



2018

MAKING A DIFFERENCE FOR RURAL AND SMALL UTILITIES

Sustainable Rural and Small Utility Management Initiative



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WORDS FROM OUR NATIONAL PARTNERS

“Technical assistance providers within the RCAP network find that the Sustainable Rural Utility Management Initiative offers small and rural systems an important and effective opportunity to network and share ideas with their peers. This exchange of real-life scenarios allows participants to see that not only are their challenges common, but also solvable. Feedback we received after workshops indicates that participants are taking back to their communities new, helpful connections and plans to address issues related to infrastructure needs, financing, water quality, and more. This framework prompts systems to take the first step with self-assessments and action plans, while also laying a foundation for us to provide follow-on assistance and in-depth training to further empower systems on their paths to sustainability and resiliency.”

Nathan Ohle, *Executive Director – Rural Community Assistance Partnership*

“The Sustainable Rural and Small Utility Management Initiative has proven to help small and rural communities assess current performance and plan for long-term sustainable operations. Through the user-friendly tools and supporting resources, small water and wastewater systems are better equipped to develop resiliency plans, save money and build support from customers and decision makers. In the last three years, NRWA has held more than 300 workshops across the country that have engaged system operation specialists, board members and other vested parties. These workshops have identified crucial challenges facing these systems and provided the know-how to implement smart management practices and strategies. NRWA will continue this initiative to help ensure sustainable operations for rural water and wastewater systems. The result will be increasing managerial and financial capacity, that will play a vital role in safeguarding and preserving Rural America.”

Matt Holmes, *Deputy CEO – National Rural Water Association*

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Supporting rural and small drinking water and wastewater systems in their commitment to provide successful and resilient service

Additional resources available online:

- <http://water.epa.gov/infrastructure/sustain/watereum.cfm>
- http://www.rd.usda.gov/programs-services/services/sustainable_management-tools

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INTRODUCTION

What Is the Initiative?

The Sustainable Rural and Small Utility Management Initiative is part of an overall Memorandum of Agreement signed between the United States Department of Agriculture (USDA) and the Environmental Protection Agency (EPA) in 2011 to support activities helping rural and small water and wastewater systems more effectively provide sustainable services to the communities they support. USDA and EPA continue to work together to build upon previous partnership efforts to increase the technical, managerial, and financial capacity of rural water and wastewater systems nationwide.

Tools for Rural and Small Systems

EPA and USDA are working with rural partners to promote the sustainability of rural and small utilities on an ongoing basis. This has resulted in two key tools for utilities and the technical assistance (TA) providers that serve them: *The Rural and Small Systems Guidebook to Sustainable Utility Management* and *Workshop in a Box: Sustainable Management of Rural and Small Systems Workshops*. The tools and supporting resources provide a structured and user-friendly approach for utilities to assess current performance and future goals in relation to key management areas for sustainable utility management. The assessment results equip users to create plans for improving sustainability over time, making them more resilient, saving them money, and helping them gain support from customers and decision makers.

Evolution of the Program

USDA and EPA first developed an agreement to coordinate in 2002, to assist small drinking water systems in complying with the revised arsenic standard for drinking water. In 2011, the agreement was expanded to incorporate specific target areas that address the challenges small drinking water systems and wastewater utilities face to achieve more sustainable rural communities. The coordinated activities included joint webinars on water system partnerships, sustainable utility management workshops for rural and small systems, and coordinated funding outreach. USDA and EPA continue to focus efforts on coordinating activities and financial assistance resources on increasing sustainability of rural communities, assisting communities with system partnerships, developing strategies to support workforce development in the water industry, and helping small rural water and wastewater systems overcome compliance issues with water regulations.

Ten Key Management Areas

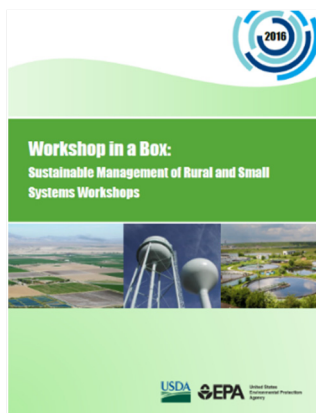
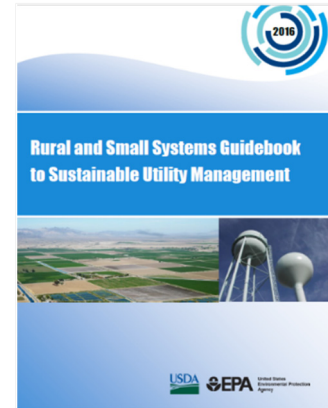
1. Product Quality
2. Customer Satisfaction
3. Employee and Leadership Development
4. Operational Optimization
5. Financial Viability
6. Infrastructure Stability
7. Operational Resiliency
8. Community Sustainability and Economic Development
9. Water Resource Adequacy
10. Stakeholder Understanding and Support

TRAINER AND UTILITY RESOURCES

Under the Sustainable Rural and Small Utility Management Initiative, USDA and EPA have worked collaboratively with water sector associations and utilities across the country to develop resources to be used by utility operators and managers, trainers, and TA providers. The materials are simple to use but still provide in-depth practices and strategies to help water and wastewater utilities become more sustainable over time.

The Guidebook

The *Rural and Small Systems Guidebook to Sustainable Utility Management* is the primary component of this initiative. The *Guidebook* describes the key management areas for sustainable utility management in detail, and provides rural and small systems with a series of steps to assess their operations based on those management areas. The *Guidebook* also provides a compilation of resources specific to small systems that relate to each key management area.



Workshop in a Box

Workshop in a Box contains a suite of materials and instructions to help both rural and small systems and TA providers market and conduct workshops based on the *Guidebook* model. During these workshops, utilities conduct a self-assessment exercise, where they rate and rank the system's performance in relation to the ten key utility management areas. When utilities leave the workshop, they have a plan for their system that they can take back and focus their efforts on areas of their system that need performance improvement.

Workshop in a Box contains everything that utilities and TA providers need to conduct the workshops, from planning checklists and agenda templates to tips for facilitation techniques. These tools and materials are also used to train other water professionals to conduct their own *Workshop in a Box* Training Sessions, referred to as "Train the Trainer" Workshops.

Supplemental Materials

A series of supplemental materials were developed to accompany the *Guidebook* and *Workshop in a Box* documents. The supplemental materials include sample workshop presentations, worksheets, promotional materials, and resource guides. Together with the *Guidebook* and *Workshop in a Box*, the supplemental materials provide utilities and TA providers everything they need to implement the Sustainable Rural and Small Utility Management Initiative and conduct workshops on their own.

2016–2017 PROGRAM ACTIVITIES

In 2016 and 2017, USDA and EPA, working with national partners like the National Rural Water Association (NRWA) and the Rural Community Assistance Partnership (RCAP) and other local TA providers, have delivered over 165 Sustainable Utility Management workshops to utilities. These sessions have reached more than 2,600 small rural water and wastewater utility staff throughout the country. In 2016 and 2017, Sustainable Utility Management workshops were conducted in all 50 states, using the *Guidebook* and *Workshop in a Box* (see map below).

Material Updates in 2016 and 2017

As the number of workshops conducted across the country rapidly grows, USDA and EPA continue to be responsive to feedback from workshop attendees, TA providers, and other water and wastewater professionals. Reflecting a commitment to continual improvement of the materials, USDA and EPA completed several updates and revisions to the *Guidebook* and *Workshop in a Box* materials in 2016–2017. Examples include:

- In early 2016, the *Guidebook* and *Workshop in a Box* materials were revised to incorporate a new “Creating an Action Plan” session and to place more emphasis on utility action plans for improvement.
- In mid-2016, substantial updates were made to the *Guidebook* and *Workshop in a Box* materials, including layout and design, introductory text, and additional clarifying edits to text throughout the documents. An updated “Train the Trainer” presentation was also developed for the NRWA In-Service.
- In late-2016, the *Workshop in a Box* presentation slides were revised to achieve 508 Compliance.

New Materials Developed in 2016 and 2017

In addition to updating materials, USDA and EPA have collaborated on developing new tools and materials to build upon the existing resources. Examples include:

- In 2016, a short [video](#) was created and made available online that highlights the attributes of the *Guidebook* and *Workshop in a Box* material, and how the workshop has benefited small water and wastewater utilities.
- In 2016, a “Quick Start Guide” was developed for USDA Rural Development (RD) state and local office staff, EPA field staff, and technical assistance providers to help them find events that may prompt a small, rural utility to use the Sustainable Utility Management tools.
- In 2017, “Build Outs” were created for two key management areas: Financial Viability and Infrastructure Stability. These documents serve as resources for USDA Rural Utilities Service staff, trainers, other service providers, and utilities as they seek to improve performance in these management areas.

WORKSHOPS ACROSS THE NATION



In 2016 and 2017, RCAP and NRWA conducted 165 Sustainable Utility Management Workshops in all 50 states. While RCAP and NRWA are the two largest TA provider partners, there are several smaller partners throughout the country conducting workshops all over the country, putting the total number well over 165.

REAL UTILITIES, REAL RESULTS

Fostering Peer Exchange Networks

Romeo, CO (population 400)

Chris Boyer of Romeo, CO, found a solution to removing more biochemical oxygen demand (BOD) from his wastewater system at a February 2018 workshop led by Chris Brandewie of the Rural Community Assistance Corporation (or RCAC, the western affiliate of the Rural Community Assistance Partnership (RCAP)). Boyer had been concerned that not enough BOD was being removed during his system’s wastewater treatment. During the workshop, Boyer met a nearby operator who offered to share the microorganisms that reduce BOD from his system in Alamosa. “We went ahead and did it right away,” Boyer said, filling up a truck in Alamosa and introducing the new microorganisms into his system’s first lagoon pool. “It brought up our lab results really well within three weeks, to over 95 percent [removal].”

Boyer, who has served as Romeo’s operator for three years, said he found the training encouraging and enjoyed listening to and meeting with operators of systems of different sizes and various terrains. Boyer said that RCAC and USDA have been great to work with and “came to our aid.” RCAC has helped Boyer do a wastewater rate study and get finances to apply for a USDA loan and grant to fix equipment, some of which is 40 years old and on the verge of breaking down.

Innovating with a Three-State Tour

Concord, NH; Gardner, MA; and Springfield, VT

In 2017, technical assistance providers with RCAP Solutions (RCAP’s northeast affiliate) organized three back-to-back workshops, each in a different New England state. Approximately 30 attendees participated in each session, including a mix of board members, town managers, operators, and federal and state organizations. What worked especially well, according to Vermont-based Mark Johnson, was having multiple trainers available who brought a deep level of experience to counsel systems. Having one technical assistance provider at every table allowed for better outcomes, Johnson said. The peer-to-peer sharing that occurs at multi-system

Workshop Participant Feedback

“Appreciation for listening to the problems of other systems and hearing how they solved their problems.”

“Lots of good lessons from both the presenters and fellow classmates.”

“It was a step up over similar presentations – very good, insightful, and well organized.”

“It was very interactive.”

“Information was useful and provided websites for further information.”

workshops is impactful. The main message participants come away with is: "Not only are our challenges common, they're solvable."

Workshop Participant Feedback

"Good mix of people and topics."

"One of the best speakers I've ever had! Excellent!!!"

"I'll encourage others to participate."

"Exercises were on point."

"The Assessment tool was great – definitely will put it into practice at my utility"

"Great information and easy to understand!"

"Simple format is achievable and realistic."



Workshop in a Box discussion (Gardner, MA - July 2017)

All participants either agreed that the tips and tools presented have allowed them to initiate improvements and efforts in the priority management areas. Johnson and his colleagues have seen direct results from meeting systems through the workshops, one of which is a new rate study to help a system gain a better financial footing. "Trainings increase awareness of sustainable system management and available technical assistance, leading to multiple new projects in New Hampshire as well," said TAP Kathy

Rodgers. 2017 workshops led to six additional projects which have helped communities map their assets, improve compliance with regulations, secure additional USDA funding and even overhaul distribution systems. RCAP Solutions ensured all the multi-system workshops they offered were approved for water operator CEUs, which may have helped drive attendance.



Workshop in a Box participants walk through curriculum (Springfield, VT - July 2017)

Building Local Capacity for Solid Waste

Anchorage, AK

In July 2017, 11 waste utility staff from 7 different communities attended a two-day *Workshop in a Box* training in Anchorage, Alaska to learn about the key management areas successful rural utilities in their area perform well in.

All attendees agreed that the key management areas and self-assessment exercise were highly relevant to improving their own community's solid waste utility.

Several participants emphasized the value of using the key management areas in helping their utility focus on small and achievable goals, such as infrastructure stability and financial viability.



Workshop in a Box participants learn about the Key Management Areas (Anchorage, AK – July 2017)



Workshop in a Box participants share information and ideas with each other on how to create and implement a successful self-sustained solid waste program. (Anchorage, AK – July 2017)

On the second day of the workshop, attendees discussed social marketing concepts and shared ideas on what tools can be used to create a successful marketing campaign for a solid waste program. Participants appreciated this opportunity to think “out of the box” and collaborate with peers on tools to create and implement a self-sustained solid waste program in their own communities.

Workshop Participant Feedback

“Categorizing each management area and finding out what areas needed work in my community was my favorite part of the workshop.”

“I like how the self-assessment process is broken down into steps so it is easy to follow.”

“Information provided was upfront and understandable.”

“I really liked all topics/areas. All of them are important to us in our community.”

“The Action Plan was awesome.”

TECHNICAL ASSISTANCE PROVIDER PERSPECTIVES

Candace Balmer, NY, RCAP Solutions

Immediately you recognize the workshop provides greater peer exchange/ networking opportunities. One of the most important benefits of the *Workshop in a Box* has to do with the class structure being interactive and collaborative. Through multiple group exercises, participants receive:

A CHANCE TO BE HEARD

People are generally not there for credit or for credits. They have genuinely recognized that they have a need to learn more to be able to take better care of their system. They are looking for tools. They also often have a strong desire to talk about their issues. Sometimes people have to be heard before they can start to listen. However, because the workshop is ultimately about developing a plan for improvements, the discussion is shifted from talking about what's wrong to the process of developing step by step plans for specific, individual improvements.

A CHANCE TO HEAR FROM THEIR NEIGHBORS

Neighbors may be having or have had similar challenges or be facing different challenges that their neighbors had not even thought of or that may be looming in the wings as they address more urgent issues. The variety of people in the room helps transform the participants' sense of isolation and a feeling of being overwhelmed within their own system. It helps them understand that others are struggling with their own system and that there are people and resources available to help them. RCAP TAPs provide real-world examples and suggestions and encouragement as well as a wealth of resources for home study and action. There is also the opportunity for further hands-on assistance from the local TA provider.

THE TOOLS FOR ACTION

The heart of the training is that participants are given templates for developing a step-by-step plan for action beginning with prioritizing concerns, then identifying desired outcomes, and finally writing down the steps that need to be taken to bring them to, or nearer to, their desired outcome. They do this first in the classroom and ideally, apply the techniques when they return home. There is also a provision for follow-up from the local TAP at intervals after the training.

IMPROVED COMMUNICATION

Communication is often a big key to implementing successful improvements, but it is more than just identifying and talking about challenges. The focus of the communication needs to be sharpened. Ultimately this workshop helps to sharpen the focus on all the small pieces that need to come together to make the larger system more functional, while providing the tools to communicate this clearly to their customers and key community leaders.

Rick Crews, FL, SERCAP

Participants often say that they have trouble getting managers to listen and spend the money to fix the problems occurring in their system. *Workshop in a Box* helps provide small system operators with the tools to communicate effectively with their managers about the improvements needed and the ways they can make their systems operate more sustainably.

I had several projects arise from the *Workshop in a Box* training. I met with local council members from the Taylor Coastal Water and Sewer District to discuss the importance of financial self-sustainability with their facilities. I conducted meetings to discuss and implement new rates/rate structures. I also conducted a Capital Improvement Plan with the members, and they were able to obtain USDA and SRF grants for an elevated water storage tower, new hydrants, upsizing of water mains, and looping the system.

When I conduct multi-system trainings I receive feedback that they will take the information to their managers, that it gives them ideas of improvements needed, and ways they can make their systems operate better. I deal with rural communities (30 or less attendees) and I have found that opening the class to an open forum works better than a break out session. People feel more relaxed and very productive discussions take place.

New York Rural Water Single Utility Workshops

Here in New York, we run our Sustainability Utility Management training over the course of several months as single utility workshops. Through the formation of Sustainable Utility Management Committees, we work with communities one-on-one to address their specific needs and assist them in developing their improvement plans based on the 10 key management areas. So far, this program has seen successes at the community level. Here are some examples of what we've heard:

At the first Town of Hague Sustainability Committee meeting, a committee member and resident of the sewer district commented on how much he was paying for sewer service. Several meetings later after the committee had discussed and rated and ranked the 10 key management areas, this same committee member stated, **"You know, we haven't been funding the system properly since day one."**

One of the Sustainability Committee members from the Village of Richmondville was not only a resident of the sewer district but also a former Board member. He had rated all 10 key management areas as "high achievement". As committee members discussed their individual assessments his understanding of the management areas changed, as well as his ratings/rankings. **He said he hadn't looked at the 10 areas in the ways other committee members had.**

At one of the first Town of Essex Sustainability Committee meetings a committee member/sewer district resident/Town Board member stated she really was not sure what she could contribute to the process since she wasn't familiar with the wastewater facility or how it worked. She was encouraged to remain on the committee all the same. One of the key management areas identified as "low achievement" was Stakeholder Understanding and Support. **As it turned out that committee member worked in public relations and is the driving force behind the implementation of that particular Management Improvement Plan.**

One of the Village of Mayfield’s Sustainability Committee members was gung ho, wanting to attack 2 of the key management areas rated as “low achievement”, those of Operational Optimization and Infrastructure Stability. The other committee members urged him to slow down and wait until Management Improvement Plans had been developed. **Now that the plans have been developed there is direction and implementation can proceed in an orderly fashion.**

NRWA Supported Multi-system Workshops

Over the past several years, NRWA has implemented numerous Sustainable Utility Management workshops throughout the country. These multi-system workshops have been a successful aspect of our training, and we continue to receive positive feedback from attendees.

For example, at a workshop held by Missouri Rural Water in Louisiana, a City Administrator who attended the workshop explained: **"I had previous knowledge of and agreed with about 95% of the curriculum utilized in the Sustainable Utility Management class. What help me was my operations personnel who attended the class got exposed to long range planning and all the considerations and aspects of these management concepts. This really helped me with the projects over the last two years and their understanding, support and ownership in maintaining and replacing a large portion of our water and wastewater infrastructure."**

In Enosburg Falls Vermont, a workshop conducted by Vermont Rural Water received this feedback after the workshop: **"Excellent class! The worksheet prioritizing our needs was very helpful. This class has helped us with our five-year capital improvement plan. It was also great that Wayne Graham of the Vermont Rural Water Association was able to hold this class in our facility, so all of our department heads and financial manager were able to attend."**

LOOKING AHEAD

What's Next?

- **Enhanced collaboration.** USDA and EPA will continue to promote these tools and resources, advocating for small and rural systems as these materials are being developed, adopted, and updated by partner agencies.
- **Enhancing along the way.** USDA and EPA see the Sustainable Rural and Small Utility Management Initiative as a great start to improving the sustainability of rural and small systems, and they will continue to be responsive to feedback from workshop participants and technical assistance providers to improve the workshop approach and supporting materials.
- **Updated materials.** EPA and USDA will continue to update materials to stay current with industry best practices. In 2018, additional “Build Outs” are being created for two key management areas: Stakeholder Understanding & Support and Operational Resiliency, which will serve as resources for USDA Rural Utilities Service staff, trainers, other service providers, and utilities as they seek to improve performance in these management areas. Updates can be found on the on the [Sustainable Management Tools](#) page.
- **Workshops planned for 2018:** Over 150 Workshops in a Box and 3 Train the Trainer sessions.
- **Continuing to enable next-step thinking.** USDA and EPA will continue to support activities to reach broader audiences, through WIB Partnership workshops or hosting workshops via webinar. For example, in September 2018, a webinar was developed to provide an introduction/overview to *Workshop in a Box* and how to find or conduct workshops in your own community.

Operating under a “continual improvement” approach, EPA and USDA will seek ways to work closely with trainers, TA providers, and system managers in three key areas:

1. Helping systems communicate more effectively with local decision makers about the importance of supporting actions that result from the workshops
2. Helping providers spend additional time with systems following the workshops to provide the kind of hands-on assistance that can lead to real improvements, including gaining access to financing for these improvements
3. Working with trainers, TA providers and others to help systems identify the most cost-effective options for financing infrastructure

The *Guidebook* and *Workshop in a Box* will continue to serve as a dynamic, evolving framework for how rural and small water and wastewater systems can provide sustainable services to enhance the communities that they support and meet the needs of an ever-changing industry.

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