



KINGBROOK
RURAL WATER SYSTEM

Quality On Tap!

October 2024 | Volume 20, Issue 2

**UNDERSTANDING
YOUR WATER
SERVICE LINE**

**RURAL AMERICA
RELIES ON RURAL
DEVELOPMENT**

**IRREPLACABLE
KNOWLEDGE ESSENTIAL
TO FUTURE EMPLOYEES**

**IN THIS
ISSUE:**

**NEW
EMPLOYEE
JOINS THE
KINGBROOK
TEAM**

THANK YOU

FROM THE MANAGER

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



As reported in July's issue of *Quality On Tap* (QOT), Kingbrook Rural Water System (KBRW) had been notified by the Department of Agriculture and Natural Resources (DANR) that KBRW could be eligible to receive up to an additional \$5,400,000 in American Recovery Plan Act (ARPA) funds. At their June board meeting, the Board of Water and Natural Resources approved KBRW to receive additional ARPA grant funds of \$4,972,298.00 for the 2022 System Improvements Project. The additional grant funding is greatly appreciated and will positively impact the continued work on the 2022 System Improvement Project.

The final two projects of the 2022 System Improvement Project were bid and are under signed contracts. The Chester Treatment Plant upgrades and improvements will start this fall and are expected to take two years to complete. The Orland Station improvements will provide additional storage and will be completed in 2025. Work continues at the Desmet Water Treatment Plant Addition and Badger Pump Station and dirt work has started on the Arlington Tower Site.

The EPA released a fact sheet that describes the 2021 Lead and Copper Rule Revisions requirements that public water systems must comply with starting on October 16, 2024. The initial requirements were outlined in the Lead and Copper Rural Improvement proposal. Based on the proposal, Kingbrook started collecting data for the Lead and Copper Rule Revision early this year. A mailer was sent to 5104 system members requesting data, which Kingbrook must include in its Lead and Copper Survey. To date, with the memberships' help and the effort of Kingbrook staff, 3,808 services have been verified. The task that Kingbrook is required to complete by October 16, 2024, will be a heavy lift. All the help the members can give Kingbrook regarding the Lead and Copper Survey is extremely helpful and important. Operators are reaching out to members in their respective areas and are willing to help you, help Kingbrook, in this effort. Thank you to everyone for reaching out and sending Kingbrook this much-needed information; your efforts are making this effort possible. KBRW will continue to obtain the necessary information for the remaining 1,296 services for submission by October 16, 2024. All the help you can provide is greatly needed and appreciated.

I want to take the time to recognize the staff at Kingbrook. Kingbrook currently

...continued on page 15



BOARD OF DIRECTORS


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MEMBERSHIP CORNER

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)

E-BILLS

Did you know that you can receive your Kingbrook bill by email? You can enroll for e-bills through the Kingbrook Customer Portal at kingbrook.authoritypay.com.

Create your portal account or log-in, click "change" under the bill type for the account you wish to enroll, then click agree. If you have more than one account, you will need to enroll each account.

Step-by-step instructions to create your portal account and to enroll in e-bills can be requested by calling the office at 605-983-5074 or emailing payments@kingbrookruralwater.com. Please note that if you choose to receive your bill by email, you will no longer receive a paper copy.



LEAK REWARD

Members who report a water leak on any of Kingbrook's mainlines will receive a \$25.00 leak reward. With approximately 2,900 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 2024 will be entered into a drawing for a cash prize of \$100.00.

The drawing will take place at our 2025 Annual Meeting. Members need not be present to win.

HOLIDAY HOURS

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

MONDAY, NOVEMBER 11, 2024
VETERAN'S DAY

THURSDAY, NOVEMBER 28, 2024
THANKSGIVING DAY

TUESDAY, DECEMBER 24, 2024
CHRISTMAS EVE DAY – CLOSED @ 12PM

WEDNESDAY, DECEMBER 25, 2024
CHRISTMAS DAY

TUESDAY, DECEMBER 31, 2024
NEW YEAR'S EVE DAY – CLOSED @ 12PM

WEDNESDAY, JANUARY 1, 2025
NEW YEAR'S 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.

THE SHAPE OF A WATER TOWER

Have you ever looked up and noticed a tall, strange-looking structure with a big tank on top? That's a water tower! Water towers are special buildings that hold water high above the ground. They store water for cities and towns so that when you turn on your faucet, water flows out easily. But did you know that water towers come in all sorts of shapes and sizes? Let's explore the different kinds of water towers and the cool shapes they come in!

The Classic Cylindrical Tower

The most common shape of a water tower is the cylinder. Imagine a big, round can of soup, but much, much taller! These towers are usually supported by a tall, straight column or a series of legs. They look simple, but they do a great job of holding a lot of water. You'll often see these in small towns or on farms.

The Spherical Tower

Some water towers look like giant balls balanced on top of a stick. These are called spherical water towers. The round shape is perfect for holding a lot of water in a smaller space. Plus, they look really cool! Sometimes, towns paint these towers with fun designs, like smiley faces or the name of the town, to make them even more interesting.

The Mushroom or Golf Ball on a Tee

A mushroom-shaped water tower looks just like its name! The big, round tank sits on top of a skinny column, just like a mushroom cap on a stem. This design is also called a "golf ball on a tee" because it looks like a golf ball sitting on a tee before someone swings to hit it. These water towers are fun to spot because of their unique shape.

The Multi-Legged Tower

Have you ever seen a spider with long legs? Some water towers look a bit like that! These multi-legged towers have several tall, thin legs that hold up a big, round tank. The

legs make the tower very sturdy, so it can stand up to strong winds and storms. These towers are often found in places where a lot of water is needed, like large cities.

The Standpipe

A standpipe is a super tall and skinny water tower. It's basically a long tube that stands straight up with a tank on top. Standpipes don't hold as much water as other towers, but they are great for giving water extra pressure. That's why they are often found in places with hills, where the water needs a little more push to get to every house.

The Onion or Teardrop

Some water towers are shaped like onions or teardrops, with a wide bottom that narrows as it goes up. These are usually made out of steel and can hold a lot of water. Their unique shape makes them strong and able to last for many years.

Custom Shapes

Some towns like to get really creative with their water towers! You might find one shaped like a giant peach, a hot air balloon, or even a ketchup bottle. These custom-shaped water towers are built to represent something special about the town.

Why Are Water Towers Important?

Water towers aren't just cool to look at – they're very important! They help make sure we have water in our homes, schools, and fire hydrants whenever we need it. By holding water high up in the air, the tower uses gravity to push water through the pipes and into buildings. This way, we always have water ready for drinking, cooking, and cleaning.

Next time you see a water tower, take a moment to look at its shape and think about all the water it's holding up there. You might even spot a design or shape you've never seen before!

MATCH THE TOWER TO ITS SHAPE

MULTI-LEG

CLASSIC

CUSTOM

GOLF BALL

STANDPIPE

ONION

SPHERICAL



IRREPLACEABLE KNOWLEDGE ESSENTIAL TO FUTURE EMPLOYEES

By Sue Bergheim, Apprenticeship Coordinator
– **South Dakota Association of Rural Water Systems**

We've probably all heard the statement that "everyone is replaceable" at some point in our careers. The part that can be true is that an employer can physically hire someone else to do a particular job. However, when replacing someone with years or decades of knowledge and experience, finding a "warm body" to fill that position still leaves the employer with a huge loss and an uphill battle. That's why passing some of that extensive knowledge down to future generations is vital before it is too late.

The state's rural water industry faces significant workforce challenges, including an aging workforce, skill gaps, and difficulty attracting and retaining talent. It is estimated that the water industry is expected to lose between 30-50 percent of its workforce to retirement in the next ten years. Many of these professionals have worked at the same utility for the majority of their careers and have a plethora of valuable "irreplaceable" institutional knowledge. The National Rural Water Association (NRWA) is helping address the need to train the next generation of skilled workers for the water industry through its Apprenticeship Program. The Apprenticeship Program aims to pair an apprentice with a mentor at a municipality or water system to help incorporate and pass on the training needed for that apprentice to become a successful Water or Wastewater System Operations Specialist. There are 36 states with registered apprenticeship programs, and South Dakota is one of three states with programs currently under development. Nationwide, there are over 500 registered apprentices, with 540 participating employers as part of the Apprenticeship Program. More than 220 apprentices nationwide have completed the program so far, according to the NRWA, with the first apprentice graduating in 2019 as part of the Alliance of Indiana Rural Water's Apprenticeship program.



The Apprenticeship Program takes approximately two years to complete. The program includes four thousand hours of on-the-job training and 288 hours of related technical instruction. The U.S. Department of Labor

recognizes the NRWA Apprenticeship Program. NRWA provides the guideline standards of apprenticeship to state Rural Water Associations, like the South Dakota Association of Rural Water Systems (SDARWS), for their approval and adoption. To be eligible for the program, applicants must be at least 18 years old, have a high school diploma or GED, have a valid driver's license, and be physically capable of performing the program's functions.

The SDARWS has a website dedicated to information regarding careers in the water industry, including the Apprenticeship Program. This website will be updated as the Association moves through the process of getting the program registered and implemented. You will want to visit sdarws.com/WaterWorks to stay current as this exciting new opportunity for the state's water and wastewater industry takes shape. As the SDARWS Apprenticeship Coordinator, I am also happy to visit with potential employers or apprentices who are interested in or have questions regarding what South Dakota's Apprenticeship Program will entail. I can be contacted via e-mail at sbergheim@sdarws.com, office phone at 605-556-7219, or cell phone at 605-501-9208.

Workforce development is critical to maintaining the quality and reliability of water services across the state. Continued investment and collaboration will ensure South Dakota's rural communities can access safe and clean drinking water, supporting residents' health and well-being.

UNDERSTANDING YOUR WATER SERVICE LINE:

From the Water Utility Main to Your Home

**By Jim Vavra, Technical Assistance Training Specialist
– South Dakota Association of Rural Water Systems**

For many of you, the Lead Service Line Inventory mailer has probably come in the mail and has been or needs to be filled out. What most people don't realize is that not only is the customer side of your line needed but also the supplier side of the line needs to be determined as well. With communities and rural water systems having different ordinances it can become confusing as to which party owns what when it comes to the service line. In this article we are not going to dive into who owns what or who is responsible for each piece of the line, but we are going to discuss how the water gets from the city water main into your residence.

To get from the water main to the house usually requires a few basic parts and pieces, some municipalities and rural water systems will differ with this but we are going to look at the very basic parts of the service line to a typical residence.

The first part of the service line is what is known to the water

industry as a saddle, and no it is not the kind you put on your horse, but it does as the name applies. The saddle is a fixture that wraps around the water main to start the connection. There are several variations of saddles but they all perform the same basic job. The saddle wraps around the main and clamps down to make a water tight seal. The saddle is the piece that houses the corporation stop which is the next part of the service line system and we will discuss its job next.

The corporation stop is the second piece of the puzzle and is basically a ball valve that is attached to the saddle. The purpose of the corporation stop is to allow installation of the service line so that when the service line is being installed there is no interruption to other services on the water main. After the corporation stop is attached to the saddle, a special tool can be used to drill a hole into the water main so very minimal water will be lost during installation, after the hole is drilled the tool is taken out and the corporation stop is shutoff until more of the water service is installed.



Gooseneck



Saddle



Corporation Stop



Curb Stop



Meter Pit (Outside)



Meter Pit (inside)

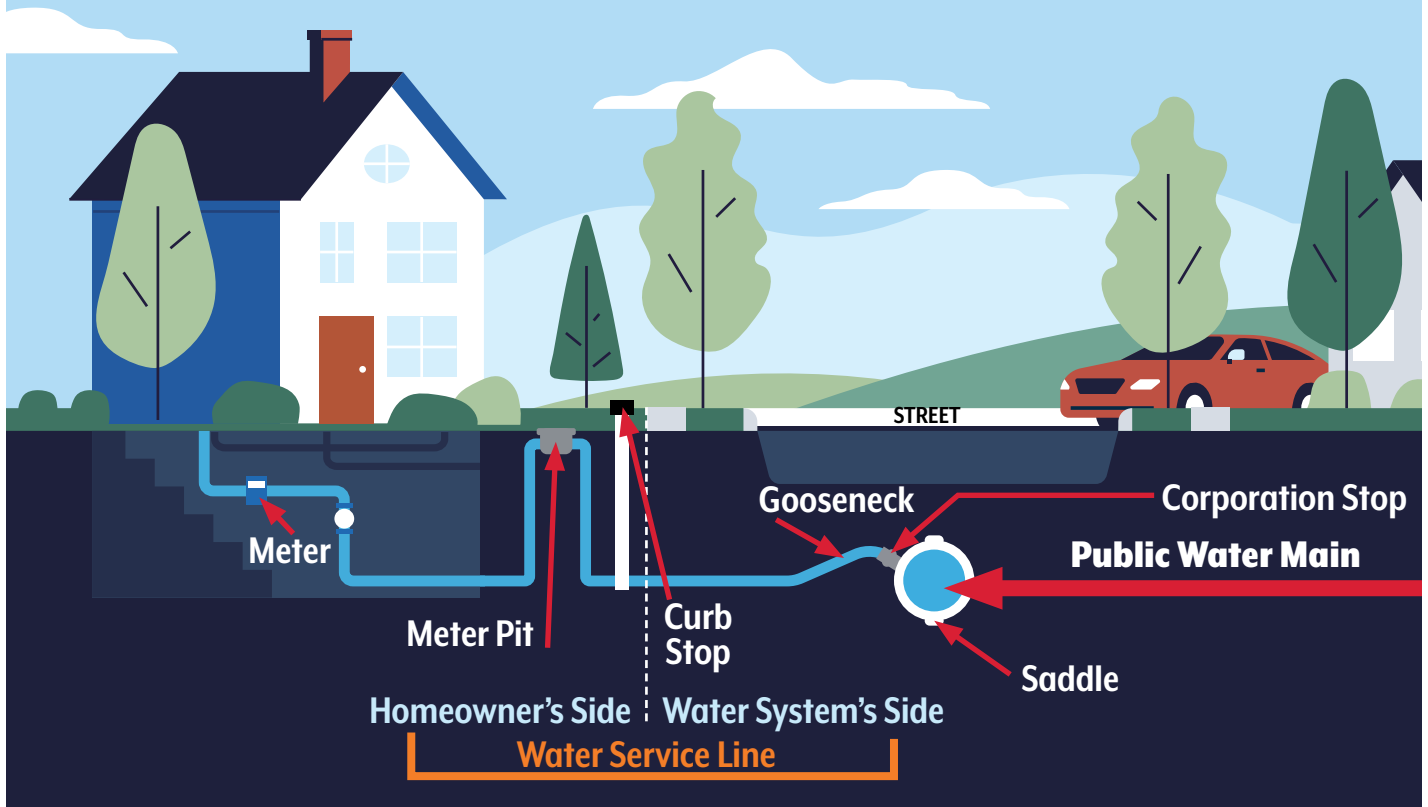


Meter



Service Line

WATER UTILITY COMPONENTS



Continuing on from the corporation stop you start getting into the actual water service line, and this line can be made of different materials and can be several different sizes depending upon the demand for the water service. This line is where the service side of the Lead Service Line Inventory starts for the water system supplying your water.

After you have some of the pipe laid in the ground the next normal piece of the puzzle for the water service line is the curb stop and curb stop box. The curb stop is an inline ball valve, usually within the property owners lawn. The piece which you may see sticking up in your yard is called the curb stop box, this is attached to the actual curb stop that is in the ground and what gives an operator access to be able to turn the valve on and off if the need arises.

After the curb stop is usually some type of pipe that either leads into a meter pit or into the residence. Depending again on ordinances and differing municipality codes and rural water systems, you will either have a meter pit or a meter that is in the residence somewhere before any water is used in the residence. Meter pits are commonly found out in rural water systems or in residences that are hard to access to install a meter.

A meter pit is a tube that goes in the ground and like its name suggests, is basically a pit for the water meter to sit in

and is deep enough that it will not freeze in the winter time. To access the meter in the pit, there are coils of water line in the pit in the very bottom. This allows for the meter to be pulled up and worked on if needed. There is also typically a valve of some kind in the pit to shut water off if needed as well.

If you don't have a meter pit, then your next stop is into the house with the pipe from the curb stop. Just like from the main to the curb stop, this can be a variation of types of pipe and size of pipe into the house. Now this piece of pipe is what is considered the consumer owned portion of service line and is what needs to be identified for the Lead Service Line Inventory.

When the pipe finally enters the house, and not having a meter pit, you will find a spot for a meter. This is typically 1-2 feet within the house before any water is used in the house. They can be several different sizes and shapes, and even have very different technology from brand to brand in them.

This is a very broad look at a typical water service hookup, every municipality, rural water system, privately owned system, or any combination can have and will have a slightly different installation process and probably won't find any two the same.

RURAL AMERICA RELIES ON RURAL DEVELOPMENT



USDA RURAL DEVELOPMENT WATER PROGRAMS PROTECT PUBLIC HEALTH

PUBLIC HEALTH FOR RURAL COMMUNITIES

Water is a vital resource and is required for all aspects of daily life, including drinking, cooking, washing, and flushing. In order to protect public health, all Americans should have access to this resource through reliable infrastructure.

Rural America's 46.1 million residents deserve safe drinking water and clean wastewater treatment just as much as urban or metropolitan residents. While access to basic water infrastructure may be taken for granted by many American citizens, it still is not a reality for approximately 146,000 rural households.

Over the last 70 years, through billions of dollars in financial assistance through USDA RD, the U.S. has made great advancements in the standard of living in rural America. Millions now have access to safe drinking water that their parents did not have. Thousands of rural communities now have modern wastewater systems, eliminating millions of failed septic tanks, cesspools, straight pipes, and worse.

For the 27,500 public elementary and secondary schools, approximately 9.8 million students, and 1,810 hospitals in rural America, public health would be immediately jeopardized without safe drinking water and clean wastewater treatment.

Even for established water and wastewater systems, new regulations such as EPA's recent PFAS and Lead and Copper Rules results in costly operational and infrastructure upgrades. USDA RD WEP ensures rural America and its communities have access to funding when they are faced with making these upgrades to remain in compliance.

Today's Congressional policies and funding decisions are jeopardizing the public health of every community in rural America. Budget cuts will leave USDA WEP unable to accomplish its mission. WEP is instrumental in helping rural America ensure public health is protected for all rural people.

USDA RURAL DEVELOPMENT WATER & ENVIRONMENTAL PROGRAMS (WEP)

Since 1972, USDA RD WEP has been the consistent source of support for rural communities to complete necessary upgrades to their water and wastewater facilities.

During 2023, WEP obligated more than \$1.6 billion in loans and grants, with 73.5% of projects addressing a health and sanitary issue.

The projects funded support more than 1.1 million rural residents, including approximately 28,326 new service connections.

TELL CONGRESS NOW

KEEP RURAL AMERICA STRONG!

Scan the QR Code to learn more about how you can help keep Rural America Strong!



THE IMPACT



WEP PROVIDES WATER TREATMENT PLANT FOR EAGLE BUTTE, SOUTH DAKOTA

IMPACT IN ACTION

Being located in a very rural area brings many challenges for a water company. The challenges are amplified when the area is also one of the most economically disadvantaged areas of the country.

The Mni Wasté Water Company is a tribally chartered entity with the Cheyenne River Sioux Tribe serving 14,000 members in the Dewey, Meade, and Perkins counties on the Cheyenne River Lakota Reservation in western South Dakota. The company currently processes an average of one million gallons of water per day, with peak demand near two million gallons daily. But Director Leo 'Earp' Fischer said Mni Wasté is capable of processing more than four-point-four-million gallons per day.

This increased capacity and ongoing updates have been made possible through the help of USDA Rural Development. Fischer said that Rural Development's nearly \$90 million investment in the Eagle Butte area through the Water and Environmental Program was vital to Mni Wasté's success.

Mni Wasté continues to update existing pipe and extend to new areas to deliver quality water to residents and businesses across the region. The system maintains 5.5 gallons of water in storage capacity and over four million gallons throughout service lines. The company manages more than 1,600 miles of pipe, delivering water to more than 1,600 customers across the reservation, with plans to extend from Highway 63 North to serve the town of Timber Lake. Future plans include upsizing lines to the west along Highway 212, and eventually providing bulk water to Perkins County Rural Water.

Fischer said Rural Development's programs have only gotten better over time, making them even more valuable to rural communities.

RURAL AMERICA DESERVES RURAL DEVELOPMENT

"We didn't have anywhere else to go. The programs offered by Rural Development have only gotten better over time, which makes it even more valuable to our rural communities."

- Leo 'Earp' Fischer, Mni Wasté System Manager

CALL TO ACTION

Fund Water Infrastructure - Stand Up for USDA Rural Development

Rural Development will continue to play a vital role in modernizing, preserving, and protecting rural America's infrastructure and public health. You can help secure its future today by signing the pledge and writing to your Congressional representatives today.

Providing adequate support and resources necessary to protect and enhance the environment, public health, sustainability of utilities, and economic vitality of rural America with clean, affordable, and safe water service is a primary responsibility for our federal elected officials.

Visit www.ruralwaterstrong.org to learn more.

AURORA BRULE RURAL WATER

Aurora-Brule (A-B) Rural Water System started as a steering committee of farmers in 1970 that were looking for a source of good quality drinking water for the rural areas of Aurora, Brule and Buffalo Counties. The communities and farms were using artesian water that was poor in quality, and most wells were 1,000 to 1,500 feet deep. The water system incorporated in May of 1972 and a five-member Board of Directors was established. The Board hired HWS Engineering of Lincoln, Nebraska to begin designing a water distribution system. The Board and engineers also went to work trying to find financing to begin construction.

Construction of Project I of A-B Rural Water System was bid in 1977 and construction began in 1978. This project consisted of 70 rural users and a 50,000-gallon storage tank south of Kimball.

After the pipelines were installed, Aurora-Brule purchased water from the Randall Community Water District to serve those 70 farms.

In 1980, the water treatment plant was built along the Missouri River south of Chamberlain. That same year, 325 miles of distribution pipeline was installed in western Brule County, which added another 300 farms and the towns of Pukwana and Kimball to the system. In the spring of 1981, the new water plant was put into operation, providing water to all 370 users on the system. Every year from 1982 through 1986, pipelines, pump stations and storage tanks were added to provide water to farms and communities in Aurora, Brule, Buffalo, Jerauld, Davison and Douglas Counties.

Throughout the 1990s and beyond, construction continued,

adding storage tanks and customers throughout the system. In 2004, Aurora-Brule collaborated with Davison Rural Water System and Randall Water District to provide water to eastern Aurora County, including the town of Plankinton



The original water treatment plant was upgraded in 2006, increasing the plant capacity from 1.2 million gallons per day (MGD) to 2 MGD. In 2011 a new Missouri River intake system was installed upstream from the old intake. The system has 560,000 gallons of treated water storage at the water plant and seven storage tanks in the distribution system holding a total of over 2 million gallons of water.

The system's latest project was a capacity improvement project that was completed in the summer of 2024, which included a new 400,00-gallon water storage tank, approximately 20 miles of pipelines ranging from 4" to 12" dia., and a new booster pumping station.

Manager Wade Blasius, who has been with the system for over 40 years, recalls, "Getting rural water was life changing for some, because

their well water quality was very poor. Many of the farm women didn't have washing machines because of the hard rusty well water. They had to bring their laundry to a Laundromat in town."

Blasius said A-B Rural Water's service area continues to grow in numbers of people, businesses, and livestock requiring more water. The System is continually working with their engineering firm, Banner Associates putting together projects to upgrade outdated equipment and to increase water capacity to meet the demands.

AURORA BRULE RURAL WATER



DIRECTORS:

- Chairman** – Ron Gillen
- Vice Chairman** – Tom Geppert
- Secretary** – Raymond Heath
- Treasurer** – Craig Swanson
- Director** – Paul Hettinger

STAFF:

- General Manager** – Wade Blasius
- Bookkeeper** – Mary Brainard
- Plant Operator** – Joe Priebe
- Distribution Operator** – Kraig Sinclair
- Distribution Operator** – Tim Pringle
- System Operator** – Rick Blasius

STATISTICS:

- Hookups:** 1,460
- Miles of Pipeline:** 1,000
- Water Source:** Missouri River
- Counties Served:** Aurora, Brule, Buffalo,
and portions of Jerauld, Davison, and
Douglas
- Towns Served Individual:** Aurora Center,
Gann Valley
- Towns Served Bulk:** Kimball, Pukwana,
Stickney, White Lake, Plankinton

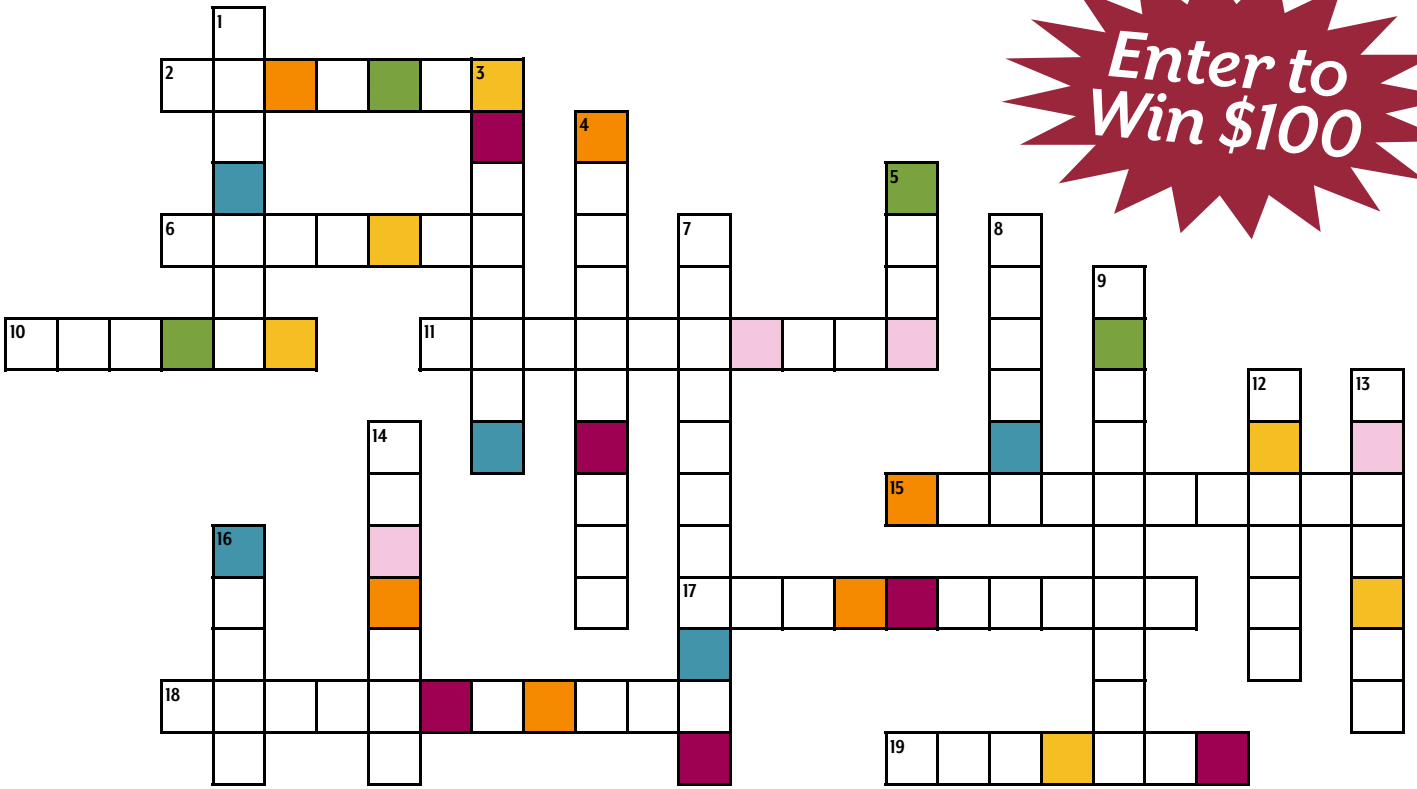


Aurora-Brule's water source has always been the Missouri River. The treatment process utilizes water clarifiers and a chemical feed system to separate solids from the water, followed by gravity sand filtration. Chlorine and ammonia are added to generate chloramines for disinfection.

The Aurora-Brule System's main office is in Kimball and currently has 6 employees. The System provides quality drinking water to 1460 rural households, farms and pasture taps as well as the communities of Pukwana, Kimball, White Lake, Stickney, Plankinton, Gann Valley, and Aurora Center and to Aurora-Plains Academy and Grass Ranch Colony.

RURAL WATER CROSSWORD & WORD SCRAMBLE CONTEST

FAIR TIME



SCRAMBLE ANSWER



Across

- 2. Carnival workers
- 6. View antiques on wheels (two words)
- 10. Handmade wares
- 11. Sticky fruit on a stick (two words)
- 15. Alfresco alehouse (two words)
- 17. Hands on experience (two words)

- 18. A giant fairground revolution (two words)
- 19. Deep-fried frank

Down

- 1. Miss State Fair, for one
- 3. Indoor animal exhibit (two words)
- 4. Seating arena
- 5. Amusement park attraction

- 7. Event with serious horsepower (two words)
- 8. Procession of floats
- 9. Temporary fairground lodging
- 12. Carnival area of a fair
- 13. It may fill a hall
- 14. Fair feature
- 16. Where the big "bucks" are

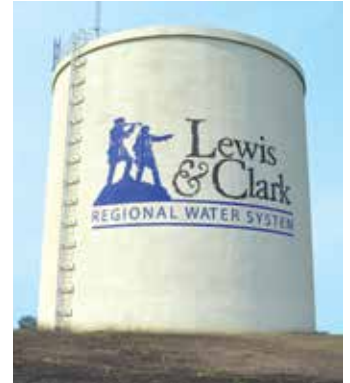
RULES: Use the colored squares in the puzzle to solve the word scramble above. Call your Rural Water System (See page 2 for contact information) or **enter online at www.sdarws.com/crossword.html** with the correct phrase by October 15, 2024 to be entered into the \$100 drawing.

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 Dan Ziemer from BDM Rural Water who had the correct phrase of "nature is our biggest ally" for October 2024.

AT LONG LAST, LEWIS AND CLARK WATER ARRIVES FOR MADISON, SD



By Mackenzie Huber, South Dakota Searchlight
– southdakotasearchlight.com

After waiting nearly 35 years, Madison is the last South Dakota city to connect to the tri-state Lewis and Clark Regional Water System. Local leaders, South Dakota's three congressmen and economic leaders gathered to celebrate the city's connection on Wednesday, August 21, 2024.

Madison's roughly 6,000 residents tapped into the system the beginning of August 2024.

The pipeline delivering the water covers 310 miles and spans southeastern South Dakota, southwestern Minnesota and northwestern Iowa. The roughly \$700 million water system serves about 350,000 people.

The connection means better water quality in the city and economic development, because it increases water capacity, especially for agriculture surrounding Madison, said state Sen. Casey Crabtree, R-Madison.

"This just means a higher capacity for growth that otherwise wouldn't exist," Crabtree said.

South Dakota Sen. Mike Rounds told attendees of Thursday's celebration that "water development is economic development." He compared the Lewis and Clark system to the expansion of electricity and broadband in rural parts of the country.

"We're continuing to make it so that young people want to come back in and stay in the rural parts of our country — not just in the communities themselves but in the ag areas as well," Rounds said. "It would not happen if it wasn't for this type of development across multiple states."

The city will blend its existing water sources with pipeline water to ensure resiliency in supply during droughts and other disasters.

Sibley, Iowa, will be the last to connect to the pipeline. Lewis and Clark Executive Director Troy Larson expects to hook up to Sibley in the fall.

The final step in construction of the "base" water system is to build out a water treatment plant in Vermillion and reach a water capacity of 44.19 million gallons a day, Larson said.

The majority of the pipeline is funded through the federal government. It was supposed to be completed in 2016 but fell behind schedule because of poor funding, Larson said.

The pipeline is now planned to be completed in 2028, after receiving a \$152.5 million boost from the 2021 Bipartisan Infrastructure Law. Bureau of Reclamation Deputy Commissioner Roque Sánchez represented the Biden administration at the celebration, touting the federal government's role in aiding the project and other rural investments across the country.

None of South Dakota's U.S. congressional delegates voted for the bill.

"While it took a long time because of federal funding to get where we are," Larson said, "the last few years we've been sprinting to the finish line."

Larson said Lewis and Clark started construction on the water system's first expansion in 2022, which is expected to be completed in 2030 and expand water capacity to 60 million gallons a day. The nonprofit aims to develop an expansion plan within the next one to two years.

The regional system has "paved the way" for similar water systems in the state and country, Larson said. Fledgling efforts in western, northern and eastern South Dakota are vying for Missouri River water for their communities.

It's to be expected, since cities and rural water systems across the state are maximizing their groundwater sources and realize other states are looking to tap into the Missouri River, Larson said. South Dakotans want to get there first.

"The only source of really untapped, reliable water in the state is the Missouri River," Larson said. "What we're all waking up to is that we need to fully utilize this resource we have."

Thank You Notes



Kingbrook Rural Water Scholarship Committee,

Thank you for choosing me as a recipient of your scholarship. Thank you also for recognizing me at your annual meeting.

Sincerely,
Emma Schultz

Thank you for the excellent meal and the door prize I won.

**Thanks again,
Sheila Huntimer**



Kingbrook Rural Water,

Thank you for selecting me as one of your scholarship recipients. I appreciate your generosity and support of continuing my education. I plan on using my scholarship towards my tuition costs while I am studying at Mitchell Technical College. Thank you again!

Sincerely,
Kate Klein

Thank you for the delicious meal and the \$50 we won at the annual meeting. It was appreciated!

Greg and Vicki Andersen



Kingbrook Rural Water Scholarship Committee,

I am writing to express how grateful I am to be chosen for the Kingbrook Rural Water Scholarship. This scholarship will help me fund my future plans of attending SDSU to major in Agronomy and minor in Precision Ag and Ag Business. I would also like to thank you for hosting my family and I at the annual meeting. Thanks again for your time and support.

Sincerely,
Kellen Kueter

Donors of the Kingbrook Rural Water System Scholarship,

Thank you for choosing me to receive this scholarship. I will attend SDSU in the fall. I plan to major in business economics and minor in accounting. I will further my education by getting my masters in accounting. I will use this scholarship to pay for tuition and textbooks.

Thanks again,
Emily Everson

MEET OUR NEWEST EMPLOYEE!

Aaron Jeffrey joined the Kingbrook staff on May 13th as a System Operations Specialist. Aaron and his wife Lindsey live in the Howard area with their children Cooper, Easton, and Macie. In his spare time, Aaron enjoys hunting, fishing, and riding/working with horses.

We are excited to have Aaron as part of the Kingbrook team!



Manager: continued from page 2

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. Many complex and detailed tasks are required of office staff 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 or correction if it should stop promptly and efficiently. I am grateful to work with such a great group of individuals.

Projects and daily processes involve much coordination and collaboration between all staff members and support professionals. Nevertheless, their completion will enhance, ensure, and expand water service to existing and future members. This is a continued focus of Kingbrook's long-range planning efforts and dedication to supply service to members.

HAS YOUR PHONE # CHANGED?

Kingbrook uses a call system to notify customers of leak repairs or water outages. We have also been using this system to send out monthly reminder notices. If you have a mobile number or have changed your phone number recently, please contact us to make sure we have your current number.

**You can verify your phone numbers
by calling 605-983-5074
or email payments@kingbrookruralwater.com**

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WATER MATTERS

AQUIFERS 101



For most South Dakotans, the water that comes out of your tap started out in the ground and has been drawn from something called an aquifer. As such, the importance of aquifers to all of us cannot be exaggerated, but just what are they?

WHAT IS AN AQUIFER?

An aquifer is a body of saturated rock from which water can be extracted in useful quantities. Aquifers must be both porous (have lots of open spaces in which water can be held) and permeable (able to let water move easily through it). In South Dakota, most aquifers consist of unconsolidated sand and gravel found along the course of current or former rivers and streams. In certain areas, layers of sandstone or fractured limestone are good sources of water. Rocks such as granite and quartzite are generally poor aquifers because they have a very low porosity. However, if these rocks are highly fractured, they make very good aquifers.

HOW DOES WATER GET IN AN AQUIFER?

Aquifers fill with water (rainfall, runoff, melting snow) that soaks into the ground. The amount of water in storage in the aquifer can vary from season to season and year to year. Ground water may flow through an aquifer at a rate of 1,000 feet per year or 5,000 feet per



hour, depending on the permeability. But no matter how fast or slow, water will eventually discharge or leave an aquifer and must be replaced by new water to replenish or recharge the aquifer.

HOW DO WE GET WATER OUT OF AN AQUIFER?

Holes are drilled into the material that makes up the aquifer and a well is installed. Normally such water must be pumped to the surface, but in some cases the water will rise to the surface naturally (artesian aquifers). When water is pumped from a well, the water table (the top of the saturated part of the aquifer) is generally lowered around the well. Hydrologists call this a cone of depression. If water is pumped from a well faster than it is replenished, the water table is lowered and the well may go dry.



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 WATER
 DEVELOPMENT
 DISTRICT

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 eastdakota.org

DEMONSTRATION - Take a clear glass jar and fill it with gravel. Now pour water slowly into the jar. Watch as the water fills in the spaces between the bits of gravel. A jar “full” of gravel can actually hold quite a bit of water. You have created an aquifer!