



KINGBROOK
RURAL WATER SYSTEM

Quality On Tap!

April 2025 | Volume 20, Issue 4

**GROWING
CONCERN OVER
PFAS AND LITHIUM
IN SD'S WATER**

**HOW YOUR WATER
SOURCE AFFECTS
QUALITY &
CHEMISTRY**

**BACKYARD
POLLINATOR
GARDENS**

IN THIS ISSUE:

RSVP FOR
KINGBROOK'S 49TH
ANNUAL MEETING
APRIL 14, 2025

**SDARWS TECH
CONFERENCE
AWARDS**

**MEET YOUR
DIRECTORS**

FROM THE MANAGER

Heath Thompson, General Manager
Kingbrook Rural Water System, Inc.



KBRW has completed year-end bookwork and audit for fiscal year 2024. Kinner & Company performed the audit, which was reviewed with the KBRW Board of Directors and reflected a positive year for KBRW.

Water sales for 2024 totaled 877,943,000 gallons, a 6% increase from the year-end of 2023. Ninety-five water leaks were repaired, and sixty-six new services were installed in 2024. Gross water loss for the year was 11%, which is a positive number and a great reflection of the dedicated efforts of KBRW staff to promptly monitor, locate, and repair water lines. Eliminating nonuse water loss is one key to an efficient and fiscally responsible regional rural water system.

Please note the notice for Kingbrook Rural Water's 49th Annual Meeting in this issue. The meeting will be held on April 14th, 2025, at the American Legion Hall in Arlington, SD. All members are welcome to attend. Please RSVP if you plan to attend to help ensure the correct accommodations for the meeting.

KBRW attended the South Dakota Association of Rural Water Systems (SDARWS) Annual Technical Conference (ATC), held in Pierre, SD, from January 9 to 11, 2024. The Conference, which is coordinated with the start of the South Dakota Legislative Session, allows water professionals to converse with legislators to explain the importance of water needs in South Dakota and provide success stories of many large-scale projects throughout the state. The ATC also includes training sessions for operators, managers, and directors, and the SDARWS holds its Annual Membership Meeting during this event. Another item held during the ATC is the Awards Luncheon.

Please take note of the SDARWS ATC Awards write-ups in this issue of *Quality on Tap*. Three individuals, along with Kingbrook, were honored by peer groups across the state for their commitment, hard work, and dedication to delivering clean drinking water across eleven counties in eastern South Dakota.

Retired directors Marvin Antonen and Rodney Stormo were recognized for their 27 years of dedicated service to KBRW as directors and received the Spirit of Rural Water Award. This award recognizes individuals who go above and beyond for a rural water system or rural water cause.

Brian Callies was awarded the Rural Water System Operations Supervisor of the Year. This award recognizes a State of South Dakota Certified Operator who is actively working in a supervisory role for a rural water system and has demonstrated outstanding leadership ability and /or accomplishments in drinking water.

Kingbrook Rural Water System was awarded the 2024 Rural Water System of the Year Award. This award is given to a member system that makes exceptional efforts to properly manage, operate, and maintain its drinking water system. It should be noted that this award outlines the efforts of all individuals at all levels of the water system and belongs to no one individual. KBRW also received this award in 1994, 2002, 2006, and 2012, framing the long-term commitment of exceptional efforts of all past and present individuals who have dedicated their service to Kingbrook Rural Water.

Kingbrook currently has 16 dedicated individuals working on running, maintaining, repairing, and growing the members system. The effort and commitment this takes is considerable and often goes unnoticed due to the nature of how a regional water system operates. Office staff must undertake complex and detailed tasks to ensure the system's administrative function and compliance are met daily. The same is required of the field staff, who may fix issues before any service interruption. These efforts lead to accessible water 24/7 or the repair and correction, should it stop, promptly and efficiently. I am grateful to work with such a great group of individuals.



BOARD OF DIRECTORS

Scott Tolzin

Chairman – District 2, DeSmet, SD

Brian Christensen

Vice-Chairman – District 3, Arlington, SD

Corey Dorhout

Secretary/Treasurer – District 6, Madison, SD

Norman Andenas

District 7, Howard, SD

Barry Loomis

District 4, Bruce, SD

Doyle Renaas

District 5, Nunda, SD

Damon Stormo

District 1, Lake Norden, SD

STAFF

Heath Thompson, General Manager

Brian Callies, Operations Manager

Jon Ekern, Treatment Plant Manager

Jerrud Kruse, Senior Operations Specialist

Bill Osterberg, Treatment Plant Specialist

Logan Calmus, Treatment Plant Specialist

Chad Bjerke, Operations Specialist

Mike Warner, Operations Specialist

Corey Clelland, Operations Specialist

Alan Brown, Operations Specialist

Nick Kramer, Operations Specialist

Aaron Jeffrey, Operations Specialist

Caleb Clark, Operations Specialist

Tabitha Duffy, Office Manager

Danielle Zeeck, Bookkeeping & Accounting Specialist


Teresa Mohr, Accounts Receivable Specialist

CONTACT INFO

605-983-5074 • kingbrookruralwater.com

302 E. Ash St. • PO Box 299 • Arlington, SD 57212

Email: office@kingbrookruralwater.com

 **STATEMENT OF NON-DISCRIMINATION:** In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by:

(1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov. This institution is an equal opportunity provider.



NOTICE OF 49TH ANNUAL MEETING

Monday, April 14, 2025 • Edgar L. Herrick American Legion Hall • 118 Main Street • Arlington, SD

Mark your calendars for the 49th Annual Meeting of the members of the Kingbrook Rural Water System, scheduled for the evening of Monday, April 14, 2025, at the Edgar L. Herrick American Legion Hall in Arlington, South Dakota. A buffet style dinner of slow roasted beef, grilled chicken filet, old fashioned mashed potatoes and gravy, buttered sweet corn, roll, ice cream cup, coffee, and water will be served. Dinner will begin at 6:00 p.m. **PLEASE NOTE THAT SERVING WILL NOT BEGIN UNTIL 6:00 p.m.**

The Annual Meeting will commence at 6:45 p.m. and will be held to consider the financial reports for our FY-2024 annual audit, election of directors and any other business properly brought before the membership. Scholarship winners will be recognized and there will be comments from the Chairman and General Manager with a question-and-answer session.

Individuals filing director petitions by the deadline were Kingbrook's three incumbent directors from District 2 – Scott Tolzin, District 3 – Brian Christensen, and District 5 – Doyle Renaas.

Concluding the business meeting will be a drawing for all cash door prizes. Top prize is \$250.00 cash followed by one \$100.00, two \$50.00 and four \$25.00 cash prizes which you must be present to win.

We request that members RSVP if you plan to attend the 49th Annual Meeting. YOUR RSVP IS VERY IMPORTANT! It will allow our caterer to plan for the dinner and ensure we have ample seating available.

Please RSVP by Wednesday, April 2, 2025, by calling our office at 1-800-605-5279 or 605-983-5074 or by emailing your name and the number attending to payments@kingbrookruralwater.com.

ELECTION OF THREE DIRECTORS EACH FOR THREE-YEAR TERM



**SCOTT
TOLZIN**
District 2 Candidate



**BRIAN
CHRISTENSEN**
District 3 Candidate



**DOYLE
RENAAS**
District 5 Candidate

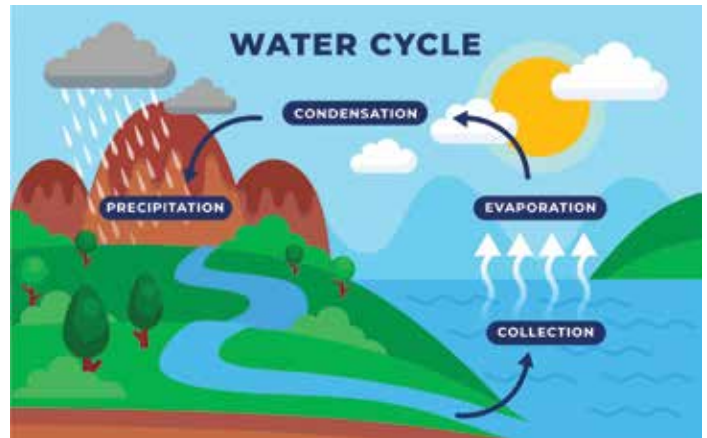
Registration & Meal – 6:00 p.m.

Business Meeting – 6:45 p.m.

DOOR PRIZES!

If you plan to attend call 1-800-605-5279 or email payments@kingbrookruralwater.com to RSVP with the number attending by Wednesday, April 2, 2025.

MAKE YOUR OWN MINI WATER CYCLE!



Have you ever wondered how water moves around our planet? The water cycle is nature's way of moving water through the air, land, and back again. You can create your very own mini water cycle at home with just a few simple materials!

Did You Know? The water you drink today could be the same water a dinosaur drank millions of years ago! Thanks to the water cycle, water keeps moving through evaporation, condensation, and precipitation – never running out, just changing forms!

What You'll Need:

- A resealable plastic bag
- A permanent marker
- Water
- Blue food coloring (optional)
- Tape

Step-by-Step Instructions:

- 1. DRAW THE WATER CYCLE** – Use a permanent marker to draw a sun, clouds, and waves (to represent water) on the outside of the plastic bag.
- 2. ADD WATER** – Pour about $\frac{1}{4}$ cup of water into the bag. If you like, add a drop of blue food coloring to make it easier to see.
- 3. SEAL AND TAPE** – Zip the bag shut tightly and tape it to a sunny window.
- 4. WATCH AND LEARN!** – Over time, you'll see water droplets form on the inside of the bag. This is condensation! As the water heats up, it evaporates, then cools and forms droplets, just like in the real water cycle.

What's Happening?

EVAPORATION – The sun's warmth turns water into a gas called water vapor.

CONDENSATION – Water vapor cools and turns back into tiny liquid droplets (that's what you see inside the bag!).

PRECIPITATION – When the droplets get big enough, they fall as rain, just like in nature!

COLLECTION – The fallen rain gathers in bodies of water like lakes, rivers, and oceans, ready to start the cycle again.

Try this experiment and watch the water cycle happen right before your eyes. Science is amazing!



Q: What did the cloud say to the raindrop?

A: You're falling for me!





BACKYARD POLLINATOR GARDENS

There are many reasons why pollinators are important for our own health and why healthy soil and pollinators are connected. Pollinators help contribute to a diverse plant community which in-turn increases the health of your soil. Listed below are a few interesting facts about the need for pollinators.

- More than 100 crops in North America need pollinators.
- One out of every three bites of food is dependent on pollinators.
- More than 75% of flowering plants depend on pollinators.
- More than \$200 billion per year impact on the global economy.

POLLINATORS

Bees are one of the most important pollinators in the world. There are over 4,000 species of bees in North America and hundreds of species in South Dakota. Over 90% of the bees are solitary, but some are communal or social bees like honey bees and some bumblebees. About 30% of solitary bees use locations like abandoned beetle tunnels in old logs for nesting and 70% nest in the ground. Butterflies are another important pollinator in South Dakota and habitat provided for either will benefit both and also benefit your garden.

GARDEN LOCATION AND MAINTENANCE

The best location for a pollinator garden has a mix of full and partial sun. Provide a place for butterflies to rest and bask in the sun. Butterflies need sun for orientation and to warm their wings for flight. Flat stones placed in a sunny part of the garden provide butterflies with an area to enjoy the sun. Butterflies often congregate on wet sand and mud to partake in “puddling,” drinking water and extracting minerals from damp puddles. Place coarse sand in a shallow pan and then insert the pan in the soil of your habitat. Make sure to keep the sand moist. Provide an area of bare or nearly bare soil that is undisturbed for ground nesting bees. Mulching your garden is a good idea for moisture retention, weed suppression, and soil health, but many ground nesting bees require an area of well-drained bare ground. The area does not need to be large or exposed to the wind, a small area about 12 inches square will be sufficient.

Avoid areas with a strong history of noxious weeds and try to locate the garden in an area with good soils that are not too wet. A garden near other existing habitat is better than an isolated island of habitat.

Leave residual vegetation (dead stems) in the garden until warm weather arrives in the spring. Many cavity nesting pollinators use dead hollow stems for nesting. Beds can be cleaned once the weather has warmed in the spring and any extra stems or leaves that are not left as mulch can be added to a compost pile.

Plant good nectar sources in the sun. Your key butterfly nectar source plants should receive full sun from mid-morning to mid-afternoon. Butterfly adults generally feed only in the sun. If sunshine is limited in your landscape, try adding butterfly nectar sources to the vegetable garden.

GARDEN DESIGN

- Place taller flowering plants and native grasses towards the back of the flower bed and shorter plants towards the front. This allows better growth and more sun to reach the flowers.
- Use bloom date guide included in this document and have at least one species blooming during all seasons, from April to October.
- Place clusters of each species (4-6 plants) rather than random scattered plants. Pollinators are more attracted to a cluster of plants that are blooming at the same time.
- Use the bloom color guide to select several different colors of flowers rather than all one color such as yellow or purple.
- Cover the garden area with a thick layer of mulch after planting (if using plugs or potted plants) or wait until seedlings have developed before mulching if using seed. Make sure to leave at least one bare ground area for ground nesting bees.

INFORMATION PROVIDED BY THE SOUTH DAKOTA SOIL HEALTH COALITION – sdsoilhealthcoalition.com

THE GROWING CONCERN OVER PFAS AND LITHIUM IN SOUTH DAKOTA'S WATER



What Are PFAS?

PFAS, often referred to as “forever chemicals,” are a group of synthetic compounds used in various industrial and consumer products due to their resistance to water, grease, and heat. These chemicals are commonly found in non-stick cookware, waterproof clothing, firefighting foams, and certain food packaging. While their durability makes them useful, it also means they persist in the environment and accumulate in human and animal tissues over time.

Studies have linked PFAS exposure to a range of health issues, including:

- Increased cholesterol levels
- Hormonal disruptions
- Immune system suppression
- Certain cancers

Given these potential risks, the U.S. Environmental Protection Agency (EPA) has been working to establish stricter guidelines for PFAS levels in drinking water. This has prompted states like South Dakota to conduct widespread testing to better understand the prevalence of these chemicals in local water systems.

Recently, there has been increasing awareness of contaminants in drinking water, with two substances drawing particular attention: per- and polyfluoroalkyl substances (PFAS) and lithium. Like many other states, South Dakota has begun rigorous testing to assess and address these contaminants, which pose potential risks to public health and the environment.

Why Test for Lithium?

Lithium is a naturally occurring element found in rocks, soil, and water. It has various industrial applications, including rechargeable batteries, ceramics, and pharmaceuticals. While the EPA does not currently regulate lithium as a contaminant, its presence in drinking water

has raised questions about its long-term health effects.

Low levels of lithium in water have been linked to potential mental health benefits, such as reduced rates of depression and suicide. However, excessive exposure could lead to health issues, including kidney damage and thyroid dysfunction. The increasing demand for lithium due to the rise in electric vehicles and renewable energy storage systems has also raised concerns about potential environmental contamination from mining and industrial processes.

South Dakota’s decision to test for PFAS and lithium reflects a broader commitment to public health and ensuring the sustainability of its water resources. Key factors driving these efforts include:

1. Federal Guidelines and Funding: The federal government has prioritized addressing PFAS contamination through initiatives like the Bipartisan Infrastructure Law, which allocates water testing and treatment funding.

2. Local Concerns: Communities across South Dakota rely on groundwater for drinking water, making monitoring and addressing potential contaminants essential to prevent long-term health risks.

3. Economic Implications: As South Dakota’s economy benefits from industries like agriculture and tourism, clean water is a cornerstone for both public trust and sustainable growth.

Testing for contaminants is just the first step. Effective remediation and prevention strategies will require:

■ **Advanced Treatment**

Technologies: Removing PFAS and lithium from water often involves specialized filtration systems, such as activated carbon or reverse osmosis.

■ **Public Education:** Informing residents about the sources and risks of these contaminants empowers communities to advocate for stronger protections.

■ **Collaboration:** Federal, state, and local governments must work together to fund and implement solutions that address contamination at its source.

As science continues to uncover the impacts of PFAS and lithium on health and the environment, South Dakota’s proactive testing initiatives serve as a model for other states. By addressing these issues now, the state is taking important steps to ensure the safety and sustainability of its water resources for future generations.

In a world where clean water is an increasingly precious resource, vigilance and action are not just necessary – they are imperative.





HOW YOUR WATER SOURCE AFFECTS QUALITY & CHEMISTRY

Water is essential to life, but did you know that its source plays a crucial role in determining its quality, taste, and safety? Whether your water comes from a river, lake, or underground aquifer, the differences in origin impact everything from mineral content to the presence of contaminants. Understanding these distinctions can help consumers make informed choices about their water consumption and treatment needs.

SURFACE WATER VS. GROUNDWATER: WHAT'S THE DIFFERENCE?

Water supplies generally fall into two categories: surface water and groundwater. Surface water is sourced from lakes, rivers, and reservoirs, while groundwater comes from underground aquifers accessed through wells. Because surface water is exposed to environmental factors, it tends to have more organic contaminants and microbial activity. In contrast, groundwater is filtered naturally through layers of rock and soil, giving it a different chemical composition.

WHAT'S IN YOUR WATER? A LOOK AT CONTAMINANTS AND CHEMISTRY:

Surface Water Characteristics

- **Higher Microbial Activity** – Rivers and lakes are open to environmental exposure, making them more susceptible to bacteria, viruses, and parasites from runoff and wastewater discharge. This is why surface water typically requires extensive filtration and disinfection.
- **Organic and Chemical Contaminants** – Pesticides, herbicides, and industrial pollutants can wash into surface water sources, increasing the need for advanced treatment methods.
- **Nutrient Pollution** – Fertilizers used in agriculture can contribute to high nitrogen and phosphorus levels, leading to algal blooms and taste or odor issues.
- **Turbidity (Cloudiness)** – Surface water often contains suspended particles from soil erosion, making it appear murky and requiring additional treatment to remove sediments.

Groundwater Characteristics

- **Higher Mineral Content** – As groundwater moves

through rock layers, it absorbs minerals like calcium, magnesium, and iron, which can contribute to water hardness and scaling in pipes and appliances.

- **Natural Contaminants** – Elements like arsenic, fluoride, and radon can be found in certain groundwater sources, sometimes requiring specialized treatment.
- **Lower Microbial Risk** – Because groundwater is naturally filtered through soil and rock, it generally contains fewer bacteria and viruses, though shallow wells can still be vulnerable to contamination.
- **Stable Chemistry** – Groundwater usually has a more consistent pH and alkalinity compared to surface water, which can fluctuate due to acid rain, industrial runoff, and seasonal changes.

How Water Treatment Adapts to Different Sources

Since surface water and groundwater have distinct characteristics, their treatment methods also differ:

Surface water treatment focuses on removing pathogens, sediments, and pollutants. This often includes filtration, coagulation, sedimentation, and disinfection processes like chlorination or ultraviolet (UV) treatment.

Groundwater treatment typically addresses mineral content, heavy metals, and natural contaminants. Techniques like water softening, reverse osmosis, and aeration help remove excess minerals and unwanted elements.

The Role of Climate and Geography in Water Quality

Climate and geographic factors significantly impact water quality and availability. Regions with heavy rainfall and dense vegetation often have more abundant surface water sources, while arid areas rely heavily on groundwater. Seasonal changes can affect water levels, temperature, and contamination risks. For instance:

Drought-prone regions may experience lower groundwater recharge, leading to higher mineral concentrations and water scarcity.

Coastal areas may face saltwater intrusion in freshwater supplies, requiring desalination efforts.

Industrial and agricultural zones are more likely to experience contamination from chemicals, fertilizers, and heavy metals seeping into both surface and groundwater.

Water Quality Testing and Consumer

Awareness

Regular water testing is crucial for both municipal and private water sources. Public water systems are required to comply with Environmental Protection Agency (EPA) regulations, ensuring safe drinking water through rigorous monitoring. However, private well owners must take responsibility for testing their water for contaminants like bacteria, nitrates, and heavy metals.

What This Means for You

If your water comes from a municipal supply, rest assured that it undergoes rigorous testing and treatment to meet safety standards. However, if you rely on a private well, regular testing is essential to ensure safe drinking water, as groundwater quality can vary based on location and environmental factors.

Understanding how water quality is shaped by nature and human activity can help you appreciate the journey your water takes before it reaches your tap.

Understanding how water quality is shaped by nature and human activity can help you appreciate the journey your water takes before it reaches your tap. Whether you prefer the crisp taste of surface water or the mineral-rich quality of groundwater, being informed empowers you to make the best choices for your household's water needs.

Future Trends in Water Treatment and Sustainability

As technology advances, new water treatment methods are emerging to improve efficiency and sustainability. Some key trends include:

- **Advanced Filtration Techniques** – Innovations like nanofiltration and membrane bioreactors provide more effective purification while using less energy.
- **Smart Water Monitoring** – IoT-based sensors allow real-time tracking of water quality and usage, helping communities detect contamination faster.
- **Water Reuse and Recycling** – Treated wastewater is increasingly being repurposed for irrigation, industrial use, and even potable water supplies.
- **Desalination Breakthroughs** – Improved desalination technology is making it more cost-effective to convert seawater into drinking water, benefiting coastal and drought-affected regions.

By staying informed about these developments, consumers can make more sustainable water choices and contribute to a future where clean water remains accessible for all.

CLAY RURAL WATER SYSTEM

In January 1975, Clay County Extension Agent Bob Schurrer launched an ambitious initiative—surveying every farm and landowner in the county to gather information about water quality and availability. The survey also posed a pivotal question: Were residents interested in developing a rural water system? The response was overwhelming, with more than half expressing interest.

At the time, many rural residents faced significant water challenges. Wells in parts of the county contained high mineral levels, and many families relied on hauling water to cisterns on their farms and acreages. Recognizing the need for a sustainable solution, Schurrer and other community leaders took action.



In March 1975, three informational meetings were held across Clay County to discuss the feasibility of a rural water system. The primary advantage? Convenience. Attendees recognized the potential benefits, including improved water quality, consistent pressure, and a dependable supply during droughts. Encouraged by positive feedback, a steering committee was formed to further explore the idea.

The first organizational meeting took place on April 29, 1975, at the 4-H Center in Vermillion, drawing approximately 60 rural residents. With enthusiasm high, the group elected a 12-member Board of Directors, with Ken Mockler of Vermillion named Chairman. Rural resident Jack DeVany stepped forward to serve as the system's attorney, and by July 21, 1975, Clay Rural Water System was officially incorporated.

Establishing a rural water system was no small task. With little precedent to follow, the Board, along with Schurrer and DeVany, embarked on one of the most significant infrastructure efforts since rural electrification decades earlier. They had to answer a key question: “Why a rural water system?”

The answer was clear. A centralized system would provide clean water directly to the homes and farms. Additionally, improved water quality would protect plumbing fixtures and pipes, and livestock would benefit from a steady supply of water.

As interest spread beyond Clay County, the project's scope expanded to include Union County. The Board enlisted the engineering firm DeWild Grant Reckert and Associates (DGR) of Rock Rapids to conduct a feasibility study. Completed in January 1976, the report confirmed the system's viability, citing a service area that included 3,000 people, 1,700 dairy cattle, 59,000 feeder and stock cows, and 94,000 hogs and sheep.

The first annual meeting of Clay Rural Water System was held in January 1976, with Ernest Schmidt elected as Chairman. Sign-ups quickly began, with meetings in Wakonda, Garryowen, the SE Research Farm, and Vermillion. Within three days, 730 locations joined, eventually reaching 980 members, each paying a \$200 hookup fee.

Securing funding was the next crucial step. In February 1976, the Board submitted a loan and grant application to the Farmers Home Administration. By fall 1977, funding was approved - a \$3.35 million loan, a \$660,000 grant, and a \$300,000 state grant. Hookup fees from new members helped cover the remaining costs.

Construction began swiftly, and by the end of the process, Clay Rural Water System was serving nearly 1,000 members, delivering quality water to approximately 3,500 people and thousands of livestock. From concept to completion, the transformation took just five years.

Since its inception, Clay Rural Water has expanded tremendously. Membership has more than doubled, and system capacity has significantly increased. Initially,

CLAY RURAL WATER SYSTEM

the system could treat 1.2 million gallons per day (MGD); today, it handles 1.5 MGD. Storage capacity has grown from 760,000 gallons to 1.21 million gallons.

A major milestone occurred in 1996 when the water plant was remodeled into a softening plant, further enhancing water quality. Today, most customers receive water from the Wakonda Water Treatment Plant, a 1.2 MGD facility utilizing lime softening. The plant draws from two high-capacity wells in the Lower Vermillion-Upper Missouri Aquifer, each producing over 1,000 gallons per minute (gpm). Customers in southern Union County receive water from the Wynstone Water Treatment Plant, which uses reverse-osmosis technology and wells in the Dakota Formation Aquifer, each yielding 350 gpm.

With total membership now at 2,555, Clay Rural Water System continues to innovate. In April 2022, the system secured a \$7.44 million American Rescue Plan Act (ARPA) grant to fund the “Chapter Project,” installing nearly 85,000 feet of pipeline to improve pressure, increase capacity, and address water loss issues.

The system’s commitment to progress remains strong. In 2024, Clay Rural Water System received an additional \$2.49 million ARPA grant to construct two ground storage reservoirs near the Greenfield reservoir and Wakonda Water Treatment Plant. The project also includes a new booster station and distribution line improvements to accommodate a Highway 46 construction project.

Further improvements include replacing the Spink booster station, originally installed in 1979. The upgraded booster will enhance water loss monitoring and improve pressure zones in the Akron and Spink areas. The Clay Rural Water System is on the move again this spring continuing with the final stages of the existing Phase I project, and moving forward with the design process of Phase II, which is the new Water Treatment Plant next to the Wakonda location.

From its humble beginnings to its role as a vital community resource, Clay Rural Water System has consistently adapted to meet the needs of its members. What began as a simple survey in 1975 has evolved into a modern, high-capacity water system supporting thousands of people and businesses across the region. As it continues to expand and modernize, Clay Rural Water System stands as a testament to vision, perseverance, and community commitment.

DIRECTORS:

Randy Huot – President
Cody Merrigan – Vice President
Patricia Manning – Secretary/Treasurer
Mark Bottolfson – State Association Director
Tim Irwin – Director
Ken Kessler – Director
Jerry Buom – Director
Randy Ronning – Director
Josh Wendling – Director

STAFF:

Steve Muilenburg, Manager
Donna Henriksen, Office Manager
Pamela Lunning, Controller
Rob Ganschow, Chief Treatment Plant Operator
Andy Ganschow, Chief Distribution Operator
Phil Iverson, System Operator
Lane Severson, System Operator
Matt Thompson, System Operator

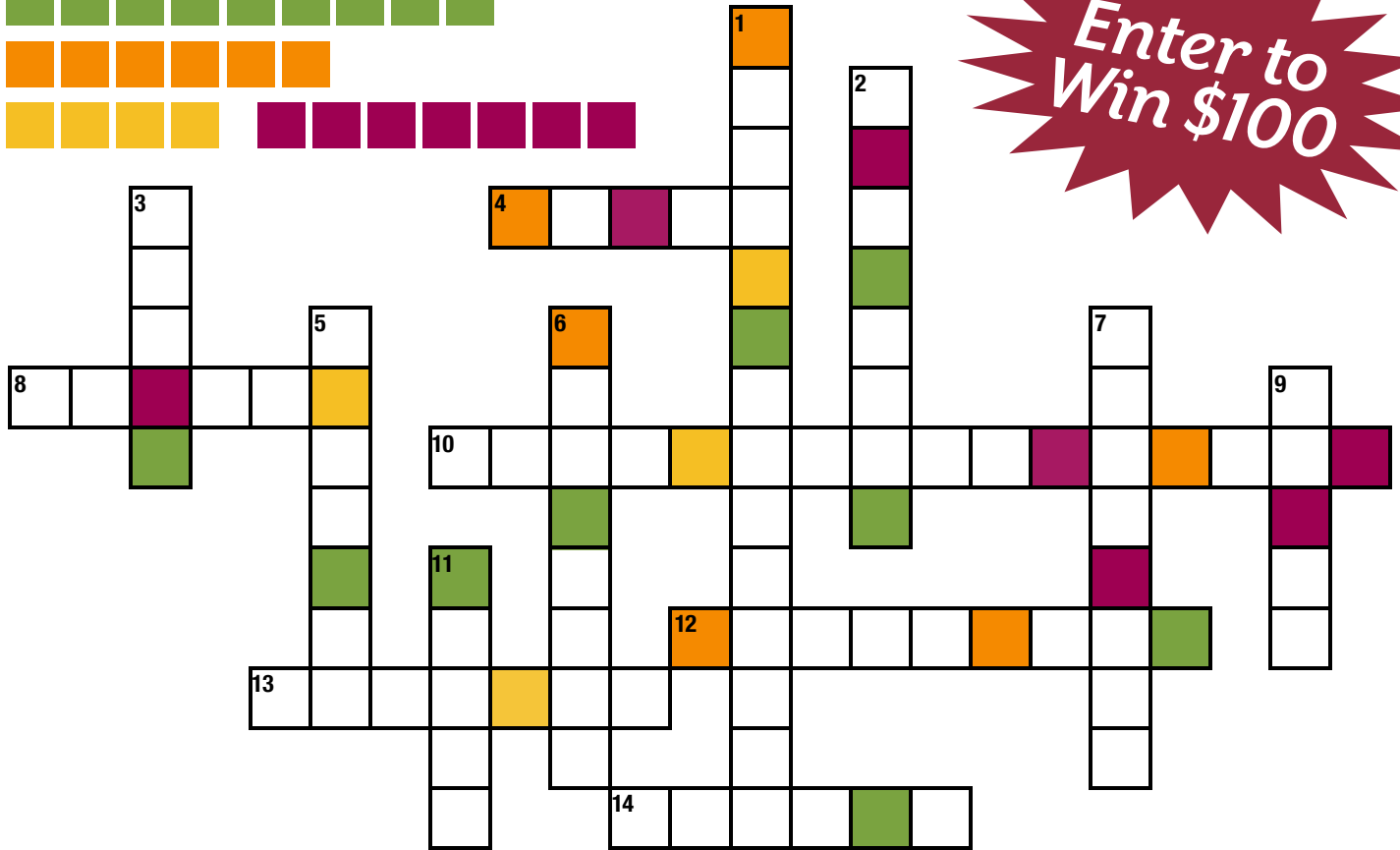
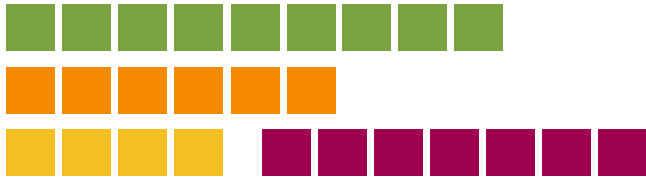
STATISTICS:

Hookups: 2,555
Miles of Pipeline: 1,405
Water Source: Groundwater (Lower Vermillion-Upper Missouri), Dakota Aquifer
Counties Served: Clay, Union, parts of Lincoln, Turner, and Yankton
Towns Served Individual: Burbank, Meckling, Deer Run
Towns Served Bulk: Wakonda, Gayville

RURAL WATER CROSSWORD & WORD SCRAMBLE CONTEST

LOCAL FLORA

SCRAMBLE ANSWER



Across

4. Fragrant purple or white flower commonly found in shrubs
8. South Dakota's state flower, blooms early in spring
10. Native prairie flower known for its immune-boosting properties
12. Tall, bright flower that follows the sun
13. Perennial flower that blooms for just one day

14. Colorful garden annual that attracts butterflies

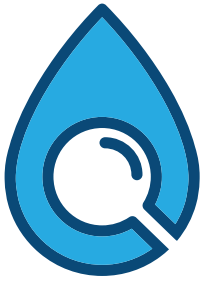
Down

1. A yellow wildflower with a dark center, often seen in meadows
2. Also known as bee balm, loved by pollinators
3. Simple white flower with a yellow center, often used in 'he loves me, he loves me not'
5. Popular garden flower available in many colors, often used in hanging baskets
6. Bright orange or yellow flower known for pest resistance
7. Essential plant for monarch butterflies
9. Fragrant, large blooms often seen in wedding bouquets
11. Spring-blooming bulb famous in Dutch gardens

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 www.sdarws.com/crossword.html with the correct phrase by April 15, 2025 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 Douglas Lynch from Brookings-Deuel Rural Water who had the correct phrase of "feels like hot cocoa weather" for January 2025.



SOUTH DAKOTA RURAL WATER APPRENTICESHIP PROGRAM

For Water & Wastewater Operators

The South Dakota Association of Rural Water Systems (SDARWS) is developing a **Registered Apprenticeship Program**. The Apprenticeship Program will be a combination of On-the-Job training (OJT) and Related Technical Instruction (RTI) in which the apprentice is provided the tools necessary to be a successful **Operations Specialist** in the water or wastewater field.

- Earn-as-you-learn program
- Accelerated pathway into the water and wastewater industry
- Work with qualified mentor from participating employer
- Progressive wage schedule



APPLICATION REQUIREMENTS:

- Must be at least 18-years-old
- Must have high school diploma, GED equivalency, or other high school equivalency credential
- Must be physically capable of performing the essential functions of the program
- Must possess a valid state issued driver's license

TWO OPTIONS AVAILABLE

- Water Systems Operation Specialist
- Wastewater Systems Operation Specialist

The Apprenticeship Program should take approximately two years to complete.

- 4,000 hours of On-the-Job Training (OJT) required
- 288 hours of Related Technical Instruction (RTI) required

LEARN MORE AT sdarws.com/waterworks



FOR MORE INFORMATION, CONTACT:

Sue Bergheim, SDARWS Apprenticeship Coordinator
sbergheim@sdarws.com
605-556-7219 or 605-501-9208





PAYMENT OPTIONS

There are several convenient methods for customers to pay their water bill:

- 1) Mail your payment
- 2) Drop your payment off at our office (there is a drop box on the east side of the building for 24-hour convenience)
- 3) Sign up for ACH payments (visit our website or call the office for more information)
- 4) Pay your bill online at www.kingbrookruralwater.com and click the "Pay My Bill" button
- 5) Sign up for the customer portal (call or email the office for more information)

MEET KINGBROOK'S NEWEST DIRECTORS

Barry Loomis and Damon Stormo were elected at Kingbrook's 2024 Annual Meeting to fill vacancies left by retired directors Marvin Antonen and Rodney Stormo. Let's "meet" Barry and Damon.

Barry Loomis, District 1 Director, and his wife Lisa reside northwest of Bruce. They have two sons, Zach and Tanner, who are both attending college. Barry has served on the Preston Township board and the Estelline Coop Grain board. He enjoys camping, boating and golfing.

Damon Stormo is the District 4 director and resides in the rural Lake Norden area. Damon has four children, Evan, Jack, Paige and Will. When asked what his hobbies are, Damon replied, "I have 4 children involved in sports. That pretty much occupies my time."

We welcome Barry and Damon to the Kingbrook Rural Water board. We are grateful for their commitment to these positions and value their contributions to the system and its members.



Barry Loomis



Damon Stormo

LEAK REWARD

Members who report a water leak on any of Kingbrook's mainlines will receive a \$25.00 leak reward. With approximately 3,000 miles of water line in the distribution system, members can play a key role in assisting system employees in locating water leaks.

All members who received a leak reward in 2025 will be entered into a drawing for a cash prize of \$100.00.

The drawing will take place at our 2026 Annual Meeting. Members need not be present to win.

KINGBROOK IS ON FACEBOOK!

LIKE AND FOLLOW OUR PAGE AT

FACEBOOK.COM/
KINGBROOKRURALWATERSYSTEM



HOLIDAY HOURS

The Kingbrook Rural Water office will be closed on the following dates:

MONDAY, MAY 26, 2025 - MEMORIAL DAY

In case of an emergency, please call the office at 605-983-5074 or toll free at 1-800-605-5279 and you will be forwarded to our after-hours answering service.

MISSION STATEMENT: To provide member-owners with reasonably priced, reliable, quality water.

KINGBROOK SHINES AT THE SOUTH DAKOTA RURAL WATER ANNUAL TECHNICAL CONFERENCE

The 2024 South Dakota Rural Water Annual Technical Conference in Pierre was a momentous occasion for Kingbrook Rural Water System. Our organization received multiple prestigious honors, recognizing its dedication to excellence in the rural water industry.

One of the event's highlights was the Spirit of Rural Water Award presentation to retired directors Marvin Antonen and Rodney Stormo. Both Antonen and Stormo dedicated over 27 years to Kingbrook and the rural water sector, leaving a lasting impact on the industry. Their commitment, leadership, and invaluable contributions have helped shape the success of Kingbrook and the broader rural water community.

Adding to the celebration, Operations Manager Brian Callies was honored as the 2024 Rural Water Operations Supervisor of the Year. His strong leadership, innovative problem-solving, and unwavering dedication to providing high-quality water services set him apart as a truly deserving award recipient.

The recognition continued as Kingbrook Rural Water System was named the 2024 Rural Water System of the Year. This prestigious award is given to systems that demonstrate outstanding service in delivering high-quality drinking water, exceptional customer service, and forward-thinking solutions that enhance their mission.

Congratulations to Marvin Antonen, Rodney Stormo, Brian Callies, and the entire Kingbrook team – including all board members and staff – whose dedication and hard work make Kingbrook a leader in the rural water industry. Their commitment ensures that communities continue to receive reliable and high-quality water services. Thank you for your invaluable contributions, and congratulations on these well-earned honors!



Stormo, left, and Antonen, right, each received the SDARWS Spirit of Rural Water Award.



Brian Callies receives the 2024 Operations Supervisor of the Year Award.



Left: Kingbrook RWS directors and staff accept the 2024 Rural Water System of the Year Award.



Kingbrook Rural Water System
 PO Box 299
 Arlington, SD 57212
 605-983-5074
 kingbrookruralwater.com

Presort Standard
 US Postage
 Paid
 Permit #32
 Madison, SD



WATER MATTERS

WATER QUALITY STANDARDS



Water bodies can be used for purposes such as recreation (e.g. swimming and boating), scenic enjoyment and fishing, and are the home to many aquatic organisms. To protect human health and aquatic life in these waters, water quality standards (WQS) are established. WQS are provisions of state, tribal or federal law that describe the desired condition of a water body and the means by which that condition will be protected or achieved. Further, WQS form a legal basis for controlling pollutants entering these waters.

Standards are typically defined in terms of an acceptable concentration or level of a particular chemical, physical or biologic parameter. For example, in South Dakota, for waters designated as drinking water supplies, the concentration of nitrate (NO₃⁻) cannot exceed 10 milligrams per liter (mg/L). Waters designated as cold-water fisheries (trout streams), water temperature cannot exceed 65°F. If swimming immersion recreation (in government speak) is the goal, levels of Escherichia coli (E. coli) bacteria in excess of 235 colonies per 100 milliliters of sample are considered problematic.

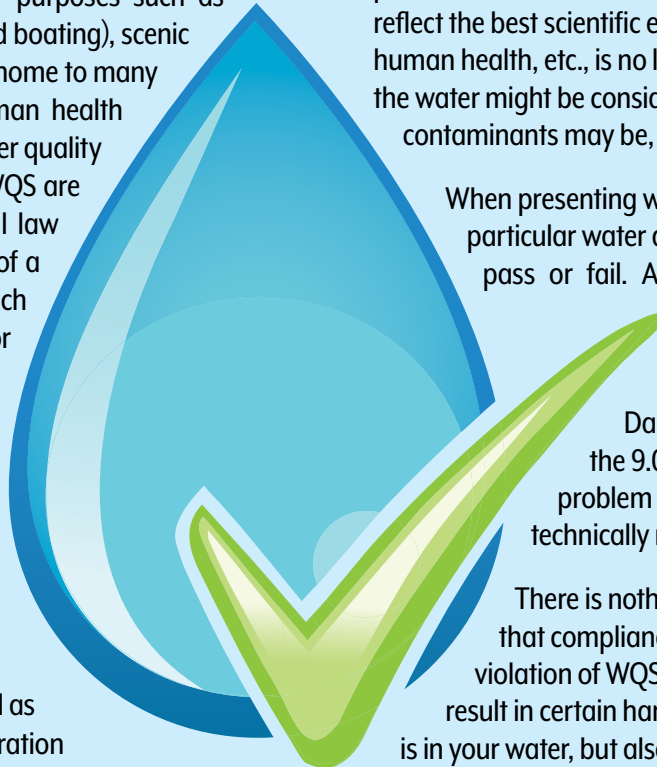
It is important to understand that while WQS have been established for most water bodies in the State, compliance with the WQS does not mean that the water is completely free of any

possible contaminants. The established standards most often reflect the best scientific estimate of when the potential risk to human health, etc., is no longer statistically acceptable. Although the water might be considered safe from a regulatory standpoint, contaminants may be, and most likely are, still present.

When presenting water quality information, the results of a particular water quality test are often expressed as either pass or fail. A nitrate reading of 9.0 mg/L would be considered 'acceptable,' as it is below the 10 mg/L WQS. However, background nitrate levels in South Dakota waters rarely exceed 1-2 mg/L, so the 9.0 reading is strongly suggestive of a problem that ought to be addressed, even if it technically meets the WQS.

There is nothing magic about WQS that would mean that compliance translates to zero risk. Similarly, violation of WQS does not mean that interaction will result in certain harm. It is important to know not only what is in your water, but also what this really means.

What are South Dakota's water quality standards? They can be found in Chapter 74:51:01 of the Administrative Rules of South Dakota. <https://sdlegislature.gov/Rules/DisplayRule.aspx?Rule=74:51:01>



BACK PAGE CONTENT PROVIDED BY:



132B Airport Avenue
 Brookings, SD 57006
 605-688-6741
 eastdakota.org