



Rural Community Assistance Corporation (RCAC)
www.rcac.org

Sustainable and Effective Utility Management for Small Systems

Rural Community Assistance Corporation (RCAC)
IACC - September 30, 2014
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The RCAP Network



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Southwest RCAP
Community Resource Group
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Northeast RCAP
RCAP Solutions
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Great Lakes RCAP
WSOS Community Action Commission
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Southeast RCAP
Southeast Rural Community Assistance Project
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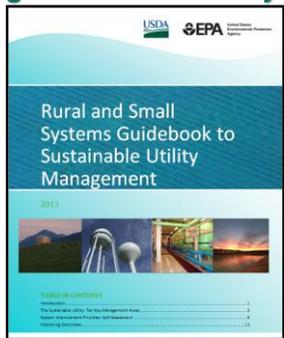
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- ## Our Schedule and Session Outcomes
- ❖ Learn About Sustainable Utility Management for Small Systems 10 Key Management Areas
 - ❖ Group Exercise to engage in Self Assessment Process
 - ❖ Discuss Tools, Resources, and Training Opportunities
- RCAC.org**

Guide on Sustainable Utility Management for Small Systems



USDA **EPA**

Rural and Small Systems Guidebook to Sustainable Utility Management

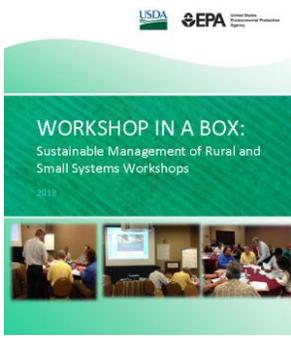
2013

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USDA and EPA Workshop in Box



USDA **EPA**

WORKSHOP IN A BOX:
Sustainable Management of Rural and Small Systems Workshops

2013

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Overview of Key Management Areas



❖ *Outcomes well managed utilities strive for*



COMMON CHALLENGES FOR UTILITY MANAGERS

- Aging infrastructure
- Rate issues
 - Prioritize demands for utility expenditures
 - Long-term rate adequacy strategy
- Customer satisfaction and confidence with services and rates

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COMMON CHALLENGES FOR UTILITY MANAGERS

- Operational issues
 - Labor and material costs
 - Regulatory compliance and new requirements
- Workforce complexities
 - Attracting and keeping reliable and competent staff
 - Succession planning
- Knowledgeable and engaged board members

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THE WELL MANAGED UTILITY

- Ten Management Areas framed as outcomes
- Building blocks for utility performance improvement: where to focus and what to strive for
- Most water and wastewater utilities pay attention to these areas and likely perform well in at least some of them
- Fit into, draw on, and support asset management, long-term business planning, continual improvement management systems

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THE TEN AREAS

- | | |
|---|--|
| • Product Quality | • Employee Leadership and Development |
| • Customer Satisfaction | • Operational Optimization – Energy and Water Efficiency |
| • Infrastructure Stability | • Operational Resiliency |
| • Community Sustainability & Economic Development | • Water Resource Adequacy |
| • Stakeholder Understanding and Support | • Financial Viability |

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PRODUCT QUALITY

- Clean and safe water
- Produce potable water, treated effluent, and process residuals:
 - Full compliance with regulatory and reliability requirements
 - Consistent with customer, public health, and ecological needs
 - Consistent with local economic development and business needs

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CUSTOMER SATISFACTION

- Know what your customers expect in service, water quality, and rates
- Set goals to meet these expectations
- Help your customers understand the value of water
- Develop a way to gather feedback from your customers, review the feedback, and then act on it

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EMPLOYEE LEADERSHIP AND DEVELOPMENT

- Enable a workforce that is competent, motivated, adaptive, and safe working
- Ensure employee institutional knowledge is retained and improved on over time
- Create opportunities for professional and leadership development

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OPERATIONAL OPTIMIZATION

- Ensure on-going, timely, cost-effective, and reliable performance improvements in all facets of operations (i.e., continual improvement culture)
- Minimize resource use, loss, and impacts from day-to-day operations (e.g., energy and chemical use, water loss)
- Maintain awareness of information and operational technology developments to anticipate and support timely adoption of improvements

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FINANCIAL VIABILITY

- Ensure revenues adequate to recover costs, fund timely maintenance, repair, and replacement of assets, and provide for reserves
- Establish predictable rates, consistent with community expectations and acceptability – discuss rate requirements with customers, board members, and other key stakeholders

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INFRASTRUCTURE STABILITY

- Understand **costs** and **condition** for each system component
- Understand operational performance factors (e.g., pressure)
- Plan for system component repair and replacement over the long-term at the lowest possible cost
- Coordinate asset repair, rehabilitation, and replacement within the community to minimize disruptions and other negative consequences

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OPERATIONAL RESILIENCY

- Identify threats to the system (legal, financial, non-compliance, environmental, safety, security, and natural disaster) – conduct all hazards vulnerability assessment
- Establish acceptable **risk levels that support** system reliability goals
- Identify how you will manage risks and plan response actions – prepare all-hazards emergency response plan

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COMMUNITY SUSTAINABILITY & ECONOMIC DEVELOPMENT

- Be active in your community
 - Be aware of, or participate in, discussions of community and economic development
 - Get to know local business needs and be aware of opportunities for new residential or business customers
- Align Utility Goals: to be attentive to the impacts utility decisions will have on current and future community and watershed health
- Align Utility Goals: to promote community economic vitality and overall improvement

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WATER RESOURCE ADEQUACY

- Ensure water availability consistent with current and future customer needs:
 - Long-term resource supply and demand analysis
 - Conservation
 - Public education
- Understand the system role in water availability
- Manage operations to provide for long-term aquifer and surface water sustainability and replenishment

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STAKEHOLDER UNDERSTANDING AND SUPPORT

- Create understanding and support from oversight bodies, community and watershed interests, and regulatory bodies:
 - Service levels
 - Rate structures
 - Operating budgets
 - Capital improvement programs
 - Risk management decisions
- Actively engage with the community and customers:
 - Understand needs and interests
 - Promote the value of clean and safe water

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Financial Viability Improving Outcomes

- ❖ High Achievement:
 - Funds set aside for reserves
 - Asset management plans, short and long term plans, and quarterly budget reviews
 - Utility board is knowledgeable about financial issues and system maintenance and repairs
- ❖ Changes Needed:
 - Good practices in place for rates and shut-offs
 - Better communication between elected officials, utility staff and consumer
 - Independent rate study
 - Document priorities for system improvements



SELF ASSESSMENT



Time to Go to Work!

GETTING STARTED

- **Step 1: RATE** your system's level of achievement (practice and performance) for each management area
- **Step 2: RANK** the importance of each area
- **Step 3: PLOT** the results
- **Step 4: IMPROVE** by exploring high achievement-related practices

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STEP 1: RATING AREAS SCALE FROM LOW TO HIGH ACHIEVEMENT

- Select **Low** if your system has no workable practices in place for addressing this area – very low capacity and performance.
- Select **Medium** if your system has some workable practices in place with moderate achievement, but could improve – some capacity in place.
- Select **High** if your system has effective, standardized, and accepted practices in place. It either usually or consistently achieves goals – capacity is high and in need of very little or no further development.

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STEP 2: RANKING AREAS SCALE FROM LOW TO HIGH PRIORITY

- Current or expected challenges
- Customer or stakeholder impact: reliability; quality; timeliness
- Consequences of not improving: compliance; cost; credibility; health; safety
- Urgency – near or long term need
- Community priorities

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STEPS 2 & 3: RATING AND RANKING AREAS SELF ASSESSMENT DEMONSTRATION

Key Management Area	Management Area Description	Step 1: Rate Achievement (Low-High)	Step 2: Rank Priority (Low-High)
1. Water Resource Adequacy (e.g. water quality)	<ul style="list-style-type: none"> My system is able to meet the water or sanitation needs of its customers now and for the foreseeable future. My utility or community has performed a long-term water supply and demand analysis. (Applies to drinking water systems only.) My system understands its vulnerability to local water availability. (Drinking water utilities should focus on alternative water resources and local water stress conditions, wastewater utilities should focus on reuse flows.) 	Low	High
2. Product Quality (e.g. leaks & safe water)	<ul style="list-style-type: none"> My system is in compliance with permit requirements and/or other regulatory or reliability requirements. My utility finds that compliance evaluations for the public water and/or wastewater treatment and/or distribution facilities that it operates. 	Medium	High
3. Customer Satisfaction	<ul style="list-style-type: none"> Customers are satisfied with the services my system provides. My system has procedures in place to receive and respond to customer feedback in a timely fashion. 	High	Medium
4. Community Sustainability & Economic Development	<ul style="list-style-type: none"> My utility is a leader of and participating in local and regional economic and economic development planning, building. My utility's public works help to support current and future economic growth and development in the community. 	Low	Low
5. Employee & Leadership Development	<ul style="list-style-type: none"> Training programs are in place to retain and improve institutional knowledge. Opportunities exist for employee skills development and career advancement. Job descriptions, performance expectations, and codes of conduct are established. 	High	Medium
6. Financial Viability	<ul style="list-style-type: none"> The rates that my utility charges are adequate to pay costs, but some funds exist for future and necessary water infrastructure investment and infrastructure as needed (ICM, debt financing and others) and are covered. My utility discusses rate requirements with customers, based on needs, and other stakeholders. 	Low	High
7. Operational Decision-Making/Innovation	<ul style="list-style-type: none"> My utility has assessed its current energy usage and performance against best. My utility has implemented resource use and resource loss in a... 		

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STEP 4: PLOTTING RESULTS SELF ASSESSMENT DEMONSTRATION

Key Management Area	Management Area Description	Step 1: Rate Achievement (Low-High)	Step 2: Rank Priority (Low-High)
1. Water Resource Adequacy (e.g. water quality)	<ul style="list-style-type: none"> My system is able to meet the water or sanitation needs of its customers now and for the foreseeable future. My utility or community has performed a long-term water supply and demand analysis. (Applies to drinking water systems only.) My system understands its vulnerability to local water availability. (Drinking water utilities should focus on alternative water resources & local water stress conditions, wastewater utilities should focus on reuse flows.) 	Low	High
2. Product Quality (e.g. leaks & safe water)	<ul style="list-style-type: none"> My system is in compliance with permit requirements and other regulatory or reliability requirements. My utility finds that compliance evaluations for the public water and/or wastewater treatment and/or distribution facilities that it operates. 	Medium	High
Customer Satisfaction	<ul style="list-style-type: none"> Customers are satisfied with the services my system provides. My system has procedures in place to receive and respond to customer feedback in a timely fashion. 	High	Medium

Rating (Achievement)	High	Medium	Low
High	CS		
Medium		PQ	
Low			WA, FV
	Low	Medium	High
	Ranking (Priority)		

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STEPS 4 & 5: PLOTTING RESULTS AND FOCUSING ATTENTION SELF ASSESSMENT DEMONSTRATION

WA	Water Resource Adequacy	FV	Financial Viability
PQ	Product Quality	OO	Operational Optimization
CS	Customer Satisfaction	IS	Infrastructure Stability
CE	Community Sustainability & Economic Development	OR	Operational Resiliency
ED	Employee & Leadership Development	SS	Stakeholder Understanding & Support
High			CS, ED
Medium	OO		PQ
Low	CE		WA, FV
Low		Medium	High
		Ranking (Priority)	

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Group Exercise

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SELF ASSESSMENT DISCUSSION QUESTIONS

- Where is your utility strong? Why?
- Where is there the most room for improvement? Why?
- What are your areas of focus?
 - Why are they a priority?
 - Why is performance low?
 - Technical capacity?
 - Financial capacity?
 - Managerial capacity?
- What are the commonalities and differences among table participants?

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IMPROVING OUTCOMES



Creating a Plan, Taking Action, Measuring Results

TABLE ACTIVITY

- Each table completes an improvement worksheet for one low achievement/high priority management area
- Share perspectives on:
 - What will constitute “high achievement” in this management area?
 - What changes will the utility need to make to improve performance?
 - How could you track your performance progress?
 - What will be the biggest challenges to performance improvement?

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Resources for Financial Viability

- ❖ EPA: Setting Small Drinking Water System Rates for a Sustainable Future
 - Determining Revenue Needs
 - Setting Rate Design
 - Approaching Rate Implementation
- ❖ RCAC: The Basics of Financial Management for Small-community Utilities
 - Understanding Financial Statements
 - Using Financial Ratios



Resources for Operational Optimization – Water/Energy Efficiency

- ❖ EPA: Check Up Program for Small System (CUPSS)
 - Free Asset Management Tool for Small Drinking Water and Wastewater Utilities
 - Tips on How to Develop a Record of Your Assets, an Understanding of Your Financial Situation, and a Tailored Asset Management Plan
- ❖ EPA: Energy Use Tool for Water and Wastewater Systems
 - Interactive, Excel-based tool
 - Detailed Analysis of All Energy Types
 - Provides Summary Report: Statement of Energy Performance
- ❖ RCAP: Sustainable Infrastructure for Small System Public Services: A Planning and Resource Guide
 - Water Conservation
 - Energy Efficiency
 - Renewable Energy



Resources for Stakeholder Understanding and Support

- ❖ NRWA: Quality on Tap!
 - Nationwide, Grassroots Campaign for Public Awareness
 - Hands On Guide to Engagement and Communication for Better Community Support
- ❖ EPA: Talking to Your Decision Makers – A Best Practices Guide
 - Role of Community Decision Makers in Small Systems
 - Tips on How to Communicate Needs to Decision Makers
- ❖ RCAP: The Big Guide for Small Systems: A Resource for Board Members
 - Water and Wastewater Treatment Basics
 - Regulatory Responsibilities
 - Board Business
 - Financial Duties and Responsibilities



For more information visit
www.rcac.org

Questions ??

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