SD RIPARIAN BUFFER INITIATIVE

SD BREWERY USES BIG SIOUX RIVER WATER IN ITS NEW CRAFT BEER
I for one would like to take the word “COVID-19” out of any language and pretend we’ve never heard of it. I also hope that the worst is behind us and really start in earnest to put things back to “Normal.” Even with all the craziness that is happening, it will be a busy year at Mid-Dakota again. New hookup requests continually add up (as of writing this Mid-Dakota has 48 on waiting list already). As has been mentioned in previous columns, Landmark has begun construction of our new 1.5-million-gallon water tower being built beside our 1.5-million-gallon water tower on our Highmore tank site. This year this tank will be completed and put into service late summer/early fall time frame. This will complete the mainline expansion project, that Mid-Dakota began researching in 2016. With the completion of this project Mid-Dakota has already begun researching how to keep water flowing to the distribution system. As Mid-Dakota continues to grow, one becomes concerned if the Water Treatment Plant will be able to produce enough safe clean water fast enough to meet the needs. Mid-Dakota is pro-active on this front and is currently working with our engineers to figure out the best plan of action over the next 20 or more years.

Right now, Mid-Dakota is running several pilot studies to determine the best course of action and decide what needs to be done first. On the distribution side, Mid-Dakota is also feeling some growing pains and is studying how and where to add additional pipe to be able to continue adding new users to some areas of service. All in all, it should prove to be an eventful, exciting and busy year at Mid-Dakota.

In my last column, I mentioned that a couple of employees were retiring, Susan Hargens and Al Thomas. Mid-Dakota has hired Cameron Bohl and Scott Szuggar to continue on. Susan has trained Cameron and Al has trained Scott well, so if you see a new face in a Mid-Dakota truck or hear a new voice in member services say hello. It is a little confusing at Mid-Dakota as staff is letting me know we now have four employees and one board member with first name of “Scott,” so if calling and need to talk to a “Scott” please add the last name to your request.
Mid-Dakota Rural Water System, Inc. hereby gives notice to its membership that the following seats upon the Board of Directors will be up for election at its 2021 Annual Meeting:

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

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

There is one expired term for City of Huron Director.

(Note: Contact Mid-Dakota if you question whether or not you are in District #3)

Rural director nominations must be made by petition. Petitions must be filed with Mid-Dakota not later than 4:00 p.m. on September 21, 2021.

Nominations for municipal-at-large director will be made by recognized member municipalities. Nominating resolutions from member municipalities shall be filed with Mid-Dakota’s office not later than 4:00 p.m. on September 21, 2021.

Nominations for City of Huron director will be made by the City of Huron. A nominating resolution from the City of Huron shall be filed with Mid-Dakota’s office not later than 4:00 p.m. on October 13, 2021.

For more information, contact the Mid-Dakota Rural Water System, Inc. office at 605-853-3159 or 1-800-439-3079.
Fish are able to live and breathe in water, but people need air to breathe. People drown when too much water gets into their lungs. When that happens, the lungs can’t put oxygen in the blood. Then, too little oxygen gets to the brain and the rest of the body. Drowning is the second most common cause of death from injuries among kids under the age of 14. Drowning can happen so fast — sometimes in less than 2 minutes after a person’s head goes under the water. That leaves very little time for someone to help.

Many drownings and near-drownings happen when a kid accidentally falls into a swimming pool. But accidents can happen anywhere and that’s why you need to know how to be safe around water.

**POOL SAFETY TIPS**

- Always have an adult watch you when you are in the pool — even in your own backyard. Never go in the pool if there is no adult around. Always call an adult or lifeguard if there is an emergency.
- Gates are around pools for a reason — to keep kids away from the water when there isn’t a lifeguard or adult around to watch them. Never go through any pool gates when they are closed. Stay safe and stay out!
- Always obey pool rules.
- Swim with a buddy.
- If you’re learning to swim, ask your mom or dad to make sure your flotation devices are Coast Guard-approved.
- Walk slowly in the pool area. Don’t run.
- Swim at a depth that is safe for you. If you’re just learning to swim, stay in the shallow end.
- Don’t push or jump on others. You could accidentally hurt someone or yourself.
- Toys to help you float come in many shapes and sizes (an inner tube, air mattress, or beach ball, for example). Although they’re fun and can help you while you learn to swim, what they can’t do is save a life. They’re toys that can lose air or float away.

**LAKE SAFETY TIPS**

- Lots of kids swim in streams, lakes, or ponds. Take extra care when swimming in these beautiful places. You can’t always see the bottom of the lake or pond, so you don’t always know the depth of the water. This is another reason to always swim with an adult.
- Although the fish swimming around won’t hurt you, some ponds and lakes may hide jagged rocks, broken bottles, or trash. Wear something to protect your feet. Also, watch out for weeds and grass, which can trap even a good swimmer. If you panic and try to yank yourself free, you may get even more tangled. Instead, shake and pull your arms and legs slowly to work yourself loose and call for an adult’s help.
- If you’re going out on a boat, always wear a Coast Guard approved life jacket. Even if you are a good swimmer, something could cause the boat to tip over and you could be trapped underneath.
For 135 years, the South Dakota State Fair has been a place to celebrate youth and agriculture. Since the late 1970s, the Open Class Beef Complex has been a part of that celebration. It’s held many memories and has been an important part of the culture of the South Dakota State Fairgrounds.

On October 31, 2020, Halloween night, that all changed with a fire that destroyed the 96,000 square foot building. Out of adversity comes opportunity. It is our generation’s time to bring this vision to life. **Discover the DEX.** Help us build the DEX: Dakota Events CompleX - the new multipurpose livestock and equestrian complex at the South Dakota State Fairgrounds.

- 200,000 square foot, one-of-a-kind, livestock and equestrian facility that will set a new standard for hosting local and national events.
- 7,000 seats will hold spectators from around the globe, as they witness events brought to South Dakota never thought possible.
- The capacity to host two full size equestrian arenas, larger livestock shows, concerts, auto thrill shows, and events throughout the year make this complex unmatched.

The footprint will encompass the area abandoned by the Beef Complex, that is scheduled to be demolished by February of 2021, and replace the 37,000 square foot Sheep Barn, that has long outlived its useful life.

For the annual South Dakota State Fair, the capacity is expected to be 2,000 head of show cattle. Open class and 4-H beef will call this new livestock facility home. A commitment will be made to work with sheep and goat exhibitors to improve and modify the existing 4-H Livestock Complex to make sure it is done right and exceed their expectations as they move to this new home.

This will allow for species specific barns across the grounds, a trend favored by exhibitors, and address livestock transportation safety issues on the fairgrounds.

The estimated cost of $19 million will be a product of all of us pulling this VISION together.

Governor Kristi Noem is asking the legislature for $12 million and insurance from the fire will bring in $3 million. **THIS IS WHERE THE STATE OF SOUTH DAKOTA NEEDS YOU.**

**Donate to the DEX.** It is a “big ask” but it is time for us to rally together and bring a pool of $4 million dollars, still needed to complete this vision, to the table. The task force lead by the South Dakota State Fair Foundation is asking for you to help us reach that mark now so we can meet the deadline of a **Grand Opening at the 2022 South Dakota State Fair.**
Discover the DEX: Building a Multipurpose Livestock & Equestrian Complex Capital Campaign

PLEDGE FORM

Donor Information:
Name(s): ____________________________________________
Address: ____________________________________________
Phone: _____________________________________________
E-mail Address: ______________________________________

Gift Information:
In recognition of the project to construct the new 'the DEX: Dakota Events Complex', I / We intend to contribute the sum of $______________
Enclosed is my outright gift to the South Dakota State Fair Foundation capital campaign with the initial payment to be made as follows:
$______________ on or before ________________, 20______.
Thereafter, payments of $______________ will be made:
☐ Annually    I / We would like to have a reminder sent, annually, in _________ (month).
☐ Quarterly    ☐ Monthly    *Monthly Payments are made using Electronic Fund Transfer (EFT).
☐ Monthly    A campaign representative will contact you with further information.

Donor Recognition:
Please print name or business name as you wish to be recognized:
____________________________________________________________________________
☐ This is a gift in honor of / in memory of (please circle which is appropriate):
☐ I / We wish to remain anonymous.

Please make checks payable to South Dakota State Fair Foundation.
Contributions to the DEX are tax deductible as provided by law.

Pledge completed by (date): ____________________________
Donor’s Signature: ___________________________________
In the land of 10,000 lakes, Matt Hastad spent his childhood days fishing and skiing on the open water. When he moved to Sioux Falls, friends still would often ask him to go fishing on the Big Sioux River.

The only catch? He couldn’t eat any fish he caught. Sometimes called the “Big Sioux-er” by locals, the Big Sioux River has a history of pollution and water quality issues in the area. The 2020 Department of Environment and Natural Resources water quality report listed E. coli and total suspended solids — which can range from sediments to floating algae — as the most prevalent problems in the river basin this past year.

“We have this amazing natural resource that can be such a major source of tourism ... “ Hastad, a co-owner of Remedy Brewing Co. in Sioux Falls, said. “(It’s) part of the city’s identity.”

That’s what drove him to collaborate with Friends of the Big Sioux River on a new beer with the intention of highlighting local water sources and their importance in the community.

A key ingredient? Surface water from the Big Sioux River, which cuts through Watertown.

Yeah. You read that right. But don’t worry, there won’t be any sand in your beer. In fact, it’ll be cleaner than the water from any kitchen faucet.

On average, it takes 7 gallons of water to brew 1 gallon of beer. Between the brewing, cooling and cleaning, Hastad said the beer-making process uses more water than the average beer lover might think.

“People often think water or beer,” Hastad said. “They don’t actually think about how much water is in beer.”

Before the brewing could start, Friends of the Big Sioux River volunteers met on April 3rd and pumped 300 gallons from the river where it meets 26th Street in Sioux Falls and took it back to Remedy for purification.

ISG, a local engineering firm, lent a reverse osmosis system to the collaborators to clean the water. By the time all was said and done, only about 150 gallons of purified water were left.

“There was a lot of material we had to clean out,” Travis Entenman, managing director for Friends of the Big Sioux, said. “You naturally have about a 50% loss.”

Entenman noted the Big Sioux River water originally had more than 600 parts per million in total dissolved solids. Tap water typically has between 100 and 200 parts per million. By the end of reverse osmosis, the river water tested between 15 and 100 parts per million.

From there, Remedy brewers took over and have since been turning that water into Kolsch, a light German-style beer.

“I just hope that (people) understand how important clean water is outside of drinking water and how important it is for the things they love,” Entenman said. “People really like beer.”

Where to get one
The Big Sioux Brew is available at Remedy’s 8th and Railroad location in Sioux Falls.

Reprinted with permission from the Argus Leader
“Water is the driving force of all nature.” Leonardo Da Vinci’s words are as true today as when he said them over 500 years ago, and I believe they will continue to ring true 500 years from now.

All South Dakotan’s have a vested interest in protecting our water resources – it’s not just a natural resource issue; it’s not just an ag issue; it’s an issue for everyone. We need to work together to implement practical and effective solutions. That is why I am excited to write to you about the South Dakota Riparian Buffer Initiative. Riparian buffers have a proven record of improving water quality (see the before and after photos from the Central Big Sioux Project). They also provide valuable habitat, stabilize stream banks, add forage for livestock, and reduce production costs on marginal crop lands. Riparian buffers are an excellent conservation practice. They just aren’t currently used enough to move the “water quality” needle in our impaired watersheds. It’s time for a change, which is why we’re incentivizing development of riparian buffers.

Through the Initiative, we will establish more than 3,000 acres of new riparian buffers across the state making measurable water quality improvements in South Dakota’s impaired watersheds. This will not happen overnight, but together we can get it done.

The first step, which we have already accomplished, is to change the enrollment requirement from annual to once every 10 years and increase the existing buffer strip property tax incentive from 40 percent to 50 percent. This is more attractive to landowners financially and – from a paperwork standpoint – more manageable for county tax officials. Working together, we passed House Bill 1042 with unanimous support from the legislature – these needed changes take effect July 1, 2021.

Next, the Department of Agriculture and Natural Resources...
and the Department of Game, Fish, and Parks, along with a diverse group of partners (the working group) from across the state, will acquire and pool dollars from multiple funding sources to establish a voluntary, state riparian buffer program. The program will incentivize buffer strips with annual cash payments to landowners based on the Conservation Reserve Program (CRP) county rental rates for filter strips on croplands and marginal pastures lands.

However, we do not want to duplicate CRP, which is a great program on its own; we want to specifically target impaired waterbodies to maximize water quality improvements. To do this, the working group identified and will continue to identify priority areas to target enrollments. In these areas, rental payments will be based on ten-year contracts at 100 percent of the CRP rate for cropland or pastureland. Rental payments on pastureland will include funding for fencing and alternative water sources. Outside of the priority areas, rental payments will be based on ten-year contracts at 50 percent of the CRP rate for cropland or pastureland with the opportunity for additional incentives provided by local sponsors as available.

As I have said, I want to see measurable water quality improvements, and I want you to see it too, so monitoring and documenting success is essential to the initiative.

Throughout the process, my team, with support from the working group, will collect and evaluate water quality samples and use proven modeling techniques to evaluate program success or failure. This information will be made available to the public.

Efforts on the Initiative are well underway. The next step is to secure program funding by leveraging state and local dollars to secure federal dollars available through the US Department of Agriculture, Natural Resource Conservation grant programs. We are working on those applications now. Our goal is to begin enrolling landowners later this year, so be on the lookout for more information on eligibility requirements and how to enroll. If you have questions, please contact us at 605.773.3623 (ask for Bill Smith) or email at SDRCF@state.sd.us.

Finally, thank you to all our partners who are working with us to make the Riparian Buffer Initiative a success. Folks from across the state including our legislators, Ag groups, water development districts, Friends of the Big Sioux, conservation districts, federal partners, Pheasants Forever, Izaak Walton League, planning districts, and Ducks Unlimited have stepped up to get this done.

I am very excited about the Initiative and can’t wait to see it underway.

Photos before (left) and after (right) buffer installation from segment two of the Central Big Sioux Project – courtesy of Barry Berg
WEB Water Development Association, Inc. is located in Aberdeen, SD and was formed in December 1975 by community leaders from Walworth, Edmunds and Brown counties who were looking for ways to improve their drinking water. The acronym for WEB was taken from the names of these three counties. Within a year of development, the interest had grown to six counties, and within four years the project had grown to 10 counties. The WEB Water project was authorized by Congress on September 20, 1980 as part of a settlement of the Oahe Irrigation Project with support from President Jimmy Carter. It took two more years of hard work, lobbying and negotiation until Congress reauthorized the WEB Water Project. On September 22, 1983, President Ronald Reagan signed WEB Water into law. The WEB Water Board of Directors then entered into a loan and grant agreement with the U.S. Department of Interior on September 29, 1983, with construction work beginning on October 20, 1983. The first WEB customers – the Keith Vojta family, who had been hauling drinking water for their farm home for 14 years – received water on May 26, 1986.

Elected officials who played a major role in the development of WEB Water were US Senator Tom Daschle (D) working with the Carter Administration and U.S. Senator Jim Abdnor (R) working with the Reagan Administration. Other elected officials also involved were Senator Jim Abourezk, Senator Larry Pressler, Congressman Clint Roberts, Senator George McGovern, Governor George Mickelson, and Governor Bill Janklow.

WEB Water now serves more than 8,500 meters with an average of 6,376,500 gallons/day. Besides rural hookups, WEB Water serves 105 town/bulk users and five ethanol plants through 6,800 miles of pipe in Walworth, Edmunds, Brown, Day, Spink, Hand, Hyde, Campbell, Faulk, Potter, McPherson, Beadle, Clark & Marshall counties in South Dakota; Emmons, Dickey and McIntosh counties in North Dakota.

WEB Water is overseen by a nine-person Board of Directors including a Chair, Vice Chairman, Secretary and Treasurer. Each Director can serve a total of three 3-year terms. They also employ 42 people throughout the WEB Water system.

The success of the WEB Water system is an example of what communities can do when they work together. Like the Rural Electric Cooperatives, the development of Rural Water has been grass-roots effort that has served South Dakota well. Hundreds of local leaders and citizen volunteers donated their time, helped sign up their neighbors, attended meetings, served on Steering Committees, served on the WEB Water Board, traveled to Pierre and Washington, DC to present testimony, and going door-to-door explaining to Congressmen, Senators and federal officials why a rural water system was needed in South Dakota.

Over thirty years ago WEB Water was the first water project of its kind. Funding a regional pipeline project by federal authorization through the Interior Department had never been done before. The idea of piping Missouri River water through thousands of miles of pipelines to farms, homes and towns seemed outlandish to many in government – and looked almost impossible to many in South Dakota. Because of the precedent WEB Water set, regional water systems are commonplace today. Other South Dakota projects have benefited by the precedent set by WEB Water; Mid-Dakota Rural Water, Lewis & Clark Regional Water, Perkins County Rural Water, West River/Lyman-Jones Rural Water, BDM Rural Water, and Mini Wiconi.

WEB Water continues to grow and expand. In August of 2014, WEB introduced a spin-off water bottling service aptly named WEB Water Bottling Company. This new company offers home and office delivery of 5-gallon water cooler jugs within a 10-mile radius of Aberdeen, SD – with the hope to expand as far as Ellendale, ND and Redfield, SD. They are the first rural water system in South Dakota to offer such a service.
DIRECTORS:

Bob Schuetzle – Chairman (Bulk)
Tim Van Hatten – Vice-Chairman (Bulk)
Lori Goldade – Secretary (Brown)
Les Hinds – Treasurer/State Association Director (Bulk)
Craig Oberle – Director (Spink, Beadle, Hand)
Allan Walth – Director (Walworth, Potter)
Bob Whitmyre – Director (Day, Clark, Marshall)
Dick Werner – Director (Campbell, McPherson, Emmonds, Dickey, McIntosh)
Jeff Stoecker – Director (Edmunds, Faulk, Hyde)

STAFF:

Angie Hammrich – General Manager
Clayton Larson – Water Treatment Plant Manager
Shane Phillips – Operations Manager
Eric Hansen – Construction Manager

STATISTICS:

Hookups: 8,500
Miles of Pipeline: 6,800
Water Source: Oahe Reservoir
(ND): Emmons, Dickey, McIntosh
Towns Served Bulk: Bowdle, Brentford, Bristol, Chelsea, Conde, Cresbard, Doland, Eden, Eureka, Faulkton, Forbes, Frederick, Grenville, Groton, Herreid, Hosmer, Ipswich, Java, Leola, Long Lake, Mellette, Northville, Onaka, Pollock, Redfield, Roscoe, Roslyn, Selby, Seneca, Stratford, Warner, Webster, Wecota, Westport, Wetonka, Zeeland
RURAL WATER CROSSWORD & WORD SCRAMBLE CONTEST

SUMMER OLYMPICS

SCRAMBLE ANSWER

Enter to Win $100

DOWN
1. Game of love?
2. Crew sport using oars
3. Catch a wave - Olympic's newest sport
4. Exercises developing or displaying physical agility and coordination
5. Football’s British relative
6. Plunging head first
7. Swimming, cycling and running
8. Game of digs and spikes
9. Fighting with fists
10. Robin Hood’s mastery
11. Off the wall sport
12. Team sport in a pool (2 words)
13. Sword sport
14. Birds fly back and forth in it
15. Win with a pin
16. In which a long run leads to home
17. Tony Hawk’s preferred mode of transportation
18. “Springy” event

ACROSS
2. Crew sport using oars
3. Catch a wave - Olympic’s newest sport
9. Fighting with fists
10. Robin Hood’s mastery
12. Team sport in a pool (2 words)
13. Sword sport
14. Birds fly back and forth in it
15. Win with a pin
16. In which a long run leads to home
17. Tony Hawk’s preferred mode of transportation
18. “Springy” event

RULES: Use the colored squares in the puzzle to solve the word scramble above. Call your Rural Water System (See page 2 for contact information) or enter online at www.sdarws.com/crossword.html with the correct phrase by July 12, 2021 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 Jarret Lee who had the correct phrase of “Hope always rises in spring” for April 2021.
Mid-Dakota Scholarships Awarded

The board of directors of the Mid-Dakota Rural Water System is pleased to announce that four students have been chosen to receive a scholarship of $500.00 each. The very deserving individuals are Landon Severson, the son of Douglas & Sarah Severson, from the rural area near Onida; Josie Mehling, the daughter of Jay Mehling from the rural area near Wessington; Jayden Mutchelknaus, the son of Scott & Dawn Mutchelknaus from the rural area near Wolsey; and Malia Schumacher, the daughter of Marvin Schumacher from the rural area near Pierre. Landon is planning to attend South Dakota School of Mines & Technology to pursue a career in Mechanical Engineering. Josie plans to attend Northern State University to pursue a career in Human Resources. Jayden plans to attend Lake Area Technical College to pursue a career in Welding. Malia is planning to attend South Dakota State University for a career in Human Biology/Pre-med.

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

Landon Severson  
Josie Mehling  
Jayden Mutchelknaus  
Malia Schumacher
Water Quality
Last year, the Mid-Dakota Rural Water monitored your drinking water for possible contaminants. This report is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies.

Water Source
We serve more than 6,222 customer accounts, or a population greater than 32,450, an average of 6,187,000 gallons of water per day. We get our water from the Oahe Dam on the Missouri River which is a surface water source. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for the Mid-Dakota Rural Water public water supply system is medium.

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

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

Contaminants that may be present in source water include:
- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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

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

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

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

**Detected Contaminants**
The table below lists all the drinking water contaminants that we detected during the 2020 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2020. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

**2020 Water Quality Test Results**

**2020 Table of Detected Contaminants for Mid-Dakota Rural Water (EPA ID 2175)**

<table>
<thead>
<tr>
<th>Substance</th>
<th>90% Level</th>
<th>Test Sites</th>
<th>Action Level</th>
<th>Date Tested</th>
<th>Highest Level Allowed (AL)</th>
<th>Ideal Goal (MCLG)</th>
<th>Units</th>
<th>Major Sources of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>0.6</td>
<td>0</td>
<td>0</td>
<td>07/31/19</td>
<td>AL=1.3</td>
<td>0</td>
<td>ppm</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.</td>
</tr>
<tr>
<td>Lead</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>08/05/19</td>
<td>AL=15</td>
<td>0</td>
<td>ppb</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits.</td>
</tr>
<tr>
<td>Alpha Emitters</td>
<td>4</td>
<td>ND - 4</td>
<td>09/27/16</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td>pCi/l</td>
<td>Erosion of natural deposits.</td>
</tr>
<tr>
<td>Atrazine</td>
<td>0.280</td>
<td>ND-0.280</td>
<td>11/13/19</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>ppb</td>
<td>Runoff from herbicide used on row crops.</td>
</tr>
<tr>
<td>Fluoride</td>
<td>0.45</td>
<td>12/09/20</td>
<td>4</td>
<td>&lt;4</td>
<td>4</td>
<td>&lt;4</td>
<td>ppm</td>
<td>Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.</td>
</tr>
<tr>
<td>Haloacetic Acids (RAA)</td>
<td>35.43</td>
<td>11/10/20</td>
<td>60</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>ppb</td>
<td>By-product of drinking water chlorination. Results are reported as a running annual average of test results.</td>
</tr>
<tr>
<td>Total Trihalomethanes (RAA)</td>
<td>60.15</td>
<td>11/10/20</td>
<td>80</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>ppb</td>
<td>By-product of drinking water chlorination. Results are reported as a running annual average of test results.</td>
</tr>
</tbody>
</table>

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

**TERMS & ABBREVIATIONS USED IN TABLES**

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

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

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

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

**UNITS**

- **ppb** – parts per billion, or micrograms per liter (µg/l)
- **ppm** – parts per million, or milligrams per liter (mg/l)
- **pCi/l** – picocuries per liter (a measure of radioactivity)
- **µg/L** – micrograms per liter or parts per billion (ppb)
For most South Dakotans, the water that comes out of your tap started out in the ground and has been drawn from an aquifer. As such, the importance of aquifers to all of us can not be exaggerated. In the last issue (April 2021), we learned what an aquifer is, how water gets into them and how it is drawn from them. Let’s touch on a few more key points:

How do we find aquifers?
Because aquifers (water bearing geologic materials) are underground, locating them in any detail often requires the drilling of exploratory (test) holes to see what is down below. Each new test hole in an area helps define where an aquifer might be, and how extensive it is. In some cases, the aquifers are large and expansive, and cover parts of many counties. In others, materials that might function as an aquifer, such as sand and gravel, are found in one test hole, but may not appear in a hole drilled just a few tens or hundreds of feet away.

To learn more about an aquifer, wells are sometimes installed after a test hole is completed. These ‘observation’ wells allow hydrologists and engineers to measure the amount and level of water in the well, and by inference the aquifer. They can also be used to gather samples of water from the aquifer to assess its suitability for various uses and to monitor changes in water quantity and quality over time.

Where are the aquifers in South Dakota?
In South Dakota, the Geological Survey Program of the Department of Agriculture & Natural Resources has been working to define the State’s ground water resources for many years. They have drilled roughly 24,000 test holes to help understand the geology of South Dakota, including the nature and extent of our aquifers. Maps and publications have been prepared that can be used by anyone interested in learning more about these critical resources.

Would you like to know if there are aquifers in your area? The Geological Survey Program has produced numerous reports and maps dealing with the State’s water resources. Visit their website, www.sdgs.usd.edu, to find information on aquifer resources in your area.