Arkansas Rural Water Association

2018 Annual Technical Conference

Conference Dates: **September 9-12, 2018**

Exposition Dates: September 10-11, 2018

Hot Springs Convention Center | 134 Convention Boulevard | Hot Springs, Arkansas 71901

Utilities *Are your systems financially funded for the future?* ENVIRONMENTAL PRODUCTS MID-SOUTH

GLEAN STREETS GLEAN WATER WORK SMARTER

SERVICE • SALES • RENTALS TURN KEY MAINTENANCE







Envirosight



2995 Sandbrook St. Memphis, TN 38116 | 901.630.4658 | myEPG.com



Arkansas Rural Water Association

Working To Improve Life In Rural Arkansas

BOARD OF DIRECTORS

PRESIDENT Greg Cross — Greenwood FIRST VICE PRESIDENT John Choate — Russellville

SECOND VICE PRESIDENT Tate House — Searcy

SECRETARY Robert Stout — Jacksonville

TREASURER David Harper — New Edinburg

NRWA DIRECTOR John Choate – Russellville

MEMBERS

Butch Bartholomew – West Fork Bobby Brown – McDougal Benjy Hildebrand – Smackover Greg Hooten – Guy Noble McCord – Salem Jesse A. McKinnon – El Dorado Bradley Scheffler – Piggott Bryan Smith – Stuttgart Doug Wasson – Harrison Steve Wear – Morrilton Cecil Zolliecoffer – Ozark

ARWA STAFF

Dennis Sternberg, CEO Jeff Ford, Deputy Director Fatina Dodson, Executive Secretary Donna McGaha, Accountant Kathryn Mashburn, Receptionist Jim Philipp, Training Specialist Susan Poe, Wastewater Trainer/Technician Shelby Townsley, Wastewater Trainer/Technician Jim Barkie, Circuit Rider Terry Fortenberry, Circuit Rider/Trainer Tim Carey, Circuit Rider Chris Harris, Circuit Rider Jimmy Ogden, Circuit Rider Roy Richards, Circuit Rider Tee Easley, Energy Tech David Quattlebaum, USDA Source Water Technician

The ARWA Magazine is published quarterly by ARWA P.O. Box 860, Lonoke, AR 72086 Phone (501) 676-2255 Fax (501) 676-2266

> E-Mail: arkrwa@sbcglobal.net E-Mail: arkrwa@arwa.net Web page: arkansasruralwater.org

From Your Chief Executive Officer, Dennis Sternberg4-6	
2018 Jack Lambert Golf Tournament	
Are You Prepared? by Jim Barkie9	
Helping Consumers Understand	
Water Conservation by Tee Easley	
Did You Know?12	
Sewer Main Video Inspection Assistance	
by Terry Fortenberry13	
Risk Services/INSURICA Selecting Safety Sunglasses 14	(
Do You Need a Bigger Wastewater Plant? by Susan Poe15	
Problems With Finding Leaks by Tim Carey16	1
The Benefits of Cleaning and Videoing Your Infrastructure	
by Chris Harris	
ARWA Membership – Why Should I Join?	
NRWA Initiatives	
ARWA Technical Conference	
ARWA Technical Conference Pre-Registration23	
ARWA Technical Conference Agenda	
Best Tasting Water	
Dechlorination Is Upon Us by Shelby Townsley 28	
Rural Cooking by Elizabeth Shelton	
Benefits of Installing Leak Detection Meters	
by Roy Richards	
Letters and Emails	
Boil Orders Protecting You by Jimmy Ogden	1
SUMMER 2018 by James Philipp	
Water Operator License Examinations	
ARWA Training and Events 2018	
Advertisers Index	

Magazine Editor – Fatina Dodson

ARWA Mission Statement

To provide Arkansas' Rural Water Utilities the highest level of Training and Technical Services in order to obtain Quality Water at the lowest possible cost.

Arkansas Rural Water Association is a non-profit organization of rural and small publicly owned water and wastewater systems. Our goal is to enhance the lives of Arkansans. Our efforts to achieve this goal are focused on providing training and technical assistance to the managers and operators of all eligible systems serving populations not greater than 10,000. We work with other non-profit organizations in representing the interest of public water and wastewater systems at both the local and national levels.

• ARWA is affiliated with the National Rural Water Association •

FROM YOUR CHIEF EXECUTIVE OFFICER

DENNIS STERNBERG

FUNDING FOR THE FUTURE Federal & State Funding for Water & Wastewater Systems' Improvements!

Congress has approved an USDA/RD funding (loan & grant) program for water and wastewater systems across the nation and the state of Arkansas. Each year congress has to approve funding for the USDA/RD loan and grant program, and this past year, congress has increased the amount of the loan and grant program to assist with the funding needs of the increased number of utilities needing to make improvements and expansion of utilities.

Each system that is eligible should contact their area's USDA regional office.

USDA/RD Area Contact Information:

Information on the WEP program and how to apply may be obtained from one of the following RD Area Offices:

*Neal Hodges, Area 1 Harrison, AR 870-741-8600 Ext. 4

- *Neal Hodges, Area 2 (Interim Basis) Jonesboro, AR 870-741-8600 Ext. 4
- *Betty Searcy or Flora Pruitt, Area 3 Forrest City, AR 870-633-3055 Ext. 4
- *Keith Huskey, Area 4 (Interim Basis) Monticello, AR 870-777-8800 Ext. 4
- *Keith Huskey, Area 5 Hope, AR 870-777-8800 Ext. 4

*Jamie Scott, Area 6 Fort Smith, AR 479-646-8300 Ext. 4

*or contact the RD State Office in Little Rock: Phone: (501) 301-3265 FAX: (501) 301-3293 Lauren Chambers, Program Engineer David Kirchner, Program Specialist or Stephen Lagasse, Program Director

Arkansas Natural Resources Commission

(ANRC) has state and federal funding available for financing water or wastewater projects. ANRC has different length of terms and interest rates depending on what financing your system needs in regards of the terms to select.

The state loans are usually used for projects below \$500,000 and federal loans usually reserved for projects above \$500,000.



Arkansas Natural Resources (ANRC) also ANNOUNCES SPECIAL: 1/2% Lending Rate for Ten Years to purchase NEW METERS!!

ANRC Contact information:

Linda Leigh Flanagin, Marketing Director Arkansas Natural Resources Commission 101 E. Capitol Ave, Suite 350 Little Rock, AR 72120 Phone: (501)-682-0547 Email: Linda.Flanagin@arkansas.gov Website: www.anrc.arkansas.gov

In this issue of the Water Insight magazine there is more detail and explanation on the funding available for both of these funding agencies. (Pages 5-6)

I would encourage every utility to meet with your board and engineer and take an in-depth look at your utility needs (areas of improvements needed) to make your water and wastewater system operate more efficiently and become more sustainable to meet your customer's needs for the present and into the future. Each system has areas of needed improvements, and now is the time to take advantage of these low interest rates and funding opportunities.

On to another topic, I hope everyone will be making plans to attend the upcoming Arkansas Rural Water Association's 41st Annual Technical Conference September 9-12, 2018 at the Hot Springs Convention Center, Hot Springs, Arkansas. Make sure you pre-register to be eligible for the GRAND PRIZE drawing of a brand new 4-wheeler on Tuesday, September 11, 2018 at the luncheon. This is the first year ARWA will be giving away a Kayak and Boat/Motor/Trailer to attendees who are present at the Tuesday luncheon! The staff has designed a great agenda for the water and wastewater personnel, and we will have the exhibit hall full of exhibitors displaying the latest water and wastewater products for all to see.

So, make plans for this event and watch the mail for all the registration information. Till then, take care, and remember to call ARWA for any of your training and technical assistance needs at 501-676-2255.

United States Department of Agriculture-Rural Development Water and Environmental Programs (WEP)

Purpose

USDA Rural Development (RD) makes direct loans and grants to build or improve essential public use facilities such as water and sewer facilities, storm sewers and solid waste facilities. Funds can be used for construction and non-construction costs including land, equipment, engineering services, legal services, and interest during construction.

Eligibility

Funding may be obtained through Rural development when the applicant is unable to secure funding from other sources at reasonable rates and terms.

Eligible applicants include: non-profit corporations, cities, towns, counties, other public bodies such as: special purpose districts and authorities. Projects may only benefit incorporated communities of up to 10,000 population and rural unincorporated areas.

The applicant must have the legal capacity to borrow and repay loans, to pledge security for loans and to operate and maintain the facilities. The applicant must be financially sound and able to manage the facility effectively as well as have a financially sound facility based upon satisfactory sources of income such as: revenues, taxes, assessments, or fees to pay all operating costs, debt service payments and reserves.

Maximum Loan, Rates, and Terms

The amount loaned is determined by the amount needed by the applicant, their ability to repay the loan and the availability of funds. Interest rates are based upon the median household income of the service area and the purpose of the project. Interest rates as of July 1, 2018 are: Poverty – 2.375% Intermediate – 3.125% and Market – 3.875%. Once a project is approved and obligated the interest rate is fixed and there are no prepayment penalties. The loan term is typically set at 40 years or the useful life of the facility, whichever is less.

Grants

Grant funding is available, when eligible and needed, and is used to supplement RD loans to reduce debt service requirements where necessary to achieve reasonable similar system user rates. Grant eligibility is also based on the available resources of the applicant, as well as the Underwriting analysis and the availability of funds. Areas with median household incomes above \$40,956 are not grant eligible. The maximum RD grant possible is 75% of eligible project costs where the median household income of the project service area is below \$32,765 and the project is necessary to alleviate a health or sanitary problem, or 45% of eligible project costs where the median household income is \$40,956 or less.

Engineering and Environmental Requirements

The applicant must utilize the services of an engineer and an attorney to provide necessary engineering and legal services. A Preliminary Engineering Report (PER) and an Environmental Report (ER) must be submitted in accordance with the RD Guides for the proposed project.

Priority

Priority is given to low income communities, communities with populations of less than 5,500 and for projects necessary to meet established health or sanitary standards.

Application

Applications are received year-round through RD's online application system -RD Apply:

https://www.rd.usda.gov/programsservices/rd-apply

Some of the Application items consist of: 1. SF424, Application for Federal

- Financial Assistance
- 2. State of Arkansas Clearinghouse comments

3. Data Universal Numbering System (DUNS)-Number 866-705-5711 or www.dnb.com/us/duns_update/index.html

4. System for Award Management Registration (SAM) www.sam.gov

Note: Rural Development WEP information, Regulations, Bulletins and Forms can be accessed at https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program and some forms are also available in a fillable format through the USDA eForms link at www.rd.usda.gov and information about Rural Development Programs in Arkansas can be found at http://www.rd.usda.gov/ar

USDA is an equal opportunity provider, employer and lender.

CP: sl 07-10-18

- 5. Current and past Financial Statements
- 6. Certification of Inability to obtain credit elsewhere
- 7. Publication of Notice of Intent to file Application/Notice of Public Hearing with Public Hearing Minutes
- 8. Preliminary Engineering Report (PER)
- 9. Environmental Report (ER)
- 10. Water and Wastewater Advisory Committee-Approval
- 11. ANRC Water Plan Compliance-Approval

Contact

Information on the WEP program and how to apply may be obtained from one of the following RD Area Offices: *Neal Hodges, Area 1 Harrison, AR 870-741-8600 Ext. 4 *Neal Hodges, Area 2 (Interim Basis) Jonesboro, AR 870-741-8600 Ext. 4 *Betty Searcy or Flora Pruitt, Area 3 Forrest City, AR 870-633-3055 Ext. 4 *Keith Huskey, Area 4 (Interim Basis) Monticello, AR 870-777-8800 Ext. 4 *Keith Huskey, Area 5 Hope, AR 870-777-8800 Ext. 4 *Jamie Scott, Area 6 Fort Smith, AR 479-646-8300 Ext. 4

*or contact the RD State Office in Little Rock: Phone: (501) 301-3265 FAX: (501) 301-3293 Lauren Chambers, Program Engineer David Kirchner, Program Specialist Stephen Lagasse, Program Director

AR Persistent Poverty

05011	AR	Bradley County
05017	AR	Chicot County
05027	AR	Columbia County
05035	AR	Crittenden County
05041	AR	Desha County
05069	AR	Jefferson County
05073	AR	Lafayette County
05077	AR	Lee County
05093	AR	Mississippi County
05095	AR	Monroe County
05099	AR	Nevada County
05101	AR	Newton County
05107	AR	Phillips County
05111	AR	Poinsett County
05123	AR	St. Francis County
05129	AR	Searcy County
05147	AR	Woodruff County

ARKANSAS NATURAL RESOURCES COMMISSION: 50 Years of Tradition in Serving Arkansas Communities **

	STATE	FEDERAL
10 year loan	2.75%*	1.5%*
20 year loan	3.9%*	2.5%*
30 year loan	4.2%*	3.0%*

**Be one of the first seven callers to (501) 831-2445 about meter replacement and receive ANRC special offer!!!!!!

*Lending Rate as of 5/10/2018

If your city or improvement district is in need of financing for a water or waste water project, the Water Resources Development Division project with financing up to 30 years. We have a professional staff of engineers and administrators to ensure your project is built in the most economical manner.

-The state loans are usually used for projects below \$500,000 with the federal loans usually reserved for projects above \$500,000.

-The state rates have a 3% fee associated with them. The federal rate does not have a fee.

- Our time frame is usually 12-18 months to gain approval for federal loans.

There is a "Letter of Intent" that allows for out of pocket expenditures while waiting. State funding time frame is usually 6 months.

For more information or initial packet contact: Linda Leigh Flanagin, Marketing Director Arkansas Natural Resources Commission, 101 E. Capitol Ave, Suite 350 Little Rock, AR 72120 Email: Linda.Flanagin@arkansas.gov Website: www.anrc.arkansas.gov Phone: (501) 682-0547 • Cell: (501) 831-2445

ARKANSAS NATURAL RESOURCES COMMISSION (ANRC) 7/2/18

ANNOUNCES SPECIAL:

1/2 % LENDING RATE FOR TEN YEARS TO PURCHASE NEW METERS!!!!!

THAT IS RIGHT: 1/2 % LENDING RATE FOR 10 YEARS TO PURCHASE WATER METERS!!!!!

WE WON'T HAVE THIS SPECIAL FOR LONG! WE ARE GETTING THE WORD OUT. IT IS LEFT TO YOUR DISGRESSION WHAT TYPE OF METER YOU BUY. WE APPRECIATE YOUR BUSINESS! WE WANT TO HELP WITH OTHER WATER/WASTEWATER PROJECTS YOU MAY HAVE, BUT THE ANNOUNCEMENT TODAY IS: **BUY METERS FOR ½ % LENDING RATE FOR TEN YEARS!!!!!** CALL ME OR EMAIL ME FOR ADDITIONAL INFORMATION, PLEASE.

LINDA-LEIGH FLANAGIN MARKETING DIRECTOR, ARKANSAS NATURAL RESOURCE COMMISSION (501) 831-2445 OR (501) 682-3985

LINDA.FLANAGIN@ARKANSAS.GOV

CONGRATULATIONS AQUASURE



In Celebration of the 20 years of service that the Aquasure Program has provided, there will be a drawing for a KAYAK in appreciation of the support from the ARWA MEMBER SYSTEM UTILITIES at the conclusion of the Tuesday Luncheon on September 11, 2018 from 11:30 am – 1:00 pm at Arkansas Rural Water Association's 41st Annual Technical Conference in Hot Springs, AR at the Hot Springs Convention Center in Horner Hall. We would like to say CONGRATULATIONS AQUASURE, and THANK YOU to the ARWA Member System Utilities for your continued support of the AQUASURE PROGRAM.

To become a Member of the Aquasure Program, visit the AQUASURE BOOTH for savings to your system at the ARWA Technical Conference or call David Feild at 501-666-6653!

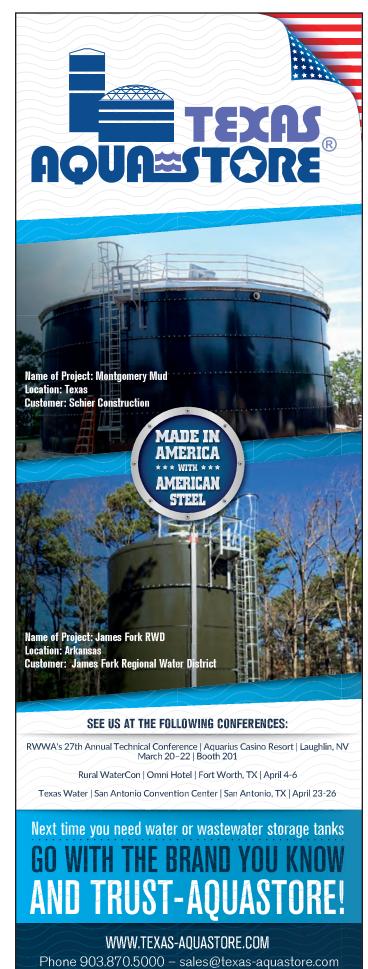




Looking for an Insurance Program specifically tailored to the unique exposures your industry faces? Arkansas Rural Water is offering the AQUASURE Program through Risk Services of Arkansas/INSURICA to meet your unique industry needs. (See Page 17)

Visit the AQUASURE BOOTH at the 2018 ARWA Annual Technical Conference to become a member of the AQUASURE PROGRAM, and receive a chance to win a grill.





ARKANSAS RURAL WATER ASSOCIATION



First Place: JT Thomalla, Raymond Means, Ryan Stuckey



Second Place: Derrick Boileau, Pat Flowers, Cody Flowers



Third Place: Erick Boileau, Brandon Burton, Terry Gibson

2018 Jack Lambert Golf Tournament

Arkansas Rural Water Association held their Annual Jack Lambert Memorial Golf Tournament on June 27, 2018 at the Hurricane Creek Golf Course in Bryant, Arkansas. It is a very nice golf course, and thanks to Jacob Friedman, Course Manager, for all his help in organizing the tournament. I would like to take a moment to Thank everyone who came out and participated in Arkansas Rural Water Association's "Jack Lambert Annual Memorial Golf Tournament" with proceeds to benefit the ERNIE FAUCETT Scholarship Fund". This year 41 players experienced a wonderful day for the tournament, a great golf course, great golf and fellowship.

This tournament wouldn't be what it is today without the great sponsorship from the following companies:

• Corporate Sponsors Crews & Associates and Core & Main.

Other companies donating to the scholarship fund were:

- Corporate Sponsors: Smith Blair, Inc., Tyler/Union, Advanced Drainage Systems
- Hole Sponsors: CoBank, Robertson Electrical Mechanical (REM)
- Tournament Sponsor: Sensus

If one of these companies calls on you in the future, take a minute to thank them for their support of the ARWA Scholarship program which benefits the dependents of member utilities of Arkansas Rural Water Association. A big thank you to our partners, David Feild with Risk Services of Arkansas, LLC / INSURICA, for sponsoring the lunch for all the players in the golf tournament. The food was excellent and everyone had great comments about the hamburgers and sausages. Thanks to the great cooks, David Field and ARWA staff Tim Carey and Jimmy Ogden for assisting in cooking. Thanks to Jim Philipp for handling registration, David Quattleman-official camera man, Jim Philipp, Jim Barkie, Tim Carey, Shannon Wayson, and Terry Fortenberry for operating the hospitality wagons for the tournament.

ARWA will provide Scholarships at Arkansas Rural Water Association's 41st Annual Technical Conference on September 9-12, 2018 in beautiful Hot Springs, Arkansas.



Closest to the pin: Cody Flowers



Longest Drive: Eric Boileau

Are You Prepared?

By Jim Barkie, Circuit Rider

A tural or manmade disasters can happen at any time. You can't predict when or where they will happen, but you can prepare for them. Keep adequate inventory on hand at all times for basic repairs. Have a manual transfer switch installed at all pump stations and critical areas of your system, so a generator can easily be connected. Service your generator monthly to keep it in good working condition. Just starting it and letting it run isn't enough. Connect



your generator to a pump station and exercise it under load.

Have a Vulnerability Assessment and Emergency Response Plan on hand and keep it updated. The Emergency Response Plan includes and explains both internal and external chain of command, vital phone numbers, and the location where everyone will meet in the event of a major disaster. The Vulnerability Assessment will list all the critical components of your system and where they are located. The size and horsepower of all your pumps should be documented and updated whenever they are replaced. We have generators ranging in size from 5k to 150k to loan you if needed, but pump and motor information is crucial in order to know

what size generator you need. Having all this information ahead of time will help you handle the situation efficiently and with less stress. If you need assistance preparing this documentation, call our office at 501-676-2255, and we will be glad to help.

The Rural Water Loan Fund *(RWLF)* is a funding program specifically designed to meet the unique needs of small water and wastewater utilities. The RWLF provides low-cost loans for short-term repair costs, small capital projects, or pre-development costs associated with larger projects. The RWLF was established through a grant from the USDA/RUS, and repaid funds used to replenish the fund and make new loans. Phone: 1.800.332.8715 Web: https://nrwa.org/initiatives/revolving-loan-fund/



Helping Consumers Understand Water Conservation

By Tee Easley, Energy Circuit Rider

Attention is essential in all regions, even where water seems abundant. While traveling this beautiful state of Arkansas, one of the many things I hear from consumers is the rising cost of water. Water, for the most part, is usually the cheapest utility bill a consumer has, yet it is the most argumentative one to deal with as a utility.

Before I started working in the water industry, I was guilty of complaining every

month about my water bill. I said and asked the same things I hear consumers complain about when I visit utilities:

"There is no way I used 10,000 gallons in one month. It's just me and my dog living in the house."

"How is it possible that one person can use that much water in one month?"

"I don't have a leak. You need to check the meter. It's wrong."

"Drive by reading? They must be driving too fast by my house."

These are just a few, but I could go on and on all day with the many reasons water bills are extremely high through the consumer's eyes. The majority actually believe water should be free. It wasn't until I started working in the water industry that I realized how much work goes on behind the scene to make water potable. I have learned rather than arguing with the consumer about the cost of water, it's better to educate the consumer of why their water bill seems high.

There are many inexpensive ways for consumers to lower their bills and help conserve water. Whether we





like it or not, it's up to you, as the utility, to educate your customers. I've listed examples below:

Always start with basic math. For example, the amount of gallons wasted daily through a leaky toilet, faucet, outside spigot, etc. (ex. 1 gallon per minute x 1440 minutes per day)

- Fix leaky faucets, toilets and plumbing joints. (saves 20 gals/day/leak)
- Install water saving shower heads and restrictors. (saves 500-800 gals/month)
- Run full loads in the washing machine and dishwasher. (saves 300-800 gals/month)
- Shorten shower time. (a one-two minute reduction can save up to 700 gals/month)
- Water your lawn only when needed and between 3 a.m.-5 a.m. (saves 750-1,500 gals/month)
- Turn the hose off when washing vehicles. (saves 150 gals/wash)

In addition, utilities should also pay attention to leaks within the system. As the weather is changing to warmer temperatures, water mains will start shifting and that means water leaks. The terrain in Arkansas isn't the same, and that means all leaks aren't easy to find. Usually the leaks that are hard to find are found when your daily pumping increases significantly. Increased pumping also means increased electrical usage.

Safe drinking water is essential to all humans and other life, even though it provides no calories or organic nutrients. We all need it to survive and it's up to us, the human population, to make sure we conserve it.



10 | SUMMER 2018 | WaterInsight



"A New Generation In Tracking Collections"

Eliminate Your Delinquent Accounts With Our Web Based Solution For Tracking Collections.

Features	Benefits
Personalized Company Info	Affordable Monthly Fee's
Multiple User Security Levels	Automatic Tracking Of Inquiries
New Customer Inquiries	Notice Of Matches Upon Login
Debt Customer Entry	Establishes Communication
Built In Request Forms	Ultimately Reduces Bad Debt

THOUSANDS OF DOLLARS CONTINUE TO BE COLLECTED THROUGH THIS SYSTEM.

EXERCISE YOUR RIGHT THROUGH ARKANSAS ACT 769 BY USING THE ONLY STATE APPROVED SYSTEM

Logon At: www.wudb.com



Call Us At:

800-451-5351

Did You Know?

69% ÷68%

of RUS funded projects are to populations of **Rural Water Circuit Rider** assistance is to populations of 2,500 or less. • 2,500 or less.

projects are to . Rider assistance is to populations of • populations of 1,000 or less.

 $1\% \pm 40\%$

of RUS funded] of Rural Water Circuit

- 1,000 or less.



NATIONAL URAL WATER ASSOCIATION

America's Largest Utility Membership



Robertson Electrical and Mechanical, Inc

- Electric motor repair and rewinding
- · Aerator and blower repair
- Vertical pump and motor repair
- Pump and gear reducer repair
- Generator repair
- Full machine shop
- Laser alignment and balancing
- Specialty coatings for corrosion prevention on pumps and motors
- Free pickup and delivery

- Baldor/ABB
- Toshiba
- Teco-Westinghouse
- SEW-Eurodrive
- Leeson/Lincoln
- A.O. Smith/Century
- Lafert N.A.
- Grove Gear
- Marathon

24 Hour service 479-474-5271 2320 Industrial Park Road, Van Buren AR 72956

Sewer Main Video Inspection Assistance

By Terry Fortenberry, ARWA Circuit Rider/Trainer

A syou may or may not know, ARWA has Sewer Camera equipment that is available to assist systems that request it. This Camera Unit is a Cues Video Camera and Trailer that can be used to video and record the condition of a wastewater system's collection mains. ARWA has had this equipment for a little over 8 years now and has been able to assist and solve many problems for several wastewater systems. Some problems found and solved include: • Inflow and Infiltration problems

• Locating existing, abandoned, and available service

In order to be able to video and record a main with

• Causes of sewer main blockages and overflows

the camera, it is necessary that the mains that are being inspected are fairly clean prior to use of the

washing equipment. ARWA does have a Vac Con

Truck that can be used for cleaning the mains if the system does not have access to a jetting machine. This

camera. This cleaning can be done and is often done

by the system personal if the system owns its own jet

• Verifying proper cleaning of main



Vac Con truck is a necessity when the mains that are being cleaned in order to inspect have sand or gravel in them, which is a common problem. By using this equipment, the sand and gravel or other debris can be removed from the sewer main rather than just piling it up in the manhole or main being washed. Removing this debris is definitely necessary to allow inspecting of the main. Sizes of mains that can be videoed with our camera are from 6 inch to 15 inch.

Since there is a cost associated with the purchase and the operation and maintenance of this equipment, ARWA has assessed a fee for the use of this equipment. However, the cost to the system is very reasonable. ARWA has an agreement for systems that are located in four different counties in Arkansas which include Woodruff, Phillips, Lee, and Monroe. This agreement involves doing Camera work for systems, by their request, which are located within these counties at no charge other than a small mileage fee for travel to and from the system.

If your system has need of this assistance and service, please contact ARWA for details and scheduling at 501-676-2255.



• Locating manholes

connections



Cues Camera Trailer





Broken Main

Blockage



Inflow



Roots



Manhole Location



Service Tap Location



Selecting Safety Sunglasses

Sunglasses are not just for fashion or for the beach; they provide the necessary protection needed to block harmful ultraviolet A (UVA) and ultraviolet B (UVB) rays. A good pair of sunglasses will protect the eyes from being burned by the sun, which can cause cataracts, macular degeneration or skin cancer around the eyes.

In addition to protecting your eyes from the sun, safety sunglasses also act as a shield while working outdoors. Industrial hazards such as flying objects, dust and chemical splashes are dangerous without the proper protection in place. A designated pair of safety sunglasses will not break if hit by objects, thereby saving the eyes from damage.

What To Look For

When shopping for a pair of safety sunglasses, look for the following:

- The glasses should contain 99 to 100 percent protection from UVA and UVB rays. The label will outline the pair's protective qualities.
- Make sure the lenses cover your entire eye area, including your eyelids and the sides of your eyes.
- Choose glasses that have shields on the top and sides to reduce the risk of getting foreign objects in your eyes from any direction.
- Look for the American National Standards Institute (ANSI) logo and the Z87.1 code. This designates the glasses as approved safety eyewear.
- Select close-fitting frames with larger lenses or wraparounds to prevent rays from entering on the sides.
- Don't let price fool you; just because the price is higher doesn't necessarily mean the protection is better!

Sun Tips

- In addition to wearing a solid pair of safety sunglasses, remember these tips to keep your eyes safe while working outside:
- If allowed, wear a wide-brimmed hat to keep the sun away from your eyes.
- Avoid looking directly into the sun even with sunglasses on because it can cause permanent damage.

Wear extra protection if you are taking medications such as tetracycline or allopurinol. These drugs will increase your sensitivity to light. Ask your doctor or pharmacist if this is a side effect of any medications you are currently taking.

For more information contact:

David Feild 1501 Mart Drive

- Little Rock, AR, 72202
- P 501.666.6653
- E David.Feild@INSURICA.com

RISK SERVICES OF ARKANSAS



Do You Need a Bigger Wastewater Plant? Let's Make Sure

By Susan Poe, Wastewater Trainer/Technician

When the systems that are constantly struggling on if they need a bigger wastewater plant and are over design flow. If you are unsure or don't have your original paperwork handy, your design flow is contained in your NPDES permit.

Every year the rain events and flooding seem to really take their toll on our wastewater plants. With the age of these systems, it seems that everyone is having operational problems

and bad sample results due to high flows during events that disrupt the biological process when rainwater enters the system in large quantities. Lots of systems were required to submit a CAP (Compliance Action Plan) when several violations were repeated. When records were checked, the majority of them went back to record rainfalls and high flows entering the plant. First instinct, we need a bigger plant. Hmmm. . . have you thought about throwing your money towards the collection system instead? I've worked with systems that exceed three times their design flow when a rain event occurs, but the plant works fine under normal flows. Yes, I still stand behind my last article on adding rice bran when needed, however, let's not replace our need for improvements to our collection system. The collection system being buried underground doesn't get the recognition it deserves in a lot of cases. I am dazzled by the elaborate collection system maintenance programs that some of our systems have, but guess what? They don't have issues every time it rains when they get a handle on the inflow and infiltration.

It is smoke test season again, and working with these aging infrastructures do nothing but get worse and problems get bigger. We have had pipes collapse from gases



eroding the tops of concrete piping, more clogs from disjointed pipes, roots penetrating the lines, and manhole sidewalls caving in, but none of this gets found if you don't check it with either a sewer camera or smoke testing. Smoke testing is best for locating abovesurface entry points for water when the line is not too deep, depending on the severity of the cracks. Smoke testing also identifies customer leaks where the use of a sewer camera (call our office for information on sewer cam-

era services and fees) can identify a magnitude of what is really going on underground. Most of these systems were started around the 80's, and some date back to the 30's. Regardless of the age, it is apparent which were maintained checked and repaired on a regular basis.

The leaks are not going to re-seal themselves. It looks like major rain events are not a thing of the past. Ground water is not going to quit finding ways to get in our collection systems on its own. So step up, locate the problem, fix what you feasibly can within your means, and pursue funding for those that you can't. Either way, when looking at a bigger wastewater plant to solve the problem with your increasing flows, remember to give equal time to evaluating your collection systems. Give it a bath (jetting and cleaning), straighten those manhole lids, and get them above grade and sealed properly. Get aggressive on those clean outs being replaced, and give credit where credit is due. You wouldn't have anything to treat if you didn't have a collection system to bring it to the plant. Hopefully, you can rehab your collection system, and it will keep it going for many more years to come. If you need assistance with evaluating your collection system, please don't hesitate to call us at 501-676-2255.





Problems With Finding Leaks

By Tim Carey, Circuit Rider

any articles have been written about leak detection.

I will start by saying, look at the number of gallons lost for the period of a month. Take that number and divide by the number of days in the month. Then, divide that number by 1440 minutes in twenty four hours. This is the leak we are looking for, not the lake you believe you are looking for. This number is very important and helps us to know exactly what to look for.



The next problem in leak detection is the lack of valves on water lines. Then we have to rely on meter services and fire hydrants. I can listen to both hydrants and meter services to attempt to narrow down the area of detection. I wrote an article in the past that had a headline saying, you can't find a leak from a truck seat. What all operators have to understand is the effort in finding a water line that has a known leak can trim down the time spent listening for the leak. Most operators in the state of Arkansas have experienced a problem with finding a leak.

The next problem is the lack of water system maps. These maps are very important to us in the leak detection process. Please try to have the maps available when any of our staff arrive at the water system. We try to separate the water system into smaller areas. It makes it a lot easier to track down the leak or leaks. After many years of completing the process of leak detection, I always find new obstacles to overcome.

Terrain is the next obstacle to overcome. The most beautiful areas in the state have areas that are very hard to access. There are hills to climb and fences to cross. The old term of when the feet hit the pavement applies.

You have to walk the water lines and listen to them at the same time. There are also areas not shown on a water map that have water lines right down the middle of the land.

These are just a few things to consider when you have a leak and need help. Feel free to call us for help, but please do your part to ensure suc-

cess in the process.



The picture shown here shows a beautiful meadow with a water line right down the middle of the land.



Small towns, big cities and Main Street, USA, wherever you go, there we are. AMERICAN has been part of the landscape for over a century. While our past is one of innovation, the same is true of our future. New products are always in the pipeline. When it comes to someone you can trust with your valve and hydrant needs, look no further than **AMERICAN**. The company where strength, dependability and integrity just come with the territory.





CAPTIVATER INNOVATION. IT'S PART OF EVERYTHING WE DO.



PO Box 2727, Birmingham, AL 35202 Phone: 1-800-326-8051 • Fax: 1-800-610-3569 EOE/Vets/Disabilities ALPHATM is a licensed trademark of Romac Industries, Inc. (U.S. Patent 8,894,100)

www.american-usa.com/firehydrants

DUCTILE IRON PIPE

FLOW CONTROL

INTERNATIONAL

SPIRALWELD PIPE

STEEL PIPE



YOUR RURAL WATER SYSTEM INSURANCE PROVIDER

At Risk Services of Arkansas/INSURICA, our exclusive AQUASURE program provides our clients with access to customized analysis, risk management and insurance solutions that are specifically tailored to the unique exposures your industry faces.

Insurance services include:

- Workers' Compensation
- General Liability
- Equipment
- Umbrella
- Property
- Commercial Auto
- Cyber
- Directors & Officers
- Local Claims Service

JUASURE

PROGRAM

• Safety Consulting

a Children

Endorsed

Building a New Water Treatment Plant or Adding on to your Sewer Treatment Plant?

See us about Builders Risk or an Installation Floater Policy.

David Feild, Risk Services of Arkansas / INSURICA 501.666.6653 | David.Feild@INSURICA.com

The Benefits of Cleaning and Videoing Your Infrastructure By Chris Harris, ARWA Circuit Rider

have been privileged to work at Arkansas Rural Water Association for the past two years. I have learned many things, since I have been here. A few of those things are the benefits of cleaning and videoing a facilities wastewater infrastructure. Arkansas Rural Water offers a Vac Con service to help in this area. The Vac Con is a helpful resource to many operating systems across the natural state.



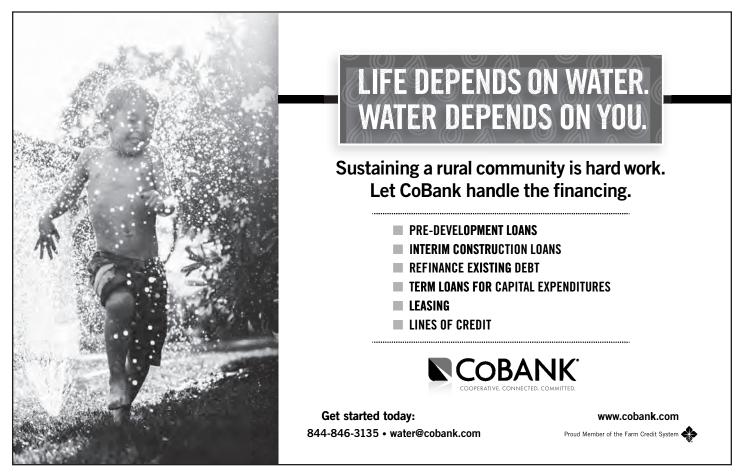
While all infrastructures, over time, will

experience some form of deterioration related to the buildup of foreign objects or the breakdown of material, the use of the Vac Con can greatly slow down this process. Another advantage of using the Vac Con in your system is that it enables the use of a mobile camera to record a real time video of your infrastructure. This Camera enables the operator to view any and all problematic areas within the system. Along with the viewing of the problems on recorded video, a very detailed report containing accurate measurements, lengthwise of service connections, and flaws within your system will be generated and given to you. This report is very beneficial to the operator and is a great troubleshooting tool. These tools are essential in controlling infiltration and planning for your system's future needs. The Vac Con can also be used to clean out lift stations and keep debris and other raw materials from causing potential pump problems.

It is important to make sure that the lift stations remain patent to ensure compliance with state regulations and financial sustainability for the system. By using the Vac Con, it can prolong the life of the lift station pump. No collection system is perfect, no

matter how up to date or state of the art it is. All systems will eventually run into problems and need assistance. However, with the help of Arkansas Rural Water Association, the Vac Con, and the Mobile Camera these problems can be identified and resolved in a cost-efficient and timely manner. The Vac Con has proven time and time again in numerous systems across the state, that it is very cost effective for systems, saves bountiful amounts of time, and decreases labor in the long run.

If you have any questions about this service or would like to utilize this service you can call me, Chris Harris, at 870-448-7647 or Arkansas Rural Water at 501-676-2255.



18 | SUMMER 2018 | WaterInsight

A GLOBAL LEADER IN LIQUID STORAGE.

ADVANCED DESIGN

Our **bolted RTP (rolled, tapered panel) tank design is unmatched worldwide**. It is the strongest, precision tank design that does not utilize cheap web stiffeners.

UNMATCHED COATINGS

Our LIQ Fusion 7000 FBE[™] powder coating system and application technology is unmatched in water storage applications. Our AQUA AGT 2020[™] glass/porcelain enamel coating system is superior to other glass coatings in its formulation and two-fire process. Both coatings are exclusively provided by one company, Tank Connection.

SUPERIOR QUALITY

Simply unmatched worldwide. Our facilities are **ISO 9001 quality system certified**. Tank Connection operates multiple storage tank manufacturing facilities in the U.S. Our storage products and services are requested globally because our quality is recognized as **THE BEST** in the industry!

INDUSTRY EXPERTS

We are the **leading experts in storage applications** with more years of combined industry experience than any other tank company.

RETROFITS

· NEW

ALUMINUM DOMES AVAILABLE FOR ALL TANK APPLICATIONS

RUCTION · INSULATED · SPE



REQUEST A QUOTE AND **GET CONNECTED** WITH REAL PERFORMANCE FROM THE MARKET LEADER, **TANK CONNECTION!** TANK CONNECTION 3609 N. 16th St, Parsons, KS 67357 ***** +1 620.423.3010 ***** sales@tankconnection.com ***** www.tankconnection.com

ARWA Membership Why Should I Join?

The rural water and wastewater industry face many challenges now and in the future due to increasingly complex regulations. These regulations place an increasing technical and financial burden on small communities and systems. Rural communities and systems must stay informed to keep up with changing laws and regulations governing their systems. Operators, managers, board members, and owners must maintain an adequate level of training to deal with these changes. ARWA offers numerous services and educational opportunities in order to make this possible. We welcome communities and utilities to join our association.

We've Got You Covered!

- ARWA is a non-profit organization with the purpose to assist water systems with day-to-day operational and management problems.
- Largest water and wastewater utility membership association with over 600 utility members.
- Training and renewal hours in Water, Wastewater, Backflow Tester Certification and Backflow Re-Certification, Backflow Repair, the ARWA EXPO, and the ARWA Annual Technical Conference.
- Governed by a sixteen member non-paid Board of Directors.
- Energy Circuit Rider, Wastewater Technicians/Trainers, Water Trainers, and Source Water Technician that provide on-site training and technical assistance.
- Legislative voice for water and wastewater utilities.
- Employs field staff that provides energy saving tips, water and wastewater training and on-site technical assistance for ARWA members year-round.
- Members receive an opportunity to participate in a series of Affinity Programs through National Rural Water Association.
- Members receive an opportunity to become a member of the AQUASURE Program through Risk Services of Arkansas/INSURICA.

- Through our quarterly magazine, "Water Insight", members stay up to date on water related news and association activities.
- Comprehensive technical training program for water and wastewater operators, managers and board members.
- Members receive a yearly Training Calendar of continuing education training sessions each January.
- All of the training sessions for operator certification renew al offered by ARWA are approved by Arkansas Department of Health and Arkansas Department of Environmental Quality. Members receive discounted prices at ARWA's Annual Technical Conference and Operator Expo.
- ARWA works with the Arkansas Department of Health, Arkansas Department of Environmental Quality, the USDA Rural Development Administration, the Arkansas Natural Resources Commission, and other state and federal governmental entities that influence water, wastewater, and solid waste policies in Arkansas.
- Lobbying Arkansas Rural Water Association monitors water and wastewater legislation in both Little Rock, Arkansas and Washington, DC.
- NRWA Water Rally The Washington, DC "Water Rally" provides an opportunity for small system representatives to meet with our Congressional delegation to express the concerns of the water and wastewater industry on funding and regulations.

The Arkansas Rural Water Association strives to meet the needs of each individual water and wastewater system. Suggestions on how we could better serve you and your system or need membership forms? Phone: 501-676-2255 • Fax: 501-676-2266 • Email: <u>arkrwa@arwa.net</u> or <u>arkrwa@sbcglobal.net</u> • Web: arkansasruralwater.org

NRWA INITIATIVES for Arkansas Rural Water Member Utilities

The National Rural Water Association has a new series of affinity programs available for Arkansas Rural Water Association's Member Utilities to support small water and wastewater utilities across the country. Please go to the NRWA website at www.nrwa.org or the WaterPro community website www.waterprocommunity.org to learn more about these programs.



RuralWaterimpact.com

Smart Websites for Smart Water Systems. Rural Water Impact is the industry leader in profes-

sional, cost effective websites – custom designed for rural water systems.

Phone: 1.888.551.4815

Web: https://nrwa.org/affinity/rural-water-impact-com/



BSR Data Breach Insurance

Bailey Special Risks, Inc. Bailey Special Risks, Inc. proudly offers *Beazley Breach Response Insurance* for utilities. This unique insurance provides a comprehensive service that protects utilities that have suffered a data breach with notification, loss control, credit monitoring services, and more.

Phone: 1.800.768.7475 Web: https://nrwa.org/affinity/data-breach-insurance/



Residental Service Line and Leak Adjustment Program *ServLine is a new* and unique insurance program that covers water loss with no deductible, as well as repairs or replacement of a customer's water and sewer line in

a timely fashion. ServLine is a full service program backed by Hanover Insurance Company – not a warranty program. Phone: 1.800.589.9876

Web: https://nrwa.org/affinity/servline/

Lifestyle Health Plans – A World of Wellness

Hecithy Medova Healthcare and Mike Keith Insurance is pleased to introduce Lifestyle Health Plans, a unique health benefits program designed to address the underlying causes of the rise in healthcare costs for both employer and employee alike – employee health behaviors.

Phone: 1.800.530.5229 Web: https://nrwa.org/products-services/loifestyle-health-plans-2/



IRIS is a SaaS (*software -as-a-service*) created and owned by TechRadium, Inc. TechRadium is a leading provider of high-speed communications services

to water districts, educational institutions, corporations, non-profits and government entities worldwide. IRIS – Immediate Response Information Systems, gives organizations the ability to broadcast information via voice and text to thousands of people simultaneously with its easy-to-use mass notification service. IRIS, TechRadium is the owner of eleven United States patents and has multiple patents pending. Phone: 1.866.894.5474

Web: https://nrwa.org/products-services/iris/



The Rural Water Loan Fund (*RWLF*) is a funding program specifically designed to meet the unique needs of small water and wastewater utilities. The RWLF

provides low-cost loans for short-term repair costs, small capital projects, or pre-development costs associated with larger projects. The RWLF was established through a grant from the USDA/RUS, and repaid funds used to replenish the fund and make new loans. Phone: 1.800.332.8715

Web: https://nrwa.org/initiatives/revolving-loan-fund/

Other support initiatives



Water Pro

Ford Fleet Vehicle Pricing http://nrwa.org/initiatives/fleetprogram/ Water University Water University

http://www.wateruniversity.org/about.aspx

Mobile Apps http://nrwa.org/initiatives/apps/ WaterPro Community Center http://careers.waterprocommunity.org/ WaterInsight | SUMMER 2018 | 21

ARKANSAS RURAL WATER ASSOCIATION REGISTRATION IS NOW OPEN!

Please visit our website to access registration forms or feel free to call us at the ARWA office.

These companies exhibited at the 2017 ARWA Conference with over 1,000 in total attendance.

IS YOUR NAME ON THE LIST?

It should be! Don't let the competition steal your customer.

Allen's Electric Motor Service, Inc. Alpha Process Sales, Inc. American AVK Company **AMERICAN Flow Control** AmeriChemm, LLC APAC/Arkhola Aquasure Arkansas Federal Surplus Property Arkansas Department of Environmental Quality Arkansas Department of Health Arkansas Natural Resources Commission Arkansas One-Call Arkansas Tax Associates, Inc. AVR, Inc. A.Y. McDonald Mfg. Co. Bertrem Products BT Environmental, Inc. Brenntag Mid-South, Inc. Clow Valve Company CoBank Consolidated Pipe & Supply Co., Inc. Continental Utility Solutions, Inc. CSA Software Solutions Cunningham, Inc. Denali Water Solutions, LLC Ditch Witch of Arkansas **DPC** Industries Eagle Water Tank Inspection Service Engineering Services, Inc. engines, inc. Environmental Products Mid-South EPA Water Security Division Environmental Technical Sales, Inc. Ferguson Waterworks, MAG Ford Meter Box G & C Supply Co., Inc. Grasshopper Company Greg Roberts Fire Hydrant Repair & Supply, LLC H*E Engineered Equipment Co. Harbor Environmental, Inc. Hawkins, Inc. Hawkins-Weir Engineers, Inc. Hawkins-weir Engineers, Inc. Haynes Equipment Company, Inc. HD Supply Waterworks Henard Utility Products ICM Technologies, Inc. Instrument & Supply, Inc. Induron Protective Coatings Jack Tyler Engineering, Inc. Kamstrup Water Metering Kirkham Systems

L & L Municipal Supplies Layne Arkansas Company LEC, Incorporated Little Rock Winwater Works Co. Luckett Pump & Well Service, Inc. M & H/ Kennedy Valve Magnolia River Maguire Iron, Inc. Master Meter, Inc. McClelland Consulting Engineers, Inc. McGoodwin, Williams and Yates, Inc. McIntire Management Group McIntire Management Group Midland-MIDCO Mitchell, Williams, Selig, Gates & Woodyard, P.L.L.C Mueller Company Neptune Technology Group New Water Systems Nexbillpay Pittsburg Tank & Tower Maintenance Co. Przybysz & Associates, CPAs / Przybysz Wealth Management, LLC Bain For Bent Rain For Rent Red Bud Supply, Inc. Red Flint Sand & Gravel, LLC Reliant Water Technologies Rep Com/Vivax-Metrotech/sebaKMT River Valley Winwater Rural Water Impact/Municipal Impact Sansom Equipment Co., Inc. Scruggs Equipment SELTECH, Inc. Serv-Atron, Inc. ServLine Sewer Sentry, LLC Shupe and Associates, Inc. Southern Pipe and Supply Stephens SUEZ Advanced Solutions TankSpekCorp Taylor Power Systems, Inc. Tencarva Machinery Company United Systems and Software USDA Rural Development Utilitybilling.com Utility One Source Vermeer MidSouth, Inc. Wachs Utility Products Water Tech, Inc. Water Utility Data Base System Wholesale Pump & Supply, Inc. Xylem Dewatering Solutions, Inc.





Annual Technical Conference

> September 9-12, 2018

Hot Springs Convention Center

EXHIBITORS:

Remember ... • Water Pac Donations • Sponsorship Opportunities and • Golf Registration

ATTENDEES:

Remember ... You must be an ARWA Member and register by August 10 2018 to be eligible for the 4-Wheeler!

Don't forget golf registration!

QUESTIONS?

Phone: 501-676-2255 Fax: 501-676-2266

> Email: arkrwa@arwa.net

Web: arkansasruralwater.org

PRE-REGISTRATION CLOSES AUGUST 10, 2018

41ST ANNUAL TECHNICAL CONFERENCE & EXHIBITION OF THE ARKANSAS RURAL WATER ASSOCIATION SEPTEMBER 9-12, 2018

NOTE: All member systems must be pre-registered for the conference by August 10, 2018 to be eligible for the grand prize drawing for the 4-wheeler.

Please print or type. Complete a separate form for each person. Photocopy if you need additional forms. NAME

REPRESENTING______

ADDRESS ______ CITY _____ STATE _____

COUNTY ______ ZIP _____ PHONE _____

Enter last four digits of Social Security No. to obtain credit hours (for Water & WW license) or N/A: _____

___ Check here if you have special needs and would like an ARWA Associate to contact you.

ARWA MEMBER: Pre-Registration Closes August 10, 2018

PRE-REGISTRATION (includes Registration, 2 Continental Breakfasts and 2 Luncheons) \$165 per person, \$150 Aquasure Member Discount per person

\$195 per person, after August 10, 2018, \$180 per person Aquasure Member Discount

NON-MEMBER: Pre-Registration Closes August 10, 2018

PRE-REGISTRATION (includes Registration, 2 Continental Breakfasts and 2 Luncheons) \$240 per person

\$270 per person, after August 10, 2018

ARWA MEMBER AT THE DOOR:

REGISTRATION AT DOOR (includes Registration, 2 Continental Breakfasts and 2 Luncheons) \$220 per person, \$200 Aquasure Member Discount per person

NON-MEMBER AT THE DOOR:

REGISTRATION AT DOOR (includes Registration, 2 Continental Breakfasts and 2 Luncheons) _____ \$295 per person

ARWA GOLF TOURNAMENT PRE-REGISTRATION FEE: \$80 EACH ______ Golf Tournament will be held at the Diamondhead Golf Club TOTAL ENCLOSED ARWA HAS A NO REFUND POLICY FOR REGISTRATION

PLEASE RETURN TO: ARWA Conference, P.O. Box 860, Lonoke, AR 72086

HOTEL HOT SPRINGS & SPA 877-623-6697 \$112-single \$10 for each additional person all room sizes (cutoff 8/9/18) ARLINGTON 800-643-1502 \$104 single (cutoff 8/17/18) EMBASSY SUITES 501-321-4430 \$144 single (cutoff date 8/8/18) Mention you are attending the ARWA Conference to get these rates

"An even membership of one-cent per person is included in your registration fee(s) allowing participants in NRWA fundraising activities. This is required by Federal Election Commission laws. If you wish to opt-out please go to the registration desk at the conference for your refund of this one-cent fee Revised: 6.19.18

Septembo	September 9, 2018	AR	<mark>SUNDAY</mark> WA 41st ANNUAL TECHNIQ	<mark>SUNDAY</mark> ARWA 41st ANNUAL TECHNICAL CONFERENCE AGENDA	
TIME	ACTIVITY	LOCATION	Water	or the "Water Taste Test" must Faste Test: 2:30 pm - 3:00 pm in	Water for the "Water Taste Test" must be turned in by noon on Monday, September 10, 2018 Taste Test: 2:30 pm - 3:00 pm in Exhibit Hall on Monday, September 10, 2018
8:00 am	ARWA Golf Tournament	Diamondhead Golf Course 4-Man Scramble		Winner announced	Winner announced at the Tuesday ARWA Luncheon
1:00 pm - 6:00 pm	ARWA Registration - Re	Registration Desk is outside of Exhibit Hall "A" in the Convention Center	he Convention Center		
2:00 pm - 6:00 nm	Exhibitor's Set-Up	Exhibit Halls "A&B"			
6:00 pm	ARWA Hospitality Room -	ARWA Hospitality Room - The Hotel Hot Spring's BAR	-		
10:00 pm	ARWA Hospitality Room is	ARWA Hospitality Room is Sponsored by ARWA & Crews & Associates			
Septembe	September 10, 2018	ARV	<mark>MONDAY</mark> VA 41st ANNUAL TECHNICA	<mark>MONDAY</mark> ARWA 41st ANNUAL TECHNICAL CONFERENCE AGENDA	
7:00 am			ARWA REGISTRATION OPENS	ATION OPENS	
TIME	CLASS I WASTEWATER	DIRECTORS AND ADMINISTRATION & OFFICE PERSONNEL	ARKANSAS DEPT of HEALTH ENGINEERING SECTION	GENERAL WATER SESSION	GENERAL WASTEWATER
	ROOM 207	ROOM 208	ROOM 209	ROOM 203	ROOM 204
8:00 am - 9:00 am	Class I Wastewater	ARWA EXHIB	RWA ANNUAL BUSINESS MEETING R00m EXHIBIT HALL OPEN - CONTINENTAL BREAKFAST	ARWA ANNUAL BUSINESS MEETING Room "104" EXHIBIT HALL OPEN - CONTINENTAL BREAKFAST	
	Shelby Townsley ARWA	8 C	CLOW VALVE "FIRE HYDRANT COMPETITIC 8:45 am – 9:15 am at the CLOW VALVE BOOTH	CLOW VALVE "FIRE HYDRANT COMPETITION" 8:45 am – 9:15 am at the CLOW VALVE BOOTH	
8:00 am- 9:30 am	.30 am	BREAK - EXHIBIT HALL OPEN	LADIES PROGRAM	LADIES PROGRAM - ARLINGTON ROOM (9:00 am - 11:00 am) MONDAY	- 11:00 am) MONDAY
9:30 am - 10:30 am	Class I Wastewater Shelby Townsley ARWA	Your Digital Communication Tool Box-Website, Social Media and Must-Have Apps!	AR Drinking Water Program - Director's Update	How to Select a Variable Frequency Drive (VFD)	Inflow & Infiltration-Micro Detection & Reporting
		Shannon Farmer & Shelly Howay Rural Water Impact/Municipal Impact	Jeff Stone, P.E. ADH	Larry R. Stanley ABB, Inc.	Mark LaPlante-Eastech Flow Control Steve Maxwell-Seltech, Inc.
11:00 am - 12 Noon	Class I Wastewater Shelby Townsley ARWA	"Cyber Security Issues"	Water Storage Tanks: Concerns and Corrections	Metering-Analytic Software How It Works	Biological Sludge Blanket Level Monitoring: Continuous Sonar Level Measurements in Primary & Secondary Clarifiers
		SA Jason Frankenberger Federal Bureau of Investigation	Lance Jones, P.E. ADH	Jeff Bonee Henard Utility Products, Inc.	Bert Gonzales/ Hawk Measurement Steve Maxwell/ Seltech, Inc.

	12:00	12:00 noon - 1:30 pm ARWA LU	ARWA LUNCHEON - "HORNER HALL" So	Scholarship Presentations & CASH DRAWING	RAWING
1:30 pm - 2:30 pm	Class I Wastewater Shelby Townsley	"FREE Legal Hour" For Water & Wastewater Utility Questions????	Jtility Requirements	How to Operate a Water System When a Water Tower Is Taken Out of Service	Municipal Infrastructure Repair and Rehabilitation: A 4 Step Process
	AKWA	David Menz, Williams & Anderson PLC Heartsill Ragon III, Gill Ragon Owen, P.A. Mark R. Hayes, General Counsel, AML	rPLC Robin Michaels en, P.A. ADH	J.W. Zelch & Morgan Zelch Tomcat Consultants, LLC	Eric Zimmerman The Sherwin Williams Company
		2:30 pm - 3:00 pm	3:00 pm BREAK & WATER TASTE TEST - EXHIBIT HALL	E TEST - EXHIBIT HALL	
3:00 pm - 4:00 pm	Class I Wastewater Shelby Townsley	Financing Your Capital Projects Jason Holsclaw	ects Distribution System's Water Age and Water Quality Concerns	Maintaining Your System's Infrastructure	Rare Earth for Phosphorus and Enhanced Sludge Properties
	ARWA	Michael McBryde Melissa Walsh Stephens, Inc.	Aaron Hilborn, P.E. ADH	Jake Waidmann Core & Main	Jim Gallmann NEO Chemicals and Oxides
4:00 pm - 5:00 pm	Class I Wastewater Shelby Townsley				
	AWAR		DINNER ON VOLIR OWN	N	
		7:00 pm - 12:00	7:00 pm - 12:00 am - "ARWA DANCE" - "The Billstown Band" Band Sponsored by Core & Main	Band" - Hotel Hot Springs Bar Iain	
September 11, 2018	11, 2018	7	<mark>TUESDAY</mark> ARWA 41st ANNUAL TECHNICAL CONFERENCE AGENDA	TERENCE AGENDA	
TIME	CLASS I WASTEWATER	DIRECTORS AND ADMINISTRATION & OFFICE PERSONNEL	WATER ARKANSAS DEPT OF HEALTH ENGINEERING SECTION	GENERAL WATER SESSION	GENERAL WASTEWATER
	ROOM 207	ROOM 208	ROOM 209	ROOM 203	ROOM 204
7:00 am			ARWA REGISTRATION OPENS	JENS	
8:00 am - 9:00 am	Class I Wastewater Shelby Townsley ARWA		EXHIBIT HALL OPEN CONTIN	CONTINENTAL BREAKFAST	
9:00 am - 10:00 am	Class I Wastewater Shelby Townsley ARWA	State & Federal L Funding for Water & Wastewater Utilities	UCMR4 - Unregulated Contaminant Monitoring Requirements	"AMR/AMI Smart Metering Beyond the Read"	Water & Wastewater Pump Monitoring and Scada Systems
		ANRC USDA/RD	Susan Corder ADH	Jon Tyson/Sensus Josh Freeman/Core & Main	Steve Luckett Luckett Pump

10:00 am - 10:30 am	30 am		BREAK - EXHIBIT HALL		
10:30 am - 11:30 am	Jel ≰	Protecting Your Workers from the Unexpected	Involving the Public in Water Source Protection	Iron Removal Proper Treatment Operation & Maintenance	Addressing Water/Wastewater Monitoring Challenges
	ARWA	John Schlarb Safety & Risk Consultant INSURICA	Ben Gilley ADH	Phil Shupe Shupe & Associates, Inc.	Justin Hogue, PE LEC, Incorporated
		11:30 WATERPAC D	11:30 am - 1:30 pm ARWA LUNCHEON - "HORNER HALL" WATERPAC DRAWING & PRIZES, 4 WHEELER DRAWING, BOAT/TRAILER DRAWING	ARWA LUNCHEON - "HORNER HALL" HEELER DRAWING, BOAT/TRAILER DRAWING	
1:30 pm - 2:30 pm	Class I Wastewater Shelby Townelay	NO CLASS	Chemical Safety	Chlorination O & M	Sewer Collection Cleaning & Inspection Services by ARWA
	ARWA	Phil Sh	Jeff Stone, P.E./ADH Phil Shupe, P.E./Shupe & Associates	Steve Luckett Luckett Pump	Chris Harris, Jimmy Ogden & Terry Fortenberry ARWA
	2:30 pm - 3:00 pm		BREAK - REFRESHMENTS WILL BE IN THE HALLWAY BETWEEN THE MEETING ROOMS EXHIBIT HALL CLOSED	VEEN THE MEETING ROOMS EXHIBIT	THALL CLOSED
3:00 pm - 4:00 pm	Class I Wastewater	NO CLASS Wat	Water License Exam Changes	Using Wasted Money to Pay for New Meters	Sewer Smoking Collection System for I & I Issues
	Shelby Lownsley ARWA		Martin Nutt ADH	Sam Selig, PE Entegrity	Susan Poe ARWA
4:00 pm - 5:00 pm	Class I Wastewater Shelby Townsley ARWA				
			DINNER ON YOUR OWN		
September 12, 2018		HOT SPRINGS CONVENTION CENTER	WEDNESDAY .R		
TIME	WATER EXAM ROOM 201-202	WASTEWATER EXAM ROOM 203-204			
8:30 am -	Water Exams AR Department	Wastewater Exams ADEO			
1:00 pm	of Health				



Hawkins Water Treatment Group has been meeting the requirements of commercial, industrial, municipal and institutional organizations since 1938.

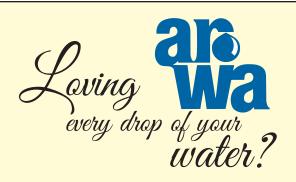
Potable Water
Lime Softening
Swimming Pool
Raw Water Clarification

Wastewater
Collection Systems
Equipment

Improving chemistry for safe, clean water

Memphis, Tennessee 2775 Channel Ave, Memphis TN 38109 Office: 901-774-1299

Fort Smith, Arkansas 6614 Old Harrison Road, Fort Smith, AR 72916 Office: 479-648-9900





Arkansas Rural Water Association is looking for the "BEST TASTING WATER" in the state.

The State Water Taste Test will be held on September 10th, 2018 at 2:30 pm - 3:00 pm at the ARWA Annual Technical Conference in Hot Springs, Arkansas.

All member water utilities are encouraged to enter.

Arkansas Rural Water Association will choose the best of the best to represent the Arkansas Rural Water Association in Washington, D.C. at the NRWA Water Rally February 4-6, 2019

Systems need to bring a quart of water, labeled with their system name, to the ARWA Annual Technical Conference registration desk by Noon on September 10th, 2018

For more information, contact the Arkansas Rural Water Association at 501-676-2255

2017 WINNER City of Bono

Dechlorination Is Upon Us

By Shelby Townsley, Wastewater Technician/Trainer

For the past few years, those of you that use chlorine to disinfect your water, have heard of the impending residual limit you would have on your new permits. That time has most likely come for several of you. If not, then get ready. We need to get ready for these changes. Some limits have been as low as .02. For some plants that is going to be a difficult but, not impossible, task to uphold. Many plants have been able to use the equipment they currently have to meet the new permit requirements and not have to resort to another means of disinfection.



Each permit varies, but most permits allow 1000/2000 fecal-coliform colonies per sample. If you have been com-

ing in at 100 or below for example, then most likely you have been using too much chlorine. I'm looking at you <1 operators! It's not that hard of a problem to fix though guys. Slowly reduce your dose rate, and monitor your monthly sample results. Over a short amount of time, you should be able to achieve these new limits, while saving some money on chemical costs.

This article is not meant to support or not support the regulations that have been handed down to our wastewater plants. It is here to

point operators in the right direction. If you would like to discuss further direction in dechlorination, please don't hesitate to contact us at 501-676-2255.



Have you considered the NRWA Affinity Programs?

The NRWA Affinity Programs are designed to help meet the needs of Arkansas Rural Water Association's utility members. (See Page 21 to consider your options)



RURAL COOKING

This corn dip is an absolute hit at all of our church and family functions. I serve it with Tostito round chips and it is also excellent with Frito Scoops. This recipe was given to me by my wonderful friend, Norma Kiss of St Joe. I revised it a little from the original recipe she gave me. The original texture was a little too loose so I added the cream cheese and reduced the amount of Accent Seasoning because it was too salty for me.

Corn Dip

2 cans Mexi Corn (drained)
1 large Pimento (drained)
2 bundles Green Onions (chopped including greens)
10 oz Sour Cream
8 oz Cream Cheese (softened)
10 oz Mayo
1 Tbl Garlic Salt
1 tsp Accent Seasoning

Be sure to drain the Mexi Corn and Pimento really good. Mix the green onions, sour cream, cream cheese, and mayo. Mix in the corn and pimento then add the following seasonings. The dip is better to chill before serving.

Grape Salad

8 oz package cream cheese, softened
8 oz sour cream
½ cup sugar
1 teaspoon vanilla
2 pounds red seedless grapes (removed from bunches, washed and dried)

Topping

1 cup brown sugar 1 cup pecan pieces

For the salad, beat the cream cheese then add the sour cream, Sugar and vanilla. Add the grapes. Stir until the grapes are well coated. Pour into a 9x13 pan or casserole dish. Sprinkle the topping over the top and refrigerate overnight.

Pineapple Chicken Quesadillas

7" Flour Tortillas Shredded Queso Cheese or any type of cheese you prefer Cooked Chicken breast seasoned with dry Taco Seasoning, Cayenne pepper and chili powder Green onion tops (green only) Canned pineapple drained (prefer crushed or small tidbits)

You can use cooked chicken from the grocery if you prefer. Just sprinkle with the seasonings and mix well. Just season to your taste, a little or a lot. Spray a pan with Pam and heat. Add the first flour tortilla then begin to layer it as it heats. Use medium heat so that all the ingredients can heat together.

Layer with cheese, then seasoned chicken, pineapple, green onion tops, then more cheese. Add another flour tortilla on top and begin to flatten with a spatula. When the bottom tortilla is brown flip it over and brown the other side. When both sides are browned, they are ready. Take out and slice in wedges. Serve with salsa and sour cream. Awesome!

Honey-Soy Salmon

2 limes 2 cups cooked rice 2 6 oz salmon filets (you can leave the skin on or off) Salt and pepper Olive oil 2 tablespoons butter 3 tablespoons honey 3 tablespoons soy sauce (I prefer low sodium)

Zest the two limes and stir into the rice and let set aside. Season the salmon with salt and pepper. In a nonstick skillet heat a little olive oil over medium high heat. Place the salmon skin side down in the pan. Cook for 5 minutes, being careful not to burn the surface of the salmon. Carefully flip to the other side and cook another 2 minutes.

Remove the salmon to a plate while you make the sauce. Back in the same skillet, melt the butter and add the honey. Then add the soy sauce and the juice from the limes. Cook the sauce over medium heat for a couple of minutes, until bubbly and thick. Cook additional time to thicken slightly if needed. Return the salmon to the skillet and spoon the sauce all over the top. Pile the lime rice on a plate and place the salmon filets on top. Spoon on some of the sauce, or all if you like.

Strawberry Pizza

 cup (2 sticks) butter, at room temperature
 cups all-purpose flour
 cup finely chopped pecans
 cups confectioners' sugar
 cup whipping cream, whipped
 One 8 oz package cream cheese, at room temperature
 cup granulated sugar
 tablespoon cornstarch
 One 3-oz box strawberry gelatin
 pint fresh strawberries, hulled and sliced

Preheat oven to 250 degrees. In a small bowl, mix the butter and flour until smooth. Stir in the pecans and combine. Pat the mixture onto a 12" pizza pan or a large cookie sheet. Roll up the edge slightly to create a ridge around the pizza. (This step is very important because when I poured the red mixture on it ran off the pan. I didn't have enough ridge to hold in the stuff.) Bake about 40 minutes, until lightly browned and cooked through. Cool completely.

To make the second layer, in a medium bowl, stir together the confectioners' sugar, whipped cream, and cream cheese. Mix about 2 minutes, until thoroughly blended and light. Spread evenly over the cooled cookie crust. Refrigerate for 1 hour, until firm. Put 1 cup water into a small saucepan. Bring the water to a boil and stir in the granulated sugar and cornstarch. Cook for about 1 minute, stirring constantly. Stir in the package of strawberry gelatin. Allow the mixture to cool to room temperature, and then spread this over the firm cream cheese layer. Refrigerate until the gelatin layer is firm, about 2 hours.

Decorate with fresh strawberries. Refrigerate until serving time.



Benefits of Installing Leak Detection Meters

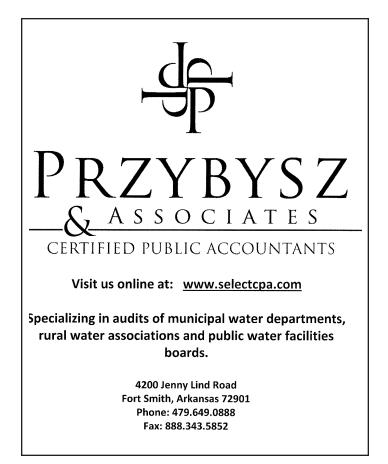
By Roy Richards, Circuit Rider

hen water systems ask me about leak detection I have recommend most systems to put in what I refer to as a Leak Detection Meter. You may ask, "What is that?" A Leak Detection Meter is where you make a tap on both sides of a valve, which bypasses the valve when shut off, so you can use a regular residential meter to see at low peak times how much water the system or section of line is using. The ideal set up is on a system that has pumps filling a tank. In this case, you



put a leak detection meter on the valve coming out of the tank, depending on your usage, which would determine the size of meter that you would need to use 5/8", 1", or 2". The most important thing is to make sure you turned the pumps off then shut off the valve. This will cause all the water feeding that pressure plain to go through the meter. If the system has two tanks at the same location, you will need to turn the one off that the leak detection meter wasn't put in the appropriate region.

Leave the meter on and the valves shut for several minutes. Time the meter to see how much water the system is using by gallons per minute. If your system has an altitude filling the tank, you may be able to time the master meter to get how much water the system is using by turning the tank off. If the meter ever stops complete-



ly, then you know you do not have a leak. If you have figured out that your water loss equals out to be 30 gallons per minute, and the meter says that the system is only losing 15 gallons per minute, this suggests that the problem could be something else, such as billing errors, theft, or a faulty master meter.

Another use for a leak detection meter is out in the system by using an overview map of the system. You select valves out in the system to put by leak detection meters, so you can go out

at low peak and see how much water that certain section of line is using. This may help narrow done the problem without having to go to the big expense of putting in a master meter.

I hope this article helps out in finding water loss problems for you and your system. Remember, every system is different. So, find out what you have. If there are any questions, feel free to call Arkansas Rural Water Association at 501-676-2255.

CUNNINGHAM INCORPORATED Your #1 Tank & Tower Service Provider since 1983



2012 W. 2nd St. Joplin, MO 64804

- Coatings
- Cleaning
- Inspections
- Repairs
- Accessories
- Maintenance Programs
- Mixing Systems

620.848.3030

• Dear Arkansas Rural Water Association:

On behalf of everyone at Bauxite Utilities, we would like to thank you for all the support and help we received from the representatives of Arkansas Rural Water that were here during the last few weeks. Arkansas Rural Water Association helped us with the following problems we had been experiencing: water leaks throughout the city, fire hydrants in need of repairs, water meters, RVS computer billing system, and determining monthly water loss. Again, thank you for all the support. We look forward to continuing to be in a working partnership with Arkansas Rural Water Association.

Sincerely, Bauxite Utilities

• I passed my Distribution 2 Test!

Thank you so much for all the training I have received. Jim is one of the best teachers I have ever had the privilege to listen to. He is always available to answer questions and to help others understand something that they aren't sure about. I know I will certainly be coming back to ARWA every time I need to go to a class. I look forward to coming back to learn more. I wasn't sure if I was going to pass my test on the first try, but Jim really helped me out with the things I couldn't understand. If Jim wasn't sure how to answer my questions, he went and looked for the answer and got back with me. He put so much of his personal time into making all his study material and his worksheets. I know I would not have passed my test if I would not have had all the material that he gave us. I just wanted to let you know that I really appreciate what you are doing. I know I still have a lot to learn about this business but I am no longer worried about it because I know I have a place to call when I need something. Thank you ARWA and thank you Jim for all of your help so I could pass my test on the first try! See you soon!

Dallas Robertson Bryant Water Department

• Dear Mr. Sternberg,

I want to thank you for the work of one of the Arkansas Rural Water Associations' employees during early January. Our rural water association, Little Creek Water Association in Grant county, was experiencing a large leak but we were unable to find the location of the leak. The leak was severe enough that our water pumping station was forced to pump and treat water for more than 2 days straight. Our water association shares a well and a water plant with another Grant County Water Association (South Sheridan). Because the leak forced the system to operate for more than 2 days without a letup, both associations were at risk if the plant or pump were to go down because of the heavy burden placed on them. This would have caused hardships on more than 2000 households and businesses in Grant county. Our plant manager called Mr. Roy Richards, ARWA Circuit Rider, and with the help of his experience and leak detection equipment, the large leak was discovered to be on a very remote section of waterline. Without this assistance, it would have been very difficult for us to have located this problem in a reasonable amount of time. The plant manager, Levon Brown, had nothing but the highest praise for Mr. Richards

and for your Association with this and other issues that you have helped us with in the past. Again, let me say thanks on behalf of the Little Creek Water Association for the prompt and professional assistance that your agency has provided to our association and customers.

Sincerely, Caroll Guffy, Board President Little Creek Water Association

• Dear Mr. Sternberg,

1/15/2018

We here at the City of Lamar would like to take a minute to thank ARWA. ADH Circuit Rider, Jimmy Ogden, and Deputy Director, Jeff Ford, recently came to our aid when the RPZ at our main pump station failed. Jimmy and Jeff not only fixed our issue but did so in a very professional and friendly manner. They saved us approximately \$500.00 in repair fees and most importantly, kept our pump station running. We are very lucky to have an agency such as ARWA to help us keep our drinking water safe and our employees trained. Once again, thank you!

Jerry Woodard, Superintendent City of Lamar

• To Whom It May Concern; 1/15/2018 On January 3, 2018, ADH Circuit Rider Jimmy Ogden and Deputy Director Jeff Ford, came to our system to help us repair a 6" RPZ at our master meter. The RPZ had began to dump constantly. Jimmy and Jeff rebuilt and tested the RPZ, which saved us the money in water and saved a costly repair bill. We estimate the repair bill would have been \$350.00 and \$75.00 retesting. Once again thanks to everyone at ARWA that has always been available when they are needed.

Milton Nordin East Johnson County Water

• To Whom It May Concern, 1/15/2018 On December 27, 2017, ADH Circuit Rider Jimmy Ogden, came to our system to help us locate a leak. We believed the leak to be approximately 30-40 GPM. Jimmy spent two days here locating the leak. It was located on a 3" line and repaired. This leak was costing us approximately \$3420.00 per month. Thanks for the help of everyone at ARWA anytime its needed.

Milton Nordin East Johnson County Water

• Dear Mr. Ford, 2/3/2018 As a longtime citizen of the Tucker community, I would

like to thank you for your assistance with getting the water rust issue resolved in a timely manner. Prior to your involvement, the tap water was unusable for washing, cooking, bathing, or consumption. This situation greatly impacted the required needs of the diverse citizenry in the community. Your efforts towards getting this issue resolved are greatly appreciated and contribute greatly to the quality of life in

LETTERS AND EMAILS

the community. Once again, I would like to thank you and express my deepest regards for your diligent work.

Sincerely, Tucker Community Member Latisha D. Davis

Dear Ms. Poe,

2/27/2018

On behalf of the City of Lonoke, I would like to thank you for your assistance reviewing our ADEQ permit, which is due for renewal this year. Also, I would like to thank you for your input concerning our corrective action plan. ARWA plays a vital role in improving our water and wastewater system which we are always grateful for.

Sincerely, Jim Kelley, Manager City of Lonoke

• Good morning Mr. Dennis Sternberg, 2/27/2018

I just want to say thank you all very much for the classes you all provide for us!! I recently attended a Distribution II class that Jim Philipp was teaching. I have attended his review classes but unfortunately did not pass my test. I had taken all my courses at Camden and unfortunately didn't do so well. Mr. Jim suggested I take a refresher course at Lonoke. Upon completing his course, I took my test and PASSED!! I am so thankful to you all for your organization. Thanks again for all you do for us!! I look forward in training with you all for Treatment in the near future!!

Carla Hurley, Administrator Jefferson Water

• Mr. Sternberg,

2/27/2018

I wanted to take time and thank you for the assistance Tee Easley, the Energy Circuit Rider, has given us for ways to improve our wastewater collection system. She has spent several days here in the past 6 months trying to help us with being more energy efficient and better improvements to our infrastructure. These things can't be changed overnight but with her diligence to find ways, we know it can be done. We appreciate Tee and Arkansas Rural Water.

Clint Walker, Wastewater Technician City of Poyen

• Dear Dennis Sternberg,

2/27/2018

My name is Kristen Miller and I am the office manager for Mt. Top PWA. I wanted to thank you for all the help I have received from Susan Poe. As you know, Nancy Duren retired from her position here at Mt. Top and Susan has helped me out tremendously with a very much needed rate study. Susan was very professional and extremely helpful not only to me, but to the board members by explaining to everyone about our rate increase. Susan is always willing to help whenever I need advice and with any project I have come across. I had never made a budget for Mt Top before and when I called Susan for assistance she did not hesitate to help me. I hope to be working with Susan more in the near future.

Sincerely, Kristen Miller Mt. Top PWA

• Dennis,

2/27/2018

ARWA has been there to assist in our times of crisis throughout the years and we cannot say enough to thank them for all of their hard work. I would like to take this time to write to you and express my gratitude for the assistance that ADH Water Technician, Chris Harris, has provided our system. At multiple times, the City of Marshall has experienced financial hardships. Through the assistance of an accurate rate study and implantation of an extensive leak detection program, the City of Marshall is becoming more and more financially stable every day. We are funding reserves and planning for the future. On more than one occasion he has helped us troubleshoot and correct problems we have had arise in our meter reading and billing software. Chris has repaired electrical and motor issues that we have experienced.

Sincerely, Kevin Elliott, Mayor City of Marshall

• Mr. Sternberg, 2/28/2018 Jim's classes were very helpful in getting my treatment 3 license.

Terry Shaddon

 Mr. Dennis Sternberg, 3/1/2018 I really appreciate you sending David Quattlebaum to help the Village Water Association with the Vulnerability Assessment and Emergency Response Plan on February 26th, 2018. We feel honored to be able to have someone come help us complete this information at no charge to us. Thank you so much.

Sincerely, Brittney Driggers, Secretary Village Water Association

• Dear Mr. Dennis Sternberg:

3/5/2018

The City of Lake View, in Phillips County, wants to express our appreciation to Mr. Roy Richards for his exemplary assistance with our water crisis during the months of December 2017 and January 2018. Mr. Richards provided us with the professional services of connecting us with all the necessary parties to ensure resolution to our water crisis. Mr. Richards also was a tremendous asset in helping our water clerk, Trina Jackson, with resolving some issues with the RVS system as well as assisting the City Clerk/Treasurer, Shirley

LETTERS AND EMAILS

Rose, with water/sewer financial paperwork. Again, the City of Lakeview greatly appreciates the help we received from Mr. Roy Richards.

Sincerely, Darrin Davis, Mayor City of Lake View

• Good Morning Dennis,

3/6/2018

I would like to send you an absolute thank you from Russellville City Corp for the outstanding job that Mr. Jim Barkie done here testing some of our larger meters. On February 13th, 2018, Jim came to our aid in solving some of our water loss issues. We started out testing 2 6" meters. These meters are at our largest water consumer in our system. They use on average a million gallons per day with both meters being combined. Jim and I tested both meters and found both of them to be around 50% accurate. With those 2 meters alone we were losing around 375,000 to 500,000 gallons per day. At \$1.90 per thousand gallons you can see were losing a substantial amount of money. Without the ARWA help and their extremely knowledgeable staff members we would, more than likely, be in an extreme financial situation. I definitely want to give a huge thanks to him Barkie for his hard work and knowledge for helping us find this issue and look forward to working with him in the future. This is just one example of how important the ARWA is to Arkansas water systems across our great state. I really do not know what we would do without you guys.

Sincerely, Ricky Biffle, Service Specialist City Corp

and my name is Roger Carter.

• Dennis, 3/12/2018 Just wanted to say the class Jim taught for exam review helped me pass the test!! I work for Cedarville Waterworks

Roger Carter

• Dennis,

My name is Gerald Mitchell. I recently passed my grade 4 distribution exam and want to say that Mr. Jim Philipp played a huge part in my success. He really takes time to make sure you understand before moving on to the next section and I believe if there were more instructors like him, it would be a lot easier to pass those exams. I took the exam a number of times and without him I would still be struggling to pass so thank you guys from the bottom of my heart.

Gerald Mitchell

• Good Morning Sir, 3/16/2018 Good morning sir or should I say great morning?

Received word yesterday that I received an 80% on my Class 2 Distribution Exam! I never took my Class 1 Exam since the

City of Norman had to have a Class 2. I took all the 72 hour classes, many with Jim. Last summer, I finally found time to set exam date. Fortunately, Jim had his review class scheduled the week before. I took the intensive daylong class and continued to study ten minutes to half hour a day. I don't know that I would have passed without his review class. Anybody that has to take the exam really needs to take the review, as it refreshes or jogs memory. As you may know, the Class 2 contains a ton of info. He went over as much of what he thought may be on the exam. His review, my many hours of study, and the Lords guidance made the difference. Please consider funding for these much needed reviews. Now I have a Class 3 Wastewater license, and now Class 2 Water Distribution license. The reviews definitely help chances of passing these super hard exams. Thank you for all you do.

Kenn C. Greene City of Norman

• Dear Dennis Sternberg, 3/19/2018 I'm writing you again, in regards to Jim Philipp. I successfully passed my T2 and I would like you to know that Jim once again went out of his way to help me prepare for my test! I cannot say enough about how thankful that I am for such a wonderful instructor!!!

Lisa Pipkin

• Dennis, 3/20/2018 I wanted to let you know I really appreciate all the hard work Jim does for us operators! He has the ability to apply the information in real world situations and takes the time to explain things thoroughly if you have questions. The exam review is really helpful.

Josh Byrd

3/29/2018 • I want to say thank you to James and all of you for help on passing my exams!

Sincerely, Stephen Forst

3/15/2018

• To Whom It May Concern:

4/3/2018

My name is David Burson and I work for Benton Utilities in the water department. Throughout my years in the water industry, the instructor at your facility, Mr. Jim Philipp, has helped me along the way instructing me to be a better and more mature water distribution operator. He has helped me through thick and thin when I was ready to give up on getting my Water Distribution 4 license. He is a very awesome instructor and teacher who really knows this water industry and what is best for us water operators. I couldn't thank him enough for what he has done for me. With all my heart I would like to thank all of you and may god bless you all.

David Burson Benton Utilities

• Jim Philipp,

This is to let you know that thanks to Jim for the refresher course, I was able to get my T-4 License. He is a great instructor and he makes his classes informative.

Thanks. Darrell Ott

 Dear Mr. Dennis Sternberg, 4/17/2018 I wanted to let you know that my students and I are very grateful that Mr. Quattlebaum was able to come and give a drinking water presentation at our school. We all learned a great deal about contamination and purification. I have attached a document from each of my classes that the students wrote what they learned during the presentation so that you know that it was truly worth his time. Thank you.

Trishia White, Chemistry Bryant High School

• Jim, 4/19/2018 Thank you for your time during the ARWA classes we attend in Lonoke. Because of your commitment to understanding the concepts related to Water Distribution from Water Source -to- customer. Stephen Lovell and myself obtained our Class IV Distribution License. Thank you again for all you do.

Chuck Wiley, Utility Coordinator City of Fort Smith

Mr. Sternberg,

4/19/2018

I wanted to write a quick note of appreciation for Jim Philipp and the instruction I received this fall in the T4 and D4 classes. The classes were interesting, packed with good material and questions, and best of all, I passed both tests on the first try. Thanks for making this excellent training possible.

James McCarty, Environmental Quality Manager Beaver Water District

Dear Dennis,

5/2/2018

We wanted to let you know how much we appreciated our circuit rider, Jim Barkie, coming to check on us before 7pm on April 13, 2018, when the EF2 Tornado touchdown in our area. Jim came to our office to see how we had weathered the storm and if there was any equipment we needed. We appreciate his professionalism and his quick response to check on us. Thank you so much for the support.

Sincerely,

Jesse L. McChristian, Jr., General Manager Hwy 71 Water District No.1 Public Water Authority

Dear Mr. Sternberg,

4/3/2018

5/14/2018 I loved David's presentation. I learned were the water I bathe in comes from. Please send him down here more. I would love to see more of what y'all do there. I am interested to see what happens in order to give us the water. Thank you for making our water clean.

Sincerely, Braden East End School

5/14/2018 Dear Dennis Sternberg, Thank you for allowing David Quattlebaum to introduce us to how water filters work. I was very intrigued on y'alls work. I hope to see him more often in the future. Thank you for allowing him to teach us.

Sincerely, Morgan East End School

Dear Dennis Sternberg,

5/14/2018

Thank you for sending David Quattlebaum to present for us. I loved the presentation. It was informing and entertaining. It sounds like the company you work for is doing great things to help other communities. I learned that water is pumped from the ground for us to get it. I would love for Mr. Quattlebaum to come back and present more.

Sincerely, Ioel East End School

Dear Mr. Sternberg,

5/14/2018

Thank you for allowing Mr. Quattlebaum to come to our school today. His presentation was very interesting and I learned many things from it. You should let him come next year for the other students. He had great stories to tell. He is a very great man. I learned what many things were and what they did. I was taught by him what contamination causes in a water system and how it can spread so easily. He was very patient and understanding. I believe that he can teach many other people things if you allow him to come next year.

Sincerely, Gabby East End School

Boil Orders Protecting You

By Jimmy Ogden, Circuit Rider

In working across the state with water operators. There seems to be many of the same concerns and issues. But the one that continues to come up is the fear of going under a boil order. Even the mention of a boil order, operators just cringe. Now, I understand that a boil order is extra work on an already busy schedule. Plus you have the constant barrage of phone calls and questions. So, yes I understand it is a headache, but it is a necessary headache.



I think one thing that operators overlook is that boil orders are not only there to protect their customers, but to protect the operators/water system also. A boil order is put into place until the water can be deemed safe for consumption through samples. So, the operator is taking the worry of health concerns off his shoulders. In today's world, we have to do everything we can to protect ourselves, as well as protect our customers.

See the following regarding Policy for Boil Water Notices:

https://www.healthy.arkansas.gov/images/uploads/rules/BWOPolicyFinal.pdf.

The policy explains when and how to proceed with a boil order, and would be a good thing to print and have on hand for a quick

reference. Also, ADH can be reached for boil orders around the clock. Normal Business Hours: 501-661-2623/After Hours: 800-554-5738.

If you need any assistance, don't hesitate to call us at ARWA 501-676-2255.



EAGLE SANDBLASTING & PAINTING, INC.

EAGLE WATER TANK INSPECTION SERVICE

ROBERT BEEL

136 Main St. Pleasant Plains, AR 72568 Ph 501-345-2542 Fax 501-345-2032 Robert cell - 501-454-4172 email: <u>espi@centurytel.net</u>

- CLEANING AND PAINTING ALL WATER STORAGE TANKS
- WELDING REPAIR
- VENT AND OVERFLOW SCREEN REPLACEMENT
- LADDER SAFETY PROTECTIVE SYSTEMS
- CABLE AND FLOAT REPAIRS OR REPLACEMENT
- TANK WASH-OUT AVAILABLE
- THREE PAGE INSPECTION REPORT WITH 8-10 PAGES OF COLOR PICTURES WITH DESCRIPTIONS
- NO DAMAGE TO TANK COATING DURING INSPECTION

SUMMER 2018

By James Philipp, USEPA Training Specialist

G reat day fellow water operational specialists located throughout our great state. I received a call from a mayor asking, "what does ARWA do?" So, I thought I would share my response with you all, just in case you were not familiar with ARWA.

We are a group water and wastewater professionals that have worked in the industry and now provide all kinds of training and technical assistance services.

For example, at ARWA we can:

- Provide water, wastewater, and backflow testing and repair certification training
- Provide onsite technical assistance
- Provide leak detection help
- Help with rate studies, Emergency and Long Range Plans
- Provide water, wastewater, and backflow certification renewal training classes
- Help with large meters and customer meter testing GPS services
- Energy conservation programs to help reduce electrical costs
- Sewer camera, sewer jetting, and smoke testing services





- Emergency equipment-generators, by-pass pumps, submersible pumps and control panels
- An awesome yearly scholarship golf tournament and conference
- Help with legislative matters, insurance for your infrastructure, leak insurance for your customers, website services, and just so much more, plus
- Staff and support to help you and your system perform better

If your water and/or wastewater system or personnel need help, 501-676-2255 should get you started to immediate assistance. We are proud to support over 600 member utilities and their mission to provide safe drinking water and best practices of waste disposal. We look forward to a large crowd at the 41st Annual Technical Conference in Hot Springs, September 9-12, 2018. Until I write again, please continue to educate yourself and your customers, work safe, and keep that water flowing.





Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000 Governor Asa Hutchinson

Nathaniel Smith, MD, MPH, Director and State Health Officer

Engineering Section, Slot 37 www.Healthy.Arkansas.gov/eng/

Ph 501-661-2623 eng/ After Hours E

 D1-661-2623
 Fax 501-661-2032

 After Hours Emergency 1-800-554-5738

WATER OPERATOR LICENSE EXAMINATIONS MAY – DECEMBER 2018 PAPER BASED EXAM SCHEDULE

Most current Exam Schedule is available at http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm

You must register for the exam 45 days in advance at: https://health.arkansas.gov/wa_engTraining/ExamType.aspx. Listed below are the dates and locations of examination sessions as scheduled, as of <u>September 18, 2017</u>. All Treatment and Distribution exam grades will be available at the sessions. Acceptable photo identification (Drivers License or equivalent) will be required to sit for an Exam. Cell phones, pagers and other electronic communication devices are not allowed. Non-Programmable calculators are allowed in exam sessions.

EXAM DATE	REGISTER DEADLINE	CITY	LOCATION	TIME
9/6/2018	7/24/2018	Mtn. Home	Baxter Co OEM Training Facility, 170 Dillard Dr, Midway	9:00 AM
9/7/2018	7/24/2018	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00 AM
9/7/2018	7/24/2018	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
9/12/2018	7/30/2018	Hot Springs	ARWA Conference, HS Convention Center	9:00 AM
9/14/2018	7/31/2018	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
9/14/2018	7/31/2018	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	9:00 AM
9/14/2018	7/31/2018	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	9:00 AM
12/7/2018	10/23/2018	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00 AM
12/7/2018	10/23/2018	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
12/7/2018	10/23/2018	Nashville	Carter Day Center, 200 Lake Nichols Drive	9:00 AM
12/14/2018	10/30/2018	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
12/14/2018	10/30/2018	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	9:00 AM
12/14/2018	10/30/2018	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	9:00 AM

The above exam session information is subject to change. You should confirm this information just prior to the scheduled examination period. Also, the latest exam schedule information can be viewed on the Internet at: < <u>http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm</u> >.

Gain more control. Partner with us.

You gain more control with guaranteed regulatory compliance

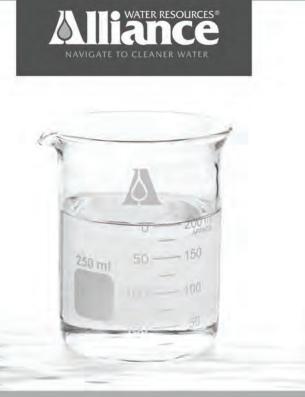
- Consistent maintenance and monitoring throughout your water system
- Precise reporting and record keeping
- Deliberate efforts to build and maintain positive relationships with regulatory officials
- Management that is consistently trained to stay abreast of regulatory updates and technological advancements

受

Terry Merritt

Director of Marketing/Business Development 573-880-1706 I tmerritt@alliancewater.com

AllianceWater.com



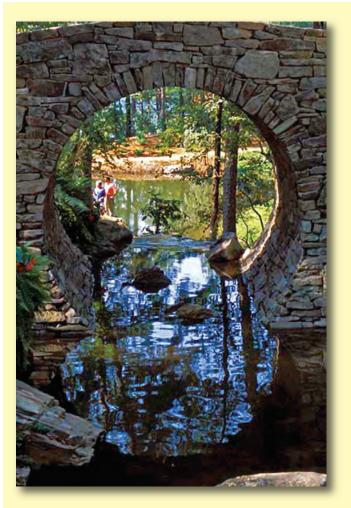
ARWA TRAINING AND EVENTS 2018

BACKFLOW TESTER CERTIFICATION CLASSES IN 2018

10/8-12/2018	8:00 am – 5:00 pm ARWA Training C		Center 240 Dee De	e Lane-Lonoke	Jeff Ford/Terr	y Fortenberry
	BAC	KFLOW TESTER RE	-CERTIFICATION	CLASSES IN 2	018	
10/8/2018	8:00 am – 5:00	pm ARWA Training C	Center 240 Dee De	e Lane-Lonoke	Jeff Ford/Terr	y Fortenberry
		BACKFLOW F	REPAIR CLASSES	IN 2018		
8/14-16/2018	8:00 am – 5:00	pm ARWA Training C	Center 240 Dee De	ee Lane-Lonoke	Jeff Ford/Terr	y Fortenberry
11/6-8/2018	8:00 am – 5:00	pm ARWA Training C	Center 240 Dee De	ee Lane-Lonoke	Jeff Ford/Terr	y Fortenberry
		ARWA WATER 1	FRAINING SCHED	ULE 2018		
7/31/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Basic Wate	r Math	Jim Philipp
8/2/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Applied Wa	ter Math	Jim Philipp
8/14-15/2018	8:00 am – 5:00 pm	Charles R Newton Center	170 Dillard Drive-Midwa	w Water Licer	nse Renewal	Jim Philipp
8/21-23/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Basic Distri	bution	Jim Philipp
9/5/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Distribution	Exam Review	Jim Philipp
9/6/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Treatment E	Exam Review	Jim Philipp
10/2-4/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Intermediat	e Distribution	Jim Philipp
10/23-25/2018	8:00 am – 5:00 pm	Operations Center	710 E. Main-Clarksville	Intermediat	e Treatment	Jim Philipp
11/6-8/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Advanced [Distribution	Jim Philipp
11/27-29/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Advanced T	Freatment	Jim Philipp
12/5/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Distribution	Exam Review	Jim Philipp
12/6/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Treatment E	Exam Review	Jim Philipp
12/18/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Basic Wate	r Math	Jim Philipp
12/20/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lond	oke Applied Wa	ter Math	Jim Philipp

ARWA WASTEWATER TRAINING SCHEDULE 2018

7/23-26/2018	8:00 am - 5:00 pm	Springdale Water Utilities	525 Oak Ave-Springdale	Class II WW	Susan Poe
8/15-16/2018	8:00 am – 5:00 pm	Charles R Newton Center	170 Dillard Dr-Midway	WW License Renewal	Susan Poe
9/10-12/2018	8:00 am – 5:00 pm	H.S. Convention Center	134 Convention Blvd-Hot Springs	Class I WW	Susan Poe
10/15-18/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lonoke	Class II WW	Susan Poe
12/10-14/2018	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane-Lonoke	Class III WW	Susan Poe



ADVERTISERS INDEX

Environmental Products Mid-South
Texas Aquastore
Core&Main9
Tencarva Municipal10
WUDB System
REM
American Flow Control
Aquasure
CoBANK
Tank Connection
Hawkins Water Treatment Group27
Master Meter
Przybysz & Associates
Cunningham
Eagle Sandblasting & Painting, Inc. 35
Pittsburg Tank & Tower Group
Alliance
Maguire Iron
USABlueBook Back Cover

McCRO

MAKE YOUR WATER TANK LAST ...

LET MAGUIRE IRON HELP EXTEND THE LIFE SPAN OF YOUR TANK AND INFRASTRUCTURE.

- Maintenance Contracts
- Interior & Exterior Paint and Repair
- Tank Mixing Systems
- Chemical Cleaning
- Component Replacement

READY TO REPLACE? MAGUIRE IRON ALSO DESIGNS, FABRICATES AND ERECTS NEW TANKS.



MAGUIREIRON.COM | 605 334-9749 WATER TOWER SPECIALISTS SINCE 1915 McCrory, AR Built 1936

With proper maintenance, tanks can last as long as we have!

B f

ARKANSAS RURAL WATER ASSOCIATION P.O. Box 860 Lonoke, AR 72086

PRST STD U.S. POSTAGE PAID Little Rock, AR 72201 Permit No. 88



USABlueBook is proud to be the only 18-year Diamond Sponsor of the National Rural Water Association

On-Line Analytical Equipment

Automate your process and free up your time



Shrinking staffs and regulatory pressures make it tough to run a plant these days, but automating your system can take some of the burden off your team. We stock process analyzers, accessories and reagents from Hach, Endress+Hauser and other trusted brands. Plus, our Technical Support reps can help you put together the right system for your specific needs. Check out our complete selection of process analyzers on pages 1186-1249 of Master Catalog 129 or at www.usabluebook.com.

Request your **FREE** catalog today! 800-548-1234 • www.usabluebook.com

