MID-DAKOTA RURAL WATER SYSTEM

Quality On Tap!

October 2017 | Volume 13, Issue 2

System Spotlight:
Rapid Valley SD-WS

The Spirit(s) of South Dakota

MIND BLOWN GLASS

Regionalization of Rural Water Systems

Manager's Message | Annual Meeting Set for October 5th

MESSAGE FROM THE MANAGER

Kurt Pfeifle, General Manager
Mid-Dakota Rural Water System, Inc.

"Ah, summer, what power you have to make us suffer and like it." – Russel Baker

This past summer was a bit of a wild ride for Mid-Dakota. With the hot temperatures and dry days we experienced in July, it made for record breaking water production and sales. Our peak days were around 10 million gallons per day (MGD). The middle of July found us "averaging" over 9 MGD (keep these figures in mind). It wasn't all that long ago and Mid-Dakota had declared a moratorium on new hookups and increased capacity. This was done because the Water Treatment Plant had a maximum daily output of 9 MGD. Mid-Dakota expanded its treatment capacity to be able to treat and deliver about 13.5 MGD. Bear in mind, this is a maximum treatment, and for the most part, the stars have to align and most everything has to be in top working order and conditions be just right in order to achieve this amount of production and sustain it for an extended period (days). The interesting part of this is a few years ago we could only get 9 MGD out of the Water Treatment Plant… fast forward to summer 2017 and we're having a week go by having us "average" more the 9 MGD. That level of production certainly made our facilities (and some employees) groan some under the strain, but we were able to continue meeting water demands, keeping our member/customers in an uninterrupted supply of water.

Elsewhere in this volume of *Quality on Tap*, you'll read about water rates and adjustments coming at the start of 2018. Probably most notable is the change to our livestock program. Livestock taps will be transitioned from an "annual" account with one bill presented and paid in October, to a monthly billed account. The rate structure will be similar, the customer will be allocated a block of water that can be used over the course of a year, but you'll receive a monthly bill. The reasons for doing this are many, but most importantly we believe it's prudent to put the reading, usage and bill in front of the customer at least monthly so that leaks and other issues can be identified and addressed sooner.

Quality On Tap!

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ORGANIZED PLANNING BRINGS PROGRESS TO MID-DAKOTA

by Susan Hargens

Many progressive and successful companies have a good planning program. They plan for what they would like to see accomplished in both the near future as well as further down the road up to five years or more. By planning ahead, determinations can be made as to the steps that will need to be taken to achieve the goals the governing body would like to reach. Oftentimes, goals that were considered impossibilities have become realities due to good planning and research.

The Mid-Dakota Board of Directors has made it a part of their agenda to have a Strategic Plan Meeting every 18 months approximately. They have found the meetings to be beneficial for solutions to goals they set which benefit the company. A meeting place is generally set up at a venue outside the office to allow the participants a place to work on ideas without interruptions. A facilitator is brought in to help everyone to stay on track and make a list of ideas they feel may be beneficial to Mid-Dakota. They then prioritize the items on the list and take the top tier and work off that. Steps to accomplish each item and designation of the individual or group that will be responsible for spearheading its development is generally the next step. Deadlines are set for when they would like to see each step completed.

Some of the goals that have been accomplished or are well into implementation are the creation of a GPS/GIS system, purchase of emergency backup generators, development of a Communication Plan, installation of an Automatic Meter Reading system and the addition of 100 users (modified to 100 service units) a year. Some incomplete goals are carried over when they are deemed important enough to continue to pursue. Two of these goals are development of an Asset Management system and getting more water delivered to areas east of the Highmore Tower.

The last Strategic Planning session attended by the board and management staff was held August 24 & 25, 2016. It resulted in six goals the participants would like to work on during the next months or years. They are analyzing water quality in the system particularly at the end of the delivery system and address them; continue to pursue getting water east of the Highmore Water Storage Tank; determine services that may be offered to small communities and develop a plan; address unserved areas on Mid-Dakota's boundaries; and continue work on an Asset Management Plan. A General Priorities list was also added which includes adding 100 service units a year; customer satisfaction and education; employee recruitment and succession planning; financial viability of system and current threats; and monitoring regulatory trends.

Great results have been accomplished from planning for Mid-Dakota's future and the board and staff have been very pleased with the goals that have been met. The use of Strategic Plan Meeting will continue to be a valuable tool for the management of the Mid-Dakota Rural Water System and Mid-Dakota's customers will continue to reap the benefits.

Save the Date

ANNUAL MEETING

OCTOBER 5, 2017

MID DAKOTA CALENDAR

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

October 9, 2017
– Native American Day

November 10, 2017
– Veteran's Day

November 23, 2017
– Thanksgiving Day

December 25, 2017
– Christmas Day

January 1, 2017
– New Year's Day

In case of an emergency, please call the office Toll Free at 1-800-439-3079, or call our After Hours answering service direct at 1-888-545-7440.

Find us on: facebook

FOLLOW US ON twitter

OUT AND ABOUT

OCTOBER

1 – SOUTH DAKOTA STATE CORN HUSKING CONTEST – FLANDREAU, SD
Compete to see who can husk the largest amount of ear corn. The contest is divided into various divisions ranging from youth, mens, womens and Golden Agers 75+. The top three in each division qualify for the national event. Located at the Jim Redder Farm – 48475 228th St., Flandreau. cornhusking.com.

4-8 – GREAT SCARECROW FESTIVAL – HURON, SD
The Huron Lions and Lioness Clubs' Great Scarecrow Festival is a fall celebration at Campbell Park. This event features an outdoor display of theatrical, bizarre, comical and scary scarecrows created by businesses, organizations and service clubs. 2017 marks the 24th year of the festival. www.huronsd.com/visiting-huron/special-events/great-scarecrow-festival

6-7 – PUMPKIN FEST & PARADE OF LIGHTS – WEBSTER, SD
Head to Webster for the Annual Pumpkin Fest & Parade of Lights. Enjoy a fun horse-drawn wagon ride, loads of great food and music, craft vendors, a baking contest (free samples), Guess the Weight of the Giant Pumpkin Contest, bounce houses for the kids, children's tractor pull and other activities. It's great fun for the whole family. Finish Saturday off by watching one of the very best lighted night parades starting at 7 p.m., and enjoy free hot chocolate while watching the parade. webstersd.com

7 – OKTOBERFEST – ABERDEEN, SD
Oktoberfest in Aberdeen celebrates our region's German/Russian heritage with Bavarian culture, music, dancing, food, beer and wine. Activities include a German breed dog parade, dachshund races and a Root Beer Garden, along with a children's area with face painting, crafts and inflatables. There will be contests for stein-holding, best costumes and yodeling, as well as a craft beer tasting event. Join in the fun! $5 for adults, free for children 10 and under. 1pm - 11pm. www.visitaberdeensd.com

If you would like your event featured in the January 2018 issue of Quality on Tap!, please email your event description to: info@sdarws.com. January's issue will cover events taking place January - March 2018. Event listings are subject to approval by the QOT Editorial Board.

NOVEMBER

4 – 78TH ANNUAL LUTEFISK FEED – SUMMIT, SD
Summit is well known for it's family-style Lutefisk feed, celebrating its 78th year in 2017. We serve you at your table as we bring you unlimited Lutefisk, ham, mashed potatoes and gravy, corn, bread and lefse (made by various community members). This event is steeped in tradition as a community event that everyone participates in every year. You need to come and enjoy at the Summit Community Hall on Saturday, November 4, from 5-8 p.m. $18 for adults and $5 for kids 12 and under. www.seesummitsd.com/

11 – WAGNER CRAFT FAIR – WAGNER, SD
Sponsored by the Wagner Music Boosters, this craft fair runs from 9 am to 3 pm in the Wagner Community School Auxiliary Gym – 101 Walnut Avenue S.W. This free annual event features exhibitors and vendors, concessions and door prizes. (Booths are still available.) For more information, contact Marti at mcimpl@hotmail.com.

DECEMBER

2 – LIVING CHRISTMAS TREE – ABERDEEN, SD
The Aberdeen Living Christmas Tree started in 1988. The performances include an orchestra, children's choir, adult choir and narration. Over the years, thousands have come to associate these performances on the first Saturday and Sunday of December with the beginning of the Christmas season in Aberdeen. Performances are held at the Aberdeen Civic Arena 7-9 p.m. on Saturday, December 2, and 3-5 p.m. and 7-9 p.m. on Sunday, December 3. Admission is a free-will donation. www.facebook.com/aberdeenlct

9 – FRONTIER CHRISTMAS – FORT SISSETON STATE PARK, LAKE CITY, SD
Come share in the festivities at the fort as we celebrate Christmas in classic 1860s fashion as only Fort Sisseton can. There will be close to a dozen make and take craft stations, handmade decorations, festive treats, and of course caroling. Be sure to bring the kids and make sure they're not naughty because Father Christmas will be making a stop to check up on all his favorite children! Hours are 10am - 4pm; state park entrance license required.

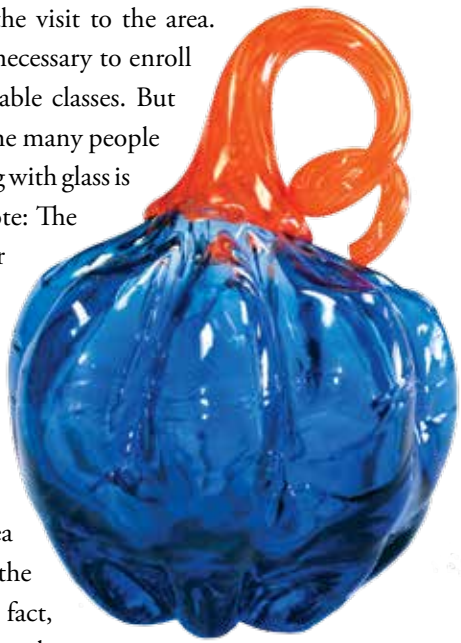
15 – SIOUX EMPIRE WACIPI – SIOUX FALLS, SD
The Great Plains Dance Company; Bird, Inc., and the Sioux Empire Wacipi are bringing this inter-tribal powwow and cultural arts event to the W.H. Lyon Fairgrounds in Sioux Falls December 15-17 from 7am - 4pm. Included is an exhibition and showcase of native artisans and crafts people who will vend and sell their traditional arts and crafts. $15 per day or $29 for the weekend; children 4 and under and seniors 65 and older are free. www.siouxempirewacipi.net

MIND BLOWN GLASS

By Jay Gilbertson, East Dakota Water Development District

Travelers to Deadwood the past few years may have noticed that the old Texaco service station at the corner of Pine Street and Sherman Street has been re-purposed. The paint scheme is similar, but now instead of gasoline and tires, visitors can watch molten glass be shaped into forms both whimsical and practical. At Mind Blown Glass, Toni Gerlach provides visitors with a chance to experience the fascinating and exciting art form of hot glass blowing, creating one-of-a-kind pieces of art. Visitors can watch as she creates items ranging from paperweights, ornaments and drinking cups to elaborate custom pieces, all of which are for sale at the studio.

But you don't have to just watch. Mind Blown Glass also offers short classes so that people can experience working with molten glass first hand. One-on-one classes allow people to create their own glass souvenir of the visit to the area. No prior experience is necessary to enroll and participate in available classes. But be warned – the first time many people try their hand at working with glass is rarely the last time! (Note: The managers of the larger rural water systems gather quarterly to discuss items and issues of mutual interest. Many recent attendees of meetings in the Deadwood area have succumbed to the lure of molten glass. In fact, the blue pumpkin shown here was created by Big Sioux Rural Water Manager Martin Jarrett).



Information about Mind Blown Glass can be located on their website, mindblownstudio.com, where you can find out details about when the facility is open and when Ms. Gerlach is likely to be in the studio working. It also has information on available classes. They do their best to keep the information up-to-date, but visitors traveling a long distance may want to call ahead just to confirm that the shop will be open. As you can imagine when working with 2,000 degree molten glass, there are times when it might be too hot to be in the studio.

THE SPIRIT(S) OF SOUTH DAKOTA

By Denise DePaolo

Many of us enjoy a nice stiff drink from time to time. We all have our favorites – Jameson, Stolichnaya, or maybe a top shelf Scotch like Lagavulin or a good Glenfiddich. Now, a growing number of South Dakotans are working to create our next go-to spirit.

This year, South Dakota is celebrating the 20 year anniversary of the Farm Wine Bill, legislation that enabled the commercial production and sale of wine. Today, there are roughly 30 wineries scattered throughout the state, and nearly the same number of breweries. And although its enabling legislation followed close behind, the state's spirits industry is just now starting to take off, with the number of distillers sitting at seven, if only for the moment.

It all began a decade ago with Pierre's Dakota Spirits Distillery and its Bickering Brothers brandy and whiskey. And slowly more and more spirits enthusiasts filed for federal licenses and began distilling. For Philip and Cindee Klein of Watertown's Glacial Lakes Distillery, the small number was part of the appeal.

"The reason we did a distillery instead of a brewery is there are 4,000-some breweries in the United States now," said Philip. "There were only 400-some distilleries. When you see craft brewing taking off like that, you've got to assume craft distilling will do the same thing, just a few years later."

The Kleins and two friends began planning Glacial Lakes three years ago, and finally began distilling in January. The first product ready for distribution was a vodka, since it doesn't need to age. Made from locally-grown wheat, it is designed to be neutral on the palate, and virtually disappear into a cocktail. So far, it's been picked up by 205 bars, restaurants, and liquor stores. But the Kleins, like most other spirit-makers in the state, remain employed full-time, with production, tastings, and events occupying evenings, weekends, and vacation time.

"Then it grew to the mammoth business we have right now," laughed Michael Lewis, owner of Sturgis' Black Hills Dakota Distillery, recalling the long process of filing for licenses and the initial trial and error involved in spirit making. "It's not at the point that we're looking at retiring on it or even quitting our day jobs to focus solely on the distillery. It's been a slow go. It would have been kind of nice if it had taken off like the TV shows you see."

Black Hills Dakota was the state's third distillery, started by Lewis and his brother as their million-dollar scheme. While it has yet to blossom into that, making products like their flagship Sturgis Shine, has become a point of pride. The development of new and interesting flavors, a passion. And the ability to control quality, while reveling in the nuances of individual batches, a fascination. This is what Lewis loves about artisan spirit making.

"Once you learn a little more about the industry, it isn't always what you think it is," he said. "For instance, Crown Royal is

looked upon as being a very uppity whisky. Well, you'll find that Crown Royal will add coloring and flavoring to their spirit to get it to the point where they want it. That's what they do and there's nothing wrong or illegal about it, but it's a lot different from an artisan distiller who doesn't do that kind of stuff. You will find a slight variation from batch to batch, and that's just the way it is. We don't have a big lab where everybody's analyzing the final product, saying, 'We need to add more brown number 50,' or whatever to get it up to the exact color. We don't really care, because that's not what we're about."

Lewis's Sturgis Shine is based on a recipe for poitín, a very strong (and once-banned) Irish liquor. Although traditionally even higher, it is bottled at 100-proof, and drinkers are wise to follow the gentle suggestion on the side of the bottle: "Drink less. Drink better. Enjoy in moderation."

Poitín is made from honey, sugar, and barley, where typical moonshine is made from corn. For the owners of Kadoka's Badlands Distillery, moonshining is a family legacy. At 22, Shaley Herber is one of the youngest distillers in the country. Her great-great uncle Joe Herber was known for the good quality hooch that came from his still during Prohibition, and he sold it to lawmen and lawmakers alike. His recipe, flavored with brown sugar syrup, has been passed down from generation to generation, and is now bottled as the 100-proof Venom.

Herber's father, Jim, and business partner Mark Eschenbacher bought an old mechanic's shop last year, a mere 20 miles from the ranch where Uncle Joe ran his still. With the help of family and friends, the building located a stone's throw from I-90, now serves as a distillery and tasting room for half a dozen spirits, like the Wata Latte, made to taste like coffee in the most straight-forward possible manner.

(Editor's Note: The distilleries mentioned in this article all use water provided by their local public or rural water supplier.)

Images by Elizabeth Lucille Photography

Reprinted, with permission, from the November 2016 Edition of 605Magazine

REGIONALIZATION OF RURAL WATER SYSTEMS

By Martin Jarrett, General Manager of the Big Sioux Community Water System, and Randy Jencks, General Manager of the Kingbrook Rural Water System

Historical Perspective

South Dakota has approximately 30 regional rural water systems. Founded in the early 1970's, the systems have expanded to service the majority of the state. They have succeeded where many city utilities have foundered. Most cities and towns in South Dakota are now served, in one form or another, by a rural water system.

Historically, a town provided water by drilling a well within the town limits, and wherever they hit an aquifer that supplied the quantity they needed, that became the town's water source. Unfortunately, the geologic history of South Dakota made for some less than desirable outcomes. East of the Missouri River, in the glaciated half of the state, ground water was abundant and wells were usually in the 50 to 500-foot range. However, most of these sources were tainted with high iron and manganese levels (red-brown to black staining), had high levels of sulfates, and from a national perspective, provided very hard water. Livestock rearing was hampered by this poor-quality water and these water supplies were often not suitable for irrigation on South Dakota's soils. The founding of regional rural water systems in the 1970's and 1980's coincided with improved hydrological research from our universities, and so placement of the regional rural water well-fields were better sited to take advantage of both better quality and sustainable water supplies.

West of the Missouri River offered greater challenges from a water supply standpoint. With much of western South Dakota covered by thick formations of Cretaceous Age shales, well depths were frequently over a thousand feet deep and the water quality was brackish in nature. It was during the 1980's that the Missouri River waters became the focus in developing large pipeline-based systems, often with thousands of miles of pipe in the ground. Systems such as WEB, West River Lyman Jones, Mid Dakota, and more recently, Lewis and Clark Regional Water system, are examples of these efforts built under the guidelines and support of the Federal Bureau of Reclamation. Given the sparse population in South Dakota, most of these systems would never have been built without Federal and state subsidies.

The development of rural water systems in South Dakota has enabled agriculture to flourish. Better water quality and greater resources now supply many large dairies, confined swine and cattle units, as well as multiple ethanol plants. Rural water has improved the standard of living for many South Dakota families, enabling in home use of dishwashers, and extending the working life of water heaters and washing machines.

It is unquestionable that rural water systems are important. As stated by James Vann, Jr., Chairman of the Task force on Rural Water and Wastewater Infrastructure, "Unless we have clean water and safe wastewater disposal in our service areas, people will not be willing to locate in our communities."

The Path Forward

During the last 30 plus years, rural water systems have tried to contain costs and keep levels of service affordable. With a relatively

low customer base and over 45,000 miles of pipe in the ground, this has been a challenge. Higher power rates, pollution issues requiring modified forms of treatment, higher infrastructure costs and higher chemical costs have all contributed to the challenge. Just in the last 15 years, we have seen infrastructure costs doubling or increasing by over five percent per year, and in the case of hydrated lime, we have seen a delivery of 24 ton increase from $1,200 to over $4,500.

Is this sustainable? In the case of smaller to medium sized rural water systems – possibly not. These systems are already under pressure trying to provide what our customers expect for service--better water quality, better pressures and flows, an online presence, better communication, automatic meter reading and billing, and on-line bill pay. Most of these systems are under staffed, with no IT person, no environmental engineer or chemist on staff. However, some progress has been made. Innovations in the use of heat exchangers have lessened the reliance on fossil fuel use, more efficient use of lighting and variable speed drives have helped with electrical demand, and the use of third party providers in the areas of meter reading and account billing have lessened the work load.

Perhaps one of the most exciting recent developments has been expanding the influence of the Lewis and Clark pipeline system with the "wheeling project," enabling the expanded use of Lewis and Clark water by Minnehaha Community Water System to free up some of its own capacity to push water up into the neighboring Big Sioux Community Water System, which in turn pushes water up to the cities of Madison and Chester. This process costs considerably less than creating new well-fields and treatment plants.

Another example of this innovative thinking took place when Kingbrook and Brookings-Deuel Rural Water Systems entered a joint venture to build a treatment plant that has served both systems for the past 40 years. However, the next logical step to review sharing staff, facilities, equipment and joint planning for the future has not taken place for various reasons.

Continued consolidation and sharing of facilities may be the most efficient response to the challenges facing today's rural water systems. But consolidation can be a sensitive subject in rural areas. Take for instance the memories associated with school consolidations, acquisitions and other mergers that did not produce the intended results. The feeling of loss of control, the sense of ownership, and the fear of the unknown all contributed to the frustration felt by the decision makers. It's understandable how this could result in lack of action to pursue consolidation. However, the consolidation of many smaller rural water systems may be the only way to take advantage of economies of scale in both the treatment, delivery, and administration of present day rural water systems. Most rural water systems do not carry the extra capacity throughout their service areas to add on additional ethanol plants or 5,000 head dairies. A plentiful supply of high quality water is often taken for granted. Many planners and developers assume it is available, whilst in reality, both from a treatment and delivery standpoint, the cost to provide that capacity is an ever-increasing challenge.

While negative perceptions on consolidations exist, there are many potential positive outcomes. These include efficiency gains through spreading fixed costs over a larger customer base; more effective use of staff, equipment and facilities; personnel redundancy and resultant cross training opportunities to reduce crisis management with the loss of a critical position; and, most importantly, better service to customers. As stated by USDA Rural Development's Jim Maras, "obtaining an economy of scale for operations, staffing and especially management should be the goal for consolidation discussions". The question remains, "are current systems willing to exhibit the foresight and courage necessary to begin the journey?"

SYSTEM SPOTLIGHT

RAPID VALLEY SANITARY DISTRICT-WATER SERVICE

The Rapid Valley Water Service Company was organized on January 19, 1962 by several local citizens who saw the necessity of having a safe drinking water supply as most of the area was using water from shallow wells. A nine-member Board of Directors was elected by the original 133 members of the cooperative. Loans were obtained from Farmers Home Administration for the initial installation of water mains, water towers and wells.

Rapid Valley Water Service was one of the first rural water systems in South Dakota to receive a loan from the Farmers Home Administration. By 1965, approximately 300 households were members of the system.

The same individuals, who formed Rapid Valley Water Service, foresaw the need for a sewer collection system to eliminate the pollution of the area caused by faulty septic systems. They established Rapid Valley Sanitary District in 1966. It was founded primarily to provide water and sewer service to the small rural community that had developed, which at the time was approximately three miles east of Rapid City.

Rapid Valley Water Service Company's first well was constructed in 1962. However, this well quickly closed because of poor production. Two more wells were dug in the 1960s, but both were eventually closed due to high radium content. A well was completed in 1980 in the Madison Formation, which is one of the larger and deeper aquifers in the Black Hills, but it had to be closed one year later because of problems with the casing.

In 1990, an underground gallery was installed along Rapid Creek to use surface water. The water treatment plant was a pressure tank sand filtration process that was located on Rapid Creek. This treatment plant was taken off-line in 2007 when a new microfiltration facility was constructed. Prior to the microfiltration plant the District purchased 70% of their water from the City of Rapid City. The District has become self-sufficient in the production of water, but continues to strive for a spirit of cooperation with Rapid City.

Improvements to both the water and sewer systems have been financed through loans, grants, bonds and by original local contributions.

In 1993, the five-member Board of Trustees for the Sanitary District and the nine members of the Water Board decided it would be in the best interest of the customers and employees to merge. The merger became effective on July 21, 1994. The new company is a quasi-governmental entity that operates under the name Rapid Valley Sanitary District–Water Service.

The District employs eight people: the general manager, two office personnel and five service people. Two of the employees have each worked for the District for more than 34 years, thus adding to the richness of the District's historical resources.

For many years, the District's office was a small cement block building. Three major renovation projects took place at that physical site to add adequate office, meeting and garage space. In 2002, the South Dakota Department of Transportation built an overpass directly adjacent to the District's office, thereby rendering the building useless to the District as there was no longer access for equipment. The District purchased land and built a new office building that nearly tripled existing space.

The Rapid Valley area is a fast-growing area on the outskirts of Rapid City. In fact, part of the Rapid Valley service area is within city limits due to expansion by the city. The District and the city work closely to provide high quality service to their customers and residents. The District currently serves approximately 3,900 connections.

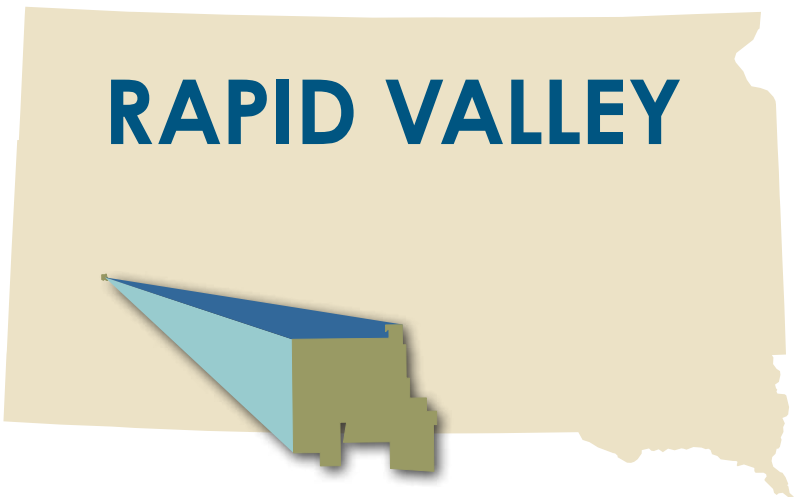
A new 1.85 million gallon tank was constructed in 2009. The concrete tank was built partially underground and serves the low level part of the District and another .256 million gallon Aqua store tank was constructed in 2013 to serve the upper system. Rapid Valley Sanitary District–Water Service now has 3.61 million gallons of storage.

Rapid Valley began making infrastructure upgrades in 2009, including new water and sewer main projects and the addition of a 1600 gpm booster station to provide for future expansion in the high zone of the District. The District annually reviews a short/long term project plan and implements two to four projects every year.

Rapid Valley Sanitary District–Water Service added a third microfiltration unit in 2010. This treatment, along with the previous units, achieves a 5 log removal along with our Trojan ultra violet system which adds another 4 log removal. This exceeds drinking water quality standards established by the Environmental Protection Agency. The upgrade increased treatment production from two million gallons per day to three million gallons per day and allows Rapid Valley the capacity to serve Green Valley Sanitary District.

RVSD Board Members

RAPID VALLEY



Rapid Valley Sanitary District–Water Service continues to look to the future to provide high quality drinking water to its consumers. This commitment to the future involves all the employees as they increase their skills and education to stay abreast of the ever-changing water industry and a Board of Trustees with a forward thinking mindset. Rapid Valley is currently pilot testing ceramic membranes for water treatment, the testing thus far has shown that this may well be the direction of the future, three to four times the production capacity per square foot when comparing to the standard polymeric membranes with a higher recovery rate and lower operating cost, hopefully this will prove to be the gateway for Rapid Valley and many other systems for the long term sustainability of the water treatment business.

DIRECTORS:

Dwight Peterson, Chairman

Richard Hensley, Vice-Chairman

Connie Olson, Treasurer

Jack Tomac, SA Director

Clyde Elwood, Director

Patrick Judge, Director

Shirley Haines, Director

Bob Phillips, Director

Diana Nelson, Director

STAFF:

Rusty Schmidt, General Manager

David Flint, Field Supervisor

Nate Broom, Operator

Garett Whipple, Operator

Glen Hahne, Operator

Mike Chrobak, Operator

Marty Garwood, Office Operations Supervisor

Kathy Graff, Administrative Clerk

STATISTICS:

Hookups: 3,900

Miles of Pipeline: 60

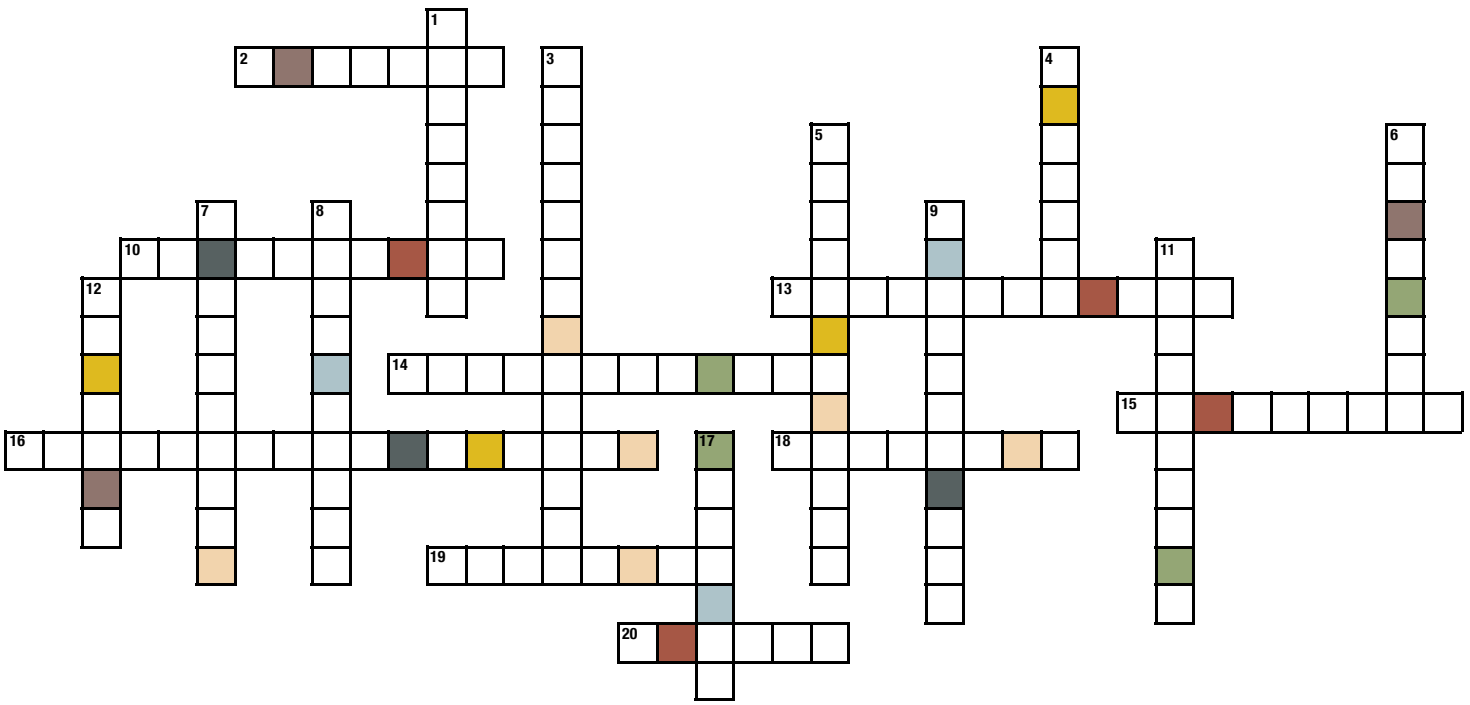
Water Source: Rapid Creek, Interconnection with Rapid City

Counties Served: Pennington

RURAL WATER & Crossword Word Scramble Contest

Animals of SD

$100 Grand Prize



ACROSS

2. It may give a hoot on a farm
10. Lewis & Clark's "barking squirrel"
13. Surefooted wooly billy
14. Large predatory cat (two words)
15. Often mistaken for an antelope
16. Endangered critter
18. Ring-neck's cousin
19. Cerulean sunfish
20. Wile E. for one

DOWN

1. Speedy vixen
3. Pinching slowpoke
4. Winged fisher
5. What mighty large horns ewe have
6. Whitetail's cousin (two words)
7. Sword-nosed bottom feeder
8. Playful aquatic mammal (two words)
9. Venomous tail shaker
11. Long-eared hopper
12. Large shaggy brown bison
17. State gamefish

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 October 14th, 2017 *to be entered into the $100 drawing.*

Online Entries - go to: www.sdarws.com/crossword.html

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 Betty Saathoff who had the correct phrase of "Step right up and be amazed" for July 2017.

FUNDING CUT THREAT CONCERNS WATER QUALITY ADVOCATES

By John Hult
Reprinted with permission from the Argus Leader

It's an important program that produces real results, but it's not worth keeping.

That was the message East Dakota Water Development District's Jay Gilbertson took from a press release trumpeting the release of $2.5 million in funding for water quality projects in South Dakota.

The release came from the Environmental Protection Agency. The money came from the Section 319 program, which is designed to tackle "nonpoint" pollution – farm runoff, manure from pastures and the like.

It's grant money South Dakota's used for years to tackle pollution in the state's public waters, two-thirds of which are too dirty for some combination of drinking, fishing, kayaking or swimming.

"Providing funds directly to South Dakota emphasizes the importance of partnering with states to help address their unique and critical environmental challenges," said EPA Administrator Scott Pruitt.

What the July 25 news didn't mention was that two months before that, Pruitt's agency proposed a budget that would zero out Section 319 funding in the next fiscal year.

"It struck me as a little disingenuous for the secretary to be lauding the benefits of a program the administration believes is unnecessary," said Gilbertson, whose agency uses Section 319 funding for projects up and down the Big Sioux River.

The budget proposal is subject to Congressional approval, and there are signs the program will remain funded. The House's budget proposal would restore $170 million in funding.

Each member of the state's Congressional delegation – Sens. John Thune and Mike Rounds and Rep. Kristi Noem – said this week they'd offer the program due consideration.

Even so, Gilbertson's not the only one troubled by the symbolism of a proposed budget that leaves no room for Section 319.

There are a handful of funding sources to help farmers pay for what are known as "Best Management Practices, or BMPs.

Those include planting buffer strips to capture runoff, installing fences and clean water sources to keep livestock and their waste out of rivers and streams and building barns with underground pits that trap waste and keep it from washing away and into water sources.

Section 319 funding pays for some of the project costs, but it also pays the salaries of the people who pitch the projects to farmers and monitor their success.

"If there's nobody there to do the program, it just sits there," Gilbertson said. "The 319 funding in South Dakota, to a certain extent, has been the glue that holds everything together."

Barry Berg works for the East Dakota Water Development District. He designed a program called S-RAM – Seasonal Riparian Area Management – that's credited with heavy reductions in pollution along Skunk Creek.

Last year, the Big Sioux River-feeding creek north of Sioux Falls was de-listed for total suspended solids after years of impairment.

Section 319 money's not only paid for Berg and an assistant over the years, but contributed S-RAM payments to farmers for keeping livestock out of the creek.

The city of Sioux Falls matches contributions and uses state revolving fund money to help pay for the program upstream of the city, but total funding cut would be significant.

"It's millions of dollars that we wouldn't have," Berg said.

"A cut to the program would likely force the city of Sioux Falls to alter its approach to Big Sioux River cleanup," said Jesse Neyens of the Sioux Falls Environmental Division.

"We wouldn't be able to accomplish all of the things we want to accomplish," Neyens said.

Jim Feeney of the state Department of Environment and Natural Resources can't recall an EPA budget without any 319 money, but he has seen Congress increase funding after budgets that sought to cut payments.

The DENR uses the money to pay 60 percent of the salaries for the equivalent of 13 full-time employees who focus on water quality.

Feeney said the agency will continue to take applications for projects through the fall, evaluate them through the winter, and wait to see if enough money's awarded to keep working.

"All we can do is proceed with thinking we're going to have 319 funding," Feeney said.

RATE SCHEDULE ADJUSTMENTS FOR 2018

Last year, Mid-Dakota users were given a respite from water rate adjustments and the rates for 2017 stayed the same as they were in 2016. Unfortunately, the cost to treat and deliver the high quality of water Mid-Dakota provides continues to rise and eventually the board was going to have to consider an increase in the cost of water to the customers.

This year, after doing an analysis of income versus expenses, the board decided to adjust the rates. The rate changes are as follows:

At the June 13th Board meeting, the board approved an approximate 5% increase to the Special Users effective January 1, 2018. Class I and II Municipal and Individual customers will see the $16.40 per gallons per minute (gpm) stay the same, the $21.00 per gpm will increase to $23.00, and there will be no change to the $0.50 per 1,000 gallon charges. Class III Municipal and Individual customers will see the $4.69 per person per month (ppm) stay the same, the $3.95 per ppm will increase to $4.35 per ppm, and there will be no change to the $0.50 per 1,000 gallon charges. Class III customers can be subject to the conservation rate when they go over their contract and that rate was adjusted at the meeting in July. It is going from $6.00 per 1,000 gallons to $6.75. Letters were sent to the special users so they could figure the new rates when working on their budgets.

At the July 11th Board meeting, the board approved an adjustment for the remaining customer classifications. The Residential and Rural Household accounts will increase by $2.00 per month. This will make the new monthly minimum bills as follows: Residential - $42.00 per month, 2-Unit Rural Household - $52.00 per month, 4-Unit Rural Household - $70.00 per month, and 6-Unit Rural Household - $87.00 per month. The water rates charges per 1,000 will change from $4.25 to $4.50, $3.25 to $3.50 and $6.00 to $6.75.

The biggest change for users will be the Livestock accounts. The board has decided to cease billing the Livestock accounts on an annual basis and move to a monthly billing after Livestock bills are sent out in October. The Livestock accounts will then be charged $30.00 per month Minimum Bill, $3.50 per 1,000 gallons for the first 300,000 gallons, $4.50 per 1,000 gallons for the next 400,000 gallons and $6.75 per 1,000 gallons for any water used over 700,000 gallons for the entire year (these are not monthly allocations). The water will accumulate over the entire year's usage. The Livestock account charges will go into effect October 1, 2017 with the full allocations of water in effect until the end of 2017. Beginning the 1st of January in 2018, the allocations will reset and the Livestock usage will start over again on the rate schedule for that year. This will allow Mid-Dakota to sync the beginning and ending Livestock rates with our other monthly rates.

If anyone has any questions concerning these changes they are encouraged to call Mid-Dakota at 1-800-439-3079.

Rate Table Effective January 1, 2018

501 Residential 1-Unit
$42.00 per month minimum bill
$4.50 per 1,000 gallons 1st 33,000
$6.75 per 1,000 gallons over 33,000

502 Rural Household 2-Units
$52.00 per month minimum bill
$4.50 per 1,000 gallons 1st 10,000
$3.50 per 1,000 gallons next 56,000
$6.75 Per 1,000 gallons over 66,000

504 Rural Household 4-Units
$70.00 per month minimum bill
$4.50 per 1,000 gallons 1st 10,000
$3.50 per 1,000 gallons next 122,000
$6.75 per 1,000 gallons over 132,000

506 Rural Household 6-Units
$87.00 per month minimum bill
$4.50 per 1,000 gallons 1st 10,000
$3.50 per 1,000 gallons next 188,000
$6.75 per 1,000 gallons over 198,000

511 Livestock
$30.00 per month minimum bill
$3.50 per 1,000 gallons 1st 300,000 (per year)
$4.50 per 1,000 gallons 301,000 to 700,000 (per year)
$6.75 per 1,000 gallons over 700,000 (per year)

161, 162, 164, 165 Special Class I & II
$16.40 per GPM per month minimum bill
$23.00 per GPM per month demand charge
$0.50 per 1,000 gallons

163, 166 Special Class III
$4.69 per Pers (equiv) per month minimum bill
$4.35 per Pers (equiv) per month demand charge
$0.50 per 1,000 gallons up to contract amount
$6.75 per 1,000 gallons over contract amount

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

After Hours or Emergencies
Call Mid-Dakota
TOLL FREE at: 1-800-439-3079
or call the answering service direct at 1-888-545-7440

For online bill paying:
www.mdrws.com

Mid-Dakota's Mission Statement

Enhancing Quality of Life By Providing High Quality Water and Excellent Service.

WATER SAVING TIPS FOR TIMES OF DROUGHT

By Susan Hargens

Many communities and water delivery systems in drought afflicted areas in the state of South Dakota are finding it difficult at best to provide a plentiful supply of water to their customers this year. This year reminds those that can remember how dry it was in 1976 and for those much older, the 1930's come to mind. Livestock had to be sold because there wasn't any grass in the pastures and farmers were running out of feed. There were no crops to replenish their supplies. This year, farmers are already starting to sell the old cows to decrease the numbers and try to save the foundation herd. Farmers are "next year" people and many are hoping for an end to a very bad dry spell.

Last year, the Mid-Dakota area did not see a large amount of rain. This year, the rains have been few and far between and in many areas the crops are ruined from the high temperatures, lack of subsoil moisture and lack of rain. Shortages of precipitation create problems for those that provide water to the customers as well. Pumps have to run non-stop and treatment plants run at maximum capacity to keep up with the demands for water. To prevent the added costs of upgrades to increase the amount of water that can be produced to send down the pipeline, it is important for everyone to use their water wisely. This will benefit both the customer and the water system to help keep down costs.

Lawn watering can be a wasteful use of water if it is not done correctly. Sprinklers should only hit the lawn, not the pavement or sidewalks. The amount of time a sprinkler is used depends on the type of sprinkler system you are using and it would be a good idea to check how long they should run with your local extension office or if possible, a lawn care expert. Decreasing the number of watering sessions by 1-2 times per week will help greatly in saving water. Those who water using hoses should use water-efficient nozzles and make sure the rubber washers are in good condition to avoid leaking. Watering should be done early in the morning before 8 a.m. to avoid evaporation which occurs more when the sun is shining. Aerating the lawn helps to retain moisture by punching little holes in the packed soil so the water doesn't run off. The use of mulch and compost around plants will help retain moisture, but be careful if using grass cuttings when weed killer has been recently applied to the lawn. If replanting becomes necessary, plant indigenous grasses and plants.

In and around the home there are many other ways to save water. When you are cleaning the sidewalks and driveways, use a broom and sweep them off instead of using a hose. Use of water barrels will collect water from the infrequent rains and this water can be used on potted plants.

Keep a pitcher of water in the refrigerator so a person can get a cold glass of water without having to run the water at the sink to get it cold. Make sure that leaking faucets are fixed as soon as possible and use low-flow plumbing fixtures such as showerheads, faucets, etc. Don't use your garbage disposal to dispose of vegetable peelings. Either place the peelings in a compost pile in the garden or put them in the garbage. Wash only full loads in the dishwasher and clothes washer and when purchasing a new one check out purchasing a high-efficiency model. Don't pre-wash dishes before putting them in the dishwasher, but soak them in a pan or the sink with the plug in place. Leaking toilets are often the guilty party when there is a leak in the home. Make sure the toilet isn't leaking by placing food coloring in the tank and see if the color enters the bowl before flushing. If it does, there is a leak.

There are many other ideas that help save water and if we all work together, we can help our utilities save on operating costs. This will mean lower costs for the customers while ensuring a plentiful water supply for everyone until the next rainy season.

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WATER MATTERS

Ground Water Protection

Why do we need it?

With only a few exceptions, public water supplies in South Dakota depend on ground water resources, known as aquifers, to meet the needs of their customers. Protection of these aquifers helps insure that both current and future users can count on clean and safe water.

How can aquifers be protected?

Protection strategies can vary depending on the type of aquifer/wells involved. For buried units, geologic materials between land surface and the aquifer provide effective isolation and protection. The only real concern would be contamination that might find its way down to the aquifer along a poorly constructed well or other man-made conduit.

With most shallow aquifers, there is usually very little or no native cover over the water-bearing deposits. This means that they can be quickly and effectively recharged by rainfall and/or snow melt, but it also means that contaminants can just as quickly find their way into the aquifer. The best and most practical protective measures reduce or restrict the presence of contaminants and/or potentially hazardous practices, particularly in the immediate vicinity of production wells. To help protect critical aquifers, over a dozen counties in eastern South Dakota have adopted land-use controls (ordinances) specifically designed to protect shallow aquifers.

What can I do to help protect ground water?

- Recognize that many of our actions can potentially impact our water supplies, and act accordingly.
- Encourage your local county and city governments to adopt aquifer protection measures as needed.
- Support source water protection efforts by your local public water supply.

To learn more about ground water protection, contact your local public water supplier or check the web sites listed below.

SD Department of Environment & Natural Resources
denr.sd.gov/des/gw/groundprg.aspx

U. S. Environmental Protection Agency
www.epa.gov/sourcewaterprotection/local-source-water-protection-measures

East Dakota Water Development District
www.eastdakota.org/BSAGPP.html

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