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Volume XX — Summer 2023





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MISSION STATEMENT

"Protecting and preserving the water and wastewater resources of Rural Illinois through education, representation and on-site technical assistance".

On the Cover:

This photo was taken by Frank Dunmire, IRWA

Executive Director, outside Macon, Illinois in

Macon County.

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PFAS Contamination

by Frank Dunmire,
IRWA Executive Director



Recently, 3M reached a settlement in a class action lawsuit over PFAS contamination of public drinking water systems with potentially harmful compounds used in firefighting foam and a host of other consumer products. Chemical manufacturer 3M Co. will pay at least \$10.3 billion and could reach as high as \$12.5 billion, depending on how many public water systems detect PFAS during testing that EPA has required in the next three years. If approved by the courts, the settlement will be paid over 13 years. announced a historic \$12.5 billion settlement with water utilities in the ongoing litigation originated by National Rural Water Association, through its legal firm Napoli Shkolnik PLLC, was one of leaders in this lawsuit and Paul Napoli serves as the court-appointed Co-Lead Counsel for the Plaintiff's and is leading the national settlement negotiating team.

NRWA's Board of Directors voted unanimously for this unprecedented step for one simple reason – they knew that small communities would not be able to afford legal representation on their own and would be forced to shoulder the financial burden of removing these toxic chemicals from their drinking water. The goal was to provide an opportunity for rural water members to benefit equally from any settlement or judgement in the case by funding both water treatment and testing.

The \$12.5 billion class action settlement still requires approval of Judge Richard M. Gergel and is in addition to the \$1.185 billion settlement with DuPont, Chemours, and Corteva announced earlier. By no means has, or is, this a simple process but Paul has been instrumental in getting the interests of Rural America this far. This is a complicated process and Paul has been there to “dummy it down” to our level and has provided some important things to consider:

1. If your system has not joined the class action suit – it is not too late! Systems can still join the PFAS lawsuit. There is no cost to register, and you can always opt out of any settlement or judgement prior to accepting.
2. Any payout to systems will be to compensate for additional treatment and testing costs and is designed to “support PFAS remediation for public water suppliers that detect PFAS at any level or may do so in the future.”
3. This litigation is limited to drinking water systems at this time, but, as water and wastewater professionals, we well know that wastewater systems will have PFAS exposure as well. It is anticipated that efforts will be made to obtain similar relief for wastewater systems.

IRWA recommends any water systems that are concerned with PFAS contamination join the lawsuit as soon as possible using NRWA's trusted partner Napoli Shkolnik, a firm with a successful history winning financial relief for water utilities. There is strength in numbers, and there are many benefits that come from uniting our efforts. That's the power of association! NRWA is committed to continuing to fight for small and rural communities across the Nation.

Joining the lawsuit is simple, just complete the form on Napoli's website (<https://www.napolilaw.com/nrwa-pfas/>). Napoli's trusted team members will walk you through the process and be available to answer any questions you might have. 💧

Labor of Love

*by Jake Johnson,
IRWA Board Member*

Running and maintaining a municipal water system can present challenges that are hard to describe to anyone that has never had an opportunity to experience it firsthand. This becomes more evident within smaller communities that might have a tight operating budget, limited income base or an aging system that is struggling to stay alive and taxing the checkbook. Some of the challenges that can be present range from textbook repairs (that an operator can complete in their sleep) to “how on earth is that even possible?” When I took the plunge in to the water treatment/distribution field a little over 8 years ago, I was greeted with only a “learn by the seat of your pants” experience and relied heavily on advice from others. Not many systems in our area had young professionals maintaining and operating water systems, but the Village of Ashmore town took a chance that I would have the to manage (and survive) as a new operator. With very large shoes to fill, every morning I would pull on my Ariat’s and put my nose to the grindstone, learning as much as I could, as efficiently as I could while facing what seemed like endless obstacles along the way. But what job doesn’t have its own unique learning curve?

Ashmore’s system was originally established in the early 1950’s and was beginning to show its age. Getting my feet wet (pun intended) was not difficult. I wouldn’t say we were controlling the bleed or pumping money into the system hand over fist but, eventually we had to analyze the repairs we were making and the problem areas. We started looking at the reliability of the system. Two of our biggest problem areas were along a busy highway that runs through the original part of town. Our whole system consisted of ductile iron and some newer sections of PVC. In our iron lines, we were getting everything from blowholes in the bottom of pipe to full circumferential breaks. There would be times we would excavate, only to find it had a repair band two feet from our current issue. To make matters worse, our isolation valving was almost non-existent. Attempting to contain certain areas of the system just wasn’t an option. We tried hiring a contracting company to come in to exercise valves, trying to salvage what we could. After breaking a more valves than I care to divulge in this article, the decision

was made that it was time to step back and reevaluate our work and look at different options that might be out there.

Before I came on board with the Village, our Board had been applying for grants to update the system.

They usually got the same response “there’s no money for water.” I will never forget the day we found the right key to unlock that door - almost 4 to 6 years into my tenure. We were having a meeting with the planning commission and our mayor made the comment “there’s no money for water.” A member of the commission stopped the meeting and gave us a small glimmer of hope. He shared contact information with us for an engineering firm that had been known for helping small towns with grants with a quite impressive success rate. After meeting with them, we realized it was time for a change.

We had been committed to our engineering firm, but oh how the tides have changed. With the amount of work that we put into proving our need and the photographic evidence of our system failures, we were on a mission. In our first-time filing, we struck a \$500,000 DCEO grant to replace almost a third of our system. While phase 1 construction was going on, we were looking at Phase II, thinking lightning never strikes the same spot twice. With very little hope, we decided to roll the dice and apply. To our surprise, we hit the jackpot again and were awarded another \$500,000. Phase 2 would take us to two thirds of our system being replaced while focusing on our most problematic areas and allowing replacements for businesses and

other vital operations to enhance our community. There was one big surprise that manifested itself from the first day we put Phase 1 online and fully disconnected from the area we were replacing. Our daily

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The Importance of Metering

*by Evan Jones,
IRWA Circuit Rider*

Over the years, since I have started in the water industry, I have always been told that 15% or less of water loss or unaccounted for water, is pretty good. Now in the last 10 years, since working for rural water, I have come to learn that this also greatly depends on the system itself. In some systems, this rate can be a lot higher. I have heard of some systems that have had 12% loss from the time it was built; so a 30% loss to them won't seem so awfully bad. To me that just seems crazy! But it is all relative to what your system does.

The tracking of lost water or unaccounted for water, has gotten much better since my early years in the industry. I can remember having high or at least higher than normal plant production, and didn't really worry about it until you read meters at the beginning of the next month. Of course, I can also recall a Sunday afternoon spent hooking up pressure gauges to fire hydrants and not being able to locate any low pressures anywhere in town, just to find out Monday morning that the fertilizer plant had decided to fill their 250,000-gallon tank Saturday night without contacting the water department. Now jump to today, if that would have happened you simply would have run a high usage report from either your office computer or even your cell phone, and have that information in minutes instead of hours or days.

Of course, I still talk to operators, administrators, and clerks all the time that still need a little help understanding all potential aspects of what may be causing the unaccounted for water in their system. When water in the system is truly "lost", you don't know where it went and can't account for it... and can't get paid for.

Unaccounted for water is due to the inability, or lack of action, to track what you are putting into the system.

Unfortunately, in some systems, we still see customers that aren't metered, and more times than not they are big users. I know of many schools and fire stations that just simply are not metered at all. Many times, I get the explanation for those to be such as, "well we can't bill them for the water". In my eyes, I don't care if they bill the fire department or school, but let's at least account for that water...and all water used. Then we can

start possibly get some of the water loss under control.

Now I have said all this to tell you about a couple of recent visits and conversations that I have had. We will start off with "Small Town", Illinois as I call it (names have been changed to protect the innocent... as well as karma and luck!).

Small Town has a population of around 2500. They have a mixed distribution system when it comes to water main composition materials. It's got a little bit of everything. They have three public works/water system personnel; and the public works director is retiring in the next several months. The community produces approximately 200,000 gallons a day, and their monthly average is around 6,000,000 (these are just averages that are not exact). The supervisor is extremely proactive when he starts seeing increased production. He will run high usage reports, and if that doesn't flag anything, he starts investigating further in the system up to but not limited to taking his small listening device out at midnight to listen to fire hydrants. He has been very proactive over the years, and stays on top of keeping good meters in the system. He runs such a "tight ship", when it comes to the water system, that he is down to only a two percent loss! The Director sent me a text with that number

on it just recently, and I honestly thought that's what he got as a pay raise! I never really expected him to tell me that number was his unaccounted-for water.

Next, we'll move on to "Little City", Illinois. This community called me recently thinking they had a major water loss problem and were wanting some leak locating completed.



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Where's My Chlorine?

by Roger Noe,
IRWA Circuit Rider

This time of year is a great time for all of your summer activities. However, for a water operator, losing chlorine residuals in a distribution system is a huge concern. In Illinois, a 0.5 mg/l free is required for groundwater without ammonia and 1.0 mg/l total chlorine residual is required for chloramine systems. The system does not have to have minimum of both the free and total; it is either/or for your treatment process. Usually, the issue of losing chlorine is in surface water (chloramines process) compared to groundwaters. The main responsibility of a water operator running a water system is to maintain chlorine residuals through the whole distribution system. Chlorine residual die-off increases during the summer months as the temperature increases. Proper residual monitoring and operations of a storage tank will help increase the chances of chlorine residual to be maintained. Surface water will have a higher temperature which will result in faster biological processes and chemical reactions. The process of chlorination is adding ammonia with chlorine to form chloramines also known as combined chlorine residual reading. Bacteria growth develops in the distribution system and combined chlorine is a food source for the bacteria. This bacteria is called nitrifying bacteria. Nitrification is the process of ammonia being eaten by the bacteria which causes the combined chlorine to be reduced. Nitrification begins when the water temperature reaches 70-76 degrees F and increases when the temperature increases. Water temperature determines when the nitrification increases. Usually the months of June, July, August, and September are when this occurs. Water temperature is affected by rainfall, air/ ground temperature and storage tanks. Residual loss and nitrification will develop first in the water tank and then move to the distribution system.

The water operator will first realize the residual loss in the distribution lines from routine sampling, but again most likely it started in the tank. Routine samples are taken from residences, businesses, flush hydrants, or sampling stations. Storage tanks are usually not routinely sampled for chlorine residuals. When I was running a water system, I would sample the tank once a

month during the cooler months and weekly when the temperature increased. That gave me the ability to see what was happening in the water system and I could make changes at the treatment plant.

Residual loss could also be from low-use, dead-end lines, or cast-iron lines with corrosion deposits. Moving water through the pipe with flushing hydrants could keep residuals at the required levels. Automatic flushers are a great tool for moving water during the overnight hours. However, many residuals are already lost or decreased from the storage tanks.

Water storage tanks are where nitrification first occurs from the temperature and detention times in the storage tank. The warm air temperature and sunlight on the tank increases the water temperature. This is one reason the tank should be painted white or a light color. If residual loss could be mitigated at the storage tank, then the residual loss problems may not reach the distribution system. Proper monitoring at the tank will help to address the problem. Most elevated tanks and standpipes have one pipe that is the inlet/outlet pipe at the bottom of the tank. This will result in stratification of the water at the top of the tank first then if it will spread to the bottom of the tank. Residual testing at the tank should be taken when the tank is at the lowest point and just before the fill cycle begins.

How can the operation of the tank help mitigate the issue of nitrification and loss of chlorine residual? One method is to fluctuate the water levels in the tank by adding or lowering the water level in the tank. My experience with my old system was that it helped when I would change my set points to have a bigger spread as the tank called for water. The summer months I would



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WHAT IS THE BEST WAY TO ADDRESS VOLITILE ENERGY COSTS?

*by Dave Speagle,
IRWA Energy Efficiency Technician*

First, what are some of the items that affect the rates for electric and gas?

Weather Outlook plays a strong role in progression of rate structures. Everything from El Nino developing in the Pacific Ocean to the Population Weighted Cooling Degree Days projected for the summer. Also, a rise in demand causes a rise in price. The opposing side of the demand is the production side, with gas production hitting record levels, this has tempered some of the volatility in the gas market but there is still plenty to be concerned about. On the electric side things lately have taken a turn for the better as the major price hikes of last year have tempered. BUT, Ameren and ComEd have each asked for over a billion in added fees for delivery of electricity. Ameren has set their summer rate and it actually beats quite a few rates that were set for towns that had Aggregate Energy rates. Thankfully, residents can opt out and return to Ameren or ComEd and achieve those savings. MISO, who regulates the flow of electricity across portions of 15 states, faces declining generation facilities as coal fired power plants shut down. This means they have to bring power in from outside the Midwest grid to meet demand thus increasing cost and decreasing reliability.

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Where's My Chlorine?

continued from page 7

drop the tank an extra 6 ft before the tank would call for water. Scada controls made the job so much easier to fluctuate the spread of when the tank called for water and when it would shut-off. An issue and operator may have with dropping the set points is fire protection so you would want to notify the fire department. As an operator the main concern is to have good quality drinking water for the citizens compared to quantity of water in the tank. Another method would be to dump the water tower and fill it with fresh water with good chlorine residuals. The concern with that is if a system is purchasing the water that could affect your bottom line, but you may not have a choice to correct the problem. The water in the storage tank should turnover every few days which means fresh water should be replacing the aging water in the tank. I have encountered instances where the pressure of the system is high enough that the water is being bypassed and the water in the tank is staying full. There are also some tanks that have too much water storage capacity and there are too many days before the tank is changed over. I have heard and seen where some systems have altered their tank with one pipe being the inlet pipe and another pipe being the outlet pipe. The inlet pipe will fill at the top of the tank and outlet pipe will be at the bottom of the tank with proper connections to make that work. Tank mixers are other

operations which help to keep that water moving throughout the tank to help with stratification of the water. Boosting chlorine in the storage tank can be done, but several factors must be thought of to make it work. If the water system is boosting chlorine, they would have to feed ammonia and chlorine to form combined chlorine if the system doesn't have enough free ammonia residual. That is where the chemistry of chlorine and ammonia ratio comes into effect. Performing proper sampling will help to determine if the ratio is being met. Nitrification sampling procedures would consist of sampling for Total Chlorine, Monochloramine, Free Ammonia, Total Ammonia, Nitrate, and Nitrite. Testing on a regular basis for chlorine, monochloramine, and various ammonias will give a better understanding of what is happening within your water system. Sampling this many different perimeters can be expensive. The budget for the water system will have to be prepared. Many operators have told me their displeasure of

performing this many tests, but then they say, "I know my system better". Good monitoring of the water system will help determine when the chlorine residuals start to drop. I would recommend sampling the tanks and multiple sites throughout the water system. Every water system has different issues that may affect the chlorine residuals. Groundwater and surface waters should not be mixed unless there is an emergency for water supply. If there are any questions or needs for assistance contact your circuit rider in your area.

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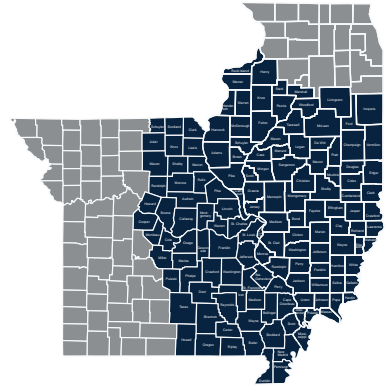
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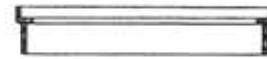
READJUST MANHOLE LIDS TO NEW ELEVATION WHEN RESURFACING

MANHOLE ADJUSTMENT RING ONLY 4 DIMENSIONS REQUIRED

- 1 - O.D. of existing lid: TOP and BOTTOM
- 2 - thickness of existing lid
- 3 - riser height (thickness of asphalt matt*)
*Note: minimum riser must be 1/2" more than thickness of existing lid



- * Full Range of Sizes
- * Eliminates Digging
- * Requires No Tools



Company Name _____

Contact Name _____ Phone # _____

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Quantity	Manhole #	Street / Location	Lid O.D. Top / Bottom	Thickness of Lid	Desired Rise

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ILLINOIS RURAL WATER ASSOCIATION

20th Annual Golf Outing

The Illinois Rural Water Association (IRWA) is hosting its 20th Annual Golf Outing. This event is sponsored as a way to have a fun IRWA member activity.

The location for this event is **Edgewood Golf Club in Auburn, Illinois**. The date for this four person scramble is **Friday, August 25, 2023**. The fee is \$70.00 which includes lunch, a gift bag, green fees and golf cart. Various prizes will be given away as well. As always, IRWA is trying to make this a fun-filled and affordable golf scramble. Your participation will ensure that this year's event will be every bit as successful as past outings. This event gives the IRWA members an opportunity to have fun and enjoy a day of golf with fellow industry professionals.

You are encouraged to submit your registration forms prior to the **Friday, August 11, 2023** deadline. Please make checks payable to Illinois Rural Water Association. You can also go online and sign up and pay by credit card at www.ilrwa.org.

This will be a four-person scramble with a **10:00 a.m. shotgun start**. Participants are encouraged to be at Edgewood Golf Club and check in at the registration table no later than 9:45 a.m. Lunch will be served as you make your way by the club house while playing golf.

It is IRWA's hope that you will be able to attend this event. Please feel free to contact **Denise Burke** at 1-217-287-2115 with any questions you may have. We look forward to seeing you there!

Sincerely,



Board of Directors & Staff

WHAT: 20th Annual
IRWA Golf Outing

WHO: Water &
Wastewater Operators,
Board Members,
Mayors, Vendors,
Others

WHEN: Friday,
August 25, 2023

WHERE: Edgewood
Golf Club —Auburn, IL

FEE: \$70.00 for
operators (includes
lunch, gift bag, green
fees & golf cart)

ILLINOIS RURAL WATER ASSOCIATION
20TH ANNUAL GOLF OUTING

The 20th Annual Illinois Rural Water Association Golf Outing will be held on Friday, August 25, 2023 at Edgewood Golf Club located in Auburn, Illinois. Directions to the course are located on the last page. The golf format will be a shotgun start at **10:00 a.m.** Please check in at the registration table no later than 9:45 a.m. Please fill out the registration form below and send it along with your check to the address listed below. **You may also pay by credit card online at www.ilrwa.org. Registration must be received and paid by Friday, August 11, 2023 in order to reserve your spot. We are limited to 144 golfers for this event.**

Course Rules:

- Dress must be in good taste keeping with golf tradition.
- Only non metal spikes are allowed.



**Edgewood Golf Club - 16497 Kennedy Road —
AUBURN, ILLINOIS**

217-438-3221

www.golfedgewood.com

Registration Form

Friday, August 25, 2023—10:00 a.m. (Shotgun start—4 person scramble)

Single Golfers will be teamed with a foursome.

NAME(S):

SYSTEM NAME:

ADDRESS:

PHONE:

OF GOLFERS

Operators / City Officials / Guests _____ **@ \$70.00** = _____

Associate Members / Vendors _____ **@ \$80.00** = _____

(If Associate members are sponsoring the golf outing (please see next page), then the fee to participate will be \$70.00).

Total _____ **=** _____
(includes lunch, gift bag, green fees & golf cart)

Please make all checks payable to Illinois Rural Water Association. Return your completed registration and payment to: **Illinois Rural Water Association—P.O. Box 49—Taylorville, Illinois 62568**

You may also pay by credit card online at www.ilrwa.org.

If you have any questions, please contact **Denise** at Illinois Rural Water Association at 217-287-2115 or email her at: **ilrwadb@ilrwa.org**.

Sponsorship Form

Lunch Sponsorship	-	\$500.00	(limited to 3 sponsors)
Beverage Cart Sponsorship	-	\$500.00	(limited to 2 sponsors)
Hole Sponsorship	-	\$150.00	(limited to 18 sponsors)
Hole in One Sponsorship	-		
\$300.00 (\$5,000 cash)		\$275.00	(2 Airplane Tickets— any destination in continental United States)
\$250.00 (Golf Clubs)		\$250.00	(\$500.00 golf shop credit)
Gift Bag & Prize Sponsorship	-	SEE BELOW	

LUNCH SPONSORSHIP: Lunch sponsors will have their sponsorship sign posted where lunch will be served reaching all of the golfers and two free registrations to participate in the golf outing.

BEVERAGE CART SPONSORSHIP: Beverage cart sponsors will have their sponsorship sign on the courtesy carts that will be on the golf course driving around with bottled water, beer and soda compliments of your company. They will also receive two free registrations to participate in the golf outing.

HOLE SPONSORSHIP: Hole sponsors will have their sponsorship sign **off the tee**. This is a great opportunity for visibility.

HOLE IN ONE SPONSORSHIP: Hole in one sponsors will have their sponsorship sign displayed off the tee and will be recognized prior to the shotgun start of the outing.

GIFT BAG SPONSORSHIP: If your company wishes to provide an item for each gift bag (approximately 144), please contact Denise to discuss.

PRIZE SPONSORSHIP: If your company wishes to bring a door prize the day of the golf outing or send it in prior to outing, please contact Denise to let her know.

Sponsorship Registration Form

Company Name: _____

Contact Name: _____

Address: _____

City: _____ State _____ Zip Code _____

Sponsorship Level: _____ Amount Enclosed: _____

Please complete and return the Sponsorship registration form and payment to:
Illinois Rural Water Association—P.O. Box 49—Taylorville, IL 62568

If you plan on participating in the golf outing, please fill out the registration form on the previous page and return with this form with your payment. If you plan to attend but not golf in the outing, please let us know on this form.



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FREE RATE STUDY

Why Have a Rate Study Conducted?

With the amount of grant dollars available for water and wastewater projects continuing to dwindle, coupled with the aging water and/or wastewater infrastructure, it is increasingly more important that decision makers for systems throughout the state become more educated about system finances. This **FREE** rate study takes an in-depth look into the expenses and revenue that a system has. Once all of the data has been gathered and entered into a spreadsheet a detailed report is generated to explain the findings and recommendations. This easy to read report and any rate changes recommended will assist Boards and Councils in mapping out the financial future of their respective systems.

If your system is interested in having a rate study conducted, please contact Clark Cameron at (217) 287-2115(Office) or (217) 820-3814 (Cell).

What Information Will the Rate Study Provide?

- ⇒ Breakdown of expenses
- ⇒ The cost to produce the water (if applicable)
- ⇒ Amount of nonrevenue water
- ⇒ Amount of lost revenue from water loss
- ⇒ Annual gain or shortfall in revenue
- ⇒ Different rate scenarios



What Information Will I Need to Supply For a Rate Study?

- ⇒ Financial statements for the most current fiscal year (audit report preferred)
- ⇒ Amount of water produced and/or purchased during the most current fiscal year
- ⇒ Amount of water sold during the most current fiscal year
- ⇒ Current rate structure
- ⇒ Number of customers in each rate class
- ⇒ Amount of debt (if any)



Video inspection technology for wastewater and storm sewer systems can help you identify and prioritize maintenance issues, while improving service and reducing emergency maintenance costs.

Small jobs (typically two city blocks, or less than 800 feet) has a "Maintenance Fee" charge of \$500.00 for our members. Non-member utilities pay \$750. There are no additional expenses charged for this type of small project. Larger projects requiring more time and inspection coverage, will be based on the Maintenance Fee (reduced for IRWA members), cost per foot (30% IRWA discount) and expenses.

Due to staffing varied work demands and logistics, IRWA will not undertake inspection jobs exceeding 5,000 feet maximum per project. For more information, or to schedule an inspection of your system, email Deputy Director Don Craig at: craig@ilrwa.org or call him at 217-561-1061.



Our mapping technician will work with your system personnel to develop digital and hardcopy system maps of your water system infrastructure. This is also true for wastewater systems and/or storm sewer features, if needed.

IRWA personnel will first do complete GPS of system features. Attributes on these features can be added when gathering the data, and also added by facility personnel any time after the project is completed.

Incorporating this kind of data allows you to monitor, edit, and evaluate your system at a whole new level, including from computers, cellular based tablets or cell phone. IRWA will input the data from the field, and through the GIS processing stage, add background layers such as aerial photography and road view maps with detailed views of your system. At the end of the project, all data and the maps will be owned by you for use in the future.

Through a project proposal, the cost for services is determined by a charge per each system feature located and mapped; and overall project expenses. These amounts will be discussed with system personnel, and documented before the start of the project. IRWA members receive an automatic 30% discount, and possibly a larger reduction with bigger projects.

For more information, please contact Deputy Director Don Craig via e-mail: craig@ilrwa.org, or via phone: 217-561-1061 or visit our website: https://www.ilrwa.org/Equipment/Asset_Mapping.html.

What are you looking for? - The ABC's of ilrwa.org

- Advertising in Water Ways information** (Ad agreement and links) - Publications > Advertising Information
- Apprenticeship**—Resources > Apprenticeship
- Becoming a Certified Water or Wastewater Operator**—Resources > Becoming a Certified Operator in Illinois
- Boil Order Notice**—Resources > Downloads
- CCR**—Services > e-CCR Hosting
- Certification Overview from IRWA**—Training > Certification
- Certified Water Operator Contract**—Resources > Downloads
- CEU Forms from webinars or conferences**—Training > CEU Form Archives
- CEU's from CD training**—Training > CD's
- Compliance Assistance**—Services > Compliance Assistance
- Cross Connection** (manual, survey & ordinance) - Resources > Cross Connection
- Current hot topics and upcoming events** - Home
- Energy Efficiency Assessment**—Services > Energy Efficiency
- For Sale/Wanted**—Services > For Sale/Wanted
- Forming a new water district**—Resources > Downloads
- GPS/GIS**—Services > GPS/GIS Mapping
- Industry Organizations**—Resources > Links
- Job Board**—Resources > Job Board
- Lead Information** —Resources > Lead Information
- Leak checklist and how much am I losing flyers**—Resources > Downloads
- Legislative Information** – (Who is my rep?, Bills that IRWA is following)—Resources > Legislative
- Mutual Aid**—Resources > Downloads
- Nitrification Action Plan Information**—Resources > NAP
- NFP Tax Forms** — Resources > Downloads
- NRWA Fleet** - Membership > Benefits—click on the NRWA logo
- Operator Groups**—Resources > Links
- PFAS**—Home
- Rate Study**— Services > Rate Study
- Red Flag Act**—Resources > Downloads
- Speaker Request Form for Conference** —Training > Conferences
- Tracer Wire Specs**—Resources > Downloads
- ERP/Contingency Plans**—Resources > Emergency Preparedness Planning
- Video Inspection Services**—Services > Video Inspection
- Wastewater CEU information**—Training > Wastewater > under table
- Water Loss Handouts**—Resources > Downloads





Rural Water Fleet Program

The National Rural Water Association has created partnerships with motor groups to offer discounts to utilities around the country. Member utilities should contact their State Rural Water Association to access the Rural Water Fleet Program.

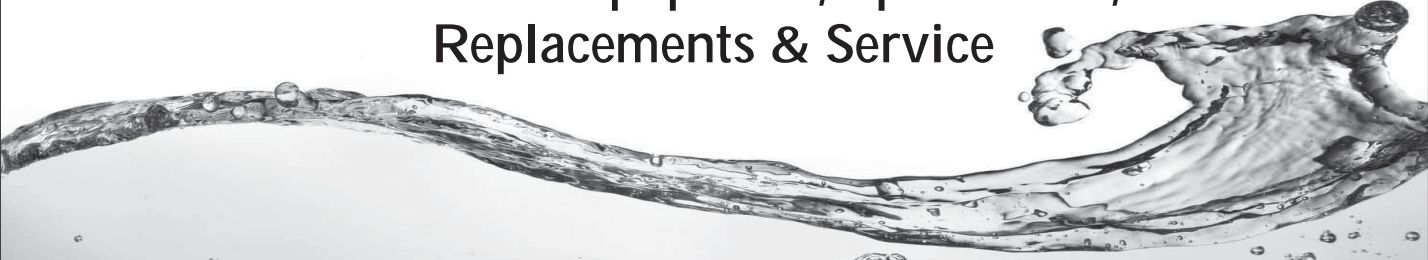


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continued from page 5

usage decreased by 30,000 gallons! Yes, you read that right, we were so used to seeing our daily usage between 70,000-80,000 gallons, we thought that was normal. To say the least, we were in shock. But wait, it didn't stop there. When Phase 2 went online, we dropped another 10,000-15,000 gallons per day.

My take-away from this is there are many small towns and communities that either have a system that is unnecessarily dwindling financial resources or creating water quality issues by not addressing their known problem areas. At some point, we all need to reevaluate our circumstances. Is there anything that can be changed to help make our current circumstances more sustainable? With Private water companies slowly buying out public systems and taking the control of rates away for their consumers, sustainability becomes a delicate subject. Currently, with the incoming infrastructure money, there seems to be many more grant opportunities for helping those communities in need. The key is finding the right program, thoroughly documenting

repairs and accounting for the cost incurred when making those repairs. Keeping this information organized will help when the time comes to apply. You will have the proper paperwork and evidence you need to maximize your chances for success.

As we have all come to recognize, operators are some of the most proud and hardest working group of people for all they do, even as thankless as it can seem to be at times. Just as in the Wizard of Oz, the general public doesn't really see what all goes on "behind the curtain". Whether it be the ever-changing regulations or day to day operations, operators are constantly adapting, improvising, and overcoming obstacles no matter the weather or time of day. The challenges are real and can be trying at times, but, as stressful as it can be, it is a labor love that is unlike any other - knowing that you provide one of the most essential elements of life to a community. Your community! 💧

The Importance of Metering

continued from page 6

So, I show up and asked some questions of the clerk and treasurer, then I went to read the master meter with one of the staff. Half an hour later or so, I showed back up at the office and crunched some numbers. "Magically" I came up with just under 5 percent water loss! We discussed that briefly, and came to find out they had just purchased a truck load of meters; thus that's why they had negative for the month in the water account, because the lack of full accountability during the interim for new meter change-outs with new readings. They went from thinking they were going to float away to finding out they were doing better than most.

On the other side of this spectrum, I have systems call and talk to me all the time about their unaccounted-for water being 30 to 40 percent! What really surprises me, is that they are used to it and do not think it's a big deal. Sometimes Circuit Riders will show up to listen to hydrants and valves, and then go over unmetered connections. Then we will question about how old the meters are, and sometimes find out they have been installed

for 20 to 30 years. Bingo! Potentially, right there, those aging meters may account for almost 20%, if they are over 30 years old.

I'm not for sure for the entire state, but in the parts that I am typically in, the "good" rates of less than fifteen percent, are not yet the normal. But, with all the innovations in the industry, give it time and I believe we may be looking at 5% as the normal and not 15.

These two stories are just a couple that I and the rest of our staff at Illinois Rural Water Association hear about, and see every day. With all this being said, everyone needs to remember that your meters are you're cash register and that is what pays the bills!

Technology in the water meter industry, has increased immensely in the last few years, and will likely continue to do so in the coming ones... Leading all us to wonder, what will be the next "new thing"? 💧

Energy Efficiency Assessment Program

Will evaluate your energy needs, consumption and costs. It will also recommend measures to reduce energy consumption and identify sources of funding for improvements.

STATISTICS SHOW:



Cost of energy is expected to increase 20% in the next 15 years.

Energy use is the largest controllable cost of providing water and wastewater service to the public.



Rising energy costs represent a major challenge for water and wastewater facilities also facing challenges of:

- 1) Aging Infrastructure which needs replaced
- 2) More stringent regulations
- 3) Population growth
- 4) Higher operational costs and budget restrictions

Consider ...

The high cost of operating utilities has gotten to the point where the utility has to look at all options available. Keeping the operational costs to a minimum ensures that your rates are the lowest possible and still ensure safe drinking water and wastewater utilities.

What do we assess?

The Energy Conservation Circuit Rider will assess your electric bills, system assets and operational procedures. They will break it down into a usable format with options to explore which will lower costs and a projection of the time to payback.

Why ...

Most Operators spend their time in operational issues to ensure safe drinking water and maintaining compliance. They often do not have the time to dedicate to energy savings or expertise in doing assessments. We can take the time and figure it out for you.

Key Offerings

Find where your system can save money on energy. Not only can your system be more efficient, it can outline which changes can generate repayment the quickest.

What is requested of the system?

- Provide Tour of Facilities for Circuit Rider
- Copies of Energy Bills for at least one year
- Review and Share Energy Assessment with Operators
- Review Financing Alternatives if Feasible
- Implement an Energy Efficiency Plan

15-30% SAVINGS ARE READILY
ACHIEVABLE



HOW??

- 1) MAKE THE COMMITMENT!
- 2) ASSESS THE FACILITIES
- 3) ESTABLISH A PLAN

A Few Findings of Assessments

- **System-Hot Water Heater**- 80 Gallon Electric Heater-24/7 in a Filter Room only for Eye Wash Station-Approximately \$2,200/Yr Savings
- **System-Water Loss** 75%, System Improvements Save \$3,300/year in Electrical For Wells
- **System-Aeration** running 24/7- \$11,300 potential savings. Improvement Recommendations- \$34,250. Payback 3 years

How Do I Get A Free Energy Assessment?

Contact Dave Speagle

217-820-1560 – cell phone

217-287-2115 – IRWA office

speagle@ilrwa.org

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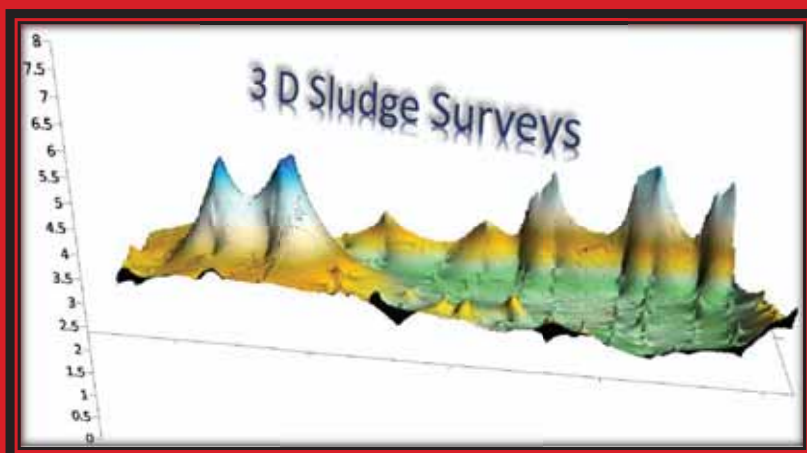
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