

BDM

RURAL WATER SYSTEM

Quality On Tap!

January 2020 | Volume 15, Issue 3

UNLOCK SECRETS
IN THE SOIL

STEP UP AND SERVE

YOUR RURAL WATER
MEMBERSHIP
AGREEMENT

ANNUAL MEETING NOTICE | RATE CHANGES

FROM THE MANAGER

Rodney Kappes
Manager, BDM Rural Water System, Inc.



GREETINGS FROM THE TEAM AT BDM:

This Fall has been very trying for most of you in agriculture. We hope conditions improve to allow you to finish the harvest.

The year at BDM has been busy with capital improvement projects, which will put your system in a much better position in the future to meet water demands. We are close to completing the 26-mile pipeline project, with all but one stretch in operation. The facilities upgrade portion of the project included an additional 200,000-gallon reservoir, upsizing pumps and motors at the water treatment plant and at the reservoir south of Britton. It also included the installation of a pump booster station at Pierpont to boost the line pressure, when necessary, to the south and west of Pierpont. The total cost of this capacity improvement project was estimated at \$3,600,000.00. It appears the project will come in around \$3,100,000. We borrowed \$2,000,000 from CoBank. With the funds saved due to competitive bids and funds saved this year from our normal operations, it appears we will have around \$700,000 available for other much needed asset replacement.

Some of the other projects we plan to complete this fall/winter will include replacing the pumps and motors at the first reservoir going east, in addition to piping upgrades and adding VFD's. We will also complete the hydraulic model for the east side of the system. In addition, we had to replace one of the existing wells with a new well. The initial pumping tests are very positive. The above-mentioned items will cost around \$350,000.00.

The \$640,000 SCADA project (which is fully funded with capital asset replacement funds) will also start in earnest after the first of the year. The anticipated completion for all the items mentioned above is before next spring.

I want to thank all the landowners and operators for their cooperation with these

...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.



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Attorney

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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.

ATTENTION LAKE CUSTOMERS

As of January 1, 2020, there will no longer be a “Lake Rate” for lake property hookups. Those hookups currently on the “Lake Rate” will be switched over to the “General Rate”. General Rate hookups are charged a \$35.00 monthly base fee (\$36.00 if they have a cellular meter). Water use is billed out according to the current Rate Schedule (see box on the righthand side of Page 3).

Technicians have completed installing cellular meters on Roy Lake this fall. Four Mile Lake, Buffalo Lake, Lake Traverse, and Big Stone Lake still have some customer-read meters. We will continue to work on changing those out as long as weather permits, with the goal of having those lakes completed by next summer.

If you have recently had a cellular meter installed at your hookup, please call the office to sign up for Waterscope, our online customer portal that allows you to monitor your water usage. With Waterscope, you can be alerted to leaks and other unusual usage events. Please keep in mind that you are still responsible for all water that goes through your meter, including leaks.

The BDM Rural Water System offices will be closed:

DECEMBER 24 – CHRISTMAS EVE (CLOSING AT NOON)

DECEMBER 25 – CHRISTMAS DAY

JANUARY 1 – NEW YEAR'S 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.

Billing Packet Reminder

Billing packets will be mailed in December to all customers not signed up for Auto-Pay. If you haven't received yours by the end of December, please call Shannon at 605-448-5417.

BDM RURAL WATER SYSTEM, INC. RATE SCHEDULE (EFFECTIVE JANUARY 1, 2020)

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

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

JANUARY

1 – FIRST DAY HIKE – OAKWOOD LAKES STATE PARK, BRUCE

Fight off the winter blues with an approximately one-mile hike through Oakwood Lakes State Park. Walk takes place from 2:00pm - 3:30pm. Park License is required. <https://gfp.sd.gov/events/detail/1096/>

7-9 – DAKOTA FARM SHOW – DAKOTA DOME, VERMILLION

For over 35 years, the Dakota Farm Show has kicked off the new year by showcasing over 280 exhibitors representing over 1,000 agricultural products and services, all inside the temperature-controlled USD DakotaDome. Join over 25,000 agricultural producers from South Dakota, Nebraska, Iowa, and Minnesota to review the latest farm technology focused on improving yields, reducing costs, and managing risk. <https://dakotafarmshow.com>

9-10 – MOBRIDGE CHAMBER ICE FISHING EXPO & TOURNAMENT – MOBRIDGE

Boasting over \$200,000 in cash and prizes, 525 2-person teams hit the hardwater on Lake Oahe. This is not a derby or contest, but is based on a true tournament format. Anglers take the ice at 9:00 am and are required to be weighed in by 7 pm in the evening. Anglers do have the luxury of fishing on over 23 miles of hardwater on Lake Oahe in north central SD. No pre-drilled holes, use your shacks and electronics, and have a great time! For more information please contact the Mobridge Chamber at 605-845-2387, or visit <https://mobridgeoutdoors.com/ice-fishing-tournament>

17-18 – MEDIAONE FUNSKI, SIOUX FALLS

This annual event features skiing, snowboarding, team tubing, Frozen Leg kickball, a snow sculpture contest, Zipfy sled racing, and cross country skiing as well as live music. Most events have beginner, intermediate, and advanced categories. Funkski has become the premier outdoor winter event in eastern South Dakota and has raised nearly \$1 million for Children's Inn. Join in the fun at Great Bear Ski Valley in Sioux Falls starting at 5 p.m. on Friday and 8:15 a.m. on Saturday. Free to attend. www.funkski.org/

31 - FEBRUARY 9 – ANNUAL BLACK HILLS STOCK SHOW & RODEO, RAPID CITY

The Black Hills Stock Show & Rodeo in Rapid City features events, rodeos and vendors. The region's largest trade show, livestock sales and competitions and is one of the top 5 indoor PRCA rodeos in the country. There are 10 different breeds of cattle sales, a two-day horse sale, and seminars for livestock producers, horse enthusiasts and the general public. Events are held at the Central States Fairgrounds and at the Rushmore Plaza Civic Center (444 Mt. Rushmore Road). Admission. www.blackhillsstockshow.com

FEBRUARY

22-23 – 47TH ANNUAL FARM, HOME, & SPORT SHOW, PIERRE RAMKOTA

Central South Dakota's Largest Display Show will be at the Ramkota in Pierre. For more information visit our website www.todayskccr.com.

20-25 – BLACK HILLS FILM FESTIVAL

The mission of the Black Hills Film Festival is to build awareness of independent films and film as an art form; provide educational opportunities for students and South Dakota filmmakers; and create opportunities for South Dakota communities to experience high-quality films. The festival features films produced or filmed in South Dakota, as well as national and international entries. 2020 dates include: Rapid City – February 20-21; Hot Springs – February 21-23; Hill City – February 22-23; Spearfish – February 25. www.blackhillsfilmfestival.org/

21-22 – MARDI GRAS WEEKEND, DEADWOOD

It is the best party north of the Bayou! Celebrate Mardi Gras in the Wild West, with a weekend full of free parades, costume contests, parties and live music. Make your plans now - you don't want to miss this cabin-fever-busting event in Historic Deadwood. The fun starts at 8 p.m. on Friday and lasts until 10 p.m. on Saturday. www.deadwood.com/event/mardi-gras/

MARCH

7-10 – SUMMIT LEAGUE BASKETBALL CHAMPIONSHIP, SIOUX FALLS

The 2019 Summit League Basketball Championships, men's and women's, return to the Denny Sanford PREMIER Center in Sioux Falls, March 9-12. Enjoy four days of Division I college basketball action by teams from South Dakota, North Dakota, Colorado, Nebraska, Oklahoma, Indiana and Illinois. Admission fees. <http://www.dennysanfordpremiercenter.com/events-tickets/calendar-of-events/2019-summit-league/>

20-21; 27-28 – SCHMECKFEST, FREEMAN

Schmeckfest is an annual festival in the southeastern South Dakota town of Freeman. The gathering uses food, art and a celebration of community to honor the history of Germans that emigrated from Russia. Held on the campus of the Freeman Academy, it's been a fundraiser for the school every spring since 1959. The ethnic German meal, served family-style, and the community musical take place over two weekends in March. www.schmeckfest.com

YOUR RURAL WATER SYSTEM MEMBERSHIP AGREEMENT

*By Dave Larson,
Attorney for the West River/Lyman Jones
Rural Water System*



Did you know that your Rural Water System is a not for profit membership association, meaning that instead of being owned by a group of faceless stockholders with a headquarters in some far off place, the Rural Water System is owned by the people that use it, right here in our community.

Most of us have become members of the Rural Water System without giving it much thought. We met with one of the employees, signed the papers they hand us, and forgot all about it. You shouldn't. One of the papers signed, is your membership agreement, and that one document forms the entire basis of your relationship to the Rural Water System.

On its most basic level, the membership agreement serves as your application for service. Without signing it and requesting service, you are not going to get water. But, the importance of the membership agreement doesn't stop there. The membership agreement is a contract between you, the Rural Water System and the other members. As a contract, the membership agreement sets the legal framework for all of your interactions with the system.

One of the most important things the membership agreement does is establish who the member is. Is the member you? Is it your spouse? Is it your corporation, partnership, or LLC? If you are married, are you and your spouse "joint members?" Unless your name is on the agreement, you are not a member. If you are not a member, you have none of the rights of membership.

Unless you are a member, or in the case of a legal entity that is a member are authorized to vote for the entity, you have no right to vote. You have no vote in the director elections. You have no vote on the bylaws. You have no right to serve as a director of the system. In short; you have no right to participate in the governance of the system.

Unless you are a member, you have no right to obtain information regarding an account. You don't have the right to terminate service or redirect the billing. Those things can only be done by the member or their legally authorized representative.

Along with the benefits of membership, the membership agreement also establishes the basis of your obligations to the system. When you sign the membership agreement, you agree that you will be bound by the bylaws and polices of the system. Those include both the present rules, and future rules adopted by the members and board of directors, so long as you continue to be a member.

If you are the member, you are the one obligated to pay the bill, regardless of who actually lives at the meter location or uses the water. As the member, you are the one legally responsible.

Signing the membership doesn't just obligate you to pay your bill. One of the most important obligations is the requirement that you provide your Rural Water System with the easements necessary to serve both you, and other members. Because the members are all in this together, one of the requirements for members, from the very beginning, was that the members cooperate with each other in providing the necessary easements to run the water lines necessary to serve all our members.

Signing the membership agreement also obligates you to respect the right of way and the Rural Water System facilities. It obligates you not to build over the water lines, or do anything that would damage a line, relief valve, meter, or make it impossible to access and perform necessary maintenance.

Signing the membership agreement is more than just an application for service. It is the entire basis of the Rural Water System commitment to you, and your commitment to the Rural Water System and the other members.

STEP UP AND SERVE

Beyond the Coffee Shop Recruitment of Decision Makers

By Jay Jorgensen
Manager, TM Rural Water District



Here in the Midwest, it is the common practice of farmers and small-town residents to meet daily for their morning cup of Joe at the local gas station or café. Most of the time, like-minded individuals will sit and discuss local, state, and national issues once the daily discussion on the weather has concluded. Conversations discuss who's to blame for problems at all different levels of government and what needs to be done to reconcile these issues. I am certain that if anyone were taking minutes of these meetings, most would result in a plethora of quality ideas that we could wrap up and send to our local, state, and national representatives. The darker side of the coffee shop however involves

Ever thought of being a part of the change that you would like to see and be a decision maker yourself?

discussions that try to point blame at decision-makers and community leaders for anything that affects us personally in a negative way. Discussions taking this negative turn can quickly escalate out of control with wild unfounded accusations that are the result of speculation or, more likely, someone in the groups' personal dislikes of another person or group. The results of these types of discussions may hurt the community as a whole if the end result is nothing more than additional anger and frustration. Negativity is cannibalistic. The more you feed it, the bigger and stronger it grows. So what? That's just the way life is, right? Sure we all have a lot of great ideas that never go

anywhere because we are unwilling to take the next step to refine our ideas by bouncing them off of others due to fear of being criticized. Understandably we all have a fear of being singled out. Yet, most of us don't hesitate to condemn the decisions of local, state, or national Boards, Councils, or Committees, when they pass rules or policies that we feel are unfair to us. Have you ever thought about the decision-making process that those institutions went thru to create those rules or policies you disliked? Have you ever participated in the open meetings held by local Boards or Commissions looking for public input for the aforementioned rules or policies? Ever thought of being a part of the change that you would like to see and be a decision-maker yourself? Sadly, most of us would answer no. It is easier to be an armchair quarterback than to take the time to be fully informed and have to make the difficult and sometimes no-win decisions needed to keep our communities running dependably and efficiently. What would you do if you were in a position to make these rules and policies? If you had the same information, would you have agreed with the same unpopular decisions? Maybe, maybe not, you will never know unless you are willing to commit to serving on a Board or Council. What would happen if?

- What would happen if I started taking time each day to inform and educate myself by utilizing multiple news agencies to get a broad spectrum of information regarding local, state and national issues in order to gain a better understanding of the workings of all levels of my government?
- What would happen if I were to seek out differing opinions than my own and try to look at issues that concern me from another person's perspective?
- What would happen if I were to take the time to research rules and policies which I dislike and try to understand why these rules were created in order to get a better perspective?
- What would happen if I quit blaming others for something which I have within my power to change?
- What would happen if I was in a group of people where a positive conversation took a negative turn, and instead of adding to the negativity, I tried to turn the conversation positive once again.
- What would happen if I was able to sit down with a group of people that were not exactly of the same opinions and beliefs as myself to calmly and rationally research, discuss

and create rules and policies that would directly affect everyone in the community in which I live in a fair and consistent manner?

What would happen is you would become an excellent candidate to be on a Board, Council, or Committee. You would have the qualities required to become a Decision Maker.

I have always believed that South Dakota is filled with many rational, independent problem solvers who are the polar opposite of what we continue to see at the national level. Sadly, what we are reminded of on a daily basis is how difficult it is for the nation to get along, and sometimes that has a trickle-down effect on state and local governments. The common-sense advice I would offer decision-makers at all levels would be to listen more and talk less. The old adage, "wise people speak because they have something to say; foolish people because they have to say something," has never been truer in the world we live in today.

One of the best ways to make a difference in your community is to volunteer to serve on a local Nonprofit or Governmental Entity's Board of Directors. The Board members are in a unique position to make decisions and implement changes and policies that can affect their entire community. The policies and rules created by these Boards may not always be popular but almost always are necessary for the efficient operation of the organizations that they represent.

One of the best ways to make a difference in your community is to volunteer to serve on a local Nonprofit or Governmental Entity's Board of Directors.

Finally, an added benefit of serving on a Board, Council or Committee is the new people you'll meet, the new connections you'll make and the knowledge you will gain. By working together to solve common problems, you may end up bettering yourself in ways you never imagined. You may also learn new skills and obtain additional training, all of

which could help you discover a new career or find a better job.

One last thing and this is important; one should never attempt to serve on a Board due to your desire to change just one thing. Those that desire to serve with such a narrow personal agenda are destined to be a wrecking ball to the community they are representing. When serving on a Board every member must come into each meeting with an open mind and no preconceived notions.

Choose to serve your community.

unlock the SECRETS IN THE SOIL

Is protecting America's natural resources – our rivers, lakes and streams, groundwater, air, and wildlife habitat – and reducing use of fossil fuels part of your corporate sustainability goals?

Do your customers demand products grown using good environmental stewardship practices?

Is your company interested in sustainability gains related to water, energy, carbon and the environment?

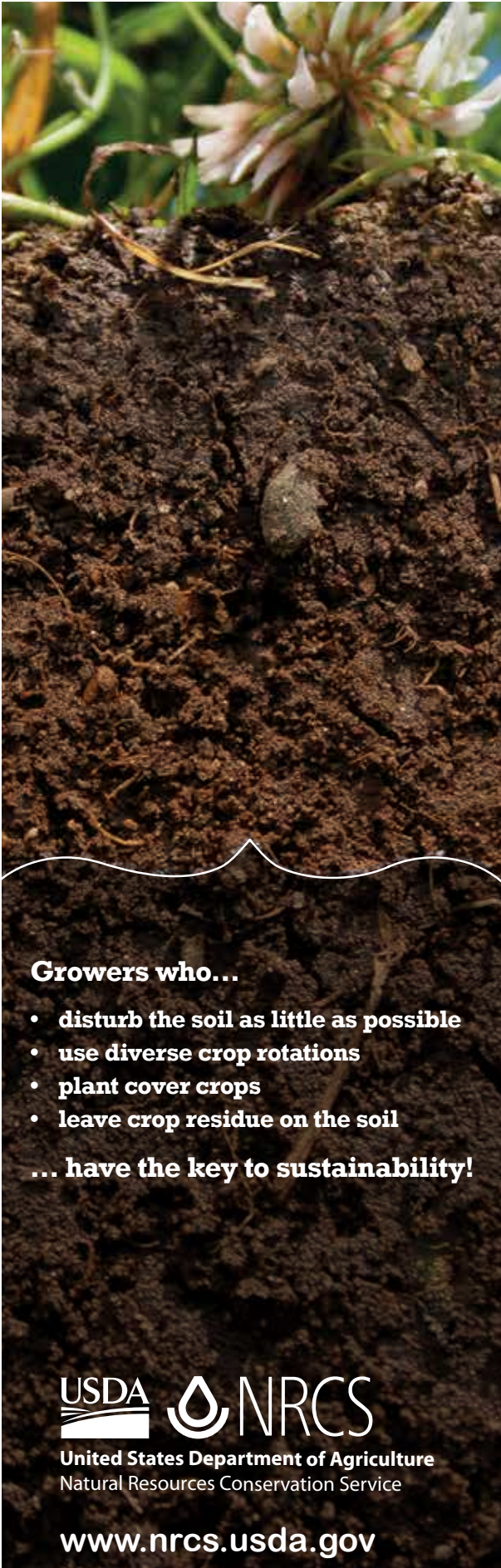
By following four basic soil health principles, producers can improve their soil health and sustainability:

1. Keep the soil covered as much as possible
2. Disturb the soil as little as possible
3. Keep plants growing throughout the year to feed the soil
4. Grow a variety of plants to diversify soil

Check in with YOUR growers about healthy, productive soils.

Soil Health Management Systems can help America's growers feed the nation and the world through sustainable conservation practices. The guide below provides an at-a-glance view of specific sustainability benefits associated with soil health improving practices. It is important to note that not all practices are applicable to all crops. Some operations will benefit from just one soil health practice, while others may require additional practices for maximum benefit.

Soil Health Management Systems include:		How does it help environmentally and economically?								
		DECREASES PEST PRESSURES	IMPROVES NUTRIENT USE EFFICIENCY	IMPROVES WATER QUALITY	CONSERVES WATER	IMPROVES PLANT HEALTH	IMPROVES WATER EFFICIENCY TO CROPS	SAVES NON-RENEWABLE RESOURCES	IMPROVES AIR QUALITY	INCREASES PLANT POLLINATION
Conservation Crop Rotation <small>Growing a diverse number of crops in a planned sequence in order to increase soil organic matter and biodiversity in the soil.</small>		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cover Crop <small>An un-harvested crop grown as part of planned rotation to provide conservation benefits to the soil.</small>		✓	✓	✓	✓	✓	✓	✓	✓	✓
No Till <small>A way of growing crops without disturbing the soil through tillage.</small>				✓	✓	✓	✓	✓	✓	
Mulch Tillage <small>Using tillage methods where the soil surface is disturbed but maintains a high level of crop residue on the surface.</small>				✓	✓	✓	✓	✓	✓	
Mulching <small>Applying plant residues or other suitable materials to the soil surface to compensate for loss of residue due to excessive tillage.</small>		✓		✓	✓	✓	✓		✓	
Nutrient Management <small>Managing soil nutrients to meet crop needs while minimizing the impact on the environment and the soil.</small>			✓	✓		✓	✓	✓	✓	
Pest Management <small>Managing pests and promoting the growth of healthy plants with strong defenses, while increasing stress on pests and enhancing the habitat for beneficial organisms.</small>		✓	✓	✓		✓	✓	✓	✓	✓



Soil health matters.

Soil is made up of air, water, decayed plant residue, organic matter from living and dead organisms, and mineral matter, such as sand, silt, and clay. Increasing organic matter typically improves soil functions including nutrient cycling and water infiltration. Healthy soils are porous, and allow air and water to move freely through them.

Healthy, fully functioning soil provides an environment that sustains and nourishes plants, soil microbes, and beneficial insects. Crops grown in healthy soil are more resilient because they resist pest pressure and use nutrients more efficiently. Managing for soil health is one of the easiest and most effective ways for farmers to increase productivity and profitability while also improving the environment.

Sustainability Solutions in the Soil

Crops grown in healthy, productive soil provide a wide range of on- and off-the-farm sustainability benefits. Whether you do business with large-scale operations or small farms, healthy soil practices can be applied to all.

When farmers manage their land to maintain or improve soil health, we all harvest the benefits of improved sustainability.

Healthy soil...

Saves farmers money – since reducing or eliminating tillage means fewer passes over fields, and healthy soils use inputs like water and nutrients more efficiently, production costs are lower.

Boosts production – plants thrive because more organic matter and soil organisms improve soil structure, aeration, water retention, drainage, and nutrient availability.

Protects against drought – because healthy soil has greater water infiltration and holding capacity, more water is available to plants when they need it, like during periods of drought.

Safeguards resources – runoff that causes flooding or carries nutrients and pesticides into lakes, rivers, and streams is reduced. There is less leaching into groundwater. And, fewer trips across fields with farm machinery mean less fuel used and fewer emissions to harm air quality.

Growers who...

- **disturb the soil as little as possible**
- **use diverse crop rotations**
- **plant cover crops**
- **leave crop residue on the soil**

... have the key to sustainability!



United States Department of Agriculture
Natural Resources Conservation Service

www.nrcs.usda.gov

Ask your growers if they know about NRCS' Soil Health Management Systems.

Contact us: For more information, contact Jeff Zimprich, Soil Conservationist, NRCS South Dakota State Office, (605) 352-1200, jeffrey.zimprich@usda.gov, or visit www.nrcs.usda.gov

MID-DAKOTA RURAL WATER SYSTEM, INC.

In December of 1987, four individuals serving on an interim board sat in a conference room at the office of May, Adam, Gerdes and Thompson in Pierre, SD and signed the Articles of Incorporation for Mid-Dakota Rural Water System, Inc. It was their hope that by forming this corporation they would see relief from the water problems experienced within the area by constructing a rural water system similar to other systems in the state of South Dakota. Thanks to the help from many volunteers, government agencies, staff and the board of directors, many are now enjoying a clean and dependable supply of drinking water.

The majority of the aquifers in the 7,000 square mile service area of the Mid-Dakota Rural Water System contain bacteria, nitrates, sulfates, sodium, iron and total dissolved

solids far above acceptable standards. These contaminants posed a health hazard to humans and animals alike. Those drinking the water from the aquifers with these contaminants could experience such conditions as diarrhea and diuresis in adults, blue baby syndrome, and high blood pressure, infant mortality in livestock, loss of production in dairy cattle, or loss of gain in feeder stock. Not only did some experience inadequate water quality, but some people were not even able to drill a well and receive any water. These people had to haul all the water for their own needs and livestock needs.

Through hard work, Mid-Dakota received its authorization in 1992 in a bill signed by President George H. W. Bush entitled P.L. 102-575 and funding was administered through the Bureau of Reclamation. Construction on



MID-DAKOTA STATISTICS:

Hookups: 6,067 · **Miles Of Pipeline:** 3,835 · **Water Source:** Oahe Reservoir on the Missouri River

Counties Served: (All of) Beadle, Hand, Hughes, Hyde, Jerauld, Potter, Sully. (Portions of) Aurora, Buffalo, Davison, Kingsbury, Sanborn, Faulk, Spink

Towns Served Individual: Agar, Broadland, Cavour, Harrold, Lane, Lebanon, Oahe Plains Development, Orient, Polo, Storla, Virgil, Yale

Communities Served Bulk: Alpena, Blunt, Gettysburg, Highmore, Hitchcock, Hoven, Huron, Miller, Onida, Ree Heights, St. Lawrence, Spring Creek Sanitary System, Tolstoy, Tulare, Wessington, Wolsey

Individual Bulk Customers: Agtegra Cooperative, Agtegra-Wolsey, Agtegra-Miller, Agtegra-Tulare, Jasen Albrecht, B&B Equipment, Barber Farm Services, Neal & Linda Bartel, Brown Agronomy Center, Cannon River Ranches (2), Cheyenne Ridge Lodge, Christensen Farms A, Christensen Farms B, Christensen Farms A C, Christensen Farms D, Christensen Farms and Feedlot, CHS, Inc., Maxon & Linda Conkey, Consolidated Ready Mix, Mark & Delilah Cotton, Cowan Ranch, Crete Ready Panel, Crop Production Services, Das Agri Genetics, Del Acres Trailer Park, Michael S. DeRouche Inc., DNA Genetics, Eagle Pass Lodge LLC, Fulton Ranch, Harrold Housing, Heartland Pork, Huron Continental Marketing, The Junction, Stan Kopfmann A, Stan Kopfmann B, Doug Kroepelin Farms, Amy Lake, Liberty Farms LLC, Links Snacks Inc., Mayer Ranches Inc., Mid-Dakota WTP FO, Miller Dale Colony, M & K Farms (2), Doyle Musick, Nachtigal Farms Inc., Our Home Inc., Paul Nelson Farms, Peoria Flats Cattle Co., Potter County Oahe Water Association, Red River Grain, Ringneck Energy LLC, River Crossing Resort, Rivers Edge Landing LLC, David Runge, Sal Roseland, Scattergun Lodge, Robert Schlechter, Spencer Livestock, Spring Valley Colony, SD GF&P- Lake Louise, SD GF&P-Little Bend, SD GF&P Okobojo Point, SD Soybean Processors, Tim & Melanie Stampe (2), Sunshine Bible Academy, Sutton Bay LLC A, Sutton Bay LLC B, Sutton Bay LLC C, Chad & Sara Thompson, Twisted Land and Cattle, US Corps of Engineers, Mark & Terri Undeberg (TMT), West Whitlock Resort, Matthew Wiebe

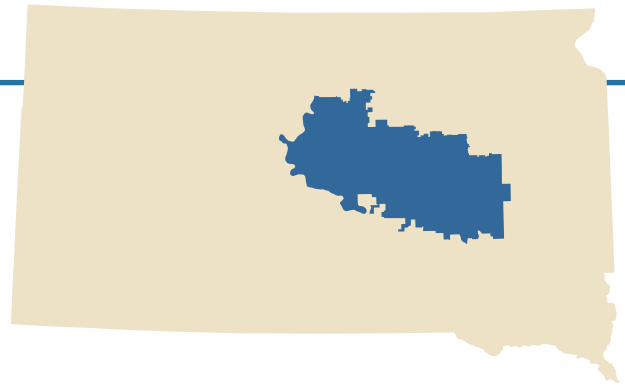
the project engineered by Bartlett & West Engineers of Topeka, KS began in September of 1994 on the Oahe Water Intake on the Oahe Dam north of Pierre, SD. Every year, directors and staff went to Washington, DC to request funding for the project and completion of the authorized project was in 2006.

The customers of Mid-Dakota are currently being served by a system which consists of: a water intake with four 400-hp pumps and a caisson that is 108' deep connected to a pipeline that is bored and jacked 1,100' into Corps Bay on Lake Oahe; a water treatment plant that can produce 13 ½ million gallons of water per day using a state-of-the art ultrafiltration submerged membranes treatment system which uses four 500-hp pumps to send the water to the distribution system; 4,700 miles of pipeline in sizes ranging from 1 ½" to 36"; 5,500 meters; 16 treated water storage tanks ranging from 100,000 to 2,500,000 gallons capacity, 2 raw water storage tanks; 14 booster stations; and a state-of-the art SCADA system which allows every aspect of the rural water system to be monitored. In order to get more water past Highmore, Mid-Dakota will see construction starting this spring on a mainline extension. This includes an additional 1.5 million gallon tank to the west of the existing tank. It will also include additional pipeline parallel to Hwy 14.

Ree Heights is having their mains and services replaced or repaired. The project will then be turned over to Mid-Dakota once it is complete.

Mid-Dakota serves a population of approximately 31,000 which includes 25 communities and towns, the largest of which is Huron. The residents of eleven smaller communities are currently served on an individual basis which has allowed those communities to get out of the drinking water business. Mid-Dakota also has Administrative Agreements with several towns which provide that town with the services of Mid-Dakota's operators to do the day-to-day operations and the billing department sends out and collects their bills. The system has 28 full-time employees and is governed by a nine-member board of directors.

It has not been an easy road but it has been well worth the effort. The system has experienced problems such as: a moratorium on new hookups when capacity was sold out; mainline washouts caused by flooding; funding shortages during initial construction; power outages during storms, etc. Even so, the staff and the board of directors have been able to assess the problem and maintain a dependable supply of water to Mid-Dakota customers. Mid-Dakota Rural Water System is a prime example of how big things can get done when people dare to dream of a better quality of life for all.



DIRECTORS:

- James McGillvrey** – Chairman/SA Director
- Dwight Gutzmer** – Vice Chairman
- Jeff McGirr** – Secretary/Treasurer
- Rick Benson** – Director
- Leslie Brown** – Director
- Lennis Fagerhaug** – Director
- Scott Oligmueller** – Director
- Darrell Rashcke** – Director
- Steve Robbenolt** – Director

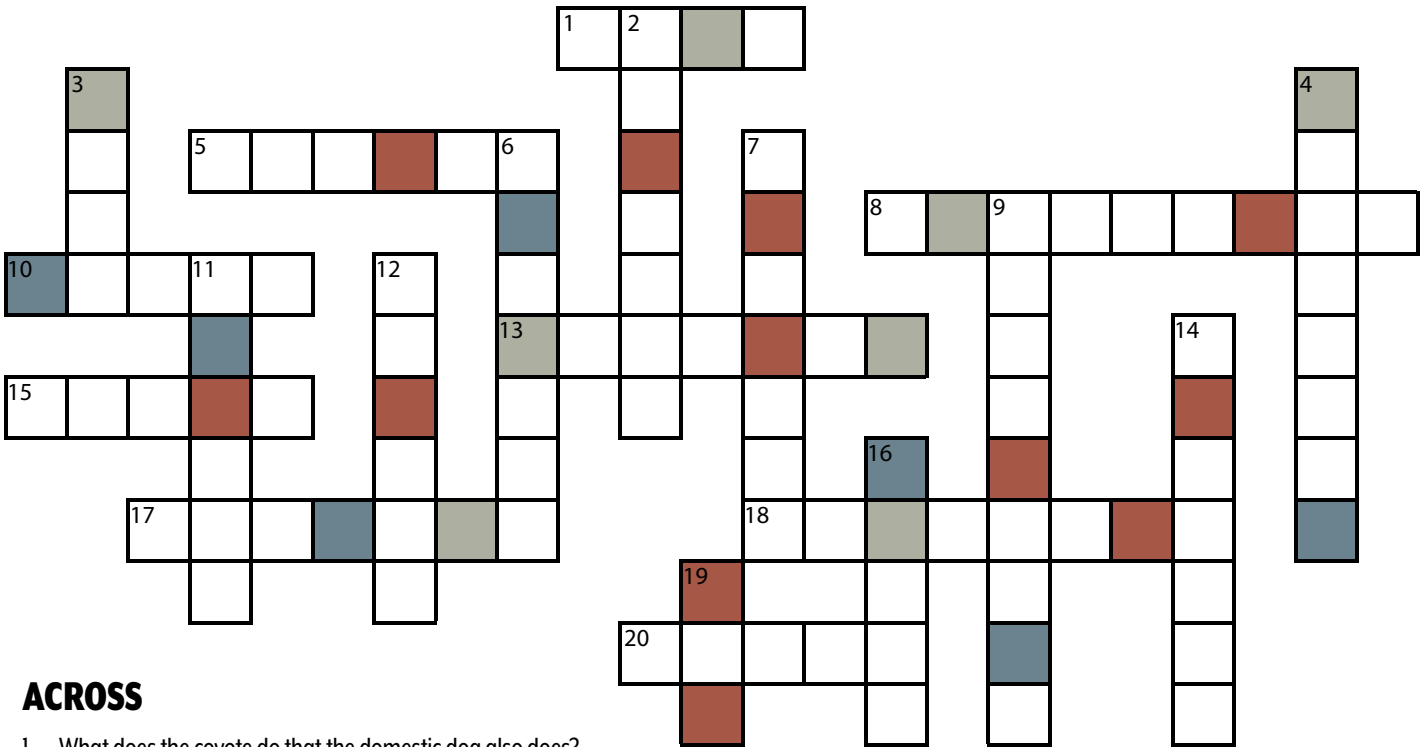
STAFF:

- Manager** – Scott Gross
- Operations Manager** – Lorin Johnson
- Water Treatment Plant Manager** – Bill Sarringer
- Member Services Manager** – Susan Hargens
- Financial Manager** – Connie Aymar
- Water Treatment Specialists**
 - Mike Polak, Steve Laird
- Electrical Specialist** – Randy Bauer
- Main Transmission Pipe Specialist** – Michael Nicholson
- Water Distribution Specialists** –
 - Shane Bothwell, Troy Dorris, Calvin Kindle, Scott Manning, Mark Gran, Scott Perry, Ron Ramsey, Al Thomas, Gary Tobin
- Small Systems Specialist** – Mike McCready
- Operations & Maintenance Specialist** – Wayne Ruhnke
- Data Aquisition Specialist** – Craig Lunde
- Hookup Specialist** – Shane Bush
- Office Administrator** – Jamie Brueggeman
- Customer & Legal Records Specialist** – DeAnn Hargens
- Customer Accounts Specialists** –
 - Sandy Holt, Tammy Oligmueller, Kristen Arthur

RURAL WATER CROSSWORD & WORD SCRAMBLE CONTEST

THE HUNT

Enter to Win \$100



ACROSS

1. What does the coyote do that the domestic dog also does?
5. A spread of these range in sizes from standard to super magnum
8. Breed of gun dog good for pheasant hunting
10. Snows and Blues
13. Jakes and Jennies
15. Cover device for hunters
17. Deer meat
18. Process of looking for a good hunting spot
20. Like many bird species, the males of this breed of waterfowl often have more colorful feathers than their female counterparts.

DOWN

2. Type of hunting using a bow
3. Deer, but not related to a Donkey
4. Ring Neck
6. Weapon popularly used for bird hunting
7. Popular hunting outfitter in southeast South Dakota
9. Open or enclosed platforms used by hunters
11. Waterfowl and pheasant hunting hours typically end at _____
12. Ruffed, Sage, Blue, Spruce
14. Moving a lure to attract fish
16. This spooks game very easily
19. Deer breeding season

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 January 10, 2020 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 Kathy Gilbert of Hitchcock who had the correct phrase of "luck is not a strategy" for October 2019.

RURAL WATER

ACROSS SOUTH DAKOTA

NEW WATER MAINS COMING TO OLDHAM

Many of our South Dakota rural communities are facing aging water pipe infrastructure and significant water loss. Oldham has been a bulk customer of Kingbrook Rural Water System, Inc., dating back to October 1988.

The City of Oldham received a Small Community Planning Grant to study its water utility and make recommendations for improvements. Funding for the engineering study came from the South Dakota Department of Environment and Natural Resources (SD DENR), East Dakota Water Development District, and Kingbrook Rural Water. The report identified three alternatives for the Community. The Town selected the alternative that would allow continued operation of their existing elevated tank and replacement of all its existing pipe.

Kingbrook submitted the funding application to the SD DENR and was awarded \$1,245,000 in funding. \$945,000 is “principal forgiveness” leaving \$300,000 to be paid back by Kingbrook Rural Water at 2.25% interest for 30 years. There is \$44,000 in “local contribution”, which is generally from a \$500 signup fee collected from the individual customers in Oldham.

The City water distribution system was built in the mid-1960’s and is composed of 4,” 6,” and 8” mainlines. The pipe material is reported to be asbestos cement (AC) pipe.

By the time of the publication DGR will be approaching 80% design of Oldham’s new water system. Kingbrook began performing a team review of the new design with our management team and the operator(s) that support Oldham, SD. By doing this, we found it gives the team a sense of true ownership. When construction is ready to begin, the team is 100% clear of the expectations and outcome of the project.

Kingbrook Rural Water Systems Inc., and the City of Oldham will benefit immensely with the installation of “The BEACON® Advanced Metering Analytics” (AMA) managed solution from Badger Meter. Each meter will be located outside the home for easier access and brings a new level of utility-optimizing information to light.

With any new construction, there are many obstacles to overcome when you’re putting new water mains in an entire community. It is critical to identify these early on and find solutions before the project begins.

For example, poor cell service exists in this area and will require an additional booster in order to work efficiently for cell phone, GPS equipment and GIS mapping. GIS can work offline but not

very effectively.

Another example is how does one locate the existing water and sewer lines as they are today? How Kingbrook plans to resolve this issue is to write an RFQ (request for quote) that will outline our expectations of locating and mapping both systems (water & sewer) to approximately 50’ outside the home before the project starts and provide this data to the contractor awarded the bid. As we all know, working around unmarked utilities is challenging, time consuming and can be extremely dangerous. Every nine minutes an underground utility is damaged. This is one way to prevent the unknown, but it also comes at a cost.

Anytime you have a large-scale project, utility coordination is critical, so each utility is made aware how to staff their locating teams to support the project. Generally, these conversations take place in early January prior to spring/summer construction by contacting them individually and making each utility aware of the size, scope of the project, months construction is expected and weekly production to assure they are staffed accordingly.

Communication on a project of this nature is instrumental to its success. Public meetings will start in March prior to contractor selection and once contractor selection has been made, a preconstruction meeting will be held where all parties will be included. Weekly safety meetings are held that include Kingbrook staff, contractor, utilities and landowners are invited to attend. This allows an opportunity to discuss production rates, utility locating issues, landowner concerns, etc.

With any new construction comes the concern of concrete, asphalt, lawn and multiple other types of damages. What Kingbrook plans to do is pre-record the specific area that will be worked in prior to any construction using a GoPro high resolution camera to ensure the areas constructed will be restored to it’s original if not better condition. These videos will be archived for future needs.

Setting the expectations up front drastically reduces the volume of calls your office will take during construction of this nature. By identifying a Project Manager and Operator to lead the project and lay out these expectations, these calls can be avoided or at least minimized.

Kingbrook Rural Water Systems Inc. is looking forward to successfully bringing new water mains to Oldham, SD in 2020. If there are any questions related to upcoming construction in Oldham, SD, please feel free to contact Erin Hayes at 605-983-5074.

Manager: continued from page 2

projects. Without your cooperation your system would not be able to undertake these mutually beneficial projects.

Year to date through September, water sales are down 13,000,000 gallons, due to the extremely wet conditions. Financially, year to date through October 31st, your system is at a \$67,000 loss for the year after funding \$1,058,000 in depreciation. If water sales were the same as last year, the system would be showing a very minimal loss. Your system continues to be financially strong.

The staff, our engineers, and the board are continuing to refine our capital improvement plan. This will continue to be an evolving document that will guide your board, management and engineering team. One of the larger items we will be looking at in the next 3-5 years is possible expansion of our existing well field and treatment plant or possible addition of another treatment plant. This will be important as more capacity is required in the future and probably more important, is to build some redundancy into the supply component of your system.

I want to thank Shannon, Mark, Darin, Jim, Ryan and Jared for their commitment to BDM and for keeping your high-quality water supply reliable.

During this holiday season, enjoy your family and friends. BDM thanks you for your patronage and wishes you a very Merry Christmas and God Bless.

CONSTRUCTION UPDATES



ABOVE: 410 cubic yards of cement went into the construction of a new 200,000 gallon reservoir east of Reservoir 5. This new reservoir will enable us to increase capacity during periods of peak demand.

LEFT: A crane lowers the new Booster Station building into place north of Pierpont. This station will provide extra pumping capacity to the south and west.





BDM 40th ANNUAL MEETING

MONDAY, MARCH 30TH, 2020

**BDM office building
705 7th Street, Britton, SD**

*The business meeting
will be called
to order at
6:00 PM*

Director districts up for election:

District Two:

Putney, Riverside, Groton, Cambria,
and Henry Townships in Brown County

District Five:

Lowell, Waverly, Pleasant Valley, Hickman, Victor, Nordland,
Wisner, Hamilton, Sisseton, and Fort Townships in Marshall County;
Tewaukon Township in North Dakota



The director position for District Two is up for election in 2020. Terry Leonhardt has served this position for one term and is seeking re-election for a second term.

Don Ogren's director position in District Five is also up for election. Don has served one term and is seeking re-election for a second term.

A nominating committee will be established to nominate candidates. If you are interested in being a director please contact a current board member or the BDM office in Britton, SD.

Financial and operations reports will be available. Cash prize drawings will be held. Only BDM members are eligible to vote and enter the drawings. Supper will be served following the meeting.

WATER MATTERS

Recurrence Intervals for Water Events

When flood conditions occur because of a heavy rain or rapid spring snow melt, you might hear the radio or TV meteorologist say something like "This has resulted in a 100-year flood on the (your river name here), which crested at a stage of 20 feet." Obviously, this means that the river reached a peak stage (height) that happens only once every 100 years, right? Further, since this just happened, we do not have to worry about an event like this happening again for a very, very long time.

Nothing could be further from the truth. Hydrologists really don't like to hear a term like "100-year flood" because it represents a misinterpretation of terminology that often leads to a misconception (see interpretations above) of what a 100-year water event really is.

Statistical techniques, through a process called frequency analysis, are used to estimate the probability of the occurrence of a given event, such as rainfall or a flood level. The recurrence interval (sometimes called the return period) is based on the probability that the given event will be equaled or exceeded in any given year. For example, there is a 1 in 25 chance that 4.50 inches of rain will fall in Brookings County in a 24-hour period during any given year. Thus, a rainfall total of

4.50 inches in a consecutive 24-hour period is said to have a 25-year recurrence interval. In common language, this is likely to be called a 25-year rainfall event.

Likewise, using frequency analysis, there is a 1 in 100 chance that a stream flow of 33,000 cubic feet per second (cfs) will occur during any year at the Big Sioux River near Dell Rapids. Thus, a

peak flow of 30,000 cfs at the river flow gage near Dell Rapids is said to have a 100-year recurrence interval. This gets translated into calling this event a '100-year flood.'

Ten or more years of data are required to perform a frequency analysis for the determination of

recurrence intervals. More confidence can be placed in the results of a frequency analysis based on, for example, 30 years of record than on an analysis based on fewer data points.

So, the next time you hear someone refer to something as a 100-year flood, remember that this is just a statistical prediction. 100-year events, be they rainfall or flood, can occur whenever the conditions are right. This can include multiple occurrences within a single year. Just because something happened yesterday is no guarantee it will not happen again tomorrow.



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