

NATIONAL RURAL WATER ASSOCIATION

RURAL WATER

nrwa.org

THIRD QUARTER 2024 | VOL. 45 | NO. 3

MENTORS + KEY TO APPRENTICESHIP PROGRAM SUCCESS

+ Cover Photo:
Photo courtesy of Steve Skirvin.



**NATIONAL
RURAL WATER
ASSOCIATION**
NRWA *America's Largest Utility Membership*

INSIDE

• WATERPRO 2024 PREVIEW • BOARD LEADERSHIP
• WORKFORCE DEVELOPMENT • LCRR COMPLIANCE



DECREASE KICKBACK RISK BY NEARLY 50% with PowerGrit® Pipe Cutting Chain



Nearly 50% less kickback energy.

That's what you get with an ICS® chainsaw outfitted with PowerGrit® pipe cutting chain. Not to mention reduced excavation, better efficiency, improved operator control and increased cutting depth.



Request a **FREE**
demonstration
for your team!

ICSDIAMONDTOOLS.COM

©2024 ICS, OREGON TOOL, INC. ALL RIGHTS RESERVED

CONTENTS



FEATURES



10

WATERPRO 2024 SHOW PREVIEW

+ September 9–11, 2024 | Savannah, Georgia



14

HOW TO BUILD A CYBER-SAVVY BOARD

+ By Tim Ebner



18

CELEBRATING MENTORSHIP AND EMBRACING THE FUTURE

+ By Kaylyn Branen Snow



24

STEPPING INTO THE LIGHT OF LCRR/I

+ Jonathan Cuppett, Lowell Huffman, and Laura Vidal



30

RURAL WATER SYSTEM INCREASES DELIVERY CAPACITY

+ By Steve Cooper

DEPARTMENTS

6

FROM THE PRESIDENT

8

NEWS BRIEFS

34

A DAY IN THE LIFE OF A CIRCUIT RIDER

40

RURAL WATER PROFILE

44

REGULATORY UPDATE

48

PRODUCT SPOTLIGHT

52

STAFF HIGHLIGHTS

53

ADVERTISERS' INDEX

54

FROM THE CEO



**NATIONAL
RURAL WATER
ASSOCIATION**

NRWA

America's Largest Utility Membership

Rural Water is the official magazine of the National Rural Water Association, 2915 S. 13th Street, Duncan, OK 73533, P: (580) 252-0629, editor@nrwa.org, Publisher: Matt Holmes, Editors: Kalli Forshee, Kaylyn Branen Snow, Corporate Partners: Anthony Prince. Send address changes and corrections to editor@nrwa.org, Published by: Rogue Monkey Media, 5579 S. Lewis Ave, Tulsa, OK 74105; P: (918) 640-9433, roguemonkeymedia.com, Publishing Management and Advertising Sales: Amy Bailie, Kelsey Rehmer; Marketing, Layout & Design: Elizabeth Wollmershauser; Editorial Content: Angela Godwin. ©2024 Rogue Monkey Media, LLC. All rights reserved. The contents of this publication may not be reproduced by any means, in whole or in part, without the prior written consent of the publisher. Advertising rate cards and media kits available on request. The publisher reserves the right to reject or edit any manuscripts received for publication. Statements of fact and opinion are the responsibility of the authors alone and do not imply an opinion on the part of the National Rural Water Association. NRWA also reserves the right to reject any advertising deemed unsuitable for Rural Water. Acceptance of advertising by the National Rural Water Association does not constitute endorsement of the advertiser, its products or services, nor does National Rural Water Association make any claims or guarantees as to the accuracy or validity of advertisers' claims. NRWA-Q0324 / PUBLISHED SEPTEMBER 2024

EXECUTIVE COMMITTEE

John O'Connell, III, New York, President
Phillip Combs, Tennessee, Senior Vice President
Chris Kenyon, Michigan, Vice President
David Peterson, Kentucky, Secretary
Paul Fulgham, Utah, Treasurer
David Baird, Delaware, Immediate Past President
Tom Goulette, Nebraska, Member at Large
Tom Delbridge, Virginia, Member at Large

BOARD OF DIRECTORS

Alabama: Eric Hill
Alaska: Jana Littlewood
Arizona: Matt Rencher
Arkansas: John Choate
California: John L. Covington
Colorado: Dannie McMillan
Connecticut: Shelby Jackson
Florida: Robert Munro
Georgia: Rick Jeffares
Hawaii: Tony Carrasco
Idaho: Brad Andersen
Illinois: Steve Fletcher

Indiana: Tom Speer
Iowa: Randal Pleima
Kansas: Bill Shroyer
Louisiana: Craig Sollberger
Maine: Jeff Day
Maryland: Clifford (Kip) Matthews
Massachusetts: James Gobeille
Minnesota: Luke Heikkila
Mississippi: Mack Lee
Missouri: David Waller
Montana: Allen Kelm
New Hampshire: John Coffey
New Jersey: James Mackie
New Mexico: John L. Jones
North Carolina: Neil Carpenter
North Dakota: Michele Schommer
Ohio: Faron Young
Oklahoma: Robert Moore
Oregon: Russell Cooper
Pennsylvania: Robert Blough
Rhode Island: Jimmy Folco
South Carolina: Linda Evans
South Dakota: Ron Gillen

Texas: Kent Watson
Vermont: Jon Thornton
Washington: Don Zuern
West Virginia: Alan Haught
Wisconsin: Kevin Mraz
Wyoming: Chuck F. McVey

"RURAL WATER" (ISSN # 1097-7686), Third Quarter 2024, Vol. 45, Number 3. Rural Water is a quarterly publication. Periodical Postage paid at Duncan, OK and additional mailing offices. Subscriptions: \$10 per year in the United States; \$18 for two years; \$25 for three years. Foreign subscriptions pay additional appropriate postage. Address all subscriptions, applications, letters to the editor, advertising inquiries, and correspondence to: Rural Water Magazine, 2915 S. 13th St., Duncan, OK 73533.

POSTMASTER: send address changes to National Rural Water Association, 2915 S. 13th St., Duncan, OK 73533, c/o Editor.



PROTECT AGAINST CORROSIVE SOILS

3 LAYER PROTECTION FOR
DUCTILE IRON PIPE:

1. 3 layer co-extruded LLDPE
2. Volatile Corrosion Inhibitor (VCI)
3. Anti-microbial layer



**VB3 ENHANCED
POLYETHYLENE**
enhancedpolywrap.com
800.537.7139 | sales@aaathread.com
aaathread.com



Simple Solutions for Chemical Feed & Water Analysis



FLEXFLO® M1

Accurate Chemical Feed, No Vapor Lock, and 4-20mA signal.



WATER ANALYZER APFCL

Real-time Free or Total Chlorine, pH, and Temperature Analyzer.



Fluid Metering Solutions Made Simple.

Learn more about the **M1** and **Analyzer** at www.blue-white.com





FROM THE PRESIDENT

Reflecting on Challenges and Looking to the Future



By John O'Connell III

I want to say that these past two years serving as the National Rural Water Association (NRWA) Board President have flown by, and while that is mostly true, some days seemed never-ending. Rural Water as a whole has faced a great many challenges these past two years, and between the NRWA leadership, staff, and our State Rural Water Association (SRWA) members, we have continued to hold true to our values and commitments through it all.

As I say nearly every time I speak to a group, whether that is at WaterPro Conference, the Rural Water Rally, at SRWA conferences, or some other engagement, I am an employee guy. I know that it is the guys and gals out in the field who are doing the work and making the biggest impacts to the small and rural utilities we represent across the U.S. Our Rural Water workforce is my main passion, and ensuring we commit the time and resources to continue to make it a success is important to me.

At the utility level, this includes continuing to make our national NRWA Apprenticeship Program a success. As of this article being written, 246 apprentices have graduated from the program. That is 246 more safe water professionals and clean wastewater professionals out in their communities ensuring public health and environmental stewardship.

At the SRWA level, it means ensuring each state is equipped with the knowledge and skills to serve their members to the best of their ability and continues proving that the Rural Water model for training and technical assistance is

successful and, in my opinion, the best method. Over the past two years, NRWA has increased the training it provides to SRWA Board Members and Executive Directors in the form of State Leadership and Management (SLAM) training. I look forward to seeing this program grow and help ensure our state members continue to be successful and have an avenue to reach out for help when they face struggles greater than they can handle alone.

It can be said that if it were not for our SRWA members, NRWA would not exist. Whether it is the work being done in the field, the key relationships with state and federal officials, or the grassroots network they provide, NRWA relies greatly on our SRWAs to make the case on Capitol Hill. I am excited that our NRWA Board of Directors and Membership Dues Committee recognized how hard our states are working and what they are contributing to the national effort. With that recognition, NRWA restructured the dues for our SRWA members, providing significant savings that can be reinvested at the state level.

The biggest challenge by far that Rural Water has faced during these past two years has been EPA's attempt to implement a cybersecurity rule through the sanitary survey. It is imperative to note that NRWA is fully supportive of cybersecurity being a top concern for our industry and is making efforts to help provide training and technical assistance to small and rural utilities to help address these areas. However, EPA implementing the rule through the sanitary survey would have caused long-lasting negative effects to our industry. I truly believe



John addresses the audience at WaterPro 2023.



John visits mobile water filtration unit at Town of Essex, N.Y. Photo courtesy of Jamie Herman.



John speaks at Rural Water Rally 2023.

FROM THE PRESIDENT



NRWA's participation in the lawsuit requesting that EPA withdraw the rule was one of the best decisions we have made, and it proved successful when the rule was officially withdrawn!

A few other accomplishments that I am proud of include securing the 5% increase in funding to State Associations for the Circuit Rider Program, a new workforce marketing campaign to promote the water and wastewater profession, historic settlements through the PFAS Cost Recovery Program, and additional affordable financing options for our State Associations. I am also proud of the fact I was able to testify before Congress to represent Rural Water. So, while Rural Water has faced struggles these past two years, we have experienced great wins as well.

Thank you to New York Rural Water Association for seating me as the National Director all those years ago, allowing me to move through the leadership ranks to finally serve in the role of NRWA Board President. Thank you to everyone who has supported me through this journey and through my career. But most of all, thank you to my family. You have heard more about Rural Water these past 30 years than you ever probably wanted to know. While I lost my best friend and wife this year, it comforts me to know the many, many great people and friends Jackie and I met over the years. I will look back fondly on those memories always, and Rural Water will always hold a special place in my life. I look forward to continuing to see the great things that will be accomplished in the future. **RW** 💧



John accepts the gavel from David Baird during WaterPro 2022.



JOHN O'CONNELL III

is president of the National Rural Water Association (NRWA).



Water and Wastewater Treatment Chemicals and Equipment



- ✓ Mini bulk delivery
- ✓ Highly trained, local technicians
- ✓ Tailored treatment programs designed specifically for your facility
- ✓ Wide range of water and wastewater treatment chemicals
- ✓ Large selection of equipment: pumps, tanks **and so much more**



LOCAL SERVICE: 877.740.2587

www.hawkinsinc.com • wtg@hawkinsinc.com



NEWS BRIEFS

HIGH SCHOOL GRAD SIGNS WITH KRWA, RECEIVES SPONSORSHIP



Tanner Henry signs letter of intent to participate in KRWA Apprenticeship Program. Photo: KRWA.

Tanner Henry, Murray High School 2024 graduate, signed a letter of intent to participate in the Kentucky Rural Water Association (KRWA) Apprenticeship Program to become a Water Operation Specialist, while receiving a \$1,000 sponsorship from TRANE, a global climate innovator and building technology and energy solutions company providing individualized, right-sized, and forward-looking solutions for commercial and industrial applications. Through its close partnership with KRWA, TRANE provides sponsorships for conference trainings, Women in Water, and the Apprenticeship Program.

"We are so excited to see Tanner Henry pursue this career. He is well deserving of this sponsorship, and we can't wait to see him shine and contribute to our communities by helping provide families and businesses with clean water," said Anthony Wright, TRANE comprehensive solutions account executive.

BOHLIN TESTIFIES BEFORE SENATE COMMITTEE

On July 10, the Alabama Rural Water Association's (ARWA) Board President Mark Bohlin testified before the Senate Committee on Agriculture, Nutrition, and Forestry Subcommittee on Rural Development and Energy. The hearing, entitled "State of the Rural Infrastructure: Emergency Response, Recovery, and Resilience," spotlighted the critical issues facing small and rural water systems in the United States. During the hearing, Bohlin represented small and rural systems to advocate for Rural Development funding and Disaster and Emergency Preparedness funding.

Bohlin, who has been the general manager of the Perdido Bay Water, Sewer, and Fire Protection District in South Baldwin County since 1998, was chosen as an expert witness due to his extensive experience and achievements in managing rural water systems. Bohlin serves as president of the ARWA Board of Directors, where he represents 630,000 customers in the 9th District of Alabama. In this role, Bohlin has played a pivotal role in advocating for rural water systems across the state.



L to R: Rob White, Mark Bohlin, Camilla Bohlin, and Jerena Webb. Photo: Rob White

NRWA, COBANK PARTNER ON LEASING PROGRAM FOR RURAL SYSTEMS

CoBank and the National Rural Water Association have announced a new leasing program designed to upgrade water meters and other much-needed equipment that keep rural systems functioning properly and efficiently.

The water meter leasing program will provide rural systems a unique and expedited alternative to traditional financing, covering the entire cost of new meters and installation and is a great alternative to large upfront capital investments. Upgrading aging water meters also improves billing accuracy and the overall performance of the water systems.

Lease financing under this program is also available for various types of water- and waste-related vehicles, as well as other equipment.

For more information or to submit a request form, visit nrwa.org/cobank-leasing or email NRWALeasing@cobank.com.



EPA AWARDS \$5M TO ESTABLISH FOUR STORMWATER CENTERS OF EXCELLENCE

The U.S. Environmental Protection Agency announced it would award \$5 million in grants to establish four new Centers of Excellence for Stormwater Control Infrastructure Technologies and a national clearinghouse for new and emerging stormwater control technologies. The Centers of Excellence will play an important role in improving stormwater infrastructure across the country by conducting research and providing technical assistance to State, Tribal and local governments.

EPA anticipates that once all the legal and administrative requirements are satisfied, it will award funding to establish the new Stormwater Centers of Excellence to the University of New Hampshire; the University of Oklahoma; the Board of Regents Nevada System of Higher Education; and the Center for Watershed Protection Inc., which has also been selected to establish a national electronic clearinghouse that contains information about new and emerging stormwater control infrastructure technologies and funding approaches.

SPECIAL NOTICE OF FLUSHABLE WIPES SETTLEMENT

In July, Federal District Court Judge Richard Gergel gave preliminary approval to a wipes-related Class Action Settlement between the Charleston Water System and the Defendant, DUDE Products. A final fairness hearing will be held on September 27, 2024, at 10 a.m. in Judge Gergel's courtroom in Charleston, S.C.

The settlements only address injunctive relief and do not affect any potential individual claims against DUDE Products for damages or other monetary relief due to wipes-related blockages.

NRWA CELEBRATES MAJOR FEDERAL INVESTMENTS IN APPRENTICESHIP PROGRAMS

In July, the National Rural Water Association (NRWA) announced a significant breakthrough for its Apprenticeship Program with \$13.1 million in new federal investments. The U.S. Environmental Protection Agency (EPA) has allocated \$5.5 million for NRWA's Innovative Water Infrastructure Workforce Development Program, while the U.S. Department of Labor (DOL) has awarded \$7.6 million to support the development and expansion of NRWA's vital water industry Registered Apprenticeships.

The NRWA Apprenticeship Program has been a top priority for rural America for many years, and these federal funds are the first competitive grant awards ever dedicated to this important effort. They come at a crucial time to address the urgent need for a trained water and wastewater operator workforce. The EPA's announcement on July 11, 2024, highlights a total of \$20 million in funding for water workforce training and career development, a part of their Investing in America agenda. Similarly, the DOL's Employment and Training Administration (ETA) has prioritized the inclusion of the water and wastewater sector in its Apprenticeship Building America, Round 2 funding awards for the first time.

"Today marks a monumental step forward for NRWA and the 31,000 small and rural communities we represent," said NRWA Chief Executive Officer Matt Holmes. "Water infrastructure is the backbone of public health, economic development, and environmental protection. These substantial federal investments will transform our ability to attract, train, and retain the next generation of water and wastewater professionals, who in turn will help ensure safe and effective water utility management across the nation."

NRWA AFFINITY PARTNER ANNOUNCES NEW HEALTH PLAN



Mike Keith Insurance Inc. announced a new health plan for State Rural Water Association members. Formerly Healthy Benefits, Wellness Works now offers a new insurance company with plans for rural water districts and cities with 1-100 employees. State Association members can access this new program, Wellness Works, through NRWA Associate Member Mike Keith Insurance Inc. (MKI).

Wellness Works offers comprehensive coverage with \$0 cost preventive and telemedicine care, care coordination, and disease management for chronic conditions. Multiple plan options are available to fit every budget. Nationwide Provider Networks are available in all 50 states.

To learn more about Wellness works, please visit nrwa.org/members/products-services-portfolio/wellness-works.



Photo credit: Bigstock.com

WaterPro 2024 Show Preview

September 9–11, 2024 | Savannah, Georgia

The 2024 WaterPro Conference will be nothing short of spectacular, and we are excited to welcome everyone to historic Savannah, Georgia! As the oldest city in Georgia, Savannah is a destination unlike any other. The city is complete with gorgeous gardens, bustling boutiques, artwork, and Victorian-style architecture, and it is the setting of this year's WaterPro. With a packed agenda of educational sessions and speakers, coupled with the fun events and activities during WaterPro, this is an event you do not want to miss! **Do More. Become More. Experience More at WaterPro Conference.**

Do More with Special Events and Activities!

- Think you have what it takes to assemble a meter the fastest? Sign up for the Ultimate Meter Challenge, sponsored by Zenner, and compete for a free trip to Hawaii! The finals will take place at 10:45 a.m. on September 10 in the Exhibit Hall.
- Let's play WaterPro Feud! Compete with your state in NRWA's spin-off of the hit game show. Survey says you should attend this event, sponsored by USABlueBook, at 4 p.m. September 9!
- Vote for your favorite photo in the Rural Water on Display Photo Contest, sponsored by Rogue Monkey Media, in the

Exhibit Hall! Voting is open September 9–10 on the WaterPro Conference app.

- **New!** Friends of Rural Water Gala*: Join us for a fun-filled evening with the Friends of Rural Water on September 10! This is the perfect opportunity to not only enjoy an evening with friends but also support the great work that Rural Water does each year.

**Ticket required for entry.*

Experience More with Networking Opportunities!

- **Cooking School – Southern Pralines:** Learn the history of pralines and then prepare a batch yourself to take home! You'll also get the chance to shop in Savannah's only local kitchen store. A morning and an afternoon class are being offered. The cost is \$65 per person. Register as part of your conference registration at waterproconference.org.
- **Exhibit Hall Extravaganza** sponsored by CoBank and USABlueBook: Join us in the Exhibit Hall at 4 p.m. on September 9 for the famous WaterPro Feud Game Show and network with your peers while enjoying drinks and snacks!
- **Send-off Social** sponsored by Hawkins: Come to the Send-off Social on Sep-

tember 11. We can't wait to celebrate another successful WaterPro Conference and look to the year ahead! You must have a full conference registration to attend the social.

- **5th Annual Women in Rural Water Luncheon:** Join us at 12 p.m. on September 10 as we celebrate women everywhere — and especially Women in Rural Water! Hear from a panel of women working in rural water while also networking over lunch! New this year, the Women in Rural Water Luminary Award will be presented during the luncheon. Purchase your ticket for \$45 with your WaterPro Registration.

Become More with Sessions and Networking Events. Check out some highlights!

MONDAY, SEPTEMBER 9

- **Opening Ceremony with VIP Guest Speaker | 8 a.m.**
- **LCR to LCRR to LCRI: What You Need to Know | 11 a.m.**

The Lead and Copper Rule Improvements (LCRI) have added another layer of complexity to compliance planning for water systems. This training session will focus

WATERPRO CONFERENCE



on the most up-to-date requirements so key water personnel can stay on track with their compliance efforts.

■ Rural Water PFAS Litigation and Settlements for Your Utility | 2:45 p.m.

The Rural Water PFAS litigation has resulted in settlements totaling \$13.6 billion with 15 more companies in ongoing litigation. This session will provide background on PFAS, what utilities must do to access the current settlement funds, and an overview of future litigation to include wastewater.

TUESDAY, SEPTEMBER 10

■ Crisis COMMS & the LCR: How to Successfully Handle Sensitive Customer Communications in 24 Hours | 9:45 a.m.

While the Lead and Copper Rule is still a work in progress, we do know that its public communication requirements are likely to remain, governing how water providers must inform the public about their lead work for years to come. Using case studies, this presentation will walk attendees through the construction and implementation of a successful, LCR-focused crisis communications plan. The talk will also cover how to handle every sensitive situation a utility may face.



■ USDA Roundtable Discussion | 1:30 p.m. ■ Why Everyone in Rural Water Should Know How to Select and Use a Good Password Management App | 2:45 p.m.

Cybersecurity standards are coming for all water systems, and although few want to do something about it, we all know we need to. The first line of defense, passwords, are a pain in everyone's rear. This class will be an interactive, practical class that briefly covers why passwords are critical for water operators.

WEDNESDAY, SEPTEMBER 11


■ Closing Cybersecurity Gaps — Vetting Contractors and Obtaining Insurance | 11 a.m.

This presentation will highlight best practices that small utilities can consider when selecting third-party vendors without compromising cybersecurity. The presentation will also highlight factors that

water systems may consider when selecting cybersecurity insurance. Finally, the presentation will provide information on freely available federal resources to support water utilities in increasing cyber resilience.

■ Microplastics Everywhere! Awareness Is Everything! | 1:45 p.m.

Plastics are all around us and have become synonymous with modern living. We are now learning what it costs us as humans to have this access. We will discuss the different sizes of plastics, what the plastisphere is, and the impact plastics have on humans. We will also discuss how microplastics impact treatment in water, wastewater, and disinfection. Awareness is key to effect a change!

A complete list of sessions and details can be found at waterproconference.org. Plan your day by downloading the app. Search 'Water-Pro Conference' in your app store! **RW** 

THANK YOU TO OUR SPONSORS:

DIAMOND



GOLD



SILVER



BRONZE



WE LOOK FORWARD TO SEEING YOU IN SAVANNAH!



ADVERTISEMENT



Badger Meter

Smart Water Evolution

Badger Meter enables confidence in operations with BlueEdge™

Badger Meter is a water technology innovator with more than a century of experience serving municipal, commercial and industrial customers worldwide. Since introducing the first frost-proof water meter in 1905, the company has built upon this success and expanded its global network of manufacturing facilities, innovation centers, sales offices and warehouses to meet the changing needs of the water industry. Over time, the company's solutions have grown to include water quality monitoring, pressure monitoring and analytics software—moving beyond the meter and driving further innovation.

BlueEdge™ is the complete Badger Meter portfolio in action: a transformative suite of solutions designed to drive visibility and optimization of assets. BlueEdge is a scalable, customizable offering of water technology, software and services that provides actionable data for proactive decision-making.

"We're proud to drive innovation in the water sector with solutions that empower customers to effectively manage water resources now and for generations to come. By combining our expertise in flow monitoring technology with advanced software solutions, BlueEdge meets the evolving needs of modern water management practices," said Ken Bockhorst, Chairman, President and Chief Executive Officer, Badger Meter.

Key features of BlueEdge include:

■ **Measurement & Control:** Precise measurement tools and advanced control capabilities ensure accurate monitoring of water use, so users can effectively manage resources and reduce non-revenue water loss.

■ **Connectivity & Communication:** Badger Meter has a decade of expertise in cellular AMI, with millions of devices deployed across the globe. Cellular endpoints enable two-way communication to put data where and when you need it. Seamless integration with IoT devices and advanced communication protocols facilitate real-time data collection and transmission.

■ **Insights & Action:** Powerful analytics and visualization tools provide data that empowers and enriches operations. Usage patterns, asset performance and system health information are accessible anywhere in the field or office to drive continuous improvement and response.

■ **Collaboration & Support:** Our global water-focused team offers expertise, training and support.

"BlueEdge is more than a suite of products. It's a comprehensive, solution-driven approach to water management that drives innovation and sustainability, backed by water industry experts," said Matt Stuyvenberg, Vice President of Software and Water Quality at Badger Meter. "Our unique approach delivers instant access to interval data, performance analytics and alerts, layered on top of related system information to inform and improve response times."

With BlueEdge, achieving excellence in water management is possible. Among the common challenges BlueEdge can solve are:

■ **Distribution Network Monitoring:** Our products, software and services enable proactive resource management and early

detection of incidents. BlueEdge offers tools to decrease water loss and improve customer confidence while keeping an eye on your bottom line. For example, flow meters deliver robust usage data in near real-time. When viewed alongside pressure and temperature data, even greater value is unlocked.

■ **Environmental Monitoring:** Designed to protect the quality of source water and limit pollution events, sensors are deployable throughout the network to measure a variety of parameters, collect baseline data and deliver a deeper understanding of trends.

■ **Drinking Water Treatment:** Meet regulatory requirements, protect treatment assets and optimize treatment processes through predictive analytics.

■ **Customer Water Usage:** Accurate and reliable solutions generate revenue, conserve water and improve customer service. As consumption history builds, customers can use trending patterns to forecast budgets and plan for equipment upgrades.

Expertly crafted and tailorable to your needs, BlueEdge from Badger Meter is deployable at every point along your smart water journey. Solutions for wastewater, HVAC, industrial process and property operations are also available.

Badger Meter knows smart water. Together, we can protect the world's most precious resource.

Learn more at badgermeter.com/evolution.

Meet BlueEdge Custom solutions delivering the future of water management

Drive visibility, manage assets and gain clarity with confidence

Discover your edge at badgermeter.com/TailoredToYou





bigstock.com

How to Build a Cyber-Savvy Board

Keys areas to focus on for improving cyber awareness

By Tim Ebner

A cyber attack can cripple an organization's infrastructure, and recovering can drain its resources. Being able to anticipate cyber risks requires a smart strategy with boardroom buy-in.

While board members typically demonstrate acumen in finance, legal, or business management and operations, few say they feel confident in what they know about cybersecurity.

In a November 2016 survey by the National Association of Corporate Directors (NACD), 97 percent of board members said cyber-risk oversight was challenging. And only 14 percent said their board had a high level of knowledge on cyber risks.

The fact is most board members don't have a lot of personal experience in IT or cybersecurity, says Robyn Bew, director of strategic content development for NACD.

"Cyber issues are complex, technical, and fast moving, and new threats are coming onto the scene all the time," she says. "Boards should work to educate themselves on cyber, regardless of size or sector."

NACD's Handbook on Cyber-Risk Oversight recommends five key areas for boards to focus on, including making cybersecurity an organizational priority, enlisting cybersecurity experts who can discuss cyber issues, and understanding the legal implications of cyber risks.

"We don't believe that every director has to be a cyber expert," Bew says. "But every director should make it a priority to improve their understanding of cybersecurity as it relates to the organization."

Education is a critical first step. [In 2017] NACD launched an online certificate program in cybersecurity, partnering with Carnegie Mellon University and Ridge Global, a cybersecurity firm led by former Homeland Security Secretary Tom Ridge.

"Even for resource-strapped organizations, there are options," Bew says. "Bring outside experts into the boardroom. A lot of our members ask for cybersecurity briefings from local law enforcement or the FBI field office."

It's important for boards to challenge and test their assumptions constant-

ly, Bew says, and to have leading cyber experts available to provide intelligence and risk assessments.

And don't be afraid to test a cybersecurity response plan. Associations can learn from simulated exercises that involve all levels of leadership, including the board. Usually, these practice drills help get directors talking about cyber-risk oversight.

"These exercises are effective because they show how cyber has a thread in all things," Bew says. Cybersecurity "should be woven into boardroom conversations, especially when it comes to things like strategic planning or new initiatives." **RW**

Tim Ebner was the communications director and press secretary at the American Forest & Paper Association in Washington, D.C. He was a member of ASAE's Communication Professionals Advisory Council and a former *Associations Now* senior editor.

Editor's Note: This article originally appeared on *AssociationsNow.com*. Reprinted with permission. Copyright ASAE, the Center for Association Leadership (May/June 2017), Washington, D.C.



SUBMERSIBLE LEVEL TRANSMITTERS



KELLER LEVELGAGE

- NSF/ANSI 61 and 372 approved for drinking water
- UL/cUL approved for hazardous locations
- Outstanding Total Error Band (TEB) Accuracy
- Pressure ranges up to 900 feet of water
- Industry-standard analog outputs
- Guaranteed lightning protection
- Ships in 3 business days
- 2 year warranty



kelleramerica.com



ADVERTISEMENT



esri

THE
SCIENCE
OF
WHERE®

Leveraging Integrated GIS Apps to Modernize, Track Data Collection Workflows

Hampton Shaler Water Authority (HSWA) is a small water authority in western Pennsylvania. HSWA currently has 23,600 water customers and distributes five to six million gallons of water per day to its customers.

Challenge

HSWA was going through staffing changes and needed to update its digital data inventory, including all its available geographic information system (GIS) data. After its in-house GIS Specialist left, HSWA needed an experienced professional to inventory the GIS and make any changes or updates as necessary.

The utility also needed a better tracking system for work order tasks. HSWA wanted to modernize workflows and reduce outdated, time-consuming paper forms and maps with the goal to enable field crews to spend less time logging information and more time doing work.



Solution

Esri partner geographIT was hired to perform an inventory of HSWA's current data and apps in ArcGIS Online and provide recommendations. Once HSWA reviewed the recommendations, geographIT stood up several apps that began the process of digitally collecting field data, while also modifying and updating existing apps to support current and future needs.

geographIT identified collection processes that could be automated with Arcade functionality or scripts run through Amazon Web Services (AWS). Automatically populating fields such as Location, Unique ID, Minutes Flushed, or Total Gallons Flushed saved time and reduced user input error.

ArcGIS Workforce was implemented to capture work orders and modernize the assignment process. ArcGIS Survey123 was linked to Workforce so mobile workers can accurately account for materials and equipment used on each job, with Survey123 automatically calculating costs. In addition, dashboards were configured to visualize collected data for hydrant and valve inspections, flushing activities, Workforce activities, and the Survey123 results.

Result

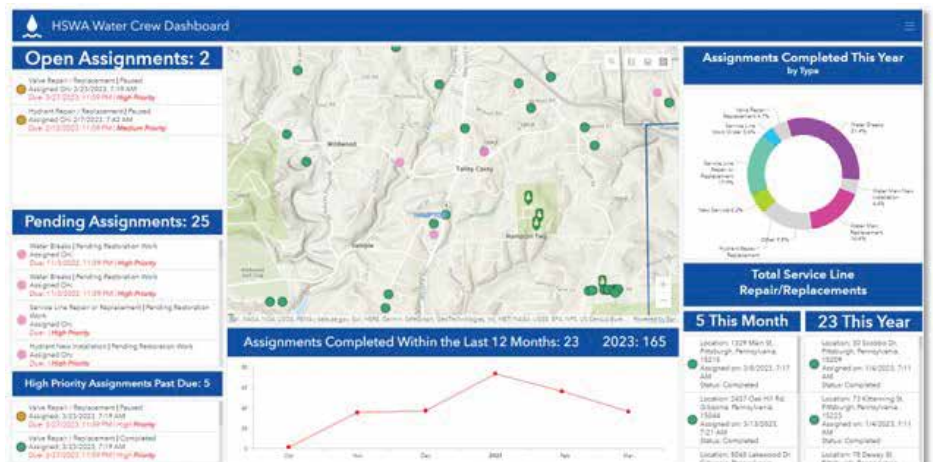
Staffing transitions gave HSWA an opportunity to introduce new technologies and workflows to assist mobile staff with completing their tasks and office staff with seeing results more efficiently. HSWA's new field services coordinator was very open to the changes and played an integral role in helping geographIT understand the field staff's needs and preferences.

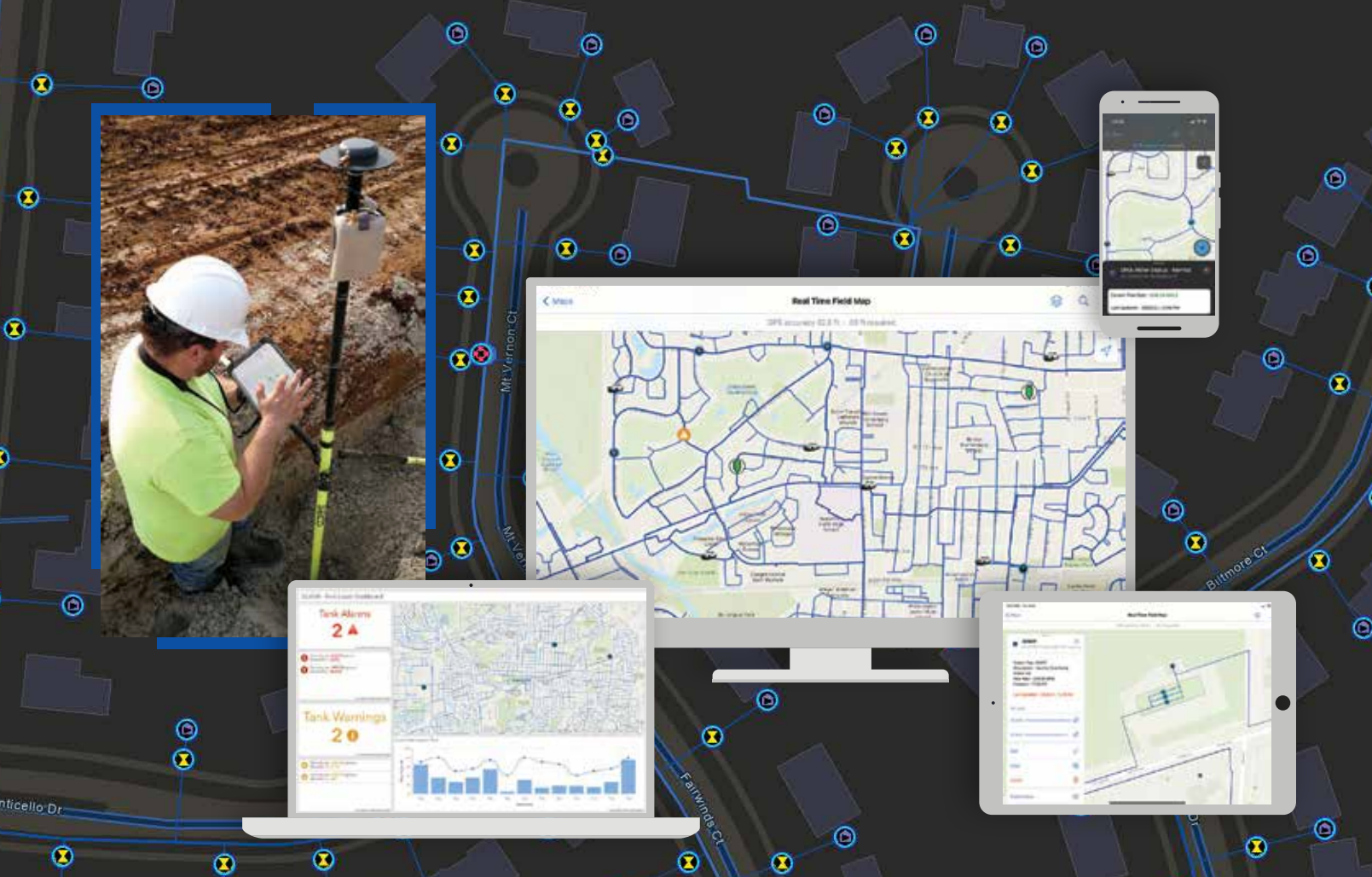
Giving the mobile staff Samsung Galaxy tablets empowered them to fill out simple forms that have logic and calculations built in. This enabled office staff to see results quicker and reduce the amount of time spent entering hard-copy data into digital systems. The field services coordinator can quickly assign tasks to mobile crews using Workforce. This enables staff to get to the job faster, know what materials are needed, and complete the job without writing anything down.

All material and equipment used are recorded in a simple, yet powerful Survey123 form that feeds a dashboard in real time. This allows the office staff to know exactly what materials and equipment were used for each job, so they can better track inventory and costs.

Learn more at [esri.com](https://www.esri.com).

"Modernizing our GIS [enabled] integrated apps that vastly improve our approach to collecting fieldwork data while being able to monitor it all in real time."
— April Winklmann, Executive Director, HSWA





Digital Maps and Mobile Apps Support Rural Water

Over the past decade, geographic information system (GIS) technology has become more affordable to implement and easier to use. Current pricing and intuitive applications make it a real option for small and rural water utilities to benefit from online maps, mobile applications, and insightful dashboards.

GIS is an important tool for utilities looking to better manage their asset information, streamline workflows, do more with less, and improve overall efficiency in operations.

Data Management—Create a system of record for your asset information.

Mobile Workflows—Replace paper workflows for maintenance activities and inspections.

Operational Awareness—Monitor work progress and provide a real-time view of daily work.

Customer Engagement—Inform the public about ongoing projects and initiatives.

Planning and Analysis—Use the data in GIS to perform analysis and support informed decision-making.

Learn more about GIS for small and rural water systems.

Get to know us at the WaterPro Conference. Visit our exhibit to connect with water team members and learn how Esri can support your organizational goals.

esri.com/smallsystems





Mentor 'Junior' Valdiviezo guides apprentice Ilona Williams at Town of Clayton, N.C.

Celebrating Mentorship and Embracing the Future

Mentors help propel Apprenticeship Program to success

By Kaylyn Branen Snow

Since its inception, the National Rural Water Association's (NRWA) Apprenticeship Program has graduated more than 260 apprentices from across the nation. While the work these apprentices have put into their careers is impressive, this accomplishment would not have been possible without their mentors cheering them on every step of the way.

Mentors play an important role in the Apprenticeship Program. Apprentices participate in a combination of related technical instruction (classes) and on-the-job training provided by their mentor.

"Outside this industry, a mentor may inspire, encourage, and develop skills, but within our industry, it goes beyond that," said Shannan Walton, NRWA's Director of Workforce Development. "Mentors also impart a deep understanding of the importance of their work. Their role involves not just teaching theories and techniques but also instilling a sense of responsibility and commitment to the community among their apprentices. This ensures that the knowledge and practices developed over years of experience are pre-

served and advanced by the next generation of professionals in the field. Their impact reaches far beyond the classroom or the workplace, making a tangible difference in the lives of many people who rely on access to safe and clean water for their daily needs."

Hear from current mentors in the program and learn why the NRWA Apprenticeship Program is helpful for your community:

TIM LAWSON, OCOEE UTILITY DISTRICT



(L-R): Tim Lawson, General Manager; Alyssa Traylor, Apprentice; Clay Underdown, Apprentice; Buck Owen, Retired Mentor. Photo courtesy of Kevin Byrd.

Tim Lawson has been involved in the water industry for the past 30 years. As the

General Manager at Ocoee Utility District in Ocoee, Tennessee, Lawson became interested in mentoring for the Apprenticeship Program to help train the next generation of the workforce.

"This Apprenticeship Program and getting folks to take the time to be mentors in our industry is really important to make sure we're ready for that next generation of operators to get into our industry," Lawson said.

As general manager, Lawson said he is mindful of putting the proper people in place and training before utility operators retire. The utility is growing and has potential expansion in the future, which only increases the number of operators needed to meet the growing demand.

"The old model of either finding somebody who's already trained at another utility or just training someone up on our own is not really a good model to follow going into the future," Lawson said. "The Apprenticeship Program gives them the big picture and not just the operational aspects but the science behind what they do, the regulatory aspect, and com-



munication with other employees and the general public, which are critical tools in their toolbox."

Currently, his utility has two apprentices in the program: one in water treatment and one in wastewater treatment. Lawson said the program helps them learn their roles and responsibilities and exposes them to opportunities outside of the utility.

"My role as a mentor is not only to make sure they understand the training and educational side of things but also to encourage them to make sure we are providing them with the background they need to succeed here," Lawson said. "Encouragement is really key. We need folks that we can be confident in for the next 10 to 20-plus years, handling these roles that are going to become more complex and are key to our operation."

Being a mentor can be a rewarding experience and helps the utility plan for the future. Lawson encourages other operators to explore becoming a mentor in the Apprenticeship Program. "They really owe it to their communities to consider it," Lawson said. "It really is the easiest way to ensure [new hires are] doing their job. It is time well-invested for that mentor. You're basically just helping someone with the knowledge and skills that you've developed over your career."

YVONNE TUCKER, VILLAGE OF PENN YAN

Yvonne Tucker is a wastewater operator at the Village of Penn Yan, New York. With her mother's encouragement, she accepted her first job at the City of Wastertown at the age of 20 and never looked

back. During her career, she's held a number of unique roles, including working as a wastewater technician for the New York Rural Water Association (NYRWA), training operators as an adjunct professor, managing a wastewater treatment plant on an Air Force base in Portugal, and managing wastewater in the British Virgin Islands. Now, her career has come full circle as she is back at a local utility to settle down. Through all of her experiences in the industry, Tucker has put an emphasis on teaching others.

"Throughout my entire career, I have been mentoring and helping people," Tucker said. "It's paying it forward."

With her experience with NYRWA, Tucker knew about the Apprenticeship Program and reached out when the Village of Penn



BUILT FIRST. BUILT TO LAST.

When the going gets tough, turn to the toughest pump on the planet. Since 1960, the unrivaled Vaughan Chopper Pump has been on the cutting edge. This original chopper pump was built first and made to last in any application, including:

- Municipalities
- Housing Developments
- Pulp and Paper Mills
- Hospitals
- Prisons
- And more

Choose the unmatched reliability of Vaughan.

Ask about our free trial program and on-site demos.



weftec
the water quality event™

**OPERATIONS
CHALLENGE**

SEE US AT WEFTEC BOOTH #3717

Vaughan
Unmatched Reliability

GUARANTEED PERFORMANCE | EXPEDITED DELIVERY | ELIMINATES COMMUNITORS

888-249-CHOP | CHOPPERPUMPS.COM



FEATURE



Yvonne Tucker embodies the core values of her utility.
Photo courtesy of NYRWA.

Yan was undergoing a workforce transition due to retirements. Three new hires at the utility are currently participating in the program.

"I'm a huge believer in the Apprenticeship Program," Tucker said. "It ensures that these new people on the job get a broad spectrum of experience. It gives your employees the opportunity to have the well-rounded experience and training to create a more professional employee, and there is no price for that. How can you pass that up?"

Tucker encourages all utilities to take advantage of the Apprenticeship Program. "I've had some very good mentors throughout my career who shared their experiences and knowledge," Tucker said. "I feel that is how we should all be, willing to share our experience and knowledge with others, and becoming a mentor accomplishes that."

STEVE SKIRVIN, CITY OF BARGERSVILLE



Steve answers apprentices' questions, prepares them for homework assignments. Photo courtesy of Steve Skirvin.

Steve Skirvin is the water treatment supervisor at the City of Bargserville, Indiana, overseeing the water plants, water towers, and booster stations. He started at the utility and worked for five years before taking a short break from the industry, after which he returned to the utility and has been there for the last 15 years.

After hearing about the Apprenticeship Program at a conference, Skirvin wanted to learn more and contacted the Alliance of Indiana Rural Water.

"We didn't know it existed, but once we found out what it was, we never doubted we were doing the right thing," Skirvin said. "It just seemed like such a great program. We saw [it] meeting several needs right off the bat. It would help our new hires get up to speed, help them advance on the pay scale quicker, and provide them with training that would make them want to stay."



Steve connects apprentices with knowledge learned in class. Photo courtesy of Steve Skirvin.

The three apprentices at the utility are now in their third semester of the program. They attend training classes, and then Skirvin answers their questions, prepares them for the homework assignments, and applies what they learned to the job.

"The quality of instruction that they are getting is the absolute best," Skirvin said. "They learn something in class, and then because we are in a water plant, we can connect the knowledge gained in the class to what they do every day," Skirvin said. "It helps them be better operators and do better on the tests."

As part of the Apprenticeship Program, after an apprentice meets the criteria and passes a set of classes, they receive a bump in pay. This not only incentivizes them to pass but also helps them view their job as a career.

Skirvin encourages other systems to reach out and learn about becoming a mentor because grants are available to help systems financially support an apprentice.

"You'll be surprised at how the program helps you, the utility," Skirvin said. "This ensures that you have a qualified, prepared, intelligent, vibrant workforce to run the utility industry going forward."

As a mentor, Skirvin learns something new every day and enjoys helping the apprentices. "It's all been great, and I can't say any negative things about being a mentor," Skirvin said.

BECOME A MENTOR

Are you ready to take the next step and give back to the next generation of the water and wastewater industry? To learn more about the NRWA Apprenticeship Program and how to become a participating employer, please contact your State Rural Water Association. **RW**



**KAYLYN
BRANEN SNOW**

is the Content & Communications Specialist with the National Rural Water Association.



WATERPRO 2024
SEPTEMBER 9 – 11, 2024 | SAVANNAH, GA



COME SEE US AT
BOOTH #724



LET US KNOW
YOU'RE COMING!

mastermeter.com



ADVERTISEMENT

FLOMATIC® VALVES

Effectively Prevent Slamming During Rapid Flow Reversal

Unleashing the power of Flomatic Model 745SC Surge-Stopper® with accelerated rapid closure

Flomatic's Model 745SC Surge-Stopper® presents a dependable and compliant solution for municipal and industrial water and wastewater applications. This precision-engineered valve incorporates a rapid closure spring in conjunction with a resilient flapper hinge, resulting in reduced disc closing time. As a result, it effectively prevents slamming during rapid flow reversal, which is commonly encountered in applications with high head, surge tanks, or multiple pumps.

Built to Last

Designed with durability in mind, the valve's body and cover are constructed from ductile iron (A536 65-45-12), providing exceptional strength and toughness. Its 45-degree seating surface minimizes disc travel, typically 35° or less, with a rapid closure spring to prevent slamming during rapid flow reversals.

The resilient seating design boasts a one-piece molded flapper, comprising a reinforced flexible hinge and a steel flapper

disc encapsulated in Buna-N rubber (EPDM optional). This design, along with the raised rib seal on the molded seating surface, ensures bubble-tight sealing even under low pressure and vacuum service.

Maintenance is made hassle-free, as the internal resilient flapper and rapid closure spring are accessible and field replaceable through the valve cover access port, eliminating the need to remove the valve from the pipeline.

Sustainability and Compliance

Designed for municipal and industrial water and wastewater applications, this precision-engineered swing check valve fully complies with ANSI/AWWA Standard C508 full waterway design. Crafted with utmost quality and environmental responsibility, our valves are manufactured under ISO 9001 and 14001 quality and environmental systems. The



valve seamlessly meets AIS standards and boasts a fusion-bonded body epoxy coat applied, guaranteeing unparalleled strength and corrosion resistance.

This cutting-edge valve maximizes efficiency, enhances control, and delivers exceptional reliability — all while embodying our commitment to superior quality and sustainability.

Enhance Control with Optional Accessories

Optional accessories include a back flush device for system maintenance, a mechanical position indicator for visual valve flapper position indication, and a limit switch for SCADA integration to monitor valve status. Choose the Flomatic Model 745SC Surge-Stopper® for reliable and efficient fluid control in critical engineering applications.

Experience the dependable performance of the Model 745SC Surge-Stopper® and elevate your fluid control applications to new heights of efficiency and reliability.

Learn more at flomatic.com.





WASTE NO TIME PROTECTING YOUR SYSTEM

WITH FLOMATIC'S AMERICAN-MADE LINE
OF WASTEWATER CHECK VALVES

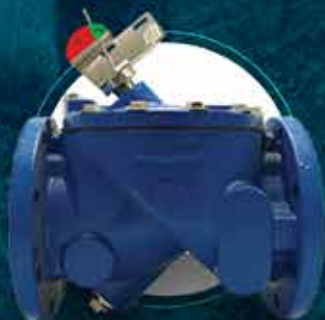
With an extensive offering of American Iron & Steel (AIS) and Build America Buy America (BABA) compliant check valves, Flomatic is dedicated to providing you the perfect solution to meet the harsh complexities of congested wastewater systems.



LEARN MORE



SWING CHECK VALVES



FLAPPER STYLE CHECK VALVES



BALL CHECK VALVES



FLOMATIC® VALVES

High Quality Valves Built To Last...

(800) 233-2040
WWW.FLOMATIC.COM
15 PRUYN ISLAND DR.
GLENS FALLS, NY 12801



bigstock.com

Stepping into the Light of LCRR/I

Compliance through partnership and education

By Jonathan Cuppett, Lowell Huffman, and Laura Vidal

By now, we've all heard about the Lead and Copper Rule Revisions (LCRR) and hopefully everyone has attended some classes and is in the process of executing their compliance plan. Those who have started know that this is not a "one-stop-and-hop-off-the-bus" sort of requirement; it an ongoing process that will require a strong foundation and continued vigilance over the long term. We have yet to see where the EPA will land with the final Lead and Copper Rule Improvements (LCRI), but there is one thing we can probably all agree on: this rule change is extremely complicated and, in many cases, requires a new mindset and a collaborative approach. Simply put: this challenge is oftentimes too much for any one person or one organization to tackle. There are just too many moving parts!

Despite the shadow cast by these large and looming changes, there is some light

at the end of the tunnel: we are all in this together. By partnering up, collaborating, and sharing our successes and failures, we can smooth the collective path forward. That's why at 120Water we are so proud to support National Rural Water Association's (NRWA) mission and ongoing efforts to assist rural and small communities through the Affinity Partnership program. One of the main objectives of this partnership is to facilitate access to modern technology and solutions. To accomplish this goal, we created a discounting program exclusive to rural water system members, along with educational resources and training sessions at rural water conferences across the country.

We are excited to report that over 300 small and rural community water systems have taken advantage of our discounts and educational programming and are well on their way to LCRR compliance! These communities are on pace to meet

the preliminary service line inventory deadline by Oct. 16, 2024. We are even more thrilled to share how much money these systems have saved by taking advantage of the partnership program. Through partnership discounting, water systems have saved more than \$700,000! That's REAL money that we know is being put to good use in these small, rural communities who need their dollars to go the extra mile (or ten).

Partnerships and collaborations are great, but they are reliant upon all parties being on the same page, if not at least in the same chapter! For these partnerships to continue to produce robust outcomes, we need water systems and their compliance staff to be well-informed on regulatory changes.

LEAD AND COPPER RULE REGULATORY CHANGES

The LCRR was finalized in 2021 and the



LCRI proposal was released in November 2023. These changes to the Lead and Copper Rule (LCR) regulatory landscape have the potential to create uncertainty among water industry stakeholders. Much of the confusion comes from how and when the LCRR regulatory requirements will be enforced alongside the LCR and LCRI. Currently, the LCRR compliance deadline is Oct. 16, 2024. However, EPA intends to finalize the LCRI **before** October 2024 and integrate the vast majority of the LCRR requirements into the LCRI. This will extend the compliance deadline for almost all LCRR requirements until approximately October 2027. The six items below highlight important details related to these changes:

June 1991 | Original LCR Published

June 2021 | LCRR published in Federal Register (compliance deadline Oct. 16, 2024)

Nov. 2023 | LCRI proposal released; *Final expected to be published before Oct. 16, 2024*

Before Oct. 16, 2024 | Water systems must comply with LCR

Oct. 16, 2024 | Three elements from LCRR will be required (see next section for details)

After Oct. 16, 2024 | Final LCRI expected to contain details on specific future requirements and compliance deadlines

THE 'BIG 3': WHERE TO FOCUS PRIOR TO OCTOBER 2024

Although the final LCRI, when published, is expected to extend the compliance deadline for the majority of the LCRR requirements, there are three specific LCRR items that EPA intends to make due starting on Oct. 16, 2024. These "BIG 3" are what water systems should be focusing on now:

1. **Service Line Inventory:** Submit your initial service line inventory to your state regulator by Oct. 16, 2024.
2. **30-Day Notice:** Send notifications to customers with lead service lines (LSL), galvanized requiring replacement (GRR), or unknown service lines within 30 days of inventory submission (i.e., November 15, 2024).

Water systems will also be required to submit these notices on an annual basis (2025, 2026, etc.) until only non-lead service lines remain.

3. **Tier 1 Public Notification:** Notify all customers within 24 hours following a lead action level exceedance (15 ppb). This only applies to systems that learn about a lead action level exceedance **after** Oct. 16, 2024.

THE 'SIMPLIFIED 7': WHERE TO FOCUS AFTER OCTOBER 2024

After the initial service line inventories and customer notifications are submitted, many water systems may think they should take a break and relax their LCRI preparedness. However, the extra compliance time allowed by the LCRI is a gift that water systems should use

Monitor Usage, Level & Feed Rate

CARBOY-SCALE

Solo G2™ Weight Indicator

Wizard 4000™ Advanced Digital System

Century™ Hydraulic System

- ◆ Accurately measure chemical usage and remaining amount
- ◆ Easily comply with government reporting requirements
- ◆ Three platform sizes available for drums from 5 to 55 gallons

For more information, Call (925) 686-6700 or visit www.forceflowscales.com

FORCE FLOW

CHECK. CONTROL. COMPLY.

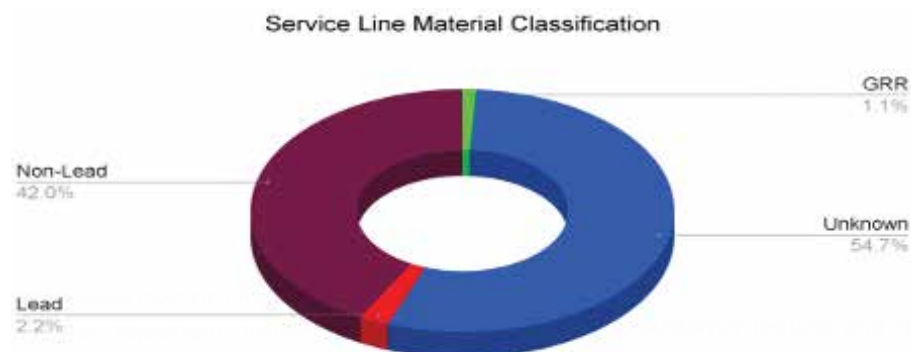


FEATURE

to their advantage. “Keeping the foot on the gas” will allow water systems to be well positioned for the variety of LCRI elements that will hit in 2027 and beyond. The “Simplified Seven” topics below are areas that water systems can begin planning for now and implementing after October 2024.

- 1.** Add Connectors to the Service Line Inventory: The LCRI is expected to mandate that connector (goose-neck) materials be added to the LCRI Baseline Inventory, which will be due around October 2027. Water systems will be required to review the same historical records for connector material identification that were required to identify service line materials for the LCRR inventory. Water systems should start tracking connectors in their inventory now.
- 2.** Verify Unknowns and Replace LSL and GRR: Starting in October 2027, there are many disincentives to having LSL, GRR, or unknown service lines in your system. Figure 1 presents a summary of entire service line classifications from 120Water’s service line inventory database. With over 54% of service lines classified as “Unknown,” now is the time to focus on verifying unknowns and preparing to replace LSL/GRR.

Figure 1. Service Line Material Summary from 120Water’s Inventory Database.



As of June 2024, the database contains >7 million service lines from >7,000 water systems in almost every state.

provides funding to states through the Drinking Water State Revolving Fund (DWSRF) specifically to help with developing service line inventories, verifying service line materials, and replacing LSL/GRR. Review the DWSRF funding requirements and programs in your state to see if this funding can help your water system.

- 4.** Prepare for a variety of notification and communication requirements: Starting in October 2027, the LCRI will require water systems to communicate with various stakeholders (e.g., customers, states, schools, health departments) on many timelines (e.g., 24 hours, 3 days, 30 days, 45 days, 60 days). Implementing a strategic communications solution in advance of October 2027 will allow water systems to stay ahead of the game.
- 5.** Start School and Child Care Sampling Program: The LCRI proposal allows historical school and child care sampling dating back to January 1, 2021, that meets LCRI program requirements to qualify for a waiver starting in 2028. Therefore, if a water system fulfills the school and child care monitoring program requirements before October 2027, they will not be required to repeat the program again starting in 2028.

and 5th-liter sampling programs: In October 2027, the LCRI is expected to require systems to offer tap sampling to homes with LSL, GRR, or Unknowns and sample for lead (Pb) in the 1st and 5th liter of those homes. If the system has a Pb action level exceedance, then the tap sampling offer will need to be extended to every customer. In addition, systems will be required to conduct compliance sampling for Pb in the 1st and 5th Liter for homes with LSLs. Water systems potentially impacted by any of these new sampling requirements would benefit from having a sampling solution in place in advance of October 2027.

- 7.** Prepare for risk mitigation following service line replacement or disturbances: The LCRI is expected to require various location-specific risk mitigation activities (e.g., public education, flushing instructions, water filters, follow-up sampling) depending on the specific action to the service line (e.g., full/partial replacement, major disturbance, or minor disturbance). This requirement includes specific risk mitigation actions following a pot-hole/excavation to an LSL, GRR, or Unknown service line. Risk mitigation is one area that EPA is considering requiring before October 2027. The specific deadline is currently unknown, but water systems should be prepared to execute risk mitigation efforts as early as October 2024.

BRINGING IT ALL TOGETHER

When the LCRI is finalized later in 2024, a new wave of industry outreach will certainly follow. This will again add another layer of complexity to the situation. Focusing on the “BIG 3” and “Simplified 7”


FEATURE



will allow water systems to concentrate on the most pressing LCR-related requirements.



Scan the QR code to view a 1-page checklist summarizing the "BIG 3" and "Simplified 7" requirements.

All the intricacies of the regulations emphasize the importance of partnerships, like the one between 120Water and the NRW, which provide essential resources and support to small and rural communities. By leveraging modern technology, educational programs, and exclusive discounting opportunities, many rural water member systems are already on track to meet compliance deadlines, saving significant costs along the way. Going forward, it will be crucial for water system professionals to stay informed and proactive in order to achieve and maintain compliance. 120Water will remain a steadfast partner with the NRW, helping ensure systems receive the support they need for years to come. **RW** 

Our rural water partnerships have enabled our team to talk with, collaborate, and help design solutions at the state primacy department/agency level. States depend on Rural Water Associations to help them solve the most complex and challenging aspects of regulatory compliance. Scan the QR code to read more about how these programs work.



Jonathan Cuppett is the Director of Water Quality Compliance for 120Water.

Lowell Huffman is the Director of Association Business Development for 120Water.

Laura Vidal is the Association Marketing Manager for 120Water.

Proven, Efficient Solutions to Water Quality Challenges

Save up to 20% in Energy Costs!

Up to 2,400gpm per housing

ONE Unit,

THREE Technologies:

Cyclonic Separation
Upflow Filtration
Cartridge Filtration

World's Largest Selection of NSF Listed Filtration Cartridges:

Prefiltration
1-Micron Absolute
3.6 Log Cyst Reduction
Activated Carbon

Visit our booth Sept. 9-11

WaterPro
Conference
Booth # 915



HARMSCO® MUNICIPAL

Call today to learn about our **LT2 Rule** and **PFAS** Solutions!
(561) 848-9628 • sales@harmasco.com • www.harmasco.com

STRUCTURE. & INTEGRITY.

PITTSBURGH TANK & TOWER GROUP

An ESOP Company

Since 1919

"100 years and still climbing"



CERTIFIED
FABRICATOR



WWW.PTTG.COM

INSPECTIONS REPAIR TANKS

NEW TANKS

(270) 826-9000 ext. 2601

EXISTING TANKS

(270) 826-9000 ext. 4601



ADVERTISEMENT

WATTS®

ArmorTek Coating Protects Valves Against Corrosion



Microbiologically induced corrosion (or MIC) is the mortal enemy of valves everywhere. This equipment-destroying process occurs when microorganisms like bacteria and fungi produce corrosive byproducts on your valve's surfaces, promoting localized corrosion and, over time, compromising your valve's reliability and functionality. This can lead to leaks, poor performance, and potential failure. Worst of all, a corroded valve cannot be repaired or recycled and is destined for a lifetime in a landfill.

The best way to combat MIC? Avoid it with ArmorTek®-coated valves. ArmorTek is a patented, proprietary three-part coating system designed to provide unparalleled protection against MIC.

According to a 2016 study from the National Association of Corrosion Engineers (NACE), it's estimated that corrosion causes \$2.5 trillion in damage annually. On its own, MIC is responsible for 20% of all

corrosion damage. That means MIC is directly responsible for \$500,000,000 worth of wasted resources and costly equipment replacements every single year.

This was the reality faced by the local water district in Las Vegas, Nevada. During a routine test of an apartment complex on Las Vegas Boulevard, they once again discovered MIC on one of their valves. This site had already installed multiple replacements, but each new valve was consumed by corrosion. It was clear that this customer needed a valve that could stand up to the harsh source water conditions and combat the looming threat of MIC. They needed an ArmorTek-coated valve.

Factory standard on select Watts and Ames backflow preventers, automatic control valves (ACV), and plate strainers, ArmorTek consists of an anticorrosion primer, a microbial inhibitor to limit MIC, and a protective epoxy-polyester topcoat all designed to control corrosion and protect the substrate

layer of the valve. A sacrificial element within the coating corrodes instead of the iron in the valve itself, preventing MIC from forming and spreading.

The apartment complex's corroded backflow preventer was replaced with a new version of the same valve, and the difference was night and day. Five years later, there are still no signs of MIC activity in the ArmorTek-coated backflow preventer.

Stop replacing corroded valves and put your trust in the only ACVs and plate strainers backed by a limited 8-year corrosion warranty.

To learn more about the benefits of ArmorTek and get hands on with ArmorTek-coated valves, be sure to visit Watts in booth #734 during the 2024 WaterPro Conference, September 9-11!

Stop Replacing Corroded Valves.

MIC-Resistant Valves
Armed with



ArmorTek®, a 3-part coating system designed to inhibit Microbially Induced Corrosion (MIC).

1 Durable Primer

2 Patented Microbial Inhibitor

3 Robust Topcoat

The **ONLY** Valve/Strainer Combo
with an
8-Year MIC Warranty*

*Terms and conditions apply.



► Stop Replacing Corroded Valves

WATTS®



The new HDPE pipeline will run 17.25 miles, bringing fresh water to residents of northwest Iowa. Photo courtesy of Douglas Westerman/ORWS.

Rural Water System Increases Delivery Capacity

Iowa water utility enhances service with durable, cost-effective HDPE pipeline

By Steve Cooper

In the northwest corner of Iowa, Osceola County Rural Water System (ORWS) serves rural communities in Osceola, O'Brien, Lyon, and Dickinson counties. The utility's service area includes West Lake Okoboji, a popular destination offering recreational activities, historical attractions, and community events that draw visitors seeking both relaxation and adventure.

To serve its growing service area and meet increasing water demands, ORWS began working with DGR Engineering (Rock Rapids, IA) in 2018 to plan extensive

improvements to the distribution system. "We have the water to serve these communities, but with the increase in hookups to our system, the distribution artery had outgrown itself," explained Douglas Westerman, general manager of ORWS.

After a thorough engineering and design review process, the 19-mile transmission main pipeline project was ready for bidding in April 2022. A variety of materials were specified for the pipeline, including ductile iron and polyvinyl chloride (PVC). But for the first time in the ORWS distri-

bution system, high-density polyethylene (HDPE) pipe was selected for a 17.25-mile segment serving the area around West Lake Okoboji. "This was a pretty big change for them to switch gears to a different mainline pipe material from what they're normally used to," noted Logan Smidt, P.E., project manager with DGR. Of that 93,500 foot-stretch, 84,440 feet of it used 12-inch diameter HDPE IPS DR 9 to DR 17, and 9,000 feet of 8-inch HDPE IPS DR-11.

"While the need for clean drinking water continues to grow, the supply continues



HDPE pipe is flexible enough to be installed in trenches, by plowing or by any trenchless method. Photo courtesy of ISCO.



Heat-fusing 53-foot-long lengths of HDPE pipe constructs a monolithic, leak-free pipeline. Photo courtesy of Douglas Westerman/ORWS.

to be constricted,” stated Camille George Rubeiz, P.E., F. ASCE, co-chair, HDPE Municipal Advisory Board, and senior director of engineering for the Plastics Pipe Institute’s (PPI) Municipal & Industrial Division. PPI is the major North American trade association representing the plastic pipe industry.

“Sourcing from other areas, generally miles away, is a potential solution. The problem is, and has always been, cost-effective and efficient delivery. Now, using PE 4710 HDPE pipe, water utilities such as ORWS are taking care of customers with a delivery system that is corrosion-free, tuberculation-free, and leak-free, can withstand severe changes in ground movements, can resist water hammer, and is highly ductile and flexible. This system will not only deliver water for as long as its 100-year design life but also save water due to its solid walls and heat-fused joints.”

For ORWS, HDPE was also the most cost-effective solution. “It’s already pretty expensive to install water main,” Westerman noted, “but at the time, PVC prices had gone up considerably.” The increase was due, in part, to a resin shortage, Smidt

explained. “HDPE was going to be much more competitive,” he said, adding that it would ultimately deliver a savings of about \$2 million compared to an all-PVC approach. “So, we allowed it — and subsequently, the owner has been very pleased.”

Two sizes of HDPE pipe, manufactured by WL Plastics (Ft. Worth, TX) and supplied by ISCO Industries (Louisville, KY), both member companies of PPI, were used. “About two and a half miles were 8-inch and the rest was 12-inch, ranging from dimension ratio (DR) 11 to DR 17,” Smidt said.

The installation contractor, Hulstein Excavating (Edgerton, MN.), started work in August 2022. Because this was a new process for Hulstein, the staff first had to be trained on the installation technique. “We required that the contractor doing the work have on-site fusion training from ISCO,” Smidt explained. “That way, if they were planning to do their own butt-joint fusing, they would be qualified and certified to do that.”

HDPE pipe is heat-fused together to form a leak-free joint. Unlike PVC and ductile iron, there are no bell and spigot connections that could introduce potential leak

points. “If those joints are properly joined, they’re stronger than the pipe itself,” Westerman said. “I find that very valuable.”

The fused nature of HDPE is a big advantage, Smidt said. “There are no gasketed joints along the main line, other than those at caps, valves, or sleeved connections to bores,” explained Smidt.

All pipe came in 53-foot-long sections from the WL plant. This reduced the number of joints to 1,698 compared to 1,800 using standard 50-foot lengths, and also reduced the number of pipe sections that would need to be manufactured and shipped.

For this project, Hulstein Excavating rented a Vietz® Paywelder VFT 500 machine that would allow them to track along the staged-out pipeline, pick up a segment of pipe, and bring it into a cabbed enclosure with a controlled environment. “They had the fusion machine mounted inside of that enclosure where they would conduct all of the processes that go with the fusion,” Smidt explained.

“Every so many feet, we would cut a section out of where a joint was and perform what’s called a bend test on the joint to



CASE STUDY



The Vietz Paywelder VFT 500 operator heat-fuses pipe sections together and controls the vehicle, speeding up the process. Photo courtesy of Douglas Westerman/ORWS.



Douglas Westerman, general manager of ORWS, holds a cut section of an HDPE pipe joint used to perform a bend test proving that the heat-fused pipe sections will not pull apart. Photo courtesy of Douglas Westerman/ORWS.

ensure that it didn't pull apart," Westerman recalled. "Those things are kind of neat! I've got some samples in my office for the board members who come in so I can show them how strong the welds are. I can show where it used to be a round piece of pipe, and we've taken it and bent it in the opposite direction. It's obvious that the joint is right there, and you

can inspect the sides and inside of it. You might expect to be able to tell that it was two pieces of pipe, but you just can't."

There are different methods of installing HDPE pipe, including trenchless horizontal directional drilling (HDD) and traditional trenched (or open cut) excavation. The former involves boring a hole to the desired size and then pulling the pipe through. This method minimizes the impact to the surrounding area and causes fewer interruptions to traffic. The ORWS distribution system improvement project utilized HDD where pipe had to be installed under roadways or stream crossings. The majority of the project, however, used traditional trenched installation. "Big excavators were used to open up a trench, separating the black soil from the clay, six feet deep," Westerman recalled.

Pressure testing is another critical aspect of pipe installation as it is the first time a newly installed system will be subjected to stress. The technique for pressure-testing HDPE


pipe differs from PVC. "With the gasketed nature of PVC, there is an allowable loss criteria over the testing timeframe," Smidt explained, "but with HDPE, there is not an allowable loss but rather an allowable drop in pressure because of the expansion properties of the thermoplastic materials." This meant pre-filling the pipeline to achieve thermal equilibrium a day in advance of the pressure test. Once equilibrium is reached, the pipe can be brought to test pressure. As the pipe continues to expand, the pressure drops slightly. "So, every hour over a four-hour period, you pump that back up to your test pressure," Smidt explained. "When the expansion has settled, you can begin the pressure test."

This was a new procedure for the installation crew. "It introduced a bit of a learning curve in the field," Smidt noted, "but everybody followed published design guidelines and it went really well."

Given that this was the first major installation of HDPE for both ORWS and Hulstein



Excavating, the project was a success on multiple levels. Westerman noted that he would welcome the opportunity to use HDPE again in the future. "In fact, we're planning on using it for some water main extensions this summer," he added, "and I've sent a couple of my staff to some training to become certified for welding HDPE."

Smidt echoed those sentiments. "I would most certainly be more apt to allow HDPE and use it as the primary design on future projects," he said. "Some of that's an owner-driven decision, of course, but as the engineer on the project, I would have no hesitation." **RW** 

Author's Note: To learn more about PPI, visit plasticpipe.org/mabpubs.

Steve Cooper is a freelance writer specializing in water and wastewater infrastructure topics.



Load of 12-inch HDPE pipe ready for fusing and installation. Photo courtesy of Douglas Westerman.



The Expansion Joint
and
Check Valve People

LOW HEADLOSS IN-LINE CHECK VALVE

The ProFlex™ Style 790 - The elastomeric check valve of choice for municipalities, odor control, railway washouts and highway flood damage prevention



www.procoproducts.com |



Gordon heads out for the day. Photo courtesy of Gordon Meyer.

A Day in the Life of a Circuit Rider: Gordon Meyer

By Angela Godwin

In 1985, Gordon Meyer was newly married with a baby on the way. In search of a solid and stable career, he set his sights on joining the Air Force. "I was scheduled to go to basic training in May to be a security specialist," Gordon said, but with a family to support and bills to pay, he was eager to start earlier.

"I talked to my recruiter, and he said all he had available was environmental support, which he told me was heating and air conditioning," Gordon recalled. He took the opportunity, and three days later he was on a plane to San Antonio for basic training.

Much to his surprise, Gordon discovered during basic training that environmen-

tal support wasn't heating and air conditioning at all; it was water and wastewater treatment. "I started out working on base with field units to make water in the field," he said. "At the time, we were actually using World War II equipment called an ERDLator, which was a field surface water unit," he explained. Later, as Gordon continued working in the Air Force Reserves, reverse osmosis became the more common treatment approach, he added.

After finishing active duty and joining the Air Force Reserves in 1988, Gordon returned home to Indiana and went to work for the Franklin County Water Association, a large, rural water utility in Brookville. "I mainly did the labor part of it," he recalled.

"We put in a lot of water mains because it was still a fairly young system."

In 1991, Gordon pursued a new opportunity, becoming the assistant wastewater operator for the town of Centerville. Over the next 8 years, Gordon honed his skills and ultimately took on the role of water treatment plant operator.

By 1999, Gordon was ready for his next chapter. He joined the Alliance of Indiana Rural Water as a wastewater technician. Three months later, he transitioned to Circuit Rider, a position he has held for 25 years.

"Being a Circuit Rider is a job where you're out helping people," Gordon



L-R: Gordon Meyer, Joe Frazier, Rex Blanton, Donald Papai. Photo courtesy of Alliance of Indiana Rural Water.



Gordon congratulates Fort Wayne City Utilities for winning the 2023 regional water taste test. Photo courtesy of Alliance of Indiana Rural Water.



Gordon assists with a pipeline repair. Photo courtesy of Gordon Meyer/Alliance of Indiana Rural Water.

described. "I make a schedule for the week, but it's really kind of fluid. You can be out doing something with one town when somebody calls with an emergency, and you're going someplace else. We also have days where we just go out and talk to people and basically keep them up to date on what's going on with requirements."

Leak detection is a very common task for Gordon. "We have our own subsurface acoustic leak detector — I call it a glorified stethoscope," he laughed. "It enhances the sound of the water escaping the pipe."

"If somebody has a leak they can't find, I'll spend a day with them, listening to hydrants and valves until we can pinpoint it to a certain area."

This year, Gordon has been especially busy helping systems with their water loss audits. "They have to be done an-

nually but this year they have to be validated and sent to the Indiana Finance Authority," he explained. "I'm a state-certified water loss audit validator, so I can come in, look over their audit, and verify that all the information is correct. If it is, I give them a certificate to send in."

Gordon also gets a lot of questions about the lead service line inventory, which is due later this year. "I try to help them out as best as I can," he said. "Sometimes I think they expect me to do their inventory for them," he chuckled, "but I inform them right away that I can't because there's so much that



CIRCUIT RIDER



Gordon looks for a leak. Photo courtesy of Alliance of Indiana Rural Water.



All in a day's work. Photo courtesy of Alliance of Indiana Rural Water.

goes into it." Rather, Gordon provides guidance on what needs to be done and how to go about doing it.

The key to being an effective Circuit Rider is having a good working relationship with the systems you're assisting, Gordon explained. "When you first start out doing this job, you drive to different places and these people don't know you from Adam. They're looking at you like you're an inspector or something," he laughed. "But you talk to them and give them basic guidance until they get to know you and trust you."

After 25 years, Gordon has built a lot of relationships. "It's amazing the number of phone calls I get now compared to when I first started doing this," he said. "A lot of times, they'll call and say, 'I know the answer, but I just want to you to confirm it.'"

For Gordon, that's a sign of success. "That's the way I do it. I go out and help people and, once I show them what to do and I watch them do it a few times,

I expect that they know how to do it," he said.

"I feel I'm a success when they don't have to call me back about that same problem. They're not afraid to handle it on their own."

If they do run into a problem, Gordon is just a phone call away. "If we can't work it out over the phone, I'll be on the road the next day, and we'll see what we can do when I get there."

Being there for systems that need assistance is the most gratifying part of being a Circuit Rider, Gordon said. "I started out



Gordon's coworkers celebrate his milestone achievement of 25 years with the Alliance. Photo courtesy of Alliance of Indiana Rural Water.



Every day, water and wastewater utilities face numerous security threats – **are you prepared?**

As a part of the partnership with NRWA and the Water Information Sharing and Analysis Center (WaterISAC), systems serving 3,300 population or fewer are eligible for a free WaterISAC membership.

Eligible NRWA Members will receive these benefits:



MONTHLY THREAT
BRIEFINGS



RESOURCE CENTER
24/7/365



SECURITY & RESILIENCE
NEWSLETTER



QUARTERLY INCIDENT REPORTS &
ANNUAL THREAT ANALYSIS
REPORTS



TIMELY AND RELEVANT
ADVISORIES

Claim your free membership today!

<https://nrwa.org/issues/cybersecurity/>





CIRCUIT RIDER



Gordon's coworkers celebrate his 25th anniversary with the Alliance. Photo courtesy of Alliance of Indiana Rural Water.

the same way they did," he explained. I know I would have liked to have had some help."

That's the beauty of the entire Circuit Rider program, he noted. "It means that they're not out there alone," Gordon said. "They can just call on us to come and help them — and we'll come and help them best we can. And if we don't have the answer, we'll find the answer for them."

Reflecting on his 38 years in the water and wastewater industry, including 25 as a Circuit Rider, Gordon said it's a career he has always enjoyed. "You don't usually plan on doing this job; you kind of fall into it," he acknowledged. "That's what happened to me all those years ago and here we are. Hopefully I can keep doing it for at least another three to five years, helping people out. That's all I want to do." **RW** 💧



ANGELA GODWIN

is a writer and editor specializing in drinking water, wastewater, and stormwater topics. She is a partner and director of editorial services with Rogue Monkey Media.



Gordon enjoys the day with the Alliance team. Photo courtesy of Alliance of Indiana Rural Water.



Gordon helps out with leak detection. Photo courtesy of Gordon Meyer/Alliance of Indiana Rural Water.



ADVERTISEMENT

Kasco

Improving Water Quality Through Effective Mixing



Water is the lifeblood of communities, and the infrastructure that delivers it safely and reliably is essential for public health and well-being. Among these infrastructures, water tanks and towers ensure a steady flow of clean water to homes and businesses.

Citizens don't give water towers much thought; yet inside, a complex interplay of factors significantly impacts their performance, longevity, and the safety

of the product they steward for the community. One such factor is thermal stratification — a phenomenon with far-reaching consequences for water quality and structural integrity.

Thermal stratification leads to chemical stratification that can seriously compromise water quality. The upper layer contains the oldest, warmest water with low disinfectant residuals while the lower, colder layer contains a higher chlorine residual. This can lead to bacteriological contamination and high concentrations of disinfection by-products. The warm conditions at the air-water interface on the interior sidewall allow biofilms to prosper.

This separation of water layers sets the stage for challenges. In the face of these,

innovative solutions are urgently needed. One such solution comes in the form of active mixers — devices designed to disrupt thermal stratification and promote uniform mixing of water within the tank. CertiSafe™ Tank Mixers from Kasco® exemplify this approach, employing a combination of vertical and horizontal circulation patterns to maintain consistent temperature and chlorine levels throughout the tank. By eliminating the thermocline, the boundary between warm and cold layers, these mixers effectively thwart the conditions conducive to microbial growth and ice formation, safeguarding both water quality and infrastructure integrity.

Contact the CertiSafe sales team for more information at kascomarine.com/contact-us.

The Fastest & Most Effective Active Tank Mixer

CertiSafe™ Tank Mixers:

- Blend drinking water quickly and efficiently
- Eliminate common water problems
- Are NSF Certified
- Improve water quality from tank to tap



CERTISAFE™
by **Kasco®**

There's Sort of Safe, or
There's CertiSafe



Discover what sets these mixers apart. | 715.262.4488 | kascomarine.com/certisafe



Gary with his parents, Doris and Elroy Larimore, at a Rural Water banquet. All photos courtesy of Gary Larimore.

Rural Water Profile: Gary Larimore

By Amanda Walsh

Gary Larimore was born and raised in Horse Cave, Kentucky, the son of a water man. His father, Elroy Larimore, was the first manager of the Green River Valley Water District (GRVWD). "I was six years old when Dad started with the local water utility. I spent years riding around in the truck with him, running lines, and learning the ropes," Gary said.

At the time, Gary's father played a significant role in developing Kentucky's rural water sector. Utilizing available grants and loans from the Farmers Home Administration (FmHA), now USDA Rural Development (RD), GRVWD grew into one of the largest water districts in the state.

Gary began working at the water utility during his junior high years on summer and holiday breaks. He learned how to do almost everything, from reading water meters, setting meters, digging ditches, fixing leaks, and painting fire hydrants

to mowing around the water treatment plant and working inside it. He even learned how to detect leaks. "Dad would wake me up in the middle of the night to go search for a leak because there were people without water," Gary recalled.

"One of the benefits of working for Dad at the water company was that the hours never conflicted with my involvement in sports. I went from one sport to the other — football, basketball, baseball. Whether I needed to go to practice or leave work early for a game, I could do so. My parents were also able to attend my games, which made for a great childhood," Gary shared. This flexibility proved particularly valuable in 1972, Gary's junior year, when his team captured the state baseball championship.

After graduating in 1973, Gary moved to Bowling Green, Kentucky, on a full baseball scholarship to Western Kentucky University. He earned a Bachelor

of Science in 1977 and a Master of Public Service in 1983, also from Western Kentucky University.

In 1979, Elroy Larimore was approached by representatives of National Rural Water Association (NRWA) about starting the Kentucky Rural Water Association (KRWA) to help water systems comply with the recently passed Safe Drinking Water Act.

Elroy was one of five KRWA board founders, along with Joe Liles. Both men later became NRWA board presidents. Liles managed Warren, Grayson, Simpson, and Butler Water Systems. The other founders were J.B. Galloway, executive director of Farmers Rural Electric Cooperative Corporation (RECC), Robert Eaton, executive director of South Central Rural Telephone Cooperative, and Jack Sims, Hart County Judge Executive. Kentucky became the 20th state affiliate of the National Rural Water Association in February 1979.



**SUMMARY NOTICE OF PROPOSED CLASS ACTION SETTLEMENT
AND COURT-APPROVAL HEARING**

In re: Aqueous Film-Forming Foams Products Liability Litigation, MDL No. 2:18-mn-02873 This Document relates to: *City of Camden, et al., v. Tyco Fire Products LP*, No. 2:24-cv-02321-RMG

UNITED STATES DISTRICT COURT, DISTRICT OF SOUTH CAROLINA, CHARLESTON DIVISION

TO THE SETTLEMENT CLASS: All Active Public Water Systems in the United States of America that have one or more Impacted Water Sources as of May 15, 2024.

All capitalized terms not otherwise defined herein shall have the meanings set forth in the Settlement Agreement, available for review at www.PFASWaterSettlement.com.

Active Public Water System means a Public Water System whose activity-status field in SDWIS states that the system is "Active."

Impacted Water Source means a Water Source that has a Qualifying Test Result showing a Measurable Concentration of PFAS.

Public Water System means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year, consistent with the use of that term in the Safe Drinking Water Act, 42 U.S.C. § 300f(4)(A) and 40 C.F.R. Part 141. The term "Public Water System" includes (i) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (ii) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Solely for purposes of this Settlement Agreement, the term "Public Water System" refers to a Community Water System of any size or a Non-Transient Non-Community Water System that serves more than 3,300 people, according to SDWIS, the owner and/or operator of such Public Water Systems, or any Person (but not any financing or lending institution) that has legal authority or responsibility (by statute, regulation, other law, or contract) to fund or incur financial obligations for the design, engineering, installation, operation, or maintenance of any facility or equipment that treats, filters, remediates, or manages water that has entered or may enter Drinking Water or any Public Water System. It is the intention of this Agreement that the definition of "Public Water System" be as broad, expansive, and inclusive as possible.

What Is the Purpose of this Notice? The purpose of this Notice is (i) to advise you of a proposed settlement of certain Claims against Tyco Fire Products LP ("Tyco" or "Defendant") in the United States District Court for the District of South Carolina (the "Court"); (ii) to summarize your rights in connection with the Settlement; and (iii) to inform you of a Court hearing to consider whether to grant final approval of the Settlement (the "Final Fairness Hearing"), to be held on **November 1, 2024 at 11 a.m.**, before the Honorable Richard M. Gergel, United States District Judge of the United States District Court for the District of South Carolina, located at 85 Broad Street, Charleston, South Carolina 29401.

What Are the Key Terms of the Proposed Settlement? Tyco has agreed to pay \$750,000,000.00 (the "Settlement Amount"), subject to final approval of the Settlement by the Court and certain other conditions specified in the Settlement Agreement. In no event shall Tyco be required under the Settlement Agreement to pay any amounts above the Settlement Amount. Any fees, costs, or expenses payable under the Settlement Agreement shall be paid out of, and shall not be in addition to, the Settlement Amount. Each Class Member that has not excluded itself from the Class will be eligible to receive a settlement check(s) from the Claims Administrator based on the Allocation Procedures developed by Class Counsel, which are subject to final approval by the Court as fair and reasonable and whose administration is under the oversight of the Special Master.

What Are My Options?

YOU CAN PARTICIPATE IN THE SETTLEMENT. You must file a Claims Form to be eligible to receive a payment under the Settlement. You can submit your Claims Form online at www.PFASWaterSettlement.com, or you can download, complete, and mail your Claims Form to the Claims Administrator at AFFF Public Water System Claims, P.O. Box 4466, Baton Rouge, Louisiana 70821. The deadline to submit a Phase One Action Fund Claims Form is **sixty (60) calendar days after the Effective Date**.

Regardless of whether you file a Claims Form or receive any distribution under the Settlement, unless you timely opt out as described below, you will be bound by the Settlement and any judgment or other final disposition related to the Settlement, including the Release set forth in the Settlement Agreement, and will be precluded from pursuing claims against Tyco separately if those Claims are within the scope of the Release.

YOU CAN OPT OUT OF THE SETTLEMENT. If you do not wish to be a Class Member and do not want to participate in the Settlement and receive a settlement check, you may exclude yourself, or "opt out" from the Class by completing and submitting a Request for Exclusion. The Request for Exclusion form will be available online and may be submitted electronically; if it is submitted via paper copy it must be served on the Opt Out Administrator no later than **September 23, 2024**. Requests for Exclusion may be withdrawn at any time before the Final Fairness Hearing.

YOU CAN OBJECT TO THE SETTLEMENT. Any Class Member that has not successfully excluded itself ("opted out") may object to the Settlement. Any Class Member that wishes to object to the Settlement or to an award of fees or expenses to Class Counsel must file a written and signed statement designated "Objection" with the Clerk of the Court and provide service on Tyco's Counsel and Class Counsel no later than **August 24, 2024**. No Class Member who has submitted a Request for Exclusion may object, and any Objections submitted by any Class Member that later excludes itself shall be deemed withdrawn.

VISIT WWW.PFASWATERSETTLEMENT.COM FOR COMPLETE INFORMATION ABOUT YOUR RIGHTS

The Court's Final Fairness Hearing. The Court will hold the Final Fairness Hearing in the U.S. Court House for the United States District Court for the District of South Carolina, located at 85 Broad Street, Charleston, South Carolina 29401, on **November 1, 2024**. At that time, the Court will determine, among other things, (i) whether the Settlement should be granted final approval as fair, reasonable, and adequate, (ii) whether the Litigation should be dismissed with prejudice pursuant to the terms of the Settlement Agreement, (iii) whether the Settlement Class should be conclusively certified, (iv) whether Settlement Class Members should be bound by the Release set forth in the Settlement Agreement, (v) the amount of attorneys' fees and costs to be awarded to Class Counsel, if any, and (vi) the amount of the award to be made to the Class Representatives for their services, if any. The Final Fairness Hearing may be postponed, adjourned, or continued by Order of the Court without further notice to the Class.

How Do I Get More Information? Please visit www.PFASWaterSettlement.com or call toll free 1-855-714-4341. You may also contact Class Counsel for more information:

Scott Summy Baron & Budd, P.C. 3102 Oak Lawn Ave., Ste. 1100 Dallas, Texas 75219	Michael A. London Douglas & London 59 Maiden Lane, 6th Floor New York, NY 10038
Paul J. Napoli Napoli Shkolnik 1302 Av. Ponce de Leon San Juan, Puerto Rico 00907	Joseph F. Rice Motley Rice LLC 28 Bridgeside Boulevard Mt. Pleasant, South Carolina 29464

Opt Out Administrator Rubris Inc. P.O. Box 3866 McLean, VA 22103
--

Clerk of the Court:

Clerk, United States District Court for the District of South Carolina 85 Broad Street, Charleston, SC 29401

Notice Administrator	Claims Administrator
In re: Aqueous Film-Forming Foams Products Liability Litigation c/o Notice Administrator 1650 Arch Street, Suite 2210 Philadelphia, PA 19103	AFFF Public Water System Claims PO Box 4466 Baton Rouge, LA 70821

Counsel for Tyco Fire Products LP:

Joseph G. Petrosinelli Liam J. Montgomery WILLIAMS & CONNOLLY LLP 680 Maine Avenue SW Washington, DC 20024 (202) 434-5000 jpetrosinelli@wc.com lmontgomery@wc.com



PROFILE



Gary and his wife, Rita, celebrate 40 wonderful years.



Gary visits with Rural Water supporter Senate Minority Leader Mitch McConnell during a Rural Water Fly-In. The men hold a photo of themselves from an earlier visit more than 35 years prior.



Newspaper clipping from the mid-1980s highlights Gary's assistance with leak detection.

At that time, Gary had recently graduated and was looking for a job. Fortunately, KRWA needed an executive director to lead the newly started organization. He was young, had a background in water, and was eager to take on a significant role. That's when Gary became the first employee of KRWA and its executive director.

"I never thought I would be in the water business," Gary said. "I said this was the last thing I ever wanted to get into! But at the time, it was all I knew. Let's see where this leads! I had a lot of help along the way, and you know the good Lord puts you in places where you need to be... or your father does."

Gary learned a lot from the founding members of the KRWA board. They taught him the ins and outs of running an association and connected him with influential people. Most importantly, they taught him to listen to members' problems, find solutions, and fight for them — especially in the legislature. Early suc-

cesses helped build trust and boosted KRWA's support.

Beginning in 1980, Gary served as the legislative advocate for Kentucky water and wastewater utilities at the General Assembly. Despite competition, KRWA quickly became the leader and successfully advocated for passing a Territorial Protection Law in the first year, safeguarding rural water service areas and establishing the organization's credibility.

Gary retired as the executive director of the Kentucky Rural Water Association (KRWA) in July 2022 after more than four decades of service. He was appointed the executive director on day one, and that's where he remained for 43 years and 120 days. The advantage of being there from the beginning, he said, was that he could witness and nurture its growth. He also had the privilege of watching NRWA continue to grow and expand to all 50 states.

Gary reflected on his rewarding career at KRWA, noting that, under his leadership,

KRWA membership represented 98% of public water supplies in Kentucky and grew to 24 employees. Gary stays in touch with other executive directors, forming strong friendships and emphasizing the importance of good leadership for the future.

"The organization has always been blessed," Gary said. "Looking back, it's clear that God's hand was on this organization from the beginning. We've got a lot of angels out there."

Gary has developed a deep appreciation for the dedication and effort of the rural water industry and its utility personnel over the years. He recognizes that most of them have servant hearts and are motivated by helping others. "That's what I like about the rural water industry — it's fulfilling. You may be tired at the end of the day, but you've helped people along the way," said Gary.

Gary took a moment to offer advice to anyone considering a job in the water industry. "Be willing to work hard; it's very rewarding, and the people are great. As far as working



KRWA board members David Peterson and Russ Rose doing their part at the 40th Annual Conference Roast.



KRWA President Russ Rose says a few kind words at Gary's surprise retirement party.

at a trade association, it's a great vocation and there will always be a need for assistance. Members require resources and someone to assist them with technical assistance and training while keeping up with new regulations and legislation," he said. He also emphasized the importance of being passionate about the field rather than focusing on the money, recognizing that this profession often receives less praise than it deserves.

"I'm the son of a water man," Gary said, "and all my professional life has been in the rural water business, so I can easily say ***I am rural water.***"

Gary now works as an independent consultant to KRWA, assisting with various operational, legislative, and regulatory issues. In addition, he serves as the president and CEO of the Rural Water Financing Agency, an interlocal public agency that offers financing options to water and wastewater utilities.

Gary currently resides in Warren County, Kentucky, with his wife, Rita Tufts Larimore. Rita is a teacher at St. Joseph Catholic School in Bowling Green, Kentucky. The couple celebrated 40 years of marriage this past August. **RW**



AMANDA WALSH

is the former Marketing & Multimedia Specialist for the National Rural Water Association.

THE VALVE BOX ALIGNER

BOXLOK

615.210.9141
BOXLOK.COM

VALVE BOX SHIFT ISSUES?

ELIMINATES VALVE BOX SHIFT – PREVENTING COSTLY REWORK




FOR USE WITH CAST IRON VALVE BOXES & 6" PVC PIPE RISERS

WORKS WITH NEARLY ALL BURIED AWWA VALVES

NON-LOAD BEARING DESIGN

VALVE DISASSEMBLY NOT REQUIRED

U.S. PATENT NO.
7575018 AND 8430116





Regulatory Update from NRWA

By Charles Stephens

As we close in on the halfway point of 2024, the water/wastewater sector is managing an unprecedented number of regulatory challenges while also recognizing many opportunities. Small and rural water systems are being sought out at the highest levels of government for feedback and guidance. This is a testament to the professionalism of our members as well as the respect each operator, facility manager and everyone in the industry has earned. Your message is resonating in Washington, D.C. and now is the time to continue telling the Rural Water story!

After providing an update on the status of the regulations you must grapple with, in this issue I would like to share some of the opportunities NRWA has to represent you in Congress, the agencies, and across the water sector. The NRWA Regulatory Committee and Dr. John DeGour, NRWA's Regulatory Analyst on staff, are working hard to submit comments in response to proposed regulations that represent your interests. PFAS, Lead and Copper Rule Improvements (LCRI), and Cyber Incident Reporting for Critical Infrastructure Act of 2022 (CIRCIA) Rule will have far-reaching impacts on how you deliver the critical services your communities rely on. In each of these instances, rural water and wastewater systems are disproportionately impacted due to small populations and lack of economies of scale. Rural communities should be considered in legislative and regulatory actions impacting the water sector, and NRWA will continue advocating on their behalf.

PFAS

The EPA released details of its final PFAS rule on April 10, 2024. Since my last report, I have no new updates to share on this rule, but NRWA will stay engaged throughout the

rule rollout and will provide additional information and support as it becomes available.

LEAD AND COPPER RULE IMPROVEMENTS

EPA has promised a final rule on the LCRI by the end of summer. For now, our members must comply with the Lead and Copper Revisions Rule (the previous rule) no later than October 2024. The proposed LCRI removes several of the requirements of the previous rule, creating a period of confusion. NRWA joined the American Water Works Association (AWWA), the Association of Metropolitan Water Agencies (AMWA), and other partners in petitioning EPA to pause LCRI implementation pending the release of the new rule, but EPA denied our request.

CYBER INCIDENT REPORTING FOR CRITICAL INFRASTRUCTURE ACT OF 2022

CIRCIA requires the Cybersecurity and Infrastructure Security Agency (CISA) to promulgate regulations implementing cyber incident and ransom payment reporting requirements for critical infrastructure entities to include owners and operators of water and wastewater systems. On April 4, 2024, the proposed CIRCIA Reporting Requirements rule was published in the Federal Register.

The rule proposes entities, including Community Water Systems as defined in 42 U.S.C. 300f(15) or a Publicly Owned Treatment Works (POTWs) as defined in 40 CFR 403.3(q), serving more than 3,300 people will be required to report "covered or substantial cyber incidents," which include:

- A substantial loss of confidentiality, integrity, or availability of a covered entity's information system or network;
- A serious impact on the safety and re-

siliency of a covered entity's operational systems and processes;

- A disruption of a covered entity's ability to engage in business or industrial operations, or deliver goods or services; or
- An unauthorized access to a covered entity's information system or network, or any nonpublic information contained therein, that is facilitated through or caused by either a compromise of a cloud service provider, managed service provider, other third-party data hosting provider, or a supply chain compromise.

The CIRCIA rule requires reporting of cyber incidents to CISA within 72 hours after an incident has occurred, and within 24 hours after the ransom payment has been made due to a ransomware attack.

The NRWA Regulatory Committee reviewed and developed comments for submission on the proposed rule. The comment period closed in July 2024, and we will continue to monitor for updates.

CYBERSECURITY

Continuing to address cybersecurity must be a priority for all drinking water and clean water systems and is something NRWA will continue to advocate for. Matt Holmes, Dr. John DeGour and I met with Jake Braun, Deputy National Security Advisor at the White House, to discuss NRWA's cybersecurity efforts. This is an ongoing relationship and as NRWA continues to make progress on building our cybersecurity and training program, we will update the White House. We presented the following list of initiatives and partnerships we are building around cybersecurity and look forward to making these available to our members soon:

Strategic Partnerships

- NRWA consults and has enjoyed a long-

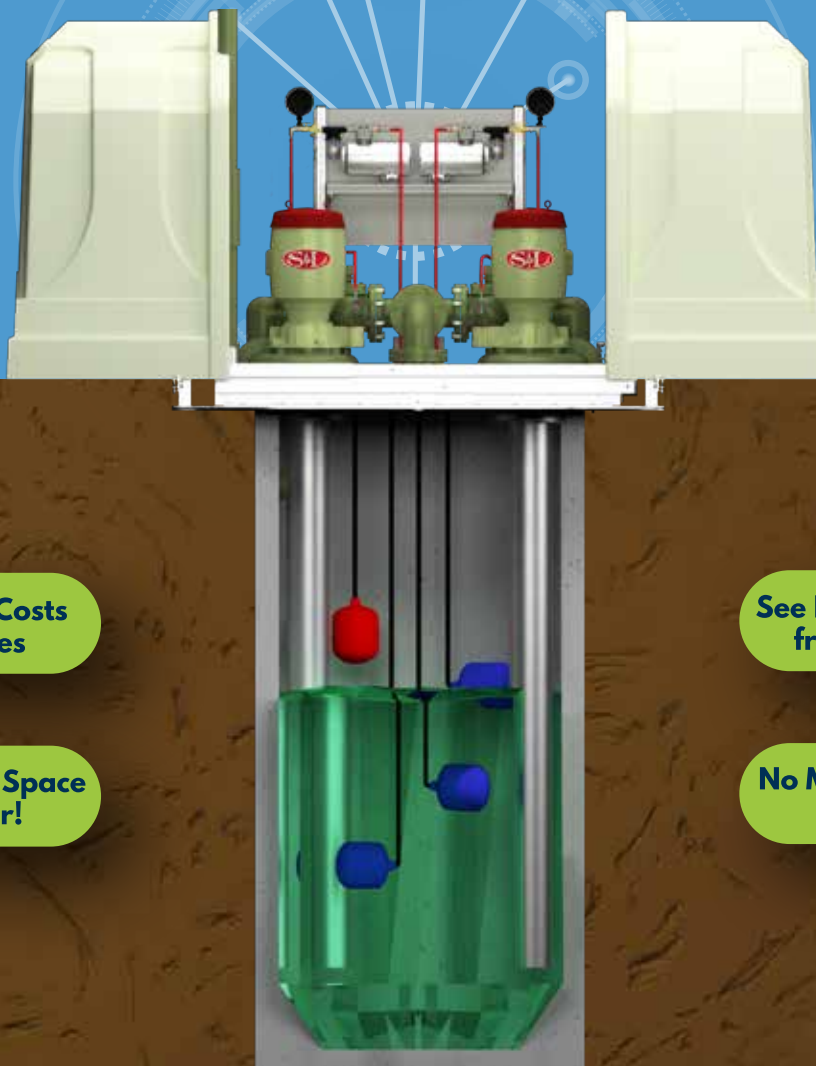
GO ABOVE.

Go Above the Wet Well with the #1 Pump Station for O&M Ease and Safety,
Pump Longevity, and Lowest Life-Cycle Costs



EVERLAST™

Wet Well Mounted Pump Stations



**Save 56% Lower Costs
vs. Submersibles**

**Eliminate Confined Space
Hassles Forever!**

**See How to Easily Switch
from Submersibles!**

**No More Pump Clogging
with XPELLER®**

CALL 800.898.9122



VISIT SmithandLoveless.com

Smith & Loveless Inc.

Protecting Water. Protecting People.™



REGULATORY UPDATE

term partnership with Steve Mustard, an independent automation consultant and a subject matter expert of the International Society of Automation (ISA). Backed by more than 30 years of engineering experience, Mustard specializes in the development and management of real-time embedded equipment and automation systems.

- NRWA works closely with Rear Admiral (Ret.) Mark Montgomery, who directs the Cybersecurity Solarium Commission 2.0 and is the Senior Director of the Center on Cyber and Technology Innovation.
- NRWA has two representatives presently serving on the Water Sector Coordinating Counsel.

Initiatives

- In partnership with the Center on Cyber and Technology Innovation and Microsoft, the Cyber Readiness Institute (CRI) has launched a pilot initiative called the "Phased Critical Infrastructure Pilot: Resiliency for Water Utilities." This program provides the CRI Certified Cyber Coach-supported training and resources focused on improving cybersecurity risk management and the ability to respond and recover from a cybersecurity incident. We now have close to 50 participants in the training pilot program. The program is free, and we have room for additional participants. If interested in participating, please contact your State Association's executive director.
- Finalizing a partnership with the SANS institute, a trusted resource for cybersecurity training, certifications, and research. This partnership will create and provide NRWA with water-specific written content, webinars/modules, virtual events, and surveys.
- Negotiated with the Water Information Sharing and Analysis Center (WaterISAC) to extend membership to small systems, resulting in no additional costs to participating members serving populations of fewer than 3,300.
- Reviewing potential cybersecurity software options and have met with former Director of the Israel National Cyber Directorate (INCD, the Israeli equivalent of DHS/CISA) Mr. Yigal Unna, who has created a consortium of Israeli cyber start-

ups committed to offering a low-cost solution to the market, with a focus on small businesses.

- Meeting regularly with EPA's Cybersecurity team to keep them informed of our progress and support their efforts where possible. Additionally, EPA's Cybersecurity team will present at our annual training conference in June.

Agency Representation


- NRWA attended a "Lead Removal in Schools and Childcare Facilities" partnership meeting at EPA. Along with AWWA, AMWA and the Rural Community Assistance Partnership (RCAP), local groups came together to discuss ways to provide technical assistance to schools. There is money allocated to each state to remove lead pipes from school and childcare facility systems and each state has a 2% set-aside that can be used to contract this work. This could be a potential source of revenue for our State Associations.
- NRWA met with USDA Rural Development Under Secretary Basil Gooden a few weeks ago. Matt and I brought Dr. Gooden up to speed on our Save WEP campaign and discussed outstanding projects and opportunities for additional collaboration.
- NRWA attended EPA's Decentralized MOU meetings quarterly and we continue working on that program where applicable.

Miscellaneous

- I was invited to join the Lead Service Line Collaborative steering committee, which is working to make resources available to systems across the country and provide educational materials and training. Randy Plima is our board member who represents NRWA on the Collaborative.
- I sit on the Local Government Environmental Assistance Network (LGEAN) and met with the group in early June. This network is a "first-stop shop" providing environmental management, planning, funding, and regulatory information for local government-elected and -appointed officials, managers, and staff. Through the membership of these partners, the network can reach more

than 100,000 local government officials and environmental professionals.

- Paul Fulgham represents NRWA as a Water Utility Counsel (WUC) member. At these meetings, Paul ensures the small and rural system perspective is heard among the large public and private utility positions when discussing sector wide initiatives.
- NRWA partnered with the National Oceanic Atmospheric Administration (NOAA) to present the impacts of drought on small, rural systems to congressional staff.

There are sure to be additional regulatory challenges in 2024, but there will also be ample opportunity to continue the vital work we do each day. There is nothing we can't accomplish when government and industry come together to ensure everyone has access to safe drinking water and clean wastewater services. **RW** 

If you have a comment or position that you would like to be considered by the NRWA Regulatory Committee, please let us hear from you. Email charles@nrwa.org or john.degour@nrwa.org.



CHARLES STEPHENS

Charles Stephens is the Senior Executive Policy Director for NRWA, leveraging his expertise in rural development, water infrastructure funding and financing, and implementation of technical assistance and training programs.

A NEW LEVEL OF TECHNOLOGICAL PERFORMANCE...



900 Series

Multi-Parameter Monitor/Controller™

Conductivity, Resistivity, TDS,
Salinity, pH, ORP, Flow/Pulse,
Temperature, % Rejection,
Touchscreen LCD
plus Additional Flexible Inputs/Outputs

Ultrameter II™

Model 6PFC^E

Conductivity
Resistivity
TDS
ORP/Free Chlorine Equivalent (FC^E™)
pH
Temperature



**MYRON L[®]
COMPANY**
Water Quality Instrumentation
Since 1957

www.myronl.com
760-438-2021





PRODUCT SPOTLIGHT



Corrosion Protection

Denso has released its first NSF Certified corrosion protection lining/coating for potable water pipes and tanks. This two-part, ultra-high solids lining is low-VOC and drinking water safe for fittings, valves, meters, and pumps 6" in diameter and greater, potable water pipes that are 36" in diameter and greater, as well as 10,000-gallon storage tanks and greater. Archco 426 Epoxy does not require any induction and is easily applied in one or two coats directly to the surface without using primer. It has undergone rigorous testing, allowing it to meet or exceed AWWA C210 Standard, be NSF/ANSI/CAN-61 & 372 approved, and suitable for SCAQMB restricted areas. Archco 426 will let you rest easy knowing that your potable water assets are protected from corrosion the right way.

Denso Inc. | denson.com



Safety Jacket

Introducing RefrigiWear® HiVis Diamond Quilted spring-weight safety jacket in high-visibility lime and high-visibility orange colors. Designed to meet ANSI/ISEA 107-2020 - Type R, Class 3 and CSA Z96 - Class 2, Level 2 standards, this safety jacket is ideal for people working outdoors in the unpredictable weather of late spring, especially across the northern U.S. and in higher elevations. It comes with double-rows of silver reflective tape around the waist and arms, as well as an X pattern on the back. The durable industrial-strength outer shell is both wind-tight and water-repellent, delivering comfortable protection from the springtime chill for those working during the overnight hours. The jacket is lightly insulated and comfort-rated for temperatures as low as 30°F. It is a recent addition to RefrigiWear's popular EnduraQuilt™ Collection and is preferred by people working in milder conditions of spring and fall.

RefrigiWear | pro.refrigiwear.com



Free Valve Planning, Analysis Software

The Cla-Val Company has launched Cla-Tools, a complimentary software suite that allows users to analyze their current or future planned valve systems. With 13 custom software programs and growing, users can analyze everything from control and modeling of stations to sizing and selection of the right valve, and there are built-in performance tools to ensure valve stations can handle the conditions they are subjected to over time. The software uses color-coded graphs, tables, and charts for easy analysis. Built-in calculators allow users to input their data and run different scenarios to determine if and what they need to adjust. Cla-Val customers can sign up for Cla-Tools at cla-val.com/cla-tools.

Cla-Val Company | cla-val.com



Disc Seals

Cherne® Disc Seals are designed to block flow or provide bypass flow in underground pipes with a low back pressure. These plugs are used for pipe construction, rehabilitation, cleaning, and testing, and can be separated into two halves to effortlessly fit through any manhole. A field-replaceable double bladder provides a reliable leakproof seal. Made of corrosion-resistant aluminum, the Disc Seals are lightweight with attached handles for easy transport and installation. Available in 17 sizes, ranging from 24" to 96".

Cherne® | cherneind.com



TAP INTO YOUR FUTURE

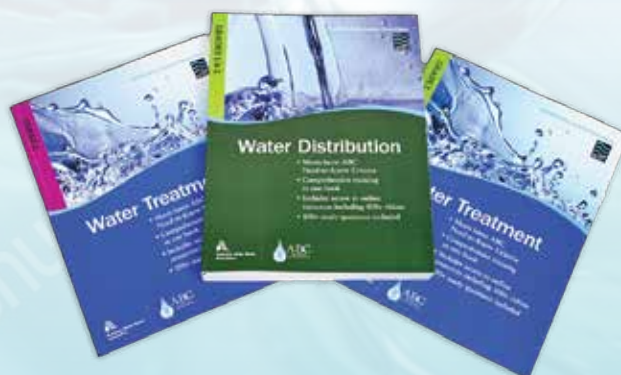
Ready to advance your career and technical expertise?

For more than 40 years, operators across North America have trusted AWWA's Water System Operations (WSO) materials to provide training on fundamental practices and principles for treatment and distribution.



With WSO, you'll find a suite of tools from guidebooks to videos designed by industry experts to help you ace your certification exams and excel in your field.

Dive into essential topics like operator math, safety, and regulations. Whether you're studying for grade 1 or 4, WSO is here to support your journey.



Discover AWWA WSO Resources:
awwa.org/RuralWater24



PRODUCT SPOTLIGHT



Updated Software Capabilities

In-Situ has reached a new milestone with the release of VuSitu HydroVu Cloud Connection. The new software feature in the VuSitu mobile app automatically uploads data logs, calibration reports, daily snapshot files and low-flow tests from VuSitu to HydroVu, In-Situ's data services platform. Cloud Collection will make it easier for scientists, researchers, consultants, and engineers monitoring water quality and water level in the field to view and manage data files and calibration reports. Rather than download and email files to their destination, users can simply use the VuSitu app to log into their HydroVu account and files will instantly upload to the cloud, where they can be viewed, managed and shared. With Cloud Connection, calibrations performed using VuSitu will automatically be stored in HydroVu. Users can quickly access a fleetwide calibration history, and files are easily searchable by keyword, instrument type, serial number and date range. The feature also enables graphing of "offline" data alongside telemetered data and notification of users accessing and/or sending files. And HydroVu keeps all data secure with instant redundant backup.

In-Situ Inc. | in-situ.com



PVC Fittings

The Blue Brute® PVC fittings from IPEX are engineered with a thicker bell for durability in pressure applications. Featuring injection-molded walls up to 125% thicker than DR18, these fittings guarantee robust performance even in demanding conditions. Available in sizes up to 12", larger sizes are fabricated to meet diverse project needs. The custom-made fabricated fittings feature an additional fiberglass reinforcement layer for enhanced protection. Designed for strength, Blue Brute systems guarantee tight joints capable of withstanding pressures three times higher than the pipe's pressure class. The smooth interior surface minimizes build-up, ensuring superior water quality and flow capacity. Manufactured from non-corroding PVC, Blue Brute fittings resist rust and corrosion in aggressive soils, eliminating the need for costly protective measures. Rigorously tested to exceed industry standards, these fittings come with standard gaskets compatible with cast-iron-sized PVC pipe, with optional transition gaskets available for IPS-sized pipe.

IPEX | ipexna.com



CD1 with Elbow Connectors

CHEM-FEED® CD1 from Blue-White Industries is engineered to provide smooth fluid flow that mimics the best performance traits of peristaltic pumps, particularly at low feeds. The dual-diaphragm configuration of the CD1 operates such that when the first diaphragm is in the suction phase, the second diaphragm is in the discharge phase. The double diaphragms allow for fluid to be pumped at a near-continuous flow, preventing two of the problems most often associated with diaphragm pumps: gas build-up and loss of prime. You can now order CHEM-FEED® CD1 with elbow connectors to free up space. This allows suction and discharge plumbing to be installed at a 90-degree orientation, which is ideal for pumps to be installed in tight, confined spaces when needed. Elbow connectors are offered in three sizes: 1/2" male NPT, 1/2" hose barb, and 3/8" tube compression fittings. Retrofit kits are available for pumps already in the field.

Blue-White Industries | blue-white.com



Natural Biological Solutions

WaterMix from Natura Solve is a liquid mixture of naturally occurring fungi and bacteria that breaks down organic material quicker, breaks down contaminants in water, and removes nitrogen and phosphorus – eliminating the need for chlorine. Features include:

- Rapid hydraulic retention time (HRT) – up to 75% faster
- Pathogen-free process
- Kills plant odor (breaks down H_2S on contact)
- Complete decomposition of organic materials, producing a Class A Fertilizer
- Rapid digestion of fats, oils, and grease (FOG)
- Decomposition of nanomaterials
- Full reclamation of water for safe agricultural irrigation
- Breaks down heavy metals during the process
- Works with both sewerage and industrial wastewater

WaterMix can help to lower overall plant costs simply and easily for most municipal wastewater treatment plants – naturally.

Natura Solve | naturasolve.com



SUMMARY NOTICE OF PROPOSED CLASS ACTION SETTLEMENT AND COURT-APPROVAL HEARING

*In re: Aqueous Film-Forming Foams Products Liability Litigation, MDL No. 2:18-mn-02873
This Document relates to: City of Camden, et al., v. BASF Corporation, No. 2:24-cv-03174-RMG*

UNITED STATES DISTRICT COURT, DISTRICT OF SOUTH CAROLINA, CHARLESTON DIVISION

TO THE SETTLEMENT CLASS: All Active Public Water Systems in the United States of America that have one or more Impacted Water Sources as of May 15, 2024.

All capitalized terms not otherwise defined herein shall have the meanings set forth in the Settlement Agreement, available for review at www.PFASWaterSettlement.com.

Active Public Water System means a Public Water System whose activity-status field in SDWIS states that the system is "Active."

Impacted Water Source means a Water Source that has a Qualifying Test Result showing a Measurable Concentration of PFAS.

Public Water System means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year, consistent with the use of that term in the Safe Drinking Water Act, 42 U.S.C. § 300f(4)(A) and 40 C.F.R. Part 141. The term "Public Water System" includes (i) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (ii) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Solely for purposes of this Settlement Agreement, the term "Public Water System" refers to a Community Water System of any size or a Non-Transient Non-Community Water System that serves more than 3,300 people, according to SDWIS, the owner and/or operator of such Public Water Systems, or any Person (but not any financing or lending institution) that has legal authority or responsibility (by statute, regulation, other law, or contract) to fund or incur financial obligations for the design, engineering, installation, operation, or maintenance of any facility or equipment that treats, filters, remediates, or manages water that has entered or may enter Drinking Water or any Public Water System. It is the intention of this Agreement that the definition of "Public Water System" be as broad, expansive, and inclusive as possible.

What is the Purpose of this Notice? The purpose of this Notice is (i) to advise you of a proposed settlement of certain Claims against BASF Corporation ("BASF" or "Defendant") in the United States District Court for the District of South Carolina (the "Court"); (ii) to summarize your rights in connection with the Settlement; and (iii) to inform you of a Court hearing to consider whether to grant final approval of the Settlement (the "Final Fairness Hearing"), to be held on November 1, 2024 at 12:00 p.m. EST, before the Honorable Richard M. Gergel, United States District Judge of the United States District Court for the District of South Carolina, located at 85 Broad Street, Charleston, South Carolina 29401.

What Are the Key Terms of the Proposed Settlement? BASF has agreed to pay \$312,500,000 (the "Settlement Amount"), subject to final approval of the Settlement by the Court and certain other conditions specified in the Settlement Agreement. BASF shall additionally pay \$4,000,000 (the "Initial Payment") to cover costs incurred by the Notice Administrator in the course of executing the Notice Plan. Together, these payments from BASF constitute the "Settlement Funds." In no event shall BASF be required under the Settlement Agreement to pay any amounts above the Settlement Funds. Any fees, costs, or expenses payable under the Settlement Agreement shall be paid out of, and shall not be in addition to, the Settlement Funds. Each Class Member that has not excluded itself from the Class will be eligible to receive a settlement check(s) from the Claims Administrator based on the Allocation Procedures developed by Class Counsel, which are subject to final approval by the Court as fair and reasonable and whose administration is under the oversight of the Special Master.

What Are My Options?

YOU CAN PARTICIPATE IN THE SETTLEMENT. You must file a Claims Form to be eligible to receive a payment under the Settlement. You can submit your Claims Form online at www.PFASWaterSettlement.com, or you can download, complete, and mail your Claims Form to the Claims Administrator at AFFF Public Water System Claims, P.O. Box 4466, Baton Rouge, Louisiana 70821. The deadline to submit a Claims Form is **sixty (60) calendar days after the Effective Date**.

Regardless of whether you file a Claims Form or receive any distribution under the Settlement, unless you timely opt out as described below, you will be bound by the Settlement and any judgment or other final disposition related to the Settlement, including the Release set forth in the Settlement Agreement, and will be precluded from pursuing claims against BASF separately if those Claims are within the scope of the Release.

YOU CAN OPT OUT OF THE SETTLEMENT. If you do not wish to be a Class Member and do not want to participate in the Settlement and receive a settlement check, you may exclude yourself, or "opt out" from the Class by completing and submitting a Request for Exclusion. The Request for Exclusion form will be available online and may be submitted electronically; if it is submitted via paper copy it must be served on the Opt Out Administrator no later than **October 15, 2024**. Requests for Exclusion may be withdrawn at any time before the Final Fairness Hearing.

YOU CAN OBJECT TO THE SETTLEMENT. Any Class Member that has not successfully excluded itself ("opted out") may object to the Settlement. Any Class Member that wishes to object to the Settlement or to an award of fees or expenses to Class Counsel must file a written and signed statement designated "Objection" with the Clerk of the Court and provide service on BASF's Counsel and Class Counsel no later than **September 15, 2024**. No Class Member who has submitted a Request for Exclusion may object, and any Objections submitted by any Class Member that later excludes itself shall be deemed withdrawn.

VISIT WWW.PFASWATERSETTLEMENT.COM FOR COMPLETE INFORMATION ABOUT YOUR RIGHTS

The Court's Final Fairness Hearing. The Court will hold the Final Fairness Hearing in the United States District Court for the District of South Carolina, located at 85 Broad Street, Charleston, South Carolina 29401, on November 1, 2024. At that time, the Court will determine, among other things, (i) whether the Settlement should be granted final approval as fair, reasonable, and adequate, (ii) whether the Litigation should be dismissed with prejudice pursuant to the terms of the Settlement Agreement, (iii) whether the Settlement Class should be conclusively certified, (iv) whether Settlement Class Members should be bound by the Release set forth in the Settlement Agreement, (v) the amount of attorneys' fees and costs to be awarded to Class Counsel, if any, and (vi) the amount of the award to be made to the Class Representatives for their services, if any. The Final Fairness Hearing may be postponed, adjourned, or continued by Order of the Court without further notice to the Class.

How Do I Get More Information? Please visit www.PFASWaterSettlement.com or call toll free 1-855-714-4341. You may also contact Class Counsel for more information:

<p>Scott Summy Baron & Budd, P.C. 3102 Oak Lawn Ave., Ste. 1100 Dallas, Texas 75219</p>	<p>Michael A. London Douglas & London 59 Maiden Lane, 6th Floor New York, NY 10038</p>
<p>Paul J. Napoli Napoli Shkolnik 1302 Av. Ponce de Leon San Juan, Puerto Rico 00907</p>	<p>Joseph F. Rice Motley Rice LLC 28 BridgeSide Boulevard Mt. Pleasant, South Carolina 29464</p>

Clerk of the Court:

Clerk, United States District Court for the District of
South Carolina
85 Broad Street
Charleston, SC 29401

Notice Administrator	Claims Administrator
<p>In re: Aqueous Film-Forming Foams Products Liability Litigation c/o Notice Administrator 1650 Arch Street, Suite 2210 Philadelphia, PA 19103</p>	<p>AFFF Public Water System Claims PO Box 4466 Baton Rouge, LA 70821</p>
<p>Opt Out Administrator Rubris Inc. P.O. Box 3866 McLean, VA 22103</p>	

Counsel for BASF Corporation:

Matthew A. Holian
DLA Piper LLP (US)
33 Arch Street, 26th Floor
Boston, MA 02110
Matt.holian@dlapiper.com

John R. Wellschlager
DLA Piper LLP (US)
650 South Exeter Street, Suite 1100
Baltimore, MD 21202
John.wellschlager@dlapiper.com



STAFF HIGHLIGHTS

NRWA Welcomes New Staff Members

Our family of dedicated Rural Water advocates has expanded

Here at National Rural Water Association, it takes a devoted team of specialists to assist our members with a wide variety of needs and initiatives. We'd like to introduce you to our newest colleagues.



MIKE DAVIS, ROVING CIRCUIT RIDER

Mike joined NRWA in April 2024 as a Roving Circuit Rider. Previously, he worked as a Circuit Rider for Rural Water Association of Utah (RWAU). Mike started in the water industry in 1984 at the City of Vernal, Utah, as a water operator. He worked his way up to heavy equipment operator before becoming the water and sewer superintendent for 28 years. Mike also served as a board member for RWAU for seven years.



FRANK DUNMIRE, ROVING CIRCUIT RIDER

Frank joined NRWA as a Roving Circuit Rider in May 2024. Previously, he was executive director of the Illinois Rural Water Association (IRWA) for 20 years. He has 32 years of water and wastewater experience and was an IRWA board member for 20 years.



CHASE MALLOW, VIDEO COMMUNICATIONS SPECIALIST

With over thirteen years of experience in content development, videography/photography production, and marketing, Chase brings a wealth of industry expertise to the table. He previously served as creative director for local news organizations such as KAUZ and KSWO. Hailing from Walters, Oklahoma, Chase holds a bachelor's degree in communications with a minor in journalism, specializing in photography from Cameron University.

Please join us in welcoming these folks to our ranks!

For more information about our staff, please visit nrwa.org/about/nrwa-staff.

I Support Rural

Development

SIGN THE PLEDGE!

Promotion by National Rural Water Association

Learn more at www.ruralwaterstrong.org



ADVERTISERS' INDEX



AA Thread 4 aathread.com	Force Flow 25 forceflowscales.com	Oregon Tool 2 oregontool.com
American Water Works Association . 49 awwa.org	Harmsco Filtration Products 27 harmsco.com	Pentair 55 pentair.com
Angeion Group 41, 51 angeiongroup.com	Hawkins 7 hawkinsinc.com	Pittsburg Tank & Tower Maintenance Company 27 pttg.com
Badger Meter 12, 13 badgermeter.com	Kasco Marine 39 kascomarine.com	Proco Products 33 procoproducts.com
Blue-White Industries 5 blue-white.com	Keller America 15 kelleramerica.com	Smith & Loveless 45 smithandloveless.com
EMMA Sales 43 emmasales.com	Master Meter 21 mastermeter.com	USABlueBook 56 usabluebook.com
Esri 16, 17 esri.com	Myron L 47 myronl.com	Vaughan Co. 19 chopperpumps.com
Flomatic Valves 22, 23 flomatic.com	National Rural Water Association 37, 53 nrwa.org	Watts 28, 29 watts.com



SDWA 50th Anniversary A Testament to the Water Workforce

By Matt Holmes

The movement to form the National Rural Water Association was largely influenced by the passage of the Environmental Protection Agency's Safe Drinking Water Act (SDWA) in 1974. Small and rural utilities across the nation needed a voice to advocate on their behalf in the halls of Congress and in agencies. Eight State Associations had the foresight to found NRWA in 1976.

When President Gerald R. Ford signed the SDWA into law, he stated, "Nothing is more essential to the life of every single American than...safe drinking water."

At the time, only 59% of water systems met drinking water standards. Now, 50 years later, only 4.5% of water systems have one or more health-based violations. This year has had much celebration of the 50th anniversary of the SDWA and what it has done for our nation's drinking water. I would say that while the Act sets the standards, the water operators across the country are the ones who truly implemented this historic improvement in the lives of every American.

Often water operators are the unsung heroes of their communities, or only garner attention when something negative happens with the drinking water. But these individuals are public servants, safeguarding our nation's drinking water, which never stops flowing 365 days

a year. They are there on nights, weekends, holidays — sometimes in extreme weather — ensuring their communities never lose access to one of life's most critical resources.

As any operator in the industry knows, the SDWA requires drinking water systems to monitor levels, take samples, analyze results, perform tests, provide public notice and retain records for over 90 different contaminants in public drinking water. For our nation's small and rural communities, all the responsibility for these tasks falls on one or maybe two individuals. In some instances, that responsibility falls on a volunteer.

So, I would like to take this opportunity to commend our nation's water operators, specifically our small and rural water operators. Every day, you are not just complying with the SDWA but ensuring our hospitals, schools, businesses, homes, and more have the safe drinking water they rely upon. From 1976 to now, through multiple changes to the Act and many technological advancements in the industry, you have

stood strong as the protectors of public health for rural America.

The water sector will face new challenges, advancements, opportunities, and future changes to the SDWA. It seems that the uncertainties and pace of change increase daily in our profession. I am confident that through it all, our small and rural water operators will continue to be steadfast in their service to their communities. No one becomes a small system operator for fame, glory, or fortune. You do it to keep your families, friends, and neighbors safe and healthy.

The last 50 years of the SDWA and the dedication from the water workforce have made great advancements to U.S. drinking water and public health. Thank you to our dedicated water operators who have made this possible, and I encourage you to thank your local water operator the next time you see them. **RW**

MATT HOLMES



is the Chief Executive Officer of the National Rural Water Association (NRWA). He is responsible for personnel management, grant and contract administration, along with multiple other leadership roles.



Each of our pumps at the IJmuiden pumping station in the Netherlands can fill an Olympic swimming pool in under a minute.

NO MATTER THE SIZE OF YOUR
CHALLENGE, **FUTURE-PROOF YOUR
COMMUNITY** WITH PENTAIR.



[Pentair.com/Future-Proof](https://www.pentair.com/future-proof)

All indicated Pentair trademarks and logos are property of Pentair. Third party registered and unregistered trademarks and logos are the property of their respective owners.

© 2024 Pentair. All rights reserved.

Experience the **USAB**BlueBook® Advantage

Get the Best Treatment™ from a partner who has served the industry since 1991.

- Over 57,000 products from leading brands
- Fast shipping from our nationwide distribution network
- Unsurpassed customer service
- Free technical advice from industry experts
- Satisfaction guarantee

In the lab, plant and field,
USABBlueBook is your trusted ally in all things water and wastewater.



Request a catalog



FREE 1800-page catalog: usabbluebook.com/C133
800.548.1234 • usabbluebook.com

USABBlueBook®
GET THE BEST TREATMENT™

