

SOUTH DAKOTA RURAL WATER'S

Quality On Tap!

April 2016 | Volume 11, Issue 4

APRIL IS
SAFE
DIGGING
MONTH

CoCoRahs:
Every Drop Counts

Dakota Water
Watch Program

A MESSAGE FROM THE PRESIDENT OF THE BOARD

Ron Gillen, President
South Dakota Association of Rural Water Systems



South Dakota Rural Water is pleased to announce the scheduling of the 2016 Water Conservation EXPO. The EXPO will be held in Rapid City at the Best Western Ramkota Hotel and Conference Center (605-343-8550) on April 27-28, 2016.

The EXPO is open to all water and wastewater utility staff, board/council members, engineers, State and Federal employees. The training will consist of twenty presentations, 30 minutes each, thus allocating ten (10) contact hours for those individuals who are licensed operations specialists. Some of the training sessions being offered include:

■ **Treating Radium 226/288 in Your Drinking Water with Co-Precipitation/Filtration**

Gregg Backstrom, Laynel/Treatment Resources

■ **Using Ice to Pig Water and Wastewater Force Mains**

Nichole Grasma & Ron Rappard, Utility Service Group

■ **Sewer System Rehabilitation**

Michelle Barrett, Hydro-Klean

■ **Diaphragm Pumps**

Dane Yde, SVEN

■ **Hydrants & Valves**

Chris Ruskamp, American Flow Control

■ **Lead Update**

Erin Dreis, DENR

■ **Tank Maintenance**

Bartlett & West

■ **Gain on Your Water Loss**

Ted Schultz, AE2S

■ **Pressure Monitoring**

Jim Urban, Milbank WinWater

■ **System Planning**

Dana Foreman, KLJ

Along with the training sessions, the EXPO will showcase many of our industry's manufacturer and supplier leaders. These professional companies will be set up in the main EXPO training center for attendee easy access and to provide answers to those pressing questions. Many will be displaying the recent advances in technology our industry has witnessed over the past several years.

The EXPO will kick off at 8:00 am Wednesday April 28th and conclude at noon on Thursday, April 29th. Registration is \$40, and SDARWS is able to bill for this fee after the conference. You can register to attend at <http://tinyurl.com/WREXPO>. The complete agenda can be seen on page 14.

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Class B East River

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Class B West River

Vacant

Class C

Vacant



RURAL WATER RALLY

Dennis N. Davis, Executive Director
South Dakota Association of Rural Water Systems

This year 22 people representing seven rural water systems and the State Association traveled to Washington, D.C. to participate in the NRWA sessions and private meetings with Senators John Thune and Mike Rounds, Congresswoman Kristi Noem, and USDA Rural Development staff.

The goal was to focus our efforts on informing our elected leaders of the needs and concerns of water and wastewater utilities in South Dakota, and hopefully our leaders were receptive to help keep funding for rural water utilities in South Dakota alive.

The theme of this year's Rally was "Let your voice be heard!" During the 2016 opening session, priorities were established to maintain funding levels for specific programs that provide assistance to small systems across the country. NRWA President Charles Hilton opened the Rally by reminding the gathered utility professionals that their voice was what had made Rural Water so successful. "National Rural Water has no power or credibility on its own," he said. "It is through the grass roots efforts of our members that we have been successful." A packed crowd greeted Congressman Tom Cole and Secretary of Agriculture Tom Vilsack. Vilsack explained that the challenge was not just encouraging Congress to fully fund the water programs, but to also fix the fire budget. NRWA legislative updates were provided by NRWA lobbyists Bill Simpson and Mike Keegan. Rural Water FY17 appropriations priorities were established as follows:

USDA Circuit Rider	\$16.897 million for FY17
USDA Source Water	\$6.5 million for FY17
EPA Technical Assistance	\$15 million for FY17

The Circuit Rider request has raised slightly to \$16.897 million and would maintain the current number of circuit riders in the field (117 nationwide). The USDA Source Water program stayed at a request of \$6.5 million – which would help bring a source water protection specialist to each state in order to better meet current demand. The EPA Technical Assistance request of \$15 million would continue a competitive grant program to provide rural communities with the training and technical assistance necessary to improve water quality and provide safe drinking water.

Besides the NRWA funding requests, appropriations for USDA Grant/Loans (\$550 million), EPA Drinking Water SRF (\$906.9 million), and EPA Clean Water SRF (\$1,448.9 billion) were being supported by Rally attendees.

Your support makes a difference in our fight to preserve rural water loan and grant assistance. Thanks to everybody who attended the Rally and to all the systems who have sent in support letters. We couldn't do it without you!



OUT AND ABOUT

APRIL

15-23 – SCHMECKFEST

FREEMAN ACADEMY CAMPUS, FREEMAN

This annual event features a German family-style meal and a community musical theatrical production.

Traditional foods and handicrafts are demonstrated and sold. www.schmekfest.com

17 – CAR SHOW AT (2:30PM) TEST 'N TUNE (5:00PM)

MILLER CENTRAL SPEEDWAY, MILLER

Come and see your favorite race cars and drivers. Concessions will be available. Free grandstand admission. (Rain date – April 24) www.millercentralspeedway.com

23 – QUILT SHOW

SWIFTEL CENTER, BROOKINGS

View a large collection of quilts made in South Dakota. Guest speaker, Yvonne Hollenbeck, will be discussing "Patchwork on the Prairie" and showing her collection of family quilts spanning 140 years. Admission is \$5 per day with lunch and beverages being served. Be sure to enter the raffle to win a one-of-a-kind quilt. 9am – 5pm. www.swiftelcenter.com

MAY

7 – AVERA RACE AGAINST BREAST CANCER

AVERA MCKENNAN FITNESS CENTER, SIOUX FALLS

Every year, the Avera Race brings together family, friends, cancer survivors and others to race for a common goal; enhance cancer care for people right here in Sioux Falls and surrounding communities. The Avera Race consists of a 10K run, 5K run, 3 mile walk or 1.5 mile family fun. Admission is \$35, and the race kicks off at 8:00am.

www.averaracesiouxfalls.org

20-22 – OPEN HOUSE AND FREE FISHING WEEKEND

SOUTH DAKOTA STATE PARKS

This weekend, enjoy free entrance into all South Dakota state parks and recreation areas. In addition, a number of parks will be hosting special events to kick off the camping season. Camping fees still apply. This weekend is also Free Fishing Weekend; no fishing licenses are required. Regulations and limits still apply. gfp.sd.gov/calendar.aspx

If you would like your event featured in the July 2016 issue of Quality On Tap!, please email your event description to: info@sdarws.com. July's issue will cover events taking place July-September 2016. Event listings are subject to approval by the QOT Editorial Board.

MAY

28-29 – SDRA FOOTHILLS RODEO

Jerauld Co. 4-H Rodeo Grounds, Wessington Springs
Competition includes Bare Back, Saddle Bronc, Tie Down Roping, Steer Wrestling, Team Roping, Sr. Men's Breakaway Roping, Ladies Barrel Racing, Ladies Goat Tying, Team Penning, Bull Riding & Children's Mutton Bustin'. Friday night calcutta & Saturday night dance to follow rodeo (all ages welcome). www.wessingtonsprings.com

JUNE

3-5 – WHEEL JAM

SOUTH DAKOTA STATE FAIRGROUNDS, HURON

Three bigs days. Three big shows. Thousands of wheels. Wheel Jam consists of three major shows: a car show, a motorcycle show and a semi show. Other events include live entertainment, dynamic engine brake competition, semi light show, car and motorcycle show n' shine, audio sound competition, burn out pit, poker run, stock car races, mobile dyno service, and the SD BBQ Championships. The event also features concessions, vendors, and carnival rides. Hours are 8 a.m.-11 p.m. on Friday and Saturday, and 7:30 a.m.-5 p.m. on Sunday. Admission is free.

www.wheeljam.com

18 – VINEGAR DAYS

MAIN STREET, ROSLYN

The annual Vinegar Days festival takes place in Roslyn in northeastern South Dakota from 9am – 4pm. Events include a parade, Vinegar Queen crowning, stage entertainment, kids activities, food and craft vendors, alumni meet and greet, vinegar tasting, International Vinegar Museum tours and food demonstrations. Spend Saturday, June 18, enjoying the art of vinegar.

www.internationalvinegarmuseum.com

24 – MIDSOMMAR AT DALESBURG

DALESBURG LUTHERAN CHURCH, VERMILLION

Held annually at Dalesburg Lutheran Church north of Vermillion, 2016 marks the 147th Annual Midsommar at Dalesburg. This celebration of Scandinavian and immigrant heritage includes musical entertainment, a Scandinavian Smorgasbord and the raising of the Midsommar Pole. Activities start at 2 p.m. and the dinner is served 4:30-6:30 p.m. General activities are free. The dinner is \$12 for adults and \$4 for children (8 and younger).

www.dalesburg.org

APRIL IS SAFE DIGGING MONTH

By Larry L. Janes, Executive Director SD 811

Isn't it interesting how dependent we are on having good quality drinking water reach our faucets, yet we don't often think of how that water gets to us? Obviously it arrives at our homes and businesses through pipes placed underground, but beyond that we don't think much about it or what we can do to protect it. One of the easiest ways for us to protect this essential service and other buried services such as power lines, natural gas, high pressure gas and petroleum lines, telephone, and cable television, is to always remember to call South Dakota One Call (or South Dakota 811 as we're now known) by dialing 811 before doing excavation work of any kind. While the term excavation makes us think of big heavy machinery like backhoes and large tracked equipment, it can also mean using something as small as a shovel to plant a tree or the use of a sledge hammer to pound in a fence post.

What is South Dakota One Call, and who is responsible for the operation?

Years ago separate calls had to be made to each utility in order to have buried service lines marked before excavation activities were to take place. It was a time consuming and frustrating process – and there were no rules as to when companies would show up to mark lines. Because of this, the South Dakota State Legislature adopted South Dakota One Call laws in 1993, and created the South Dakota One Call Notification Board (One Call) as a state agency attached administratively to the Public Utilities Commission. The One Call board was tasked to establish the processes to operate the 811 Center and the procedures for gathering information from facility operators (utilities) to improve the ability to reduce damage to underground facilities. The eleven Board members are appointed by the Governor, serve three-year staggered terms, and serve without pay. They represent rural water systems, telecommunication companies, and natural gas companies.

The laws established by the Legislature required that a locate request must be made before digging, and it also established rules so that homeowners and excavators would know that all buried service lines would be marked within 48 hours of making a locate request, excluding weekends and state recognized holidays. There are a few exceptions, such as gardening to a depth of 12", and tilling of soil for agricultural purposes to a depth of 18" – but even so, it is a good idea to call anyway. It would be a shame to lose water when it's needed, or for someone to get seriously hurt by inadvertently digging into a shallow electrical line. A quick call to 811 can help avoid an injury and/or a large repair bill.

The question of how deep various services are buried is sometimes asked. This is the great unknown. Even if a utility is buried deeply when it is placed, erosion, landscaping, and other work done later on can make that buried service become very shallow. Calling 811 is a free service for you, and calling that number will notify the

utilities that you're planning to dig. It allows them to mark their lines so you can safely work around them. There may be times when those buried lines belong to you and not the utility company, in which case you may need to hire someone to locate that particular buried service line for you. A good example of this is the propane line buried between the propane tank and your house or electrical

lines between buildings on your property. In other situations the utility may locate the lines for you and charge to mark those lines near your project, or you may have to contact someone to locate those lines for you. Even in these rare cases where there is a cost to locate buried facilities, it's a small cost to avoid being without service, getting hurt, or worse.

How often is the SD 811 service used?

In 2015, over 140,000 locate requests were made to have underground services marked, and over 800,000 lines were marked in South Dakota by utility companies. That's a lot of digging!

Who enforces One Call laws?

South Dakota One Call laws are enforced through an online complaint process, which can be found on the South Dakota 811

website. It is generally used by professional excavators and utility companies, although individuals occasionally file complaints. The complaint process should not be used when there's dissatisfaction of work with a utility or an excavator, but can be used when it's believed that a One Call law has been violated. Even then, the Board suggests communication between parties should occur before filing a formal complaint. Oftentimes disagreements can be resolved amicably without going into this legal process, which can involve attorney representation by each party. Since 1993 the Enforcement Panel of the South Dakota One Call Board has processed 140 Complaint Dockets. Findings have ranged from dismissal of complaints for no violations of law to penalty assessments as high as \$15,000 for repeated violations.

Can I do a One Call online?

South Dakota 811 has developed an online tool for everyone to make these locate requests quicker and easier. Just go to sdonecall.com and click on the "Homeowner" tab to learn more. There is also a free South Dakota 811 app available for Apple and Android users which anyone may use to enter locate requests and find previously entered tickets.

Once you place that drain tile in the public right of way, or have an electrical line placed across a road to serve irrigation equipment, you are required by law to register that facility with South Dakota 811. Just go to www.sdonecall.com and click on the Facility Operator tab to register your facilities. There is a small cost to register these services, but it's very low and will be the cheapest insurance you'll ever have to protect your investment.

Remember to call 811, so you won't have to call 911. It's a free service. It's there for your safety. It can save you inconvenience and unnecessary repair bills, and it's the law to call before digging.



**Know what's below.
Call before you dig.**

WHAT'S GOING ON OUT THERE?

By Jeremy Hinke, East Dakota Water Development District

Whether you live next to a lake or stream in South Dakota or only visit one occasionally, you may have asked yourself... Why are there more algae in my lake than I've seen in the past? Why isn't the water in my lake as clear as I've seen in other places? Is that body of water healthy? Is there anything in there that would make me not want to go swimming, fishing, or even boating?

In 2007, in an effort to help people answer questions just like these and more, the East Dakota Water Development District started the Dakota Water Watch program. Prior to that, individuals with questions about a particular waterbody had very limited amounts of information to turn to. There are approximately 575 lakes classified by the South Dakota Department of Environment and Natural Resources (DENR) for recreational use. Due to limited time and resources, only about 25 of these lakes are sampled by DENR staff each year. Furthermore, there are about 95,000 miles of rivers and streams across the state with only 148 permanent locations monitored by the state. The creation of the Dakota Water Watch program allowed interested citizens an opportunity to learn more about waterbodies that concerned them the most and answer questions they might have. Data collected by volunteers has the added benefit of helping to fill in gaps in existing data as well as identifying lakes and streams that may need additional testing and attention.

Prior to the creation of Dakota Water Watch, there were several efforts to engage interested citizens in volunteer monitoring programs across the state. All of these various projects were different in their goals, methods, duration, number of participants, and which parameters they were looking at. One of the initial goals of Dakota Water Watch was to serve as a mechanism to unite all these different groups into one statewide program. Citizen monitors began using identical materials and received the same training, allowing results from across the state to be comparable to one another. Additionally, Dakota Water Watch supports networking between groups and individuals interested in water quality. It allows them to share thoughts and ideas and brings people together with similar interests and concerns. By educating residents about their local environment, Dakota Water Watch also helps build community awareness and stewardship.

Interested persons need to attend a Dakota Water Watch orientation workshop, the goal of which is to educate them about

river and lake systems, water quality monitoring, and aquatic life, amongst other topics. Some attendees may find that the workshop has provided them with all the information they need at that time. However, anyone who does complete the workshop will have the opportunity to become a volunteer. New volunteers collect information about several physical parameters including: water clarity, temperature, algal conditions, aquatic invasive species, and small aquatic creatures. Later, volunteers can choose to receive additional training to gather further information such as E. coli bacteria concentrations and nutrient data.





Many Dakota Water Watch volunteers collect samples at a specific location periodically throughout the year. This enables the program to track changes occurring both during the year and over the course of multiple years. For example, one of the program's citizen monitors from McCook Lake, Kelly Kistner, has collected samples for Dakota Water Watch since 2008. The data he has collected over the past eight years serves as a baseline against which future data can be compared. Also, by collecting information over multiple years, we can begin to see if there are any changes happening to the lake. If water quality indicators in the lake are improving or deteriorating over time, local citizens and state authorities can be notified.

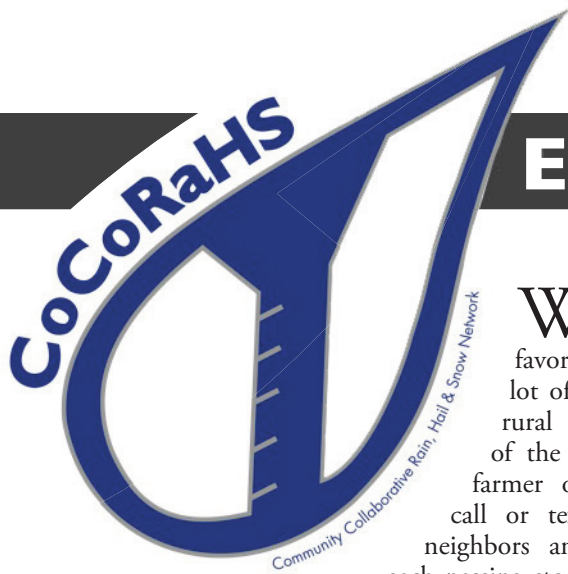
While water quality conditions can vary over time, they can also vary across a single lake or watershed. One way of documenting these types of variations is by collecting samples in what is known as a "snapshot" event. The South Dakota Canoe and Kayak Association has helped Dakota Water Watch perform several

such events over the past few years. During a "snapshot" sampling event, multiple samples (sometime as many as 20) are collected across a lake within an hour or two. While this type of sampling doesn't show us what is happening on the lake long term, it allows us to see what the conditions are like across the lake at that moment. It also demonstrates how water conditions can be very different at different locations on the same lake on the same day.

If you're thinking to yourself that participating in Dakota Water Watch sounds interesting, but there has to be a catch, have no fear. Aside from your time, Dakota Water Watch tries its best to be of minimal cost to the volunteers. In addition to in-person training, all necessary supplies and materials are provided. The program also provides assistance in choosing a monitoring site, a centralized data collection point, project personnel, data review, and periodic reports and updates. There are even funds available to offset shipping and travel costs incurred by volunteers.

If you would be interested in learning more about your local water resources and possibly taking part in gathering information about your favorite lake or stream, please contact Jeremy Hinke, Dakota Water Watch program, East Dakota Water Development District, at 605.688.6611. You can also visit our website at www.eastdakota.org/dakotawaterwatch.





EVERY DROP COUNTS!

By Dennis Today, State Climatologist

Watching the weather is a favorite pastime for a lot of us who live in rural areas, and part of the job of being a farmer or rancher. We call or text our friends, neighbors and family after each passing storm, any time of year, share our reports on social media, or visit at the local coffee shop to compare our storm totals. There is now a volunteer group of weather watchers in South Dakota (and across the nation) that keep their eyes on the weather for all of us, and you can be one of them too.

CoCoRaHS is an acronym for the Community Collaborative Rain, Hail and Snow Network. CoCoRaHS is a unique, non-profit, community-based network of volunteers of all ages and backgrounds working together to measure and map precipitation (rain, hail and snow). By using low-cost measurement tools, stressing training and education, and utilizing an interactive website, the aim is to provide the highest quality data for natural resource, education and research applications. CoCoRaHS currently operates in every state across the country.

WHERE DID THE COCORAHHS NETWORK ORIGINATE?

The network originated with the Colorado Climate Center at Colorado State University in 1998, thanks in part to the Fort Collins flood a year prior. In the years since, CoCoRaHS has expanded rapidly with over 17,000 observers in all 50 states. There are a few hundred active observers in South Dakota.

WHO CAN PARTICIPATE?

This is a community project. Everyone can help – young, old, and in-between. The only requirements are a rain gauge, an enthusiasm for watching and reporting weather conditions, and a desire to learn more about how weather can affect and impact our lives.

WHAT DO VOLUNTEER OBSERVERS DO?

Each time a rain, hail or snow storm crosses your area, volunteers take measurements of precipitation from as many locations as possible. Even reports of 0.00" count for something! These precipitation reports are then recorded on our website at www.cocorahs.org.

Daily observations can be reported through the website or by either Apple or Android smartphone apps. The data is then displayed and organized for many of our end users to analyze and apply to daily situations ranging from water resource analysis and severe storm warnings to neighbors comparing how much rain fell in their backyards.

Training materials are available online at the CoCoRaHS website. There are PDF documents that describe how to observe rain, hail and snow, and how to use the website. Short video tutorials and animations are also available on the CoCoRaHS YouTube channel.

WHO USES COCORAHHS?

CoCoRaHS is used by a wide variety of organizations and individuals. The National Weather Service, other meteorologists, hydrologists, emergency managers, city utilities (water supply, water conservation, storm water), SDSU Extension, insurance adjusters, USDA, engineers, mosquito control, ranchers and farmers, outdoor & recreation interests, teachers, students, and neighbors in the community are just some examples of those who use the data.



WHAT DO WE HOPE TO ACCOMPLISH?

CoCoRaHS has several goals: 1) providing accurate high-quality precipitation data for our many end users on a timely basis; 2) increasing the density of precipitation data available throughout the country by encouraging volunteer weather observing; 3) encouraging citizens to have fun participating in meteorological science and heightening their awareness about weather; and 4) providing enrichment activities in water and weather resources for teachers, educators and the community at large to name a few.

WHO IS SPONSORING THIS NETWORK?

The National Oceanic and Atmospheric Administration (NOAA) is a major sponsor of the national headquarters in Colorado. Other organizations have contributed either financially, and/or with supplies and equipment. In South Dakota, we have no major sponsors and we volunteer our time as coordinators, like many of you. Occasionally we have some grants that help purchase rain gauges or other supplies for our observers. Many other organizations and individuals have pitched in time and resources to help keep the network up and running. We are grateful to all of you, as CoCoRaHS would not be possible without your help.

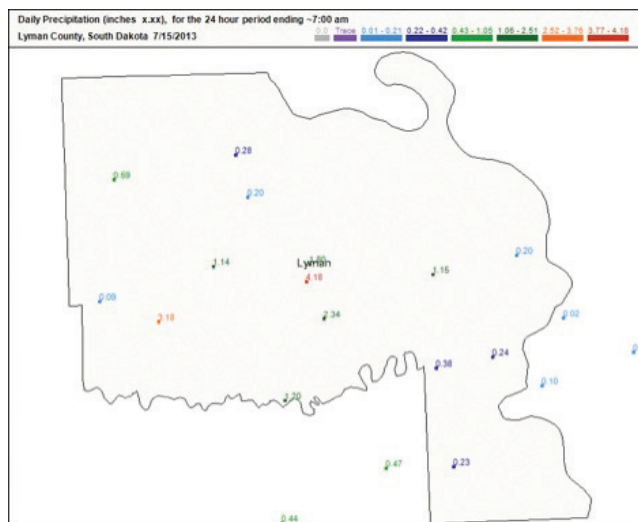
WHAT ARE THE BENEFITS IN VOLUNTEERING?

One of the neat things about participating in this network is coming away with the feeling that you have made an important contribution that helps others. By providing your daily observation, you help to fill in a piece of the weather puzzle that affects many across your area in one way or another. You also will have the chance to make some new friends as you do something important and learn some new things along the way. In some areas, activities are organized for network participants including training sessions, field trips, special speakers, picnics, pot-luck dinners, and photography contests.

We also find that CoCoRaHS is a great record keeping tool. There are a lot of great apps and websites to tell you yesterday's rainfall, but this way you can record exactly how much has fallen on your yard, garden or farm. Data is archived on the website, so you won't need to go digging up that wall calendar from years past to see how much rain fell in a memorable spring flood, or how dry it was in that one summer that you remember.

HOW CAN I SIGN UP OR LEARN MORE?

An online application form is provided on the CoCoRaHS website at <http://cocorahs.org>. The South Dakota state coordinators are Laura Edwards, SDSU Extension Climate Field Specialist, and Dennis Today, SDSU State Climatologist. They are CoCoRaHS volunteers themselves and have had many of the same questions and problems as any other volunteer observer. Contact: Laura Edwards – laura.edwards@sdstate.edu, 605-626-2870; or Dennis Today – dennis.today@sdstate.edu, 605-688-5678.



Above is a map of Lyman county, South Dakota, on July 15, 2013, after a summer thunderstorm system moved across the region. CoCoRaHS volunteers reported 4.18 inches near Kennebec, 3.18 inches near Prescho, but only .10 to .20 inches on the county's borders. Radar can not capture this detail, nor can any other group of weather observers or weather stations in the state. CoCoRaHS is very important for understanding weather and climate in South Dakota, and nationwide. (Image from www.cocorahs.org/Maps/)



Henry Reges, CoCoRaHS National Coordinator, assisted in the chain of possession of the U.S. record largest hail stone en route to the National Snow and Ice Data Center in Boulder, CO. The hail stone fell near Vivian, SD on July 23, 2010 and measured 8.0 inches in diameter, 18.62 inches circumference and weighed nearly two pounds. (Photo credit: NASA, scijinks.jpl.nasa.gov)



Nolan Doesken, the National Director of CoCoRaHS and State Climatologist of Colorado, was at the White House in March 2015 as the representative of CoCoRaHS. The network was acknowledged as a national model of a citizen science volunteer program. On this day, the White House announced that it has a CoCoRaHS gauge in the Kitchen Garden which is read by the National Park Service staff who record weather in the garden and yard. (Photo credit: @SciStarter on Twitter)



Dr. Dennis Today, SDSU State Climatologist, and Laura Edwards, SDSU Extension Climate Field Specialist, are the SD CoCoRaHS State Coordinators. Regional coordinators include National Weather Service offices in Rapid City, Aberdeen and Sioux Falls. There are also a handful of local coordinators that work with volunteers in specific counties across the state. There are many opportunities to get involved if you want to work with volunteers to help provide local assistance in reporting. (Photo credit: SDSU)

SYSTEM SPOTLIGHT

OGLALA SIOUX RURAL WATER SUPPLY SYSTEM

For way too long, residents of Pine Ridge Indian Reservation suffered from the lack of good potable water – especially on the western side of the reservation where tribal members lugged water in cream cans and buckets from sources located 10-15 miles away from their homes. Their water sources were often contaminated with bacteria or undesirable minerals, and caused a high rate of water borne diseases, cancer and childhood mortality, causing much suffering among reservation residents.

The passage of the Mni Wiconi Act of 1988 helped to dramatically change the conditions. Combining the needs of the Lyman-Jones and West River Water Systems and their political clout with the needs of the Oglala Sioux Tribe, their federal connection proved to be a successful formula as Public Law 100-516 was signed into law in October of 1988; Lower Brule and Rosebud Sioux Tribes were added in when the original act was amended in 1994. The project was reauthorized in 2002 and amended again by the Consolidated Appropriations Act, 2008, to extend the sunset date to 2013. Similar to other large Federal rural water projects, appropriations have failed to keep up with projected timelines, and additional costs have cut into the funding. All of the water used in the Mni Wiconi project is pulled from the Missouri River through a pump station and water treatment plant in Ft. Pierre, and is piped through a 24" pipe covering more than 12,500 square miles, and is considered one of the world's largest rural water projects. Mni Wiconi, through the Bureau of Indian Affairs, uses existing programs and annual appropriations to construct, repair, and upgrade plumbing fixtures, skirting, and

other necessary features, such as septic tanks and drain fields, to ensure that houses within the service areas are able to meet the standards to be connected to the water system.

In 2010, after the completion of the Hisle Junction to Kyle OSRWSS pipeline, treated Missouri River water had finally reached the heart of the Pine Ridge Reservation. "The rough terrain on this section of the pipeline created extraordinary engineering and construction challenges," said Oglala Sioux Water Director Frank Means. "The infrastructure we have been building is essential to providing water delivery services for rural, municipal, commercial and industrial purposes now and in the future while providing opportunities for many tribal members to move back to their own land."

"Since 1988, our mission has been to bring good potable drinking water to the residents of the reservation," said Means. The Oglala Sioux Tribe owns and operates both the Core pipeline and the Pine Ridge Reservation distribution system with 50% of the water brought from the Missouri River, and 50% developed from reservation ground water. This formula gives the tribe the flexibility and reliability of a safe and adequate water supply for present and future generations.

The completed pipeline stretches from Kadoka to Wanblee, and provides treated Missouri River water to homes in Oglala, Pine Ridge, Kyle, Manderson, Sharps Corner, Porcupine, Evergreen, Redshirt, Grass Creek, Wanblee, and Potato Creek.





The Porcupine Butte to Manderson pipe connects more of the reservation, while the Kyle West pumping station helps pump river water to Porcupine, and as far away as the Red Shirt area. However, due to fluctuation appropriation levels, there are still a few towns waiting for the pipelines to reach them.

“We are continually working to shorten and eventually eliminate the water hauling list,” said Means, “we also work at putting together resources to cover what we call indefinite quantities, hooking up new individual residences to the pipeline and more importantly planning ahead with the communities to upgrade and transfer community water systems to the OSRWSS pipeline.”

With the connection to Kyle complete, the tribe is poised to deliver Missouri River water in combination with ground water to any location on the reservation where supply is limited or water quality is unsafe, added Means, the taste will be sweeter and fixtures less likely to corrode.

Currently, OSRWSS consists of about 409 miles of pipeline and over 2,500 hookups. OSRWSS also bulk serves the Rosebud Rural Water System, the West River/Lyman-Jones Rural Water System, and the Lower Brule Rural Water Supply System. OSRWSS has offices in both Pine Ridge and Kyle, and employs around 50 individuals.

OGLALA SIOUX RURAL WATER SUPPLY SYSTEM

DIRECTORS:

Willard Clifford, Acting Director
Frank Means, Director

STATISTICS:

Hookups: 2,583

Miles of Pipeline: 409

Water Source: Arikaree Aquifer,
Missouri River

Counties Served: Oglala Lakota
and Jackson

Towns Served Individual: Oglala,
Pine Ridge, Kyle, Manderson,
Sharps Corner, Porcupine,
Evergreen, Redshirt, Grass
Creek, Wanblee, Potato Creek

Towns Served Bulk: Rosebud
Rural Water System, West River/
Lyman-Jones Water System,
Lower Brule Rural Water Supply
System

RURAL WATER & Crossword Word Scramble Contest

SD Towns

\$100 Grand Prize

SCRAMBLE ANSWER



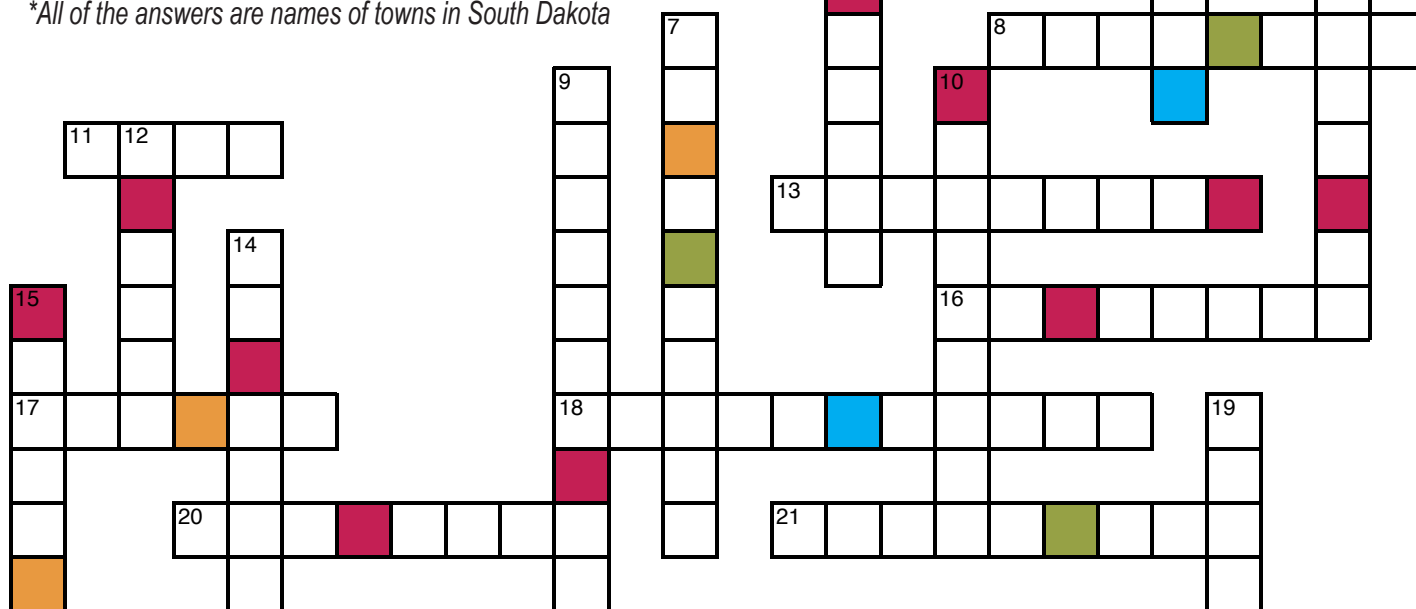
ACROSS

1. Soak in the tub
4. Screwdriver
8. Well
11. Coffee
13. Wet City
16. Scarlet Acres
17. "I found it!"
18. Bridge over H2O
20. Senior Citizen Container
21. Skeleton theft

DOWN

2. Stumble
3. Champion
5. Cemetery Forest
6. Aged Pork
7. Bright Red
9. Lincoln's Address
10. Transparent Waters (2 words)
12. A knight's clothing
14. Jerk 2,000 pounds
15. A parking place for boats
19. Division among rooms

**All of the answers are names of towns in South Dakota*



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 April 8th, 2016 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 Keith Amundson who had the correct phrase of "Visions of Sugar Plums" for January 2016.

Rural Water Across South Dakota

SD Water Systems Bring Rural Water Message to DC



This past February, 22 people representing six rural water systems and the South Dakota Association of Rural Water Systems traveled to Washington, D.C. to participate in the National Rural Water Rally and met with Senators John Thune and Mike Rounds, Congresswoman Kristi Noem, and USDA Rural Development DC staff.

SD Rural Water has been participating in the NRWA Rally for almost three decades. The goal of the Rally is to inform our elected leaders on the needs and concerns of water and wastewater utilities throughout South Dakota, and to ask them to vote on continued funding for projects and programs that help us to provide clean, safe drinking water to everyone in our state.

The NRWA Rally also brings together Rural Water advocates from all 50 states. Congressman Tom Cole and Secretary of Agriculture Tom Vilsack headlined the event.

Cole, a Republican representative from Oklahoma, praised the quality of Rural Water programs and the “bang for the buck” they provide. He warned, however, that growing federal deficits were forcing Congress to make difficult spending choices.

“The programs that you’re interested in, again, these are high value for low cost,” he said. “It shouldn’t be something that we have to struggle for, but we do because entitlement programs keep squeezing out discretionary spending.”

Congressman Cole insisted that Congress and the next President would have to make hard choices about issues like Social Security, the deficit and the tax code. He added that they would have to make those choices without limiting critical programs, like those that support clean drinking water.

“The people in Flint, Mich. can tell you that if someone isn’t doing this job, the consequences of it are terrible,” Cole said.

Secretary Vilsack also spoke about budget difficulties, though his remarks explained how funding choices, even within the same department, could impact other programs.

“One of the challenges is budget,” Vilsack said. “You may not think that your situation is related to the Forest Service budget, but it is. When we increase spending on fire suppression, it means we have to reduce resources and investment in another part of our budget.”

The secretary explained that the challenge was not just encouraging Congress to fully fund the water programs, but to also fix the fire budget. In response to the demands of the tightening budget, USDA started an effort to recruit investment banks and pension funds to invest in rural water projects.

Vilsack’s speech did not focus on the challenges Rural Water faced, but explained why it was important to preserve and promote rural America. He explained that unemployment is slightly higher in rural areas and that poverty is more persistent – 85% of persistent poverty counties are rural counties.

“Rural America is not just the place where we get our food, not just the place almost all the feedstock for the energy we consume comes from, it’s also the place where a disproportionate number of our men and women serving the military come from,” Vilsack said.

More than 44 percent of military recruits come from rural communities. Vilsack believes that rural young people are not enlisting only to find economic opportunity, but because of a value system in rural America.

“People who work the land understand that you have to give something back,” he explained. “It’s a value worth keeping.”

NRWA President Charles Hilton also addressed the crowd and reminded the gathered utility professionals that their voice was what had made Rural Water so successful.

“National Rural Water has no power or credibility on its own,” he explained. “It is through the grass roots efforts of our members that we have been successful.”

MAKE PLANS TO ATTEND

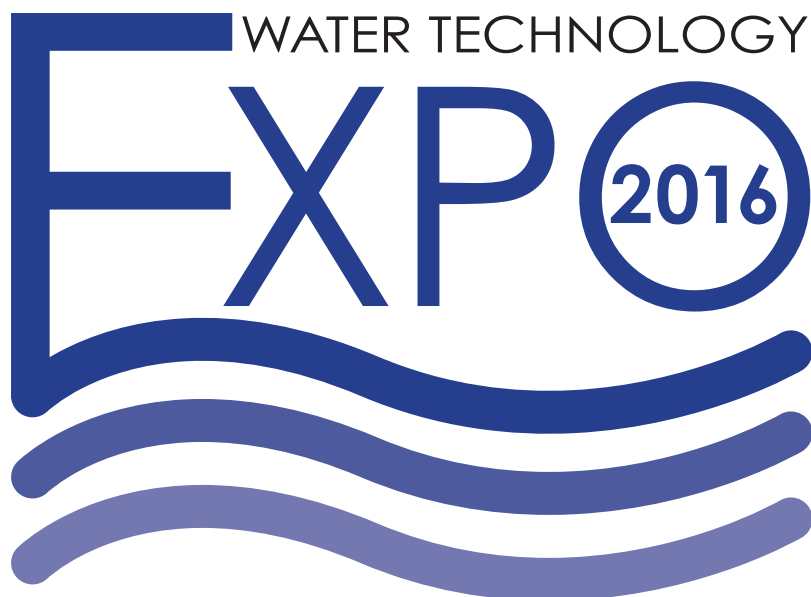
Contact Hours
Door Prizes • Lunch
\$40 Registration Fee

TO REGISTER

visit our website at:

www.sdarws.com or

<http://tinyurl.com/WREXPO>



April 27-28, 2016
BEST WESTERN RAMKOTA HOTEL - RAPID CITY

Wednesday, April 27, 2016

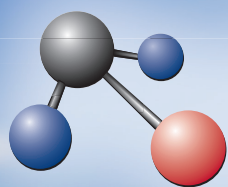
- 7:30am **Registration – Refreshments – Visit Displays**
- 8:15am **Welcome, Agenda Review**
- 8:30am **Treating Radium 226/228 in your drinking water with Co-Precipitation/Filtration**
– Gregg Backstrom, Layne/Treatment Resources
- 9:00am **Using Ice to Pig Water and Wastewater Force Mains** – Nichole Grasma & Ron Rappard, Utility Service Group
- 9:30am **Sewer System Rehabilitation**
– Michelle Barrett, Hydro-Klean
- 10:00am **Refreshment Break – Visit Displays**
- 10:30am **System Mapping and what is New from Trimble & CompassTools**
– Nate Bruss, CompassTools
- 11:00am **Hydrants & Valves** – Chris Ruskamp, American Flow Control
- 11:30am **Lead update**– Erin Dreis, DENR
- 12:00pm **Deli Bar Buffet Lunch**
- 1:00pm **Tank Maintenance**
– Joe Honner, Bartlett & West
- 1:30pm **New Coatings Technologies for the Water & Wastewater Industry**
– John V. Sierzega, The Sherwin Williams Co.
- 2:00pm **Tank Operations** – Rich Kemmis, Maguire Iron

- 2:30pm **Refreshment Break – Visit Displays**
- 3:00pm **Pumps** – Shawn Chong, Grundfos
- 3:30pm **SDARWS Presentation** – Steve Attema
- 4:00pm **Largest geographic 2 Way AMI System in the US** – Rich Fott, Mueller Systems
- 4:45pm **Door Prizes – Adjourn**

Thursday, April 28, 2016

- 7:30am **Coffee, Juice, & Rolls**
- 8:00am **Diaphragm Pumps** – Dane Yde, SVEN
- 8:30am **System Planning** – Dana Foreman, KLJ
- 9:00am **The Difference Between Coagulants and Flocculants** – Joe Schmidt, Hawkins Water Treatment Group
- 9:45am **Refreshment Break – Visit Displays**
- 10:00am **Kamstrap Meters** – Tyler Smith, DSG
- 10:30am **Pressure monitoring**
– Jim Urban, Milbank WinWater
- 11:00am **Gain on Your Water Loss** – Ted Schultz, AE₂S
- 11:45am **Door Prize – Adjourn**

This is a tentative agenda. Topics and times are subject to change.



AES[®]
2



Cedar Shores Marina **OACOMA, SD**

APRIL 30TH, 2016

Registration

\$100.00 PER TEAM/BOAT (LIMIT 30 TEAMS)

REGISTRATION DEADLINE IS APRIL 15TH

VISIT SDARWS.COM TO DOWNLOAD A REGISTRATION FORM

Launch Time

7:00 AM - 3:00 PM

Rules

TEAMS TO CONSIST OF 2-3 PEOPLE WITH AT LEAST ONE PERSON WHO IS A
CURRENT WATER/WASTEWATER, ASSOCIATE OR CORPORATE MEMBER OF
SOUTH DAKOTA RURAL WATER

8 FISH MAXIMUM PER BOAT WITH THE LARGEST 7 FISH WEIGHED

ALL JUDGES RULES ARE FINAL

IN CASE OF A TIE, THE TEAM WITH THE BIGGEST FISH WINS

RULES MEETING 8:00PM FRIDAY NIGHT

SOUTH DAKOTA FISHING REGULATIONS MUST BE FOLLOWED

Prizes

PAYOUT DEPENDENT ON NUMBER OF TEAMS

TOURNAMENT WINNERS ANNOUNCED SHORTLY AFTER
WEIGH-IN RESULTS ARE COMPLIED



SOUTH DAKOTA RURAL WATER
P.O. Box 287
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WATER MATTERS

State Navigable Streams



Navigable streams in South Dakota are considered public highways and the right of the public to use such streams cannot be prohibited or unduly restricted. Under state law, a stream, or portion of a stream, is considered navigable if it can support a vessel capable of carrying one or more persons throughout the period between the May 1st and September 30th, inclusive, in 2 out of every 10 years (SDCL 43-17-34).



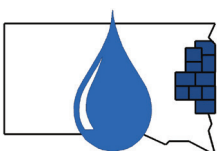
In 1990, legislation was enacted to allow fencing of certain navigable streams provided that a gate be installed in the fence crossing the stream. Streams in the state where gates are required in fences include portions of the Bad, Big Sioux, Cheyenne, East Vermillion, Elm, Grand, Little White, Moreau, Redwater, Vermillion, and White Rivers, and portions of Flandreau, Firesteel, Moccasin, Splitrock, and Turtle Creeks.

The Missouri River, James River, Boise des Sioux River, and the lower five miles of the Big Sioux River are designated as navigable rivers pursuant to federal law and may not be fenced with or without a gate.

Gate and Fence Requirements: Fences constructed across navigable streams are required to have a gate with a minimum opening size of 6-feet high by 6-feet wide and the opening must be outlined with reflective tape or other highly visible material. In addition, reflectors or highly visible material must also

be attached to the fence connecting the gate with the stream bank, and the reflectors must be no more than 25 feet apart and visible from both up and downstream. If no livestock are present, then the gates need to be removed or kept open.

RESOURCES: A "Guide to Fencing of Navigable Streams" brochure is available in an Adobe PDF format. (denr.sd.gov/des/wr/StreamFencingGuide.pdf) This brochure outlines the responsibilities of landowners and recreationists as well as fencing requirements. In addition, a complete listing of applicable statutes and rules are available for review in South Dakota Codified Laws 43-17-34 through 43-17-41, and Administrative Rules of South Dakota Chapter 74:02:10.



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