

# January 2021 | Volume 16, Issue 3

# FROM ETHANOL TO HAND SANITIZER

**BUILDING CONNECTIONS**Soil Health Mentor Network

# NRWA

Strengthening State Associations & Rural Communities

# A MESSAGE FROM THE PRESIDENT OF THE BOARD

Ron Gillen, President South Dakota Association of Rural Water Systems



#### **2021 RURAL WATER RALLY**

The Rural Water Rally in-person event scheduled for February 8-10, 2021 has been cancelled due to the COVID-19 health crisis and the uncertainty of scheduling face-to-face meetings with congressional offices. In lieu of the in-person event, NRWA is planning to hold a virtual event, with many details to be determined – including the opening session and the



Great American Water Taste Test. The city of Harrisburg will represent South Dakota in the virtual taste test. We will send out more information regarding this event as soon as it is released.

#### **SDWARN**

The current state of response to the COVID-19 virus means that water and wastewater systems must commit themselves as first responders to the protection of the public's health. The undisrupted continuation of water and wastewater service within all communities and regional providers is vital.

There may be systems, that due to an outbreak of COVID-19 require operational assistance. Accordingly, South Dakota Association of Rural Water Systems (SDARWS) and South Dakota Water/Wastewater Agency Response Network (SDWARN) is compiling a pool (list of volunteers) of certified water and wastewater operators who might be available to provide emergency on-site assistance to other systems.

This assistance could require the responder to relocate to the requesting system for up to 14 days. Water/Wastewater systems and the responding operator should be prepared to keep detailed records of their response for reimbursement either through the requesting system or other available funding.

SDWARN is administered through the South Dakota Association of Rural Water Systems (SDARWS). Communications regarding this matter should therefore be through the SDARWS office. Your system need not be a member of SDWARN nor SDARWS to respond to this message. However, if activated, the system making the request and the systems responding to the request would need to become members of SDWARN as their mutual aid agreement would become the governing documents.

If an operator is available for this effort their name, certifications and certification levels along with contact information should be sent by email to Greg Gross at ggross@sdarws.com. There is no requirement that you respond if you reply to this request.

Thank you for your attention and assistance!

#### **BOARD OF DIRECTORS**

**Aurora-Brule Rural Water System** Ron Gillen, President

**Kingbrook Rural Water System** Rodney Stormo

Sioux Rural Water System Jim Thyen, Secretary

**Grant-Roberts Rural Water System** Tom Frogner, Treasurer

**Big Sioux Community Water System**Dan Carlson, Past President

Clark Rural Water System Larry Wasland, NRWA Director

Clay Rural Water System Glen Gilbertson

**BDM Rural Water System** Torre Raap

**Brookings-Deuel Rural Water System**Gary Johnson

**Butte-Meade Sanitary Water District**Bob Lewis

**Davison Rural Water System** Bob Weisz

**Fall River Water User District** Keith Neugebauer

**Hanson Rural Water System**Doug Degen

**Lewis & Clark Rural Water System** Sid Munson

**Lincoln County Rural Water System** Joe Burns

**Mid-Dakota Rural Water System** James McGillvrey

**Minnehaha Community Water Corporation** Lloyd A. Rave

Oglala Sioux Rural Water Supply System Chuck Jacobs

**Perkins County Rural Water System** Lynn Frey

Randall Community Water District Dave Meyerink

**Rapid Valley Sanitary District/Water Service**Bobby Sanner

TM Rural Water District Greg Nugteren

Tri-County/Mni Wasté Water Association J.R. Holloway

**Tripp County Water User District**Louis Kehn

**WEB Water Development Association** Les Hinds

West River/Lyman-Jones Rural Water System Rick Doud

Class B East River
Brad I awrence

Class B West River Jeff Crockett

Class C VACANT



#### FROM THE EXECUTIVE DIRECTOR

THE CIRCUIT RIDER PROGRAM

**PROVIDES TECHNICAL** 

**ASSISTANCE TO RURAL WATER** 

AND COMMUNITY SYSTEMS

(UNDER 10,000 POPULATION)

THAT ARE EXPERIENCING

**DAY-TO-DAY OPERATIONAL,** 

FINANCIAL, OR MANAGERIAL

ISSUES.

Kurt Pfeifle, Executive Director South Dakota Association of Rural Water Systems

South Dakota Association of Rural Water Systems (SDARWS) is pleased to announce that National Rural Water Association (NRWA) has been awarded a new five-year, Circuit Rider contract. The Circuit Rider program is a grant agreement provided through USDA – Rural Development (RD). Every five years the Circuit Rider contact is reissued through a public "Request for Proposal"

(RFP) process. The Circuit Rider Program was up for renewal in 2020. RD published the RFP in August and it was their intent to award the program by the end of October. NRWA put together a strong proposal in response to the RFP. NRWA and SDARWS felt good about our chances to ultimately be successful in the RFP process. However, NRWA was not alone in sending in a response to the RFP there was competition. Nevertheless,

SDARWS learned on Monday, November 2, 2020, that NRWA was awarded the new five-year Circuit Rider agreement. By

extension (through a subaward), SDARWS will retain all three of its Circuit Rider positions.

#### What does the Circuit Rider Program do? The

Circuit Rider program provides technical assistance to rural water and community systems (under 10,000 population) that

are experiencing day-to-day operational, financial, or managerial issues. Rural water and community system officials may request assistance directly from SDARWS, or Rural Development staff may request assistance on behalf of the system.

SDARWS Circuit Riders are Nick Jackson, Spearfish, SD, Greg Gross, Madison, SD and Jeff Fossum, Madison, SD. Nick, Greg and Jeff are all very knowledgeable

in water operations, finance and managerial issues and they are ambitious and eager to lend a hand to our rural water and community systems.















# **Circuit Rider Services**Available to Eligible Systems

The NRWA Circuit Rider Program, funded by the United States Department of Agriculture-Rural Development (USDA-RD), provides hands-on technical assistance to eligible water systems by request at no charge to the system. Personal and professional technical assistance is at the heart of the NRWA Circuit Rider Program.

NRWA provides a nationwide experienced team of drinking water professionals to offer hands-on training and technical assistance to water utility managers, boards, and Operations Specialists. The assistance is designed as on-site, hands-on, activity-based training where participants take ownership in learning and are empowered to resolve their current and future problems. This program is designed to protect USDA-RD's current water utility infrastructure investments and help plan for a more sustainable future.

#### Some of the assistance and services provided by Circuit Riders include:

- Identify and evaluate affordable solutions to drinking water problems in rural areas
- Assist systems to rapidly respond and recover after natural and man-made emergencies such as hurricanes, earthquakes, tornadoes, floods, wildfires, ice storms and a health pandemic, including COVID-19
- Protect the environment and public health by improving treatment processes
- Improve financial sustainability through better management practices, more efficient operations, and assistance with financial loan/grant application
- Enhance compliance with drinking water regulations
- Aid with all aspects of water utility management, finance, operation and maintenance, regulatory compliance, energy efficiency and loan/grant applications

#### YOUR SATISFACTION IS OUR PRIORITY

To determine your system's eligibility and/or request assistance, please contact the South Dakota Association of Rural Water Systems:

East River Office: 605-556-7219 • West River Office: 605-642-4557

www.sdarws.com



### FROM ETHANOL TO HAND SANITIZER

POET

Hand

Sanitizer

POET

Sanitize

### POET Switches Production During COVID-19 Battle

By Randy Dockendorf

Reprinted with permission from the Yankton Daily Press & Dakotan

**S**ioux Falls-based POET – the world's largest producer of biofuels – has produced an allnatural, ethanol-based sanitizer to tackle the severe local shortage.

For POET, the production switch to hand sanitizer came at a good time for the Scotland and Chancellor plants. Fuel consumption, including ethanol, had fallen because of social distancing during the pandemic. More people were remaining at home or taking fewer, shorter trips.

#### MAKING A DECISION

POET founder and CEO Jeff Broin said he knew his company could ease challenges created by the hand sanitizer shortages, according to a company press release.

"Frontline workers are facing risks every day to keep our communities safe from COVID-19, and we all need to do our part," he said. "At POET, we saw an opportunity to help our community while living our mission – to be good stewards of the Earth by converting renewable resources to valuable goods – and created an all-natural ethanol-based sanitizer product."

POET engineers created an additional distillation process for corn, which results in pharmaceutical-grade ethanol. The higher-grade product is then blended into a sanitizer product.

"The effort required the company to adjust its manufacturing processes at biorefineries, work around the clock and lean into its strengths in engineering and operations," according to the press release.

"The resulting product is pharmaceutical grade, meets FDA (Food and Drug Administration) guidelines and has been verified by toxicologists as safe for human health. In fact, purified ethanol has been used in hand sanitizers and disinfectants for years before the COVID pandemic."

Once the process fell into place, the company's Scotland and Chancellor ethanol plants shifted gears to produce the hand sanitizer. The World Health Organization (WHO) recommends that sanitizer contain at least 60% alcohol. However, POET's supply surpasses that standard as it contains 80% alcohol.

Once the product was finalized, POET partnered with Sioux Falls-based companies Senproco Inc. and Cimarron to package and label the sanitizer for consumer use.

Another major player came in with the sanitizer's bottles and labels: Groomer's Choice, a Sioux Falls-based national leader in wholesale pet grooming supplies. Thanks to this new partnership, the team at Groomer's Choice can produce upwards of 10,000 16-ounce bottles each day.

#### MAKING CONTRIBUTIONS

Once production was up and running, POET began distributing

sanitizer to front-line workers. The company donated 220 gallons of hand sanitizer to help tackle the severe local shortage. The initial donations of about 10,000 bottles went to a wide variety of front-line workers.

An initial donation went to Pioneer Memorial Hospital and Health Services in Viborg. The facility provides health services to many of the POET team members who work at the Chancellor plant.

POET donated 220 gallons of sanitizer, produced at its Chancellor plant, to the City of Sioux Falls. In addition, POET donated 780 bottles, each 16 ounces, to the South Dakota Health

Care Coalition. These groups then distributed the sanitizer to nursing homes, assisted living facilities, firefighters, emergency medical services (EMS) and other frontline workers.

The additional supply of sanitizer has helped South Dakota as it reaches its anticipated peak of the coronavirus, said Lynn DeYoung, executive director of the South Dakota Health Care Coalition.

"This is another reminder of the great partnerships that we have in South Dakota," DeYoung said. "POET saw a need and became innovative to protect health care workers, EMS, fire, law and critical infrastructure personnel."

Donations were also shared with frontline workers and healthcare systems across the state seeking more hand sanitizer for their use. Hospitals have worked to contain the virus, including their work with COVID-19 patients. Nursing homes and

assisted living facilities have been hit hard by the virus, which has proven fatal for the elderly and those with medical conditions or compromised immune systems.

#### **FUTURE DEMAND**

POET released figures reflecting the dramatic increase in demand for hand sanitizers. Adobe Analytics, an agency that monitors E-commerce transactions for the top 80 online retailers, reported the December-January demand for hand sanitizer jumped more than 1,000%. Nielsen, a company that collects sales data from point of sale scanners, reported hand sanitizer sales in the United States were up 73% in February alone.

POET Vice President Rod Pierson said the company wanted to create superior product.

"Our frontline workers deserve nothing but the best," he said. "We're proud of what we've been able to create and the impact it will have in protecting the public."

As the COVID-19 pandemic continues, the nation is likely to see continued demand for sanitizer products. Broin has indicated his company looks to remain in the sanitizer market.

The commitment to the hand sanitizer product isn't just a business decision, Pierson said.

"It is crucial that we prevent shortages of PPE (personal protective equipment) as we saw when this pandemic began," he said.



#### By Janelle Atyeo for South Dakota Natural Resources Conservation Service

When your doctor prescribes a new daily regimen or a major surgery to improve your health, it's common practice to turn to an expert and seek a second opinion. When setting out to improve the health of your crop, range and pastureland, there's a resource for finding advice from other producers who've made the same journey.

A directory of agriculture and local foods producers throughout

the state has been assembled with South Dakota people who are ready and willing to talk with other farmers and ranchers as they navigate through process of building soil health and using regenerative practices. We work closely with the SD Soil Health Coalition, SD Grassland Coalition and South Dakota's Conservation Districts with the Mentor Network. people

learning and asking questions, NRCS and our partners help connect people with others who have the experience to address the question.

"Building Connections" is a 40-page directory that lists volunteer mentors by county, giving their contact information along with a synopsis of their soil health-building experience. Some have tried diverse crop rotations or full season cover crops. Others are experts in rotational grazing, multi-species livestock, or managing native grasses.

Unique to South Dakota, there are more than 160 mentors in all, with at least one in every county with expertise ranging from large operations to average size acreages to small local foods

producers and gardeners. The Natural Resources Conservation Service spans South Dakota and started organizing the group through the USDA's Earth Team network in 2013. Several gardeners, Master Gardeners, and small acreage folks have joined the network.

Doug Sieck is one of three producers under the Walworth County listing, ready to share his experience with cover crop

rotations and grazing, no-till, soil biology and more. More experienced producers helped him out when he was first trying some unconventional management styles. "Being part of the mentor network is a way to give back," he said.

Sieck remembers when he was first planting some of his crop land back to grass and alfalfa. He made the mistake of putting hungry cows in the alfalfa, and he lost one cow and others got sick.

The experience could very well have soured him on the practice and made him abandon his grazing plans altogether, but instead, he reached out to others who had been grazing alfalfa/grass combinations. They warned him against letting hungry cows loose on the mix and told him how the practice was a success for them. It gave him the confidence to keep going.

Now he's counseled others – most recently about grazing in standing corn. It's something he lauds as a great way to adapt to less-than-ideal conditions. When wind blows down a field of corn and makes it impossible to harvest, producers might fear it's a total loss, but the crop can become fodder for grazing herds.

"When we get curve balls, it's nice to have a reference from

people who can help us adapt," Sieck said.

He hopes the mentor network will give producers the reassurance they need to try new things.

"It's experiences shared farmer-to-farmer and rancher-to-rancher," said Colette Kessler, public affairs officer for NRCS South Dakota. "The peer network is really the best place for a real-life example of how things really work. They're living it on a daily basis."

Kessler and her team got the idea for the "Building Connections" directory after working with producers across the state, helping them share their conservation success stories. They spoke highly of how their soil practices were working, and Kessler saw the value of making that information available to others interested in doing similar things. "The network is an important sounding board for how to adapt these principles to your operation," she said. "Changes are not always easy or

quick, such as transitioning fields from tillage to a no-till system, so finding good coaches certainly helps. Sometimes, conversations about smaller tweaks such as modifying equipment can be very timely," she commented.

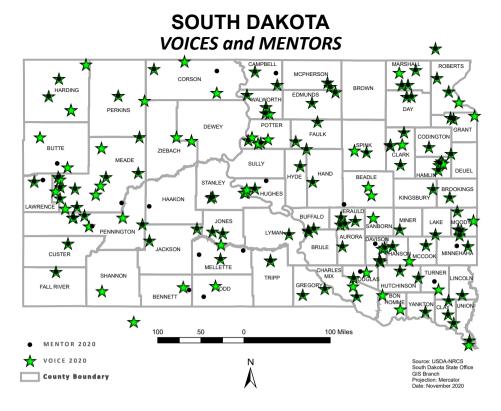
The mentor network was built with the help of several organizations whose experts provide technical advice for resource management. Along with NRCS, the South Dakota Grassland Coalition, the South Dakota No-Till Association, the South Dakota Soil Health Coalition, the South Dakota State University Extension and South Dakota's Conservation Districts are involved. Producers interested in joining the mentor network can contact any of the partnering organizations.

The network is free. There is no charge to contact or get involved with the mentors in the directory. Anyone can receive the directory by sending an email to colette.kessler@usda.gov or call (605) 352-1200 to receive the publication in the mail. Directories are available in every county at local USDA Service Centers with the NRCS or conservation district.

"The farmers and ranchers are all volunteers who simply want to help their peers with questions," Kessler said.

Soil health experts, agronomists and range specialist have a great understanding of soil health principles and the microbiology that makes healthy soil function like it should. But it's the producers with boots on the ground who have an intimate understanding of how it works in practice.

"They've made mistakes. They've learned through doing it rather just in theory," said Bryan Jorgensen, a member of the mentor network who has long been incorporating no-till and cover crops on his family's ranch near Ideal in southern South Dakota.



He doesn't discount the expert advice and the researchers or university extension, NRCS and other groups are doing. It's the partnerships between researchers and producers that give them the ammunition to help other people, he emphasized.

Jorgensen also doesn't discount the value of making mistakes. They're part of the learning process and serve as useful examples for others. Jorgensen encourages anyone with success stories in regenerative agriculture to become part of the mentor network.

"We feel it's important to spread the good word about soil health. We're passionate about soil health, and we want people to improve the soil," he said.

As a statewide service, NRCS South Dakota has organized the network of mentors who are willing to talk other producers through adopting regenerative practices such as transitioning away from tillage, use of cover crops or rotational grazing. Producers can directly contact a mentor and their conversations are private.

The Mentor Network is a free service available to anyone by contacting your local Natural Resources Conservation Service, Conservation District, the South Dakota Grassland Coalition or the South Dakota Soil Health Coalition. A newly updated version of the "Building Connections" Mentor Network publication is now available. Request your free copy of the booklet today!





## The National Rural Water Association

# STRENGTHENING STATE ASSOCIATIONS & RURAL COMMUNITIES

The National Rural Water Association is a non-profit organization dedicated to training, supporting, and promoting the water and wastewater professionals that serve small and rural communities across the country.

NRWA provides training and technical assistance through 49 affiliated State Rural Water Associations that currently have over 31,000 utility system members. Rural Water training and technical assistance covers every aspect of operating, managing and financing water and wastewater utilities through multiple federally funded programs. NRWA programs generally focus on assisting small and rural communities that serve less than 10,000 people. However, State Associations work in different ways with all sized systems, with many large cities demonstrating their support for Rural Water as members.

The NRWA Circuit Rider Program is made up of 49 State Rural Water Associations (CT/RI are combined as one) and Puerto Rico, totaling 147 Circuit Riders in the U.S. These Circuit Riders

provide hands-on training and technical assistance to small, rural water systems on an everyday basis, 24/7. Personal, professional assistance is at the heart of the Circuit Rider program. On-site help is delivered when and where a rural community needs it.

"Circuit Riders have provided technical assistance more than 700,000 times to help rural systems and communities since 2009," said Rita Clary, NRWA Circuit Rider Program Manager.

The purpose of the Wastewater Program is to protect the nation's multi-billion-dollar investment in rural and small municipal water/wastewater systems by providing on-site technical assistance,

which ensures cost-effective operations and adequate income for both operations and debt service within each state. There are 65 dedicated and talented Wastewater Technicians throughout the country working through their State Rural Water Association. The primary goal of these technicians is to assist small, rural and economically challenged communities to enhance and maintain the financial sustainability of their wastewater systems through technical assistance and/or training.

The Apprenticeship Program provides standards and guidelines to State Associations so they can build their own program to hire and train apprentices in their state. Through these programs, apprentices can earn while they learn and emerge with a secure career as a water or wastewater operations specialist. With a declining workforce, this program has proved

essential to provide future water and wastewater operators.

The NRWA Source Water Protection Program is built around small water utilities, local businesses, agriculture, government, and other

groups working together to develop and implement strategies to protect their drinking water sources. This cooperative program has made significant progress in reducing point source pollution from industrial, agricultural, municipal, and even household sources. The program has also made progress in the challenging area of nonpoint source pollution.

NRWA's Energy Efficiency Technical Assistance Program is designed to promote energy efficient practices in small water and wastewater systems. Funded through a grant from the U.S. Department of Agriculture Rural Utilities Service, the program performs energy assessments, recommends energy efficient

practices and technologies, and provides support following recommendations. Technical support includes assisting with presentations to governing boards, accessing financing, training, and developing documentation.

The USDA loan and grant program helps very small, financially distressed rural communities extend and improve water and waste treatment facilities that serve local households and businesses. This assistance supports infrastructure improvements, business development, housing, community services such as schools, public safety and health care, and high-speed internet access in rural areas. It can be used to finance drinking water, stormwater drainage and waste disposal systems for rural communities with 10,000 or fewer residents.

The Safe Drinking Water Act Compliance Assistance Program is designed to strengthen the technical capacity in small water systems, ultimately resulting in the reduction of the number of systems out of compliance with health-based standards. The Training Specialists provide technical assistance in compliance with the Safe Drinking Water Act to small public water system personnel by working directly with them on-site at their system.

Training Specialists use NRWA's nationwide pool of expertise to provide diagnostic and troubleshooting assistance for operational and compliance-related problems.

The National Rural Water Association also creates multiple public relations and outreach campaigns to promote a positive image of the water and wastewater industry to the public. Americans often take for granted that they have the highest quality, most affordable water, piped directly to their homes and businesses. This level of quality is accomplished because of dedicated professionals that take pride in their hard work, education, and service to the community. We also provide resources and information on current issues in the industry to our State Associations like the COVID-19 pandemic, PFAS, and Disaster Response during natural disasters.

Clean drinking water and safe wastewater treatment are vital to the health and safety of Americans. With the support of our State Associations, NRWA strives to protect the quality of life in America, while supporting the grassroots efforts required to help rural communities thrive. For more information, please visit www.nrwa.org.













Quality On Tap!

### SYSTEM SPOTLIGHT

# **BDM RURAL WATER SYSTEM**

n 1976, the need became apparent for a rural water system in southwestern Marshall County and later in adjoining townships in Day and Brown counties. The Marshall County Extension Agent was instrumental in holding informational meetings and designing the BDM information sheet questionnaire. It was completed at the collection of the \$30 good intention fee by the Steering Committee over the next two years. A letter stated, "The BDM Rural Water Steering Committee was organized in spring 1977. Since that time, it has sought every available means to bring the project to pass. The total project cost was projected to be \$5,300,000, which increased to \$5,900,000 due to some of the proposed new users being in fringe areas outside the original proposed boundaries, necessitating more miles of pipeline and thus more expense." The initial steering committee consisted of seven very dedicated and forward-thinking members. By December of 1981, the steering committee had grown to 27 committed, resilient, devoted, and persistent members. As I read through files of notes and letters of correspondence, it was evident that many disappointing events occurred to justify the committee to throw in the towel on this endeavor. However, they continued to work through every challenge and obstacle they were confronted with, to look for that next ray of hope to bring good quality water to the rural farms and towns in Northeast South Dakota. For this, we are forever grateful for those who went before us with determination and foresight to build BDM Rural Water into what it is currently. We today, in the farms and rural towns of South Dakota, are the beneficiaries of the seeds of rural water systems that were planted decades ago by our parents and grandparents.

The Preliminary Engineering Facility Study for the BDM Rural Water System was dated April 25, 1979. The report stated it "consists of a summary of the study made to determine the feasibility of constructing and operating a rural water system for Brown County, Day County, and Marshall County South Dakota. The study comprised of individuals located in an area including eight townships in the eastern part of Brown County, four townships in the northwestern part of Day County, and 12 townships in Marshall County. The area lies mostly in the James Basin, bounded on the west by the James River and east by the Coteau Des Prairies' numerous lakes. The area is approximately 25 miles wide and 40 miles long along an axis running northeast to southwest. There are 526 members (who have paid a \$30 good intention fee) constituting more than 3,500 persons. Of the total membership, 518 are farm or rural residences, three are residences in a small community, and 5 are towns. Those towns include Bath, Groton, Pierpont, Langford, and Claremont, which have central distribution systems and are interested in purchasing water on a bulk basis."

A letter dated June 16, 1980, explained the situation to the South Dakota national congressional delegation. "BDM was organized in 1977 (steering committee), and 520 potential users paid good intention fees. They were projected for funding in 1981, but due to current and proposed reduction in funds, that date is very unlikely to be met, if at all.

The area is not densely populated, and therefore, any system has a relatively high cost per user. However, due to the lack of quantity and quality of water, it is of considerable significance to the area. Also, wells are not cheap! Most wells are artesian and cost from \$8,000 to \$12,000. That is for water that is too high in dissolved solids to meet public health water quality standards. This causes continuing problems with diarrhea. Some of the shallower wells have problems with nitrates to such a degree that it can be deadly for infants and small animals to drink the water.

Many people haul water to drink and for household use. The livestock has a reduced rate of gain, causing economic loss. Plumbing corrodes, water heaters last about five years, and in some cases, clothes can't be washed with the water because of stains and rust, so they have to be washed in town."

On November 5, 1981, it was decided that the Brown Day Marshall Rural Water System, Inc. should be formed as a non-profit corporation. On December 3, 1981, the newly formed corporation's directors approved the Articles of Incorporation. The Articles of Incorporation for BDM Rural Water System, Inc. were filed on December 22, 1981.

The first ray of hope was on December 3, 1982, where the South Dakota Dept of Water & Natural Resources approved a grant for \$650,000. On April 11, 1983, FmHA approved a loan for \$2,880,000 at 7.125%, and BDM was becoming a reality.

The original system was designed for 406 customers in Brown, Day, and Marshall County. This was to be completed in three sections. Bids for these three sections were advertised for bid opening on April 25, 1984. Section I was for 2,041,800 linear feet of 1.5 inch to 8-inch PVC water main and 8,339 linear feet of railroad and highway crossings with 406 water service meter assemblies. Section II was for a 100,000-gallon reservoir, pump house, filtration plant, and two 40,000-gallon reservoirs with pumps and controls. Section III was for two water supply wells and equipment. The three sections were awarded on May 14, 1984, and April 18, 1985, for \$3,215,148, which came from a combination of loans and grants. Interest increased as construction started in the summer of 1984 and took two years to complete, with the final project clean up in 1986. Almost 600 users were added in the initial phase.

In 1996 BDM added a small expansion project, which added 45 users to the system. This project was a warmup to the project that was to take place in the next few years.

In 1999 construction began on the East Marshall project, which would add over 1,000 users in Marshall and Roberts counties. This project added several wells, reservoir capacity, and expanded the treatment plant. The project was completed in four phases, with completion in 2006.

In 2008-09 the Hecla expansion project started, which added 29 rural users and the community of Hecla.

The last two wells were added in 2012, which brought the total number of wells to eight, which provides the source water for the system today. BDM's source water is from the Middle-James aquifer. Water is stored and distributed from the water treatment plant and 14 reservoir sites with a total capacity of 2,860,000 gallons of storage. Stand-alone generators provide back-up power in case of electrical failures at the treatment plant and five reservoirs, with several mobile generators.

Today BDM serves 2,279 users with annual growth in users realized every year for the past five years. In addition to individual users, we currently provide bulk water to Amherst, Claremont, Langford, Pierpont, Britton, Veblen, Lake City, New Effington, Peever, and Hecla. The Sisseton-Wahpeton Oyate is also provided bulk water at several of their housing sites and over 200 individual homes throughout the area. The system provides between 400,000,000 to 420,000,000 gallons of high-quality water to its' customers annually. The system has 1575 miles of PVC pipe varying from 1.5" to 14." This is equivalent to a pipeline running from New York City to Dallas, Texas. The system is 78% converted to an AMR reading system that provides valuable customer and BDM usage data in 5-minute increments. The system has a hydraulic model on 100% of the system that is updated annually. The SCADA system is in the final stages of being 100% replaced. For the past several years, the system has covered 100% of depreciation expense, with approximately \$5,000,000 invested in capital replacement over the past three years, of which \$2,000,000 is financed over ten years.

The system is directed by a seven-member board and a system attorney. The day to day staff includes a general manager, operations manager, office manager, and four operations specialists.



#### **BDM RURAL WATER SYSTEM**

#### **DIRECTORS:**

**Torre Raap** – Chairman, State Association Director Kevin Deutsch – Vice-Chairman Hal Treeby - Secretary/Treasurer **Don Ogren** – Director Terry Leonhardt - Director Marc O'Brien - Director Alex Suther - Director

#### STAFF:

Rodney Kappes – General Manager Mark Hagen - Operations Manager Darin Roehr - Senior Operations Specialist **Jim Hagen** – Operations Specialist Ryan Vrchota - Operations Specialist **Jared Marzolf** – Operations Specialist Shannon Wegleitner - Office Manager

#### **STATISTICS:**

**Hookups: 2,268** Miles of Pipeline: 1,600

Water Source: Middle James Aquifer

Counties Served: Brown, Day, Marshall, Roberts,

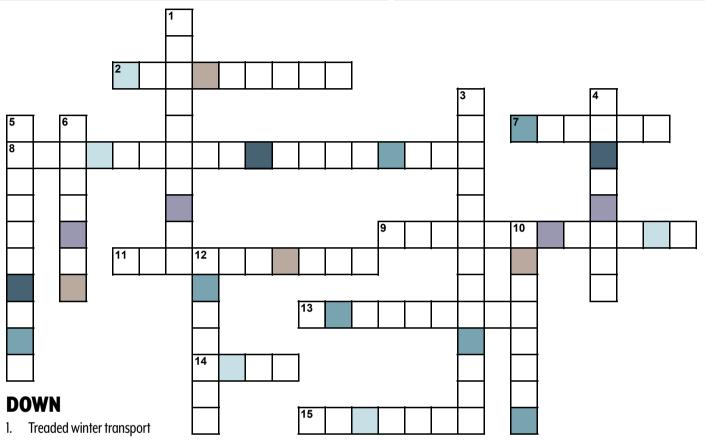
Sargent (ND)

Towns Served Individual: Claire City, Houghton,

Towns Served Bulk: Amherst, Pierpont, Langford, Claremont, Britton, Lake City, Veblen, New Effington, Peever, Sisseton-Wahpeton Oyate, Hecla

# RURAL WATER CROSSWORD & WORD SCRAMBLE CONTEST

# **Winter Sports**



- Graceful event scored on jumps, spins, and lifts (2 words)
- Plummeting head-first down a steep and treacherous ice track on a tiny sled; considered the world's first sliding sport.
- 5. Arctic angling (2 words)
- 6. Racing toboggan
- Best done with a tube, saucer, or flexible flyer
- 12. Iditarod racer

#### **ACROSS**

- 2. Rink game minus skates
- Goal-oriented winter sport
- A recreational sport in which people tour through wooded trails at a leisurely pace (3 words)
- 9. Racing on blades (2 words)
- 11. Pair skating's relative (2 words)
- A board resembling a short, broad ski
- 14. Racing toboggan
- 15. Stone sliding

Enter to Win \$100

**SCRAMBLE ANSWER** 



**RULES:** Use the colored squares in the puzzle to solve the word scramble above. Call your Rural Water System (See page 2 for contact information) or **enter online at <u>www.sdarws.com/crossword.html</u>** with the correct phrase by January 10, 2021 to be entered into the \$100 drawing.

Only one entry allowed per address/household. You must be a member of a participating rural water system to be eligible for the prize.

Your information will only be used to notify the winner, and will not be shared or sold.

Congratulations to Bonnie Rusche who had the correct phrase of "ATTITUDE DETERMINES DIRECTION" for October 2020.

ACROSS SOUTH DAKOTA

# SDARWS RECEIVES AWARD FOR ACHIEVEMENT IN PUBLIC RELATIONS

he South Dakota Association of Rural Water Systems (SDARWS) was recently recognized for Outstanding Achievement in Communications, Publications and Public Relations by the National Rural Water Association.

SDARWS is the only Rural Water Association in the nation that produces a consumer magazine. Quality on Tap! is created in-house and published quarterly along with 17 participating Rural Water Systems. Thirty-five thousand copies are mailed quarterly and reach about half of our rural water consumers in South Dakota. Quality on Tap! highlights water issues affecting consumers and proves successful in creating a unified voice for rural water in our state. Other publications produced by SDARWS include ServiceLine magazine, Rural Water Bi-Monthly eNews, JobConnection eNewsletter, and Ripples Legislative eNewsletter.

"Our publications focus on water conservation, stewardship, regulations, as well as promote the Association. The consumer magazine is a cooperative effort between several rural water systems and the Association and works to unite us as one voice for water in our state," said Jennifer Bame, SDARWS Communications and Marketing Coordinator.

Jennifer Bame administers SDARWS' public relations efforts. Jennifer is a graduate of South Dakota State University with a B.A. in Journalism/Mass Communications and has been with SDARWS since 2012. The Association has also received this award in 2016 and 2018.

"We are incredibly proud of our marketing effort and continually look for new ways to promote rural water through as many mediums as possible, including social media, print and, digital publications. We also promote rural water at farm shows and children's water festivals throughout the state," said Bame. "SDARWS is also very active on social media with almost daily posts highlighting our work, as well as providing education on water issues."



#### **NOW IS THE TIME TO ACT**

#### Get Started on Your Water Utility Construction Project

Do you have a Water Utility Construction Project? Now is the time to act! Rates are at an all time low, and with the current pricing being opportunistic and taking action can result in benefits not only for yourself but for the customer as well. Consider the below items that detail positive reasons to act now that you can present to your governing body.

- Interest rates are at an all-time low.
- More project contractors are available, increasing the number of bids, potentially lowering project costs.
- Fuel costs are low, lowering pipe related costs.
- Most material costs for projects are down.
- Shipping costs for many have decreased.
- Road and water projects are easier to schedule due to decreased volume in traffic.
- Low construction costs and available contractors are not guaranteed to last.









# FREE CLOTH MASKS FOR SOUTH DAKOTA WATER & WASTEWATER PERSONNEL

# ATTENTION WATER & WASTEWATER SYSTEM PERSONNEL:

South Dakota Association of Rural Water Systems (SDARWS) and Water and Wastewater Agency Response Network (SDWARN) has worked with EPA and FEMA to secure a limited supply of cloth facemasks for water sector personnel. SDWARN is partnering with SDARWS to help distribute these cloth facemasks. Because supplies are limited, systems can request a maximum of two masks per utility personnel. Masks will be distributed based on need and prioritized in counties most impacted by COVID-19.

#### **ABOUT THE CLOTH FACEMASKS:**

- Single size (one size fits all)
- Fabric touching skin is 100% cotton
- The cloth masks are reusable and machine washable up to 15 times
- NOT for use with chemicals or in hazardous environments where N95 or other respirators are required

If you are in need of masks for utility personnel, please visit *sdarws.com/masks.html* to fill out the online request form, and we will get you on the list to receive these essential supplies.

You will be asked to provide basic information about you and your water system such as your PWSID or NPDES Permit number and the number of FTE at your system. This is to verify that you are a South Dakota water or wastewater agency.

#### **SOME KEY POINTS OF THE PROGRAM ARE:**

Cloth masks are being made available to all water and wastewater agency employees in South Dakota.

The cloth masks are for all public water and wastewater system employees; masks are not exclusive to field workers and operators.

Identify the number of cloth facemask requested – current limit of two cloth facemasks per water or wastewater agency employee.

Once approved, you will receive an email to confirm the number of cloth masks you will receive and confirmation of arrangements made for pick-up or delivery of the facemasks.

You do not need to be a member of SDWARN in order to receive masks, however, if you're not a member, we strongly encourage you to join. More information can be found on SDWARN's website by going to www.sdwarn.org.



# OPERATOR CERTIFICATION TRAINING AND EXAMS

Course	Date	Location
Basic Wastewater Treatment Online Course	January 26-28	Webinar by SDARWS
OpCert Exam (50 Seats Available)	January 28 - 1:00 pm	Rapid City Ramkota - Rushmore Room
Water Distribution Online Course	February 23-25	Webinar by SDARWS
Wastewater Collection Online Course	March 9-11	Webinar by SDARWS
OpCert Exam (50 Seats Available)	March 18 - 1:00 pm	Rapid City Ramkota - Rushmore Room
Basic Wastewater Treatment Online Course	March 23-25	Webinar by SDARWS
OpCert Exam (50 Seats Available)	March 18 - 1:00 pm	Watertown Ramkota/Events Center
Basic Water Treatment	April 6-8	Sioux Falls Ramkota
Small System Water Treatment Workshop	April 27	Rapid City Ramkota
Small System Water Treatment Workshop	April 29	Huron-Crossroads/Events Center
Intermediate Water Treatment	May 4-6	Sioux Falls Ramkota
Advanced Water Treatment	May 18-20	TBD
Stabilization Pond Workshop	June 1	Huron-Crossroads/Events Center

#### How do I attend an online webinar?

First, register for the class online at go.activecalendar.com/sdarws. You will not need to set up a username nor a password. Upon registration you will need to enter a valid email address for each registrant or we will not be able to send you the following: After you are registered, SDARWS Trainer Jim Zeck will send you a link with instructions on how to get signed up for the online course using Zoom. When registering on Zoom we ask that you use your full name instead of a handle so we know who you are when you logon to the course. You will also get instructions on how to access the course materials to download and which material you may want to print off (typically the ABC Formula Conversion Table and the Math Handout) prior to the day of the course. If you have multiple participants from one system, please include them and their email in the go.activecalendar.com registration process. During the start of the course you may be asked to use the chat function to let trainer Jim Zeck know who is in attendance at your site if you have more than one person. You will also need a pen/pencil, notepad, and calculator available. The webinars are accessible via computer (may need headphones or speakers if not built in), smartphone, or tablet (the bigger the screen the better). During the webinar, if you have questions you are able to ask them by typing your question in the Q&A box. There is a possibility to request to turn on and use a microphone on your end if you have a very specific question or comment. Attendance will be taken periodically during the duration of the webinar. Certification webinars are not recorded - you must attend on the day the class is given for credit.

#### How will the OpCert exams be given during the COVID pandemic?

- · If any examinee feels ill on day of exam, they are to stay home.
- Any examinees showing any symptoms will not be allowed to take exam and anyone showing symptoms while taking exam while be told to leave with exam being confiscated.
- · Masks may be worn, or may be required by the venue.
- Extra personnel will not be allowed in Foss Building or exam room.

#### Exams at Matthew Center/Foss Building-Pierre:

You may not enter the building without an escort. At 25 minutes before the exam

start time, please line up at the front door of the Foss Building on Capitol Avenue observing social distancing. A proctor will meet you at the front door and escort you to the exam room. DENR rules require that upon entering the building, you must sign in and have your temperature taken. If you are late, you risk not getting into the building to take the exam.

#### Exams at Other Locations such as Motels/Water/WW Plants:

- No-one enters exam room before proctor. All materials/people will clear room after class has ended if applicable. Please remain in parking lot or lobby maintaining social distances. Line up at the front door of the exam room 20 minutes before the exam start time and observing social distancing.
- When exam room is ready, proctor will invite each examinee into room to an assigned seat with exam already in place.
- When you get seated, you are not to start your exam. You are to wait until all
  examinees are seated, exam instructions are given, and exam session will start.
- Pencils/calculators/pencil sharpeners will not be provided. You must bring your own.
- No receipts/exam applications/schedules will be available. For a receipt, call 605-773-4208 or email rob.kittay@state.sd.us after the exams and one will be emailed to you.
- Examinees needing to leave exam room during exam such as bathroom use will be allowed to do so; however, only one person may leave at a time.
- Examinees with a question on exam will come forward to the proctor's table (maintaining social distancing) to ask question.
- When examinee is done with exam, they will come up to proctor's table and hold up their exam booklet/answer sheet so proctor can determine that answer sheet has been completed properly. After proctor gives OK, they will put answer sheet inside booklet and leave on table without proctor touching exam.
- Examinees are then to leave exam room at motels/water/WW plants or the Foss Building/Matthew Center directly.

For Study materials, visit: www.abccert.org/testing\_services/ExamReferences.asp
For more information contact SDARWS Trainer Jim Zeck: 605-201-9568 or jzeck@sdarws.com
REGISTER FOR CLASSES ONLINE: go.activecalendar.com/sdarws



PRESORTED STANDARD US POSTAGE PAID PERMIT #32 MADISON, SD



Until fairly recently, most rural homes, farms and ranches in South Dakota depended on individual wells for water. In some cases, the quality and/or quantity of what came out of the well was not great, but it was at least better than the alternative - no water at all. The growth and expansion of regional water systems (insert your system name here!) has provided plentiful, high quality water for consumption by people and livestock, replacing the sometimes sketchy wells.

In some cases, the old well(s) were completely decommissioned and sealed (hopefully in full compliance with state law (see denr.sd.gov/des/wr/abandonedwell.aspx for details). In other cases, the wells were simply disconnected and abandoned. However, a large number of these otherwise functioning wells remain active, with use largely restricted to lawn and garden watering and other non-consumptive uses.

#### Why check the well water?

Just because you no longer use the old well all the time, it is important to check the quality of the water occasionally. On a hot day, it is tempting to take a quick drink of the cold water coming out of the

garden hose. At the same time, running through the spray of lawn sprinklers is irresistible to small (and not so small) children. If the well is still functional, chances are it will be used.





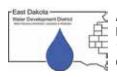


#### What should I check for?

Bacteria and nitrate are the most common things to look for. Bacteria in the well suggests that the integrity of the well has been compromised. Most bacteria are harmless, but some can cause serious illness. Shallow wells are most susceptible to nitrate contamination where they leach into the ground water from excess nutrients and fertilizers. They can interfere with oxygen intake, particularly for very young children and those with compromised immune systems.

#### How do I check the water?

This is the easy part. The Public Health
Laboratory at the South Dakota
Department of Health has a program
for just this situation. They provide
sample bottles which include complete
instructions for collecting and submitting
water samples for testing. Fee information
for the various tests is included. Bottles
can be requested by calling (605) 7733368, or by completing a form on-line at
doh.sd.gov/lab/environmental/privatew.
aspx. Sample bottles and instructions are
also available from South Dakota State
University Extension offices.



**Back page content provided by:**East Dakota Water Development District
132B Airport Drive • Brookings, SD, 57006
(605) 688-6741 • http://eastdakota.org