



**Memorandum of Agreement (MOA) Between the
United States Environmental Protection Agency Office of Water and the
United States Department of Agriculture – Rural Development Rural Utilities Service**

Promoting Sustainable Rural Water and Wastewater Systems

Objective

The U.S. Environmental Protection Agency Office of Water (EPA-OW) and the U.S. Department of Agriculture-Rural Development Rural Utilities Service (USDA-RD-RUS) support increasing the sustainability of drinking water and wastewater systems nationwide to ensure the protection of public health, water quality, and communities across the United States. To ensure that rural and small systems have a strong foundation to address 21st century challenges, the USDA-RD-RUS and the EPA-OW are committed to working together to help these systems face the challenges of aging infrastructure, workforce shortages, increasing costs, limited management capacity, and declining rate bases. Together, the USDA-RD-RUS and the EPA-OW can assist small rural systems in implementing innovative strategies and tools to allow them to achieve short- and long-term sustainability.

Background

More than 97 percent of the Nation's 153,000 public water systems serve fewer than 10,000 persons, and 78 percent of the Nation's 15,000 wastewater treatment plants treat less than one million gallons per day. These small systems face unique challenges in providing affordable drinking water and wastewater services that meet federal and state regulations and ensuring that operations are sustainable in the future. In many communities, these systems lack financial stability, the expertise to apply and obtain financial assistance, and managerial capacity. The absence of management capacity impacts the system's ability to perform the long-term planning necessary to make optimal infrastructure decisions and investments and ensure proper management of all aspects of system operations, consistent with overall community goals. Reliable and affordable water and wastewater treatment and management of decentralized systems can help rural areas improve the quality of life for rural residents. Investments in small system infrastructure and management capacity support our long-term national goal of ensuring that rural communities have the basic infrastructure necessary to become sustainable, protect public health, and support the rural economy.

The EPA-OW has made a clear commitment over the years to improve water infrastructure and promote the sustainable management of water and wastewater systems across the country, including small and rural systems. Funding for both infrastructure improvements and technical assistance are provided through the Drinking Water State Revolving Fund (DWSRF). Over the last 23 years, states have leveraged the EPA-OW's \$21 billion in federal funding to make \$41

billion in loans within 15,400 assistance agreements. In addition, the EPA-OW also provides annual capitalization grants to the states to be used for loans to municipalities under the Clean Water State Revolving Fund (CWSRF) for various wastewater projects authorized by the Clean Water Act, including decentralized system projects. The CWSRF program provides states the flexibility to target resources to their particular environmental needs, including contaminated runoff from urban and agricultural areas, wetlands restoration, groundwater protection, brownfields remediation, estuary management, and decentralized wastewater treatment. The CWSRF has provided over 41,000 assistance agreements to communities throughout the United States, financing over \$138 billion in high priority water quality projects.

The USDA-RD-RUS, Water and Environmental Programs (WEP) exclusively focuses on rural water and wastewater infrastructure needs of communities with populations of 10,000 or less. The WEP administers a variety of programs to help improve the quality of life and support economic development in rural and small communities throughout the United States through funding for the construction of drinking water, sanitary sewer, solid waste disposal, and storm water facilities in rural communities. Direct loans and grants and guaranteed loans may be provided to applicants who are unable to finance their needs through their own resources or with reasonable credit from other resources.

Both the EPA-OW and the USDA-RD-RUS provide funding for technical assistance to small systems technical assistance providers. The EPA-OW's funding provides training and tools to enhance system operations and management practices for water and wastewater system staff and private well owners and supports continuing efforts to protect public health and promote sustainability in small communities. The USDA-RD-RUS WEP also provides technical assistance through circuit riders and technical assistance providers from non-profit organizations to assist rural water systems with their infrastructure needs. This much needed assistance is critical to rural areas, particularly those in lower income or economically challenged areas that may not have the resources or expertise to prepare a project proposal. The technical assistance program supports rural communities by effectively identifying funding resources, developing and/or providing support to an existing governance structure, and keeping systems operating in compliance with federal regulations. Since 2013, the EPA-OW and the USDA-RD-RUS, in collaboration with technical assistance providers and states, have sponsored the Sustainable Management of Rural and Small Systems Initiative. The Initiative helps managers of small and rural systems comprehensively assess the effectiveness of their systems and develop plans for improving their performance to ensure the long-term sustainability of their operations.

Together, the small systems technical assistance and funding programs of USDA-RD-RUS and the EPA-OW revitalize rural communities with a variety of infrastructure improvements and help create economically sustainable communities in rural America.

Actions

This MOA builds upon previous partnership efforts. The USDA-RD-RUS and the EPA-OW will continue focusing on coordinating activities and financial assistance resources on the project

areas described below to increase the technical, managerial, and financial capacity of rural water and wastewater systems nationwide.

1. Sustainability and Resilience of Rural and Small Systems and Communities

Sustainable and resilient water and wastewater systems are critical to ensuring the sustainability of rural communities. Emphasis on promoting asset management planning, water and energy efficiency practices, and other sustainable utility management practices are important to ensuring long-term technical, managerial and financial capacity. The EPA-OW and the USDA-RD-RUS will work together on the following activities:

- Provide training and education in collaboration with technical assistance providers, to assist small and rural systems in the development of sustainable utility management strategies based on an assessment of their entire system, adoption of best practices, and performance measurement.
- Encourage system-wide planning and infrastructure alternatives analysis that takes into consideration sustainability goals, including financial capacity, asset management, nutrient reduction, and the evaluation of decentralized infrastructure and technology alternatives, water reuse strategies, and energy management and water conservation to help ensure that projects and communities are sustainable.
- Share and distribute resources, tools, and trainings that promote long-term sustainability. This includes tools such as the Rural and Small Systems Guidebook for Sustainable Utility Management, Workshop in a Box, Infrastructure Alternatives Analysis Guidance, and other related tools; financial management tools and resources developed by the Environmental Finance Centers; and other resources to assist rural systems in identifying sources of funding.
- Encourage small and rural utilities and communities to take advantage of tools and resources that they can use to help educate local decision makers and customers about the importance of sustainable infrastructure, including water efficiency and water reuse, to help smaller systems become more resilient to water shortages that may be caused by earthquakes, drought, or other weather-related challenges.

2. System Partnerships

To attain the necessary technical, managerial, and financial capacity to provide clean and safe water in rural communities, small water systems may choose to develop partnerships with other systems. These partnerships can provide opportunities to collaborate on compliance solutions, operations and maintenance activities, and share costs with other nearby systems, thereby enabling them to become financially sustainable and provide safe and affordable water to their communities. The USDA-RD-RUS and the EPA-OW will educate communities and utilities on the array of tools that are available and encourage water systems to explore various partnership options to increase sustainability. The USDA-RD-RUS and the EPA-OW will work together to implement the following activities:

- Develop a common understanding of system partnerships and coordinate effectively when interacting with communities, utilities, and other stakeholders.
- Work with technical assistance providers to assist communities with system partnership options as well as identify funding opportunities available if collaboration is pursued.
- Coordinate funding or identify opportunities to co-fund, where appropriate and possible, to further system partnership activities, such as shared infrastructure or establishing shared management.
- Work together to further define barriers and refine approaches for encouraging system partnerships.

3. Water Sector Workforce

A well-trained and knowledgeable workforce is vital to the sustainability of water and wastewater systems. According to the 2018 Brookings Institute report, *Renewing the Water Workforce: Improving Water Infrastructure and Creating a Pipeline to Opportunity*, some water occupations are significantly older than the national median, including water treatment operators.ⁱ

Additionally, the 2014 *National Economic & Labor Impacts of the Water Utility Sector: Executive Report* by the *Water Research Foundation* and the *Water Environment Research Foundation*ⁱⁱ states that one-third of the water sector workforce is currently eligible for retirement. The report also states that water utilities are anticipating unprecedented workforce replacement needs over the next decade. In addition, the *U.S. Department of Labor* projected that 8.2 percent of existing water operators will need to be replaced annually between 2016 and 2026.ⁱⁱⁱ It also found that future workforce needs can be identified through strategic workforce planning, which involves developing long-term strategies for acquiring, developing, and retaining staff to achieve program goals.^{iv} The USDA-RD-RUS and the EPA-OW will work together to promote careers in the water sector to attract a new generation of water professionals to rural systems. The USDA-RD-RUS and the EPA-OW will work together to:

- Raise awareness of rural water sector careers through promotional initiatives.
- Enhance existing initiatives such as Sustainable Management of Small and Rural Systems (workshop in a box) to help systems analyze their workforce needs and develop strategies to fill these needs.
- Work with other federal agencies, educational institutions, and other associations to train new operators through initiatives targeted at specific audiences (e.g., veterans, vocational/high school students, and diverse and underrepresented populations in the water sector).

- Work to identify new opportunities to promote the National Rural Water Association's Apprenticeship Program.
- Develop strategies for overcoming challenges specific to recruitment and retention of rural utility operators.
- Explore solutions to fill workforce gaps in rural communities, such as the use of contract operators.

4. Compliance of Small Rural Public Water and Wastewater Systems with Drinking Water and Clean Water Regulations

Approximately half of the community water systems with health-based violations are systems serving 500 persons or less. The EPA's strategic goal, identified in its FY2018-2022 Strategic Plan,^v to deliver a cleaner, safer, and healthier environment for all Americans and future generations by carrying out the Agency's core mission is supported by a long-term performance goal to reduce the number of community water systems out of compliance with health-based standards.

The USDA-RD-RUS and the EPA-OW understand the many challenges rural water systems face just to maintain day-to-day operations. Partnering to ensure that regulation training is provided to public water and wastewater systems in rural areas in a timely manner is essential to systems' compliance. Further, as federal partners, it is important to address funding for projects that aid in the compliance of national drinking water and clean water regulations that protect the Nation's public health. Certain drinking water regulations, such as the Revised Total Coliform Rule, the Phase II/V or Chemical Contaminants Rule, and the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) represent ongoing compliance challenges for many rural systems. Future modifications to drinking water and wastewater regulations may also present challenges for rural systems. To address these current and future challenges, the USDA-RD-RUS and the EPA-OW will work together to implement the following activities:

- Consider funding priority to projects needed for compliance with national drinking water regulations, including those that pose the biggest challenge to small systems such as Revised Total Coliform Rule, Phase II/V or Chemical Contaminants Rule, the Stage 2 Disinfectants and Disinfection Byproducts Rule, and the Lead and Copper Rule.
- Develop and distribute materials to rural water systems that address specific water and wastewater rule requirements and the impact to rural systems.
- Coordinate with technical assistance providers to conduct rule training for rural water systems on specific water and wastewater rule requirements, and potential solutions to issues that pose a challenge to rural water systems.
- Share information relevant to rural water systems, including upcoming EPA-OW regulatory actions and timeframes, and information that the USDA-RD-RUS may

have for analyzing impacts of those actions, and develop strategies to minimize negative impacts.

Financial Provisions

All commitments made by the USDA-RD-RUS and the EPA-OW in this MOA are subject to the availability of appropriated funds and budget priorities. Nothing in this MOA, in and of itself, obligates the EPA or the USDA to expend appropriations or to enter into any contract, assistance agreement, or interagency agreement, to incur other financial obligations. Any transaction involving transfers of funds between the parties to this MOA will be handled in accordance with applicable laws, regulations, and procedures under separate written agreements.

Expiration

This MOA between the USDA-RD-RUS and the EPA-OW will remain in effect for five years. This MOA may be extended or modified, at any time, through the mutual written consent of the parties. Additionally, a party may terminate its participation in this MOA at any time by providing written notice to the other party at least 60 days in advance of the desired termination date.

United States Environmental Protection Agency–Office of Water



Assistant Administrator

2/11/2020
Date

United States Department of Agriculture–Rural Utilities Service



Administrator

02/18/2020
Date

ⁱ <https://www.brookings.edu/research/water-workforce/>

ⁱⁱ <http://www.waterrf.org/PublicReportLibrary/4566a.pdf>

ⁱⁱⁱ <https://www.gao.gov/assets/690/689621.pdf>

^{iv} <https://www.gao.gov/assets/690/689621.pdf>

^v <https://www.epa.gov/sites/production/files/2019-09/documents/fy-2018-2022-epa-strategic-plan.pdf>