APRIL 2024

ServiceLine

The Official Publication of the South Dakota Association of Rural Water Systems

2024 EXPO AGENDA SEE PAGE 9



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SOUTH DAKOTA ASSOCIATION OF RURAL WATER SYSTEMS

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GAVIN GRAVERSON Training Specialist

WYATT HIX Circuit Rider



ASSOCIATION UPDATES



WEST RIVER EXPO

South Dakota Rural Water is pleased to host the 2024 Rural Water EXPO April 24-25. The EXPO will be held at the Best Western Ramkota Hotel & Convention Center in Rapid City, SD.

The EXPO is open to all water and wastewater utility staff, board/council members, engineers, State and

Federal employees. The training will consist of twenty presentations, 30 minutes each, thus allocating ten contact hours for those individuals who are licensed operations specialists. Along with the training sessions, the EXPO will showcase many of our industry's manufacturer and supplier leaders. These professional companies will be set up in the main EXPO training center for attendee easy access and to provide answers to those pressing questions. Many will be displaying the recent advances in technology our industry has witnessed over the past several years.

This year's EXPO will kick off at 8:00 am Wednesday and conclude at noon on Thursday, with lunch provided on the first day. Registration is \$125, and SDARWS is able to bill for this fee after the conference. Please pre-register by visiting our website at: sdarws.com/EXPO.

NEW FACES AT SDARWS

South Dakota Rural Water has recently added two staff members to our team. Sue Bergheim came to us this past February and is tasked with setting up our new apprentice program. She has close to 20 years of experience working as the News Director at KJAM Radio in Madison and several years at Dakota State University. She joined SDARWS in February after spending a year as an Employment Specialist with the Madison Job Service Office. She has a bachelor's degree in broadcast journalism and political science and a national career readiness certificate at the platinum level. "I look forward to working with the professionals at SDARWS, our member systems, businesses, and communities to build a strong Apprenticeship Program. I also look forward to promoting the program and enrolling apprentices to help fulfill the ongoing need for water and wastewater professionals," said Sue. In her spare time, Sue enjoys attending her children's sporting events, other activities, volunteer work, and puzzles. She and her

husband Jerry have three children and just welcomed their first grandchild.

Dave Duba joined the team in March as a Circuit Rider and came to us from the City of Ethan, where he was the Utilities Manager. Dave holds a Class I Water Distribution certificate and has almost seven years of water utility experience. He is looking forward to helping small towns and giving them direction, just like SDARWS had provided to him in the past. In his spare time, he enjoys bow hunting, fishing, watching all of his grandkids' sporting events, playing cards, and spending time with his family.



Welcome Sue and Dave!

Dave Duba

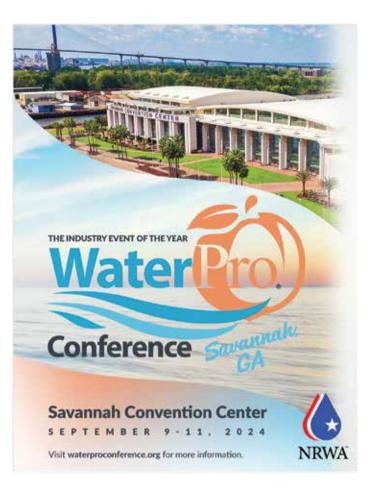
Sue Bergheim

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FISHING TOURNAMENT

The Rural Water Warriors are hosting the Annual Rural Water Fishing Tournament May 4th at the Outpost Lodge on Cow Creek Bay in Pierre. This tournament is limited to the first 40 teams of 2-3 fishermen, and is open to current water/wastewater, associate, or corporate members of SDARWS. The cost is \$150/team and includes lunch. The registration deadline is April 26, 2024. More information can be found online at sdarws. com/FISHING, or check out page 31 of this issue of *ServiceLine*.







ROAD CASTINGS



OPERATOR CERTIFICATION TRAINING AND EXAMS

Cross Connection Control and Backflow Prevention	Sioux Falls - Water Treatment Plant	April 10, 2024
Water Distribution	Mitchell - Highlands Conference Center	April 16-18, 2024
OpCert Exam	Mitchell - Highlands Conference Center	April 18, 2024
Small Water Treatment Workshop	Rapid City - Ramkota	April 23, 2024
Basic Wastewater Treatment	Watertown - Ramkota	May 7-9, 2024
OpCert Exam	Watertown - Ramkota	May 9, 2024
Advanced Wastewater Treatment	Sioux Falls - Hilton Garden Inn	May 21-23, 2024
OpCert Exam	Sioux Falls - Hilton Garden Inn	May 23, 2024
Stabilization Pond Workshop	Huron Events Center	June 6, 2024

MORE CLASSES TO BE ADDED SOON!

Register for training classes online at: web.sdarws.com/events

Classes start at 8:00 AM Tuesday through Thursday. Classes end at approximately 4:30 PM on Tuesday and Wednesday, and noon on Thursday. One-day Workshops start at 8:00 AM and end at 4:30 PM.

EXAM INFORMATION

All exams cost \$60.00 and must be taken "in-person."

Any exam can be taken at an exam session. You can take more than one exam at an exam session; however, the exam session remains at three hours long.

All exam applications are due no later than two weeks prior to the exam date to DANR. Questions regarding exams can be directed to Tammie Hill with DANR at 605-773-3577.

DANR OPERATOR CERTIFICATION WEBSITE

danr.sd.gov/OfficeOfWater/OperatorCert/default.aspx

The Stabilization Pond class deals strictly with ponds/lagoons and is the best class for preparing to take the Small WW Exam. The Basic WW Treatment class deals with all types of wastewater treatment other than ponds/lagoons and is the best class for preparing to take the Class I WW Treatment exam. Small Systems that use ponds/lagoons for treatment can come into compliance with the Operator Certification Law by passing either the Small WW System exam or the Class I WW Treatment Exam. Water systems serving less than 500 individuals and use wells as its source can come into compliance by passing the Small Water Treatment exam. Larger systems must pass the Class I Water Treatment exam or higher depending on the facility classification.

STUDY MATERIALS

DANR has water exam study material to lend to operators. These include manuals from California State:

- Water Distribution System Operation and Maintenance
- Small Water System Operation and Maintenance

TRAINING CLASSES

Certification Training Classes are conducted by the South Dakota Association of Rural Water Systems. **These classes are presented at no charge.** Certified Operators can obtain contact hours for attending all of the above classes.

For more information on certification training classes, please contact Bill Thorson at 605-556-7219 (office) or 605-201-0170 (cell).

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RURAL WATER 2024

APRIL 24-25, 2024 BEST WESTERN RAMKOTA HOTEL 2111 N LACROSSE STREET RAPID CITY, SD

10 Contact Hours • Door Prizes • Lunch on Day One • Exhibit Displays



Get ready for an immersive experience at the EXPO, welcoming water and wastewater utility staff, board/council members, engineers, and State and Federal employees alike. Dive into 13 dynamic presentations tailored for licensed operations specialists seeking to stay at the forefront of their field. As you soak in the training sessions, don't miss the chance to explore the Exhibit Hall, where industry-leading manufacturers and suppliers will unveil the latest technological breakthroughs that have reshaped our industry in recent years.

WEDNESDAY, APRIL 24

7:30 AM	Registration – Refreshments – Visit Displays	7:30 AM Exhibits Open – Coffee, Juice, & Rolls			
8:00 AM	Welcome, Agenda Review	8:00 AM	8:00 AM Water Meters Can't Find Distribution Ma they? You Bet They Can! – Graham Mattison, Kamstrup		
8:15 AM	Capital Improvement Planning – Dane Ekdom, ISG				
9:00 AM	Disinfection By-Product Rule Sampling Procedures Failure to Monitor, Forms, Chain of Custody	8:45 AM	Water Tank Maintenance and Life Cycl – Rich Kemmis & Chad Edwards , Maguire I		
	– Erin Fangan, SD DANR & Dean Aurand, MidContinent Labs	9:30 AM	Refreshment Break – Visit Displays		
9:45 AM	Refreshment Break – Visit Displays	10:00 AM	– Karen Brady, RESPEC		
10:15 AM	Telling Your Story with Data: Benchmarking with the AE2S Annual Rate Survey – Miranda Kleven, AE2S	10:45 AM			
11:00 AM	Brass, Corps, Saddles, Curb Stops: Proper Application and Installation – Calvin Williams, A.Y. McDonald	11:30 AM	Door Prizes - Dismiss		
12:00 PM	Deli Bar Buffet Lunch	REGISTER ONLINE sdarws.com/EXPO ATTENDEE REGISTRATION \$125 – In-Person Registration			
1:00 PM	Water-use Trends and Water Availability in the Black Hills Region of South Dakota, 1990-2022 – Colton J. Medler – USGS, Dakota Water Science Center				
1:45 PM	Lead Service Line Inventory Update – Erin Fangan, SD DANR, & Erin Steever, Bartlett & West	Includes 10 contact hours & lunch on Day one FOR MORE INFO CONTACT			
2:45 PM	Refreshment Break – Visit Displays	Gavin Graverson · 605-501-2298 · expo@sdarws.com			
3:00 PM	VFDs in Water & Wastewater – Bob White, Electric Pump	ROOM	BLOCK ern Ramkota Hotel • 605-343-8550		
3:45 PM	Are You Above or Below the Cybersecurity Poverty Line? – Jim Edman, Department of Homeland Security	Desi wesi			
4:30 PM	PVC Pipe Systems: Design & Installation Considerations for Rural & Municipal Applications – Dana Foreman & Matt Oedekoven, DGR	SD	South Dakota Association of Rural Water Systems		
5:00 PM	Vendor Reception - Exhibit Hall – Join us for free beer, snacks, and a chance to win a TV!		of Rural Water Systems		

THURSDAY, APRIL 25

7:30 AM	Exhibits Open – Coffee, Juice, & Rolls
8:00 AM	Water Meters Can't Find Distribution Main Leaks, Can they? You Bet They Can! – Graham Mattison, Kamstrup
8:45 AM	Water Tank Maintenance and Life Cycle Costs – Rich Kemmis & Chad Edwards , Maguire Iron
9:30 AM	Refreshment Break – Visit Displays
10:00 AM	West River Regional Water and Wastewater Study – Karen Brady, RESPEC
10:45 AM	Wastewater Lagoon Maintenance Options – Tim Donovan, Hawkins
11:30 AM	Door Prizes – Dismiss

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SEASONS CHANGE, TRAININGS CHANGE

Training can be rather mundane and repetitious, but it is an important part of our industry's toolbox. The more you know and the safer you can be, the better you will be at your job. You will also be able to go home every time in one piece. The water and wastewater industry is perilous if you don't pay attention to what you are doing and your location on the work site. The daily things you deal with can be very hazardous or even extremely deadly. Atmospheres, chemicals, machinery, electrical hazards, and diseases are just a few things you may deal with on your work site. Onthe-job training can be the best or the worst, depending on the trainer and the student. Classroom training can be good or bad, depending on the trainer and the subject. Any training is better than none at all.

I am working on my schedule for July through December, and some changes have been made to the upcoming and current schedules. Some classes have been added with more opportunities to learn and get some hours. All of our trainings are posted on our website, sdarws.com, as they are scheduled. I have changed some venues, so make sure you look at which venue is listed and the address of the venue. There may be more than one location by the same name. I try to move things around so that not every class is a long trip for everyone. Watch for some different localities, and I will look for others that fit into class sizes and schedules. If you want or need extra training or materials, let me know by email or phone call, and I will try to get you information or schedule some one-on-one time if required. Our capable water and wastewater staff also put on one-day workshops and training, and they can tailor a workshop to a specific subject or area of expertise if you need it. We are all in this together, so if we can help you or find someone to assist as needed, we will do our best to make your job more manageable. There have been some additions to programs and staff at South Dakota Rural Water Association, so look us up and let us know what we can do for you.





BILL THORSON joined the SDARWS staff in March of 2018 as a Wastewater Tech. Bill transitioned to Trainer/Technical Assistance Specialist with SDARWS in October of 2019, and took over Certification training in 2020. He was previously employed with the City of Canton as Public Works Director for nine years and water/ wastewater operations specialist for 19 years. Bill holds Class II certifications in Water Treatment, Water Distribution, Wastewater Treatment, and Wastewater Collection and is NASSCO certified in pipeline and manhole inspections. Bill is also an SDWWA board member.

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HELP IS ALWAYS WANTED

Most people will never have a thought or understanding of sewage lagoons and those that do, probably don't realize the many forms of beauty they can bring. A picturesque sunset over the ponds or enough wildlife sightings to make you feel like a zoo-goer at times can provide a feeling of tranquility. Getting to see a fresh hatch of geese or ducks in the middle of a pond utilized for the purpose of treating wastewater can make you realize that life can be created amid something that most of us would define as waste.

With much of eastern South Dakota being in the lakes region, low river valleys and marshy areas, it provides the perfect habitat for the pesky muskrat, their burrowing can be a serious



issue for the stability of the lagoon dikes and artificial wetlands. During my tenure as a city operator, I was lucky to have a healthy mink population at the lagoons. They would show up shortly after the muskrats would and then leave for another nearby source of prey when their job was done. Freshly laid eggs of migrating geese and ducks were also an easy snack for them. Minks, geese and ducks aren't the only animals on the move in this state, the biggest migrant animal of them all is us humans.

Getting to frequently travel this wonderful state, I can't help but notice all the abandoned buildings in small towns and the now empty cafes I remember eating at as a child. A correlation I've noticed is that most of the small towns of South Dakota were at their peak population during the mid twentieth century. Since then, some towns have lost 75% or more of their people. The population of small towns might be fading, but the water and wastewater systems remain, and this is creating many challenges for communities. Low sewer flow is creating hydrogen sulfide gas causing deterioration of manholes and lift stations, clay bottom lagoons are going dry, and chlorine residuals are diminishing in water storage tanks from little usage. The other struggle for these communities is finding personnel to maintain the systems. Some of the people in charge of the systems are a mayor or board members, a very part-time employee, and sometimes a volunteer. Many of

these people don't have a background in water or utility work and it can prove to be overwhelming to those that have been tasked with the job.

I've met an 81-year-old gentleman who recently got certified to maintain the water system. He has spent his time digging through the gravel to locate, map and exercise water valves, repairing hydrants, etc. for only \$3.87/day. His wife also puts in several volunteer hours between helping her husband with the water system, hosting children's events and can even be seen sweeping the county highway with a handheld broom to prevent motorcycle accidents. The pride this couple has in their community is honorable and something that we should all strive to have now and in the future when the next generation is being brought up. Another town I've been to has its mayor as the maintenance employee and wastewater operator and somehow, he does it all from a wheelchair. This makes me wonder about the future of these communities. Isn't there anybody else younger or more mobile to do these physically demanding jobs? What if nobody steps up to help in the future when these people retire?

If you're an operator living near one of these diminishing communities, perhaps you can reach

out and offer some assistance. Something to consider is becoming a contract operator to be able to help multiple communities. Contract operators are commonplace west river, but scarce on the eastern side of the state and there is a growing demand.



BLAINE EILTS joined the South Dakota Association of Rural Water Systems staff in November 2023 and comes to us from the City of Valley Springs. Blaine holds certifications in Class II Wastewater Collection, Class II Water Treatment, Class I Water Distribution and Stabilization Pond. He enjoys motorcycling, antique tractors, shooting and playing music.

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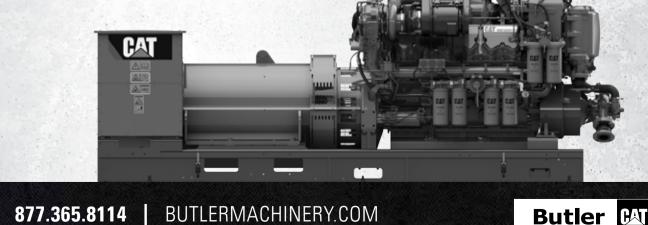


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MAY 3-4, 2024 FORT PIERRE, SD

MANDATORY RULES MEETING

7:00 PM CT on Friday, May 3rd in the Outpost Lodge Hoop Tent

TOURNAMENT DETAILS

\$150 Team Registration

Saturday, May 4, 2024

Cow Creek Boat Ramp

7:00 AM - 3:00 PM

Meal Provided following the tournament

PRIZES

\$1,000 prize for first place

Other payouts depend on participation

ROOM BLOCK

Outpost Lodge on Cow Creek Bay 28229 Cow Creek Rd, Pierre, SD 57501 605-264-5450 • theoutpostlodge.com

TOURNAMENT RULES

- Teams to consist of 2-3 people with at least one person who is a current water/ wastewater, associate or corporate member of South Dakota Rural Water.
- This is a boat-only tournament.
- Tournament begins at the Cow Creek Boat Ramp on Saturday from 7:00 AM - 3:00 PM.
- Participants may fish above or below the dam (Lake Sharpe or Lake Oahe)
- Boat inspection prior to start.
- South Dakota fishing regulations must be followed.
- Weigh-ins start @ 3:30 PM.
- Walleye tournament; largest seven walleye weighed per team.
- All judges rules are final.
- In case of a tie, the team with the biggest fish by weight wins.
- Tournament winners announced shortly after weigh-in results are compiled.
- Meal to follow at the event center @ 5:00 PM.

For more information, contact Mike Moeller, SDARWS Tournament Chair 605-270-4989 • mmoeller@sdarws.com **REGISTER ONLINE AT SDARWS.COM/FISHING** REGISTRATION DEADLINE: APRIL 26, 2024



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SSO OR SOS OR HELP?

f you're thinking I missed a typo or got an acronym wrong, that's not the case. But let's talk about why we use so many acronyms. Wouldn't it be simpler to just say what we mean instead of rattling off letters? It saves time upfront but causes confusion later when we have to explain what we meant. When I started working in the Rural Water World six years ago, I felt like everyone was speaking in a secret code with all the acronyms flying around. Now that I've got that off my chest, let's dive into what this acronym is all about.

The place in the wastewater world you'll encounter acronyms is in your Discharge Permit. If you've recently received a new permit, take some time to go over the testing requirements and parameter limits. They might have changed, and change isn't always easy to embrace. This is the section that covers Sanitary Sewer Overflow. HERE IT IS Word For WORD.

Section 4.2 – Effluent Violation, Bypass, Emergency Discharge, and SSO Reporting Requirements.

A "Sanitary Sewer Overflow" or "SSO" is the intentional or unintentional discharge of untreated sewage from the sanitary sewer collection system, including sewer lines, manholes, lift stations, etc. An SSO is an enforceable violation of the permit unless it is an allowable bypass that does not cause effluent limitations to be exceeded, an anticipated bypass approved by the Secretary, or an unanticipated bypass allowed under Section 4.2 – Effluent Violation, Bypass, Emergency Discharge, and SSO Reporting Requirements.

4.2 Effluent Violation, Bypass, Emergency Discharge, and SSO Reporting Requirements

- Any possible or actual endangerment to health or the environment attributed to an effluent violation, bypass, emergency discharge, or sanitary sewer overflow shall be reported as soon as possible, but no later than 24 hours after becoming aware of the circumstances as follows: a. During regular business hours (8:00 a.m. - 5:00 p.m. Central Time), the report shall be made at (605) 773-3351. b. Outside of normal business hours, the permittee shall contact the South Dakota Emergency Management at (605) 773-3231.
- Effluent violations, bypass, sanitary sewer overflows, and emergency discharges that do not meet the conditions above shall be reported to the Secretary within 24 hours from the time the permittee becomes aware of the circumstances as follows:

 a. During regular business hours (8:00 a.m. - 5:00 p.m. Central Time), the report shall be made at (605) 773-3351.
 b. Outside of normal business hours, the permittee shall leave a message at 1-800-GET-DENR (1-800-438-3367).
- The permittee shall submit notice of bypass as follows: a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Secretary at least 10 days before the date of the bypass. b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass to the secretary at (605) 773-3351 by the first workday (8:00 a.m. – 5:00 p.m. Central Time) following the day the permittee became aware of the circumstances. Permit No: SD0022489 Page 26 of 33
- 4. The Secretary may require the permittee to notify the general public or downstream users that could be or will be impacted by the effluent violation, bypass, emergency discharge, or SSO. a. In making the decision to require public notification, the Secretary will consider the potential impacts as a result of the effluent violation, bypass, emergency discharge, or SSO, the downstream beneficial uses (such as drinking water or recreation), and the potential for public contact. b. If required by the Secretary, the permittee shall notify the public and/or downstream users as soon as possible, but in no case more than 24 hours after the effluent violation, bypass.
- 5. In addition to verbal notification, the permittee shall submit a written report of the circumstances regarding the effluent violation, bypass, sanitary sewer overflow, or emergency discharge to the Secretary. The permittee shall use the Emergency Discharge and SSO Reporting Summary Form in Appendix A to report an emergency discharge or SSO. Effluent violations shall be reported on the Discharge Monitoring Report forms required in Section 4.1 – Reporting of Monitoring Results. a. Reports shall be submitted in accordance with Section 4.1 – Reporting of Monitoring Results. b. The written submission shall contain: i. A description of the event and its cause; ii. The

period of the event, including exact dates and times; iii. Where the wastewater was discharged; iv. The estimated time the event is expected to continue if it has not been corrected; v. Any adverse effects, such as fish kills; vi. If public notification was required, describe how the public was notified of the discharge; and vii. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the event.

6. The written report shall be submitted by the 28th day of the following month. The Secretary may require a written report to be submitted sooner or may require additional information if the discharge has the potential to impact human health or the environment.

Reporting the activity from your wastewater system is crucial, especially if your system discharges wastewater. As a permit holder, you're required to complete a report every month, even if there's no discharge. It may seem like just another task, but it's a serious responsibility. DANR trusts you to operate your wastewater facility according to your permit rules, and if you can't, they're accountable to the EPA to ensure compliance.

Acronyms are everywhere in the water and wastewater world, especially within Discharge Permits and SSO reporting. Whenever wastewater left the system, even if it backed up into a basement, a paper report was sent to DANR. But things have changed. Most systems using Net DMR reporting have incorporated SSO reporting into their capabilities. The challenge is getting all the facilities with no discharge to set up this reporting on Net DMR. It won't happen overnight, but DANR and SDARWS are here to help make the transition as painless as possible. It's like unraveling a secret code, but fear not! Embracing electronic reporting tools like Net DMR is like trading your quill for a keyboard – it simplifies processes and minimizes errors. Yet, rallying all facilities, even those designated as no discharge, to adopt Net DMR is just like herding cats in a rainstorm! There's hope on the horizon. The members of SDARWS #OneTeam are uniting like a team of wastewater management superheroes armed with education and support programs to guide facilities through the acronymladen maze. Just call Danny Ayers @ 605-291-2299 or Blaine Eilts @ 605-645-6488, or me, Jeff Fossum, @ 605-201-9561.

Why did the DANR bring a ladder to the bar? They heard the drinks were on the house, and they had to do an O&M inspection of the rainwater collection system to check if it was compliant with EPA regulations!



JEFF FOSSUM joined the SDARWS staff in February 2018, as a Circuit Rider. He previously worked for 32 years at the City of Canton, SD as the Water/ Wastewater Superintendent. Jeff holds a Class II Water Treatment, Class II Water Distribution, Class II Wastewater Treatment and Class II Wastewater Collection. His interests include gardening, woodworking and talking.



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DO YOU KNOW YOUR ISO RATING?

Do you know your community ISO rating or what an ISO rating is? An ISO fire rating is a score provided to fire departments and insurance companies by the Insurance Services Office (ISO). The score comprises four categories, with water being the second to fire department preparedness. The water score on an ISO rating makes up 40 percent of the total score.

The water system is evaluated by how many fire hydrants it has in an area, the amount of available water after daily consumption, and whether the community has enough water and water access points for fire departments during a fire event.

South Dakota Association of Rural Water Systems has assisted many water systems with collecting data to improve their ISO rating. The process of collecting the data requires collecting static pressure at each fire hydrant, collecting residual pressure at each hydrant, and the flow and pressure out of each fire hydrant.

Before flow and pressure are tested out of the fire hydrant, the static system pressure must be collected on the closest fire hydrant. After that is collected, the fire hydrant can be flow tested, and while it is being flow tested, the residual pressure needs to be collected at the hydrant the statice pressure was





Static pressure being recorded in system

collected. The pressure should maintain at least 20 PSI for adequate fire protection in the system.

The community's ISO rating significantly impacts homeowners' insurance costs. The better the ISO rating, the more rebates you can expect on your insurance costs in that area. The ISO rating for a community can be found by talking to the local fire department. Remember that they do not have to give you this information but usually will. If your ISO rating is low and it is due to a lack of pressure, flow, or access points, this can be a very costly endeavor to alleviate. This would mean more water storage at a higher elevation. It would also mean more fire hydrants, requiring the installation of additional water mains. All these improvements come at the expense of the system and will ultimately be billed back to the customers.



MIKE MOELLER has worked for SDARWS since 2014. He previously worked at Dakota Pump and Control for five years, and served 30 years with the South Dakota National Guard. Mike also holds an Advanced Safety Certificate from the National Safety Council.

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CURB STOP AND CURB BOX MAINTENANCE

When it comes to maintenance, it is easy to overlook all those curb boxes in your water system. Have you spent hours or days looking for a curb box or even had no success locating it? Do you have curb stops you are unable to operate? Some of you might be thinking about what is the best way to keep track of the maintenance for all those curb stops and curb boxes out there? I have compiled some info below on how and what to keep records on.

CURB BOX CONDITION

Is the curb box damaged? If so, what is needed to make repairs?

CURB STOP OPERATING CONDITION

How did the valve operate, easy, hard, or seized up?

FUNCTION OF THE CURB STOP

What does the curb stop shut water off to, one house, several houses?

LOCATION OF CURB BOX

Longitude & latitude, mapped, measurements off a fixed point. The more the better here. Something might change down the road. Might get covered with pavement, concrete or landscaping. A lost curb box and stop can be as bad as a broken one.

A good maintenance plan will start with being able to locate each curb box. This can be accomplished several ways, metal detector, line locator, and experience. Keeping this information in a book and on your phone where it is readily available when the time arises. This will save you time and money in the long run. Marking each curb box with a post or fiberglass marker, and also being able to visibly see the curb box lid will speed up the time it takes to locate a curb box when time is of the essence. I like the curb box top to be at ground level or slightly below ground level but still visible and the tops painted blue.

- Direction to close (¼ turn clockwise) keep in mind on shut off day. It's time "Clockwise" to shut the water off.
- Direction to open. (¼ turn counterclockwise).
- A little anti-seize on the cap threads. This will help keep the cap from becoming seized up. Grease will also work.
- I recommend getting a Snap-On B2191 pentagon socket and a battery powered impact for removing the curb box cap (photo A).
- Some but not all curb boxes are adjustable. You can adjust the elevation by using a bar to pry on the top to raise it or a block of wood and a hammer to lower them, be very careful not to overdo it and break the valve or service line.
- Sometimes a curb box can get dirt, rocks, or other foreign material inside. You can use a ten-foot section of 1 inch conduit pipe, and a reducer on a vacuum to remove the material (photo B).
- If you have a bent curb box. You can place a solid steel bar inside to straighten.
- I recommend exercising your curb stops ever three years.

SEIZED CURB STOP

- 1. Try turning it back and forth with pressure in both directions.
- 2. Try applying a little pressure in the clockwise direction first, while someone else tapes "lightly" on top of the curb stop key this a hammer.
- 3. Get a bottle of ice-cold Coke. Take a drink, pour the rest down the curb box. Let it set over night. Try steps 1 and 2 again.

Every situation is unique and may require some finessing. Don't hesitate to give us a call at SDARWS. We are here to help you. Give our office a call at 605-556-7219 or if you are west river, call me at 605-641-4557. I look forward to working with you on your upcoming curb box and curb stop maintenance.







WYATT HIX started his career at SDARWS in the spring of 2022 at a Circuit Rider and is based out of our Spearfish office. He holds a Class II Water Distribution, Class I Water Treatment certificate, and is a licenced Sewer and Water Contractor, Certified Installer of Individual and Small on-site Wastewater Systems, and trained in on-site Wastewater Treatment Systems Installation. Wyatt resides in Belle Fourche.

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SDARWS TOURS NEW MAGUIRE IRON FACILITY

South Dakota Rural Water Association Staff and Rural Development Staff tour the New Maguire Campus on February 13th, 2024.

In September 2020, Maguire broke ground on their new headquarters in Sioux Falls, SD located North of I-90 and West of I-229. This new state-of-the-art campus will continue to ensure Maguire is the industry leader in the fabrication and maintenance of water storage tanks and towers.

The new Maguire campus features three buildings on 20 acres of land. The three buildings include the main office, mechanic shop, and fabrication facility. The campus has been designed with Maguire team members in mind. Maguire will be the first company in South Dakota to achieve a Fitwel certification. This investment in human health will greatly benefit Maguire team members in the short and long term.

The 70,000-square-foot manufacturing facility has been outfitted with new equipment from around the world, which includes the integration of robotics. This new equipment will improve worker comfort, manufacturing quality, and expanded capacity. This new equipment and processes will ensure Maguire continues to be a leader in the water tank industry as we help customers store and protect quality water.





GAVIN GRAVERSON joined the SDARWS staff in April 2023 after he retired as the Sioux Falls Water Superintendent. Gavin has 35 years of experience working in the Water field as a water operator for the City of Beresford and then with the City of Sioux Falls. Gavin has a Class IV Water Treatment certification. In his free time you can find him at the Crooks Gun Club shooting, out hunting or fishing.



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CERTIFICATION PRACTICE QUESTIONS

1. An empty one-ton chlorine container (Tare weight) usually

weighs about

- a. 500-700 lbs.
- b. 800-900 lbs.
- c. 2000-2100 lbs.
- d. 1300-1700 lbs.
- 2. A full one-ton chlorine container usually weighs
 - a. 2000-2100 lbs
 - b. 1700-1800 lbs
 - c. 2200-2400 lbs
 - d. 3300-3700 lbs

3. Chlorine gas is drawn into a flow of water at the chlorinator through a(n)

- a. venturi meter
- b. diffuser
- c. pressure relief valve
- d. injector

14. Several one-ton chlorine containers are connected to a manifold that collects the liquid and allows it to proceed into the evaporator using

- a. cat-tail hookups
- b. neoprene rubber hoses
- c. leaded gas lines
- d. type K copper pigtail lines

5. Chlorine liquid expand	ls approxi	imate	lyt	imes i	into
a gas when warmed					

10.D

a. 7.48 b. 460 c. 2.5 d. 0.785

- 6. Long stretches of chlorine piping downstream of evaporators have to have _____ installed should the gas re-liquefy.
 - a. pigtails
 - b. expansion vessels
 - c. fusible plugs
 - d. lead gaskets

7. Intakes to chlorine leak detectors should be placed

- a. near the roof line in a chlorine room
- b. near the floor in a chlorine room
- c. immediately outside the chlorine room
- d. about eye-level inside the room
- 8. Which of the following is the proper emergency kit for a 150-pound chlorine cylinder?
 - a. "D" kit b. "A" kit c. "B" kit d. "C" kit
- 9. When making or breaking a chlorine gas connection, the lead gasket should be
 - a. refurbished and replaced until cracks are noted
 - b. thrown away each time and replaced regardless of its condition
 - c. ruffed on its outer edges then inserted again
 - d. sanded down with a "smoothing" tool

10. Which of the following compounds is considered to be

D'l

- "free" chlorine in its present state?
- a. HCl
- b. Ca(OCI)2
- c. N aOCI
- d. HOCI

2.D 3.D 4.D 5.B 6.B 7.B 8.B 9.B

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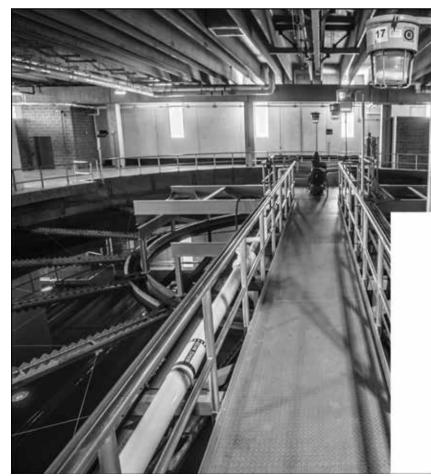


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SDARWS Conferences & Events





The EXPO is open to all water and wastewater utility staff, board/council members, engineers, State and Federal employees. The training will consist of 13 presentations, 30 minutes each, thus allocating ten contact hours for those individuals who are licensed operations specialists. Along with the training sessions, the EXPO will showcase many of our industry's manufacturer and supplier leaders. Many will be displaying the recent advances in technology our industry has witnessed over the past several years.

To learn more, visit sdarws.com/EXPO or email expo@sdarws.com

Rapid City Ramkota Hotel & Convention Center 2111 N Lacrosse Street • Rapid City, SD • 605-343-8550

Rural Water Fishing Tourney | May 3-4, 2024

The Annual Rural Water Warriors Fishing Tournament takes place at the Outpost Lodge on Cow Creek Bay in 2024. Teams consist of 2-3 people with at least one person who is a current water/wastewater, associate member or corporate partner of the SDARWS. This tournament is limited to 40 teams. There is an eight fish maximum per boat with the largest seven fish weighed, and all South Dakota fishing regulations must be followed. A mandatory rules meeting is held at 8:00pm the night before the tournament.

For more information, visit sdarws.com/fishing or email fishing@sdarws.com

Outpost Lodge on Cow Creek Bay Cow Creek Recreational Area, 28229 Cow Creek Rd. • Pierre, SD • 605-264-5450









Rural Water Open Golf Tourney | July 23, 2024

The Annual Rural Water Open will take place in Sioux Falls. This tournament is open to Utility Members, Associate Members, and Corporate Partners of SDARWS. Registration is \$100/player and includes golf, cart, lunch, and awards.

For more information, visit sdarws.com/golf or email golf@sdarws.com

Trap Shoot | Fall 2024

The Second Annual Rural Water Trap Shoot will take place at the Crooks Gun Club. This tournament is open to Utility Members, Associate Members, and Corporate Partners of SDARWS. Registration is \$100/player or \$150 to pick your partner. Includes shells and dinner. For more information, visit sdarws.com/trap or email ggraverson@sdarws.com

Leadership Seminar | November 13-14, 2024

This seminar is geared towards Rural Water System Directors and covers a gamut of topics pertaining to rural water boards and system leadership.

For more information, visit sdarws.com/leadership or email jcorbin@sdarws.com

Pierre Ramkota Hotel & Convention Center 920 W. Sioux Ave. • Pierre, SD • 605-224-6877

Annual Technical Conference | January 14-16, 2025

The ATC is the annual conference of the South Dakota Association of Rural Water Systems, and is the largest water/wastewater conference in South Dakota. This event is designed to bring together water and wastewater utility systems – both large and small, municipal and rural – for sessions in operations, management, boardsmanship and governance. This conference is held every year during the first week of the South Dakota Legislative session in Pierre, SD and hosts over 500 attendees.

To learn more, visit sdarws.com/ATC or email atc@sdarws.com

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FROM THE EXECUTIVE DIRECTOR

FAREWELL AND FORWARD: REFLECTING ON A REWARDING JOURNEY WITH SDARWS

As I approach my final day at the South Dakota Association of Rural Water Systems (SDARWS) on April 15, 2024, I am engulfed in a whirlwind of emotions – a blend of excitement and sadness. Today, I announce my retirement, marking the end of a fulfilling chapter in my life that has spanned over six years as your Executive Director.

Looking back, the journey has been nothing short of extraordinary. From my early days in the late '80s and early '90s as manager of West River/Lyman-Jones Rural Water through the twenty-five years with Mid-Dakota Rural Water System to the culminating six years here at SDARWS, it's been a remarkable ride. Over these 37 years in the rural water industry, I've been fortunate to lead, learn, and grow alongside some of the most dedicated teams and organizations. Each has left an indelible mark on my professional and personal life, imparting invaluable life and leadership lessons.

My parents once told me, "If you find a career that you love, then you'll never work a day in your life." This adage has been the story of my career. More than a profession, rural water has been a passion, offering me a nurturing and accepting community. It has been my utmost pleasure to serve in this sector, and if given a chance to relive my career, I wouldn't alter a single step of this journey.

As I prepare to step away, I am heartened to see the SDARWS board managing a seamless leadership transition. The succession wheels are turning, and I am confident that the future of SDARWS is secure and ready to continue as a model for rural water state associations nationwide.

Reflecting on my tenure, I am proud to have been part of an era of significant growth and recognition for SDARWS. We've

expanded from a team of 12 with a budget under \$2 million to a robust staff of 16 (soon to be 18) and a budget of \$3 million. This growth is a testament to our collective effort to enhance training programs and service offerings across South Dakota. Our achievements have been acknowledged by the National Rural Water Association (NRWA), earning national awards for excellence in five of the last six years. This success, I firmly believe, is not solely my doing but a result of the exceptional team I had the privilege to work with. Their hard work, intelligence, and collaborative spirit are unparalleled.

As I step into retirement, I hope to maintain a connection with the rural water community. I trust that new opportunities will emerge, allowing me to continue contributing to this industry I hold so dear.

Lastly, I must express my deepest gratitude to my wife, Laurie. She has been my rock, my unwavering supporter through the peaks and valleys of this journey. Her encouragement, understanding, and forgiveness during challenging times have been the backbone of my ability to pursue and thrive in this field.

In closing, I look forward to the paths our lives will take and hope they intersect again. The rural water community is not just a professional network; it's a family. I cherish the experiences, the friendships, and the lessons learned. Thank you all for being a part of my story and for the unforgettable years at SDARWS. As I turn this page, I carry with me a treasure trove of memories and the satisfaction of having contributed to a cause so close to my heart.

Till we meet again,

Kurt Pfeifle

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