



BDM

RURAL WATER SYSTEM

Quality On Tap!

July 2019 | Volume 15, Issue 1

**A DAY IN THE
LIFE OF A WATER
OPERATOR**

**RURAL WATER
SYSTEM SPOTLIGHT**

**BIG SIOUX COMMUNITY
WATER SYSTEM**

TRU SHRIMP

**SEEKS TO BECOME
INDUSTRY LEADER**

RATE INCREASES | ANNUAL MEETING RECAP

FROM THE MANAGER

Rodney Kappes
Manager, BDM Rural Water System, Inc.



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GREETINGS FROM THE TEAM AT BDM:

The primary events at BDM, outside the normal maintenance and service issues, revolves around the continuation of our capacity upgrade project. The remainder of the original \$3,600,000 project was bid this past winter and also came in underestimates. The total project came in \$485,000 underestimates. We've been adding some additional upgrades as we are moving through the project, which will add some additional costs, but still well below the original \$3,600,000 estimate. Up to this point, we have not advanced any funds from our CoBank credit facility, as we have been using the capital reserve funds that had been set aside for this project. As of this writing, one of the bigger pumps and motors in each the water treatment plant and reservoir four are operating and performing as designed. The second pump/motor combination for each of these locations is expected to become operational the week of May 28th. This piece of the project is significant as we can now move more water to the south and west. Currently we're moving an additional 30 gallons per minute, with additional capacity available as we are running the motors at less than capacity. The 30 gallons per minute equates to an additional 43,000 gallons per 24-hour period.

The two major parts of this project that are in process are the new 200,000 gallon reservoir and completing the Highway 12 bore west of Groton. The new reservoir will add much needed capacity during those high usage days that we can draw down and then refill during the nighttime hours. This piece has a substantial completion date of October 15, 2019 with a final completion date of November 30th, 2019. The Highway 12 bore was not able to be completed last fall due to an unmarked line that was hit and needed to be repaired before we could complete that connection. This line is the last stretch of the 26 miles of the new pipe that needs to become operational. We need dry weather to dry up this area to complete this connection.


We are seeing measurable capacity improvements with the parts of the project that have become operational. We are looking forward to the completion of this whole project and the improvements it will have for our customers.

...continued on page 14



OUR MISSION

IS TO ENSURE OUR MEMBERS HAVE QUALITY WATER AT A REASONABLE PRICE FOR HOUSEHOLD, LIVESTOCK AND COMMERCIAL USE FOR GENERATIONS TO COME.

 **STATEMENT OF NON-DISCRIMINATION:** In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

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

NOTICE OF RATE INCREASE

The BDM Board of Directors has authorized a rate increase beginning with the July 2019 billing (bills payable by August 10th).

All rate tiers will increase by 20 cents per thousand gallons. This rate increase will go into effect July 2019 for all general, lake, and bulk hookups. Municipality rates will increase beginning with the January 2020 billing (bills payable by February 10th).

The BDM Rural Water System offices will be closed:

THURSDAY, JULY 4TH (INDEPENDENCE DAY)

MONDAY, SEPTEMBER 2ND (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.

NEW EMAIL ADDRESSES

We have changed over to a new email system. Please note our new email addresses:

Rodney Kappes, General Manager:
rodneyk@bdmruralwater.com

Mark Hagen, Operations Manager:
markh@bdmruralwater.com

Darin Roehr, Sr. Systems Operations Specialist:
darinr@bdmruralwater.com

Shannon Wegleitner, Office Manager:
shannonw@bdmruralwater.com

BDM RURAL WATER SYSTEM, INC. RATE SCHEDULE (EFFECTIVE JULY 2019)

General User Rates:

Debt Service monthly payment: \$35.00 per hookup per month for member-read meters, \$36.00 for cellular meters

\$6.70 per thousand gallons for the first 2,000 gallons used per month

\$5.70 per thousand gallons for the next 5,000 gallons used per month

\$4.70 per thousand gallons for the next 8,000 gallons used per month

\$3.70 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	41.70	25,000	151.50
2,000	48.40	30,000	170.00
3,000	54.10	35,000	188.50
4,000	59.80	40,000	207.00
5,000	65.50	45,000	225.50
6,000	71.20	50,000	244.00
7,000	76.90	55,000	262.50
8,000	81.60	60,000	281.00
9,000	86.30	65,000	299.50
10,000	91.00	70,000	318.00
11,000	95.70	75,000	336.50
12,000	100.40	80,000	355.00
13,000	105.10	85,000	373.50
14,000	109.80	90,000	392.00
15,000	114.50	95,000	410.50
16,000	118.20	100,000	429.00
17,000	121.90	125,000	521.50
18,000	125.60	150,000	614.00
19,000	129.30	175,000	706.50
20,000	133.00	200,000	799.00

LAKE USER RATES:

Debt Service monthly payment: \$28.00 per hookup per month for member-read meters, \$29.00 for cellular meters.

\$6.70 per thousand gallons of all water used per month.

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.

OUT AND ABOUT

JUNE

JUNE 22 – OAAHE DAYS ARTS & MUSIC FESTIVAL, PIERRE

We welcome you to join us for this fun community event along the Missouri River in Pierre. The 2019 Oahe Days Music and Arts Festival will kick off Thursday night, June 20, and run Friday, June 21, 3-8 p.m., and Saturday, June 22, 10 a.m.-8 p.m. There will be arts and crafts and other vendors, as well as a variety of food, drink and music. Activities include the Cardboard Boat Regatta, carnival rides, inflatables and more. Oahe Days is fun for the whole family. www.oahedays.com

JUNE 22-23 – BROOKINGS KITE FESTIVAL

The Brookings Kite Festival is a free community event for all ages held annually during the 4th weekend in June. Fly or buy a kite, view massive demonstration kites, build and shoot air rockets and have fun outdoors! The 2019 Brookings Kite Festival will take place on Saturday, June 22 and Sunday, June 23 at the Fishback Soccer Park from noon to 4:00. www.facebook.com/pg/brookingskitefestival

DATES VARY - 1880 TRAIN WILD WEST SHOOTOUT, KEYSTONE

Experience an old west shootout aboard the 1880 Train this summer. Dates are June 6, 13, 20 and 27; July 3, 5, 6, 11, 18 and 25; August 8, 15 and 22 (3:45 p.m. departures); and September 1. The shootout begins at the Hill City station. A few bad guys board the train and hide their treasure. The train is stopped by cowboys and “held up” halfway between Hill City and Keystone. It’s a good thing the sheriff is in town! Take the 6:45 p.m. Hill City to Keystone departure to experience the shootout. Admission: See our website for ticket prices. www.1880train.com/old-west-shootout.html

JULY

3 – MINA LAKE 3RD OF JULY FREEDOM FESTIVAL

Come for the live music and stay to watch the fireworks over Mina Lake at the annual Freedom Festival on Wednesday, July 3. Some activities include: kids fishing, inflatables, kids face painting, lunch at The Wakeside Bar & Grill, Jet Ski Barrel Racing, live music at 9 p.m., and then the fireworks display at dusk. No admission fee. www.facebook.com/minalakesouthdakota/

5-7 – BADLANDS ASTRONOMY FESTIVAL

The festival brings together space science professionals, amateur astronomers, educators and visitors for a three-day celebration. Attendees will enjoy spectacular dark night skies at public star parties. During the day, a variety of family-friendly events will provide opportunities to learn about the night sky, the sun and space exploration. Special guest speakers, stargazing activities, solar observing opportunities, and more will take place at the Visitor Center and Cedar Pass Amphitheater. Admission: The festival is free. Park admission fees are required. <https://www.nps.gov/badl/planyourvisit/night-sky-program.htm>

DATES VARY – LAURA INGALLS WILDER PAGENT, DESMET

Based on Laura Ingalls Wilder’s Little House books, the 2019 pageant - By the Shores of Silver Lake - depicts the Ingalls family’s move to Dakota Territory and their settlement in De Smet. This is an outdoor theater experience. Some seating is provided, but lawn chairs are welcome (jackets and/or blankets are recommended). The gates open at 6 p.m. and the performance begins at 8 p.m. The 2019 performance dates are July 5-7, 12-14 and 19-21. Admission: Adults are \$12, children 6-12 years old are \$8, children 5 and under are free. All seating is general admission.

16 – CORN PALACE STAMPEDE RODEO, MITCHELL

For 49 years, the city of Mitchell has hosted the Corn Palace Stampede Rodeo. This PRCA rodeo features performances at 8 p.m. Thursday, Friday, Saturday and Sunday nights. Other events during the six-day celebration include a golf tournament, Mutton Bustin’, parade, Cowboy Church Service, and a chili cook-off. Admission: See our website for ticket information. www.cornpalacestampede.com

19-21 – GOLD DISCOVERY DAYS, CUSTER

In 1874, Lieutenant Colonel George Custer led the troops of the 7th Cavalry into the Black Hills and discovered gold near present day Custer. To celebrate this event, Custer has the annual Gold Discovery Days celebration. Included are an Arts & Crafts Fair in the park, bed races, inflatable bouncy houses for the kids, volleyball tournaments, a quilt show, an archery shoot, a 5K Fun Run/Walk, hot air balloon rally, stick horse rodeo, and the largest parade in the Black Hills. www.visitcuster.com/Gold-Discovery-Days

AUGUST

3-4 – RIVERSIDE PARK DAYS, FLANDREAU

Riverside Park Days is an annual, two-day festival held on the banks of the Big Sioux River. During Park Days, the city park is filled with craft and food vendors, hours of musical entertainment, children’s activities and various adult activities including a softball tournament and bean bag tournament. The festival celebrates all there is to love about a small town in the summertime and we hope you’ll join us! Hours: Sat – 10-5, Sun, 11-3. Team of Angels does begin breakfast at 7:00am Sunday in conjunction with a church service.

24 – GREAT DAKOTA WINE FESTIVAL, VERMILLION

Tastings, grape stomp, amateur wine-making competition, cooking and sangria demonstrations, winery tours, music, food and art. Tickets: \$15 www.greatdakotawinefest.com

24-25 – FALL RIVER HOT AIR BALLOON FESTIVAL, HOT SPRINGS

Join us in Hot Springs in the southern Black Hills for two days of hot air balloon fun. Balloon launches are scheduled for both days about 6:15 a.m. from the Hot Springs Municipal Airport. On Saturday, August 24, there will be static displays and glider rides at the airport, a Night Glow at the Southern Hills Golf Course, and an Art Walk & Chalk in downtown Hot Springs. Refreshments will be available. Events are dependent on weather. Free Admission. www.fallriverballoonfest.com

DON'T TAKE THE BAIT!

When in doubt, check it out. If an email sent to you has any of these red flags, verify with the sender before clicking on any link or downloading an attachment.

Message Header

Do I know the sender?

Is this from someone I usually communicate with?

Does the sender's email address have a suspicious domain?

Is this an unexpected or unusual email from this sender?

Is the email sent at an odd time, outside regular business hours?

Is the email sent to an unusual group of people?

Does the subject line match the content of the email?

Think Before You Click

You should always take caution when clicking on a link or opening an attachment. Before you click:

1. Hover your mouse over the link and be sure the link address displayed is to a website you'd expect.
2. Take a good look at the web address displayed to be sure it doesn't contain any spelling errors.

From: YourCEO@yourorganization.com
To: You@yourorganization.com
Date: Monday, February 3, 16, 05:45am
Subject: Direct Deposit System Update

Sally, You are receiving this email because you have authorized Bank payroll to pay you through direct deposit.

Due to a recent update to system, your direct deposit routing and account number will need to be updated by Tuesday. Failure to do so will result in the loss of direct deposit status and require you to pick up your pay check from payroll each pay period. Remember to save the direct deposit emails for your records.

To update your direct deposit information please click the link below and verify your account:

[Employee Portal](#)

Office of Payroll
Your CEO

Message Body

Is the email written in a style consistent with the sender?

Does the email contain bad grammar, odd styling, or spelling errors?

Is there a link or attachment?

Does the email just seem "off" or give you an uneasy feeling?

Is the sender asking for personal, financial, or customer information?

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TRU SHRIMP SEEKS TO BECOME INDUSTRY LEADER

By *Mary Gales Askren*

Appearances can be deceiving.

From the outside, the Tru Shrimp Balaton Bay Reef in Balaton, Minn., is as sterile as a prison. Inside, the red-lighted expanse of steel and concrete is evocative of infrastructure tunnels in futuristic movies.

The smell, though, is the smell of the sea and life, like a major aquarium where the teeming life of the ocean is opened for visitors to see.

Even employees of the fledgling company are a little in awe of the newest development in their quest for a product which will set new standards for shrimp production in the nation – the reef which took their concept from innovation tanks and a pilot basin to a full, though scaled back, stack of tidal basins.

"It doesn't have the same taste as other shrimp," Jamie Brink-Thordson, director of sales and marketing, said about the crustaceans which have been raised there.

The shrimp is said to be firm and sweet and fresh – not sweet like fruit, but without the fishy taste of much shrimp purchased by consumers in the United States. That taste is the result of the way shrimp is raised, harvested and processed.

"A lot of people believe the shrimp they eat comes from the Gulf and is freshly caught," said Robert Gervais, senior director of operations.

Instead, it comes from Asia or South America. In fact, according to Tru Shrimp, 90 percent of the 1.9 billion pounds of shrimp consumed by Americans is imported and has been frozen and thawed several times as it makes its way to American tables.

Tru Shrimp wants to change that. By constructing harbors and producing shrimp in the Midwest, they intend to make Tru Shrimp a brand

as recognizable as Farmland bacon, Blue Bunny ice cream and Chicken of the Sea tuna.

Problem solving is important

The company announced in January they intend to build their first commercial harbor in Madison, SD. The facility will include two hatcheries, a nine-acre reef with 256 basins, and a water reclamation facility. Within the first year, Tru Shrimp plans to raise 7.5 million pounds of shrimp.

At present, the projected cost of the facility is \$300 million. That is subject to change, in part because Tru Shrimp is breaking new ground and is literally inventing the wheel as they go.

Gervais talked about one cost-saving change that has already been developed since the steel basins and concrete walls of the Balaton Bay Reef were put in place with cranes last year. In their natural environment, shrimp are bottom feeders.

"They're called the pigs of the sea," Gervais said.

They digest what they eat in less than an hour and eat continuously. Consequently, the feeding system developed for the shallow water basins is an important element of the facility. Unfortunately, the feed spreader originally designed worked but proved to be expensive when scaled for a commercial operation.

Then, Gervais had a brainstorm. What if

they developed something similar to a broadcast spreader used for turf building? That modification was both cost-effective and efficient.

Finding solutions to problems by thinking in terms of the familiar has been a proven approach at Tru Shrimp.



"We're not 34 people with shrimp expertise," Brink-Thordson said about the company's current roster of employees.

Gervais actually has a background in economic development and moved into the private sector after working as an economic development director in Tracy, Minn. The company also has individuals with backgrounds in biology, chemistry and engineering, and frequently draw from the agriculture industry in developing solutions to problems.

"We've taken things that work in chicken, swine and cattle production and said, 'Why can't we use part of that here?'" Brink-Thordson said.

Unexpected beginning

The company which has set for itself the goal of becoming an industry leader is the result of a happy accident. Brian Knochenmus, president of Ralco, a company which specializes in animal health and nutrition, was



in Ecuador visiting a farm that uses the company's products for livestock when he learned the farmer was also using feed for shrimp production.

When he returned to the States, Knochenmus started looking for a partner who could test the product's effectiveness when used for that purpose. He learned that Texas A&M actually had developed a new approach for shrimp production and acquired the patented technology.

In 2015, Ralco built a lab with 144 research tanks in an old school building in Balaton, Minn. They began conducting feed trials and started to explore other factors — such as light and water quality — which could affect shrimp growth.

“You name it and we have probably tested it four or five times,” Brink-Thordson said.

In 2016, a pilot basin was constructed. In a shallow rectangular tray, warm salt water was circulated to mimic the movement of the sea. A whole new set of problems was identified and solved. What can be done to prevent the water from creating an eddy? How can the molted shells and waste be removed to keep the environment clean and productive?

“Our philosophy is control the water and the shrimp will do fine,” Gervais said.

Model for commercialization

No longer a division of Ralco, Tru Shrimp is now ready to begin producing shrimp on a commercial scale. The model developed includes hatcheries where pairs of Pacific white shrimp, flown in from Hawaii, will produce eggs.

In the hatcheries, these eggs will hatch and go through larval stages. When they reach the post-larval stage and are about the size of an eyelash, they will be transferred to the reef. Over a million post-larval shrimp will be produced daily.

The reef will contain stacks of shallow basins holding carefully regulated sea water. Together, the basins will hold 14.5 million gallons of water and create 43 acres of feeding ground for the shrimp which will be fed on a carefully regulated schedule.

Initially, the feed will be as fine as powder, but as the shrimp grow, the nature of the feed will change. In addition, like a tree farm, as the shrimp grow, some will be harvested to give others room to grow.

“We'll start by harvesting salad shrimp and end up with a final harvest of jumbo

shrimp,” Brink-Thordson explained.

Based on the research conducted and on the conditions they are able to maintain, Tru Shrimp can currently raise jumbo shrimp in 140 days, a significant improvement over the 210 days Texas A&M recommended as their target.

This growth is possible not only due to carefully regulated conditions but also because the company places an emphasis on biosecurity. By creating and maintaining a disease-free environment, they can breed shrimp for growth rather than disease resistance, Gervais explained.

Employees are not allowed to wear street shoes in any of the production areas, and washing is a nonnegotiable requirement for entering. Visitors are only allowed to view the production areas through windows to ensure these areas are not contaminated.

Managing water is important

The final component of the Madison Bay Harbor is a water reclamation plant.

“Our wastewater facility could probably handle a small town, Gervais said.

approximately what a typical household might use in 40 months or 40 households might use in a month.

Gervais said the water will be used to replenish water in the basins which is lost through evaporation and for washing out the basins following a harvest, among other things.

Work in progress

Currently, the company is engaged in problem-solving on two fronts. First, Tru Shrimp is working with another company to develop technology to de-head, shell and de-vein the shrimp. Currently, that is done by hand in the industry, which creates delays the company is seeking to eliminate.

Second, the company has not selected a location for processing the shrimp. Since construction of the first harbor is expected to take between 18 and 24 months, they do not feel that is urgent at this point, but they know it must be addressed before the harbor can enter production.

No date has been set for the ground-breaking of the Madison Bay Harbor. Brink-Thordson said that as soon as all



The in-house operation is beneficial to both the company and the community. The company will be able to return the sea water to its system and to harvest some of the waste products such as the molted shells, which can be used for a variety of products from medical to cosmetic.

The community benefits because Tru Shrimp will not be discharging wastewater into the system that Madison is not prepared to handle.

“We will not discharge any salt water into the Madison system,” Gervais said. “We are not out to pollute anything.”

The company will use about 300,000 gallons of water per day. This is

of the financing has been secured, the company will move forward.

Before the project was announced in January, both the Governor's Office of Economic Development and Heartland Consumers Power District had provided support in the form of low-interest loans. At the time, Madison's designation as an Opportunity Zone was expected to help the company secure additional funding. However, Gervais indicated the IRS is still working out guidelines for projects such as theirs, so it has not helped as much as anticipated.

Article reprinted with permission from the Madison Daily Leader.



THE DAY IN A LIFE OF A RURAL WATER OPERATOR

By Georgia Andersh, Randall Community Water District

Routine, something we all have and normally don't give it a thought. Most mornings, I wake up, grab my water glass, and turn on the faucet. Whether just a quick drink to rinse out a good night's sleep or to take your morning vitamin, that first glass of water begins your daily routine.

Have you ever really thought about the water you are drinking? Do you ever wonder if it's safe to drink or if you should worry about contaminants? After scares all over the country of unsafe drinking water, how do you really know?

Trust your water treatment plant operators. They are ultimately in charge of making sure your water is safe for consumer consumption. From the time it leaves its source, whether your system utilizes shallow or deep wells or surface water, your water has been treated and tested to ensure its quality.

Working for a rural water system, sometimes I forget exactly what our plant operators do daily. I've come to know that they have the needs and concerns for each of us covered. From the time they clock in each morning until check-out time at the end of the day, they are continually checking the quality of your drinking water. The following is a shortened version of a water treatment plant operator's day.

Most plants have some form of computer or SCADA system (Supervisory Control and Data Acquisition). These SCADA systems record the process used to pump, treat, and distribute the water to your faucet, and is an operator's first stop in the morning. Here he/she will check the data collected during the last 24 hours, check any alarms that may have been noted and the levels of any treatment process used.

Next is a physical walk-through of the treatment facilities where the operator visually checks the analyzers, chemicals, and pumps to confirm all is well. Any adjustments or possible repairs needed

can be made at this time. Depending on your filtration system, backwashing of the filters may be required at this point. If multiple filter banks, this could be done on a rotation.

Paperwork, a necessary evil, or in today's world computer work. Now is the time to check for any correspondence (emails) that need attention. Placing orders, checking order status, or returning calls are completed while at the computer.

The next step of the day involves a mop or possibly a screwdriver. Daily maintenance, although mundane, is an absolute necessity. At this point, a check of the chemical pumps and flow will determine if any adjustments are needed.

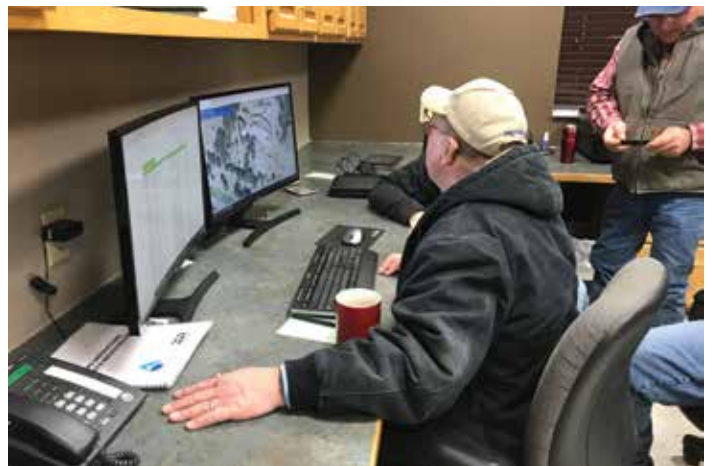
Daily samples are taken on the treated water. Free Chlorine, Total Chlorine, Free Ammonia, and Monochloramines are checked to maintain levels determined by the EPA. Weekly samples are taken at the plant and in the distribution system for

the mandatory discharge reports to the state.

The day at the treatment plant ends with the same routine: computer check, plant walk through and logging data collected on the filtration system.

Of course, there are those days when the routine changes. A leak in the distribution system may require additional assistance. Construction projects may require observation and direction from the operator. Staff meetings, board meetings, and safety meetings need attendance. Training and certification are state and federal requirements.

As you can see, plant operators wear many hats. Regardless of the hat worn on any given day, our plant operators take each job seriously with you, the consumer, and the quality of the water you drink in mind.



BIG SIOUX COMMUNITY WATER SYSTEM

In 1972 a steering committee met in the offices of Sioux Valley Energy in Colman to discuss the feasibility of developing a rural water system to serve Moody and Lake Counties. Two of our present Board Members, Dan Carlson and Andy Groos, were part of that historic group. DeWild Grant Reckert and Associates (DGR) completed the preliminary engineering report, and upon approval of the committee, forwarded it to the Farmers Home Administration (FmHA) for funding consideration.

Starting off with around 700 sign-ups, the first water was sold in 1975. A well-field was created in the Big Sioux River valley east of the City of Egan, and three production wells were drilled along the north-south township road just to the South of the Treatment Plant. One of those original wells is still producing drinking water today.

Treatment in the early years was minimal, basically disinfection and fluoridation. Compared to the well water found in Moody County outside of the Big Sioux River valley, this water was still vastly superior. The erection of towers, additional wells, the first treatment plant at Brant Lake and the installation of more mainline all added to the system's infrastructure in the 1980's.

Surpassing 1,000 customers by 1979, an added user project and better reliability with our SCADA monitoring in 1989 pushed us past 1,350 hookups by 1990. Growth continued steadily to 1,550 through 1994, and then increased after the construction of our new lime softening treatment plant in 1994. The better water sold itself, and by 2010 we surpassed 2,000 hookups.

In 2000, the system gained tremendously by adding Flandreau as a bulk customer, and also supplying

over 200 million gallons annually to Dakota Ethanol. By 2006 it became evident that summer demand from the Lake Madison and Lake Brant areas was straining our capacity, so plans were drawn up by Banner and Associates for a smaller membrane plant that could satisfy those demands around the lakes on holiday weekends. That plant came on line in 2010. In 2017 we completed a new pipeline from Minnehaha Community Water giving us added capacity and service to the Cities of Madison and Chester. In 1980 annual sales were around 150 million gallons per year. By 2021, if current plans follow through, annual sales will exceed one billion gallons.



Big Sioux prides itself in delivering the best tasting, best quality water they can. Aggressive wellhead protection policies have improved our raw water quality. Since the inception of the system, over \$20 million has been invested in infrastructure. The system today has over 2,180 services and works hard to be the area's water source of choice, whether for domestic, commercial or industrial use. The offices are located at our Egan Treatment Plant site just across the Big Sioux River from the City of Egan.

Big Sioux Community Water System recently celebrated its forty-seventh year at its Annual Meeting held in Colman on April 9th, 2019. "Rural water is probably the most precious commodity we have on the farm, especially given the quality we enjoy," said Andy Groos, Director of 47 years.

"Having quality rural water at my home gives me many of the advantages of city living while getting to enjoy the benefits of country living," said Daniel Carlson, Director of 47 years.

BIG SIOUX COMMUNITY WATER SYSTEM



2019 Big Sioux Board of Directors:

Back row left to right - Reggie Gassman, Gaylen Backus, Tom Hagedorn, Vince Nelson, Kent Whipkey, Dan Carlson. Front row left to right - Martin Jarrett (Manager), Andy Groos (Secretary/Treasurer), Dan Dannenbring (Chairman), Thomas Kansanback (Vice Chariman)



Aerial view of the Big Sioux Community Water System plant near Egan, SD.

DIRECTORS:

- Dan Dannebring** – Chairman
- Thomas Kansanback** – Vice-Chairman
- Andy Groos** – Secretary / Treasurer
- Daniel Carlson** – State Association Past President
- Gaylen Backus** – Director
- Vince Nelson** – Director
- Reggie Gassman** – Director
- Tom Hagedorn** – Director
- Kent Whipkey** – Director

STAFF:

- Martin Jarrett** – General Manager
- Jodi Johanson** – Corporate Accounts
- Dawn Christenson** – Customer Service / Billing
- Dave Bennett** – Chief Plant Operator
- Mike Headrick** – Chief of Distribution
- Garrett Carr** – Distribution Operator
- Aric Olson** – Distribution Operator
- Chad Kneebone** – Distribution Operator
- Brant Membrane Plant**
- Jeff Carruthers** – Small Systems Water / Wastewater Operator

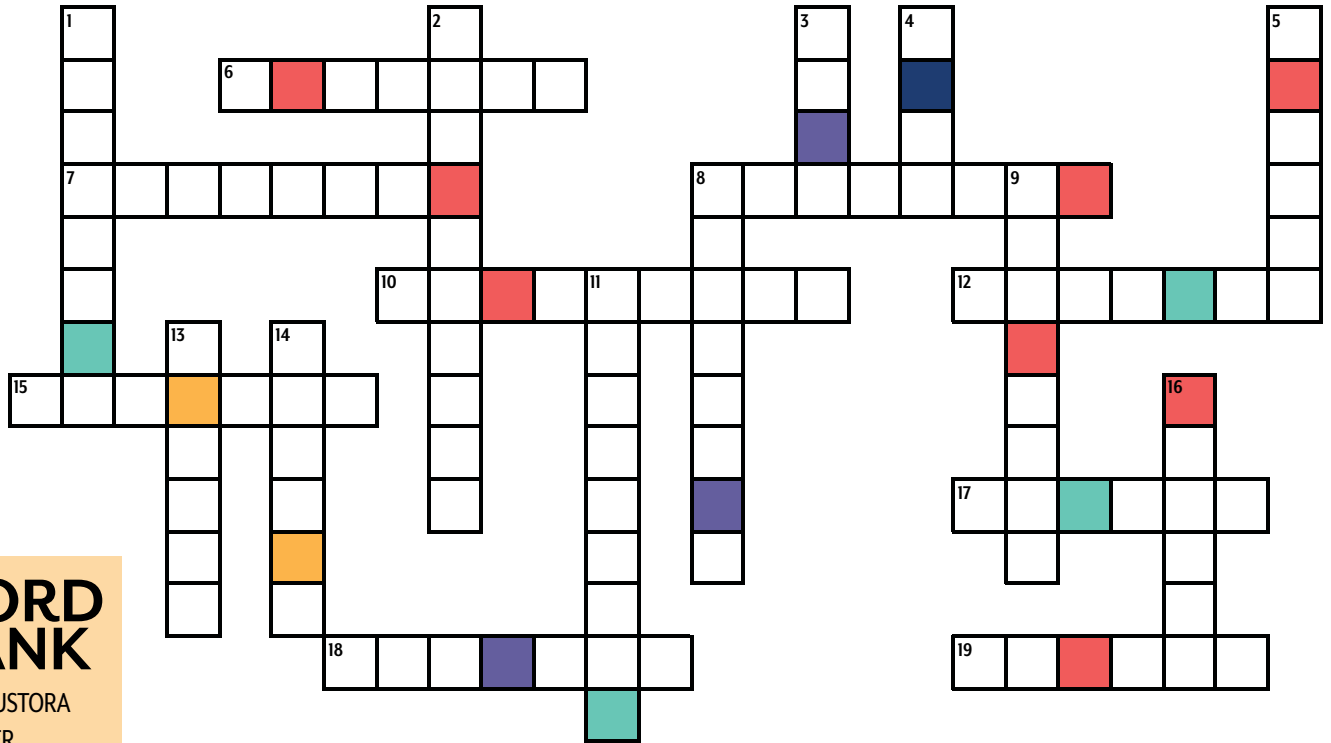
STATISTICS:

- Service Connections:** 2,180
- Miles of Pipeline:** 800
- Water Source:** Wells – Big Sioux Aquifer, Skunk Creek Aquifer, Minnehaha Community Water Corporation
- Counties Served:** Moody, Lake and portions of Brookings and Minnehaha
- Towns Served Individual:** Rutland
- Towns Served Bulk:** Madison, Flandreau, Egan, Trent, Colman, Wentworth, Chester
- Contracted Management Wastewater Systems:** Egan, Wentworth, Chester Sanitary District
- Contracted Management Water Systems:** Chester, Dakota Ethanol, Golden Dakota Dairy, Egan, Wentworth, Wildwood Dairy

RURAL WATER CROSSWORD & WORD SCRAMBLE CONTEST

Lakes of South Dakota

Enter to Win \$100



WORD BANK

- ANGUSTORA
- BITTER
- COTTONWOOD
- LOUISE
- MADISON
- MINA
- OAHE
- OAKWOOD
- PACTOLA
- PELICAN
- POINSETT
- SHADEHILL
- SHARPE
- SHERIDAN
- SYLVAN
- THOMPSON
- TRAVERSE
- WAUBAY
- WILLOW

DOWN

1. Located in northeast, SD, it the most urban developed lake in the state. Its name means "Lake of the Shining Shells" in Dakota.
2. There are several lakes in SD that boast this name – given for the trees with the fluffy seeds that grow around them.
3. One of the first man-made lakes in northeast South Dakota, was originally named Shake Maza, a Lakota name for "shaped like a horseshoe."
4. Fourth largest reservoir in the United States.
5. Picturesque lake located in Custer State Park, also featured in the movie National Treasure: Book of Secrets.
8. Kingsbury County lake which appears in several Laura Ingalls Wilder novels.
9. The Black Hills mining town formerly known as Golden City lies at the bottom of this lake.
11. Located in Perkins County, this lake shares a name with the dam that created it.
13. Clark county lake named for the droopy trees that line its shores.
14. Encompassed by a state park of the same name, 14 miles north of Miller.
16. Named after the 17th Governor of South Dakota, this lake boasts 200 miles of shoreline and features a "big bend."

ACROSS

6. Brookings County glacial lake that borders state park with the same name.
7. One of the largest lakes in SD, named after a U.S. Secretary of War, located on Highway 81
8. Lies between the South Dakota and Minnesota border and means "across the lake" in French.
10. Reservoir located on the Cheyenne River and means "narrows" in Spanish.
12. Named after a pouch-beaked bird that can be found in the springtime
15. Popular boating lake located in Lake County.
17. Means "a place where numbers of birds make their nests" in the Dakota language.
18. The largest reservoir in the Black Hills; is used for flood control, irrigation, and domestic water use.
19. Tripling in size since the 1990's, this former shallow alkaline slough was named after its taste.

SCRAMBLE ANSWER



RULES: Use the colored squares in the puzzle to solve the word scramble above. Call your Rural Water System (See page 2 for contact information) or enter online at www.sdarws.com/crossword.html with the correct phrase by July 5th, 2019 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 William Janssen of Castlewood who had the correct phrase of "focus on the future" for April 2019.

RURAL WATER

ACROSS SOUTH DAKOTA

MEDICINE CREEK WEIR

March of 2011 was a time of flooding much like we have been experiencing this year. Towns, farms and roads were flooding in several areas and sandbagging activities were at a frantic pace. Medicine Creek near Blunt, SD flooded, sending a virtual tsunami down a small creek bed without the capacity to handle the large amount of water. The flood went through the diversion channel that was built in 2004 and crossed Mid-Dakota's 24-inch diameter main transmission pipeline. The water found a foothold and began to erode the diversion channel, eating the earth away in front and behind the pipeline which is a "main artery" for the rural water system. Had the flood washed out the pipeline, Mid-Dakota water service would have been interrupted in an area of approximately 5,000 square miles. The Mid-Dakota staff, Morris Irrigation, Dahme Construction, Bartlett & West Engineers, and even some of the public worked together to save the pipeline and keep it in place. The solution to the problem after the flooding was over was to construct a weir just downstream of the pipeline to protect it.

This year there again was flooding along the Medicine Creek near Blunt, but this time the story ended differently. The weir was successful in providing protection for the pipeline and the water flowed downstream with no issues for the pipeline.



Medicine Creek before the weir was constructed.



Construction of the weir.



The completed weir.

BOTTLED WATER VS TAP WATER



Do you drink bottled water for convenience or out of concern for the safety of your tap water?

Consider the following:

- 40% of bottled water is filtered tap water.
- Millions of tons of plastic bottles end up in landfills.
- Tap water is the most heavily regulated substance you can ingest.
- Water from the BDM Rural Water System meets all state and federal drinking water regulations.
- If you like the convenience of bottled water, fill a water bottle at the tap.

Manager: continued from page 2

A reminder that the Groton Golf course water tanks are operational. There are two 10,000 gallon tanks filled with well water. BDM provides the tanks and pump and operational support. The water is from the golf course well. For any questions please call the golf course at 397-4653.

The discussions have started and will be presented to the board at our June meeting to move forward with the SCADA replacement. This is the computer system that runs the system. The system is still operational however is considered obsolete with replacement parts becoming significantly more expensive. The original estimate for replacement was \$625,000. We will be updating some of the electrical components at the same time, which will add to the cost, however this will be the most effective and efficient time to complete

with the SCADA replacement. We have the \$625,000 set aside in a reserve account and may need to borrow for some of the electrical upgrades. There will be enough room on our approved CoBank facility to cover these items we know of at this time.

We've had some major line breaks this spring which had some customer impact. We try very hard to minimize customer impact and provide advance notice when lines need to be closed. Unfortunately, at times circumstances and plans change in the field during repair projects and no time was available to provide an advance notice. For these situations I apologize for any inconvenience we may have caused.

A reminder, there will be a slight increase of twenty cents per one thousand gallons of water used in the water rate as of July 1st, 2019 for residential and bulk users who are

not municipalities. The municipality rate will increase as of Jan 1st, 2020.

I want to thank the board for their time and commitment to improving your water system. Also, a big thank you to the staff, Shannon, Mark, Darin, Jim, Ryan and Jared. They are very dedicated to your system and always striving for 100% reliability. Recently Darin, Ryan and Jared started fixing a significant leak at 3:00 PM, after having fixed several other leaks earlier in the day. They worked all through the night until 5:30 AM the next morning to fix this leak. It's situations like this that may not be noticed by our members, but truly shows the dedication of the BDM staff.

I hope the weather turns more favorable to complete your planting intentions. Please stay safe and God Bless.



BDM RURAL WATER SYSTEM, INC.

39TH ANNUAL MEETING RECAP

The 39th annual meeting of BDM Rural Water System was held on Monday, March 25th, 2019 at 6:00 pm in the BDM building in Britton. Forty-nine voting members and 20 guests were in attendance.

Torre Raap, Chairman of the Board, called the meeting to order, introduced the BDM employees, and gave the Board Report. Dwight Berglin of Quam, Berglin, and Post P.C., appeared via video conference and reviewed the audit. Assets as of December 31st, 2018 totaled \$22,346,289.08. Total liabilities were \$8,690,238.33. Water sales for 2018 were \$2,877,756.28. Brian Bergantine of AE2S addressed the members with a presentation about BDM's recent and ongoing construction and upgrading projects. General Manager Rodney Kappes presented the Manager's Report.

Director Elections were held for Districts Three, Four, and Six:

- Hal Treeby was re-elected for a third term for District Three.
- Robert Watkins of District Four has completed his third term and is ineligible to run again. Marc O'Brien was elected as the new director for District Four.
- Ken Spence, director for District Six, did not seek re-election for a second term. The new director for District Six is Alex Suther.

Manager Kappes presented Robert with an engraved mantel clock in appreciation for his years of service to BDM. Ken was unable to attend but will also receive a clock. Shannon Wegleitner was presented with her 10-year employment anniversary pin.

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.



Manager Rodney Kappes presents outgoing Director Robert Watkins with an engraved clock in appreciation for his service on the Board.



Rodney Kappes presents the Manager's Report.



Attorney Danny Smeins conducts the Board of Directors election.



RURAL WATER SYSTEM
 PO Box 49
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 www.bdmruralwater.com
 605-448-5417

PRESORTED
 STANDARD
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 PERMIT #32
 MADISON, SD

WATER MATTERS

Water Festivals



PROMOTING AWARENESS AND INSPIRING CONSERVATION

South Dakota Water Festivals have been providing hands-on activities about water to 4th grade students for more than 25 years. At this free event, students have the opportunity to interact with water resource professionals who lead many of the activities. Topics include water conservation, water history, uses of the resource, and current water issues. Students investigate how water impacts their lives and the importance of having clean water. They discover how everyone has a role in water conservation and in the protection of the environment. Each festival relies on the support of local residents and community businesses who give generously by volunteering their time or through donations and monetary contributions.

VOLUNTEERS ARE NEEDED! HOW YOU CAN HELP...

South Dakota Water Festivals need volunteers to:

- Present activities about our water resources
- Guide small groups to designated activities
- Help with setting up and taking down displays
- Assist activity leaders or supervise exhibits
- Become committee members & help plan a festival

SOUTH DAKOTA WATER FESTIVALS CONTACT A FESTIVAL NEAR YOU!

This is a great opportunity to support your local community and to help educate kids about South Dakota's water resources!



FOR A COMPLETE LIST OF WATER FESTIVALS HELD IN SOUTH DAKOTA GO TO: SD-Discovery.org/Watershed-Outreach



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