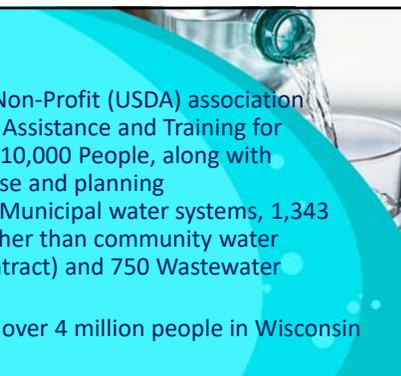




Wisconsin Rural Water Association
Best Practices for Managing Small Water Utilities

1



Who We Are

- Federally Funded Non-Profit (USDA) association
- Provides Technical Assistance and Training for Systems Less than 10,000 People, along with emergency response and planning
- We represent 610 Municipal water systems, 1,343 community and other than community water systems (State Contract) and 750 Wastewater systems
- Our systems serve over 4 million people in Wisconsin

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Ten Attributes of Effectively Managed Water Sector Utilities

- Operators in rural Wisconsin (and urban Wisconsin for that matter) have 10 common Best Management Practices
- Our rural operators must accomplish this by themselves or with a minimum staff and very minimum money
- Safe and affordable drinking water services are critical to ensuring the environmental, economic, and social sustainability of a community.
- Water utilities across the state face challenges, such as aging infrastructure, an aging workforce, increasing regulatory mandates, and competing priorities within the communities they serve.

3



Product Quality

- Produces potable water, treated effluent, and process residuals in full compliance with regulatory and reliability requirements and consistent with customer, public health, and ecological needs

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Product Quality

- All Wisconsin's drinking water is tested, safe and affordable
- New contaminants are becoming a problem for systems to continue this due to costs of testing, and treatment
- PFOS, nitrates, manganese are very costly to test for and/or treat

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Employee and Leadership Development

- Recruits and retains a workforce that is competent, motivated, adaptive, and works safe
- Establishes a participatory, collaborative organization dedicated to continual learning and improvement
- Ensures employee institutional knowledge is retained and improved upon over time
- Provides a focus on and emphasizes opportunities for professional and leadership development and strives to create an integrated and well-coordinated senior leadership team

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Employee and Leadership Development

- This could be the hardest problem for rural systems right now
- Operators are aging and it is much harder to hire and retain good operators
- Lots of institutional knowledge leaves with retiring employees
- Board are reluctant to pay new operators or offer benefits to attract good employees

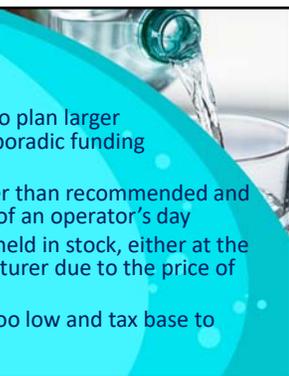
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Financial Viability

- Understands the full life-cycle cost of the utility and establishes and maintains an effective balance between long-term debt, asset values, operations and maintenance expenditures, and operating revenues
- Establishes predictable rates—consistent with community expectations and acceptability—adequate to recover costs, provide for reserves, maintain support from bond rating agencies, and plan and invest for future needs

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Financial Viability

- Most rural systems are unable to plan larger projects due to low rates and sporadic funding opportunities
- Equipment is pushed way harder than recommended and maintenance can take up most of an operator's day
- Construction materials are not held in stock, either at the water system or at the manufacturer due to the price of storage and manufacturing
- Rates? Don't get me started. Too low and tax base too small for reserves

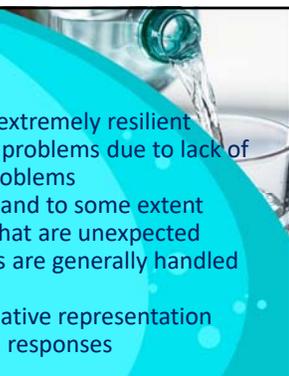
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Operational Resiliency

- Ensures utility leadership and staff work together to anticipate and avoid problems
- Proactively identifies, assesses, establishes tolerance levels for, and effectively manages a full range of business risks (including legal, regulatory, financial, environmental, safety, security, and natural disaster-related) in a proactive way consistent with industry trends and system reliability goals

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Operational Resiliency

- Most small rural systems are extremely resilient and are able to avoid a lot of problems due to lack of funding and infrastructure problems
- Small systems rely on WRWA and to some extent DNR for help with problems that are unexpected
- COVID, other natural disasters are generally handled well with a little help
- Mutual aid agreements, legislative representation and emergency preparedness responses

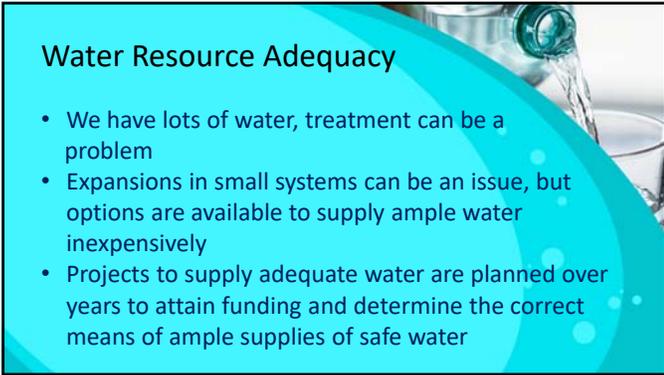
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Water Resource Adequacy

- Ensures water availability consistent with current and future customer needs through long term resource supply and demand analysis, conservation, and public education
- Explicitly considers its role in water availability and manages operations to provide for long-term aquifer and surface water sustainability and replenishment

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Water Resource Adequacy

- We have lots of water, treatment can be a problem
- Expansions in small systems can be an issue, but options are available to supply ample water inexpensively
- Projects to supply adequate water are planned over years to attain funding and determine the correct means of ample supplies of safe water

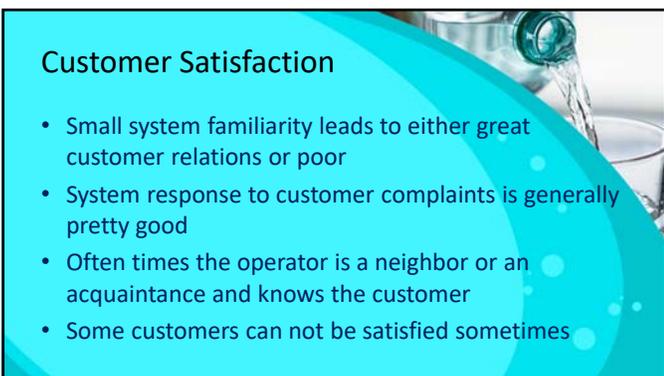
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Customer Satisfaction

- Provides reliable, responsive, and affordable services in line with explicit, customer-accepted service levels
- Receives timely customer feedback to maintain responsiveness to customer needs and emergencies

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Customer Satisfaction

- Small system familiarity leads to either great customer relations or poor
- System response to customer complaints is generally pretty good
- Often times the operator is a neighbor or an acquaintance and knows the customer
- Some customers can not be satisfied sometimes

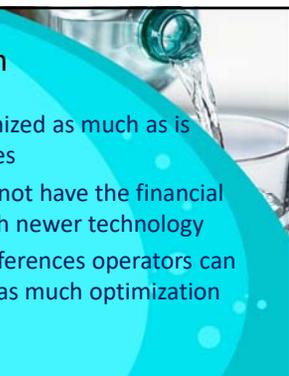
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Operational Optimization

- Ensures ongoing, timely, cost-effective, reliable, and sustainable performance improvements in all facets of its operations
- Minimizes resource use, loss, and impacts from day-to-day operations
- Maintains awareness of information and operational technology developments to anticipate and support timely adoption of improvements

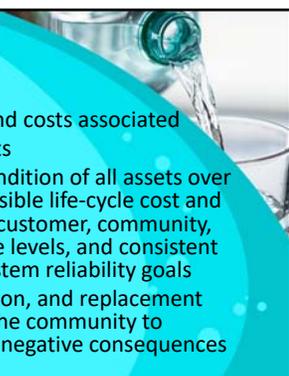
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Operational Optimization

- Rural systems are often optimized as much as is possible with limited resources
- Small systems sometimes do not have the financial means to totally optimize with newer technology
- Through our training and conferences operators can research needs and costs for as much optimization they can afford

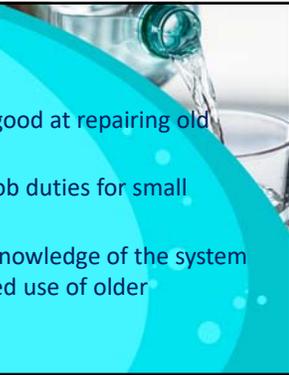
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Infrastructure Stability

- Understands the condition of and costs associated with critical infrastructure assets
- Maintains and enhances the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulator-supported service levels, and consistent with anticipated growth and system reliability goals
- Assures asset repair, rehabilitation, and replacement efforts are coordinated within the community to minimize disruptions and other negative consequences

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Infrastructure Stability

- Many rural systems are very good at repairing old equipment and infrastructure
- Maintenance is the primary job duties for small systems
- Schedules, work orders and knowledge of the system is very important for continued use of older infrastructure

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Community Sustainability

- Is explicitly cognizant of and attentive to the impacts its decisions have on current and long-term future community and watershed health and welfare
- Manages operations, infrastructure, and investments to protect, restore, and enhance the natural environment; efficiently uses water and energy resources; promotes economic vitality; and engenders overall community improvement
- Explicitly considers a variety of pollution prevention, watershed, and source water protection approaches as part of an overall strategy to maintain and enhance ecological and community sustainability

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Stakeholder Understanding and Support

- Engenders understanding and support from oversight bodies, community and watershed interests, and regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions
- Actively involves stakeholders in the decisions that will affect them

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Things to Focus On

- Outcome Oriented
- Identify Improvement Opportunities
- Fit the Unique Needs of Individual Organizations
