



TESTIMONY OF

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BEFORE THE

SENATE COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY SUBCOMMITTEE ON RURAL DEVELOPMENT AND ENERGY

HEARING ON JULY 19, 2023, ENTITLED

"RURAL WATER: MODERNIZING OUR COMMUNITY WATER SYSTEMS"

Good afternoon, Chairman Welch, Ranking Member Tuberville, and esteemed members of this Committee. I am deeply honored to be here today, offering my insights on the U.S. Department of Agriculture's (USDA) Rural Development Water and Environmental Programs, and their crucial technical assistance initiatives, which are integral to offering affordable and sustainable services to this nation's rural communities.

I would like to extend my personal gratitude to Senator Tuberville for his invitation and, more importantly, his stalwart leadership and advocacy for Alabama's rural water and wastewater sector.

My name is Rob White, and I serve as the Executive Director of the Alabama Rural Water Association (ARWA), a non-profit organization that advocates for small and rural water and wastewater systems across Alabama. I am not only here to represent the interests of ARWA but also to voice the concerns of the National Rural Water Association, which stands for over 31,000 rural systems throughout the country.

Our rural systems have their roots in the 1960s Farmers Home Administration, and they continue to benefit from assistance and support from its successor agency, Rural Development to this day. The aggregate impact of improved health outcomes and bolstered economic prosperity for rural communities resulting from Rural Development's efforts is immeasurable.

If I may, I'd like to express my gratitude to this Committee for its unwavering commitment to the success of these initiatives. These investments have yielded remarkable returns in terms of enhancing the quality of life in rural America. Regrettably, the public often overlooks the tremendous strides made in improving their communities' health and economic landscape over the past six decades. The outcomes, however, speak for themselves, as I have witnessed firsthand in nearly every small and rural community I have visited across Alabama and the nation. On behalf of both the Alabama Rural Water Association and the National Rural Water Association, I extend our heartfelt appreciation for your vision and leadership.

History of the Alabama Rural Water Association

The Alabama Rural Water Association (ARWA) was inaugurated in 1977, offering training workshops for Alabama's water systems. These workshops were designed to navigate the then newly introduced regulations from the 1974 Safe Drinking Water Act and other subjects essential to the effective management and expansion of critical water services throughout Alabama.

Starting from such modest beginnings, the ARWA has evolved into the leading service provider and resource center for rural water and wastewater systems across Alabama. At present, our team consists of nineteen committed employees, and we represent 457 member utilities. This corresponds to an impressive 91% of Alabama's 503 permitted community water systems. Our dedication to service transcends membership status as we extend our support to all communities within Alabama that request our assistance. We provide a wide array of services, including hands-on assistance and training with utilities, covering everything from regulatory compliance and continued professional education to daily operations, to system maintenance, governance, and much more.

We also invest in the future, training the upcoming generation of professionals to succeed in an aging workforce. Our services extend to emergency response and recovery, source water protection, asset management, energy audits, rate studies, and much more. We stand ready to assist communities in need, 24 hours a day, 365 days a year.

Our operations are steered by a volunteer board of ten full-time operators, managers, or directors from rural water and wastewater utilities. A key component of our service success is rooted in the fact that our staff and board members come from within the industry. Their rich experience in operating and managing water utilities provides an unmatched level of trust and confidence, establishing valuable peer-to-peer relationships from a non-regulatory, third-party entity respected in rural communities.

Although we value and invest in academic knowledge, we firmly believe that practical, on-the-ground experience is irreplaceable and central to the future success of the water and wastewater industry in rural America. Despite the industry's growing reliance on technology to enhance efficiencies, the persistent need for experienced professionals to perform on-site duties is undeniable. This tangible experience in the field forms an essential part of our successful strategy.

We are well aware, though, of the emerging challenges in our industry. Existing systems are aging and increasingly burdened by more rigorous regulations designed to shield our customers from newly discovered contaminants like PFAS and renewed initiatives to eradicate lead from our communities.

Simultaneously, we are seeing a wave of retirements in the industry alongside the escalating complexity of operating water and wastewater systems. These factors highlight the importance of a robust, relevant, and dynamic training program. Such a program is crucial in cultivating a new generation of proficient operators and providing existing operators with the necessary knowledge and tools to perform their daily tasks effectively.

The recent pandemic has exposed vulnerabilities in our supply chains, leading to unforeseen challenges in project planning and execution and subsequent cost overruns. These complications hinder any communities' ability to renovate their systems efficiently and effectively.

Despite the progress made so far, significant needs remain, especially in Alabama, with respect to extending sewer services to the remotest rural areas of our state.

ARWA Partnerships

The Alabama Rural Water Association (ARWA) is known for its successful partnerships with a variety of state and federal organizations. Our non-regulatory role serves as an essential aid to these agencies, often being the sole provider of on-site actions to solve immediate issues in Alabama. Among our partnerships, the one with the U.S. Department of Agriculture (USDA) has proven to be especially influential and beneficial. We both share the objective of delivering accessible, safe, and affordable water and wastewater services to smaller, rural communities. Currently, ARWA is partnering with the USDA and the EPA on the Closing America's Wastewater Access Gap Community Initiative to mitigate the wastewater issue in Lowndes and Greene counties in Alabama.

This pilot project was announced in White Hall, Alabama, last August. Its purpose is to help promote the development of programs to expand or introduce a variety of wastewater treatment solutions for communities that lack sufficient sanitary sewer service in 11 areas across the nation, 2 in Alabama. Significantly, Greene and Lowndes County represent just two out of sixteen counties in Alabama's Black Belt region dealing with this need. Latest estimates indicate that roughly \$1.4 billion is needed to implement decentralized wastewater treatment technologies and to resolve individual septic tank issues across Alabama's Black Belt.

ARWA works closely with the Alabama Rural Development State Director and his committed team to advance the Agency's mission within the State.

It's worth noting that USDA Rural Development has been specifically designed by Congress to cater to rural America. Considering that 91% of the nation's water systems serve communities with less than 10,000 residents and 54% serve communities with less than 500, the need for their services is immense. The task of providing adequate service and improving the infrastructure in these communities lies at the core of the Rural Development's Water and Environmental Programs portfolio and aligns with our technical assistance efforts. Rural Development is devoted to updating, maintaining, and extending this crucial infrastructure.

ARWA Suggestions for Consideration in the 2023 Farm Bill

I will now provide a few examples of pending issues in Alabama and suggested solutions for your consideration as you draft the 2023 Farm Bill.

Circuit Riders

Established by this Committee in 1980, the Circuit Rider program was our pioneer initiative aimed at offering solutions and hands-on support to rural communities. Initially, it was designed to assist small and rural towns with regulatory compliance following the enactment of the Clean Water Act. Over the years, this Committee and the USDA have broadened the Circuit Rider's roles and activities to tackle emerging issues.

In Alabama, the ARWA employs a robust team, including 3 Water Circuit Riders, 2 Wastewater Specialists, an Energy Efficiency Specialist, a Source Water Protection Specialist, an Apprenticeship and Training Coordinator, along with other training experts and operations consultants. These professionals aid utilities statewide in all aspects of operating, managing, and maintaining any community's water or wastewater system. On a national scale, last year alone, Water Circuit Riders made a direct impact on the health and safety of 24,780,065 individuals, constituting 41% of rural America.

Our Alabama team successfully conducted 47 training events, which consisted of 43 local on-site training sessions, 2 conferences, and 2 online sessions attended by 2,950 industry professionals. Six of these training courses are tailored each year specifically for Board Members and decision-makers, equipping them with the knowledge to fulfill their fiscal and public health obligations effectively. Our objective is to provide a class within a 60-mile radius of every operator in Alabama annually, to reduce the burden of travel and time away from operating their systems. We also hosted nine certification schools with 150 potential new operators participating.

Our technical service providers also carried out 2,271 individual on-site visits across Alabama, providing various forms of technical assistance. Key examples of service included 49 leak surveys, which resulted in annual systems savings of 2.8 billion gallons of water valued at \$8.3 million. Circuit Riders completed 151

Consumer Confidence Reports, saving an extra \$135,750.00 for those systems. Moreover, our energy program, up until the end of 2022, identified potential annual energy savings of \$1,828,279 for the systems that participated.

Water Circuit Riders offer a wide range of services such as hands-on training, certification licensing, financial management, environmental compliance, disaster assistance, governance, and on-site technical aid. These efforts ensure that facilities operate effectively, safeguarding the community and government's investment.

We are available all year to respond to calls for assistance, whether they concern disaster management, sourcing disinfection supplies, design and construction advice, or existing system maintenance. We assure immediate response upon being contacted.

We humbly request this Committee to renew authorization for this program.

Emergency Preparedness and Response Activities

For many years, the National Rural Water Association (NRWA) and State Associations have been at the forefront of emergency disaster response. We have not only maintained these services, but we've also broadened them by offering yearly training accessible to all State Associations. This training provides a platform to exchange knowledge, methodologies, and technologies to strengthen recovery initiatives.

In Alabama, we've fostered strong alliances with our Gulf State Associations, establishing a cooperative partnership to facilitate a more effective deployment of resources and immediate responses to significant disasters. For instance, following Hurricane Sally's landfall on September 15, 2020, our Association mobilized staff and resources the day after the event. We stationed our equipment and command center at one member system's office. Assistance came from multiple Rural Water associations, and we were able to maintain essential water and sewage services for about 97,000 individuals, despite power outages.

Last year, in October, we demonstrated the resilience of our emergency response network when the Alabama Rural Water Association dispatched a team to Florida following Hurricane Ian. Other Rural Water Associations also provided substantial support.

During the 2022 Christmas week, Alabama experienced a historic cold front. On Christmas Day, while most families were home opening presents and enjoying other holiday traditions, ARWA Circuit Riders left their families to respond to several locations in Alabama that were either without or nearly without water service due to the freezing conditions. The ARWA worked with system personnel to find and fix leaks, manage extreme consumption due to customers flowing water to prevent frozen pipes, and even had 2,880 cases of bottled water delivered to systems without water, valued at \$18,144. These systems had been without water for several days and were able to provide this water to their customers at no cost through a partnership with ARWA, ADEM, and other State Agencies.

In most of these emergencies, State Associations finance their staff, equipment, and expenses with internal non-federal resources. However, statutory and administrative constraints limit the full efficacy of our service in impacted areas.

We propose that this Committee consider extending authorities to enable and enhance preparedness activities. This will allow Alabama and other Rural Water Associations to dedicate more resources to communities during periods of calm, or 'blue-sky days.' These efforts could include assisting utilities in planning and preparing by identifying vulnerabilities, mapping infrastructure, developing disaster protocols, coordinating with statewide emergency networks, and registering utilities on hazard mitigation lists. Additional training could focus on real-world, hands-on disaster response for water and wastewater systems.

Another crucial aspect of emergency response is the administrative requirements during and after a disaster. Adequate documentation and follow-up with agencies are mandatory to access recovery funds. Our small and rural communities often lack the necessary resources to effectively fulfill this function, leaving potential funds unclaimed.

Examples and Images of Emergency Response in Action Hurricane Ian



ARWA Andrew Crawford and FRWA Ben Lewis set up the Starlink at the National Rural Water Command Center



ARWA Generator being delivered to Englewood



ARWA, Andrew Crawford surveying damage to a well











Checking for Leaks



Georgia Rural Water Association Emergency Response



Some of the response efforts



Morning Briefing



National Rural Water Emergency Response Trailer and Truck that was utilized as the Command Center.





FRWA's numerous Emergency Response







Some of the many assets that were used.



ARWA Darrell Brewer, Delivering a Generator.





October 12th the last of our two Man deployments headed back to Alabama with two of our Large Generators.

Christmas Deployments





Water Delivery to Old Line Water Authority in Jackson, Alabama, located in Clarke County. They serve approximately 2,475 water customers. Through the Associations' efforts, Old Line Water Authority Received 432 cases of bottled water. (10,368 Bottles)





Water Delivery Wilcox County Water Authority, in Camden, Alabama, located in Wilcox County, Alabama, serves approximately 4050 Customers. Through the Associations' efforts Wilcox County Water Authority, Received 576 cases of bottled water. (13,824 Bottles)



Water Delivery City of Reform Water & Sewer Board, Located in Pickens County, Alabama, serves approximately 754 Customers. Through the Associations' efforts City of Reform Water & Sewer Board, Received 432 cases of bottled water. (10,368 Bottles)

Leaks, Repairs, and Generators













Rural Water and Wastewater Cyber Security Circuit Rider Program

The cybersecurity of small and rural water systems is a paramount concern for the ARWA and NRWA. However, the multifaceted nature of cyber threats to vital water infrastructure means that many rural utilities are ill-equipped to ward off such attacks, often due to a lack of financial means and technical proficiency. Furthermore, it's commonplace for smaller rural communities in Alabama to be reliant on a single operator who is already overburdened with a multitude of critical duties.

Congress had stipulated that all systems catering to populations over 3,300 complete a cyber/physical evaluation by December 31, 2021. Yet, smaller systems serving populations less than 3,300, with their constrained financial and personnel resources, are in dire need of direct aid to comply. Additionally, federal agencies like the EPA and Rural Development are starting to mandate cybersecurity provisions before authorizing any new financial assistance.

We suggest this Committee consider providing a corps of cybersecurity specialists to help rural water systems protect their utility and the public health of the residents. This program should aim to assist rural utilities that lack the means or knowledge to adhere to these federal mandates. Initiatives could encompass swift evaluation of the utilities' efficacy in safeguarding their cyber infrastructure and public health, creating sensible protocols to bolster protection, and assisting with the enhancement of any deficient cyber protection strategies.

Modernization of Rural Development Water & Environmental Programs

Across Alabama and the nation, numerous small and rural utilities function on slim profit margins, depending largely on customer rates to cover all operation costs like salaries, infrastructure loan repayments, energy costs, materials, maintenance, and more. This financial limitation is particularly felt by utilities serving low-income residents with smaller economies of scale, which urgently need to modernize their aging water infrastructure.

NRWA and ARWA propose the modernization of the Rural Development Water and Environmental Programs to align with current needs, offering affordable financing and servicing options. This mirrors the modernization seen in other infrastructure programs such as the EPA State Revolving Loan Fund programs. Currently, EPA has the authority to offer "additional subsidization", which can include principal forgiveness, zero or negative interest loans, or a mix of these tools. Moreover, loan terms have recently been lengthened.

NRWA supports current and past legislative initiatives that would grant the Rural Development additional affordable financing and servicing instruments. New financing options should empower Rural Development to extend zero and 1% percent loans to disadvantaged or financially struggling communities. This limited authority should be targeted for low-income communities to ensure their access to affordable water and wastewater services.

I want to note that on June 22nd, the FY2024 Senate Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations bill reported the inclusion of \$30 million in loan authority for USDA to provide 1% loans to selected communities.

In Alabama, there are numerous systems that would greatly benefit from these enhanced authorities. Whether the communities face financial constraints due to low-income availability for utility bills or the financial hardship caused by the closure or relocation of commercial entities, these flexible options would shield these communities from excessive, costly, and burdensome utility bills and potential default on community financial commitments.

Concerning servicing options, the Rural Development should be equipped with the means to financially stabilize a utility borrower in communities experiencing economic downturns through no fault of their own. Both the EPA and USDA Rural Housing Service currently have this authority.

As stated earlier, Rural Development is the only federal agency specifically mandated by Congress to cater to rural communities with a population below 10,000. These rural systems, characterized by thin revenue margins over expenses and a lack of economies of scale, can face serious challenges in providing affordable rates for lower-income residents.

NRWA and ARWA appeal to this Committee to consider providing these additional affordable financing and servicing options.

Regionalization and Consolidation for Rural Water Utilities

According to EPA's Safe Drinking Water Information System (SDWIS), in Alabama, 503 community water systems exist currently, out of which 376 (or 75%) serve communities with a population of less than 10,000. Different states and regions have their own interpretations and policies regarding what counts as regionalization or consolidation. Considering the significant number of small community water systems throughout the country, it's only natural that regionalization and consolidation of water and wastewater services occur wherever it is economically viable.

We urge the Committee to include additional measures that will incentivize affordable sustainable services for underserved rural communities. We recommend this language should focus on lower-income communities lacking adequate water or wastewater services. These communities frequently fall short in terms of financial and managerial resources and the ability to independently maintain affordable services. A financial incentive will allow a high-performing local or adjacent system to apply for a grant or loan on behalf of the underprivileged community.

At present, most rural utilities and their boards have the desire to provide service to their neighboring communities but lack the necessary financial support to move forward. Local and adjacent utilities and their boards hesitate to impact their current customers financially by raising rates or taking on the financial burden of inadequate infrastructure for new customers outside their original service area. For example, there is one small struggling community in south-central, AL whose neighboring, higher-performing system already treats the wastewater for the community. The neighboring system has expressed interest in taking over operations for its neighbor-in-need, but the struggling system's existing debt and needed infrastructure upgrades would cause an undue burden for the higher-performing system's existing customers.

NRWA and ARWA believe that a calculated financial incentive could mitigate these concerns and further the objective of providing affordable and financially sustainable services to rural residents in underserved areas.

The authority should be directed to ensure additional subsidy is directed exclusively toward the community in need. The EPA keeps a list of significant non-compliant utilities, and Rural Development tags many of these utilities as high risk. We believe that this initiative will effectively decrease that list and could potentially result in future federal resources being saved.

Workforce Development

As highlighted before, the imminent retirement of a large portion of our workforce remains a major concern, especially given that labor market data predicts half of these workers will exit the water industry within the coming decade. Owners and operators of rural water and wastewater utilities require a steady flow of trained personnel to ensure the public continues to enjoy clean, safe water and to maintain the infrastructure necessary for keeping rural services economically sustainable.

To address this, NRWA, State Rural Water Associations, rural water utilities, USDA, the Department of Labor (DOL), and private stakeholders such as CoBank, have jointly established the first nationally acknowledged Guideline Standards for Registered Apprenticeship for water and wastewater system operators. This successful collaboration has resulted in quality job creation in rural USA.

The vast majority of small community water systems across the country face challenges due to limited staffing, with some systems only employing one part- or full-time operator. The limited economies of scale and technical expertise in rural water utilities are further strained by a lack of qualified operators, which increases the difficulties small and rural communities encounter when trying to comply with complex federal regulations and provide safe, affordable drinking water and sanitation.

The NRWA Apprenticeship Program has seen considerable growth and success over the past five years, creating over 600 water industry jobs in rural America. However, the registered apprenticeship program model is constrained in very small communities where there is insufficient capacity to employ or provide mentorship to an apprentice. This problem is unique to these communities and acts as a significant obstacle to attracting, training, and retaining capable staff.

This harsh reality also inhibits these communities' access to many resources available through the Department of Labor's workforce system.

In Alabama, our Apprenticeship Program standards were finalized with the Alabama Office of Apprenticeship on February 7th, 2020. Despite delays due to the pandemic, we have 14 participating employers and successfully placed 9 apprentices with systems. Our first graduate is projected to complete the program in April 2024. Our unprecedented, growing program in Alabama aims not only to increase public awareness of careers in the water and wastewater sectors through state career centers, but also to support newcomers in the field with a structured program offering incentives and assistance to those starting out in the industry. Furthermore, Alabama's Rural Water Association's training program is listed on the Eligible Training Providers List for Alabama, and we recently received approval from the VA for additional incentives and resources for veterans entering our field.

We urge the Committee to consider incorporating financial resources and policies into the 2023 Farm Bill to provide mentoring and training to address these workforce issues specific to Rural Development borrowers and potential borrowers. A sustainable solution is urgently required to boost participation and retention for the rural water workforce, safeguard the substantial federal investment in rural America's water and wastewater systems, and improve these crucial services and basic civic necessities on which our customers rely.

1926(b)- Curtailment or Limitation of Service

This provision, or what is commonly referred to as the 1926(b) service protection clause, is of the utmost importance to our membership. This provision has protected the service areas for many smaller utilities in Alabama and across the nation. The 1926(b)-protection clause (7 U.S.C. 1926(b)), was designed by Congress with two goals in mind:

- (1) Congress wanted to ensure the USDA federal debt held by borrowers was protected and would be repaid, and
- (2) Congress wanted to promote the development of rural water systems for rural residents and ensure they are economical and safe.

There have been previous attempts to modify or eliminate this existing provision, and they were rejected by this Committee. This provision has been litigated for decades since its inception. NRWA is concerned that any modification of the existing statute would have to be relitigated at a potentially tremendous cost to the rural utilities and could potentially reduce their service area and cause negative financial consequences, including repayment ability to Rural Development and long-term sustainability.

Conclusion

In summary, USDA's Rural Development Water and Environmental Programs are critical to keeping water and wastewater service areas economically viable, while also providing the funding and resources to address underserved communities. With a current backlog of approximately \$4 billion, demand remains high. The accompanying direct technical assistance is necessary to assist rural utilities and enhance the capacity and experience to protect the community's and federal government's investment. These programs work together to advance the mission to provide safe, sustainable, and affordable water and wastewater services throughout Rural America. ARWA and NRWA are honored to continue and strengthen this successful partnership with USDA Rural Development and this Committee.

Thank you for the opportunity to participate today, and I am happy to take any questions that you may have at this time.