



# BDM

RURAL WATER SYSTEM

# Quality On Tap!

July 2022 | Volume 18, Issue 1

**A \$1.1 BILLION  
INVESTMENT  
IN SOUTH DAKOTA  
WATER PROJECTS**

CONSUMER CONFIDENCE REPORT | RATE INCREASE JULY 1 | ANNUAL MEETING RECAP

# FROM THE MANAGER

Rodney Kappes  
Manager, BDM Rural Water System, Inc.



I want to thank all the members that attended the annual meeting and the good questions that created good discussions on the present and future horizons for BDM.

The board and I have been having discussions for several years on how we continue to invest in BDM to increase redundancy, improve reliability and increase capacity. The State moved us closer to improving these 3 objectives with the approval of our application that BDM submitted for funding. BDM was approved for a loan of \$8,006,917, of which \$507,867 will be principal forgiven and \$3,530,083 in grant. This project will include a new well field with 4-5 new wells to supplement the current well field, with a new treatment plant for desperately needed redundancy and added capacity, and funding for paralleling some lines in areas that have capacity and pressure issues at times. We have started to work on the loan paperwork which could take several months to complete. In a couple of months, we will be able to drill some test wells to determine the adequacy of this site for a wellfield.

The monthly base fee is the revenue source to make term principal and interest payments, cash finance the smaller capital expenditures and build reserves for some larger projects. We are using capital reserve dollars to payoff some existing debt to minimize a rate increase due to the additional \$7,500,000 loan. As I have stated in previous articles, all the unfunded depreciation in the previous years and the rolling of existing debt into extended amortizations, will continue to require higher principal and interest payments well into the future. To pay for the \$27,255.00 monthly payment on the new loan will require an increase of \$10.00 in the monthly minimum rate. This will be phased in over a couple of years with the first \$5.00 increase effective 7-1-2022, which is payable on the bill due by 8-10-22. The second \$5.00 increase will take effect 7-1-2023, which is payable on the bill due 8-10-23.

The other part of your bill is the water rate charge per one thousand gallons of water used. This charge is for the operational expenses incurred to pump, treat, and deliver the water to you. In the past several months we have experienced price increases of 20-30% on most of our inputs such as water treatment chemicals and pipeline parts. PVC pipe has increased much more with the hope it will eventually come back down some over time. The board approved increasing all tiers of the water usage rate \$.25 per one thousand gallons of water used, effective 7-1-2022. If you use 6,000 gallons in a month, your water rate usage part of the bill will increase by \$1.25 per month. This increase is equivalent to a 5% increase compared to the 20-30% increase in costs we have had. The board will re-evaluate this in a year to determine if costs come back down to be in line with revenue or not.

For both the monthly minimum increase and the water usage rate increase by 7-1-2023, a user that uses 6,000 gallons per month, the monthly bill will increase by \$11.25 per month.

The board spends a considerable amount of time discussing investment to maintain reliability as the system ages, increase in system redundancy to reduce significant outages, and increased capacity required for an increasing demand from our customers. Significant improvements have been made over the past several years which have resulted in significant operational savings while at the same time making capital asset replacements/upgrades.

I want to thank you for being a customer of BDM. Hopefully warmer days with sunshine are around the corner. Be safe this spring, God Bless.



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# BDM MEMBERSHIP CORNER

## NOTICE OF RATE INCREASE



The BDM Board of Directors has authorized a water rate increase effective July 1st, 2022. Base rates will go from \$35.00 to \$40.00 (add \$1.00 for cellular meters). Water rates will go up \$0.25 per thousand gallons. This change will go in effect with the July bills, which are due by August 10th. See the Rate Schedule to the right for more information.

### The BDM Rural Water System offices will be closed:

**MONDAY, JULY 4TH – INDEPENDENCE DAY**  
**MONDAY, SEPTEMBER 5TH – LABOR DAY**

As always, if you have an emergency, please call the office at 605-448-5417 or toll free at 1-800-448-9236. You will then receive a message with the telephone number of the employee on call. Please call that person for assistance in an emergency only.

### CELLULAR METER NOTICE

The operators have been busy all winter and spring changing out old customer-read meters with cellular meters that are read automatically by the office staff. There are fewer than 150 meters left to be changed out. Many of these are inside homes, so appointments are needed.

If you are still reading your meter, please call the office to schedule a time for your meter to be changed out.

Once your meter has been changed out with a cellular meter, we strongly recommend that you sign up for WaterScope, our online customer portal that gives you the ability to monitor your usage, check for leaks, and set your own notifications. Please call the office with your email address and we will help you set up your account.

## BDM RURAL WATER SYSTEM, INC. RATE SCHEDULE (EFFECTIVE JULY 1, 2022)

### GENERAL USER RATES:

Debt Service monthly payment: \$40.00 per hookup per month for member-read meters, \$41.00 for cellular meters  
 \$6.95 per thousand gallons for the first 2,000 gallons used per month  
 \$5.95 per thousand gallons for the next 5,000 gallons used per month  
 \$4.95 per thousand gallons for the next 8,000 gallons used per month  
 \$3.95 per thousand gallons for over 15,000 gallons used per month  
**\*Add \$1.00 to the Monthly Totals Below if Hookup has a Cellular Meter\***

Gallons Used Per Month	Monthly Total	Gallons Used Per Month	Monthly Total
1,000	\$46.95	25,000	\$162.75
2,000	\$53.90	30,000	\$182.50
3,000	\$59.85	35,000	\$202.25
4,000	\$65.80	40,000	\$222.00
5,000	\$71.75	45,000	\$241.75
6,000	\$77.70	50,000	\$261.50
7,000	\$83.65	55,000	\$281.25
8,000	\$88.60	60,000	\$301.00
9,000	\$93.55	65,000	\$320.75
10,000	\$98.50	70,000	\$340.50
11,000	\$103.45	75,000	\$360.25
12,000	\$108.40	80,000	\$380.00
13,000	\$113.35	85,000	\$399.75
14,000	\$118.30	90,000	\$419.50
15,000	\$123.25	95,000	\$439.25
16,000	\$127.20	100,000	\$459.00
17,000	\$131.15	125,000	\$557.75
18,000	\$135.10	150,000	\$656.50
19,000	\$139.05	175,000	\$755.25
20,000	\$143.00	200,000	\$854.00

### ALL USERS:

No water is included in the debt service payment. All water used is in addition to the monthly debt service payment. Payments are due by the 10th of the month. A \$10.00 fee applies to all payments received after that date. Service is subject to disconnection if payment is not received by the 15th.

### AFTER HOURS & WEEKENDS WATER EMERGENCIES:

Please call the BDM Office at 605-448-5417 or 1-800-448-9236 & a message will direct you to the employee on call.

# HOW WETLANDS WORK



South Dakota is home to more than a million wetlands. Most are located in the eastern part of the state. Wetlands have wet (hydric) soils perfect for water loving plants (hydrophytes) like cattails, lily pads, and duckweed. The hydrology of a wetland, or the movement of water in relation to the land, is also unique. There are three main types of wetlands in the Big Sioux River watershed: lacustrine (associated with lakes), palustrine (ponds), and riverine (along rivers and streams).

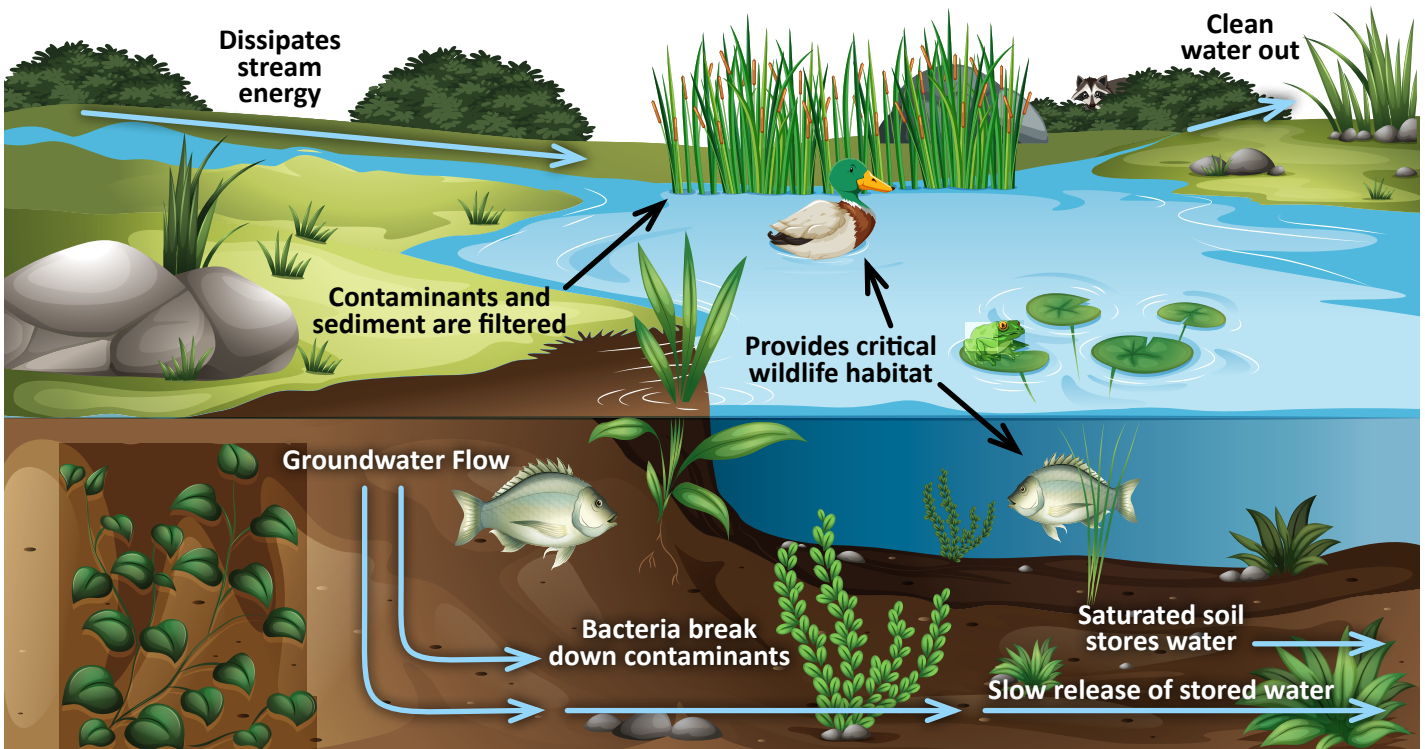
Wetlands used to be thought of as useless wet areas and many were drained or filled. We now know that wetlands are important ecosystems that provide many benefits not only to plants and animals, but also to us. There are now conservation and restoration programs in place to help restore and create new wetlands to help replace the ones that have been lost.

## THREE VERY IMPORTANT FUNCTIONS ARE:

1. Act as sponges providing flood and erosion control
2. Act as water filters, removing sediments, excess nutrients, and pollutants
3. Provide food and habitat for creatures.

Wetlands are known by **MANY** different names. Can you figure out some of the other names by unscrambling the letters below?

OOGANL _____	ENF _____
OGB _____	RSHMA _____
PLADINOOLF _____	ELTAD _____
FLADUTM _____	NOPD _____
RIME _____	AMPSW _____
NGROVMAE _____	BABILLONG _____





# A \$1.1 BILLION INVESTMENT IN SOUTH DAKOTA WATER PROJECTS

The South Dakota Department of Agriculture and Natural Resources (DANR) announced the Board of Water and Natural Resources has approved \$430,651,683 in grants and loans for rural water systems throughout South Dakota. These awards are part of more than \$1.1 billion in statewide awards approved by the board.

The \$430,651,683 total includes \$152,265,282 in grants and \$278,386,401 in low-interest loans to be administered by the Department of Agriculture and Natural Resources.

“I am pleased to announce this financial assistance is available,” said DANR Secretary Hunter Roberts. “These grants and loans will result in upgraded drinking water systems which is good for the users and the environment.”

The grants and loans were awarded from DANR’s Drinking

Water State Revolving Fund Program, Consolidated Water Facilities Construction Program, and American Rescue Plan Act (ARPA) to the following:

**Aurora-Brule Rural Water System** received a \$4,144,734 Drinking Water State Revolving Fund loan and a \$1,855,266 ARPA grant to address water pressure and reliability issues within the system by installing 10 miles of new parallel water main, a new water storage reservoir, a booster station, multiple loops within the system, and making other line improvements. These funds and local cash will cover the cost of the project. The loan terms are 1.875 percent for 30 years.

**Bear Butte Valley Water, Inc.** received a \$1,115,500 Drinking Water State Revolving Fund loan and a \$5,202,000 ARPA grant to make improvements to its water system.

Improvements include installation of 20 miles of water mainline to 24 new services connections to meet rural, residential, and livestock drinking water demands; construction of a new well with a higher capacity pump to provide a second water source; and miscellaneous site piping and appurtenances to address system deficiencies in the Blucksberg Service area. The loan terms are 2.125 percent for 30 years.

**BDM Rural Water System** received a \$8,006,917 Drinking Water State Revolving Fund loan with \$507,867 in principal forgiveness and a \$3,530,083 ARPA grant to construct a new water diversion system and treatment system for additional water supplies. In addition, 18 miles of pipe will be added to expand the system, lines will be looped for redundancy and pressure stabilization, and 382 water meters will be replaced. The loan terms are 1.875 percent for 30 years.

**Big Sioux Community Water System** received a \$17,788,000 Drinking Water State Revolving Fund loan to replace water mains and construct 35.5 miles of parallel water lines in various sizes. The loan terms are 2.125 percent for 30 years

**Brookings-Deuel Rural Water System** received a \$5,607,560 Drinking Water State Revolving Fund loan and a

\$2,703,240 ARPA grant to install 22 miles of 12-inch water main to meet the growing demands of rural customers including livestock and dairy operations; reduce the amount of water loss due to existing glued-joint pipe; and to interconnect the system's two primary water sources. In addition, six miles of 6-inch watermain will be installed to the Lake Cochrane service area to improve low pressures around the lake during periods of peak water use. This funding, local cash, and other funds will cover the cost of this project. The loan terms are 2.125 percent for 30 years.

**Clark Rural Water System** received a \$5,068,000 Drinking Water State Revolving Fund loan and a \$2,172,000 ARPA grant to address low pressures on the upstream side of Henry Booster Pump Station and the Crocker Ground Storage Reservoir by installing 13.5 miles of 10-inch and 7 miles of 8-inch parallel main line. The loan terms are 2.125 percent for 30 years.

**Clay Rural Water System** received a \$10,736,050 Drinking Water State Revolving Fund loan, a \$825,850 Consolidated Water Facilities Construction Program grant, and a \$4,955,100 ARPA grant to address increased water demand, outdated and undersized water mains, and storage facility limitations. The project includes new water storage reservoirs, booster station replacement, and water main improvements. The loan terms are 2.125 percent for 30 years.





**Davison Rural Water System** received a \$810,385 Drinking Water State Revolving Fund loan and a \$439,615 ARPA grant to address water supply and system pressure issues. In addition, the project will increase accuracy and efficiencies by upgrading from self-reading meters to automatic meter read technology. The loan terms are 2.125 percent for 30 years. This funding and local cash will cover the project costs.

**Grant-Roberts Rural Water System** received a \$4,360,400 Drinking Water State Revolving Fund loan and a \$2,433,600 ARPA grant to install approximately 24 miles of pipeline and other miscellaneous apparatus to add capacity so each reservoir can be filled during high water use periods. In addition, pipeline looping and parallels will be completed to distribute water to existing and new customers as well as improve the reliability of the water system. This project will include a connection to provide bulk water service to the residents of Corona. The loan terms are 2.125 percent for 30 years.

**Hanson Rural Water System** received a \$2,356,165 Drinking Water State Revolving Fund loan and a \$1,273,835 ARPA grant to address water supply and pressure issues within the system by paralleling and looping existing mains to meet current demands. In addition, the project will upgrade metering methodology by moving from self-reading meters to automatic meter read technology to increase accuracy. The loan terms are 1.625 percent for 30 years. This funding package along with local funds will complete the cost of the project.

**Joint Wellfield Inc.** received a \$6,592,000 Drinking Water State Revolving Fund loan and a \$2,868,000 ARPA

grant to construct a new gravity filtration water treatment plant to increase the treatment capacity of the system and drill two new wells. The loan terms are 2.125 percent for 30 years. These funds along with local cash will cover the cost of the project. This project is a joint effort between the Brookings-Deuel Rural Water System and the Kingbrook Rural Water System.

**Kingbrook Rural Water System** received a \$22,850,000 Drinking Water State Revolving Fund loan and a \$9,900,000 grant to install an elevated tank near Arlington, a booster pump station near Bryant, and relocate and resize pipeline segments along Highway 25 north of DeSmet. In addition, Kingbrook has several existing facilities that are operating beyond its firm capacity and need to be replaced or improved. These include the Badger Pump Station, DeSmet Water Treatment Plant, Chester Water Treatment Plant, Oakwood Pump Station, and the Orland Pump Station. The loan terms are 2.125 percent for 30 years. These funds along with local cash will cover the cost of the project.

**Lewis & Clark Regional Water System** received a \$13,136,100 ARPA grant to expand its water system and increase capacity. This grant will greatly benefit rate payers, as the project has a direct impact on the water rates paid by its customers.

**Lincoln County Rural Water System** received a \$2,653,700 Drinking Water State Revolving Fund loan and a \$1,137,300 ARPA grant to install 16.5 miles of new pipeline to serve the growing developments surrounding the City of Sioux Falls and City of Harrisburg without negatively impacting existing customers. The loan terms are 2.125 percent for 30 years.



**Shared Resources Inc.** received a \$69,983,400 Drinking Water State Revolving Fund loan and a \$38,276,600 ARPA grant for a joint effort between Minnehaha Community Water Corporation and the Big Sioux Community Water System. The project includes a treatment plant, well field, distribution pipeline, and two storage tanks. Shared Resources will treat and deliver the water to the two systems, which will then distribute water to their existing customer base. The loan terms are 2.125 percent for 30 years.

**Sioux Rural Water Systems** received a \$3,202,650 Drinking Water State Revolving Fund loan and a \$1,778,350 ARPA grant to construct a new elevated tank and pipeline to address inadequate storage in the existing system. A pipeline will be installed in two locations to improve service pressure to

existing customers and provide adequate delivery to the proposed elevated tank. The loan terms are 2.125 percent for 30 years. These funds and local cash will support the project.

**South Lincoln Rural Water System** received a \$10,384,082 Drinking Water State Revolving Fund loan and a \$5,677,918 ARPA grant to meet increasing demands on its existing service area and construct new water system facilities. The new facilities include an elevated tank south of Canton, a pump station north of Canton, and a new water treatment plant south of Worthing. The loan terms are 2.125 percent for 30 years. These funds and local cash will support the project.

**Southern Black Hills Water System** received a \$540,000 Drinking Water State Revolving Fund loan and a \$3,060,000 ARPA grant to install a new well, booster pump station, storage, a new chlorination system, a SCADA system, and water main to connect the Paramount Point and Spring Creek Acres Service areas. The loan terms are 2.125 percent for 30 years.

**Tri-County/Mni' Waste Water Company** received a \$1,238,302 ARPA grant to make improvements to the raw water line, which will stabilize a landslide threatening the entire system's water source. This grant and other funds will cover the cost of these improvements. Mni' Waste Water Company also received a \$6,448,598 ARPA grant to replace an undersized pipeline along Highway 63 causing high friction loss and low pressure issues. In addition, new treated water pipeline, water tower, valves, pumps, and air releases will be installed.

**Tripp County Water Users District** received a \$9,250,000 Drinking Water State Revolving Fund loan and

**Mid-Dakota Rural Water System** received a \$29,467,750 Drinking Water State Revolving Fund loan, a \$2,000,000 Consolidated Water Facilities Construction Program grant, and a \$13,867,250 ARPA grant to install a new water meter system, construct parallel pipe, and make improvements to the water treatment system including a new backwash recovery system and additional membrane capacity. The loan terms are 1.875 percent for 30 years.

**Minnehaha Community Rural Water System** received a \$44,349,000 Drinking Water State Revolving Fund loan to install new water main to keep up with increasing demands in the area. Improvements include installation of approximately 7.3 miles of 20-inch diameter water main, 19 miles of 16-inch diameter water main, a new control valve station, a 1.5 million gallon water tower, and a new reservoir and booster station. The loan terms are 2.125 percent for 30 years.

**Perkins County Rural Water System** received a \$4,589,000 Drinking Water State Revolving Fund loan and a \$2,471,000 ARPA grant to add two elevated storage tanks in their Central and Lemmon service areas to provide adequate storage on high-capacity days and add a ground storage tank at the main booster station. Transmission and distribution lines will also be upgraded to accommodate increased pressure and handle peak demands. The loan terms are 1.625 percent for 30 years.

**Randall Community Water District** received a \$6,325,375 Drinking Water State Revolving Fund loan and a \$2,710,875 ARPA grant to update waterlines to accommodate growth and maintain pressure to existing customers in Cedar Grove Waterline North area, Lakeview Colony Waterline North area, and Carda Tank Waterline South area. The loan terms are 1.875 percent for 30 years.



a \$4,050,000 ARPA grant to replace two storage tanks, parallel and loop lines to increase water pressure, and expand their well field to address supply issues. The terms of the loan are 0.0 percent for 30 years.

**TM Rural Water District** received a \$5,913,600 Drinking Water State Revolving Fund loan and a \$2,534,400 ARPA grant to address deficiencies in its distribution system due to increasing demands attributed to drought and new customers. Improvements includes installation of 4 miles of parallel 12-inch watermain. The loan terms are 1.625 percent for 30 years.

**WEB Water Development Association** received a \$6,520,000 ARPA grant to upgrade its raw water intake pipe size from 30-inch to 48-inch in anticipation of a much larger drinking water regionalization project. This funding along with other funds will support the project.

**West River/Lyman Jones Rural Water System** received a \$2,800,000 Drinking Water State Revolving Fund loan and a \$1,200,000 ARPA grant to install 8-inch, 6-inch, and 4-inch PVC water main pipes to replace existing undersized main services in Mellette, Haakon, and Lyman counties. In addition, a ground storage tank will be replaced in Pennington County. The terms of the loan are 1.625 percent for 30 years.

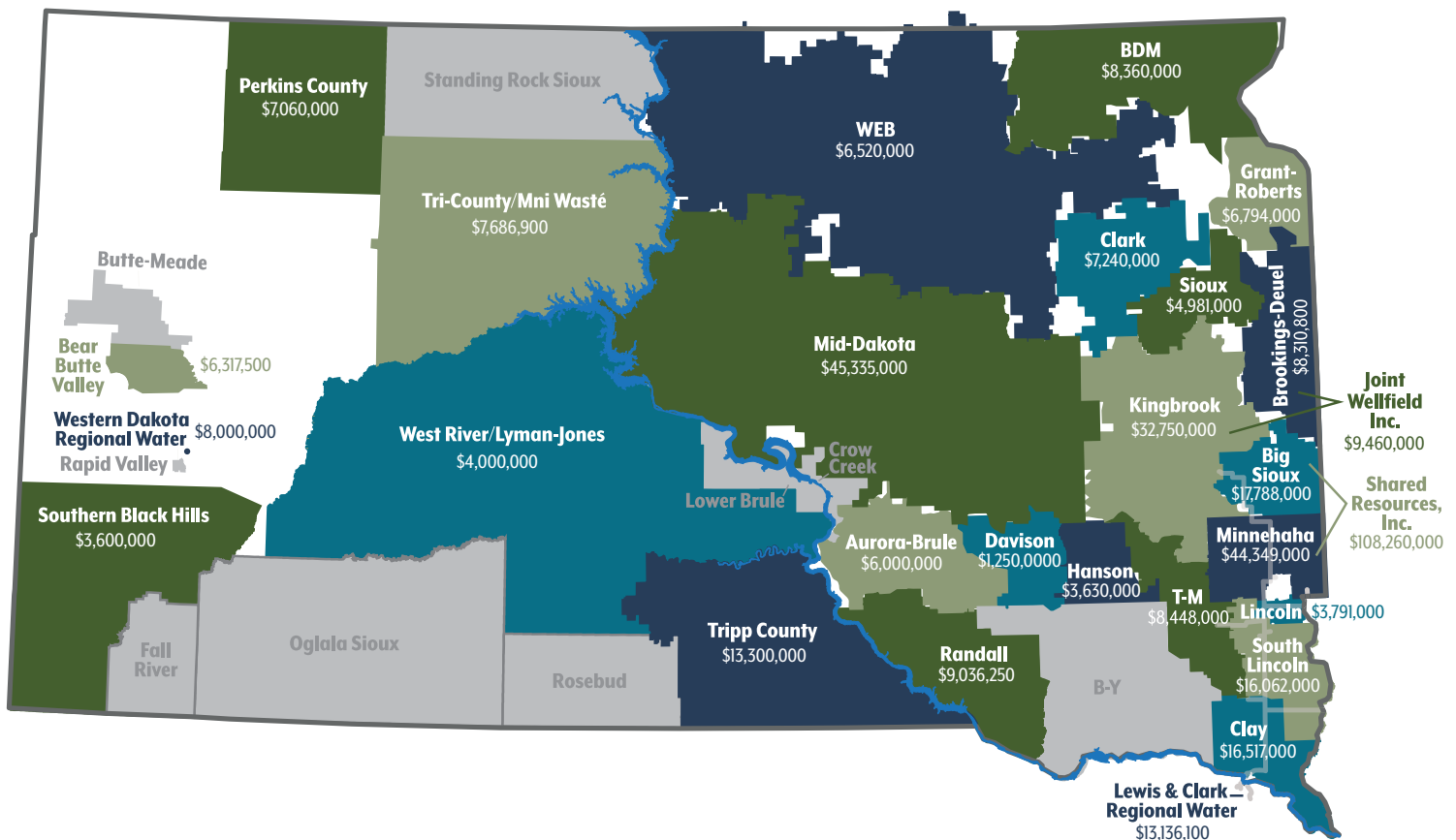
**Western Dakota Regional Water System** received a \$8,000,000 ARPA grant to hire an engineering firm to complete a facility plan and preliminary design for a drinking water expansion project from the Missouri River to Western South Dakota. The study is necessary to address source water capacity and resiliency in the event of a long-term drought for the region.

The American Rescue Plan Act provides grants for eligible water, wastewater, storm water, and non-point source projects. The state of South Dakota is making a historic investment in infrastructure by dedicating \$600 million of American Rescue Plan Act funding for local water and wastewater infrastructure grants.

The Consolidated Water Facilities Construction Program, funded in part by revenues from the Petroleum Release Compensation Tank Inspection fee and the sale of lotto tickets, provides grants and loans for water, wastewater, and watershed projects.

The State of South Dakota and the U.S. Environmental Protection Agency fund the Drinking Water State Revolving Fund Program, which provides low-interest loans for public drinking water system projects. The program is funded through a combination of federal appropriations, loan repayments, and bonds.

# FUNDING ALLOCATIONS





# WESTERN DAKOTA REGIONAL WATER SYSTEM

Access to a reliable and plentiful source of high quality drinking water is critically important from a public health and safety standpoint, especially in western South Dakota, which has a more arid climate and limited water supplies. This is compounded by population and industrial growth.

The Western Dakota Regional Water System (WDRWS) will serve western South Dakota where the population and water needs are both expected to more than double in the next century. Due to the area's growing population and the unpredictable nature of future drought projections, the WDRWS is needed to ensure reliable ongoing access to drinking water in western South Dakota.

An example of the need for supplemental water supplies is southwestern South Dakota, which has historically heavily relied on groundwater from the Minnelusa and Madison aquifers and surface water from Rapid Creek and Cleghorn Springs as a drinking water supply. These drinking water sources have been adequate. However, as the regional population grows and is combined with drought, the

demand for water will exceed the current supply.

To determine the future water needs for the area, the West Dakota Water Development District (WDWDD) commissioned the South Dakota School of Mines and Technology (SDSMT) in 2017 to complete the Missouri River Water Allotment Study for Future Use Water Permit 1443-2.

The WDRWS and its engineering team will expand upon these efforts to understand the needs of those who live in western South Dakota and to dive even deeper into water service for this region.

WDRWS was provided an \$8 million American Rescue Plan Act (ARPA) Grant from the South Dakota Department of Agriculture and Natural Resources and will use that financial support to develop:

1. more detailed regional water needs assessments;
2. concept designs for a fully regional system; and
3. financial analysis of the regional concepts, Tribal

## PROGRESS TO DATE

### DECEMBER 2019

- West Dakota Water Development District (WDWDD) receives South Dakota Mines Report

### MARCH 2020

- WDWDD asks Banner Associates to start West River discussion to gauge interest

### DECEMBER 2020

- WDWDD receives report to proceed with:
  - Governance
  - Technical Evaluation
  - Funding

### JANUARY 2021

- WDWDD commissions Water Use Study
- Asks for a new non-profit to be convened

### SEPTEMBER 2021

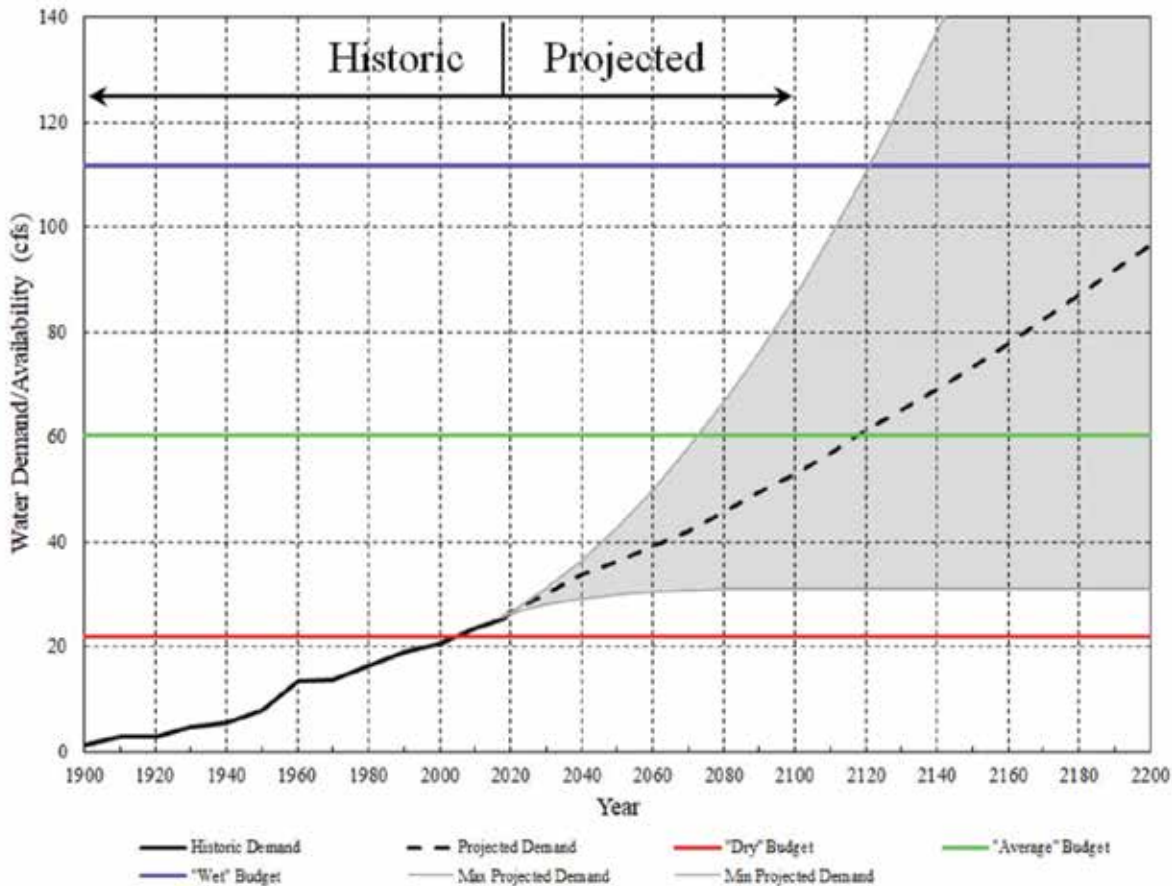
- Western Dakota Regional Water System (WDRWS) Non-Profit is formed

consultation, and completion of National Environmental Act compliance.

The outcome of these efforts will be used to help secure federal authorization and for the construction of the project.

For more information on the Western Dakota Regional Water System, please contact Cheryl Chapman, Ph.D., PE, Executive Director, WDRWS via email at [info@WDRWS.org](mailto:info@WDRWS.org), or call 605-519-7333.

*“As population in the area increases, the need to ensure water security will grow even greater. Therefore, local entities with a stake in our water security should pool their resources to ensure that they are proactive in securing future sources of water, one of which could involve from the Missouri River.” (Source: 2019 SDSMT Study)*



### INITIAL QUESTIONS

1. Who's interested in participating in the project?
2. How much water do they need?
3. When do they need the Water?
4. How much will this cost the end users?

*Credit: South Dakota School of Mines & Technology (2019)*

**Ensuring long-term water security for western South Dakota will be a challenging feat.** However, the ARPA grant secured by the WDRWS Board of Directors and staff provides a unique opportunity to overcome the most challenging part of providing long-term reliable water service to the region. We are taking the first step by seeking answers to some initial questions shown above.

The funding already secured for this project will help answer these questions and so much more! However, it will be essential for the project to have broad support and participation from water systems across the region.

#### OCTOBER 2021

- Water Use Study Completed

#### NOVEMBER 2021

- Named on the State Water Plan

#### DECEMBER 2021

- Water Summit
- WDRWS First Annual Membership Meeting

#### JANUARY 2022

- Submits Drinking Water Facilities Funding Application
- WDRWS interviews 3 engineering teams for a competitive selection

#### FEBRUARY 2022

- WDRWS Selects AE<sub>2</sub>S and its teaming partners KLJ and Black & Veatch

#### APRIL 2022

- WDRWS receives \$8M, 100% grant from SD Department of Agriculture and Natural Resources

# RURAL WATER CROSSWORD & WORD SCRAMBLE CONTEST

## WEATHER



### SCRAMBLE ANSWER



### ACROSS

- 2. Sun blocker
- 4. A line of intense, widespread, and fast-moving storms that moves across a great distance and is characterized by damaging winds.
- 7. Transport to Oz
- 9. Damp air

- 11. Frozen dew
- 13. Severe weather is happening in your area
- 14. Aptly contains the letters R-A-I-N
- 15. Prolonged dry spell

### DOWN

- 1. Overflow

- 3. Measured in degrees
- 5. Major snowstorm
- 6. A meteorological phenomenon in which rain falls while the sun is shining
- 8. Comes in a flash
- 10. Rainy day delight
- 12. Means severe weather is possible, but not yet happening

**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](http://www.sdarws.com/crossword.html) with the correct phrase by July 15, 2022 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 Greg Anderson with Kingbrook RWS who had the correct phrase of "Weed it and Reap" for April 2022.

# BDM Rural Water System

## Annual Drinking Water Quality Report

January 1, 2021 – December 31, 2021

### Secretary's Award

**The Brown-Day-Marshall RWS has supplied ten 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 Agriculture and Natural Resources.**

### Water Quality

Last year, the Brown-Day-Marshall RWS monitored your drinking water for possible contaminants. These two pages are 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 5,673 customers an average of 1,277,000 gallons of water per day. Our water is groundwater that we produce from local wells. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for the Brown-Day-Marshall RWS public water supply system is low.

**For more information about your water and information on opportunities to participate in public meetings, call 605-448-5417 and ask for Rodney Kappes.**

### 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. FDA 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 Environmental Protection Agency's Safe Drinking Water Hotline (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/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants can be obtained by calling the Environment Protection Agency's Safe Drinking Water Hotline (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 Brown-Day-Marshall RWS 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 for drinking or cooking. If you are concerned about lead in your water, you 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](http://www.epa.gov/safewater/lead).

### Detected Contaminants

The table below lists all the drinking water contaminants that we detected during the 2021 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, 2021. 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.

## 2021 Table of Detected Contaminants for BDM RWS (EPA ID 0882)

Substance	90% Level	Test Sites > Action Level	Date Tested	Highest Level Allowed (AL)	Ideal Goal	Units	Major Source of Contaminant
Copper	0.5	0	07/23/19	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	4	1	07/27/19	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 Source of Contaminant
Fluoride	0.50	0.49 - 0.50	08/11/21	4	<4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids (RAA)	6.40		08/11/21	60	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Total trihalomethanes (RAA)	3.05		08/11/21	80	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.

Please direct questions regarding this information to Mr Darin Roehr with the Brown-Day-Marshall RWS public water system at (605)448-5417.

## 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.

**Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water. For turbidity, 95% of samples must be less than 0.3 NTU.

**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)



*Rodney Kappes, General Manager, gives a recap of 2021 and a preview of things to come in 2022.*

# BDM ANNUAL MEETING RECAP

The 42nd annual meeting of BDM Rural Water System was held on Monday, March 28th, 2022 at 6:00 pm in the BDM building in Britton. 35 voting members and 12 guests were in attendance, along with Brian Bergantine from AE2S, Jeremiah Corbin from SDARWS, and BDM employees.

Torre Raap, Chairman of the Board, called the meeting to order and gave the Board Report.

Terri Post of Quam, Berglin, and Post P.C. appeared via video conference and reviewed the audit.

Assets as of December 31st, 2021 totaled \$23,937,955.56. Total liabilities were \$9,385,195.93. Water sales for 2021 were \$3,333,873.60. Total gallons sold were 444,117,280.

Attorney Dan Smeins appeared via video conference and reported that the incumbent directors for District Three (Hal Treeby), District Four (Marc O'Brien), and District Six (Alex Suther) were the only members to submit nominating petitions, and therefore are re-elected to their director positions.

General Manager Rodney Kappes presented the Manager's Report. BDM experienced record usage in 2021 and taxed the system to its limit, but with the dedication of the operators, the system kept up. Our source water was discussed. BDM has received additional permits from the state allowing us

to draw more water from the aquifer to keep up with current water demands. Operational and material costs have risen dramatically in the last couple of years. Members should expect a rate increase in the next few months. The WINS (Water in Northeast South Dakota) project was explained to the members.

Brian Bergantine of AE2S addressed the members with a presentation about current industry trends affecting BDM. Material cost increases, material shortages, and inflation are some of the obstacles water systems are now facing. Labor shortages and contractor availability are also complicating systems' construction and maintenance plans.

Jeremiah Corbin of the SD Association of Rural Water Systems spoke briefly about the services SDARWS provides to its member systems, and thanked BDM for its continued support and membership.

Manager Kappes responded to several questions from the members and thanked them for their interest and input.

Drawings for prizes were held and supper was served to those attending. If you have any questions or comments regarding the annual meeting, please contact General Manager Rodney Kappes or any of the Board members. We appreciate your input.



*Chairman of the Board of Directors, Torre Raap, welcomes members to the Annual Meeting.*



*Brian Bergantine of AE2S addressed members about issues currently affecting rural water systems.*



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# WATER MATTERS



## The Cost of Pipe

As described elsewhere in this issue of *Quality on Tap!*, public water suppliers (PWS) all across the State of South Dakota are benefitting from access to \$600,000,000 provided by the federal American Rescue Plan Act (ARPA). The amount of money being made available is unprecedented, and it will provide once-in-a-lifetime opportunities for the various PWS's that are successful in obtaining ARPA funds.

At the same time, this opportunity will present some very real challenges, as PWS's scramble to get project designs completed, obtain the necessary materials (pipe, pumps, etc.) and line up contractors to do the actual work. Further complicating things is a hard deadline of December 31, 2026, for the expenditure of the ARPA funds.

Unfortunately, inflation and supply chain issues will mean that the available grant and loan dollars won't go as far as they could a year or two ago. ARPA funding is largely available right away, but the sudden influx of support does not mean that engineers, suppliers and contractors can increase their capabilities on a similar time line. Project planners need to prepare for cost increases and shortages related to labor and materials and adjust bid expectations accordingly.

*PVC & Pipe Weekly* reported in the April 29, 2022 edition that demand for PVC pipe remains strong enough that some pipe makers are allocating pipe to customers due to a large backlog of orders. In addition, some ductile iron pipe distributors report orders are 40 months out, so some customers are switching to PVC pipe which will likely increase the shortage. Along with supply chain issues, the cost of PVC pipe has increased steadily, rising over fifty percent (50%) in the past two years.

for funding, odds are good that the ARPA funds will allow early implementation of a project that was going forward anyway, albeit with a little more grant assistance than might have been expected. If planning began with the advent of ARPA funding, things could be a little trickier, as available resources, whatever they might be, are likely to have been swept up by the early starters.

No matter what type of project is being implemented with ARPA funding, cost increases and supply chain issues are a reality that need to be budgeted for in the next few years. Although no one has



a (working) crystal ball that tells us when things might get back to normal, careful thought and decision making on the front end can minimize drastic impacts to project budgets for the duration of the ARPA funding opportunities. Compared to no available funds, these are problems that most people are happy to have!

### WHAT DOES THIS MEAN FOR YOUR LOCAL PWS? If plans and designs were in place and simply waiting

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