# ServiceLine

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

IMPORTANCE OF A VA/ERP

FIRE HYDRANT MAINTENANCE

2019 ATC
JANUARY 8-10
PIERRE RAMKOTA



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## IN THIS ISSUE







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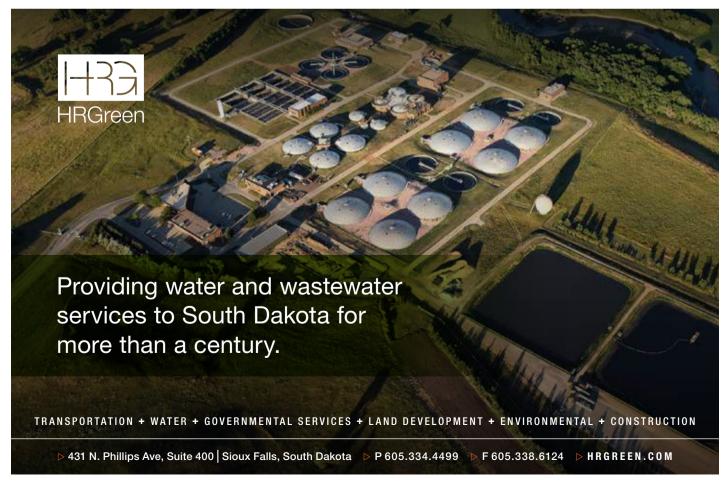
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## FROM THE SDARWS PRESIDENT

**RON GILLEN, SDARWS PRESIDENT** 

### **2019 ATC REGISTRATION OPEN**

The 44th Annual Technical Conference is approaching fast, and the staff at South Dakota Rural Water are busy behind the scenes gearing up for the event which kicks off Tuesday, January 8th at the Best Western Ramkota Hotel and Convention Center in Pierre.

Online registration is open, so check sdarws.com for everything you need to know – agendas, hotel information, and news regarding the upcoming conference. Save money by registering before December 14, 2018.

For our exhibitors, we will be offering two types of booth registrations: Full Conference Hallway (Tuesday and Wednesday) for \$525, and Wednesday Night at our Exhibit

Hall for \$425. Booth spaces are limited – so make sure to register soon to reserve your space! If you register before December 14, you'll receive a \$50 discount on your booth registration.

This year's awards brunch will feature a public judging of the top three finalists in the SD Rural Water Taste Test. The winner chosen at this taste test will go on to represent South Dakota in the National Rural Water Taste Test held at the Rural Water Rally in Washington, DC in February. If your water system is interested in participating in the taste test, please make sure that they bring a quart-sized glass jar filled with water from your water system to the Registration Desk by 2:00pm on Tuesday, January 8th. Entries must be submitted in a glass jar. A representative from each system submitting an entry must be in attendance; no person can represent more than one entry.

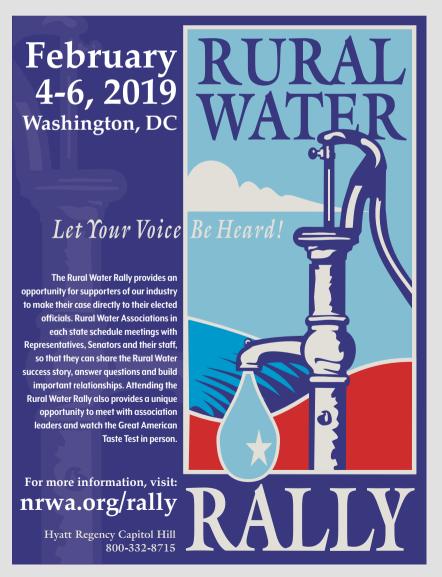
Exhibitors can again look forward to participating in various advertising sponsorships at this year's conference. Please visit www.sdarws.com/annual-conference.html to see what we still have available.

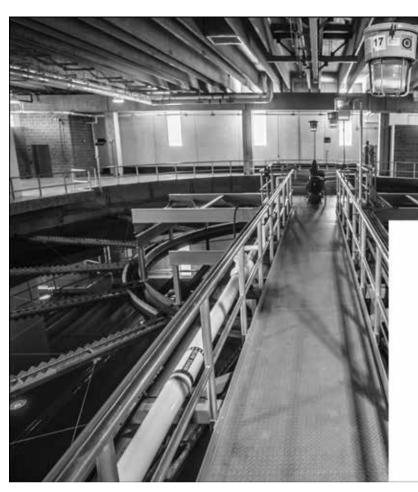
### **2019 RURAL WATER RALLY**

South Dakota Rural Water does many things, and one of the most important benefits to our rural water membership relates to our legislative efforts. Every year the National Rural Water Association hosts a Rural Water Rally in Washington D.C. to further the work of providing drinking water and wastewater services to rural communities. Rural Water professionals, leaders, and customers from every state attend the rally to thank their Senators

and Representatives for their support and encourage them to further support the goals and needs of the Rural Water Industry. The Rally provides your Association the opportunity to meet directly with our congressional delegation one-on-one to discuss concerns of SDARWS members and other systems, as well as with their staffers, and USDA.

We invite you to join us February 4-6, 2019 at the Hyatt Regency on Capitol Hill. For more information, visit NRWA's Rally page at: nrwa.org/rally. Room reservations can be made at the Hyatt Regency by calling 202-737-1234. If you have any questions about attending the Rally, please call the SDARWS office at 605-556-7219. We would love to have you join us on the Hill!





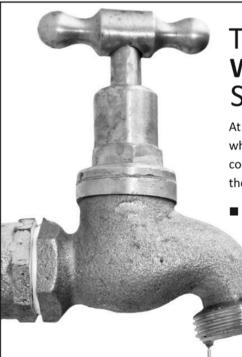
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# Training Calendar

### **DECEMBER**

### 4-6 - WASTEWATER COLLECTION

### Sioux Falls Ramkota 3200 W. Maple Street • Sioux Falls, SD

This course covers the Association of Boards of Certification "Need to Know" requirements for the Class I through III Wastewater Distribution Collection Exams. This course only covers the material for Wastewater Collection. Operations Specialists who wish to attempt a Water Distribution Exam should attend the Water Distribution Course. Class begins each morning at 8:00 a.m. local time and wraps up around 4:30 p.m. on Tuesday and Wednesday and approximately 11:30 a.m. on Thursday.

### **JANUARY**

### 22-24 - BASIC WATER TREATMENT

#### Spearfish Holiday Inn 305 N. 27th Street • Spearfish, SD

Topics covered include: South Dakota Drinking Water Regulations, disinfection, fluoridation, groundwater and wells, pumping, hardness, cross connections, pH, filtration, turbidity and mathematics. Day 1 & 2, 8:00 a.m. to 4:30 p.m.; Day 3 8:00 a.m. to 11:30 a.m.

### **FEBRUARY**

### 5-7 - BASIC WASTEWATER TREATMENT

### Sioux Falls Ramkota 3200 W. Maple Street • Sioux Falls, SD

This course covers the Association of Boards of Certification "Need to Know" requirements for the Class I & II Wastewater Treatment Exams. This course does not cover the material included in the Stabilization Pond Exam. Operators who will be attempting the Stabilization Pond exam should consider the Stabilization Pond Workshops. Class begins each morning at 8:00 a.m. local time and wraps up around 4:30 p.m. on Tuesday and Wednesday and approximately 11:30 a.m. on Thursday.

#### 26-28 - WATER DISTRIBUTION

#### **Rapid City Ramkota**

### 2111 N. LaCrosse Street • Rapid City, SD

This course covers the Association of Boards of Certification "Need to Know" requirements for the Class I through III Water Distribution Exams. This course only covers the material for Water Distribution. Operations Specialists who wish to attempt a Wastewater Collection Exam should attend the Wastewater Collection Course. Class begins each morning at 8:00 a.m. local time and wraps up around 4:30 p.m. on Tuesday and Wednesday and approximately 11:30 a.m. on Thursday.

### **MARCH**

#### 19-21 - BASIC WASTEWATER TREATMENT

#### **Rapid City Ramkota**

### 2111 N. LaCrosse Street • Rapid City, SD

This course covers the Association of Boards of Certification "Need to Know" requirements for the Class I through III Wastewater Distribution Collection Exams. This course only covers the material for Wastewater Collection. Operations Specialists who wish to attempt a Water Distribution Exam should attend the Water Distribution Course. Class begins each morning at 8:00 a.m. local time and wraps up around 4:30 p.m. on Tuesday and Wednesday and approximately 11:30 a.m. on Thursday.

### **APRIL**

#### 3 - STABILIZATION POND WORKSHOP

#### **Huron Crossroads**

#### 100 4th Street SW · Huron, SD

This course covers the material on the Association of Boards of Certification Stabilization Pond Exams. It does not cover material on Class I or higher Wastewater Treatment Exams. This is a single day workshop starting at 8:30 a.m. local time and wrapping up around 4:30 p.m.

#### 9-11 - INTERMEDIATE WATER TREATMENT

#### **Huron Crossroads**

#### 100 4th Street SW · Huron, SD

This course covers the Association of Boards of Certification "Need to Know" requirements for the Class II & III Water Treatment Exams. Class begins each morning at 8:00 a.m. local time and wraps up around 4:30 p.m. on Tuesday and Wednesday and approximately 11:30 a.m. on Thursday.

#### 23 - SMALL WATER TREATMENT SYSTEM WORKSHOP

#### **Rapid City Ramkota**

### 2111 N. LaCrosse Street • Rapid City, SD

Topics covered include; small water treatment systems, groundwater issues, disinfection issues, regulatory issues for small community and non-community water systems. This course is designed for those who are not involved on a full-time basis with water treatment. This is a one-day course starting at 8:30~a.m. and finishing at 4:30~p.m.

### 25 - SMALL WATER TREATMENT SYSTEM WORKSHOP

#### Aberdeen Ramkota

### 1400 8th Avenue NW · Aberdeen, SD

Topics covered include; small water treatment systems, groundwater issues, disinfection issues, regulatory issues for small community and non-community water systems. This course is designed for those who are not involved on a full-time basis with water treatment. This is a one-day course starting at 8:30~a.m. and finishing at 4:30~p.m.

### **30-2 - SMALL WATER TREATMENT SYSTEM WORKSHOP**

#### Sioux Falls Ramkota

#### 3200 W. Maple Street • Sioux Falls, SD

Topics covered include: South Dakota Drinking Water Regulations, disinfection, fluoridation, groundwater and wells, pumping, hardness, cross connections, pH, filtration, turbidity and mathematics. Day I & 2, 8:00 a.m. to 4:30 p.m.; Day 3 8:00 a.m. to 11:30 a.m.

## REGISTER FOR CLASSES ONLINE AT: go.activecalendar.com/sdarws

Course agendas, maps and registration are all available online at www.sdarws.com. All classes are free unless otherwise noted. For more info on these and other events, visit www.sdarws.com or call 605-556-7219.



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ABBEY LARSON West River Wastewater **Technician** alarson@sdarws.com 605-645-6488



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**Please submit letters via email to:** info@sdarws.com **or by mail to:** South Dakota Rural Water, PO Box 287, Madison, SD 57042

## **ARE YOU ON OUR EMAIL LIST?**

Don't miss out on event details, training updates, job postings and other important information!

Email info@sdarws.com to be added to our list.

### **ARTICLE SUBMISSIONS**

Does your company have information to share that would be of value to our readership? If so, we would welcome your article submission for ServiceLine Magazine.

**To send us an article, please email:** jbame@sdarws.com *NOTE: SDARWS reserves the right to refuse any and all article requests.* 

## MEET ABBEY



Abbey Larson is the newest Wastewater Technican for the South Dakota Association of Rural Water Systems. She will be assisting our West River systems, but you may see her make an appearance on the east side on occasion.

Abbey was raised in Montrose, SD. She has a B.S. Degree in Civil Engineering with an emphasis in water resources from the South Dakota School of Mines and Technology. She has four years of experience in the water industry and is skilled at Arc-GIS.

In her free time, Abbey enjoys rock climbing and biking. Fun fact: she can play five different musical instruments!

Abbey is looking forward to meeting all the operators and helping solve problems! If you'd like Abbey to assist with your wastewater system, you can call her at 605-645-6488, or email her at alarson@sdarws.com.



### By Jeremiah Corbin, SDARWS Source Water Protection Specialist

The twelfth Leadership Seminar provided an opportunity for 70 attendees from 19 systems to learn, network and discussed some of the most pressing issues in rural water today. This year's Leadership marked the 6th year that the Pierre Ramkota has hosted the event. The focus for this year's conference was board fundamentals and keeping current with federal issues. The subject matter covered at the seminar identified the fundamentals of good governance and how systems, the state association and NRWA work together to move rural water priorities forward.

The 2018 seminar started with a presentation from Todd Kays.

Todd is the Executive Director of the 1st Planning District located in Watertown. The planning districts are technical assistance providers that work with municipal and county entities specializing in zoning, economic development and grant writing. There are six planning districts in South Dakota that assist nearly every county in the State. Most planning districts also provide GIS assistance to communities they serve. They are a critical resource for small communities looking to upgrade infrastructure, regarding assisting them to navigate the steps required for state or federal financing.

The next presentation came to us as a result of one of the priorities of the SDARWS long-range plan. The planning committee felt an obligation to educate the stakeholders in rural water regarding



cybersecurity. Nick Podhradsky with SBS Cybersecurity provided an engaging presentation on a variety of topics relating to cybersecurity. Mr. Podhradsky provided attendees with recommendations on password security, how to identify potential spearfishing emails and best management practices for handling your computer when you encounter a suspect message (press ctrl + f4).

After the first afternoon break, Tim Cowman, State Geologist provided attendees with a presentation on sedimentation issues on the Missouri River. With the sedimentation issues in Lewis & Clark Reservoir, a water system in Nebraska is abandoning their surface water intake in exchange for wells along the river. Sedimentation will have an impact on river systems in the future; the only question is when?

Margo Northrup, SDARWS's attorney, provided the final presentation of the afternoon for the second consecutive year. Fiduciary Responsibility is the primary responsibility of board members and can be a complicated and broad topic. Margo covered the critical areas of fiduciary responsibility and gave attendees some sound fundamentals to utilize as they govern our rural water systems.

The keynote presenter for the conference was Rural Development State Director Julie Gross. Gross provided an overview of the programs that Rural Development offers and some of the projects that are impacting our communities in South Dakota.

The seminar resumed at 8:00 am the next day with Dr. Nancy Moose providing an informative presentation on parliamentary procedure. Attendees were very responsive to this presentation and asked a lot of good questions. This presentation was 45 minutes long, but could easily have filled a time slot twice as long and kept attendees engaged.

Following a break, utilizing Skype for Business, the NRWA Washington D.C. staff provided an hours' worth of information on how the DC staff leverage the national grassroots support to further rural water priorities. Bill Simpson, Michael Preston, Mike Keegan, and Keith Heard. They provided the group with information on NRWA's efforts and invited attendees to join their state association and NRWA at the 2019 Rural Water Rally in February.

Our next presentation covered the topic of Leadership and instilling community trust in your water utility. Erin Dreis with SDDENR provided attendees with insight on how to message information for maximum benefit to community members.

Our final presentation of the leadership seminar was a farm bill update from Senator John Thune's office. Lynn Tjeerdsma, Senior Policy Advisor provided updates to the farm bill that is being finalized by Congress. Mr. Tjeerdsma pointed out some of the changes that will benefit Rural Water systems in the coming years.

The feedback received from this year's Leadership Conference has been very positive, and attendees have provided topics to continue the conference well into the future. The 2019 Leadership Conference will be Wednesday, November 13 - Thursday the 14th at the Pierre Ramkota.













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## JANUARY 8-10, 2019 <u>Pierre Ramkota Hotel & Convention Center</u>

### **REGISTER**

Register by December 14, 2018 and save \$25 off your registration or \$50 off your booth. You can register through a link on our website at

www.sdarws.com/annual-conference

### WATERPRO DISCOUNT

Become a WaterPro member and save an extra \$30 on your 2019 ATC registration. In addition to \$30 off at the ATC, you will also receive \$10 off 2019 West River EXPO registration, as well as discounts on several NRWA events. Visit **waterprocommunity.org** to register for a WaterPro membership.

### **CLIENT MEETING ROOMS**

We have a limited number of rooms available for client meetings. Call 605-556-7219 to reserve.

### **HOTEL INFORMATION**

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## ATTENDEE INFORMATION

### MEMBER FULL REGISTRATION

**\$250** (Standard)

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\$195 (WaterPro Discount + Early Bird)

### **MEMBER FULL + SPOUSE**

**\$295** (Standard)

**\$265** (WaterPro Discount Standard)

**\$270** (Early Bird - by 12.14.18)

\$240 (WaterPro Discount + Early Bird)

### **MEMBER TUESDAY ONLY**

\$155 (Standard)

\$125 (WaterPro Discount Standard)

\$130 (Early Bird - by 12.14.18)

\$100 (WaterPro Discount + Early Bird)

### **MEMBER WEDNESDAY ONLY**

**\$205** (Standard)

\$175 (WaterPro Discount Standard)

\$180 (Early Bird - by 12.14.18)

\$150 (WaterPro Discount + Early Bird)

### **MEMBER BRUNCH ONLY**

\$30 (Standard)

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**THE WATERPRO ONLINE COMMUNITY** offers significant networking and professional advancement opportunities for NRWA members. The WaterPro OLC will allow you to network with utility personnel, access training on new technology and regulations, discuss utility-specific topics with your peers, and even manage your membership online.

Subscription to the Rural Water magazine – NRWA's award-winning quarterly publication has articles, legislative updates, commentaries and other timely information on local, state, national and world events. Individual membership is only \$49!

### IN ADDITION TO \$30 OFF AT THE ATC, GET \$10 OFF AT THE 2019 WEST RIVER EXPO, AND \$10 OFF LEADERSHIP TRAINING!

As a member of WaterPro, you also become an individual member of the National Rural Water Association (NRWA)

As a NRWA Individual Member, you will receive the following benefits designed to strengthen your network with utilities and professionals in the water and wastewater industry:

- Discounts on merchandise at the Rural Water Store, WaterPro Conference and online
- Access to the latest information on technology, regulation and funding through Water University webinars
- NRWA Membership lapel pin, certificate and wallet card
- Support funding for water and wastewater utilities NRWA is a leading advocate for infrastructure funding, resulting in billions of dollars of funding
- Timely information on the impact your support is having throughout the water industry
- Verizon Wireless Access to top tier discounts
- LifeLock Identity Theft Protection Receive 30 Days Free + 10% off for the lifetime of your membership.

To learn more, please visit www.waterprocommunity.org/r/us/

## **EXHIBITOR INFORMATION**

### **EXHIBIT HALL – \$425**

- Exhibit in our Exhibit Hall/Legislative Reception on Wednesday evening from 4-8pm
- Booth registration includes full conference registration for two individuals

Setup: Wednesday, January 8th – 9:30am - 1:30pm Exhibit: Wednesday, January 8th – 4:00pm - 8:00pm Tear Down: Wednesday, January 8th – 8:15pm - 9:00pm

### **FULL CONFERENCE HALLWAY – \$525**

 Exhibit for the entire duration of the ATC (Tuesday, January 8th, and Wednesday, January 9th)

- Booth registration includes full conference registration for two individuals
- Booth will be assigned in the hallway area of the Ramkota Convention Center.

**Setup:** Tuesday, January 8th – 8:00am - 10:00am

**Exhibit:** Tuesday, January 8th – 10:00am - 5:00pm; Wednesday, January 9th – 7:30am - 8:00pm

**Tear Down:** Wednesday, January 9th – 8:15pm - 9:00pm Additional exhibit personnel will need to register as an attendee. All booth spaces are 8-feet wide and contain electricity, a table, and two chairs. You must be a current member of South Dakota Rural Water to reserve a booth. All registrations will be reviewed.

## Rob Bell 2019 ATC KEYNOTE SPEAKER



### **SEE ROB LIVE!**

TUESDAY, JANUARY 8TH AMPHITHEATER II

KEYNOTE: 1:00 PM BREAKOUT: 3:00 PM Rob Bell is the perfect combination of educational know-how, professional experience and humor for a speaker. His presentations are high-energy and feature real-life anecdotes, which are as fun as they are meaningful. Drawing on more than 25 years of experience in leadership roles, customer service, and training, Rob makes it simple, clear and FUN to improve customer service and gain leadership skills.

Rob began teaching his Customer Service and Communication Techniques early in his tenure as the Personnel Development - Education & Training Director for Dick's Supermarkets, Inc. He is "a recovering CPA" who worked as the Accounting Manager for a large transportation company before becoming Dick's Supermarkets' go-to guy for education. He has also worked as an auditor, and an adjunct instructor at the University of Wisconsin – Platteville.

Rob has earned the prestigious designation of Certified Speaking Professional (which has been awarded to less than 650 people in the world). Rob was the 2011 – 2012 president of the National Speakers Association - Wisconsin Chapter as well as the author of the book, "Beyond Paper or Plastic – 8 Items or Less to Remarkable Service."

His insight on both external and internal customer service rings true to all who hear him. Participants leave Rob's presentations "fired up" and supplied with the techniques they need to meet and exceed customer and organization expectations. He is truly the Bell you will want to "ring for service."

## SYSTEM HAVE THE BEST DRINKING WATER IN SOUTH DAKOTA

Bring a glass quart jar of your system's water to the 44th Annual Technical Conference in Pierre. All entries must be submitted to the registration desk by 2:00 pm on January 9th in order to be entered into the contest. Entries must be submitted in a glass jar. A representative from each system submitting an entry must be in attendance; no person can represent more than one entry.

The winner's name will be announced at the ATC Awards Banquet on Thursday, January 10, 2019. The winner will go on to represent South Dakota at the NRWA Great American Water Taste Test in Washington, DC on February 7th, 2019.

### SPONSORSHIPS AVAILABLE

### **BREAK TABLE SPONSORSHIP - \$1,200**

Sponsorship includes electronic signage at the break table, the opportunity to place promo materials on the break table, and recognition in the program booklet and agenda displays.

### **NEW! CHARGING STATION SPONSORSHIP - \$1,000**

Sponsor the electronics charging station. Charging station will be up for the entire duration of the conference (3 days), and includes advertising space for a printed 22" x 28" ad on two sides of the station. You can either send us an ad, or we will print your logo in the space allotted.

### **CONFERENCE LANYARD SPONSOR - \$500-\$1,500**

Place your company's logo around every conference attendee with their name badge. Note: If you wish to supply your own lanyards, the sponsorship is only \$500.

#### T-SHIRT SPONSORSHIP - \$150

For only \$150, your company's logo will be printed on the back of this year's ATC t-shirt which will be handed out free to every conference attendee. Artwork deadline is December 1st.

### **PUT YOUR SWAG IN OUR BAG - \$100**

Have your postcard (or company brochure, flyer, pen, notepad, flash drive, etc) inserted into each conference attendee's bag. Price is for 400 items which must be delivered to our Madison office by December 15th.



## **SCHEDULE OF EVENTS**

THISDAY ΙΔΝΙΙΔΡΥ 2 2019

	5 D T T T T T T T T T T T T T T T T T T	,
8A - 4P	CONFERENCE REGISTRATION – Registration Desk	
8A - 4P	WATER PAC RAFFLE	

8:00 AM **BREAK TABLE** 

HIME	GALLERY D-E	UALLEKY F	UALLEKY U	LAKE SHARPE
10:00 AM	Saddles and Corps - Best Practices	O&M Considerations for Pressure Sewer Systems	GNSS Data Collection Hardware	11:00 AM Quality on Tap!
10:45 AM	Single & Multi Pump Booster Pump Packages	Utilizing Low Cost Solar and Air	The Complete Drone Program	Editorial Board Meeting (This meeting is open to Rural Water managers
11:30 AM	Ground Storage Maintenance	Raven - Lagoon Liner	Advanced and Affordable GIS	board members and office staff)

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NOON LUNCH - On your own

AMPHITHEATER II **Opening Session** Keynote Address - Rob Bell

Rob Bell began teaching his Customer Service and Communication Techniques early in his tenure as the Personnel Development -Education & Training Director for Dick's Supermarkets, Inc. He is "a recovering CPA" who worked as the Accounting Manager for a large transportation company before becoming Dick's Supermarkets' go-to-guy for education. He has also worked as an auditor, and an accounting instructor at the University of Wisconsin – Platteville.

2:30 PM BREAK TABLE - Sponsored by Butler Cat - Lobby Area

TIME	GALLERY D-E	GALLERY F	GALLERY G	LEWIS & CLARK	L. FRANCIS CASE	AMPHITHEATER II
3:00 PM	SD OneCall	Bioaugmentation for Wastewater Treatment	UAV Pipeline Design	Well Maintenance Program	Improving Water Taste & Safety Using Multi- Barrier Disinfection	
3:45 PM	Curb Stops and Service Fittings Best Practices	Lift Station Maintenance	GIS and Asset Management for Rural Water	Flexible Drop Pipe - Maximize Life & Performance of Water	History, Theory & Design of Lime Softening Water Treatment Plants	<b>Keynote Breakout</b> Rob Bell
4:15 PM	Managing Water System User Additions	Dell Rapids Wastewater Plant	Taking to the Skies to Communicate Your Message	Utility Locating Basics	USDA Funding Opportunities	

**JANUARY 9, 2019** 

8A - 4P	CONFERENCE REGISTRATION – Registration Desk				
8A - 4P	WATER PAC RAFFLE				
TIME	AMPHITHEATER I	AMPHITHEATER II	L. FRANCIS CASE A-B	LAKE SHARPE B	
8:00 AM	Class A&B Member Caucus	PPC Water Presentation	Planning & Financing Wastewater Projects with Private Funds	SIGN UP TO USE THIS ROOM FOR CLIENT MEETINGS	
8:00 AW	8:15 AM <b>44th Annual</b>				
8:45 AM	Membership Meeting (This is the Official Business Meeting of the SDARWS)	Maintaining Your Chlorine & Chloramine	Overview of EPA's Criminal Investigation Division	605-556-7219	
9:30 AM	BREAK TABLE – Lobby Area				
10:00 AM	Rural Water Center	Corrosion Control	Cybersecurity - SBS	SIGN UP TO USE THIS ROOM FOR CLIENT MEETINGS	
10:45 AM	Annual Meeting	Water Tank Maintenance	Cybersecurity - EPA	605-556-7219	
11:30 AM	LUNCH – On your own				
1:00 PM	Legislative Panel Featuring Representatives for	Top of the Tower	Instilling Public Trust in Your Utility	SIGN UP TO USE THIS ROOM FOR CLIENT MEETINGS	
1:45 AM	Senator Thune, Senator Rounds, and Representative Johnson	Air Monitoring in Confined Spaces	Infrastructure Resilience	605-556-7219	
2:30 PM	BREAK TABLE – Lobby Area				
2:45 PM	Legislative Preview with SDARWS Lobbyist	Answer to Water Quality & Quantity	DENR Regulatory Update	SIGN UP TO USE THIS ROOM FOR CLIENT MEETINGS 605-556-7219	
3:30 PM	Margo Northrup	Meter Setters and Meter Pits - Best Practices	SDWARN		
4:00 PM	LEGISLATIVE RECEPTION AND TECHNOLOGY EXHIBITS — Grand Galleria				

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### THURSDAY

**JANUARY 10, 2019** 

8:00 AM	LEGISLATIVE OPEN FORUM — Rooms D&E
9:30 AM	AWARDS BRUNCH - Sponsored by DGR - Rooms A-B-C

This is a tentative agenda and is subject to change

### SPOUSE PROGRAM



This year's craft is a 12"x12" painted stenciled sign on wood. There are several options to choose from. Spouses registered before December 7th will have the option to choose which sign design they want to make.

### **SPOUSE PROGRAM SCHEDULE**

Wednesday, January 9

Continental Breakfast 9:00 AM
Craft time with Jennifer 10:00 AM
Soup/Sandwich Luncheon 11:00 AM

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### DON'T GET GROUNDED THIS WINTER



### By Steve Attema, SDARWS Safety Trainer

As we get into the winter season and licy surfaces let's look at a major cause of injuries in the workplace. Slips combined with trips and falls are the leading cause of missed workdays and the second leading cause of fatalities. That is the bad news; the good news is that there are many steps you can take to prevent these injuries and deaths.

### **KEEP AREAS WELL LIT**

- Being able to see changes in elevation, trip hazards and slippery surfaces can prevent accidents especially on stairways, ramps and hallways.
- Maintain good housekeeping.
- Avoid having cords, cables, hoses, boxes and other hazards stored in walkways.
- Implement a housekeeping program and assign responsibilities to individuals.

### DECREASE SLIPPERY SURFACES

- Keep parking areas and sidewalks free of ice and snow.
- Use slip resistant paint or anti-skid adhesive tape in difficult walking areas.
- Use absorbent and slip resistant mats and rugs at entrances and other areas to reduce tracking in of moisture to indoor areas.
- Wear proper footwear with slip resistant soles.

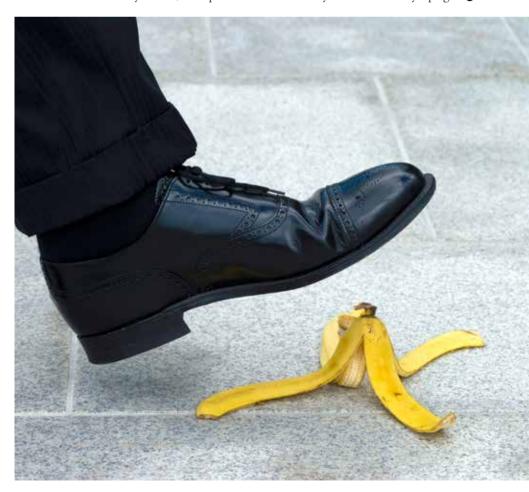
### **BE AWARE**

- Know the conditions and avoid distractions. Talking, texting or just looking at your phone when walking reduces your ability to detect slip and trip hazards.
- Getting in and out of vehicles on slippery surfaces.
- Take extra precaution with ladders. Having wet or muddy shoes can reduce your traction on ladder rungs; the place where you need it the most.

Those are just a few of the things you can do to prevent slips, trips and falls. There are also more specific hazards that operators in the water and wastewater industry may encounter. The following are some of the hazardous items Operations Specialists in South Dakota have provided during safety training classes.

- Water or treatment chemicals spilled on floors (especially polymer). Painted floors can be especially slippery here.
- Spoil piles with dirt clods creating trip hazards and other construction debris.
- Hazards hidden in tall grass: Ditch slopes and holes created by animals.
- Getting in and out of equipment with wet or muddy boots.
- Changes in elevation and door thresholds creating slip hazards.
- Trenches: Muddy surfaces and extra hazards with using ladders with muddy boots.

It may be difficult to eliminate some of these hazards but being aware and taking extra precaution when encountered with them can reduce the number of injuries they cause. Eliminate the hazards you can, take precaution with ones you can't and stay upright.





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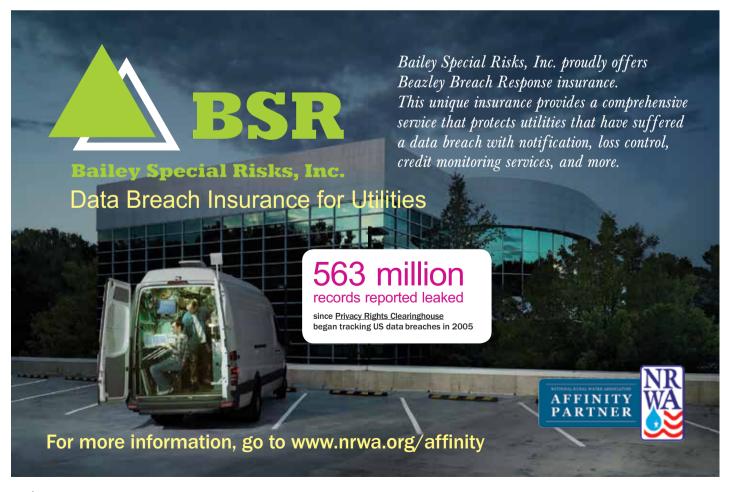
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## TIME TO START PLANNING FOR THE NEW YEAR



By Jeff Fossum, SDARWS Circuit Rider

o start, I would like you, dear reader, to do some role-playing. First, put yourself in the place of a System Operations Specialist. Next, pick which title would best suit the year that is about to pass. Would it be, "Thankfully 2018 Is Almost Over," or "Looking Ahead to a New Year in 2019."

If the title for you was "Thankfully 2018 Is Almost Over," I think it tells me a little something about yourself and the year you have experienced. As an Operations Specialist, you probably had many challenges to overcome this past year, and are ready for the new year so you can leave the old year behind. Let's look back, no matter how painful it may have been, and try to figure out what can be done differently to make you look forward to 2019.

First, make a list of everything you NEED to accomplish next year, including the tasks that you assume everybody knows about, like sampling, service calls, flushing, include the daily jobs, emergency response plans, consumer confidence reports and anything that needs your attention for the entire year. Don't forget to include a reasonable time estimate. Now add to the list the projects that you'd like to get accomplished this

next year (not extra work but different tasks that should be accomplished next year). Next, take the list and place the tasks in the months that the task should be performed, taking into consideration when summer help is available and the correct seasons to accomplish the task (like snow plowing in December; hopefully not like last year in April). Next, add to the list extra or bonus tasks that could be achieved if by chance the regular tasks went exceptionally well. Now you have a year-long plan, your agenda. What, do you think are you done? Not really! The next step should be to take your schedule to at least your chairman if not the entire governing body. Get input, see if items need to be added or removed from the agenda. With a year-long mutual plan now, your schedule is set for the next year. A lot of the last-minute scuttling can be avoided by eliminating issues and making the problems a planned event of your agenda. By taking these steps to plan out your year, I hope you can change your title to, "Looking Ahead to a New Year in 2019."

Lastly, I want to say thank you for the positive response that I have received from my first article "In the Groove" in the October issue of *ServiceLine*. I was surprised that so many people were interested in what I had to say. I felt the pressure to have something Earth-shaking or at least memorable to print – especially when South Dakota received the National Rural Water Award for Communications for the second time (thanks Jennifer Bame)!

I am looking forward to more feedback for this article and would enjoy some suggestion of topics that you would like. Please let me know if even a small part or thought was of help to either Operations Specialists or a board member!



DECEMBER 2018 | 23



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## FIRE HYDRANT MAINTENANCE



By Mike Moeller, SDARWS Technical Assistance/ Training Specialist

Water Systems was contacted recently to assist a community with some fire hydrants they were having problems with. SDARWS had spoken to the water superintendent about making sure he had all the parts ordered for the maintenance that needed to be done on the hydrants, and was told that the parts were on order and when they came in he would give us a call.

When we received the call to set up a time to assist with the fire hydrant maintenance/rebuild we were then told there was a total of four hydrants that needed some work done on them, so Circuit Rider Nick Jackson and myself were ready to get them done. The first hydrant that needed some work done to it was not shutting off entirely and would always leak out the hose connections. We took the top portion of the hydrant apart, and removed the seat from the bottom of the hydrant. We put our hydrant seat removal tool in the hydrant with a long cross pipe at the top and began trying to break the seat loose. We could not get it to come loose. We then decided to use the city's skid loader to pull on the long pipe and break it loose that way. We didn't have any luck getting it to break loose

with that either; in fact, we bent our seat removal tool. The city operator decided he would have to dig the hydrant up and replace it with a new one.

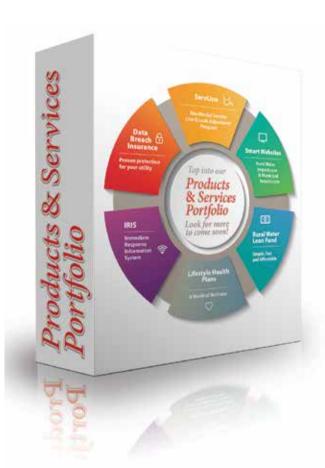
The next three hydrants were simpler to work on in regards to repairs. One of the hydrants had a breakaway flange that had been knocked off the riser tube, and the 2-½ inch hose coupling's threads had been hit by something and folded them over. Nick and I removed the 2-½ inch coupling and replaced it with a new one. We also pulled the breakaway flange apart and found it to be in good condition, just the stem breakaway inside the hydrant needed to have a bolt put back in it. We were able to get the hydrant repaired and lubricated so that it works like a new one.

Hydrant number two of the remaining three had a loose 2-½ hose coupling. After investigating it further, we found it to be an older hydrant that the hose coupling had

... continued on page 27



SDARWS Circuit Rider Mike Moeller working on dismantling a hydrant.





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Nick Jackson and Mike Moeller assisting with the dismantling of a fire hydrant - and the aftermath.

lead added to hold it into place. We then asked the operator if he had any old hydrants around that we could take the top portion off it instead of trying to lead the coupling back in place. He said he did, and we went to the city shop to look around and see what was available. Fortunatly, we were able to find a replacement head for the hydrant that we were working on. We replaced the whole head and lubricated the internal parts of the hydrant. The third hydrant we went to do work on had also been hit by a something substantial and broke the head off the riser tube. After some quick inspection of that hydrant, we found that the breakaway flanges did not break like they are designed to do, and it broke the extender pipe flange. So we headed back to the "hydrant boneyard" to see what could be scrounged up for parts to fix the hydrant. We found an extender and took it back to repair the hydrant. We replaced the extender and the breakaway coupling on the shaft and put the discharge head back on the hydrant and lubricated all the moving parts. At this point, we thought we had finished our work for the community. The operator then asked if we had time to look at a few more. We went and looked at them and discovered all that was needed was to take the top off the hydrant and lubricate the threads on the shaft. We exercised the hydrants after lubricating them and were able to get the hydrants to turn freely.

Some suggestions I would like to make are that cities should make sure that you have a program in place to exercise your hydrants – not only to ensure smooth operation for you, but also for the fire department if they would ever need to use them. I would also like to point out that on all newer hydrants, the water pressure below the rubber seat pushes it in place when it is shut off and that is what shuts it off. So when you close a fire hydrant, close it fully, then rotate the operating nut back a quarter of a turn so that the thread isn't preloaded all the time. Never over tighten a hydrant when shutting it as the rubber seat will get a memory and the next time you decide to use it and shut it off it will not shut off entirely. Lastly, a little bit of time and some food-grade grease on the operating threads will make your life a lot easier when you or the fire department needs to use the hydrants. •

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## **IMPORTANCE OF A VA/ERP**



By Brant Ager, SDARWS Circuit Rider

As the SDARWS staff travels to assist and meet with you all, a common question you may hear us ask is, "Has your VA/ERP been updated lately?" What we mean is have you reviewed and updated your system's vulnerability assessment and emergency response plan recently.

By presidential order in 2002 following the attacks of 911 and the bioterrorism act, all public water systems (PWS) with a population over 3,300 were required to assess vulnerability and complete an emergency response. In the years following, all PWS became required.

Vulnerability assessments and emergency response plans (VA/ERP) are essential tools used to find weaknesses in public water and wastewater systems and will make a plan on not only how to, but who will respond to an emergency your system is experiencing. We will use a computer program that asks questions and identifies assets.

The first step is to generate a Vulnerability Assessment. This report is just how it sounds; we will find where your system is vulnerable in regards to severe weather, vandalism or even in extreme cases, terrorism. The VA will categorize your systems individual assets and prioritize them as low, medium or high. It is simply a process and report designed to get you

thinking about weaknesses and further develop strong, sound water or wastewater system. The VA is used in preparation for the ERP.

After the VA is thought through and made, you will be able to write up your ERP. The ERP will identify a chain of command who is allowed on site and what backup measures will be taken to fix damaged assets or components of your system temporarily.

SDARWS will be available and should be used while making or updating your VA/ERP. Rural Development (RD) prefers SDARWS' format because we can sign off on the certificate of completion. It is also important to list SDARWS staff in the contacts so we can be allowed on-site to assist in emergencies. The staff has the knowledge and experience from traveling and assisting systems across the state. This knowledge can be used again or at least reflected upon.

An example of the importance of a VA/ERP is the flood of Hermosa, SD in 2007. A freak of a rainstorm dropped 13 inches in the matter of a couple of hours in a very concentrated area. Battle Creek along with a few tributaries were taking the influx and keeping up without running over. The problem started when debris got hung up on a railway bridge just outside of Hermosa. The bridge let go just like a dam collapse and let a wall of water hit the town. Houses were knocked off foundations, and many other damages occurred. The operator, Chuck Ferguson, had completed a VA/ERP and knew what to do. He isolated services and sections of the main, stopping the spread of contamination. His quick action allowed for the water system to be brought back fully online in a short four days, FEMA predicted 4-6 weeks.

This process is sometimes long and feels tedious but don't underestimate its benefits. The process will afford your system some security in knowing it can handle most unforeseen events with efficiency and also most importantly, safety. By completing a VA/ERP, you have filled one of the parameters to receive a USDA Rural Development loan/grant. Finally, generating and keeping these reports up to date keeps you thinking about your system and involved in making it better all the time. It shows your board you are in control and you have a plan.



DECEMBER 2018 | 29







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## THE NEXT CHAPTER



By Bill Thorson, SDARWS Wastewater Technician

ecently, the talk of wastewater problems has been centered around copious amounts of excess water from flooding or I & I (inflow and infiltration). As the Spring, Summer, and now Fall rains have slowly begun to subside, and talk has turned back to the issues of "non-flushable" items causing collection system and lift station problems. Almost every person who maintains a wastewater system will say that personal wipes or towels have caused a problem at one time or another in their system. The City of Winner, SD had a lift station pump that was clogged with wipes and taken apart so many times for cleaning, that the bolt holes were needing rethreading and the clearances in the impeller could not be kept tight for efficiency. The decision was made to upgrade the system and the design included new pumps and a stainlesssteel bar screen ahead of the lift station to collect "non-flushable" items. The money being spent on prevention made more sense than to spend more money on continued maintenance, especially since the problem does not look to be going away anytime soon. The new lift station building is built with the new pumps and upgrades to the piping to the lagoons are in place. The work is in progress on the bar screen apparatus and once everything is in place, I will have more pictures and information on how the process works to prevent problems and reduce maintenance. Stay tuned...











View of new lift station in Winner, SD. Improvements include new controls, air relief valves, and check valves.



## PHOTOS FROM THE FIELD

SDARWS Circuit Rider Greg Jeff Fossum assisting with flushing hydrants, pressure testing, and leak detection in Egan.





Circuit Rider Greg Gross assisting with the Hydro-Vac in Montrose.



Active Shooter session at the SDARWS Office Manager Training at the Lewis & Clark RWS office in Tea



SDARWS Trainer Jim Zeck conducting a Stabilization Pond workshop in Aberdeen.

To see more pictures of SDARWS in action, follow us on Facebook www.facebook.com/SDRuralWater

## **CERTIFICATION PRACTICE QUESTIONS**

## 1 IMPURITIES SUCH AS CLAY AND SILT THAT ARE FOUND FLOATING IN WATER IS SOMETIMES CALLED?

- a. Dissolved Solids
- b. Biological Decay
- c. Organics
- d. Suspended Solids

## 2 SIMILAR SIZED PARTICLES OFTEN DO NOT READILY SETTLE OUT. THESE FINE SILTS AND CLAYS THAT ARE TOO SMALL TO SETTLE CAN ALSO BE CALLED?

- a. Dissolved Solids
- b. Settleable Solids
- c. Nonsettleable Solids
- d. None of the above

## THE ADDITION OF ALUMINUM SULFATE TO WATER WILL CAUSE SMALLER PARTICLES TO CLUMP TOGETHER FORMING FLOC, THIS PROCESS IS CALLED?

- a. precipitation
- b. coagulation/flocculation
- c. sedimentation
- d. filtration

## THE RAPID MIXING OF RAW WATER AND TREATMENT CHEMICALS IN A SHORT AMOUNT OF TIME IS ANOTHER TERM FOR?

- a. Flocculation
- b. Packaged treatment
- c. Aeration
- d. Flash Mixing

## 5 SOMETIMES DURING THE COAGULATION PROCESS FLOC PARTICLES ARE SLOW-SETTLING OR NON-SETTLEABLE. IF THIS OCCURS, WE CAN USE A \_\_\_\_\_\_\_ TO ADD WEIGHT AND TOUGHNESS TO FLOC PARTICLES.

- a. polyphosphate
- b. coagulant aid
- c. metallic salt
- d. paddle wheel

## 6 NEGATIVE PARTICLES FOUND IN WATER WILL BE ATTRACTED TO ---\_\_\_\_CHARGED PARTICLES?

- a. Positive
- b. Negative
- c. Neutral
- d. Doesn't make a difference

### WHICH OF THE FOLLOWING WOULD NOT BE CONSIDERED A METALLIC SALT?

- a. Alum
- b. Ferric Sulfate
- c. Ferrous Sulfate
- d. Polymer

## THE BEST PH RANGE FOR THE COAGULATION PROCESS FALLS INTO THE RANGE OF:

- a. pH 5 to 7
- b. pH 10 to 12
- c. pH7 to 9
- d. pH 6 to 8

## 9 THE ABILITY OF WATER TO NEUTRALIZE ACIDS IS A GOOD DEFINITION FOR?

- a. oxidation
- b. coagulation
- c. alkalinity
- d. hardness

### 1 OTHE OVERDOSING OF POLYMERS CAN CAUSE?

- a. clogged filters
- b. staining
- c. pink water
- d. hardness

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**KURT PFEIFLE, EXECUTIVE DIRECTOR** 

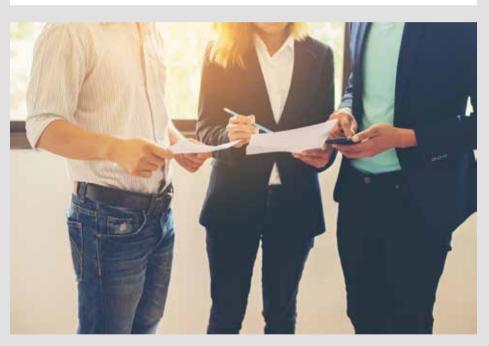
outh Dakota Association of Rural Water Systems knows that Water and Wastewater Operations Specialists are a necessity for communities to have access to clean drinking water and to ensure wastewater is returned to the environment properly. Without these highly trained individuals, communities will fail to prosper or eventually even exist.

Apprenticeship is a system in which workers train on-the-job, earning wages and doing productive work — while simultaneously taking courses and attending other training. When someone completes an apprenticeship, they will have valuable work experience and recognized industry credentials, along with state certification that allows them to continue in the field and over time, advance in their career.

Nationally, most water operations apprenticeships last two years. Apprentices, who must be at least 18 years of age, work full-time at a local water or wastewater system and must be paid at least minimum wage. As the apprentice advances through the program, his/her wages would increase according to a predetermined schedule governed by the Apprenticeship Program standards and agreed upon between employer and apprentice.

One key distinction between apprenticeship and other forms of workforce training is that an apprenticeship program engages the learner as a paid employee from the start of the program. Although an apprentice's wages may begin at a lower level than those of co-workers, his/her wages would increase as the individual progresses through the program, based on a

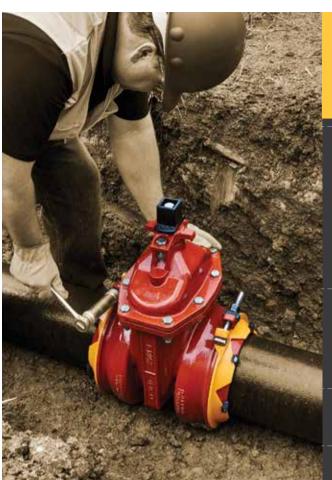




schedule outlined in a written agreement between employer and apprentice.

Nationally, it takes more than 380,000 highly skilled water and wastewater personnel to ensure the public supply of safe drinking water and to protect our lakes, streams and groundwater. Advancements in water treatment and supply technology have increased the skills and training required of this workforce. Water and Wastewater professionals are ultimately responsible for meeting stringent regulatory standards, replacing aging infrastructure, recruiting and training new operations specialists, and responding to and recovering from disasters. This is why SDARWS is exploring the creation of an Apprenticeship Program in our state.

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