

July 2024 | Volume 20, Issue 1

WHY IS MY LAKE GREEN?



AN OLD IDEA THAT'S
STILL USEFUL

RECRUITING YOUTH TO THE WATER INDUSTRY

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FROM THE MANAGER

Scott Gross, General Manager Mid-Dakota Rural Water System, Inc.



Summer is here and Mid-Dakota is again very busy with several projects all in different phases of completion. Mid-Dakota has begun work on Phase I of distribution improvements and has hopes of bidding the next two phases yet this year. Bidding is also complete on our new water treatment plant backwash filter facility. We are still working on the construction timeline, but I do know this will be completed in 2025. The filters that will be installed in this facility are being manufactured now to be ready to install when facility is ready. The automatic meter reading upgrade should really pick up speed this year as the components are finally starting to show up. We anticipate a large number of these will be installed as the collector system is upgraded. Mid-Dakota staff continues to add new users in anticipation of the system's improvements becoming available. The list of new add-on customers to be put in is already over 70 for this year. Mid-Dakota is also working through details of hooking up the town of Wessington Springs and delivering 100% of their water needs in the near future. More information to come on this as paperwork gets worked out. As mentioned in the last issue, Mid-Dakota and all other water systems have been tasked by the EPA to inventory lead lines in the water systems. Our staff appreciate any and all help in getting this completed. If you have any guestions on this please contact us at 1-800-439-3079, and again thanks for all your help in completing this by October of this year. Scholarships were awarded again this year and are presented on the next page. Congratulations to the award winners.

MID-DAKOTA CALENDAR

The Mid-Dakota Rural Water System offices will be closed on the following dates:

> **June 19, 2024 - Juneteenth** July 4, 2024 - Independence Day September 2, 2024 - Labor Day

In case of an emergency, please call the office Toll Free at 1-800-439-3079.



MISSION STATEMENT

Enhancing quality of life By providing high quality water And excellent service.

Mid-Dakota Rural Water System, Inc. 608 W. 14th St., P.O. Box 318 Miller, South Dakota 57362-0318

Office: 605-853-3159 • Fax: 605-853-3245 Office Hours: 8 a.m.-5 p.m., M-F Email: office@mdrws.com Website: www.mdrws.com

Rural Directors

C: D. I. I.	51.1.1
Steve Robbennolt	District I
Leslie Brown	District 2
Chuck Steptoe	District 3
Lennis Fagerhaug	
Rick Benson	District 5
Municipal Directors	
Dwight Gutzmer	At Large

Office Staff - Miller, SD

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Scott Gross	General Manager
Connie Aymar	Financial Manager
Jamie Brueggeman	Office Administrator
Tammy Oligmueller	Customer Accounts Specialist
Kristen Arthur	Customer Accounts Specialist
Cameron Simons	Membership Specialist

Operations Staff / Water Treatment - Pierre, SD

Darrell Raschke.....

Bill Sarringar	Water Treatment Plant Manager
Mike Polak	Water Treatment Plant Specialist
Scott Szuggar	Water Treatment Plant Specialist

Water Transmission & Distribution - Miller, SD

Lorin Johnson	Operations Manager
Calvin Kindle	Water Distribution Specialist
Scott Manning	Water Distribution Specialist
Jerod Raethz	Mainline Transmission Specialist
Paige Gesinger	O & M Specialist
Jordan Heumiller	Operations & Maintenance Inspector
Mike McCready	Small Systems Specialist
Deric Diede	Hookup Specialist
DeAnn Hargens	Customer & Legal Records Specialist
Gage Russell	Water Distribution Associate Specialist

Pierre, SD

Shane Bothwell	Water Distribution Specialist
Ron Ramsey	Water Distribution Specialist
Travis Jones	Water Distribution Specialist
Randy Bauer	Electrical Specialist

Gettysburg, SD

Gary Tobin... . Water Distribution Specialist

Wessington Springs, SD

Mark Gran .. Water Distribution Specialist Huron, SD

Troy Dorris.......Water Distribution Specialist Scott Perry......Water Distribution Specialist

Consultants

Bartlett & West Engineers

May, Adam, Gerdes & Thompson - Law Office Endorf, Lurken, Olson & Co. - CPA

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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.

Mid-Dakota Rural Water System, Inc.

NOTICE OF VACANCY on the Board of Directors

Mid-Dakota Rural Water System, Inc. hereby gives notice to its membership that the following seats upon the Board of Directors will be up for election at its 2024 Annual Meeting:

There is one expiring term in Rural Director District area 3, consisting of the following: All of Spink County; those portions of the Rezac Lake, Highmore Central, Mac's Corner, Collin's Slough, Cottonwood Lake and Redfield service areas lying in Hand County; and the Staum Dam service area in Beadle County.

There is one expiring term for Municipal-at-Large Director.

There is one expiring term for City of Huron Director.

Rural director nominations must be made by petition. Petitions must be filed with Mid-Dakota not later than 4:00 p.m. on September 17, 2024.

Nominations for municipal-at-large director will be made by member municipalities (other than the City of Huron). Nominating resolutions from member municipalities shall be filed not later than 4:00 p.m. on September 17, 2024.

The City of Huron will designate its director as provided in Mid-Dakota's Bylaws.

For more information, contact the Mid-Dakota Rural Water System, Inc. office at 605-853-3159 or 1-800-439-3079.

Save the RURAL WATER SYSTEM ANNUAL

MEETING

Thursday, October 17, 2024 10:00 a.m. – 2:00 p.m. All Mid-Dakota offices

HEUMILLER HIRED



n February 12th, Jordan Heumiller began working at Mid-Dakota with the position of Operations and Maintenance Inspector. He is currently stationed at the Gettysburg Field Office and will oversee our seventy-mile water line expansion project. Jordan grew up on a farm just outside of Spencer, SD and later graduated from McCook Central High School. He then attended South Dakota State University; graduating with a

bachelor's degree in 2015. Jordan met his wife Ashley while attending SDSU and they decided to move to her hometown of Hoven, SD. They currently have three children and Ashley runs her own in-home daycare. Jordan worked for the City of Hoven as their Maintenance Supervisor for seven years. He currently possesses a class one water distribution certification and believes his experience and background with water maintenance will help him become an asset for Mid-Dakota.

MDRWS ENGINEER RETIRES FROM BARTLETT & WEST



id-Dakota would like to congratulate Lyle Schumack on his retirement with Bartlett and West Engineering. Lyle was a Chief Resident Inspector for Mid-Dakota for 10 years and a Senior Project Manager for 17 years. His advice was greatly appreciated and his experience will be missed. We thank him for all his hard work and dedication to our company and wish him the best in his future endeavors!

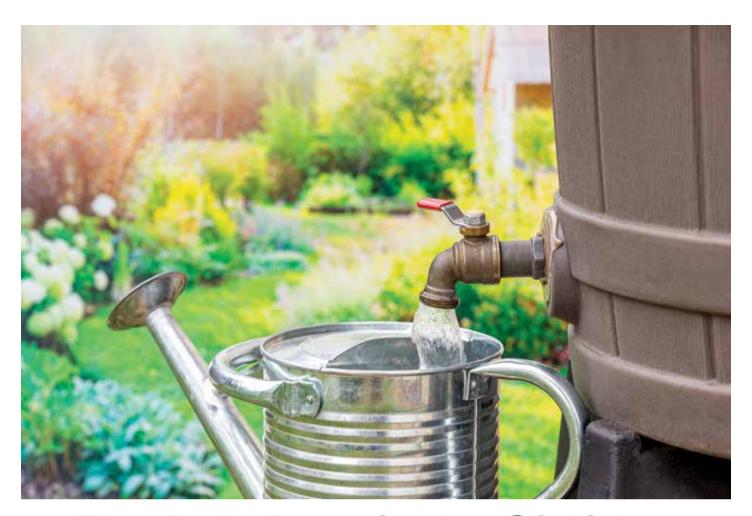
LEAD-FREE SD WATER CUSTOMER SURVEY

If you have already done this survey or contacted us, please disregard.

If you have a smartphone, we encourage you to fill out the electronic survey at **survey.SDWaterPipes.com** or scan the QR code at the bottom as an alternative to the paper form.

Physical street address: (P	O. Box not acceptable)		
Contact Number:		Out	alita
Account Number:			On Tap!
When was home built?			
Before 1987		MID	AKOTA
1987 or after		RURAL WAT	ZER SYSTEM
Unknown			
If there is no structure, ple NOTE: There is no need to		s not serving humans or residences.	
	iing into your home, <mark>take a pictui</mark> 05-290-7711 or email: <u>office@m</u>	re and send it to your water system widrws.com	rith your account
What color is your water p	pipe? (circle the example)		
Black	Gray/Silver	Orange/Copper	White
Other, indicate colo	r here:		
This survey is submitted b	y:		
Print first and last name		SCAN QR	
Thank you for completing	the survey.	COMPLET ONL	E SURVEY LINE

If the structure was built after 1987, we <u>do not</u> need a picture, just the filled-out survey. If the property does not have a structure, we <u>do not</u> need a picture, just the filled-out survey.



The Rain Barrel – An Old Idea That's Still Useful

While browsing online recently, I came across something that instantly transported me back to my childhood – an old rain barrel. It reminded me of the days spent at my grandparents' house, playing in the yard. In one corner, under the waterspout, stood the rain barrel, a symbol of a time when water was hauled to the house and its quality was unpredictable. Back then, early American water systems required fetching water from a central supply. Today, thanks to innovations like well digging, piping, and pumps, water flows directly to our homes through one of the 155,000 public water systems across the U.S.

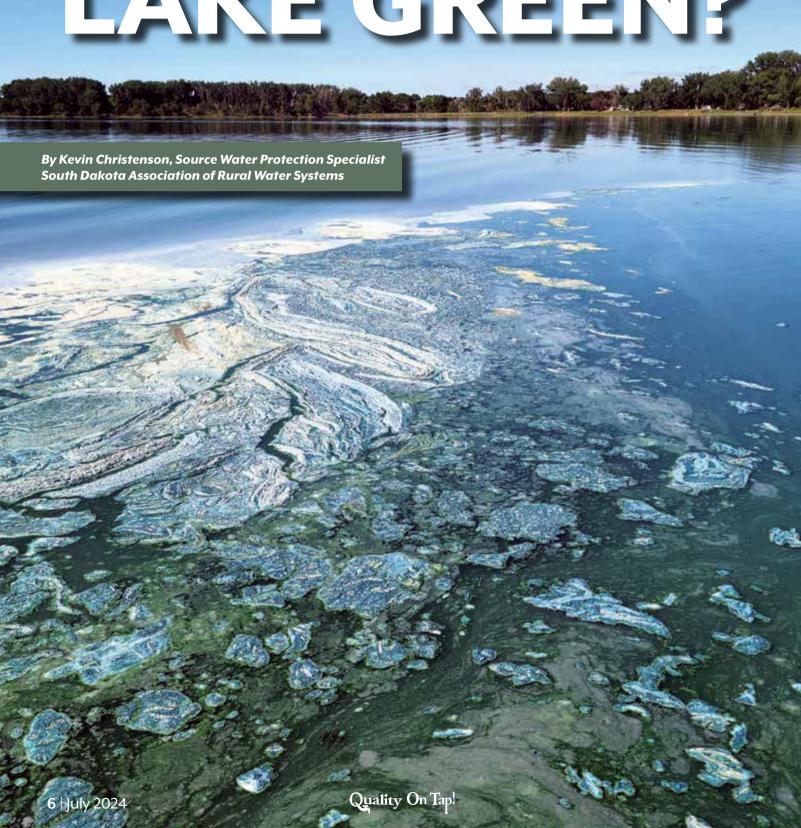
The discovery that triggered this nostalgic journey was a city program called the "Green Barrel," which offers residents discounted rain barrels. Imagine cutting your water bill by capturing rainwater for free! In this city, watering lawns and gardens accounts for 40% of household water usage. With each barrel saving approximately 1,300 gallons over the summer, the impact on your wallet and the environment is significant.

Modern rain barrels are a far cry from the ones of the past. Gone are the makeshift screens and weighted lids. Today's barrels feature a sleek inlet that directs water into a small opening and an outlet that easily connects to a watering can or hose. These design improvements not only prevent evaporation and keep bugs out but also make collecting and using rainwater effortless.

Think about the possibilities: watering your houseplants, gardens, and lawns with pure rainwater, especially during dry spells. Droughts, with their abnormally low rainfall, lead to water shortages. A rain barrel ensures you always have a supply of water on hand. Plus, the benefits are immense – reducing your water usage, cutting down on water sent to sewers, and saving money.

Investing in a rain barrel isn't just about conserving water; it's about connecting to a tradition of resourcefulness and sustainability. It's about making a positive impact on the environment while enjoying the simplicity and efficiency of nature's own irrigation system. So why not bring a bit of that old-world charm into your modern home? Get a rain barrel today and start reaping the benefits – your garden, your wallet, and the planet will thank you.





Summer has arrived, and summers include visits to the lake for many people. Whether you enjoy boating, swimming, fishing, or simply take in the scenery, lakes and state parks offer an excellent setting for weekend getaways. Regardless of the lake or waterbody you visit this summer, there is a common denominator – algae. What is algae, and why does it turn our waterbodies unappealing at times during the hot summer months?

The term "algae" encompasses many organisms, from microscopic single-celled entities floating in lakes to seaweed in oceans. The prevalent variety of algae in lakes is known as "Green Algae," specifically the single-celled type. These microorganisms thrive on lake nutrients and utilize sunlight for photosynthesis, similar to above-water plants

and trees. Along with chlorophyll, the pigment responsible for the green color in plants, these algae play a crucial role at the bottom of the lake's food chain. As you swim in the lake, imagine yourself as a complex of algae floating the water, albeit without chlorophyll and the ability photosynthesize.

Understanding what algae are reveals the cause behind lakes' murky and unpleasant green appearance. This transformation typically

occurs in the hottest parts of summer and is identified as an "algal bloom."

An algal bloom signifies a significant increase in algae organisms in the lake. While numerous algae species may exist, a bloom typically comprises one or two dominant types. These blooms result from optimal lake conditions, where one algae species experiences rapid reproduction due to abundant nutrients, particularly phosphorous and nitrogen. The excess nutrients and consecutive sunny days in summer create the ideal environment for a substantial algal bloom.

Beyond the green color and unpleasant odor, an algal bloom is a natural and essential phenomenon for maintaining lake health. The excess plant life generated by the bloom serves as abundant food for other microorganisms and fish, as the algae convert free-floating nutrients into a form edible by lake residents.

While algal blooms are natural, scientists have observed troubling events known as "Harmful Algal Blooms" (HABs). HABs, detrimental to the lake ecosystem and its inhabitants, can manifest in various forms, like the thick "green soup" seen occasionally. HABs can also cause "summerkill," a mass die-off of a lake's fish population caused by an excessive algal bloom. Large blooms lead to oxygen depletion in

the water, creating a hypoxic environment that can suffocate fish and other aquatic organisms.

While HABs occur naturally, increasing occurrences are linked to human activities. Excessive nutrients. especially phosphorous and nitrogen, disrupt the delicate nutrient balance lakes. Human contributions this imbalance include the overuse of fertilizers on lawns,

with runoff carrying nutrients into lakes. Awareness of the environmental impact of fertilizer use is crucial to maintaining the health of our lakes.

While algae can make you and your pets sick, most reports refer to Blue-Green algae, a type of bacteria known as Cyanobacteria. Cyanobacteria, capable of producing toxins, can cause skin irritation and stomach flu symptoms. Despite potential risks, State and County-run parks diligently monitor algae blooms, issuing warnings when necessary. Enjoy your summer responsibly and with an appreciation for the natural beauty of our lakes and water bodies.

While HABs occur naturally, increasing occurrences are linked to human activities.

Excessive nutrients, especially phosphorous and nitrogen, disrupt the delicate nutrient balance in lakes. Human contributions to this imbalance include the overuse of fertilizers on lawns, with runoff carrying nutrients into lakes.

RECRUITING YOUTH TO THE WATER INDUSTRY

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

When asked about a career in the water industry, many high school students aren't quite sure what that means. They know they like to drink water and use water for showers, brushing their teeth, or washing clothes, but most aren't sure how that good, clean water they are using gets to their house or school.

It's this uncertainty of what an occupation in water means that is motivating me to hit the road and talk directly with students about working in the most vital industry in the world. My first event was the FFA Career Carnival, held in conjunction with the State FFA Convention in Brookings

in April. There were nearly 60 different booths filled with hands-on activities for students to gain knowledge about different careers within the world of agriculture. SDARWS Interim Executive Director Jeremiah Corbin and I had a booth at the Carnival and networked with hundreds of FFA students from across the state. Along with candy and brochures of information about water-related careers, we also provided students with the opportunity to win some fun water-related prizes. We quizzed the students on various water trivia questions for them to have a chance to spin our prize wheel and possibly walk away with one of the most







coveted pieces of swag from the event – a water gun! It was a busy and fun event and a great way for me to kick off my efforts to start getting students thinking about a career in water.

The next week I made the drive to Eagle Butte to take part in a Career Fair at Cheyenne-Eagle Butte High School. This Fair allowed me to visit with students from Dupree, Tiospaye Topa, Takini, and Eagle Butte. Dan Marshall, Operations Specialist with Mni Wasté Water Company, joined me for the event. We provided candy and other promotional items to the students, and Dan helped them get a feel for some of what his job entails by showing them a variety of on-the-job pictures, including the inside of a water tower. Some of the students and teachers attending had great questions for us and it was enjoyable interacting with them.

These two events are just the start of my effort to get the word out about the benefits of working in water or wastewater careers in the state. I plan to attend other Career Fairs or events moving forward to continue to promote working in the water industry, especially for students to utilize the Apprenticeship Program. I am interested in knowing about other events or activities like these that may be beneficial for me to attend.

I started as the Apprenticeship Coordinator with SDARWS in

February and have been working with the National Rural Water Association (NRWA) Apprenticeship Program team to get South Dakota's program up and running. The NRWA Apprenticeship Program is recognized by the U.S. Department of Labor and provides guideline standards of apprenticeship to state Rural Water Associations, like SDARWS, for their approval and adoption. Apprentices will attend an approximately two-year training program that includes classroom technical instruction and on-the-job training. During the program, apprentices will earn-whilethey-learn with knowledgeable professionals who work to deliver clean drinking water to their communities and treat wastewater before returning to the environment. 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 functions of the program. The program's goal is to have students emerge with a secure career as either a Water Operations or Wastewater Operations Specialist.

SDARWS has a website dedicated to information regarding careers in water, including the Apprenticeship Program. It will be updated as the Association moves through the process of getting the Program registered and ready to go. Be sure to visit sdarws.com/WaterWorks for the latest information and check out videos about water and wastewater careers.

SYSTEM SPOTLIGHT

DAVISON RURAL WATER

avison's story began in May 1983 at the Davison County 4-H Building, where around 70 attendees recognized the need for a rural water system. A steering committee of eight individuals was formed, and in June, Bernie and Iris Oster donated office space at American Global Co. By August, the By-Laws were approved, followed by state approval of the Articles of Incorporation in September. With the system official, rules and regulations were adopted, and the first Annual Membership meeting took place in October 1984.

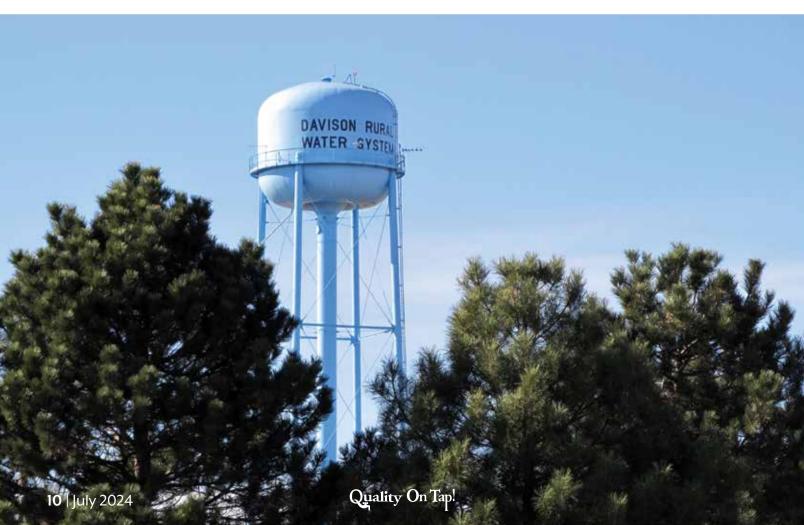
In 1985, construction began after purchasing five acres for an office building, pumphouse, and reservoir. By November, a water contract was signed with the City of Mitchell, and by January 1986, water was operational for part of the system. A permanent office/shop space was completed in December 1987, and Davison partnered with Hanson Rural Water for shared management in January.

In 1992, a new warehouse was completed alongside the first expansion project, adding a tower northeast of Mitchell

and 61 new users. In 1996, the board sought a new water source, eventually contracting with Randall Community Water District in December 2002. The second expansion, completed in October 1998, added a tower south of Mitchell and 147 users.

In December 2002, Missouri River Water was introduced, adding 29 users. The third expansion, completed in September 2003, connected Mount Vernon and added 67 users in Mount Vernon and Plankinton rural areas, shifting the water source from the City of Mitchell to Randall Community Water.

Since 2005, Davison has built a second shop/warehouse and remodeled its office. Currently, Davison services 1,220 hookups through 610 miles of pipe, covering Aurora, Davison, Douglas, and Sanborn counties in southeast South Dakota. In the years leading up to 2024 Davison has increased its member services to over 1,300 hookups selling over 148 million gallons of water in 2023.





CSDA Wast of Devidence at the Control of the Contro



DIRECTORS:

Chairman – Bob Weisz

Vice Chairman – Norman Neugebauer

Secretary/Treasurer – Dennis Kiner

Director – Brian Bode

Director – Harvey Fouberg

Director – Bruce Haines

Director – Brett Young

STAFF:

General Manager – Jake Jones

Office Manager – Teresa Sprinkel

Service Technician – Terry Haag

Service Technician – Bob Riggs

Service Technician – Myles Horton

Service Technician – Blake Hemminger

STATISTICS:

Hookups: 1,220

Miles of Pipeline: 610

Water Source: Randall Community Water

District (Missouri River)

Counties Served: Aurora, Davison,

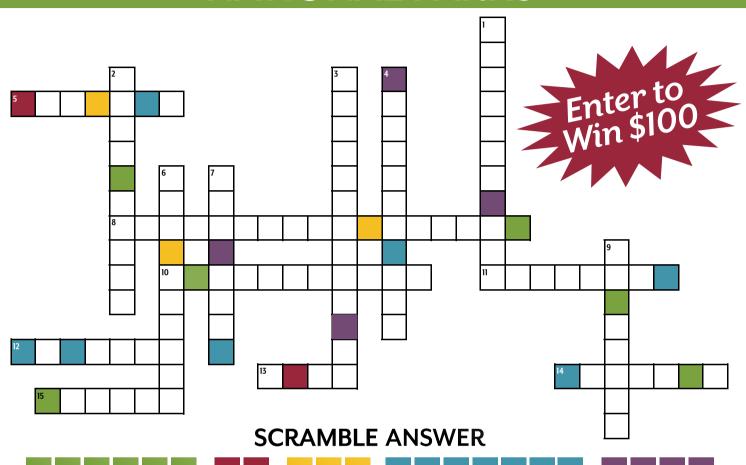
Douglas, Sanborn

Towns Served Individual: Loomis

Towns Served Bulk: Mount Vernon, Letcher

RURALWATERCROSSWORD & WORDSCRAMBLE CONTEST

NATIONAL PARKS



Across

- 5. Forest of giants
- 8. Named for a president
- The Colorado River cuts through this deep gorge
- Located in the Sierra Nevada mountains
- 12. Includes the Chisos mountain range and

the Chihuahuan Desert in Texas

- 13. Known for it's steep red cliffs in southern Utah
- 14. Montana's Mountain park
- 15. Utah park known for it's sandstone structures

Down

- Named for its reputation of extreme heat and barren landscape
- 2. Named for it's twisted bristly trees
- 3. Spans the Continental Divide in Colorado

- 4. Home of 'Old Faithful'
- 6. Protects the southern 20% of Florida's tropical wilderness
- 7. Scenic South Dakota park
- SD park known for its vast underground calcite formations

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 July 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 Lynn Frey from Perkins County Rural Water who had the correct phrase of "big dreams start in a small town" for April 2024.

SCHOLARSHIPS AWARDED

he board of directors of the Mid-Dakota Rural Water System is pleased to announce that four students have been chosen to receive a scholarship of \$750.00 each. The very deserving individuals are Abigail Kolousek, the daughter of Scott & Amber Kolousek from the rural area near Wessington Springs; Shaylee Anderberg, the daughter of Travis & Angie Anderberg from Miller; Jarron Beck, the son of Kellie Beck from the rural area near Pierre; and Jaycee Baruth, the daughter of Rob & Melissa Baruth from the rural area near Alpena. Abigail is planning to attend Northern State University to pursue a career in Digital Marketing and Agricultural Business. Shaylee plans to attend South Dakota State University to pursue a career in Early Childhood Education. Jarron plans to attend South Dakota State University to pursue a career in Human Biology Pre-Dental. Jaycee is planning to attend Northern State University for a career in Accounting and Agricultural Business.

The board and staff at Mid-Dakota congratulate the winners and would also like to thank the other students for taking the time to submit an application. Best wishes to all of them in their future endeavors.





Jaycee Baruth



Jarron Beck



Shaylee Anderberg
Quality On Tap!



Rate Table Effective January 1, 2024

501 Residential 1-Unit

\$44.00 per month minimum bill \$5.65 per 1,000 gallons 1st 33,000 \$8.05 per 1,000 gallons over 33,000

502 Rural Household 2-Units

\$54.00 per month minimum bill \$5.65 per 1,000 gallons 1st 10,000 \$4.62 per 1,000 gallons next 56,000 \$8.05 Per 1,000 gallons over 66,000

504 Rural Household 4-Units

\$72.00 per month minimum bill \$5.65 per 1,000 gallons 1st 10,000 \$4.62 per 1,000 gallons next 122,000 \$8.05 per 1,000 gallons over 132,000

506 Rural Household 6-Units

\$89.00 per month minimum bill \$5.65 per 1,000 gallons 1st 10,000 \$4.62 per 1,000 gallons next 188,000 \$8.05 per 1,000 gallons over 198,000

511 Livestock

\$32.00 per month minimum bill \$4.62 per 1,000 gallons 1st 300,000 (per year) \$5.65 per 1,000 gallons 301,000 to 700,000 (per year) \$8.05 per 1,000 gallons over 700,000 (per year)

161, 162, 164, 165 Special Class I & II

\$16.40 per GPM per month minimum bill \$28.00 per GPM per month demand charge \$0.61 per 1,000 gallons

163. 166 Special Class III

\$4.69 per Pers (equiv) per month minimum bill \$5.70 per Pers (equiv) per month demand charge \$0.61 per 1,000 gallons up to contract amount \$8.05 per 1,000 gallons over contract amount

1 Minimum & demand charges do not include any water. 2 Livestock (511) water allocations are annual use, not monthly. 3 "equivalent" population "person" = contract GPD ÷ 270

> After Hours or Emergencies Call Mid-Dakota TOLL FREE at: 1-800-439-3079



For online bill paying: www.mdrws.com







Annual Water Quality Report

January 1, 2023 - December 31, 2023

SECRETARY'S AWARD

The Mid-Dakota Rural Water System has supplied 23 consecutive years of safe drinking water to the public it serves and has been awarded the Secretary's Award for Drinking Water Excellence by the South Dakota Department of Environment and Natural Resources.

WATER QUALITY

This report is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies.

WATER SOURCE

We serve more than 6,500 customer accounts, or a population greater than 32,700, an average of 6,204,000 gallons of water per day. We get our water from the Oahe Dam on the Missouri River which is a surface water source. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for the Mid-Dakota Rural Water public water supply system is medium.

For more information about your water and information on opportunities to participate in public meetings, call 605-945-0437 and ask for Bill Sarringar.

ADDITIONAL INFORMATION

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial

or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food & Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants can be obtained by calling the EPA Safe Drinking Water Hotline at 800-426-4791.

If present, elevated levels of lead can cause serious health problems,

especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Mid-Dakota Rural Water public water supply system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

DETECTED CONTAMINANTS

The table below lists all the drinking water contaminants that we detected during the 2023 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2023. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

2023 Water Quality Test Results

2023 TABLE OF DETECTED CONTAMINANTS FOR MID-DAKOTA RURAL WATER (EPA ID 2175)

Substance	90% Level	Test Sites > Action Level	Date Tested	Highest Level Allowed (AL)	ldeal Goal	Units	Major Sources of Contaminant
Copper	0.3	0	08/24/22	AL=1.3	0	mag	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	1	0	08/31/22	AL=15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.

Substance	Highest Level Detected	Range	Date Tested	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Major Sources of Contaminant
Alpha emitters	4	ND-4	11/30/22	15	0	pCi/l	Erosion of natural deposits.
Antimony	0.32		3/22/22	6	6	ppb	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Arsenic Atrazine	2 0.280	ND-0.280	3/22/22 11/13/19	10 3	0 3	ppb ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Allazine	5.25	ND-0.200				ррь	Runoff from herbicide used on row crops.
Barium	0.035		03/22/22	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of nautral deposits.
Lithium	60	52.0-60	04/12/23			ug/l	
Fluoride	0.5		10/04/23	4	<4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids (RAA)	20		03/20/23	60	0	nnh	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Selenium	0.96		03/22/22	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Total Coliform Bacteria	1	positive samples		1	0	pspm	Naturally present in the environment.
Total Trihalomethanes (RAA)	38.5		11/07/23	80	0	nnh	By-product of drinking water chlorination. Results are reported as a running annual average of test results.

Please direct questions regarding this information to Bill Sarringar with the Mid-Dakota public water system at 605-945-0437.

TERMS & ABBREVIATIONS USED IN TABLES

Action Level (AL) – the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. For Lead and Copper, 90% of the samples must be below the AL.

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Running Annual Average (RAA) – Compliance is calculated using the running annual average of samples from designated monitoring locations.

UNITS

ppb – parts per billion, or micrograms per liter (ug/l)

ppm – parts per million, or milligrams per liter (mg/l)

pspm – positive samples per month

pCi/I – picocuries per liter(a measure of radioactivity)

ug/L – micrograms per liter or parts per billion (ppb)



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WATER MATTERS NITRATES IN WELL WATER - PART 1

itrate is a compound that occurs naturally and also has many human-made sources. Nitrate is found in some lakes, rivers, and

groundwater in South Dakota. When nitrate is found in South Dakota groundwater, it is usually at very low concentrations. However, some groundwater has nitrate concentrations that present a health risk – especially for babies. Unfortunately, you cannot taste, see, or smell nitrate in your water.

Safe levels

Drinking water with concentrations of nitrate (measured as nitrate-nitrogen) below 10 milligrams of nitrate per liter of water (mg/L) is considered safe for everyone in your family. The U.S. Environmental Protection Agency, and State of South Dakota, drinking water standard for nitrate in public water

supplies is 10 mg/L. Public water supplies (PWSs), such as your regional water system, are prohibited from providing water to it's customers if nitrates exceed 10 mg/L. However, if you are using water from a non-public source (private well), monitoring nitrate levels is up to you.

Health risks

Consuming too much nitrate can affect how blood carries oxygen and can cause methemoglobinemia (also known as blue baby syndrome). Bottle-fed babies under six months old are at the highest risk of getting methemoglobinemia. Methemoglobinemia can cause skin to turn a bluish color and, left untreated, can result in serious illness or death.

Only recently has scientific evidence emerged to assess the health

impacts of drinking water with high nitrate on adults. A growing body of literature indicates potential associations between nitrate/

nitrite exposure and other health effects such as increased heart rate, nausea, headaches, and abdominal cramps. Some studies also suggest an increased risk of cancer, especially gastric cancer, associated with dietary nitrate/nitrite exposure, but there is not yet scientific consensus on this question.

To learn more about nitrate and methemoglobinemia, you can view or download an information sheet prepared by the Minnesota Department of Health on Nitrate and Methemoglobinemia at: www.health.state.mn.us/communities/environment/water/docs/contaminants/nitratmethemog.pdf



Test your well water

If you use a private well for drinking water, even if only occasionally, it is recommended to have the water tested for nitrate concentrations annually. You are responsible for keeping your well water safe and testing it as needed. The South Dakota Health Department's State Public Health Laboratory offers water quality testing services. Information can be found at: doh.sd.gov/laboratory/environmental-testing, along with a link to other certified water testing laboratories. Contact these laboratories to get sample containers and sampling instructions.

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