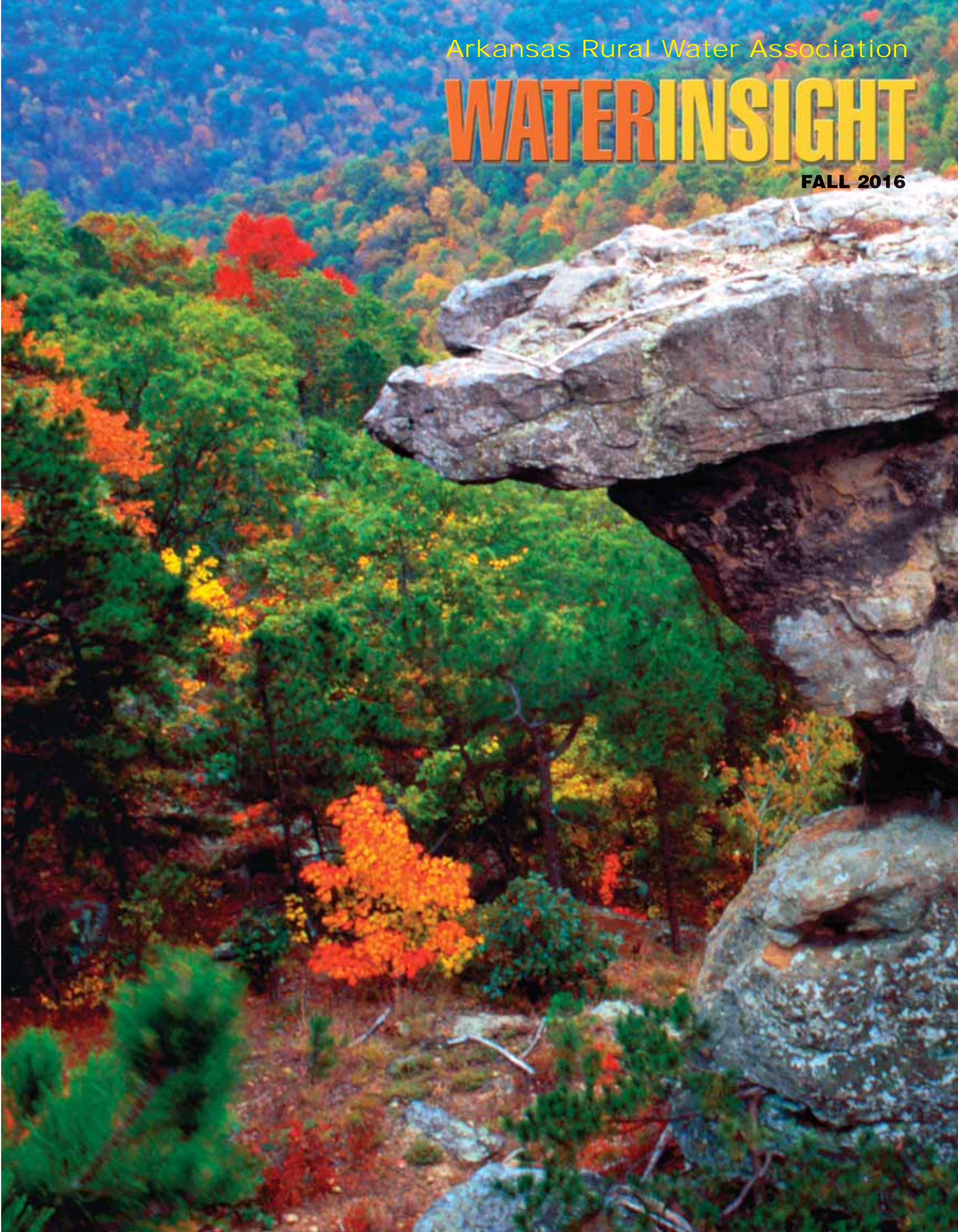


Arkansas Rural Water Association

WATERINSIGHT

FALL 2016



FROM YOUR CHIEF EXECUTIVE OFFICER

DENNIS STERNBERG

I would like to thank everyone who participated in the Arkansas Rural Water Association's 39th Annual Technical Conference in Hot Springs, Arkansas September 18-21, 2016. This year's conference featured six different concurrent sessions with something for everyone depending on your position with your utility. At the Monday Luncheon, we were pleased to have as our guest speaker Administrator of Rural Utilities Service, Brandon McBride, who spoke to the attendees. Brandon is from Searcy County Arkansas and is always glad to get back to Arkansas. Brandon has a passion about getting water services to people who don't have access to a public water system. This year's exhibit hall was full with 113 exhibit spaces displaying their latest products in the water and wastewater industry. Hopefully, everyone had a chance to stop by the booths and visit with each of the exhibitors to discuss their products and how their products or services can assist you in your time of need.

ARWA had the largest total attendance at this year's conference of 1,016 water and wastewater industry personnel. I would like to give a special thank you to the largest group of exhibitors ARWA has ever had in attendance and who used 113 booth spaces displaying their products at this year's ARWA conference. Also, a special thank you to those exhibitors who donated those great gifts to the Arkansas Rural Water State PAC and to everyone who purchased tickets to win those prizes. This year's Arkansas Rural Water Raffle was a huge success thanks to everyone who participated. State PAC raised \$5,500 this year.

A special thank you also goes to National Rural Water who provided \$500 for the ARWA Federal Water PAC Raffle. A 12 Gauge Shotgun was donated by myself with monies going to the Federal Water PAC. Also, a thank you to everyone who purchased tickets to win that shotgun and the \$500 which made this year's event a great success. Federal PAC raised \$4,000.

I would like to thank all the systems that competed in this year's Arkansas Great Water Taste Test at this year's conference. A thank you to this year's Water Taste Test judges Larry Shook, David Feild with (Aquasure) Risk Services Insurance, and Greg Alexander with Arkansas Department of Health. Congratulations, the 2016 winner of the Best Tasting Water in Arkansas goes to the City of Chidester, Arkansas. Chidester will go on to compete in Washington, D.C. in the Great American Water Taste Test at the National Rural Association Water Rally February 6-8, 2017.

This year's Annual Golf Tournament was held on Sunday, September 18, 2016 at the DeGray State Park Golf Course. I want to thank all the sponsors and all the players who showed up to play. The group appeared to have a great day of golf, except for the two-hour delay due to the rainstorm that moved through.

Again, a special thanks to everyone that attended ARWA's 39th Annual Technical Conference this year. Because of your support, it was the largest conference ever with 1,016 in attendance. A special thanks as well to the ARWA staff for working to put together such a great conference. Thank You.

So, mark your calendars for next year's ARWA 40th Annual Technical Conference September 10-13, 2017 to be held at the Hot Springs Convention Center in Hot Springs, Arkansas.

Thanks for all your support in the past and for your continued support in the future. If you have any questions, please feel free to contact ARWA at 501-676-2255.





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Cover Photos

Pedestal Rocks

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 •

BEST TASTING WATER IN ARKANSAS

City of Chidester

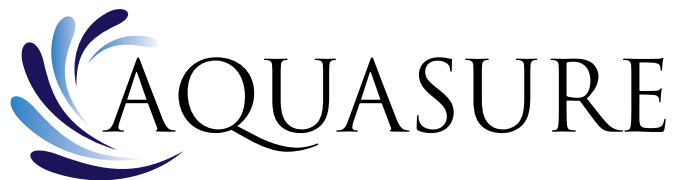
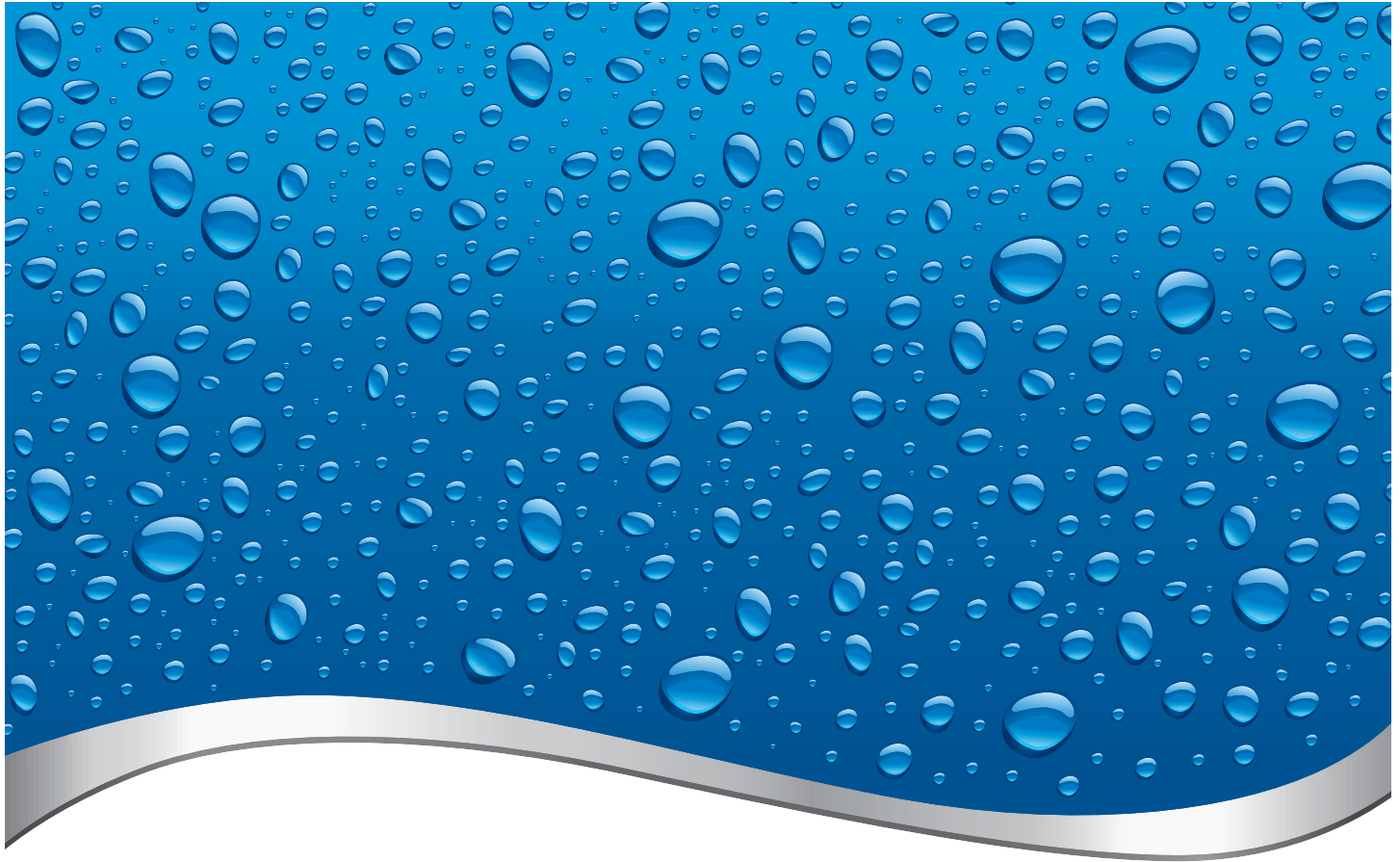
Officials at the Arkansas Rural Water Association (ARWA) have found the best-tasting water in Arkansas. On September 20, 2016, the winner of a state-wide competition was announced in an effort to identify the tastiest rural water in the state and, participants hope, in the nation. Small and rural water utili-

ties from around the state submitted samples of their water, straight from the tap. The winner of the event was the City of Chidester, whose water sample was chosen by judges as the most appealing. “It tasted clean, pure and refreshing,” stated the judges. “Because of the quality of this water, Arkansas has a good chance at the national taste

test in Washington, D.C.” added Arkansas Rural Water Association CEO, Dennis Sternberg. The competition is part of a “Quality On Tap!” Campaign to emphasize the high quality standards and, consequently, taste of rural water. Winners of the state taste test will compete in a national contest at Capitol Hill in Washington, D.C. on February 6-8, 2017. This event is part of the Rural Water Rally, an annual legislative event for the 49 state affiliates of National Rural Water Association.



Dennis Sternberg presenting “Best Tasting Water” winner’s plaque to City of Chidester Mayor Bobby Box, Sr.



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2016 ARWA Conference Guest/Luncheon Speakers



Steve Wear, National Director on National Rural Water Association Board/Arkansas Rural Water Association.



U.S. Department of Agriculture Rural Development, Brandon McBride, Administrator Rural Utilities Service.



Jeanie Cunningham, Healthy Benefits, Mike Keith Insurance, Inc.



Glen Womack, National Director on National Rural Water Association Board/Louisiana Rural Water Association.



Brandon McBride, USDA invited guest/speaker and Lawrence McCullough, USDA; Dennis Sternberg, Arkansas Rural Water Association.

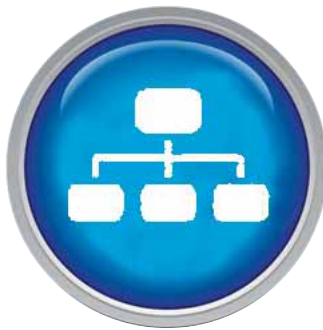


Bradley Scheffler, President Arkansas Rural Water Association Board of Directors.

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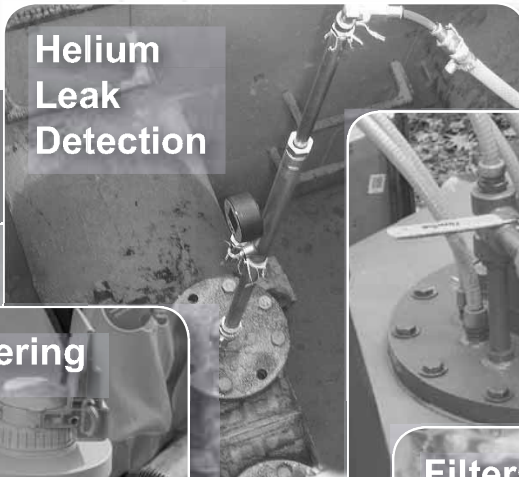
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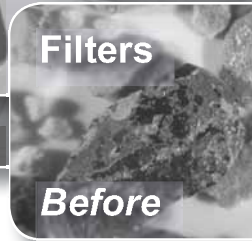
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Southwest White County Water Authority and City of Beebe Settle Water Service Territory Litigation

The City of Beebe has paid \$150,000 and transferred water service rights to 36 customers in settlement of litigation initiated in 2015 by Southwest White County Public Water Authority.

On January 22, 2015, Southwest filed suit against the City in United States District Court alleging that the City had encroached upon Southwest's water service territory in violation of a federal statute found at 7 USC 1926b.

The federal statute provides that municipal water utilities may not provide water service within the territories served by rural water associations indebted to the United States Department of Agriculture-Rural Development. The service territory protection is intended to preserve and grow the customer base of rural water associations thereby assuring water service revenues sufficient to repay federal loans.

According to Tate House, Southwest general manager, the settlement allows Southwest the right to provide water service to 36 customers that the City had previously served. Southwest, in turn, agrees not to challenge the City's continued water service to

customers located within the City's Terrace Meadows and Bellengrath subdivisions. Without admitting admission or fault, the City also paid Southwest the sum of \$150,000, which Southwest will use in order to pay legal fees and to fund costs related to transferring customer water service.

Heartsill Ragon III of Gill Ragon Owen, P.A., Little Rock, lead legal counsel for Southwest, stated: "This settlement is a strong endorsement of the anti-encroachment and service territory protection rights that are afforded rural water utilities by federal law. Municipalities should carefully review their expansion plans in the future to ensure that they do not provide service to customers who can readily be served by rural water associations."

In 2007, the City annexed a portion of Southwest's service territory and notified Southwest that the rural water utility was no longer allowed to set water meters within this newly annexed territory. In response to this notice, Southwest delivered correspondence to the City advising the City that it would defend its service territory rights as allowed by federal law.



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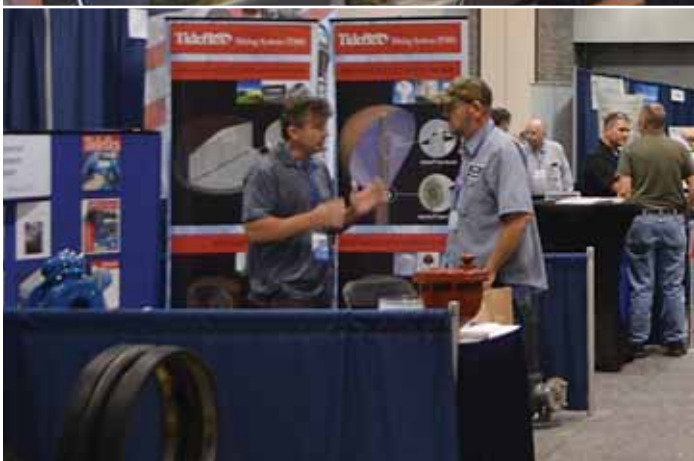



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You may have heard mention of defensive driving, but do you really know what it means? Defensive driving is one of the most important things you can do to prevent injury on the job. Let's take a look at the meaning of driving defensively and discuss techniques for staying safe.

What is Defensive Driving?

Defensive driving means anticipating dangerous situations by taking into account the actions of others and the presence of adverse driving conditions. Simply stated, defensive driving means being completely ready for potential surprises on the road.

What does Defensive Driving Require?

Defensive driving requires the knowledge and strict observance of all traffic rules and regulations applicable to the area in which the vehicle is being operated. A successful defensive driver will never be involved in a preventable accident. The following requirements of the National Safety Council's Defensive Driving Program can be helpful in learning to drive with a more defensive mentality. According to the program, defensive driving requires:

- A constant alertness for the illegal acts and driving errors of other drivers, and a willingness to make timely adjustments in your own driving so that these actions will not cause you to get into an accident.
- An understanding and anticipation of any adjustments you may need to make in your driving for hazards presented by unusual or changing conditions. Such conditions include the mechanical functioning of your vehicle, type of road surface, weather, light, amount of traffic, and your physical condition and state of mind.
- A thorough knowledge of the rules of right of way and a willingness to yield the right of way to another driver whenever necessary to avoid an accident.
- An attitude of confidence that you can drive without ever having a preventable accident.

3 BASIC STEPS TO DRIVING DEFENSIVELY

Strive to follow these three basic steps:

- **See the hazard.** When driving, think about what is going to happen or what may happen as far ahead of encountering a situation as possible.
- **Understand the defense.** Specific situations require specific ways of reacting. Become familiar with the unusual conditions that you may face and learn how to handle them.
- **Act in time.** Once you've noted a hazard and understand the defense against it, act as soon as possible! Never take a "wait and see what happens" attitude when driving.

By remembering these three steps and keeping good driving techniques in mind, you will learn to tailor your own driving behavior to the unexpected actions of other drivers and pedestrians.

You'll also be ready to adapt to the unpredictable and ever-changing factors of light, weather, road and traffic conditions, the mechanical condition of your vehicle and your physical ability to concentrate and drive.

Helping Your Company

Learning proper defensive driving techniques will not only protect you and others on the road from injury; it will also help protect by avoiding the property damage and liability risks that are associated with even the most minor employee driving accidents.

More Information Contact:

David Feild

Risk Services of Arkansas/INSURICA

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Young Retires After 31 Years as Director of Arkansas Natural Resources Commission

Dennis Sternberg, CEO – Arkansas Rural Water Association



J. Randy Young, PE, retired on July 31 after 45 years of service to Arkansas as an employee of the Arkansas Natural Resources Commission (ANRC) and its predecessor the Arkansas Soil & Water Conservation Commission. Mr. Young served as a Water Resources Engineer, Deputy Director, and Executive Director of ANRC. He served 31 years as Executive Director and Secretary to the Arkansas Natural Resources Commission (ANRC).

Randy was born in Russellville and reared on a dairy farm near Dover. He attended Arkansas Tech University, obtained a B.S. in agricultural engineering, and a M.S. in environmental engineering from the University of Arkansas –Fayetteville.

In the area of public water protection and development, Mr. Young was instrumental in development of the 1990 and 2016 Arkansas Water Plan, passage of the Arkansas Groundwater Management and Protection Act, and amending the surface water allocation law to give municipal domestic water use the highest priority during shortage.

In the area of water and wastewater infrastructure

development, Mr. Young obtained the first state level water funding through the Arkansas Water Development Fund, development of the ANRC General Obligation Bond Program, and issuing the first Arkansas General Obligation Bonds in modern times having assisted with passage of four authorizations totaling \$950 million to issue general obligation bonds. State programs have provided funding to over 1400 projects with financial assistance totaling in excess of \$1.4 billion. In addition to the state financial assistance, Mr. Young oversees the Arkansas Drinking Water and Clean Water Revolving Loan Funds.

Mr. Young has also made significant contributions to the areas of agricultural water supply, soil conservation, non-point pollution source abatement and proper nutrient use in the state.

"I have enjoyed my working relationship with Arkansas Rural Water and [its executive director] Dennis Sternberg" said Young, "I think Arkansas is a better place because of our work together."



Congratulations Ernie Faucett Scholarship Winners for 2016



The Scholarship Committee was proud to announce the Ernie Faucett Scholarship winners at our 2016 ARWA Conference in Hot Springs. Scholarships are awarded to students who are dependent children or step children of employees of ARWA member water utilities. The funds available to provide these scholarships are earned through donations and your support of our Ernie Faucett Scholarship fund raising events throughout the year. Thanks to our supporters and golf tournament participants, we were privileged to be able to give (21) schol-

arships this year. Nineteen of these were for \$500.00 and then two were awarded in the amount of \$1000.00 each. The thousand dollar scholarships were sponsored by H D Supply & The Aquasure Program from Risk Services Insurance. This is our way of giving something back to you and your families and saying "Thank you" for your enduring support.

These applicants were chosen at random from over (40) entries that we received from our member systems.

The \$500 scholarship winners are as follows:

NAME	SYSTEM	COLLEGE
1. Anna E Best	Lafe Regional Water	Arkansas State University - Jonesboro
2. Sydney Bowman	Beaver Water District	University of Arkansas
3. Miranda Campbell	Huntsville Water Utilities	Missouri Southern State University
4. Devon Hayes	Wilburn Water Assoc	Arkansas State University - Heber Springs
5. A' Quincy James	Gould Municipal Water & Sewer	University of Arkansas - Monticello
6. John Brian Kirksey	Alpine Water Assoc	University of Arkansas
7. Madison McCord	Fulton County Water Authority	Ozarka College
8. Sydney McFarland	City of Summit	University of Arkansas
9. Evan W McKinnon	Parkers Chapel Water	Ouachita Baptist University
10. Victoria McKinnon	Lisbon Water	Henderson State University
11. Audrey R Patterson	Harrisburg Water & Gas	Arkansas State University
12. Allie Swayde Reep	Southeast Bradley County Water	South Arkansas University
13. Logan Hannah Riley	Newport Municipal Water Co.	Arkansas State University - Jonesboro
14. Mackenzie Smith	Fulton Co. Water Authority	Ozarka College
15. Jeffrey Steward	Newport	Arkansas State University
16. Jeni Veazey	Watson Chapel Water Assoc	Jefferson Regional Medical Center School of Nursing
17. Audrey "Cheyenne" Williamson	Brookland Utilities	UAMS College of Pharmacy
18. Andrew Yardley	City of Alma Water	University of Arkansas - Fort Smith
19. Courtney L Zollicoffer	City of Ozark Water	University of Arkansas

We are honored and proud to be able to award these scholarships to these students and hope this financial award will help in their educational endeavors.

2016 SCHOLARSHIP WINNERS

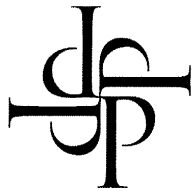


2016 SCHOLARSHIP WINNERS



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9/21/2016

Thank You for selecting me as a winner of the Ernie Faucett Scholarship for \$500. This scholarship will certainly help in my pursuit of a degree in Media Communication. Once again, Thank You.

Sincerely,
Andy Yardley

October 4, 2016

Dear Mr. Sternberg and ARWA,

I would like to take this opportunity to thank Arkansas Rural Water Association and those who provide support for the Ernie Faucett Scholarship Fund. These scholarships are a great blessing to not only myself but to all who receive them.

Thank you again for helping me as I continue to work toward furthering my education and achieving my degree.

Courtney Zolliecoffer
University of Arkansas Student
(Ozark Water Department)

2016 State WaterPac Raffle Winners

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Henard Utility Products, Inc.
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Check Valve Maintenance

By Jim Barkie, ARWA Circuit Rider

How often do you check your lift stations to see if the pumps are working at full capacity? They may be functioning enough to move the wastewater and prevent overflows but could be running longer than normal to get the job done. I recently visited a system that was experiencing reduced flows from both pumps at the main lift station. They have eight inch pumps that are rated at 900 gpm each, but both were showing a little over 600 gpm output. Both pumps sounded fine, and all other indications were normal. We found both check valves were



full of mop strings, rags, and other debris.

After we cleaned them both, the pumps produced 900 gpm again, and run times were reduced. The system now keeps extra gaskets on hand and plans to clean the check valves routinely to ensure they are running at peak performance. If you experience reduced flows from your lift stations, start with the simple things first.

Eliminating any debris from entering the collection system is impossible, but cleaning your check valves is cheap and easy, and it will prolong the life of your pumps and motors.



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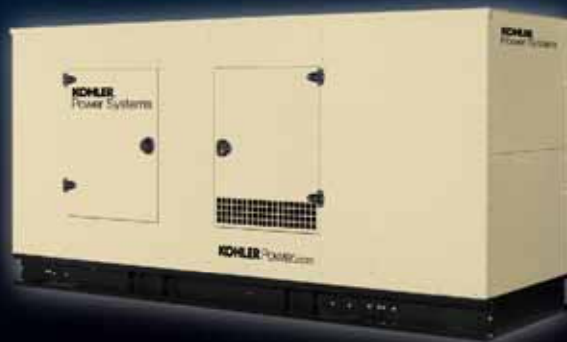
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Ultra Sonic Flow Meter Uses

By Josh Freeman, ARWA Circuit Rider

Arkansas Rural Water Association (ARWA) has ultra sonic flow meters which can be used in many ways on a water system to see how much flow is moving through a certain section of pipe. The meter is installed on the side of at least twelve inches of straight pipe from two inches through twenty-four inches in diameter to see how much water is going through the pipe. This allows us to do a master meter, to see how much a pump is actually pumping or leak detection. To do an ultra sonic meter test, we need the material, diameter, and thickness of the pipe which we can get. The system usually doesn't know but will have to find out if the material is ductile iron and if there is a mortar lining in the pipe and how thick. The flow meter is also great in leak detections where you can tell how much water is going



through the line. The only pipe material that we have found that it does not work on is AC (asbestos concrete).

Master meter testing using the ultra sonic meter needs to be installed near the master meter, and we will do a comparison test by running certain number of gallons or getting the GPM through the meter. It has been most beneficial for ARWA in doing leak detections. If you think there is

leak in an area, we can pinpoint by spot digging holes down the line and attaching the meter to the exposed pipe in the holes to help narrow the location of the leak. If there is a safe location with a power supply, it can be left to see how much water is used in a section of the system. If you have any questions on Ultra Sonic Flow Meters, please feel free to call Arkansas Rural Water Association at 501-676-2255.



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Valves and Water Audits Safety In The Heat

By Rodney Baldwin/ARWA Circuit Rider

Knowing where your valves are on your system and having a good valve maintenance program will assure you of being able to valve off and isolate sections of your system to make repairs or help with leak detection. Having a good set of maps that are up-to-date will add to your ability to locate your water lines and vales. This is very important in leak detection as well as in case of an emergency in your system. This might keep you from draining your system down and having to be on a boil order as well as minimize the number of customers that may be without water.

Maintaining water loss is a big part of your water audit. By performing a water audit on an annual basis, it will help you to justify water rates as well as the



need for a rate study if the present rate is not allowing you to keep up with an aging system. You will know who your minimum users are as well as your high-end users. You will know where you can save money and where you will need to make upgrades. By locating and fixing leaks, you will save money on chemicals, electrical power, as well as possibly detecting problems before they become a large problem. Water audits

will help to save water loss. As time goes on, we learn how valuable water is to us and how we need to be good stewards in regards to water waste.

The main thing to watch for in the heat is to stay hydrated, watch the ones you are working with, make sure you drink plenty of water, and do not over heat.

The advertisement features a background image of a two-story house partially submerged in floodwater. Overlaid on this image is the text 'LEAK ADJUSTMENTS HIT YOUR BUDGET LIKE A FLOOD' in large, bold, white letters. In the top left corner is the ARWA logo with the text 'AFFINITY PROGRAM' below it. In the top right corner is the ServLine logo. At the bottom, it says 'CONTACT KIRK SMITH:' followed by 'Email: Kirk@ServLine.com' and 'Phone: (615) 243-6490'.

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WATER OPERATOR LICENSE EXAMINATIONS

JANUARY 2016-DECEMBER 2016 PAPER BASED 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. Call (501) 661-2623, ask for Water Licensing Program.

Listed below are the dates and locations of examination sessions as scheduled, as of **January 1, 2016**.

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
12/2/2016	10/18/2016	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00 AM
12/2/2016	10/18/2016	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
12/2/2016	10/18/2016	Nashville	Carter Day Center, 200 Nichols Drive	9:00 AM
12/9/2016	10/25/2016	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
12/9/2016	10/25/2016	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	9:00 AM
12/9/2016	10/25/2016	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: < <http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm> >.

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ARWA GETS LETTERS AND E-MAILS FROM SYSTEMS



• Dear Sternberg, April 26, 2016

Thank you for allowing Mr. David Quattlebaum to come to our school and teach us about ground water pollution and how easily it can be polluted. He was very informative and did a great job teaching our Natural Resource Class.

Dylan
Mena High School Student

• Dear Mr. Sternberg, April 26, 2016

Thank you for allowing Mr. Quattlebaum to come to our school and show us the water model. It was interesting and better knowledge for us on how and where water goes.

Sincerely,
Joseph
Mena High School Student

• Mr. Sternberg, April 26, 2016

Thank you for allowing Mr. Quattlebaum to come to our school and speak to our class. He presented us with a model and showed us how it worked and it was very interesting. I enjoyed listening to him speak to our natural resource class, and I hope he continues educating students across Arkansas.

Sincerely,
Sierra Sanders
Mena High School Student

• Dear Mr. Sternberg, May 3, 2016

Thanks to you and your staff at ARWA for all that you do for the City of Mountain Home Water & Sewer Department.

Today I want to thank you for making Tim Carey available to us for testing & checking the calibration of our

large meters for us this past month.

You are truly blessed with a great staff, each and every one of your staff are great to work with, and we as a utility are blessed to have this resource available to us to utilize.

I appreciate all the help we get from ARWA. I cannot express how much we value your services.

Thank you,
Alma L. Clark
Director Water & Wastewater Services

• Dennis Sternberg, June 10, 2016

I want to say Thank you for the Exam review class that I recently attended. Jim is a great instructor, and I really appreciate him for all that he does to help us with preparing for our test.

Again, thank you for doing this and allowing Jim to be our instructor. He is great at what he does.

Michael Patrick
City of Batesville

• Dear Mr. Sternberg, June 20, 2016

On the City of Dardenelle and its employees' behalf, I would like to thank you and more specifically, Terry Fortenberry and his crew for the excellent and I might say professional job of cleaning and videoing a large portion of our sewer main infrastructure.

For some time we have been experiencing large frequencies of the two things sewer operators hate the most, stoppage and infiltration. We knew we had certain areas of the system with higher frequency of problems than others, but did not know the exact locations of those problems.

With the help of Terry and his crew's expert use of the Vac-Con and mobile camera system, we now have exact locations of those trouble spots along with video records to assist in repairs of those problems.

I would like to express my sincere appreciation to the Arkansas Rural Water Association and staff for its' continued assistance to those members who would otherwise not have the ability to solve problems such as ours.

Carolyn McGee, Mayor
City of Dardanelle

• Dennis, June 30, 2016

Just wanted to drop you a line to let you know how much I appreciate your organization. You have knowledgeable employees. If they don't have the answer, they will get you one. I feel like they are a valuable asset to the water and waste water operators in the small communities who don't have the resources or even know how to obtain help when they need it. I can't say enough good about them. Thanks again for all you do.

Thank You,
Arnold Elmore
Public Works Director, Mansfield

• Sternberg June 30, 2016

I just finished water classes in Springdale with Jim. I just wanted to let you know he is the best teacher I've ever had! Very smart and funny guy, great sense of humor. I hope he keeps teaching for long time. We are very lucky to have him in Arkansas.

Bronson Alex Brewton

• Sir: July 14, 2016

I attended Basic Distribution class in Mountain Home, Arkansas July 12-14 with Mr. Philipp as the instructor. I attended this class to meet my renewal for T-4 and D-4 license. Mr. Philipp was very knowledgeable and showed concern for all to learn. Though I do not have to test, I participated due to

his good teaching habits and relearned what I had forgotten. Please congratulate Mr. Philipp on a good job performed.

Thank ya,
Larry Skiver T-4 and D -4 operator
Mountain Home Water Plant

• Dennis Sternberg, July 18, 2016

I would like to express my appreciation for the generator that ARWA recently loaned us during a power outage on one of our rural systems. I called you and within a few short hours Terry Fortenberry showed up with it. We were able to avoid pressure loss and a boil order thanks to your fast response to our predicament.

Steven L. Rand
Warren Water & Sewer

• Dennis, July 18, 2016

Good afternoon, I wanted to take some time and recognize Jim Philipp. I had been studying for my D4 exam since May of 2015. As you know, it takes time to take all the required courses before you can even take the test. I started taking the test in September of 2015. I'm proud to say I finally passed on my 6th try and \$225 later on July 15th 2016 through AMP. Through the course of the different classes and different instructors, I found that Jim is the most caring of his students and does anything he can to help. He has gone as far as meeting with me after his 3-day classes in Lonoke and even opened his home up to me when I took the test in Hot Springs in May just so I wouldn't have to leave early from Little Rock to make it there with plenty of time. I can't thank him enough for all his help. He's so humble. He says he doesn't do anything but be a cheerleader. The guy knows his stuff, and I'm glad I know him! I just wanted to take some time and let you know he is very appreciated.

Tee Easley
Jacksonville Water Works

• Hi, July 25, 2016

I took a class 3 wastewater class in West Fork, AR last week with Jim Barkie and Susan Poe. I really enjoyed their class. They were very informative, and they covered all the information that I needed to pass the test. So, I was just wanting to let you know how much I appreciate them doing such a good job!

Colby Jones

• Mr. Sternberg August 25, 2016

I had the privilege of visiting the rural water facility in Lonoke a month ago. I attended a basic math class. James Philipp was teaching class. I enjoyed the class. James taught the class in a way that made it interesting (never had chance to dose off). We worked math problems that actually pertain to the things Water Operators do. Jim came to Rosston and helped me with some math problems and persuaded me to take a math class in Lonoke. I am glad I did. I passed my test for D 1. I just wanted to say thanks to you, Jim, and everyone at Arkansas Rural Water.

Thanks
Vince Biddle
Rosston Waterworks

• Dennis, September 5, 2016

I would like to take a minute and tell you about my experience last week at the water review classes. I was there to review for a treatment II test. It was wonderful!!

I tested on Friday, and I think there were only 2 questions out of 100 that I could not remember being discussed in previous trainings for this test or from the review itself. Jim and Ron have done a great job in preparing me for taking this test. I am patiently awaiting the results from ADH, but I feel very confident that I passed. This, of course, is directly due to the training I received at seminars that your people put on.

As I told Jim, I am from Mount Magazine State Park, and 98% of the things we have to learn for these tests I have never seen, much less done. So, I wanted to let you know that I would not be able to even start on these tests without your guys help.

Thank all of you for all your efforts in helping me achieve my goals.

Jeff Braden
Maintenance Technician
Mt. Magazine State Park

• Good Morning Dennis, Sept. 7, 2016

I just wanted to take a minute to let you know how well Jim Philipp helped me prepare for the D-4 exam last week. It was my second attempt at taking the exam, and I feel very confident that I passed this time. The first time around, I took a class from another training group, and I did not feel very confident after I walked out of the test. The instructors at ARWA are very knowledgeable, very easy to talk to, and truly care about the people in their classes.

Keep up the good work there!

Thanks,
Mark Ferguson/Water Systems
Engineer
Conway Corporation

• Mr. Dennis Sternberg, Sept. 26, 2016

I would like to express my appreciation for the work that you and ARWA do. Terry Fortenberry is a tremendous help to me on a regular basis. I cannot tell you the number of times that he and the other circuit riders have assisted me. Their knowledge and experience is invaluable. Just today, Terry assisted me in replacing the impeller seals on one of my wastewater pumps. Without Terry's guidance, I would have made a mistake which would have been very confusing to troubleshoot and potentially expensive. Without the services of ARWA, Water and Wastewater Utilities in the state of Arkansas would be in dire straits.

Thanks,
Jaymes C. Moreland
Water/Wastewater Operator,
City of Watson

ARWA TRAINING AND EVENTS 2016

ARWA WATER TRAINING SCHEDULE 2016

11/8/2016	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane – Lonoke	Basic Math	Jim Philipp
11/10/2016	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane – Lonoke	Applied Math	Jim Philipp
11/15-17/2016	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane – Lonoke	Advanced Distrib.	Jim Philipp
11/30/2016	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane – Lonoke	Water Exam Review	Jim Philipp
12/1/2016	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane – Lonoke	Water Exam Review	Jim Philipp
12/6-8/2016	8:00 am – 5:00 pm	ARWA Training Center	240 Dee Dee Lane – Lonoke	Advanced Treatment	Jim Philipp
12/13-14/2016	8:00 am – 5:00 pm	Community Center	201 Bobbie Jean Lane – Heber Springs	License Renewal	Jim Philipp

ARWA WASTEWATER CLASS SCHEDULE 2016

12/14-15/2016	8:00 am – 5:00 pm	Community Center	201 Bobbie Jean Lane – Heber Springs	License Renewal	Susan Poe
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To see our entire schedule of classes or to get more details
please go to our website: www.arkansasruralwater.org

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Water Loss and In-house Leak Detection (Part 2)

By Roy Richards/ARWA Circuit Rider

Now that you have narrowed it down to zoned areas, you will need to go to that area and start with dead-end sections of lines. Valve off the dead-end valves for a few minutes, then listen to the wrench as you turn the valve back on. Turn it on slowly. Depending on the valve size, it may take a couple of turns to get it off seat.

If the line pressures up right away and you stop hearing water flowing, then most likely, there is not a leak on this line.



Now, if the line does not pressure up and you can still hear water flowing, then that line most likely has a leak.

You will need to do this to as many lines as you can. You may have to do this over a couple of nights.

If you find that you are getting overwhelmed or cannot find a leak on a section of line, call Arkansas Rural Water Association for technical assistance. We will

be glad to come give you a hand in finding the leak with you.



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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.

- 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.
- Water Circuit Riders, 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 water and wastewater

training and on-site technical assistance for ARWA members year-round.

- 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 renewal 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, D.C.
- NRWA Water Rally - The Washington, D.C. “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?

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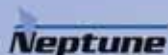


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Rural Cooking

• Mrs. McVay's Chocolate Cream Pie

- 1 cup regular milk
- 1 cup canned pet milk
- 3 egg yolks (slightly beaten)
- 1 cup sugar
- 3 Tablespoon All Purpose Flour
- dash of salt
- 2 Tablespoons Cocoa Powder
- ½ stick butter
- 1 Teaspoon vanilla

Combine milk and egg yolks in pan and heat on stove till hot not boiling. Mix sugar, cocoa, salt, and flour in small bowl till well mixed. Add to milk mixture in pan and stir till all ingredients are smooth. Add butter and continue to cook on medium heat till thickened. Remove from heat and stir in vanilla. I had never added butter until filling is done but this recipe does and it works. Add cooled pie filling to a baked pie crust and top with meringue.

• Mile High Meringue

- 5 egg white at room temperature
- ½ teaspoon vanilla
- 1 teaspoon cream of tarter
- ½ cup sugar

Put egg whites, cream of tarter, vanilla in mixing bowl. Beat with electric mixer until stiff peaks form. Add sugar 1 tablespoon at a time beating well after each tablespoon is added. Pour on cooled pie shell and bake at 400 degrees till browned to your liking

• Fried Pie Dough

- 1 ½ cup all purpose flour
- ¼ teaspoon salt
- 1/3 cup Crisco Shortening

- ¼ teaspoon baking soda
- 1 teaspoon baking powder
- ½ – ¾ cup buttermilk

Add all dry ingredients and mix well. Add Crisco and cut into dry ingredients with a pastry cutter. Add buttermilk gradually till mixed well. Dough should be mixed but not wet. If too dry add a little buttermilk. That is why the amount is ½ – ¾ cups. Take a heaping tablespoon of dough and roll out on floured surface in a circle. Add your favorite fruit pie filling. With your finger and add a small amount of water on one side of the crust. Fold over and crimp with a fork dipped in flour. Fry the pies in Canola Oil till browned over medium high heat. Drain on paper towels. Delish!!

• Brownie Cookies

- 1 box family sized Brownie Mix (any flavor)
- 1 egg slightly beaten
- use one half of wet ingredients (oil and water)
- Add ½ cup self rise flour

Mix all ingredients well. Place one heaping tablespoon of batter on parchment paper lined cookie sheet. Bake at 350 degrees for 8 minutes and no longer.

• Buttermilk Dressing

(similar to Ranch but much better)

- 2 cups mayonnaise
- 2 cups real buttermilk
- 2 ½ Tablespoon parsley flakes
- 1 tablespoon coarse ground black pepper
- 1 tablespoon minced onion flakes (dried)
- ½ tablespoon garlic powder
- 1 tablespoon salt
- ½ tablespoon Accent Seasoning

Combine all ingredients and mix In well sealed jar. Stays fresh several weeks. Amazing as dip for homemade French fries.



• Spicy Asian Chicken Noodle Salad

- 1/2cup rice vinegar
- 1/3 cup Kikkoman Soy Sauce
- 1/3 cup Crisco Oil
- 1 tablespoon sugar
- 2 teaspoons grated fresh gingerroot
- 2 tablespoons Asian-style chili-garlic sauce
- 3 tablespoons sesame oil
- 12 oz vermicelli pasta, cooked and drained
- 1 cup thinly sliced green onions
- 2 cups diced cooked chicken
- 1 cup snow peas, cooked and drained
- 1/2 cup chopped fresh cilantro
- 1/4 cup McCormick sesame seeds

In a large serving bowl, whisk together first 7 ingredients. Add pasta, green onions, chicken and snow peas; stir to coat with sauce. Add cilantro and sesame seeds; toss to blend. Serve slightly warm or at room temperature. Yield: 6 servings.

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Lift Station Maintenance

By Terry Fortenberry, Circuit Rider/Trainer

During the past 26 years working at ARWA, I have been able to help systems throughout the state with all types of issues from rebuilding pumps, electrical problems, seal replacement, pumps and lift station issues that cause their pumps to not operate efficiently, just to name a few.

Another common problem that we can have with our wastewater pumps is a collection of all sorts of items that somehow almost mysteriously show up in our lift stations such as bottles, balls, 2X4's, bricks, wrenches, rags, pieces of pipes, brooms, mops, bed sheets, and the list goes on. Oh, and of course, there is the normal buildup of grease and sludge.

Regardless of the type of pumps you have, grinder type or solid removal type. They are probably not designed to deal with all the debris that can be found in your lift station. Therefore, it may be necessary to



periodically remove such debris by some means so that your pumps will not be damaged by becoming clogged or not pumping due to trying to pump such items. The all too common problem that has been found even if debris and items such as named above are not found in a lift station is a buildup of sludge in the bottom of the wet well from insufficient pumping and or circulation of the wet well. I have seen this sludge get thick and settle around the suc-

tion pipe or pump to where it prevented the pump from pumping at all. I have helped systems and been successful in breaking up this sludge and removing it with the pumps along with the help of a sewer jetting machine or a pumper truck to break up the sludge and liquefy it enough that the lift station pumps could remove it. Of course, this will not get rid of other objects as mentioned, as they will have to be removed some other way.

A piece of equipment that ARWA is fortunate to own now is our Vac Con truck that can make this task much easier. If the wet well can be accessed with the snorkel of the truck, most all debris, grease, and sludge can be removed from the wet well and taken to the systems Treatment Plant, thus giving the pumps a fighting chance and prolonging the life of the pumps. If this procedure were done on a routine basis, say every year or couple of years, it could mean less time needed to be spent on unclogging pumps, repriming pumps, and replacing pumps.

If you would like to have assistance or want information on the fee and possible use of our Vac Con Truck for cleaning your lift station wet wells, please contact our office at 501-676-2255.

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Looking for Submissions

We are looking for article and recipe submissions from our members for future editions of Water Insight! Please email your submissions or questions to arkrwa@sbcglobal.net, or feel free to call us at 501-676-2255. ARWA reserves the right to edit all submissions, and we do not guarantee that all articles or recipes will be published. We are looking forward to hearing from the Arkansas Rural Water Community!



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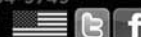
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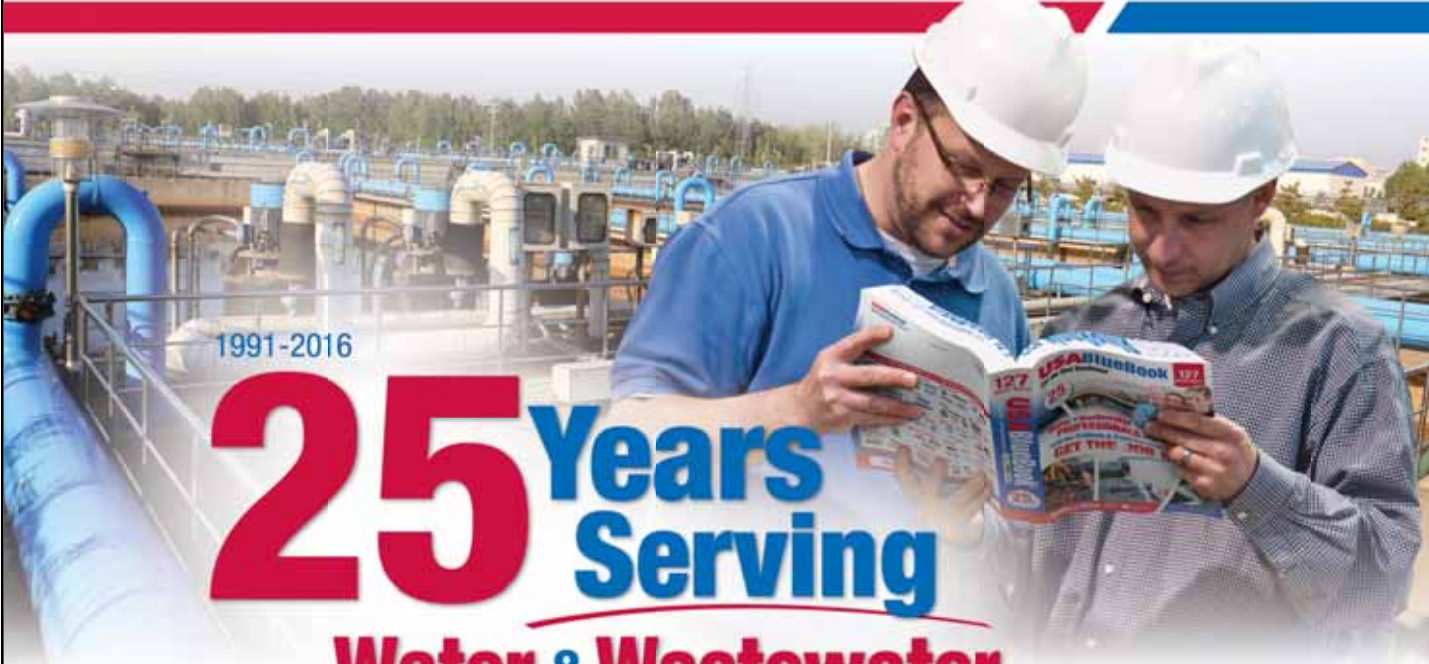
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