

ServiceLine

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



**2024 EXPO CALL
FOR PAPERS**

SEE PAGE 9

**LEAD SERVICE
LINE UPDATE**

**SDARWS INSPIRES 4TH
GRADER'S 4-H PROJECT**

**FIRE RATINGS
AND WATER
INFRASTRUCTURE**

**2024 ATC AWARD
WINNERS**



Water Treatment Chemicals, Equipment and Local Service

Scan this QR code
to see the Hawkins
testimonial video.



800.328.5460
wtg@hawkinsinc.com

Black Hawk, SD 605.787.6881 Sioux Falls, SD 605.368.5793 Fargo, ND 701.293.9618 Washburn, ND 701.462.8588

*Customized solutions by a
professionally trained team.*

SERVICE

- Mini Bulk Delivery
- Equipment Installations
- Laboratory Testing

WATER TREATMENT

- Potable Water
- Wastewater Treatment
- Collection Systems

EQUIPMENT

- Chemical Injection Pumps
- Chlorination Control
- Chemical Feed Equipment

Now Hiring for Sales & Service!

Visit www.hawkinsinc.com/careers for current openings and locations



Seeing success from your PERSPECTIVE

“We know your goals are
bigger than just the project at
hand. We’re invested in your
overall best interest.”

Dustin Dale, PE, AE2S Engineer



www.ae2s.com

Water Engineering and Beyond

Award-Winning Best Place to Work





STAFF



KURT PFEIFLE
Executive Director



JEREMIAH CORBIN
Deputy Director



ROBYN BROTHERS
Office Manager



JENNIFER BAME
Marketing



STEVE ATTEMA
Training Specialist



MIKE MOELLER
Training Specialist



JEFF FOSSUM
Training Specialist



BILL THORSON
Training Specialist



PAUL DORWART
Training Specialist



GAVIN GRAVERSON
Training Specialist



KEVIN CHRISTENSON
Source Water



ALLEN KOCMICH
Circuit Rider



WYATT HIX
Circuit Rider



JIM VAVRA
Circuit Rider



DANNY AYERS
Wastewater Tech.



BLAINE ELTS
Wastewater Tech.

SOUTH DAKOTA ASSOCIATION OF RURAL WATER SYSTEMS

203 W. Center Street • P.O. Box 287
Madison, SD 57042
605-556-7219 • info@sdarws.com
www.sdarws.com

TABLE OF CONTENTS

- 5 Association Updates
- 7 Operator Certification Training Class
And Exam Schedule
- 9 EXPO Call For Papers
- 11 2024 ATC Event Recap
- 16 2024 Award Winners
- 19 SDARWS Inspires 4th Grader's 4-H Project
- 21 Dosing Your Decibels: Hearing Protection In the Water
Industry
- 23 Lead Service Line Update
- 25 Ensuring Safety: The Give And Take Of Fire Ratings
And Water Infrastructure
- 27 Certification Practice Questions
- 29 Upcoming Conferences & Events
- 31 Fishing Tournament Information

SDARWS CORPORATE PARTNERS

MARSH & MCLENNAN AGENCY, INC.
RISK ADMINISTRATION SERVICES
DAKOTA PUMP & CONTROL
DAKOTA SUPPLY GROUP
TREATMENT RESOURCES, INC.
BANNER ASSOCIATES
BARTLETT & WEST, INC.
DGR ENGINEERING
MAGUIRE IRON, INC.
CORE AND MAIN

DAKOTA PUMP INC.
COBANK
MILBANK WINWATER
AE2S
ISG
BROSZ ENGINEERING
HAWKINS
RESPEC
JETLINE SALES & SERVICE

Cover Photo: Northern Cardinal. Photo Credit freepik.com

ServiceLine is published bi-monthly by the South Dakota Association of Rural Water Systems. The contents of this publication may not be reproduced by any means, in whole or in part, without the prior written consent of SDARWS. SDARWS reserves the right to reject or edit any manuscripts received for publication. All submissions become the property of the South Dakota Association of Rural Water Systems unless otherwise specifically stated in this publication. Statements of fact and opinion are the responsibility of the authors alone and do not imply an opinion on the part of the South Dakota Association of Rural Water Systems. Advertisements and editorials do not represent official policies of the Association. Acceptance of advertising by SDARWS does not constitute endorsement of the advertiser, its products or services, nor does SDARWS make any claims or guarantees as to the accuracy or validity of advertisers' claims.

To submit editorial or advertising content, or to update your mailing information, please contact Jennifer Bame at 605-556-7219 or email jbame@sdarws.com.

ServiceLine - Copyright 2024

DAKOTA PUMP

an *impel* company

WATER PUMP STATIONS

Modular Water Booster Stations
Grade Mounted Water
Booster Stations
Water Booster Pump Stations
Water Control Vaults

SEWAGE PUMP STATIONS

Wet Well Mounted Lift Stations
Flood Suction Lift Stations
Self-Priming Lift Stations
Obround Package
Pump Stations

WHY PREFABRICATED?

- Fully Factory Tested
- Ease of Installation
- Simplified Design
- Single Source Responsibility

PROACTIVE PUMP STATION SALES, MAINTENANCE AND INSPECTION

WE PROVIDE
SOLUTIONS
BUILT ON
RELATIONSHIPS

DAKOTA PUMP OFFICES

MITCHELL

25524 413th Ave, Mitchell, SD 57301
MAIN 605.996.6636 | CELL 605.770.9371

BLACK HILLS

11985 Quaal Rd, Black Hawk, SD 57718
MAIN 605.996.6636 | CELL 605.430.2862

PROACTIVE PUMP STATION SALES, MAINTENANCE AND INSPECTION | VISIT DAKOTAPUMP.COM



**Bartlett
& West**

Engineering water solutions for community growth.

Clean, safe and reliable water is a basic building block of a modern community. Residents and industry depend on your system. You need proactive communications regarding system needs and innovative, comprehensive solutions. As a national leader with long-time relationships in water-focused services, Bartlett & West is your ally for success.

5900 S. Western Ave., Ste. 101 ■ Sioux Falls, SD
(888) 200-6464 ■ www.bartlettwest.com



ASSOCIATION UPDATES

RURAL WATER EXPO 2024

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.



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*.



WATER TOWER EXPERTS



(605) 334-9749 | MAGUIREIRON.COM |    

EXTEND THE
LIFE OF YOUR
WATER TANK

TANK MAINTENANCE & NEW TANKS

- Full-Service and Custom Tank Maintenance Plans
- Interior/Exterior Tank Painting
- Interior/Exterior Sandblasting and Containment
- Interior/Exterior Tank Inspections
- Lead Abatement
- Interior Tank Cleaning and Disinfection
- Custom Tank Logos
- Chemical Cleaning
- Tank Mixing Systems
- 24-Hour Emergency Services



MAGUIRE

CHAD EDWARDS

South Dakota Water Tower Expert
(605) 759-4957 | edwardsc@maguireiron.com

Winwater™

COMPANY

**S. Hwy. 15 • P.O. Box 350
Milbank, SD 57252
1-800-743-2972
Fax 605-432-5447**

- WATER PRODUCTS
- INDUSTRIAL PIPING
- WATER METER SYSTEMS
- PUMP SYSTEMS
- GEO TEXTILE FABRIC
- ROAD CASTINGS

*Large enough to handle any job,
but small enough to care about yours.*



OPERATOR CERTIFICATION TRAINING AND EXAMS

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

Wastewater Collection	Sioux Falls - Hilton Garden Inn SW	February 6-8
OpCert Exam	Sioux Falls- Hilton Garden Inn SW	February 8, 2024
Cross Connection Control and Backflow Prevention	Aberdeen - Dakota Events Center	February 21, 2024
Basic Water Treatment	Aberdeen - Dakota Events Center	March 5-7, 2024
OpCert Exam	Aberdeen - Dakota Events Center	March 7, 2024
Intermediate Water Treatment	Sioux Falls - Hilton Garden Inn SW	March 19-21
OpCert Exam	Sioux Falls - Hilton Garden Inn SW	March 21, 2024
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

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).



engineering
a better
community

water | wastewater

Mni Wasté Water Supply Project | Cheyenne River Sioux Reservation | North Central SD

Brookings | Sioux Falls | Vermillion | Rapid City | Milbank
605.692.6342 | Toll Free 1.855.323.6342
www.bannerassociates.com

BANNER
engineering a better community



WATER SOLUTIONS THAT AREN'T WATERED DOWN.

Featuring world-class scientific and academic leadership, RESPEC is the premier provider of water, environmental, and natural resources engineering and technology in North America. We help clients adapt to the dynamically changing present and prepare for water demands of the future.

RESPEC.COM



RURAL WATER

EXPO

2024

CALL FOR PAPERS

South Dakota Rural Water, in cooperation with the many small and rural systems located in western South Dakota, would like to invite manufacturers, suppliers, and engineering firms to participate in our Rural Water EXPO April 24-25, 2024 at the Best Western Ramkota Hotel & Conference Center, Rapid City, SD.

Presentations for the 1½ day event will focus on water technology, distribution and regulatory advances in the water & wastewater field. 10-foot tabletop displays will be arranged around the perimeter of the room to provide easy access to exhibit displays.

In order to provide reduced registration for attendees, we have set the tabletop display cost at \$300/exhibitor (non-electric), \$325 (electric). We will also offer exhibitors 30 minutes on the program on a first come first serve basis. We have pre-arranged our program to provide 20 presentations at 30 minutes each. Lunch will be provided.

TOPIC SUGGESTIONS

- Drinking water security strategies and tools
- How Water Storage Can Impact Water Quality
- Fair Labor Standards Act
- Hands-on sessions:
 - ◆ Control valve repair kits
 - ◆ Hydrant maintenance and repair
 - ◆ Solution pump repairs (diaphragm and peristaltic)
 - ◆ Repair couplers, saddles, wet tapping
- The importance of Cross Connection Control
- Water Rights for public systems
- Ice Piggings to clean water and sewer pipelines
- Source water protection and sustainability of water supplies
- Climate change, water and energy efficiency, and conservation
- Clean Water Act/SDWA connections, nutrient pollution, and Harmful Algal Blooms (HABs)
- Emerging drinking water treatment technologies
- and optimization of current technology
- State revolving loan fund tools and techniques/ green infrastructure strategies
- Small systems: TMF, sustainability strategies, technologies, and compliance
- Trench Safety
- PFAS
- Data management (e.g., SCADA, GIS, IT)
- Workforce, operator certification, and/or technical assistance initiatives
- Distribution system issues
- Emerging contaminants in drinking water, both chemical and microbial
- Drinking water research
- Sanitation and wastewater management
- Risk assessment, risk communication and consumer outreach
- Implementation of regulations – challenges and successes

Register & submit abstracts online at sdarws.com/expo



Trusted. Professional. Solutions.

At DGR Engineering, we know about water and its vital role in everyday life. After all, we've been working in the industry since 1952. We provide our clients with solutions they can trust, covering all types of water services from supply, treatment, storage and distribution, to wastewater treatment, collection, and sewer rehab.

Call us today to discuss solutions for your next project.



Sioux Falls, SD
Rock Rapids, Sioux City
and Sioux Center, IA

800-446-2531



dgr.com



COMMITTED TO MAKING YOUR WORKPLACE SAFER

We're more than a workers' compensation insurance policy provider. We're your partner in driving injury prevention.

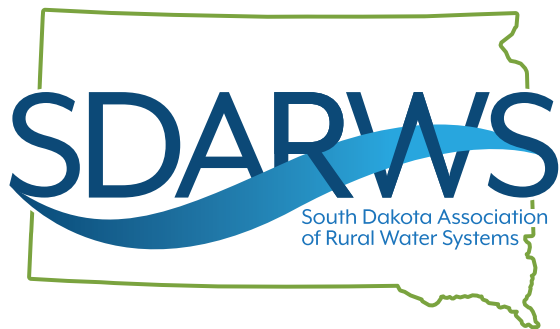
RAS has been the endorsed Work Comp carrier for the SD Rural Water Association for over 10 years.



Our association agency partner:

Justin Overman
Marsh & McLennan Agency, LLC
605.339.3874

RASCompanies.com
800.732.1486



EVENT RECAP

Amidst winter's icy embrace, the 2024 South Dakota Rural Water Annual Technical Conference brought warmth and energy to the scene from January 10-12 at the Ramkota Hotel & Convention Center in Pierre, SD. Undeterred by the extreme cold, attendees journeyed to Pierre for our industry event sponsored by AE2S. After a few morning training sessions, the Awards Luncheon sponsored by DGR Engineering kicked off the conference, ensuring our awardees received continuous recognition throughout the entire affair. After the accolades were made, the scene was set for our Keynote Speaker, Dan Meers, the iconic KC Wolf, mascot for the Kansas City Chiefs. Dan captivated our group with tales from his journey, sharing invaluable lessons from his extensive career as a professional mascot, inspiring the audience to make wise investments in each passing day.

Entering its second year, the Water Meter Challenge, backed by prizes from Metering & Technology Solutions, Ferguson Waterworks, and Mueller, continued the excitement at this year's event. Contestants honed their skills on Badger, Neptune, or Mueller meters, competing in the finals hosted in our Exhibit Hall. The top six contestants showcased their talents, with Josh Rogness (Brookings-Deuel RWS) securing first place,

Hannah Kast (DANR) in second, and Austin Collins (City of Pierre) in third. The event was a blast, and we're already looking forward to hosting it again next year.

Generosity flowed as attendees made substantial contributions to our WaterPac fundraiser. Traditional and second annual gun raffles, combined, generated record profits of \$8,860. A heartfelt thanks go out to our members and sponsors for their unwavering support, ensuring another triumph for the ATC.

Attendees relished the abundance of opportunities to connect with colleagues, explore the latest advancements in water and wastewater, and partake in numerous informative classes. We were honored to host National Rural Water Director Cameron McKay from Nevada. The event concluded with a legislative panel breakfast sponsored by Brosz Engineering and a panel on SDWARN. With over 550 attendees and 87 exhibitors, this year's ATC was a resounding success.

Save the date for January 14-16, 2025, as we eagerly anticipate seeing you at the Ramkota Hotel & Convention Center in Pierre for yet another fantastic edition of the South Dakota Rural Water Annual Technical Conference! 💧



2024 ATC Exhibitors & Sponsors

A.Y. McDonald Mfg. Co.

AE₂S – PREMIERE SPONSOR, KEG SPONSOR

AMERICAN Cast Iron Pipe Co.

American Flow Control

Badger State Inspection, LLC

Banner Associates, Inc. – KEG SPONSOR

Bartlett & West – EDUCATIONAL SESSIONS SPONSOR

Brosz Engineering Inc. – LEGISLATIVE BREAKFAST SPONSOR

Butler Machinery Company – BREAK TABLE SPONSOR

C. Emery Nelson, Inc.

Clow Valve

CoBank – T-SHIRT SPONSOR

Core & Main

Dakota Pump and Control

Dakota Pump Inc.

Dakota Supply Group, Inc. – KEG SPONSOR

DGR Engineering – AWARDS LUNCH SPONSOR

Direct Companies

DN Tanks – KEG SPONSOR

DSG Automation

Ductile Iron Pipe Research Association

Dutton-Lainson Company

East Dakota Water Development District

Electric Pump – T-SHIRT SPONSOR

Ellingson Companies

Ferguson Waterworks

Fischer Harris & Associates

Flow Control Automation, Inc.

Ford Meter Box

Foth – KEG SPONSOR

Granse/Trio Sales LLC

Great Northern Environmental, LLC – WINE SPONSOR

Great Plains Structures

Hawkins Inc. – BREAK TABLE SPONSOR, T-SHIRT SPONSOR

HDR – KEG SPONSOR

Hobas Pipe

HR Green, Inc. – BAG SPONSOR

In Control, Inc.

ISCO Industries – BREAK TABLE SPONSOR

ISG – LANYARD SPONSOR

IXOM Watercare

Jet Line Sales & Service

KLJ

KLM Engineering, Inc. – T-SHIRT SPONSOR

Larson Data Communications

Maguire

Malloy Electric

Marsh McLennan Agency

Metering and Technology Solutions

Metron Farnier

Micro-Comm, Inc.

Mid Continent Testing Labs, Inc.

Midco Diving and Marine Services

Milbank Winwater Works

Modern Coating Solutions/Tnemec

Mueller

Mueller Technology

NICOR, Inc.

Northern Pipe Products

Northwest Pipe Fittings Inc. – T-SHIRT SPONSOR

Northwestern Power Equipment Co.

Pipe Detectives Inc.

Prinsco

RESPEC

Risty Benefits, Inc. – T-SHIRT SPONSOR

Sargent Drilling

SD 811 – T-SHIRT SPONSOR

Sherwin Williams

Short Elliott Hendrickson Inc.

Sioux Valley Environmental

SPN & Associates

Sunflo2

Sweeney Controls Company

Tank Maintenance Solutions

Tech Sales Company

Thein Well Co., Inc.

Treatment Resources, Inc. – T-SHIRT SPONSOR

U.S. Environmental Protection Agency

USDA Rural Development

USG Water Solutions

Utility Logic, LLC

Vessco, Inc.

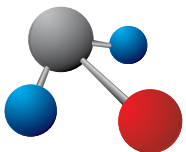
Visu-Sewer, Inc.

WEERC - SDSU

West Dakota Regional Water System

Winwater Sioux Falls SD Co.

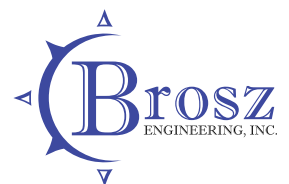
Special Thanks to our Event Sponsors



AES
2

**Bartlett
& West**

DGR
ENGINEERING





When It Comes To Waterworks, There Can Be A Lot Of Pressure.



To succeed, you need a partner that makes your job easier. With Dakota Supply Group, you get more than just pipe and products:

▶ Contact us today to learn more about how we can help you.

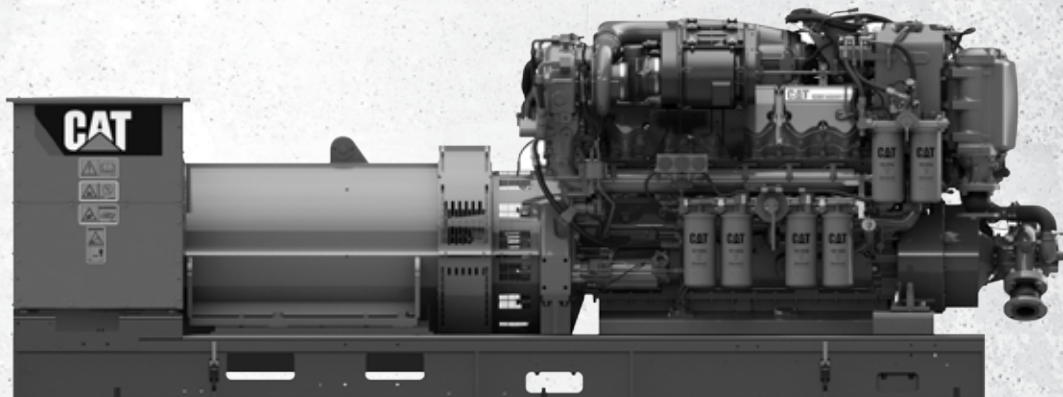
DSG
DAKOTA SUPPLY GROUP
For all the right connections!

FARGO, ND ▶ [800] 342-4676
BISMARCK, ND ▶ [855] 337-9258
SIOUX FALLS, SD ▶ [800] 660-5531
RAPID CITY, SD ▶ [800] 660-5538
BURNSVILLE, MN ▶ [800] 325-0514

www.dakotasupplygroup.com

WHEN YOU NEED POWER, WE ARE THERE FOR YOU

NEW OR USED, ANY SIZE OR SHAPE, IN ANY REGULATORY ENVIRONMENT



877.365.8114 | BUTLERMACHINERY.COM

Butler 



2024 AWARD WINNERS

RURAL WATER SYSTEM OF THE YEAR

– Mni Wasté Water Company

WATER/WASTEWATER SYSTEM OF THE YEAR

– City of Sioux Falls Water Reclamation

MUNICIPAL OFFICE PERSON OF THE YEAR

– Lynn Meyer, City of Sioux Falls

RURAL WATER OFFICE PERSON OF THE YEAR

– Shannon Wegleitner, BDM Rural Water System

RURAL WATER OPERATIONS SPECIALIST OF THE YEAR

– Darin Roehr, BDM Rural Water System

MUNICIPAL OPERATIONS SPECIALIST OF THE YEAR

– Matt James, Sioux Falls Water Treatment

RURAL WATER OPERATIONS SUPERVISOR OF THE YEAR

– Aric Olson, Big Sioux Community Water System

MUNICIPAL MANAGER OF THE YEAR

– Kyle Ramynke, City of Lennox

RURAL WATER MANAGER OF THE YEAR

– Heath Thompson, Kingbrook Rural Water

ASSOCIATE MEMBER OF THE YEAR

– Sioux Valley Environmental

DONALD B. POSPISHIL MEMORIAL AWARD

– Kyle Kampshoff, City of Alexandria

FRIEND OF RURAL WATER

– Riter Rogers, LLP

CARROLL ANDERSON AWARD

– Louis Kehn, Tripp County Water Users District

RUSS PHILLIPS MEMORIAL AWARD

– Gene Wilts, Brookings-Deuel Rural Water

BEST TASTING WATER IN SOUTH DAKOTA

– WEB Water Development Association



Shannon Wegleitner



Lynn Meyer



Heath Thompson



Louis Kehn



Darin Roehr



Aric Olson



Mni Wasté Water Company



Gene Wilts & the family of the late Russ Phillips



City of Sioux Falls Water Reclamation



Matt James



Riter Rogers - Darla Rogers & Lindsey Riter-Rapp



WEB Water Development Association



Sioux Valley Environmental



Kyle Ramnyke



Kyle Kampshoff

In Memorium

Lane Miller – Big Sioux Community Water System

Rick Hensley – Rapid Valley Sanitary District /Water Service

Kenneth “Butch” Meyer – Davison Rural Water System

Don Stuessi – South Lincoln Rural Water System

Don Sweeter – Lewis & Clark Regional Water System

Gail Schoffelman – TM Rural Water District

Tom Erickson – Lewis & Clark Regional Water System

Tom Kramer – TM Rural Water District

Scott Oligmueller – Mid-Dakota Rural Water System



WATER TREATMENT'S TOTAL SOLUTION



- ✓ Best-in-Class Process-Pump-Flow Control Equipment
- ✓ Custom Chemical Feed Skids
- ✓ Local Service and Product Support
- ✓ Proudly Serving Municipal & Industrial Markets



WWW.VESCO.COM

952-941-2678



IS NOW IN PIERRE!

Office Leaders



COLTON HIPPLE
Civil Engineering
Colton.Hipple@ISGInc.com



KYLE FISEL
Project Management
Kyle.Fisel@ISGInc.com

- #### Expertise Snapshot
- Capital Improvement Plans
 - Feasibility Studies
 - Grants + Funding Support
 - Hydraulic System Modeling + Analysis
 - Industrial Wastewater
 - Inflow + Infiltration Studies
 - Master Planning + Facility Plans
 - Permitting
 - Sanitary Sewer + Wastewater Collection
 - Site Selection + Surveying
 - User Rate Studies
 - Water Reuse
 - Wastewater Treatment
 - Water Treatment



Now Hiring in our Pierre Office!
bit.ly/ISG_careers

South Dakota Office Locations

122 East Sioux Avenue + Suite A
Pierre, SD 57501 | 605.910.4732

345 North Reid Place + Suite 300
Sioux Falls, SD 57103 | 605.274.6401

SDARWS INSPIRES 4TH GRADER'S 4-H PROJECT

Hi! My name is Addyson Dorwart, I am ten years old, and I am a member of the Dusty Trails 4-H club. My dad, Paul Dorwart, is a Training Specialist for South Dakota Rural Water. He had an idea that his coworker, Source Water Protection Specialist Kevin Christenson, would come and help me with a 4-H project. Kevin gave me a few ideas, but the one I loved most was going around, collecting water samples, testing them for nitrates, and doing a research project about nitrates in drinking water. Kevin stopped while he was in my hometown for a Farmers' Union Day camp for local kids where he, with help from my dad, did a source water education activity. Kevin showed me how to use the nitrate analyzer and how to take water samples properly. This made me very interested in testing for nitrates and recording my work. I had lots of fun taking samples all over the state and learning so much about nitrates in drinking water. I was so surprised when I tested a shallow well on my grandpa's farm that tested over 10 mg/L of nitrates! Luckily, the well was only being used for cattle. I tested drinking water, pool water, rivers, and even storm water runoff from our yard. While I was testing, I researched information on what nitrates are,



I received a purple ribbon on my project at the Brule County Achievement Days and at the South Dakota State Fair!

and the damaging health effects that they have. I also learned how nitrates get into drinking water, and the health effects on animals, one surprising thing that I learned was that cattle are more vulnerable to nitrates than horses and pigs. I also learned that if your pet has nitrate poisoning, it's okay, your local veterinarian can help!

At our county 4-H achievement days, I received a purple ribbon on my nitrate project. I took my nitrate project to the state fair and received another purple ribbon. I was so excited! That was my first time taking a project to the state fair. Thank you to Kevin Christenson for all you do for youth environmental education outreach, it was really fun, and I look forward to my next water project! 💧



Source Water Protection Specialist Kevin Christenson helped me learn how to use the nitrate analyzer to take water samples.



ADDYSON DORWART is a fourth grader at Kimball elementary school, she loves to read and write. Her passions include playing piano, figure skating, singing, and most recently 4-H shooting sports. In the summer she enjoys going to the pool and traveling with her family.

**NEVER TAKE RISKS
WITH WHAT
YOU'RE MADE OF**

Ford Meter Box will never compromise the quality of our brass products or alloy because communities around the world depend on them for reliable delivery of clean water. Ford's underground services endure for generations because of what they're made of.

FORD
FORD METER BOX
www.fordmeterbox.com
260-563-3171

Play Video

GNE

WATER
PROCESS EQUIPMENT

WASTEWATER
PROCESS EQUIPMENT

LOCAL SD
PARTS, SERVICE & SUPPORT

Great Northern Environmental
651.289.9100
www.gnenv.com | kfritze@gnenv.com

**STRUCTURE.
& INTEGRITY.**

**PITTSBURG
TANK & TOWER
GROUP**
An ESOP Company Since 1919
"100 years and still climbing"

**CREWS
AVAILABLE
GLOBALLY**

WWW.PTTG.COM

INSPECTIONS	REPAIR	TANKS
Wet Dry ROV In-Service Cleaning	Code Updates Paint Insulation	Elevated Ground Relocation Erection Dismantles
NEW TANKS - Rick DiZinno (270) 826-9000 ext. 2601	EXISTING TANKS - Jordan Pyles (270) 826-9000 ext. 4601	

JETLINE
SALES & SERVICE

Official Dealer & Distributor For

rausch USA

**SOUTHLAND
TOOL MFG. INC.**

USB-USA

Chase Johnson 320.290.5764 | chase@jetlinesales.com | www.jetlinesales.com

DOSING YOUR DECIBELS: HEARING PROTECTION IN THE WATER INDUSTRY

Hearing protection is a crucial aspect of occupational safety, particularly in industries where workers are exposed to high levels of noise. The water and wastewater industry is no exception, as employees in this sector often encounter noisy environments that can pose risks to their hearing health. In this article, we will explore the importance of hearing protection in the water/wastewater industry, the potential hazards, and effective measures to safeguard workers' auditory well-being.

The water and wastewater industry involves various processes, machinery, and equipment that generate significant noise levels. From water treatment plants to pumping stations, employees are exposed to the continuous hums and roars of machinery. Prolonged exposure to high noise levels can lead to permanent hearing damage, impacting the overall quality of life for workers.

Recognizing the potential hazards, regulatory bodies have set standards for occupational noise exposure. Compliance with these standards is essential for ensuring the safety of workers in the water/wastewater industry. Employers are required to conduct regular noise assessments, provide hearing protection equipment, and implement engineering controls to minimize noise levels.

In the water and wastewater industry, different sources contribute to noise pollution. Pumps, motors, compressors, and treatment processes can generate high decibel levels. Workers involved in maintenance, inspections, and operational activities are particularly vulnerable to noise-induced hearing loss. Identifying the specific sources of noise is crucial in implementing targeted protection measures.

EFFECTIVE HEARING PROTECTION MEASURES

Earplugs and Earmuffs: Personal protective equipment (PPE) such as earplugs and earmuffs can significantly reduce noise exposure. These devices come in various designs, offering flexibility and comfort for workers. Regular training on the correct usage of ear protection is essential to ensure its effectiveness.

Engineering Controls: Implementing engineering controls, such as noise barriers and enclosures, can help mitigate noise at the source. This approach not only protects workers but also contributes to a quieter and more comfortable working environment.

Workplace Design: Considering noise reduction in the design and layout of facilities can contribute to minimizing exposure. Locating noisy equipment away from workstations and incorporating sound-absorbing materials can be effective strategies.

Training and Awareness: Educating workers about the



risks of noise exposure and the importance of using hearing protection is crucial. Regular training sessions should emphasize the proper use of equipment and encourage a culture of safety within the workplace.

Hearing protection is a paramount concern in the water and wastewater industry. With a commitment to regulatory compliance, the implementation of effective measures, and a culture of safety, employers can ensure the well-being of their workforce. Preserving the hearing health of workers not only enhances their quality of life but also contributes to a safer and more productive work environment in the water/wastewater industry. 💧



STEVE ATTEMA Steve Attema joined SDARWS in May 2014 as a Training Specialist. He previously worked for six years in industrial wastewater, and three years at Bolton & Menk, Inc. as an Environmental Engineer. Steve has a Bachelor of Science degree in Civil and Environmental Engineering (CEE) from South Dakota State University. He also holds a Class III Wastewater Treatment Certification, is an FAA certified Remote Pilot SUAS and holds Utility Management Certification with the NRW. As a Safety Trainer, Steve holds an Advanced Safety Certificate from the National Safety Council, completion of OSHA's 30-hour General Industry Training Course and certified with the Board of Certified Safety Professionals as an Associate Safety Professional.

SPN & ASSOCIATES

ENGINEERS SURVEYORS GIS SERVICES

Schmucker, Paul, Nohr and Associates

2100 N. Sanborn Blvd – PO Box 398
Mitchell, SD 57301
Phone (605) 996-7761
FAX (605) 996-0015
www.spn-assoc.com

Water • Wastewater • Storm Water • Streets
Airports • Solid Waste • Animal Waste
Land Surveying • Site Development
Geographic Information Systems (GIS)



**ENGINEERING EXCELLENCE
SINCE 1961**



ELECTRIC PUMP



An Electric Pump Company



800-211-6432
www.electricpump.com

115 Lipton Street
Suite B
Tea, SD 57064

402-333-9660
www.mc2h2o.com

LEAD SERVICE LINE UPDATE

As the national initiative to eliminate lead service lines gains momentum, water systems across the country are actively engaged in conducting Lead Service Line Inventories (LSLI). With a looming deadline of October 16th, 2024, communities are facing the challenge of efficiently completing this inventory to ensure the safety of their drinking water. In South Dakota, where concerns and questions are prevalent, there is a valuable resource that can aid water systems in this endeavor: sdwaterpipes.com.

For water systems yet to create an account on sdwaterpipes.com, now is the time to act. The website provides comprehensive information on the LSLI process and offers tools to streamline the inventory. Once registered, water systems can access a wealth of resources, including infographics and flyers available in the systems resource tab. These materials serve as effective communication tools to convey important information to customers.

To expedite the inventory process, communities can leverage the support of their residents. One innovative approach is encouraging customers to fill out the LSLI survey on sdwaterpipes.com using their smartphones. The website features a tutorial video guiding customers through the process. For those without smartphones, a printable survey is available in the resource tab.

To boost customer participation, communities have implemented various strategies:

- 1. Drawings for Prizes:** Some communities are incentivizing customers by entering those who complete the survey by a specified date into drawings for prizes such as coolers or gifts.
- 2. Community Bucks:** Similar to prize drawings, offering community-specific incentives like local currency or community bucks has proven effective.
- 3 Utility Bill Discounts:** In an effort to encourage participation, some communities are considering offering a discount on customers' utility bills.

Communities that have undertaken meter projects in recent years may already have valuable data for the inventory. If

thorough records were maintained during installation, this information can be used to expedite the process. A question that has arisen with this though is the need for a picture, if you customers are doing the survey a picture needs to be included, if an operator has the information from installing the meter themselves or having a reputable company or individual doing the meter installation for them a picture is not needed.

As questions arise during the LSLI process, the South Dakota Association of Rural Water Systems stands ready to assist. Communities are encouraged to reach out with any inquiries,

ensuring a smooth and accurate completion of the inventory. With the deadline fast approaching, proactive engagement and collaboration are essential.

The nationwide effort to eliminate lead service lines demands collective action, and the Lead Service Line Inventory is a crucial step toward achieving this goal. sdwaterpipes.com serves as a valuable ally in providing information, tools, and resources for water systems. By involving the community and implementing creative incentives, communities can efficiently meet the October 16th deadline

and contribute to safeguarding the health of their residents. The South Dakota Association of Rural Water Systems is committed to assisting communities in navigating the complexities of the inventory process, emphasizing the importance of acting promptly in the face of this pressing challenge. 💧



JIM VAVRA joined the association team in September and comes to us from the City of Wessington Springs. He has 10 years of water and wastewater experience and holds certifications in Water Treatment 3, Water Distribution 2, Wastewater Treatment 2, Wastewater Collection 2. In his spare time Jim enjoys golf, darts, bowling, traveling, and going to dirt track races.



**QUALITY
ENGINEERING
SOLUTIONS FOR
RURAL WATER
PROJECTS**

- MASTER PLANNING
- ASSET MANAGEMENT
- HYDRAULIC MODELING
- CAPACITY ANALYSIS
- STORAGE RESERVOIRS
- PUMPING STATIONS
- PIPELINES
- TREATMENT FACILITIES
- CONSTRUCTION SERVICES

MITCHELL, PIERRE, SIOUX FALLS, STURGIS
SOUTH DAKOTA
broszeng.com



Only the National Rural Water Association can bring together this unique Products and Services Portfolio.



That's the *Power* of Association.

nrwa.org/members/products-services-portfolio/

ENSURING SAFETY: THE GIVE AND TAKE OF FIRE RATINGS AND WATER INFRASTRUCTURE

In the realm of community safety, the ISO (Insurance Services Office) plays a pivotal role in assessing fire departments and surrounding areas to gauge their effectiveness in fire suppression. This evaluation, known as the “ISO fire score,” significantly influences homeowners’ insurance rates.

With extensive experience as the Assistant Chief of the Avon Fire Department and over three decades as a water superintendent, I’ve observed firsthand the critical factors that influence ISO assessments. These evaluations meticulously scrutinize various aspects, including fire department equipment, maintenance protocols, training efficacy, and the existence of comprehensive documentation validating training and upkeep efforts.

The city’s role is equally crucial in securing a favorable ISO rating. Factors such as the number and quality of fire hydrants, the size and material of water mains, maintenance, and the water supply capacity – whether sourced from city wells or rural water suppliers – significantly impact the ISO rating.

For small towns, achieving a desirable ISO rating poses an escalating challenge. The necessity to upgrade infrastructure, procure modern firefighting equipment, enhance water capacity, and maintain existing systems strains their resources, often necessitating substantial financial investments.

CONSIDER THE SCENARIOS FACED BY TWO SMALL TOWNS:

In one town, an important decision looms: whether to transition from their well-based water system to a regional rural water supply. Despite the rural supplier’s reluctance to take over their small water tower, this decision poses a dilemma. Adopting the rural water system could mean losing water reserves and encountering heightened rates. This option would mean the town would gain a high quality, reliable source of water. Conversely, retaining the well system might offer potential income from sales but demands significant investment in new fire trucks and utility infrastructure, with a lower quality of water and a substantially larger investment in labor and regulatory compliance.

Similarly, another town, reliant on a rural water system without a water tower, sought funding for a pumper tanker due to the absence of water reserves – a pressing need underscored by their successful grant application. This helped them to retain an ISO rating without major infrastructure investment in their water system

As these communities navigate critical decisions, the challenge lies in striking a balance between enhancing safety standards and managing costs borne by taxpayers.



The connection between fire ratings and water utilities emphasizes the inherent relationship between safety and infrastructure. It propels communities toward strategic decisions for a secure and resilient future, ensuring the well-being of residents while managing resources responsibly. 💧



ALLEN KOCMICH joined the SDARWS staff in November 2021 as a Circuit Rider. He previously worked for 30 years at the City of Avon, SD as the Water/ Wastewater Superintendent. Al holds a Class I Water Distribution and Class I Wastewater Collection. Al has volunteered with the Avon Fire Department for over 30 years, with 15 years as Assistant Chief, and served on the Avon Ambulance crew for over 22 years. He enjoys fishing, hunting, boating, camping, and the Green Bay Packers (when they win).



HRGreen®

Since 1913, HR Green has provided solutions that build communities and improve lives.



▶ SIOUX FALLS

▶ HRGREEN.COM



Your number one source

Top providers of creative water and wastewater solutions with over 75 years of combined experience.



treatmentresources.com • 612 702-2692



CERTIFICATION PRACTICE QUESTIONS

1. Which of the following is not considered to be a disinfectant?

- a. Ozone (O₃)
- b. Potassium Permanganate
- c. Rock salt
- d. free chlorine
- e. chloramines
- f. total chlorine

2. Chlorine gas is heavier than air by

- a. 1.33 times
- b. 2 times
- c. 2.5 times
- d. 4.33 times

3. The chlorine curve has three locations where a measurable residual can be detected. The strongest, most aggressive form of chlorine is found on the _____ portion of the curve.

- a. disinfection-by-product (DBP)
- b. chloramine destruction
- c. free-chlorine
- d. monochloramine buildup

4. Which of the following is the free-chlorine molecule?

- a. HCl
- b. HOH
- c. HOCl
- d. NaCl

5. Chlorine gas and water form which two acids?

- a. hypochlorous and hydrochloric
- b. sulfuric and nitric
- c. caustic soda and soda ash
- d. natural organic matter and chloramines

6. Chlorine gas is produced by dissolving rock salt in water then placing electrodes in the brine solution. As a result, the three chemical products produced are

- a. chlorine gas, caustic soda liquor, and hydrogen gas
- b. chlorine gas, ammonia, and brine
- c. chlorine gas, hypochlorous acid, and THM's
- d. chlorine gas, sulfuric acid, and disinfection-by-products

7. The fusible plugs on a chlorine container are designed to melt and release chlorine when the container reaches which temperature?

- a. 158° to 165°F
- b. 158° to 165°C
- c. 212° to 220°F
- d. 100° to 105°C

8. At sea-level in the year 2023, freshwater begins to boil at what temperature?

- a. 212°F or 100°C
- b. 158°F or 70°C
- c. 250°F or 121.1°C
- d. 451°F or 232.8°C

9. Natural Organic Matter (NOM) and free-chlorine can form

- a. trihalomethanes
- b. hypochlorous acid
- c. hydrochloric acid
- d. caustic soda

10. To extract gas from a one-ton chlorine container, you should connect to

- a. the bottom valve
- b. one of the fusible plugs
- c. the "B" kit
- d. the top valve

RESHAPING THE FUTURE OF UTILITY TECHNOLOGY



Analytics



Security



Mobility



Office



Field

An Integrated Technology Cooperative.

CSA/PCS is an industry leader in utility software solutions. As a member-owned cooperative, we strive to provide best-in-class integrated solutions for: billing, financials, engineering, operations, analytics, and customer empowerment - in a secure, hosted environment.

We provide a true enterprise experience.

888-843-3106 • pcs-csa.com



Central
Service
Association

Professional
Computer
Solutions



Bridging the gap
between idea +
achievement



Sioux Falls 605.977.7740
Rapid City 605.791.6100

hdrinc.com

SDARWS Conferences & Events



Rural Water EXPO | April 24-25, 2024

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

Pierre Ramkota Hotel & Convention Center

920 W Sioux Ave. • Pierre, SD • 605-224-6877

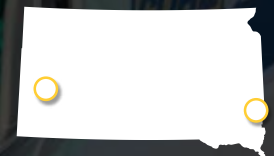
The Leading Distributor of Water, Sewer & Storm Drain Products & Services



WE'RE ALL ABOUT

South Dakota

When you need dependable service in the middle of the night, the eye of the storm or the center of town, you need the waterworks experts at Core & Main.



Sioux Falls
2101 E 54th St N
(605) 339-2814

Rapid City
2808 E Highway 44
(605) 716-9427

- FUSIBLE PIPING
- METERING AMR/AMI
- TREATMENT PLANTS
- STORM DRAIN
- PUMPING

Local Knowledge | Local Experience | Local Service, Nationwide®

coreandmain.com

PASD20190529

Special Loan Terms for SDARWS Members!

South Dakota Association of Rural Water Systems (SDARWS) has partnered with CoBank,

a national cooperative bank that serves rural America, to provide attractive financing solutions for SDARWS members. Find out about the specially negotiated terms on many loan products and bonds for water and wastewater utilities, including:



- ✓ USDA INTERIM CONSTRUCTION FINANCING
- ✓ USDA GUARANTEED LOANS AND BONDS
- ✓ LINES OF CREDIT
- ✓ DEBT REFINANCING
- ✓ TERM FINANCING



CONTACT
Michael Griffiths
Call: 720-520-6261
Email: griffiths@cobank.com



**MAY 3-4, 2024
FORT PIERRE, SD**



SCAN HERE
TO REGISTER

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](https://sdarws.com/fishing)

REGISTRATION DEADLINE: APRIL 26, 2024



203 W. Center Street
P.O. Box 287
Madison, SD 57042
www.sdarws.com

***This 1½ day event includes presentations
and features exhibit displays***

RURAL WATER
EXPO
2024

APRIL 25-25, 2024

**BEST WESTERN RAMKOTA HOTEL &
CONFERENCE CENTER – RAPID CITY, SD**

REGISTER ONLINE: sdarws.com/EXPO



***10 Contact Hours • Door Prizes
Lunch provided on Day One***

