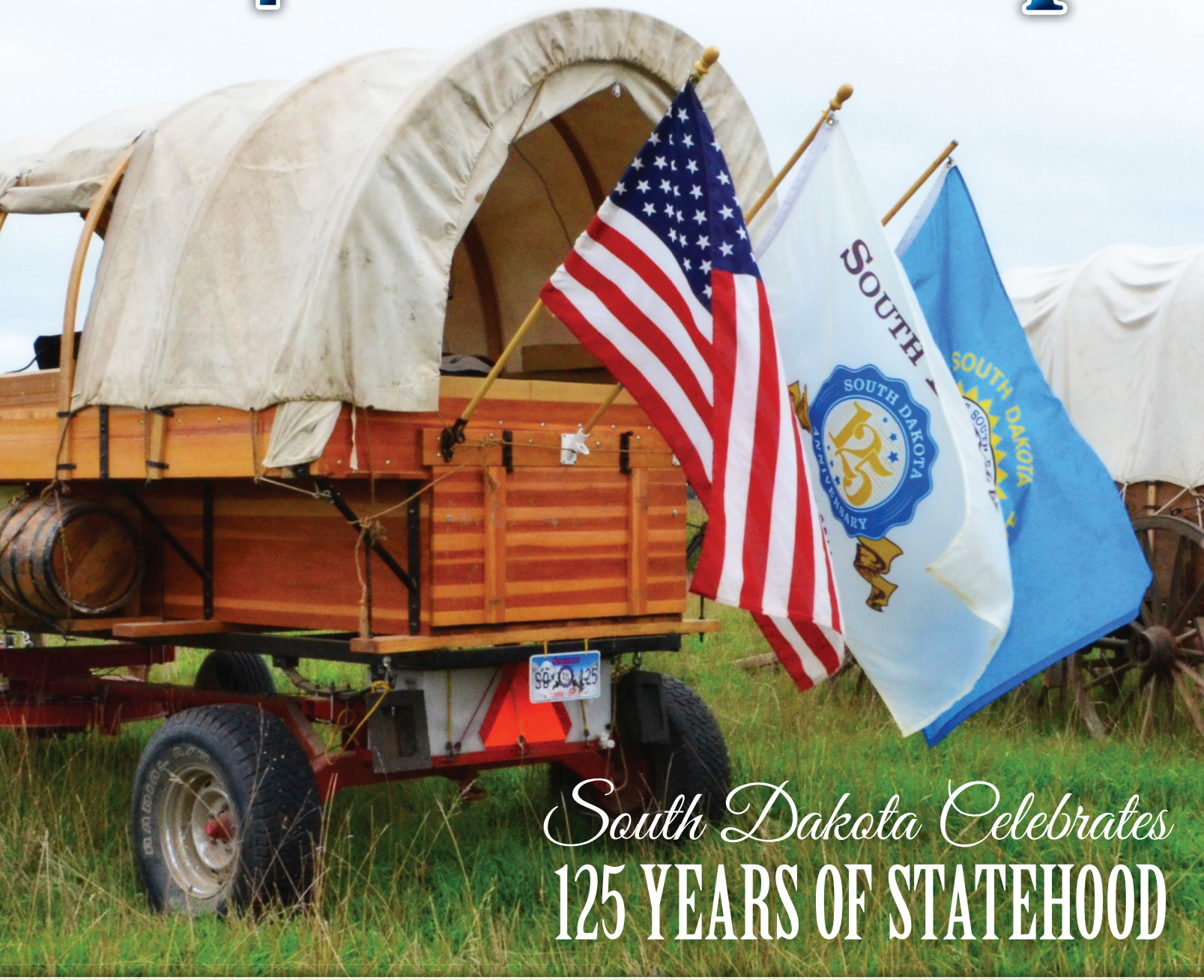
SOUTH DAKOTA RURAL WATER'S

Quality On Tap!

October 2014 | Volume 10, Issue 2



South Dakota Celebrates 125 YEARS OF STATEHOOD

WaterPro | New West River Office | Events Calendar

South Dakota Association of Rural Water Systems Board of Directors

Big Sioux Community Water System
Dan Carlson, President

Kingbrook Rural Water System
Dale Thompson, Vice President

Aurora-Brule Rural Water System
Ron Gillen, Secretary

Grant-Roberts Rural Water System
Tom Frogner, Treasurer

Clark Rural Water System
Larry Wasland, NRWA Director

Clay Rural Water System
Glen Gilbertson

BDM Rural Water System
David Wade

Brookings-Deuel Rural Water System
Gary Johnson

Butte-Meade Sanitary Water District
Charles Yuill

Davison Rural Water System
Bruce Alexander

Fall River Water User District
Dave Jennings

Hanson Rural Water System
Donald O'Neill

Lewis & Clark Rural Water System
Dennis Weeldreyer

Lincoln County Rural Water System
Otto Hagedorn

Mid-Dakota Rural Water System
Robert Jones

Minnehaha Community Water Corporation
Lloyd A. Rave

Oglala Sioux Rural Water Supply System
Willard Clifford

Perkins County Rural Water System
Lynn Frey

Rapid Valley Sanitary District/Water Service
Jack Tomac

Randall Community Water District
Tom Travis

Sioux Rural Water System
Jim Thyen

Southern Black Hills Water System
Bob Peplinski

TM Rural Water District
Tom Kramer

Tri-County Water Association
J.R. Holloway

Tripp County Water User District
Dale Waters

WEB Water Development Association
Mike Neuharth

West River/Lyman-Jones Rural Water Systems
Richard Doud

Class B East River
Jay Gilbertson

Class B West River
Brad Lawrence

Class C
Francis Toscana

A Message From The President of the Board

Dan Carlson
President, South Dakota Rural Water

Now that fall is upon us, we are gearing up for our Annual Leadership Conference which will be held at the Best Western Ramkota Hotel in Pierre November 19-20th. The cost to attend Leadership is $125 and tentatively features sessions on long range financial planning, promoting your rural water system, director panels, board panels, risk management and 1926(b).

This training is great for Rural Water System Executive Directors and Board Members. If you haven't attended a leadership training in the past, I highly suggest you register to attend this one. Registration for this event is available on our website at www.sdarws.com, or by calling the SDARWS office at 605-556-7219. The tentative agenda is below:

Wednesday – November 19, 2014

1:00 **Welcome** – Dan Carlson, President, SDARWS
Flag Presentation – Nick Jackson, Circuit Rider
National Anthem and Pledge of Allegiance

1:15 **Agenda Review** – Dennis Davis, Executive Director, SDARWS

1:30 **Manager Panel Discussion: Diversifying Operations & Long Range Planning**
Steve Harper, WEB Water – Bottled Water
Kurt Pfeifle, Mid-Dakota – Providing Wastewater Assistance
Martin Jarrett, Big Sioux CWS – Selling water for industry / dairy

2:15 **Rural Water System Risk Management & Coverage**
Dan Carlson, Big Sioux CWS**,** Jim Thyen, Sioux RWS**,**
Jack Miller, Howalt-McDowell

3:15 **Board Members Fiduciary Responsibility & Attorney Q&A**
Darla Pollman Rogers – Riter, Rogers, Wattier, & Northrup, LLP

5:30 **President's Reception**

6:00 **Dinner w/Guest Speaker** – Dr. Sid Goss, SDSM&T

Thursday – November 20, 2014

8:00 **Media Tools: Quality On Tap! NRWA Branding, Annual Meeting Assistance –** Jennifer Bame, SDARWS

8:30 **Infrastructure Management Software** – Mike Schwab, Beehive Industries

9:15 **Board Panel:**
Review of financial reports – Tom Frogner, Grant Roberts
Committee formation, Roles and Responsibilities – Otto Hagedorn, Lincoln County
How to motivate board members – Glen Gilbertson, Clay RWS

10:30 **1926(b) –** Scott Buss, Minnehaha Community WC, Heath Thompson, Sioux RWS, Robin Dykstra, Lincoln County RWS

12:00 **Closing Comments** – Dennis Davis & Dan Carlson

Rural Water Friends –Thank You!

On behalf of my wife Julia and myself I want to express our sincere thanks for the well wishes I received upon my retirement. To the SDARWS staff, thank you for the celebration dinner and parting gifts, it was truly unexpected but very much appreciated. To say I will miss you guys is an understatement, maybe with the exception of Jim!

The reception held by the Rural Water Manager Group along with the gift cards and heartfelt words from group leader Wade Blasius had me speechless for the first time in many years. I have always felt that this group fit naturally in the category of family and I was honored to be associated with you.

As for the board of directors, it was an exciting evening at the K Bar S Lodge in Keystone and again you showed your true spirit and camaraderie with a top notch reception/dinner. Your leadership and guidance will continue to maintain the Association as the most respected and technically knowledgeable organization in South Dakota.

Lastly, to my fellow golfers, after organizing twenty-seven rural water golf tournaments I'll admit my game was rusty during the 28th Annual Event. Thankfully my game is improving with the help of a schedule of golf outings that include all days that end in "y."

To everyone, thank you for allowing me to share my career with you.

George Vansco, Retired

MARK YOUR CALENDAR!

METER PITS

Every rural water member has a water meter to record water use for billing purposes. Water meters are either located in your basement or utility room, or outside in a meter pit. If you have a meter pit, following are some meter pit basics.

Meter pits are typically 6' in depth. They rely on heat from the ground to keep the water meter and related piping from freezing. The accompanying graphics show two styles of meter pits typically used by South Dakota rural water systems.

The concrete version looks like a small manhole and consists of three precast concrete sections. The top section is concentric and has a double cast iron cover arrangement measuring approximately 24" in diameter on top. The cover consists of an outer and inner lid. The inner lid is designed to hold ground heat inside the pit. Larger concrete meter pits may have a slightly different configuration.

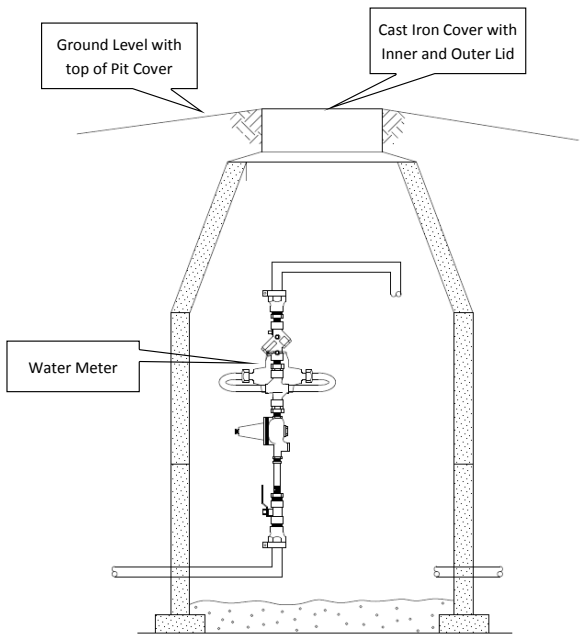
The plastic version is typically 15" to 18" in diameter and consists of a PVC tube with cast iron cover. The key to the plastic pit is an insulating cushion that sits above the meter to hold ground heat inside.

Meter pits are normally very reliable in protecting water meters and related piping from freezing. However this past winter was an exception. In some parts of the state, frost penetrated to a depth greater than five feet, partly because of lack of snow cover. This left little heat in the ground to keep meter pits warm. Here are some basic things you can do to make sure your meter pit can stand up to winter's cold. Some rural water systems prefer that only water system personnel remove meter pit lids or regrade around the lid, so check with your local system before you inspect your meter pit.

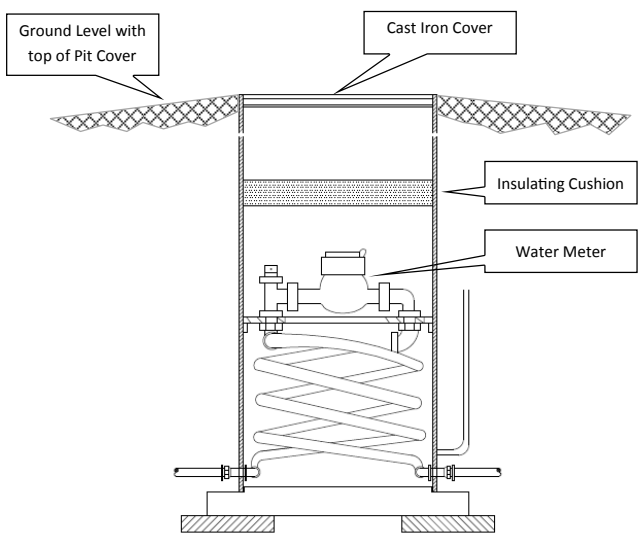
- Make sure the surrounding grade is level with the top of the meter pit and not below the lid (see exposed meter pit photo).
- If you have a concrete pit (larger diameter lid), remove the outer lid and make sure the inner lid is in place.
- If you have a PVC pit (smaller diameter lid), remove the outer lid and make sure the insulating cushion is in place.
- For added protection in winter, cover the meter pit lid area with straw, hay bales or bags of leaves to limit frost penetration.

Exposed Meter Pit

Concrete Meter Pit



PVC Coil Meter Pit

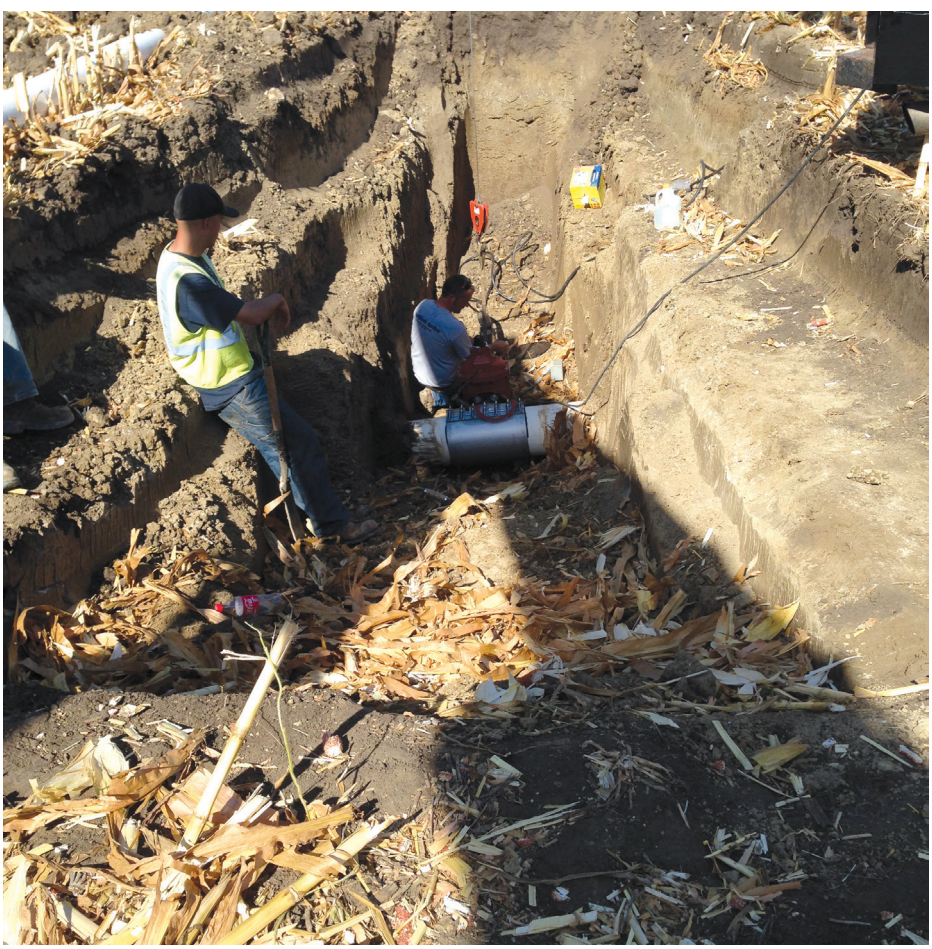


Highway 19 Pipe Relocation Project

The South Dakota Department of Transportation has been working on an improvement project on a 23.5-mile stretch of Highway 19 in southeast South Dakota. These improvements include grading, resurfacing, drainage improvement, widening of shoulders and improving sight distances. With this project also came the responsibility of Kingbrook and Minnehaha rural water systems to move their water pipelines further away from the road. A combined total 16.5 miles of water pipeline was relocated to accommodate the road construction at a cost of over $1.3M and took about 90 days.

The Highway 19 road project is expected to be semi-completed by November 26, 2014 when the roadway will be opened to traffic as a gravel road; the road project is expected to be completed in 2015.

The photos on this page show the work the Kingbrook RWS did to move the water lines.



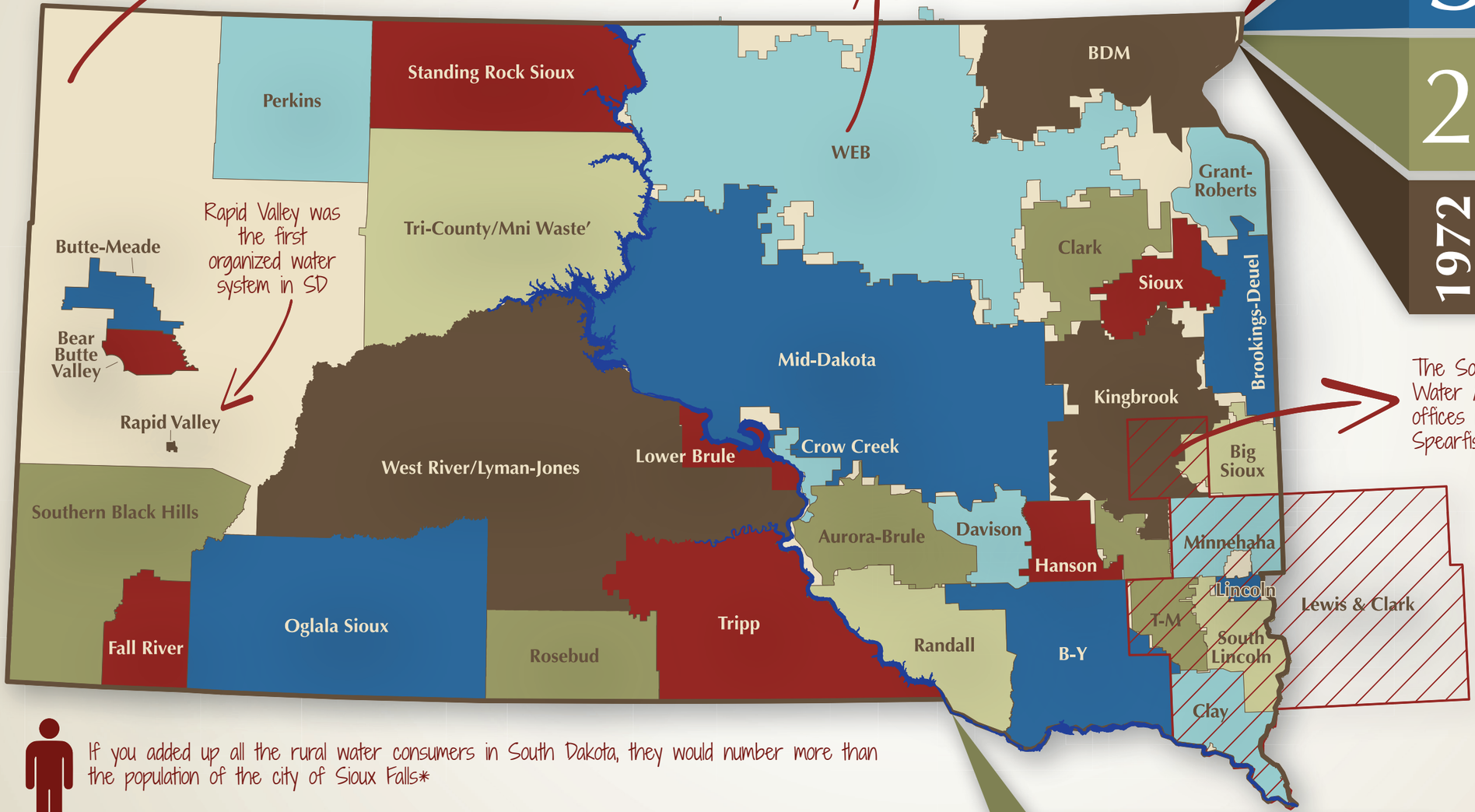
South Dakota Celebrates 125 YEARS OF STATEHOOD

As South Dakota celebrates 125 years of statehood this year, organizers decided that the best way to commemorate the anniversary would be by recreating how the settlers arrived – on horse-drawn wagons. Led by Gerald Kessler of Ft. Pierre and sponsored by the South Dakota Draft Horse and Mule Association, the 17-day expedition included stops in 13 towns between Yankton and Pierre, as well as two rest days. Traveling at speeds less than four miles per hour, passengers and riders were led along historic trails during the 250-mile journey – mostly taking gravel and section-line roads and covering from 14 to 20 miles per day. Locals could be spotted waiting and watching for the horse-drawn convoy in their pickups and lawn chairs as it moved through the area. Each evening concluded with resident landowners and town historians presenting a history of the area. Local civic groups sponsored meals and events so that those unable to participate in the train could come and see the wagons up close. Roughly 250 people, 40 horses and 70 wagons – including participants from at least eight states – took part in this historic quasquicentennial event. The number of riders and wagons varied each day – with locals participating when the procession neared their home area, along with the select few who made the entire trek. Every conceivable type of wagon could be seen on the train – many were of the homemade variety (such as the way wagons would have been produced back in the day). While many wagons featured modern conveniences such as rubber tires, cushioned seats and shocks – participation in the wagon train gave participants a taste of what life would have been like traveling across the prairie 125 years ago.

Rural Water Systems of South Dakota

Every county in South Dakota is served by a rural water system except for Lawrence and Harding County in northwest South Dakota

WEB Water Development Association, Inc. is the largest Rural Water System in the state with 6,800 miles of pipeline and 8,154 hookups



The South Dakota Rural Water Association has offices in Madison and Spearfish

If you added up all the rural water consumers in South Dakota, they would number more than the population of the city of Sioux Falls*

**Figure based on 73,381 hookups x 2.5/household*

There are around **44,957** miles of rural water pipeline in South Dakota

330 people are employed by Rural Water Systems in South Dakota

5 Rural Water Systems in SD also serve users in other states.

291 South Dakota cities and towns are served by a Rural Water System

1972 the year the South Dakota Association of Rural Water systems was established to provide training, technical assistance and support to Rural Water Systems

18 Rural Water Systems pull their water from the Missouri River

33 Water Systems serve water to rural consumers in South Dakota

SYSTEM SPOTLIGHT

WEB Water Development Association, Inc.

BOARD OF DIRECTORS:

Mike Neuharth, Chairman/SDARWS Director
Daryl Thompson, Vice Chairman
Scott Campbell, Secretary
Arnie Goldade, Treasurer
Evan Haar
Harold Loewen
David Sigdestad
Tim Van Hatten

MANAGEMENT:

Steve Harper, General Manager
Mark Lindseth, Operations Superintendent
Clayton Larson, Water Treatment Plant Superintendent
Angie Hammrich, Business Manager

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 Chariman, Vice Chairman, Secretary and Treasurer. Each Director can serve a total of three 3-year terms. They also employ 40 people out of their Aberdeen headquarters.

WEB Water Development Association

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, attending meetings, serve on Steering Committees, serve on the WEB Water Board, traveling 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.

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 precedence 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.

SYSTEM AT A GLANCE

Service Connections: 8,154

Miles of Pipeline: 6,800

Water Source: Oahe Reservoir

Counties Served: (South Dakota) Beadle, Brown, Campbell, Clark, Day, Edmunds, Faulk, Hand, Hyde, McPherson, Marshall, Potter, Spink & Walworth; (North Dakota) Emmons, Dickey & McIntosh

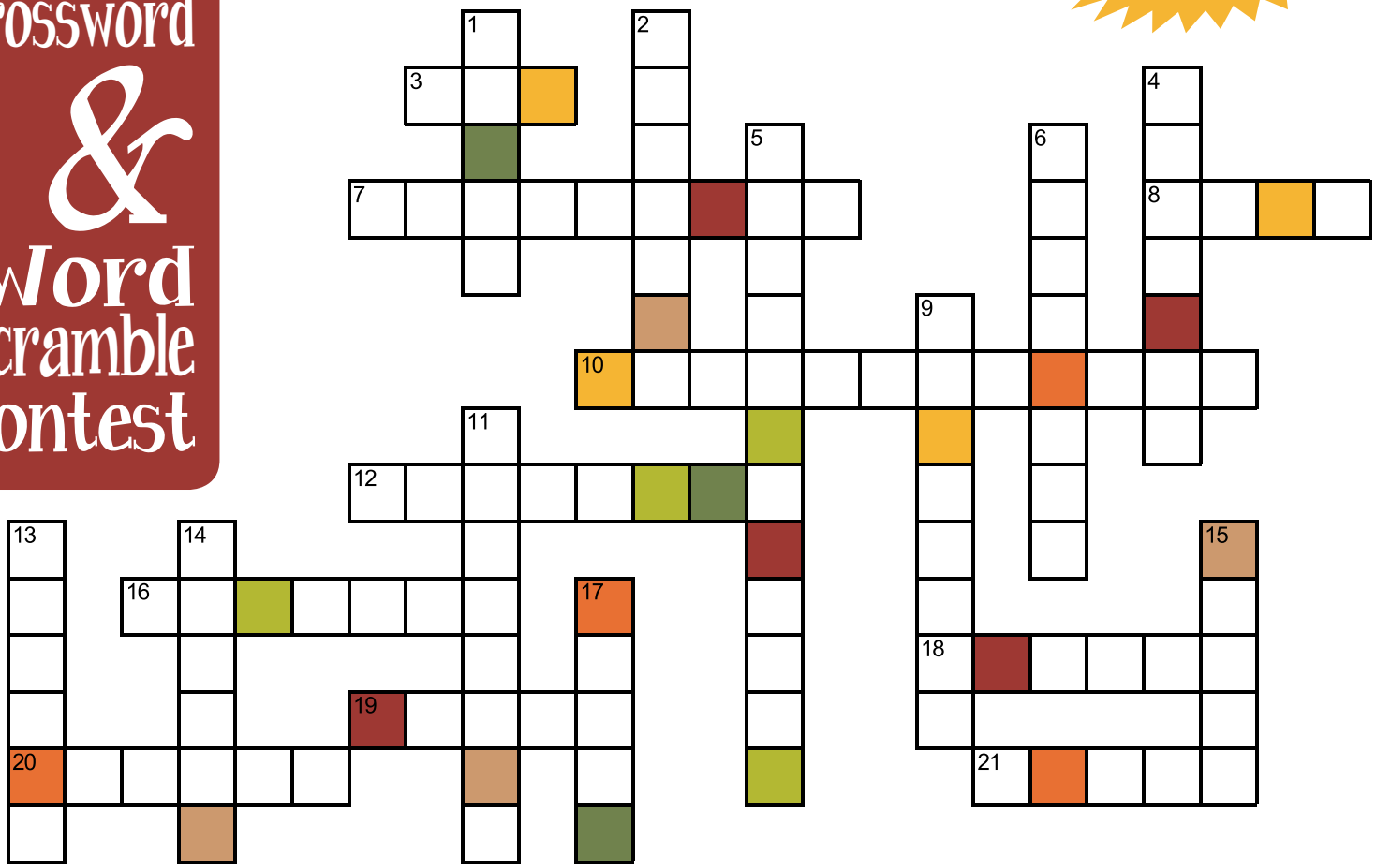
Towns Served Individual: Akaska, Andover, Athol, Ashton, Barnard, Bath, Butler, Columbia, Ferney, Frankfort, Glenham, Holmquist, Lily, Lowry, Loyalton, Mansfield, Mina, Miranda, Mound City, Rockham, Turton, Verdon, Zell.

MISSION STATEMENT: WEB is an established water utility committed to customer satisfaction by providing a quality product and service at a reasonable price. We are dedicated to improving ourselves, our community, and the water system we work for.

Rural Water Crossword & Word Scramble Contest

HALLOWEEN

$100 Grand Prize!



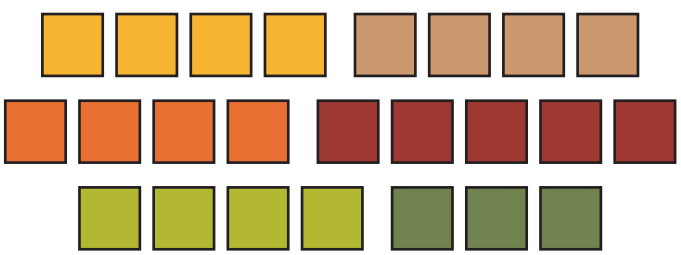
ACROSS

3. Belfry denizen
7. Triangular Halloween treat
8. Face covering
10. Illuminated gourd
12. Framework of bones
16. Disguise
18. Popular Halloween color
19. Witch transportation
20. Mistress of the dark
21. Haunted house spirit

DOWN

1. Spooky stomping ground
2. Stoker's pain in the neck
4. Blood sucker
5. Popular monster/Mary Shelley creation
6. Ghost story setting
9. Witch's brewing pot
11. Hairy man-monster
13. Halloween hangup
14. One of the living dead
15. Trick or _____
17. Wrapped cadaver

CROSSWORD SCRAMBLE



We apologize for the mistake on the crossword puzzle scramble answer in the last issue. The answer was supposed to be "Blessed with bright sunshine," but because of an error in the placement of one of the scramble boxes, many of you had trouble finding the correct answer. We also accepted the answer, "Blessed with bright shannies."

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 e-mail ***info@sdarws.com*** *with the correct phrase by* October 10th, 2014 *to be entered into the $100 drawing.*

Email Entries: ***Put your answer in the subject line.***

You MUST include the following in the body of your email: your name, address, phone number, and the name of your Rural Water System

(Your Water System name is located on the front cover of this magazine). Incomplete entries will be disqualified without notice.

Only one entry allowed per email 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 Carol Gaikowski who had the correct phrase of "Blessed with Bright Sunshine" for July 2014.

EVENTS CALENDAR

SEPTEMBER 2014

23-25 **Intermediate Water Treatment**
Sioux Falls Water Purification
2100 N. Minnesota Ave., Sioux Falls, SD
605-367-7025

OCTOBER 2014

6-8 **NRWA WaterPro Conference**
Sheraton Seattle
1400 Sixth Avenue, Seattle, WA
For more info visit:
www.waterproconference.org

7-9 **Wastewater Collection/Water Dist.**
Best Western Ramkota - Rapid City
2111 N Lacrosse St., Rapid City, SD
605-343-8550

15-16 **Mapping & GIS with TerraSync**
Randall Community Water District
445 Main St., Lake Andes, SD
605-487-7823

NOVEMBER 2014

4-6 **Basic Water Treatment**
Days Inn – Brookings
2500 6th St., Brookings, SD
877-831-1562

19-20 **Leadership Conference *(Board Training)***
Best Western Ramkota – Pierre
920 W Sioux Ave, Pierre, SD
605-224-6877

DECEMBER 2014

2-4 **Basic Wastewater Treatment**
Sioux Falls Water Reclamation
4500 N Sycamore, Sioux Falls, SD
605-367-8188

9 **Sustainable Management of Rural and Small Water Systems Workshop**
Lodge at Deadwood
100 Pine Crest Lane, Deadwood, SD
605-584-4800

DECEMBER 2014

10 **Sustainable Management of Rural and Small Water Systems Workshop**
Nicky's Restaurant
1407 NW 2nd St, Madison, SD
605-256-3791

11 **Sustainable Management of Rural and Small Water Systems Workshop**
Tea Steak House Event Hall
215 S Main St, Tea, SD
605-368-9667

JANUARY 2015

13-15 **Annual Technical Conference**
Best Western Ramkota – Pierre
920 W Sioux Ave, Pierre, SD
605-224-6877

27-29 **Basic Water Treatment**
Holiday Inn – Spearfish
305 N 27th St., Spearfish, SD
605-642-4683

FEBRUARY 2015

10-12 **Water Collection/Water Distribution**
Sioux Falls Water Reclamation
4500 N Sycamore, Sioux Falls, SD
605-367-8188

10-11 **NRWA Rural Water Rally**
Hyatt Regency – Capitol Hill
400 New Jersey Ave NW, Washington, DC
202-737-1234
www.nrwa.org/rally

24-26 **Basic Wastewater Treatment**
Best Western Ramkota - Rapid City
2111 N Lacrosse St., Rapid City, SD
605-343-8550

Course agendas, maps and registration are all available online. For more info on these classes and other events, visit www.sdarws.com or call 605-556-7219.

New West River Office Purchased

This August, the SDARWS Board of Directors approved the purchase of a 4,000 square foot office building in Spearfish to replace the office space being rented at 1140 N. Main. The new office located at 301 Seaton Circle in Spearfish features 2,000 square feet of office space and 2,000 square feet of heated storage/garage space. The building was formerly an office/warehouse with five offices and a conference room. The warehouse has 16 ft. sidewalls and a 14x14 drive-in door zone – perfect for parking our leak detection trailers and vehicles.

Recently, several staff members traveled to Spearfish on the closing date to help clean up and ready the office for the move. We are making a few updates to the building such as adding a new coat of paint and knocking down some walls. We hope to officially move into our new home in mid-September.

We are very excited about this purchase as it gives us a sense of permanency as well as equipment access on the west side of the state. Currently the Spearfish phone and fax number will remain the same.

Exective Director Dennis N. Davis making some necessary purchases for the new office.

Executive Director Dennis N. Davis and Circuit Rider Nick Jackson tackle the vaccuuming.

Wait, is that George Vansco? Didn't he retire? (He did, but decided to bring donuts to those working)

Training Specialist Steve Attema gives a hand cleaning windows.

Circuit Rider Mike Moeller working hard – and with a smile.

NRWA's WaterPro Conference

Dennis N. Davis
Executive Director

South Dakota Rural Water Association staff and board members, along with managers and staff from rural water systems from around South Dakota will be traveling to Seattle, WA this October to attend WaterPro – the annual conference of the National Rural Water Association. This conference is designed to bring together water and wastewater utility systems – large and small, municipal and rural – for sessions in operations, management, boardsmanship and governance.

The conference will feature 30 hours of educational sessions, an exhibit hall of over 150 industry vendors and numerous special networking opportunities. Those attending WaterPro will get a chance to see the latest technology in the water industry, network with experts from across the country, make contacts with federal officials from regulatory and funding agencies, and expand their knowledge and skills.

NRWA, and its state affiliates train over 100,000 water professionals every year, including water and wastewater system operations specialists, utility managers, utility board members and engineers. Rural Water training and technical assistance saves an average of $40,000 per year for the utilities that receive it. Additionally, NRWA legislative efforts have helped bring $3.8 Billion in funding to water and wastewater utilities while also supporting the electronic CCR delivery decision that saves systems $120 million annually. For more information on this conference, please visit www.waterproconference.org.

South Dakota Rural Water
203 W. Center Street
P.O. Box 287
Madison, SD 57042

Water Matters

Aquifers 101

For most South Dakotans, the water that comes out of your tap started out in the ground and has been drawn from something called an aquifer. As such, the importance of aquifers to all of us cannot be exaggerated, but just what are they?

WHAT IS AN AQUIFER?
An aquifer is a body of saturated rock from which water can be extracted in useful quantities. Aquifers must be both porous (have lots of open spaces in which water can be held) and permeable (able to let water move easily through it). In South Dakota, most aquifers consist of unconsolidated sand and gravel found along the course of current or former rivers and streams. In certain areas, layers of sandstone or fractured limestone are good sources of water. Rocks such as granite and quartzite are generally poor aquifers because they have a very low porosity. However, if these rocks are highly fractured, they make very good aquifers.

HOW DOES WATER GET IN AN AQUIFER?
Aquifers fill with water (rainfall, runoff, melting snow) that soaks into the ground. The amount of water in storage in the aquifer can vary from season to season and year to year. Ground water may flow through an aquifer at a rate of 50 feet per year or 50 inches per century, depending on the permeability. But no matter how fast or slow, water will eventually discharge or leave an aquifer and must be replaced by new water to replenish or recharge the aquifer.

How Do We Get Water Out of an Aquifer?
Holes are drilled into the material that makes up the aquifer and a well is installed. Normally such water must be pumped to the surface, but in some cases the water will rise to the surface naturally (artesian aquifers). When water is pumped from a well, the water table (the top of the saturated part of the aquifer) is generally lowered around the well. Hydrologists call this a cone of depression. If water is pumped from a well faster than it is replenished, the water table is lowered and the well may go dry.

DEMONSTRATION - Take a clear glass jar and fill it with gravel. Now pour water slowly into the jar. Watch as the water fills in the spaces between the bits of gravel. A jar "full" of gravel can actually hold quite a bit of water. You have created an aquifer!

Provided by:
East Dakota Water Development District
132B Airport Drive • Brookings, SD, 57006
(605) 688-6741 • http://eastdakota.org