Happy Holidays
from Arkansas Rural Water Association’s Board of Directors and Staff
By the time everyone receives this magazine and is able to read this article, we will be ending 2017 or beginning 2018, and will be wrapping up one year and planning for another year for your utility.

I would like to take a minute and reflect back on the 2017 Arkansas Legislative Session. The Arkansas General Assembly meets every year, but on odd years (like this year 2017), they are in what is called a Regular Session, and State Representatives and State Senators can introduce any type of legislation. On even years (2018, etc.), these are budget years, and they are handling the State’s budget.

This past year, 2017 was a Regular Session, and each legislator introduced numerous bills that they felt would be beneficial to someone or some special interest group. Each bill is assigned to a committee on either the House of Representatives or the Senate side to be presented by the sponsor to the committee to hopefully get the committee to vote the bill out to the respective chamber for consideration by the full body (House of State Representatives or the Senate). Once the piece of legislation is voted on, the Senate Chamber or House Chamber receives a DO PASS, and (51%) of the vote of the chamber is transferred to the other chamber for the same process to be repeated. Once the piece of legislation has passed both houses, it is sent to the Governor for his signature.

There is a need for everyone to stay involved with the different industry groups such as the Arkansas Rural Water Association, Arkansas Water and Wastewater Managers Association, and the Arkansas Municipal League to monitor how each organization is standing on the specific legislation. You can also go to the internet and log in at http://www.arkleg.state.ar.us/assembly/ to monitor legislation, as well as, to check on how each member votes on the legislation while the bill is voted on in the House or Senate floor.

Below are a couple pieces of legislation that was introduced that ARWA opposed this session because the ARWA Board of Directors felt the pieces of legislation were not good pieces of legislation for the industry in their present language.

SB332 TO PROVIDE OPEN AND FAIR COMPETITION FOR STATE-FUNDED WATER, WASTEWATER, AND STORM WATER DRAINAGE PROJECTS BY INCLUDING ACCEPTABLE PIPING MATERIALS IN A PROJECT BID.

This bill was sponsored by the PVC industry trying to get the State of Arkansas to pass a law that would require water, wastewater, and storm water drainage entities to take the lowest cost material regardless of your systems wishes on the type of pipe.

The PVC pipe industry also had legislation sponsored in at least four other states this past year. NO state passed this legislation, but a lot of money was spent to try and pass this legislation.

The PVC pipe industry is now trying to get federal legislation passed regarding this legislation. ARWA believes this is a decision that the local entity should be able to make and not have state or federal legislation dictating a specific type of pipe must be used just because it is cheaper.

SB376/ACT 1056 TO CREATE THE WATER PROVIDER LEGISLATIVE TASK FORCE.

ACT 1056 passed the General Assembly and requires that” A report on all tasks completed by January 1, 2019, to the Governor, the Director of the Arkansas Economic Development Commission, the Arkansas State Chamber of Commerce, the Arkansas Municipal League, the Association of Arkansas Counties, water providers, the members of the Senate Committee on City, County, and Local Affairs, the House Committee on City, County, and Local Affairs of the Ninety-Second General Assembly.”

This ACT requires the Water Task Force to look at many different areas regarding water and wastewater systems and how they operated and managed.

I would encourage each one of you to go to the link for the Arkansas Legislative site, and download a copy of this bill to get a better understanding of the potential effects, positive or negative, depending on how you look at this.

I will try in the upcoming WaterInsight Magazine to include other items of interest and any updates on the Water Task Force at that time.

Please mark your calendar for ALL the ARWA 2018 Training Sessions by watching for the 2018 ARWA Training Calendar or by going to ARWA’s website at www.arkansasruralwater.org and download the calendar.

If you have any questions or need assistance, feel free to contact me at 501-676-2255.

Wishing everyone a Merry Christmas and Happy New Year!
Arkansas Rural Water Association

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Cover Photo
May this joyful season greet you with health and happiness.
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 •
Arkansas Rural Water Association

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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.

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Introducing New Wastewater Technician/Trainer

By Shelby Townsley, Wastewater Technician/Trainer

I would like to introduce myself. I am Shelby Townsley, and I am one of the newest members of the Arkansas Rural Water Team. I will be the Wastewater Technician/Trainer covering primarily the Western half of the state. I will also be working with Susan Poe on the training classes for Wastewater.

I was born and raised in Central Arkansas, and I am currently living in Greenbrier. I am blessed with a loving wife and four healthy children. I was on staff with the City of Greenbrier for seven years and became the Wastewater manager in 2015. The City of Greenbrier had a Sequencing Batch Reactor which I was involved with since its inception. I look forward to visiting the different types of plants in the State of Arkansas in the near future.

I believe Arkansas is the best kept secret around, and I am committed to helping the Water and Wastewater Systems, to the fullest of my potential, to help them with their problems and do my part in protecting our resources in our beautiful state. If you have any problems, or if I can be of any assistance, please don’t hesitate to call me at 501-676-2255. I look forward to meeting y’all.
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 Membership
Why Should I Join?

- 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.
- 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, 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: arkrwa@arwa.net or arkrwa@sbcglobal.net • Web: arkansasruralwater.org
My name is Jimmy Ogden, and I am the new Arkansas Department of Health Circuit Rider for Arkansas Rural Water Association. I have been in the Water/Wastewater industry for 15 years. I started working at ARWA on September 18, 2017. I grew up and still reside in Lamar, AR in Johnson County. I have worked for municipal and rural water systems. I hope to bring my experience and knowledge to the job and learn from other ARWA employees and system operators. I look forward to the opportunities and the challenges of working for ARWA and assisting operators all over the state.

Since joining ARWA, I have had the opportunity to visit several water systems across the state and to work with them to solve issues. I look forward to meeting everyone and assisting with any issues you may have. Please feel free to call me anytime at 479-746-1815.
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What are the benefits of timely reporting of incidents: Timely reporting of injuries can provide numerous benefits to the employer, such as:

◆ Minimize the anxiety and frustration of injured workers’. – Reporting workers’ compensation claims late can result in delayed treatment of the injured worker, who now has no motivation to return to work. It also leads to additional lines of questioning that could lead to an employee becoming disgruntled.

◆ Prompt and correct medical treatment. – Prompt reporting ensures your employee’s get the proper medical care and can return to work as quickly as possible. It also, improves morale, and is effective containing your Total Cost of Risk.

◆ Avoids costly litigation. – The cost of the claim gets higher and higher for each day it is not reported.

◆ Provides a thorough investigation. – The longer period of time between an incident and the investigation, the less likely it is to develop a concise cause. When you are not able to determine the proper root cause, the corrective action plan developed doesn’t address the actual cause of the incident.

For more information contact:

David Feild
1501 Mart Drive
Little Rock, AR, 72202
P 501.666.6653
E David.Feild@INSURICA.com
One of the many requests that ARWA receives from systems is the request for help with looking at the system’s water rates to determine if they are sufficient or if they should be increased. One question I have been asked a lot when a system is looking at what to charge for their water is, What do other systems charge for their water? In my opinion, this is not a good way to determine what should be charged. A better question to determine what should be charged would be, What does it cost a system to provide the water to the customers in that system? The rate study program that we use to help a system determine what to charge for their water does just that.

When figuring a rate, there are, basically, two figures to come up with. One figure is how much to charge as a minimum, and the other figure is how much to charge for each thousand gallons over the minimum.

A fair minimum charge can be determined by taking the system’s yearly loan payment, including payment and interest on the loan, dividing that figure by the number of customers then dividing by 12 months which would give you a cost per customer per month. This would be used to collect from every water customer on the minimum to ensure that system could meet their debt service and make payments to all outstanding loans. This amount plus the cost per each thousand gallons of water allowed for the minimum, in most systems 1,000 gallons are allowed, however, some will allow 2,000 minimum. Whichever amount is used does not matter that much, as long as the system is getting paid for the whole amount. By using this strategy, every customer will be paying their share of the cost of the system.

The next figure to come up with is the cost for the water itself. This is usually figured as a cost per thousand gallons. This amount, when calculated, can be added for every 1,000 gallons allowed on the customer’s minimum to the debt service figure to determine a minimum bill. This cost per thousand would be collected for every 1,000 over the minimum to ensure adequate revenue is collected to maintain the system’s operation and maintenance cost.

Unfortunately, most often, when doing a rate study for a system, it can be found that the system is collecting way less per thousand than it actually cost to buy or produce the water due to rates not being increased for 15 to 20 years or other reasons. I usually tell systems it is like if they were to get in their truck, drive a hundred miles, buy a gallon of gas for $4.00, drive 100 miles back, and sell the gallon of gas to me for $1.00. It is not hard to see that if this is the case, they will not be able to continue to do this very long unless they do not need money to continue doing it.

Of course, everyone wants to keep water bills to their customers as low as possible, but one must charge enough to cover that system’s actual cost plus what would be needed for future needs and unexpected costs to ensure the ability of continuing to provide service.

If ARWA can be of any assistance in helping with a rate study or any other matter please contact us at 501-676-2255.
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For the last seven and a half years, many of you have known me as a Wastewater Trainer/Technician for Arkansas Rural Water Association. I have met and worked with great people across the state performing smoke tests, trouble shooting treatment plants, working on pumps and valves, and teaching certification classes. I have enjoyed it, and I have learned a lot during that time.

In September 2017, an opportunity was presented to me for the position of Circuit Rider with Arkansas Rural Water Association. I began my career in water and wastewater, with the City of Alma, Arkansas, working at the water treatment plant. Later, I moved on to line maintenance supervisor before joining the great people at Arkansas Rural Water Association. I guess you could say I have gone full circle now that I will be working with water treatment and distribution again. I will still come to your systems when needed to help you in any way I can, but now as a Circuit Rider instead of Wastewater Trainer/Tech. This new position opens up many areas that I have not been to before, and I look forward to meeting you. If you need assistance with anything, please call our office at 501-676-2255. We will make sure to get the right people heading your way as soon as possible.
Like an Opportunity to Speak at the ARWA 2018 Annual Technical Conference?

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Did You Know?

69% of RUS funded projects are to populations of 2,500 or less.

68% of Rural Water Circuit Rider assistance is to populations of 2,500 or less.

41% of RUS funded projects are to populations of 1,000 or less.

40% of Rural Water Circuit Rider assistance is to populations of 1,000 or less.
Considerations for the Financial Sustainability of a Water and Wastewater System

The holiday season is upon us. It’s a time to gather with family and friends as well as a time to reflect on the past year and plan for the upcoming year. It’s also the time when many water utility managers and their boards, council or commission come together to lay the foundation not just for the upcoming year’s operations, but to reflect on sustainability well into the future.

Water system sustainability is about planning, foresight and pragmatic financial management. It requires understanding the economic forces in your community as well as having a vision for where major trends are headed. In the Fall 2017 issue of WaterInsight, I outlined a few key macroeconomic trends and helpful resources that water managers and boards, councils or commissions should be attuned to as they consider the future of their water system. These include population change and demographics, job growth and unemployment, water source and usage, and business and industry trends impacting the local economy.

Managing the financial health of a water utility is crucial to ensuring that your community has clean and affordable water for generations to come. That responsibility can add a good deal of complexity to your role as a steward of your utility’s financial health. As an active lender to the water and wastewater industry, I focus on five key considerations when assessing a utility’s ongoing financial viability. These might be a good place to start when assessing your own utility’s sustainability.

Planning for Today

Begin with a thorough analysis of your current water rates. Are you only covering today’s obligations and not preparing for tomorrow? If you’re not, it’s probably time to start increasing rates to account for that. This doesn’t have to happen all at once. In fact, rate payers seem to appreciate gradual increases more than large one-time increases. Put together a plan on how much and when rates will be raised, and what the increase is intended to pay for. Share your plan with your community. An informed rate payer is usually a happier rate payer.

As you build up your rates, consider a line of credit as a stopgap funding source. In a perfect world, you would have enough cash on hand to handle any emergencies that pop up, and once you’ve implemented your rate plan, you eventually will. But in the meantime, consider getting a line of credit large enough to handle anything that might require immediate attention. For a small utility, $50,000 is probably enough. If you manage a larger utility, you will likely need more than that.

The benefits of a line of credit are quick access to cash, flexibility of use and interest-only payments. Lines of credit typically renew annually, so you can decide whether you want it on a year-by-year basis or otherwise. Government funding sources don’t offer lines of credit, but some private sources of funding (including CoBank) offer them.

Capital Planning

Capital planning is an exercise to determine how long your current facilities will last. How a utility goes about capital planning really depends on the situation. If your utility already has abundant access to clean water and is in a stable growth situation, you can probably address capital planning in a fairly nonchalant manner. This might include discussing it at an annual board or commission meeting and setting up adequate reserves for replacing existing facilities using only your current rates.

If you find yourself managing a water utility in a high growth area with limited access to water, you have a whole different situation on your hands. In this situation, you should probably engage the help of a professional rate consultant or capital planner. They can help you forecast future demand and the costs of meeting that demand, while also helping you charge a fair rate today.

Deciding how to cover replacement capital expenditures (capex) is one of the more challenging aspects of capital planning, because you have to determine how much of the cost of a future benefit will be paid for by current rate payers. If you only include a portion of the replacement cost in your current rates, you will need to find other funding to bridge the gap between the cash you have reserved and the cost of replacement, which likely means debt.

The same concept goes for expansion capex. There, however, the dilemma is lessened, because the utility is able to cover some of the cost of expansion via connection fees on new taps.

One sensible plan is to build depreciation into your rates, including an inflation adjustment annually (generally between 1 and 3 percent). You will likely have to use debt to bridge the difference between depreciation and actual replacement cost (especially if you are getting a late start on that replacement), but the cost of that
Using Your Audit

Another way to assess your utility's financial health is to look at your annual financial report card: the audit. Most water utilities conduct an annual audit. If you don’t have a current one, you should seriously consider it. Most sources of debt funding will require you to have one, but that’s not the only purpose. It can be very beneficial to have an impartial outsider come in and look at your books. Fraud detection is one important reason, but an audit will also help keep your books clean, and provide you as a manager with an independent appraisal of your utility’s financial health. The trick is knowing what to look for when you read the audit.

The first step is to read the auditor’s opinion, which is always at the very beginning of the audit. The auditor’s opinion will be one of two options: unqualified or qualified. Almost all opinions (especially in the water industry) will be unqualified, meaning that the auditor has found no reasons to not fully stand behind the audit. A qualified opinion is a much bigger deal. It means that the auditor has found something at your utility that forces them to qualify the opinion. It could be that they are concerned about the financial health of the utility. It could be that they found major independence and financial control issues. It could be that they found fraud. No matter what, a qualified opinion is a big deal.

After you’ve gotten through the auditor’s opinion, it’s time to look through the balance sheet and income statement. The balance sheet runs down your utility’s assets (what you own), liabilities (what you owe) and equity (the gap between the two). Balance sheets are important because they provide an indication of how financially stable your utility currently is, and its ability to absorb unplanned events.

Completing the balance sheet and income statement is the cash flow statement, which details whether your utility actually generated or lost cash. It does this by adjusting for non-cash items in your balance sheet and income statement, and by detailing whether the cash generated or used was involved in operating, investing or financing related activities.

The final portion of the audit is the notes to the financial statements, where the auditor explains everything that was summarized in the financial statement that preceded it. A lot of it is boilerplate language, but I encourage you to read it every year for those parts that are different from the previous year or significant in some way. If you get a call from your debt provider on your audit, it’s likely because of something that is or isn’t in these notes.

Financial Performance Ratios

As a general manager or board, council or commission member, the key financial factor you should pay attention to is the amount of debt compared to total capitalization (debt to cap), which is a ratio you will see if you borrow from private debt providers. The calculation goes like this:

\[
\frac{\text{Total Debt}}{\text{Total Debt} + \text{Total Equity}}
\]

Most utilities should target a ratio between 55 percent and 75 percent debt to cap. This allows for plenty of equity to absorb unexpected events and keep interest expenses lower. Access to low interest rate debt and long repayment terms can allow you to carry more debt, although a longer term will cost you more in interest expenses over time.

The income statement will show you how much cash over or under your expenses your utility collected the previous year. If your utility has included depreciation in its rates or is reserving for a big project, you will likely have positive net income for the year. If your utility doesn’t include depreciation in its rates or isn’t saving for a project, net income will likely be negative.

One key factor you should pay attention to within your income statement is the debt service coverage ratio. This is a financial measure that all providers of debt funding use to analyze the financial health of a utility and its ability to repay debt. The ratio varies depending on who you work with, but 1.10x is generally the lowest threshold you should expect. We would encourage targeting at least 1.25x to ensure additional monies are being generated and reserved for future needs.

The ratio is calculated differently by different debt providers, but this will get you in the ballpark:

\[
\frac{\text{Net income} + \text{interest expense} + \text{taxes} + \text{depreciation} + \text{amortization}}{\text{current portion of long term debt [found on the balance sheet]} + \text{interest expense}}
\]

A number around 1.0 means that your utility is generating enough cash flow to service debt payments but nothing more. A number under 1.0 indicates potential payment issues. Mitigating factors include a large cash balance on the balance sheet, a significant unexpected expense, and much lower water usage than expected (i.e., wet years).

Final Word

Managing the financial health of a water utility is much harder than most of your customers realize. There are a small number of actions you can take to ease some of that hardship. Put together a plan for what you’re going to need and how you’re going to pay for it, then share it openly with your customers. Build good relationships with all the providers of debt - that will make things easier when it’s time to finance a portion of your next project. Have an audit done annually, and read it carefully when it comes. Good or bad, it’ll give you an indication of what you need to do to deal with today - and how to plan for tomorrow.

While overseeing your utility’s financial health is a significant responsibility, it doesn’t have to be overwhelming. The ideas and practices outlined here can go a long way toward helping anyone ensure the success of a water system, both now and into the future.

Bentley Hodges is a senior relationship manager in the Water and Community Facilities banking division at CoBank.

CoBank is a member of the Farm Credit System, a nationwide network of banks and retail lending associations chartered to support the borrowing needs of U.S. agriculture, rural infrastructure and rural communities.
Upon a visit to McCrory, I was impressed with their new Water Treatment Plant that the city has gotten in operation this past year. The city received a 2.5 Million Dollar Grant from USDA for the construction of the plant with two new wells, which are capable of producing 500 gallons per minute. The system uses Sodium Permanganate, Polymers and Sodium Hydroxide to treat the ground water from the system. This is a great deal for the system to finally receive a much needed new plant to be able to provide the residents of the McCrory area Quality on Tap.
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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
ARWA GETS LETTERS AND E-MAILS FROM SYSTEMS

- Mr. Sternberg, 10/16/2017
  After a recent sanitary survey conducted by the ADH, our utility was informed that an upgraded treatment license would be needed. I called Mr. Jim Philipp my instructor for both the treatment and distribution classes from your organization. He recommended a number of ABC’s reference materials, spent some time answering my questions, and provided some insight into what should be studied for the exam. The City of Leachville has been a long-time supporter of ARWA and it is because of the fine staff you employ, the professional training classes you offer, and the many opportunities for operators to learn and obtain information at events like your EXPO and annual technical conference. I just wanted to say thanks to Mr. Philipp and ARWA for all you do for the Arkansas Water and wastewater operators throughout the state.

  Sincerely,
  James Robert Ballard
  City of Leachville

- Dear Mr. Sternberg: 11/7/2017
  Wright-Pastoria Water Association would like to say “THANK YOU” to Terry Fortenberry, ARWA Circuit Rider/Trainer; Jeff Ford, ARWA Deputy Director; Jimmy Ogden, ADH Circuit Rider; Chris Harris, ADH Circuit Rider; Roy Richards, USDA/NRWA Circuit Rider and Jim Barkle, USDA/NRWA Circuit Rider for coming to assist Wright-Pastoria with our water treatment plant issues and our water loss back in August 2017. With Arkansas Rural Water Association and other’s assistance, Wright Pastoria Water is operating more efficiently and producing good clear safe water from our treatment plant. The assistance with identifying and helping to correct our treatment plant filter problem and finding a major leak in our water distribution system that we were unable to find has allowed Wright-Pastoria to operate properly. Arkansas Rural Water Association is to be commended for your assistance your organization provides to small and rural communities across the state of Arkansas.

  Sincerely,
  Diane Akien, President
  Wright-Pastoria Water Association

- To Whom it may concern: 11/20/2017
  We at the Town of Portia Waterworks would like to take this time to thank the ARWA, USDA and USDA Circuit Rider Tim Carey, who over the last few years has saved our small town thousand of dollars with advice, help, and being there when we have needed them. One instance, in particular, we had a valve freeze and bust and with one call to ARWA, we had help on the way to get the valve changed out before we lost thousands of gallons of water. Thanks so much for all you do.

  Sincerely,
  Greg Duckworth, Operator
  Town of Portia Waterworks

- Dear Mr. Sternberg, 11/15/2017
  My name is Adam Owens, the water operation specialist for the City of Newark, Arkansas. We have roughly 540 Customers on our system in northeast Arkansas. I wanted to take a minute to share my experience with you about Tee Easley, the Energy Technician for the Arkansas Rural Water Association. Tee came to our fine city and spent several days at our water system. While there, she conducted an energy audit on all water well motors, treatment facilities, and pumping stations. We were released with her enthusiasm to help with cutting energy costs. Although, our motors are fairly old, she did mention they run pretty efficiently. She made recommendations on what can be changed currently and in the future as motors failed and also mentioned funding that is available through USDA/RD, NRWA, and ANRC, which was also included in her report. Our utility is also looking at other cost saving measures suggested by this energy technician. This includes having better control over energy usage especially during peak usage times. Mr. Sternberg, on behalf of Newark, Arkansas, thank you for employing such excellent professionals like your energy technician, Tee Easley, and thank you for what your organization does to support our industry in the state of Arkansas.

  Sincerely,
  Adam Owens, Water Operator
  City of Newark

- Dear Dennis Sternberg, 11/13/2017
  Source Water Protection Program
  I know that you already know this but feel that I need to express my appreciation to you anyway. I cannot express to you the great deal of help that we received from Arkansas Rural Water Associations Source Water Technician, David Quattlebaum. He was instrumental in the development of our Source Water Protection Plan. As you know, this is a required plan to have in place. As a small water system, we have many constraints to meeting some of the necessary requirements that are placed on us. Two of the constraints that we encounter the most are time (personnel) and money. Mr. Quattlebaum definitely filled those shoes tremendously in the development of our Source Water Protection Plan. His time spent was crucial, not to mention the fact that his services were provided for us at no extra charge. There is no telling what it would have cost us, at Northeast Arkansas Public Water Authority, to hire an outside firm to complete the SWPP for us. As you know being a smaller wholesale system with only 6 customers, personnel and finances run short on many occasions. This is where Mr. Quattlebaum was instrumental in completing our SWPP, not to mention the extreme wealth of knowledge and experience that he provided for us to complete the plan. I would hate to know that this service would not be available for Arkansas Rural Water Association members in the future.

  Thank you,
  Joseph Jansen, Manager
  Northeast Arkansas Public Water Authority

- Dear Dennis, 11/16/2017
  Thanks for all the assistance that Arkansas Rural Water Association provides. We appreciate the class locations that save the utility and lodging expenses for updated training license and renewal hours. Wastewater Trainer/Technician, Ms. Susan Poe, has always been a big help to us on keeping up to date on Arkansas Rural Water Association classes in our area. These training opportunities help the utility get the most out of our training budget. It is wonderful that her services are free of charge to our system. We hope to see the continued benefits in the future of the USDA Rural Development Program for Wastewater Technical and training support and the funds keep coming to support these valuable programs. Ms. Poe has also helped us with all aspects of our wastewater treatment and collection system. She has also helped our staff with laboratory issues and is always ready to help in any way when a problem arises. It occurred to me that during this Thanksgiving holiday season all the rural water and wastewater systems in Arkansas should give thanks to all our friends at ARWA. We have always depended on their expertise and assistance to help us maintain our water and wastewater systems through the years. I hope the programs of ARWA will continue to be funded so that the people of Rural Arkansas can continue to maintain their water and wastewater systems.

  Sincerely,
  Kent Latch, General Manager
  Heber Springs Water/Wastewater
New Position For Richards

By Roy Richards, Circuit Rider

My name is Roy Richards, and I have changed my position with Arkansas Rural Water Association. In August 2017, I moved over from the ADH Circuit Rider Program to one of the USDA Water Circuit Riders for the Eastern District of Arkansas. I have worked with some of the largest systems to the smallest, from Distribution to Treatment and anything in between. I am here for anything you may need help with or any questions you may have. Please feel free to contact me, and I will be glad to help. Office: 501-676-2255/Cell: 501-231-5128 I look forward to working with you.

Season’s Greeting
FROM
ARKANSAS RURAL WATER ASSOCIATION’S STAFF AND BOARD OF DIRECTORS

ARE You AN ARWA MEMBER?

All of our regular training classes are free of charge to all ARWA members. Non-members will be charged $99 a day for each person attending our training sessions effective January 1, 2015. These fees cover the cost of training materials provided in each class. If you want to update your ARWA membership you can print our membership form online at www.arkansasruralwater.org. You can also call us directly at 501-676-2255.
Our rural water professionals care about the health and success of your municipality because their families live, work, and play there too. When a water disruption occurs it impacts everyone and no one understands that better than Ferguson Waterworks.

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With the colder weather finally here, it's time to make sure we're preparing for lower utility bills. Below are tips to help save energy during the cool fall and cold winter months.

1. Take advantage of the sun (FREE HEAT):
   - During the day, open the curtains/blinds (especially where the direct sunlight hits), and take full advantage of the heat from the sun.
   - At night, close the curtains/blinds to keep the cool from the windows out and the heat from escaping through the window drafts.

2. Seal drafty doors and windows:
   - Add caulking and weather stripping around these areas. They should be checked yearly for cracks and wear and replaced every few years. This can save up to 20% on your annual energy bill.
   - Don’t forget about those electrical outlets as well. If you feel a draft, make sure to fix the cracks around those as well.

3. Check holes in exterior walls:
   - Pipes, gas lines, and electrical cables enter your house leaving gaps. Use expanding spray foam to fill the gaps instead of caulk.
   - Filling the gaps is also a good idea to keep mice and insect from coming into the house and causing damage.

4. Adjust the temperature in your home:
   - Use programmable thermostats if possible.
   - Set the thermostat as low as possible to keep comfortable when home.
   - Wear warm clothing when home and add rugs to hardwood and ceramic floors to keep warm.
   - Don’t block heating vents with furniture or rugs. Keep your furnace and vents clean, unblocked, and properly maintained to reduce energy consumption.

5. Reduce the loss of heat from your fireplace:
   - Keep the damper closed when there is NOT a fire burning. It's the same as leaving a window or door wide open.
   - If you have a fireplace that's never used, seal the chimney flue.

There are many ways to save on our utility costs, but these are just a simple few anyone can do to beat the colder weather. I hope everyone stays warm and enjoys the upcoming holidays.
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WATER OPERATOR LICENSE EXAMINATIONS
JANUARY – DECEMBER 2018
PAPER BASED EXAM SCHEDULE

Most current Exam Schedule is available at [http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm](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](https://health.arkansas.gov/wa_engTraining/ExamType.aspx). All Treatment and Distribution exam grades are 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.

<table>
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<tr>
<th>EXAM DATE</th>
<th>REGISTER DEADLINE</th>
<th>CITY</th>
<th>LOCATION</th>
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<td>9:00 AM</td>
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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](http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm).

Compiled November 15, 2017
G

reat day fellow Arkansas drinking water operational specialists! Can you believe another year has whizzed by so quickly? The young singer, Taylor Swift, was recently quoted as saying, “This is new year, a new beginning, and things will change.” Ms. Swift, you are correct.

I’ve mentioned previously that the ADH exam prepared by the ABC Boards of Certification will again be changing in 2018. It will no longer be a pass at 70%, as ABC is now utilizing a Modified Angoff Procedure which incorporates a psychometrically set passing score. This is certainly a change. And, yes, I had to look that up to understand what it actually meant. I still believe that if students are given the appropriate reference materials (found on the ADH & ABC Certification web sites) well in advance of beginning mandatory training classes, have the appropriate experience for the grade of license, and actually participate during training, they should have fewer problems during the exam.

The 2018 training calendar is now available online. To properly plan training for a new employee, we encourage your facility to utilize the ARWA website, www.arkansasruralwater.org, where you will find our mandatory training schedule and listings for specialized training classes. Three separate “renewal” classes will be held in 2018. Those locations in Arkansas are Mountain Home, Lonoke, and Warren. These three-day classes allow a water and wastewater operation specialist to obtain the required 24 hours of training in one convenient location. This should reduce travel costs for small systems.

As I close out my 11th year as the USEPA Training Specialist/Technical Assistance provider in our great state, I cannot thank you all enough for entrusting me to train your personnel. We strive at ARWA to provide the highest quality training and technical assistance. So remember, if your system is in need of training or assistance of any kind, make sure ARWA is your first call.

Until I write again, I hope you will continue to educate yourself and your public, continue to work safe, and most importantly, continue to keep that water flowing. Oh, and expect change in 2018!
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## ARWA Training and Events 2018

### Backflow Tester Certification Classes in 2018

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<th>Location</th>
<th>Instructor(s)</th>
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### Backflow Tester Re-Certification Classes in 2018

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<td>8:00 am – 5:00 pm</td>
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<td>Jeff Ford/Terry Fortenberry</td>
</tr>
<tr>
<td>7/16/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Jeff Ford/Terry Fortenberry</td>
</tr>
<tr>
<td>10/8/2018</td>
<td>8:00 am – 5:08 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Jeff Ford/Terry Fortenberry</td>
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### Backflow Repair Classes in 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/13-15/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Jeff Ford/Terry Fortenberry</td>
</tr>
<tr>
<td>5/15-17/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Jeff Ford/Terry Fortenberry</td>
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<tr>
<td>8/14-16/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Jeff Ford/Terry Fortenberry</td>
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<tr>
<td>11/6-8/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Jeff Ford/Terry Fortenberry</td>
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### ARWA Water Training Schedule 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Course</th>
<th>Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/16-18/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Intermediate Distribution</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>2/6/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Basic Water Math</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>2/8/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Applied Water Math</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>2/13-15/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Basic Treatment</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>2/28/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Distribution Exam Review</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>3/1/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Treatment Exam Review</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>3/6/8/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Advanced Distribution</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>3/20-22/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Intermediate Treatment</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>4/3/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Basic Water Math</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>4/5/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 170 Dillard Drive-Midway</td>
<td>Applied Water Math</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>4/17-18/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Shooting Complex 323 Bradley Co Rd 38-Warren</td>
<td>Water License Renewal</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>4/24-26/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Advanced Treatment</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>5/8-10/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Charles R Newton Center 170 Dillard Drive-Midway</td>
<td>Basic Distribution</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>5/22/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Operations Center 710 E. Main–Clarksville</td>
<td>Basic Water Math</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>5/24/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Operations Center 710 E. Main–Clarksville</td>
<td>Applied Water Math</td>
<td>Jim Philipp</td>
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<tr>
<td>5/30/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Distribution Exam Review</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>5/31/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Treatment Exam Review</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>6/12-13/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Water License Renewal</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>6/19-21/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Charles R Newton Center 170 Dillard Drive–Midway</td>
<td>Intermediate Distribution</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>7/17-19/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Operations Center 710 E. Main–Clarksville</td>
<td>Basic Treatment</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>7/31/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Basic Water Math</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>8/2/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Applied Water Math</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>8/14-15/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Charles R Newton Center 170 Dillard Drive–Midway</td>
<td>Water License Renewal</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>8/21-23/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center 240 Dee Dee Lane-Lonoke</td>
<td>Basic Distribution</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Location</td>
<td>Course</td>
<td>Instructor</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
<td>---------------------------</td>
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<tr>
<td>9/5/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Distribution Exam Review</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>9/6/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Treatment Exam Review</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>10/2-4/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Intermediate Distribution</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>10/23-25/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Operations Center</td>
<td>Intermediate Treatment</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>11/6-8/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Advanced Distribution</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>11/27-29/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Advanced Treatment</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>12/5/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Distribution Exam Review</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>12/6/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Treatment Exam Review</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>12/18/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Basic Water Math</td>
<td>Jim Philipp</td>
</tr>
<tr>
<td>12/20/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Applied Water Math</td>
<td>Jim Philipp</td>
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</tbody>
</table>

ARWA WASTEWATER TRAINING SCHEDULE 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Course</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/23-25/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Class I WW</td>
<td>Susan Poe</td>
</tr>
<tr>
<td>2/12-15/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Park and Rec Center</td>
<td>Class II WW</td>
<td>Susan Poe</td>
</tr>
<tr>
<td>3/20-22/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>John Lusk Building</td>
<td>Class I WW</td>
<td>Susan Poe</td>
</tr>
<tr>
<td>4/18-19/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Shooting Complex</td>
<td>WW License Renewal</td>
<td>Susan Poe</td>
</tr>
<tr>
<td>4/23-26/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Community Center</td>
<td>Class II WWS</td>
<td>Susan Poe</td>
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<tr>
<td>5/8-10/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Operations Center</td>
<td>Class I WW</td>
<td>Susan Poe</td>
</tr>
<tr>
<td>5/16-17/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Microbiology Class</td>
<td>Toni Glymph-Martin</td>
</tr>
<tr>
<td>6/13-14/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>WW License Renewal</td>
<td>Susan Poe</td>
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<tr>
<td>6/18-22/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Class III WW</td>
<td>Susan Poe</td>
</tr>
<tr>
<td>7/23-26/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Springdale Water Utilities</td>
<td>Class II WW</td>
<td>Susan Poe</td>
</tr>
<tr>
<td>8/15-16/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>Charles R Newton Center</td>
<td>WW License Renewal</td>
<td>Susan Poe</td>
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<td>9/10-12/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>H.S. Convention Center</td>
<td>Class I WW</td>
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<tr>
<td>10/15-18/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Class II WW</td>
<td>Susan Poe</td>
</tr>
<tr>
<td>12/10-14/2018</td>
<td>8:00 am – 5:00 pm</td>
<td>ARWA Training Center</td>
<td>Class III WW</td>
<td>Susan Poe</td>
</tr>
</tbody>
</table>
LAB CLASS REGISTRATION

MAY 16th and 17th, 2018

SEND PAYMENT TO:
ARKANSAS RURAL WATER ASSOCIATION
P.O. BOX 860 • LONOKE, AR 72086

SYSTEM _____________________________________________
NAME _______________________________________________
ADDRESS ____________________________________________
CITY _____________________STATE____________ZIP______
PHONE ______________________________________________
_______ PERSON(S) @ $99.00 EACH FOR TWO DAYS OF LAB
NUMBER OF MICROSCOPES YOU WILL BE BRINGING____
IT IS NOT MANDATORY TO BRING A MICROSCOPE
HOWEVER WE CANNOT GUARANTEE ONE WILL BE
AVAILABLE FOR YOU TO SHARE. SPACE IS LIMITED FOR
THIS CLASS. PAYMENT FOR THIS CLASS IS NON-REFUND-
ABLE.

Forms available at www.arkansasruralwater.org

BACKFLOW CLASS REGISTRATION

(See Page 28 for Schedule of Classes)

Class time: 8:00 am - 5:00 pm

Please fill out information below and mail to
Arkansas Rural Water, with payment, ten working
days prior to the class date you wish to attend:
ARWA P.O. Box 860, Lonoke, AR 72086. You may
also fax your registration form to 501-676-2266 and
we can take a credit card payment over the phone.

NAME _______________________________________________
ADDRESS ____________________________________________
CITY ____________________STATE _________ ZIP ________
PHONE____________________________________________
EMPLOYER _________________________________________
ARWA MEMBER  YES_____ NO____
NAME OF CLASS _____________________________________
DATE OF CLASS ______________________________________

Tester Certification – Member $400 – Non-Member $445
Tester Re-Certification – Member $100 – Non-Member $125
Repair Certification – Member $300 – Non-Member $345

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INSPECTION SERVICE
EAGLE SANDBLASTING & PAINTING, INC.

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