- Methods of purchase
  - Non-competitive purchases
  - Competitive bids
- Factors to consider
  - Education/certification
  - Experience/references
  - Familiarity/expertise
  - Capacity to perform

Differences between Bylaws and Policies/Procedures

- **Bylaws are adopted by the membership**
  - Outlines the purpose and the rights of the organization
  - Define type and area of service provided
  - Dictate employees' responsibilities and policies and procedures to follow
  - Any occurrences not specifically outlined in bylaws should refer back to Nonprofit Act
- **Policies/procedures/ordinances are voted on by the Board and cannot overshadow or conflict with the system's bylaws**

How Bylaws Manage and Regulate the Corporation

- Set a fixed time for the annual meeting (MS Code Section 79-11-97)
- Terms of the directors (these cannot exceed 5 years but may be staggered to insure management continuity for the system) (MS Code Section 79-11-239)
- Authentication of minutes (MS Code Section 79-11-271)
- Members have a right to inspect and copy the records of the association (MS Code Section 79-11-285)

Municipal Ordinances

An ordinance establishes definitions, policies, charges and rates for municipal systems.

Ordinances serve the same purpose for municipalities that bylaws and policies and procedures serve for water associations.

Policies and Procedures

- Standard Operating Procedures (SOPs) act as a daily guide for employees and should be signed by all water system personnel and management to ensure accountability and legal support
  - Cut-off policy
  - Rates and fees
  - Water user agreement
  - Customer complaint procedures
  - Boil Water Notice procedures
- Help maintain consistency in operations
- Prevent discrimination
- Act as a reference or instruction for employees

Other General Policies and Procedures Examples

- Collection & cut-off
- Customer service
- Financial internal control
- Emergency/boil water notices
- Subdivision/line extension
- Flushing devices
- Rate review
- Job descriptions
- Water users' agreement
- Standard operating procedures
- Flushing program
- Long-range plan
- ***Emergency Operating Procedures***
  - ***Emergency Response Plan***
  - ***Security Vulnerability Assessment***

Board Policies - IRS Form 990

- The tax form for all nonprofit organizations; used to evaluate the organization and the way in which it functions
- Requires policies in place for:
  - Executive compensation
  - Record retention
  - Document destruction
  - Whistle blowing
  - Conflict of interests
- These policies should be ***written, approved by the board and entered into the minutes***

Board Policies – Executive Compensation

- Any compensation must be approved by executives/officers
  - Approved by membership per bylaws
- To comply with IRS requirements this must be a reasonable financial agreement
- There should be no off-agreement benefits

Board Policies - Record Retention Policy

- Record Retention Policy establishes the proper files to be retained for the organization to exist and function, and to serve as evidence for potential legal matters, system history, and strategic planning.

- Refer to Section III in Board Management Training Manual, IRS Publication *Compliance Guide for Tax Exempt Organizations,* and consult with your system's accountant and attorney

Board Policies - Document Destruction Policy

- Documents (including electronic documents and voicemails) cannot be destroyed if the organization is or may soon be under investigation for any reason.

- Document Destruction Policy must establish:
  - Which documents can be destroyed
  - When they can be destroyed
  - How to go about destroying them

Board Policies - Whistleblower Policy

- Whistleblowing policies concern a person who reports dishonest or illegal activity occurring in an organization
  - What constitutes illegal/dishonest activity in general terms
  - Clear process for reporting illegal activity
  - How these activities should be investigated and subsequent penalties
  - Safeguards to protect the whistleblower
- Whistleblowers are protected by federal law: Sarbanes-Oxley Act of 2002

Board Policies - Conflict of Interests

- Potential conflicts should be disclosed when joining the board and be reviewed by the other board members

- Establish a clear process for disclosing and addressing conflicts as they arise, including actions to be taken by the individual person and the board
  - Board Member – Board Member
  - Board Member – Employee
  - Board Member – Vendor
  - Employee – Employee

Board Policies - Conflict of Interests

- Ongoing and serious conflicts of interest may lead to that member resigning from the board
- Types of conflicts of interests:
  - Financial
  - Loyalty to multiple organizations
  - Conflicting roles and relationships
- This policy is essential to:
  - Maintaining the integrity of the organization
  - Avoiding legal problems and public scandals
  - Having a functioning organization

Board Policies - Ethics

- A ***written, approved and adhered to*** ethics policy is crucial to maintaining:
  - Organizational integrity
  - Public trust
  - Employee – Board relations
- Ethical organizations should abide by all necessary
  - Abide by all applicable laws and regulations
  - Demonstrate care for the well-being of the community and the organization
  - Have **written** penalties for inappropriate behavior

Board Policies - Ethics

Individuals in an organization should treat with respect and consideration all persons, regardless of:

- Race
- Religion
- Gender
- Abilities
- Age
- National Origin
- Sexual Orientation
- Political Beliefs
- Military Service
- Creed

Checks and Balances

- A system of checks and balances should exist for the protection of each board member and employee
- Checks and balances helps to safeguard the financial wellbeing of the system
  - A system's money is the customers' money
  - Ensure those who deal with the system's finances are bonded and keep entire board informed of any developments

Checks and Balances

- Require 2 signatures on all checks, CD's, etc.
- Review financial and bank statements, company credit card and local business receipts, and invoices monthly
- Receive vote of approval on above statements and receipts from board after review
- Schedule bill payments after board approval (except required bills such as utilities, debt obligations, normal payroll)
- Secure yearly audits from an outside, reputable firm

Checks and Balances

- Watch for red flags: unusual lines on financial statements, very little cash deposited, returned checks/missed payments of bills, missing business checks, unpaid system taxes/payroll taxes
- Prior to any misconduct, adopt a policy for dealing with such misconduct that covers employee termination, repayment, and other resulting procedures
- When dealing with financial misconduct, always have an auditor and attorney involved and keep information confidential

Roles of a Board Member

- The function of a board member and his/her level of involvement varies with each organization.
- Above all, a board member's responsibility is to enable the organization to achieve its stated goals and protect the public's (including customer's) interest.
  - Board members should be assigned to certain tasks or management areas based on experience and expertise. By separating out the responsibilities of a public water system board into manageable pieces, each board member can devote more time and attention to their particular task

Roles of a Board Member

- **Duty of Care:** must be present at meeting and prepared to make informed decisions
- **Selection of Chief Executive:** important for the day to day functioning of the organization
- **Strategic Planning:** long-term goals to promote long-range sustainability of the organization
- **Organizational Direction:** the board sets goals and then carries them out

Roles of a Board Member

- **Stewardship:** ensuring that the organization's resources are used in the best way possible to benefit the public and the customers
- **Aid to Staff:** assisting the organization's staff in both large and small matters when needed
- **Community Relations:** board members are representatives of the organization when out in the community and should inform customers of the organization's plans and activities when possible

Roles of a Board Member

- **Ethics:** should create an environment of ethical behavior and hold other members accountable to the highest ethical standards
- **Oversight:** should always be aware of how the organization is functioning and how resources are being used to ensure that the organization is complying with all laws and regulations

Duties of Officers

- President/Mayor/Chairman
  - Executive Officer
  - Enforces adopted policies
  - Calls special meetings
  - Presides over Board meetings (maintains order)
  - Legal point of contact for regulatory agency correspondence/actions

Duties of Officers

- Vice-President/Mayor Pro Tem/Vice-Chair
  - Presides over Board meetings in the absence of the President/Mayor/Chairman
  - Performs other duties as assigned by the President/Mayor/Chairman
- Secretary-Treasurer/Secretary/Town Clerk
  - Records Board minutes
  - Receives, presents and keeps correspondence
  - Maintains financial records

Types of Meetings

- Monthly Board meetings
- Regular annual meetings
  - Annual meetings of non-profit associations are legally required by Miss. Code § 79-11-197
- Special meetings
  - If a special meeting is called, the purpose of the meeting must be stated; this is the only business that can be addressed
  - Notification of special meetings comes from the President or Chair; Secretary is usually asked to mail notices or otherwise advertise the meeting

Agendas

- Usually developed by President, manager or a designated board member to ensure that business will be conducted in an orderly and efficient manner
  - Should have an approved policy setting a deadline for adding agenda items
  - Should have an approved policy stating how long customers can have the floor at board meetings
- Outlines the nature of the business of the board meeting and allows time for better preparation by the Board to discuss pertinent business

Sample Meeting Agenda

- Call to order (President)
- Patriotic exercise or opening prayer (optional)
- Roll call (Secretary)
- Reading/approval of minutes (Secretary)
- Public comment to voice complaints or suggestions (including time limit on the floor)
- Committee reports
- Old business
- New business
  - Operator reports
  - Financial report (Treasurer)
  - Approval of claims
  - Other new business
- Adjournment

Meeting Introduction

- Call to Order
  - Certification of Quorum
- Invocation/Pledge (optional)
- Roll Call of Board Members
- Reading and approval of minutes

Meeting Introduction - Association

- Unless the articles of incorporation or bylaws require a higher or lower quorum, 10 percent of the votes entitled to be cast on a matter must be represented at a meeting of members for a quorum to exist
- Unless one-third or more of the voting power is present in person (or proxy) the only matters that may be voiced at an annual meeting are those described in the meeting notice

Customer Comments

- Customers and the public should be treated with dignity and respect regarding their comments. However, board decisions should be well-conceived and consistent across customers.
- However, established policies should be adhered to – particularly those that deal with the length of time that a customer or member of the public can speak

Old Business

- Chair raises items that were tabled or not acted on at previous meetings
- Chair gives opportunity for other members to bring up other old business for discussion

New Business

- Operator/O&M monthly reports
  - Operator presents written and oral water production/consumption and O&M reports
  - Discussion/questions
  - Chair calls for motion to accept operator report
- Review of monthly financial reports
  - Individual board members review reports
  - Discussion/questions
  - Chair calls for motion to accept financial reports

New Business (continued)

- Review, discussion and approval of claims
  - Board members review each invoice or claims docket
  - Discussion/questions
    - Ample time should be allowed for the board members to understand and make informed decisions regarding financial requests or obligations
  - Chair calls for motion to pay claims

New Business (continued)

- All other new business
  - Chair brings up other new business items listed on agenda
  - Chair gives other Board members the opportunity to raise other new business

Adjournment

- Board decides date, time and location of next meeting
- Chair calls for motion to adjourn meeting

For more information regarding how to make motions, refer to the Board Management Training Manual

Minutes

- Minutes are the legal record for board actions
- Minutes confirm what business was conducted by the board and provide critical evidence of board decisions
- A poor set of minutes often leaves board members vulnerable to criticism and legal action

Minutes (continued)

- Detailed enough to give the important aspects of the meeting but not so detailed to record every comment
  - Nature of meeting
  - Time/date/location
  - Board members present and absent
  - Matters discussed and actions taken (including motions and votes)

Open Meetings Law

- Municipal meetings are to be open to the public
- Association meetings are to be open to members of the association according to outlines in the MS Nonprofit Act

All official meetings of any public body, unless otherwise provided in this chapter or in the Constitutions of the United States or the State of Mississippi, are declared to be public meetings and shall be open to the public at all times unless declared an executive session as provided in section 25-41-7 and section 79-11-205 (Mississippi Code of 1972; revised 2013)

Rights of Members (Assn)

- A member is entitled to inspect and copy any association records listed under the record-keeping requirements at any reasonable time and location specified by the association, if the member gives the association written notice of this demand
- If the member follows proper legal procedures to inspect or copy records and the association refuses this request, the court may become involved

Long-Range System Planning

Long Range Planning

- A long range system plan identifies the system's future goals and the steps necessary in order to achieve them.
- An effective long range plan covers all aspects of the system's operations
  - Finances
  - Operations
  - Human Resources
  - Customer Service
- An effective long range plan is a ***proactive*** effort by the board to identify the best and most cost effective ways to provide quality water to customers at an affordable cost.

Long Range Planning

- There are many methods for developing a long range plan for the system. Not all these methods are effective.
- Bad Practices
  - Develop a “wish list” in 20 minutes at one board meeting
  - **Not reviewing and/or updating** the LRP annually
- Best Practices
  - Involve the operator in the development of the LRP
  - Follow a set procedure for adding items or reviewing
  - Revisit/review LRP regularly

Best Practices for Long Range Planning

- Set aside a significant amount of time for the board and operator to work together
- Use maps/plans to strengthen the LRP
- Incorporate Capacity Inspection comments/noted issues into LRP
  - Nearing capacity limits
  - Deteriorating assets
  - Significant deficiencies
- Identify goals to improve areas of system weakness
- Develop strategies to accomplish those goals and a feasible funding plan
  - Use interest rates to your advantage

Asset Management

Asset Management

- Component of the long range system plan
- A structured approach to maintaining and utilizing current assets and preparing for future asset needs and replacement.
- Benefits:
  - Prolongs asset life and reduces unforeseen emergencies
  - Provides a basis for rate setting and a budgeting base
  - Increases the ability to meet service expectations, customer demands, and regulatory requirements
  - Improves emergency response capability
  - Identifies methods to improve asset security

Asset Management

- Elements
  - People and Organization
  - Data and Records
  - Information Systems
  - Practice and Process
  - Planning and Targets

Cite: http://icma.org/en/Article/10994/Introduction_Part_2 The_Five_Elements_of_Asset_Management

Asset Management

- Developing an Asset Management Plan:
  - Create a current asset inventory list that includes the physical condition of the assets
  - Identify expected/remaining sustainable service life
  - Prioritize assets that are critical to sustained performance (chlorinators, mains, wells)
  - Develop a method to objectively evaluate options
    - Purchase price
    - Maintenance costs
    - Expected life
    - Salvage value (if any)
  - Develop long-term funding strategies

Asset Management Tools

- Risk of incidence
- Remaining life, residual value
- Repair, rehab, replacement schedule
- Procedures
- GIS solutions
- Asset Management Software
  - Check Up Program for Small Systems (CUPSS) on EPA website
  - Spreadsheet
  - Database

Asset Management Example

- Develop asset inventory that includes:
  - Age of the asset
  - Expected serviceable and remaining life
  - Condition (rank from 1-5; 1 = very poor condition and 5 = excellent condition)
  - Remaining life and condition determine prioritization

Asset Management Example

- Develop management plan for storage tank
  - Current Cost: $600,000
  - Average Annual Cost increase: 3 percent
  - Expected life: 20 years
  - Future estimated cost: $1,083,667
- 20 Year Financing Plans
  - Borrow $700,000
  - Accumulate $383,667 in system funds
  - Using an interest-earning account, set aside $1,600 per month
  - At 2 percent ***savings*** rate, set aside $1,300 each month

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TAKING CARE OF WHAT MATTERS

Consolidation

PLAN – 1

- **Consolidation** – one community water system being absorbed into, combined with, or served by other systems to gain the resources they lack otherwise
- **Question**: *Will consolidating assets streamline the management, treatment, and distribution process?*
- Common Consolidation Options
  - **Informal Cooperation**: Assistance without contractual obligations
  - **Contractual Assistance**: Contract for services under system's control
  - **Joint Powers Agencies**: New entity that may be similar to an association that serves all member systems
  - **Ownership Transfer**: Transfer of all assets and liabilities to another system

Consolidation

- **Considerations:**
  - Operating and debt coverage ratios
  - Condition of infrastructure
  - Impact on customers
  - Additional investment needed
  - Public sentiment
  - Short- and long-term economics

- **Pros:**
  - Greater access to capital and grant funding
  - Eliminate duplicated services to save money and increase efficiency
  - Can lower cost of complying with regulations

- **Cons:**
  - Communities may lose autonomy and independence
  - Debt acquisition
  - May cause loss of jobs
  - Physical connection limitations
  - Conflict of management goals and political conflicts

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TAKING CARE OF WHAT MATTERS

Rate Setting

When is it necessary to examine adjusting water rates?

Rate adjustments should be implemented **BEFORE** the utility's expenditures rise to a level of 91% of revenues.

This means that the utility's operating ratio is 1.10 (the minimum ratio that the utility should maintain).

$$\text{Operating Ratio} = \frac{\text{Revenues}}{\text{Expenditures}} = 1.10 \text{ (minimum acceptable ratio)}$$

Factors That Initiate Rate Adjustments

- Increases in expenses – particularly in times of inflation
- Increases in debt service as a result of capital improvements
- Declining water supply, increased growth, and other physical capacity problems that indicate the need for water usage conservation
- A declining customer base or the loss of high-consumption customers

Utility Bills for the Average Home

- Electricity
- Natural Gas or Propane
- Cable or Satellite Television
- Entertainment Streaming Services
- Cell Phone
- Internet
- Water/Sewer/Wastewater

Average Utility Bill Cost

Type of Bill	Cost	Source
Electricity	$135.35	eia.gov
Natural Gas	$100.00	inspirecleanenergy.com
Propane Gas	$200.00	kauffmangas.com
Satellite Television	$85.00	cabletv.com
Cable Television	$83.00	cabletv.com
Entertainment Streaming Services	$75.00	financebuzz.com
Cell Phone	$127.27	moneylion.com
Internet	$36.33	forbes.com
Water	$23.00	wisewater.com
Sewer/Wastewater	$45.00	balancingeverything.com

Rate Structure Components

- (Base) Minimum Water Rate
  - A fixed charge that can include a water usage allowance for a billing cycle
  - Historically, this rate has been used to cover the fixed expenses of the system
- (Base) Minimum Water Usage
  - The maximum amount of water consumed with no additional charges other than the (Base) Minimum Water Rate

Rate Structure Components

- Flow Rate
  - Variable charge for usage in excess that that allowed by the (Base) Minimum Water Rate
  - Historically, this rate has been used to cover the variable (operations) expenses of the water system
- Flow Rate Measurement
  - The unit of measurement that determines how the Flow Rate is calculated (i.e., 1,000 gallons or 100 cubic feet)
  - The typical flow rate measurement in Mississippi is 1,000 gallons

Rate Setting

- Determining Current and Future Budgetary Requirements
  - Fixed Expenses (Expenses incurred regardless of whether water is produced or sold)
    - Debt service Insurance
    - Salaries/wages Professional Fees
    - Scheduled O&M Depreciation
  - Variable Expenses (Expenses that change with the amount of water produced)
    - Electricity Unscheduled maintenance
    - Chemicals
    - Maintenance supplies

Generating Revenue without Increasing Rates

- Determine the true cost for additional services
  - Tap fees
  - Disconnect/reconnect fees
  - Regularly review fees
- Conduct a water audit and leak detection analysis
- Establish a meter change-out program
  - Eliminate old and dead meters
- Establish or review "up front" charges
- Establish or review a late payment charge

Generating Revenue without Increasing Rates

- Establish strict and consistent collection/cut-off policies
  - Rate levels do not matter if you don't collect appropriate amounts from customers
  - Customers who pay subsidize those who don't
  - Collection and disconnect policies should be uniform and fair
  - Pursue legal prosecution of those who damage locks, meters, etc.

Elements of a Uniform Collections Policy

- Establish late charges for overdue bills (10% - 20%)
- Collection fees
- Disconnect notices and deadlines
  - Stamp bills
  - Door hangers
  - Text messaging
- Reconnection fees
  - Fees should recover all disconnect and reconnect expenses
  - Fees should be punitive in nature; discourage late payments from occurring

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Contact Information

Dr. Jason R. Barrett

Extension Professor & Director

Mississippi Water Resources Research Institute

Mississippi State University Extension

133 Scales Building

Mississippi State, MS 39762

662.325.1788 phone

Jason.barrett@msstate.edu

www.wrri.msstate.edu