Nebraska Runal Water Association



Nebraska Good Water News

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Nebraska Good Water News

Issue 1/2016

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"Nebraska Good Water News" is a quarterly publication of the NEBRASKA RURAL WATER ASSOCIATION, 3390 Ponderosa, Wahoo, Nebraska 68066. Phone 1-800-842-8039 or (402) 443-5216 or FAX (402) 443-5274. Copies are mailed to all member rural and municipal water

The NEBRASKA RURAL WATER ASSOCIATION is dedicated to the improvement and assistance of all public water systems in the State of Nebraska.

NOTICE: Nebraska Rural Water Association does not endorse any

particular product or company in this publication. Membership and advertising should not be taken as an endorsement.

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On the cover:

St Helena Water Tower.

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Standard Operating Procedures; aka "SOP" 15

Read Your Mail!!

operators, Federal and State Legislators, associates and individual members.

How'd We Do and Letters From...

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VILLAGE OF UTICA 466 1ST STREET P.O. BOX 158 UTICA, NEBRASKA 68456

REGULAR MEETING FIRST MONDAY OF EACH MONTH

January 6, 2016

Nebraska Rural Water Association 3390 Ponderosa Drive Wahoo, NE 68066

Dear NeRWA,

The Utica Village Board of Trustees would like to thank the very capable NeRWA staff for coming to Utica to meet with our maintenance men on water department issues. Your assistance, expertise and professionalism are truly appreciated.

Please accept this donation to your equipment fund and our thanks for your valuable services.

Sincerely,

Donald alson Donald Olson, Board Chairman Village Board of Trustees

Utica, Nebraska

Village of Harrison <villageofharrison@vistabeam.com>

Wednesday, January 06, 2016 2:34 PM

'Salli Kemerling'

RE: NeRWA follow-up

Subject:

From:

Sent:

To:

On December 2, 2016 Randy Hellbusch came to Harrison and visited with me concerning the best alternatives Salli,

for chlorinating our two new wells. We only plan on using our equipment for maintenance chlorination. The Village Board agreed with the plan of purchasing two new stenner pumps. Randy made this decision easier.

We at the Village of Harrison value the great relationship we have with the staff at the Nebraska Rural Water

Association and sincerely appreciate all the assistance we've received through the years!

Sincerely,

Edgar Hatch, Village Utilities Superintendent

Village of Harrison

villageofha@qwestoffice.net

308 668-2323 Maintenance Shop

715 East 5th street Stromsburg NE, 68666

12/16/15

Mr. Mike Lucas

Dear Mike:

Thank you so much for the opportunity of shadowing you in Bellwood and Duncan this last Monday. I took away new knowledge that I can now use to help determine the field I wish to enter into, all while enjoying myself!

By following you, I learned that there is a lot more to engineering than one may think. The vast range of tasks that you preform in a day is nothing short of amazing. and the knowledge needed to preform them, astounding. I can only hope to one day have as much knowledge as you.

As we discussed, I would be interested in once again shadowing you when our schedules align, and I hope that this may again be possible. Thank you again for taking the time to allow me this opportunity, it is greatly appreciated! Sincerely,

Ti_{'eva Nielson}

RE: Exercise Valves

Dear Doug,

Please find enclosed a donation in the amount of \$480.00 for the Nebraska Rural Water Association from the Village of Hershey. On October 7th & 8th, with your help, we were able to exercise (64) water valves. We sincerely appreciate your time, the use of your machine and your help with this endeavor. Without your help, we would not be able to achieve this important task as quickly nor as easily.

We always appreciate all the exemplary help, expertise and knowledge we receive from the Nebraska Rural Water Association and are happy to be able to give our help and support in return.

Our grateful thanks,

Village of Hershey Board of Trustees and Staff City of Madison 211 South Lincoln Street P.O. Box 527 Madison, Ne 68748-0527 Office: 402-454-3412 Fax: 402-454-2262 www.madison-ne.com



Mayor~ Alvin Brandl Council Members~ Brett Freudenburg Robert Jurgens Jeff Prather Rob Fite

December 18, 2015

Nebraska Rural Water Assn 3390 Ponderosa Drive Wahoo, NE 68066

Dear Rural Water Assn,

The City of Madison, population 2,402, values the opportunity to utilize equipment, programs and other assistance, provided by the Nebraska Rural Water Association. This cooperative effort creates access to expensive equipment that our small town utility could not otherwise afford. Please use the enclosed donation for your equipment fund.

Thank you!

Mayor Alvin Brandl Madison, NE



Russell D. Topp, born April 9, 1961, passed away Dec. 21, 2015. Born in Lincoln, Nebraska, he lived his entire life in the Panama/Adams area. He graduated from Norris High School in 1979, and then farmed with his dad. He then went on to work for the city of Adams. After that he worked for the State of Nebraska. Russell retired in June, 2015, from the Nebraska Rural Water Association where he worked for 14 years.

Russell was an avid Harley Davidson rider, bow hunter, duck hunter, fisherman, wine maker, loved camping and camp fires. \\

Survived by wife Karen (Steffens); sons Jonathan (Kayla), Benjamin (Karly); parents Duane and Shirley Topp; brothers Rodney (Deb), Bruce (Kim); sisters Cindy (Doug) Holden, Barb (Jeff) Jobes, Carla Anderson; brother-in-law Keith Freeouf; loving nieces and nephews, great nieces and

great nephews, many special friends, and loving pets, Gracie and Sadie.

Page 4 Nerwa

2016 TRAINING

<u>Grade 6 Backflow Prevention Cross-</u> <u>Connection Control Course - 5 Day</u>

January 11-15 Wahoo
April 11-15 Wahoo
October 17-21 Wahoo

Wastewater Certification Course

January 26-29 Wahoo June 7-10 Wahoo August 23-26 Wahoo November 15-18 Wahoo

Wastewa January 7	ter Training Wahoo
February 18	Alliance
March 3	Auburn
April 7	Aurora
May 4	Omaha
June 16	Wahoo
July 21	McCook
August 11	Ogallala
September 7	O'Neill
October 6	Ord
November 3	Omaha
December 8	Laurel

Water Oper	rator Training
January 12	Beaver Lake
January 14	Newman Grove
April 6	Ogallala
May 17	Pawnee City
June 15	Sutton
July 13	Chadron
August 9	Bancroft
October 5	Chappell
November 9	Lindy
December 14	Red Cloud

Backflow Continuing Education Training					
January 20	Alliance				
January 21	Sidney				
February 9	Nebraska City				
February 11	Stanton				
April 19	Cairo				
April 20	Wymore				
April 26	Wahoo				
May 10	Valentine				
September 20	McCool Junction				
September 21	Ord				
October 25	South Sioux City				
October 26	Atkinson				
November 22	Wahoo				
December 13	Mitchell				
December 14	Ogallala				
December 15	Cambridge				

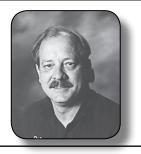
Annual Conference March 21-23

Younes Conference Center Kearney, Nebraska Fall Western Conference Sept. 27-29

> Gering Civic Center Gering, Nebraska

August 3 Trenching & Shoring Wahoo

August 4 Confined Space Entry Wahoo



Back to the Basics

By Randy Hellbusch, Circuit Rider

This fall there seemed to be an abundance of coliform violations. Almost at every system that I have visited recently the coliform issue comes up in the conversation. I haven't asked anyone with DHHS yet, but according to the calls NeRWA has received about bacti hits, I can't help but believe they are way above normal. Sometimes, or should I say most times, many of us feel somewhat rushed and in a hurry for some reason. Taking a bacti sample should not be one of those times. For most of the calls we get, the operator can't understand how the sample could be bad.

Be sure to disinfect faucet or sampling point prior to pulling sample.
 Use hand sanitizer or disinfectant before you pull the sample.

the sample.

There hasn't been anything done to the system, no pressure

loss, no construction, etc. Below are some basic suggestions

that I am sure everyone has heard before, but sometimes it

doesn't hurt to step back and review.

- 3. Make sure you have a good clean sample site.
- 4. Be sure to let the tap run long enough to pull fresh water from the main.
- 5. Be sure the sample bottle is not old. Rotate bottles as necessary if you keep them on hand.
- 6. Be sure sample bottle is clean and has not been previously opened.
- Make sure flow from tap is even and not spraying about.
- 8. Open sample bottle just prior to filling.
- 9. Do not set cap down or turn upside down and recap bottle immediately.
- 10. If you are taking more than one sample wash hands each time. As soon as you walk outdoors or open the door of your vehicle, your hands can become contaminated.

With the new groundwater rule, if you have a bacti hit, you don't only need to take the necessary repeat samples, but you also need to take samples at your well sites. Sometimes a little precaution and extra time can save you a lot of time and work later.

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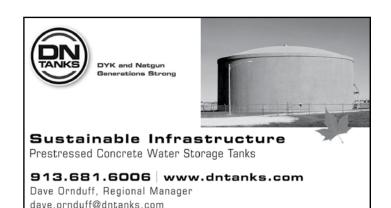
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Doug Yantzie, Municipal Manager

Office: (888) 496-3902 After Hours: (402) 759-2929



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BOARD OF DIRECTORS

The following NeRWA board members will be running for re-election to the association Board of Directors at the meeting held during the annual conference in Kearney held on March 23.

Tom Goulette, City of West Point Ken Halvorsen, Lancaster County RWD#1

Tom's position must be filled by a delegate from a utility system. Ken's position must be filled by a delegate from a rural water system.

Requirements for the above positions:

- Must be the voting delegate or alternate delegate from system.
- Must attend monthly board meetings (held at NeRWA office).
- Cannot miss more than 3 meetings in a row.
- Attendance at the annual spring conference is required.
- Attendance at the fall conference is encouraged.
- Occasional out-of-state travel is possible.

Duties for the positions are:

- Attend meetings and show commitment to board activities.
- Be well-informed on issues and agenda items in advance of meetings.
- Contribute skills, knowledge and experience when appropriate.

If you are interested in running for any of the above positions, please submit a letter and a resume so indicating. The deadline is March 11, 2016. If you have any questions, please do not hesitate to contact our office.

Email to: salli@nerwa.org
Fax: 402-443-5274

Mail: 3390 Ponderosa St, Wahoo NE 68066

Nebraska Rural Water Association

Annual Conference Pre-Registration

March 21-23, 2016 Younes Conference Center Kearney, Nebraska

ne (1 person per f	form)						• • • • • • • • • • • • • • • • • • • •
ddressty, State, Zip				_ Pre-F	Pre-Registration		
					Deadline is		
						: M	
License numbe	ers MUS	T be o	n this f	orm to rec	ceive the correct CEUs.		•••••
License #: Wat	er:		BF	wv	V WD	I am the V	oting Delegate
fees after this dat	te and on lay and V gister as a IF YOU	-site wi Vednes an atter	Il increas day for t ndee. TITUTE	se by \$50. If he price of r FOR AN AI THERE WIL	S, MEALS AND BREAKS Monday is free for all utility, meal tickets. Board member LREADY REGISTERED P L BE AN EXTRA \$25 CHA	/rural water board members who are also license	pers. Board Members d operators and want
					litional days: Tues	_ Wed	
DAYS AT	TENDING			Member	Member after March 11	Non-Member	Non-Member after March 11
FULL CONFERENCE	(all meals	s)	_	\$375.00	400.00	\$425.00	\$450.00
MONDAY (evening r	neal)		_	\$100.00	125.00	\$125.00	\$150.00
TUESDAY (lunch & e	vening mea	ıl)	_	\$175.00	\$200.00	\$200.00	\$225.00
WEDNESDAY (break	fast & lunch	1)	_	\$125.00	\$150.00	\$150.00	\$175.00
Extra meal tickets available	Guest Tickets	Cost	on Wed	Your Meals		istered for the confere	ence.
Mon evening		\$25	\$		Registration \$ Tickets \$		\$
Tues lunch		\$15	\$		110ναιο φ	Total	Ψ
Tues Banquet		\$30	\$		NeRWA membe	er: Bill Payn	nent enclosed
Wed lunch \$15 \$ To Register: Online: www.nerwa.org Fax: 402-443-5274					Non-membe registrati Hour	ers—Payment mus ion or pay when ch is will not be issued payment is receive	t accompany lecking in. d until
. 3390 Wah	aska Rui Ponderd oo, NE 6 IONE RE	osa Str 88066	eet		When making room reservations, mention you are with NeRWA DATE REGISTRATION RECEIVED:		
 CANCE	LLATION	POLIC	Y: Canc	. — . — ellations afte	er March 18 and NO SHOWS		
For NeRWA of						<u> </u>	Check #
Hours: Water		BF	Was	stewater	WD	Certificate mailed	

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Bowling, Billiards, and Miniature Golf

@ Big Apple Fun Center7:30 - 10:00 pm

(A shuttle will be providing round trip transportation to and from the Younes Conference Center and Big Apple Fun Center from 7:00 to 11:00 pm.)

Social event provided by Nebraska Rural Water Association Sponsored by









(additional sponsors are pending)

CONFERENCE AGENDA

Monday 21		Í .	nter Diamond Ballrooms				
1:00 pm	2:00 pm	4 & 5 Nebraska Water System Regulatory Update Andy Kahle, DHHS 1W 1WD		March 21-23, 2016			
2:00 pm	2:15 pm	BRI	EAK	!]	ubject to change.		
2:15 PM	3:15 pm	Customer Relations Bill Podraza, Miller & Associates 1W, 1WW, 1WD			en applied for. 14 water (W)		
3:15 pm	3:30 pm	Bro	eak	5 backflow (BF)			
3:30 pm	4:30 pm	Rich Koen	ater Operator ig, NDHHS W	12 wastewater (WW) 12 well driller (WD)			
4:30 pm	4:45 pm	Br	eak	1 1	4W, 2 WW, 2 WD		
4:45 pm	5:45 pm	Respon Denise Meeks/Ma	ngineers & Operators sibilities arty Norton, USDA 1WW	Tuesday hours: 6W, 5BF, 6WW, 6WD Wednesday: 4W, 4WW, 4WD			
Tuesday	22	Diamond Ballroom 4	Diamond Ballroom 5	Diamond Ballroom 9	Diamond Ballroom 10		
9:00 am	10:00 am	Trench and Excavation Safety Jon Schnepel, United Rentals 1W, 1WW, 1WD	Energy Efficient Pumping & VFDs Keith Broman/Shad Yarrington, Sargent Drilliing 1W, 1WW, 1WD	Small Systems/Rural Water Round Table NeRWA Board and Staff 1W	Backflow Forum Rich Koenig, NDHHS 1W, 1WW, 1BF		
			.50 break				
10:30 am	11:30 am	Confined Space Entry Jon Schnepel, United Rentals 1W, 1WW, 1WD, 1BF	Hydrant & Valve Maintenance Cort Place, HD Supply Waterworks 1W, 1WD	The Key to Utility Success: Communication Katie Miller, Burns & McDonnell 1W, 1W, 1WD	Hydraulics of Backflow and Troubleshooting Brett Petersen, Mack McClain and Assoc 1W, 1WW, 1BF		
			1 hour lunch				
12:30 pm 1:30 pm		Modern Pipe Sizing and Connection Solutions Bob Hennig, Municipal Pipe Services 1W, 1WW, 1WD	Smart Metering Systems Charles Bausch, HD Supply Waterworks 1W 1WW 1WD	Electrical Safety in the Water & Wastewater Industry Rob Pierce, LONM 1 W, WW, 1WD	Backflow Incident and Emergency Planning Rich Koenig, NDHHS 1W 1WW 1BF		
			.50 Break				
2:00 pm	3:00 pm	Modern Maintenance Tools Bob Hennig, Municipal Pipe Services 1W, 1WW, 1WD	Nitrate Case Study Tom Christopherson NDEQ 1W, 1WD	Controls, Logging, Security/Doing More with Less David Messing, Facility Solutions 1W, 1WW, 1WD	Elements of a Cross- Connection Control Program Barney Whatley, NeRWA 1W 1WW 1BF		
			.50 break				
3:30 pm	4:30 pm	Total System Efficiency Brian Gongol, DJ Gongol and Associates 1W, 1WW, 1WD	811/Digger's Hotline of Nebraska Update Jill Geyer, Nebraska 811 1W, 1WW, 1WD	Infrastructure Rehab- Pressure & Gravity Brian McCrary, Insituform 1W, 1WW, 1WD	Backflow Knowledge Rich Koenig, NDHHS 1W, 1BF		
.25 break							
4:45 pm	5:45 pm	Controlling System Surges Brian Gongol, DJ Gongol and Associates 1W, 1WW, 1WD	Public Notice/CCRs Becky Schuerman, NDHHS 1W	Wastewater Operator Certification Requirements Mike McBride, NDEQ 1WW	NeWARN Update Dennis Watts, Norfolk .5W, .5WW RTCR/Assessments Andy Kahle, NDHHS .5W		

		Wedn	esday 23	
7:30	8:30	reakfast		
A		Diamond Balfroom 4	Diamond Ballroom 5	Diamond Ballroom 9
8:30	9:30	Tank Mixing/Ice PiggIng Nichole Grasma, Utility Service 1W	Field Rep/Lab Q &A NDHHS Field Reps Andy Kahle,NDHHS 1W	Dealing with Iron and Manganese Steve Smith, Layne Christensen 1W, 1WW, 1WD
		2	l 5 break	
9:45	10:45	Source Water Protection Samantha Capps, NDEQ 1W, 1WW, 1WD	Source Water Protection Hydrant History and Samantha Capps, NDEQ Maintenance	
		.2	i 5 break	
11:00	12:00	Well Siting and Planning Dan Freese, Layne Christensen 1W, 1WD	We Don't Know What Happenedl Now What? Rich Koenig, NDHHS 1W	Water and Wastewater Employment Practices Lash Chafin, LONM 1W, 1WW
			our lunch	
1:00	Climate Change in the Water/Wastewater Industry Kim Morrow, UNL 1W, 1WW, 1WD Smart Device Mapping/Drone Uses in the Water/Wastewate Industry Nate Buss, CompassTools 1W, 1WW, 1WD		Setting Up Your Chlorine/Chemical Pump Doug Buresh, NeRWA 1W, 1WW	

Kearney Hotels:

Ask for NeRWA room block

Fairfield Inn & Suites (connected to center) 308-236-4200

Comfort Inn (connected to center) 308-236-3400

Hampton Inn (next door) 308-234-3400

Wingate (next door) 308-237-4400

Holiday Inn Express (across the highway) 308-234-8100



Here Comes the Conference

By Pat Petersen, Training Specialist

With recertification in the rear view mirror of Nebraska Water Operators, it's time to start thinking CEU's for the 2016-2017 period. What better way to get started gathering your new hours than attending the Nebraska Rural Water Association's Annual Conference. Once again we will travel to Kearney and the beautiful Younes Conference Center for three days of learning, sharing our experiences with others and a lot of fun. This year the conference is set to get rolling on Monday, March 21 and conclude early in the afternoon on Wednesday, March 23.

The format for the conference this year will resemble that of last year's. Monday afternoon will begin with the annual Regulation Update by the Nebraska Department of Health and Human Services. Some of the topics they will discuss will be the Revised Total Coliform Rule and some of the personnel and position changes that have taken place in their department. Other speakers on the Monday program include Bill Podraza, Rich Koenig, and a representative from the USDA/RD. Once again, operators will have the opportunity to participate in a "fun night" Monday evening. JEO Consulting Group is doing the planning for this event and I'm sure it will be fun for all!

The learning will begin Tuesday morning at 9 AM. Operators will have their choice of four different sessions during each time period for which recertification hours have been applied for. Those attending will have an opportunity to gather 6 water hours, 6 wastewater hours, 5 backflow hours, and 6 well driller hours, pending state approval. Following the day full of classes, a social hour sponsored by HD Supply/Waterworks will give the operators a chance to enjoy a beverage before the evening meal and awards banquet. Following the banquet the NeRWA will provide entertainment and drinks for attendees. Final preparations are taking place for the entertainment and I feel those who attend will find Tuesday evening to be much more operator friendly than in the past. So, please come to the banquet and enjoy the evening.

Wednesday will begin with the operator breakfast and annual business meeting. Breakfast will be served at 7:30 AM and the business meeting will begin at 8 AM. Training sessions will begin at 8:30 AM and conclude at 2 PM Wednesday afternoon. The agenda for the conference is included in our magazine this quarter and I hope you see something new that you will want to attend. Some of the training sessions may look familiar but there are also some

new sessions including a session about drones and their uses in the water and wastewater industry, climate change and operator succession.

The exhibit hall will be full again with vendors and their newest items to help make your jobs easier. Please support the vendors at each break and let them know how much you appreciate them and their products. The vendors are a major part of the Nebraska Rural Water Association's Annual Conference success.

For all of the operators who choose to attend this year's conference I hope it becomes an annual event for not only gathering CEU's, but to learn and mingle with other operators who may have some of the same issues as yourself. Each year I hear from many attendees that the interaction with other operators is invaluable to their success! So mark your calendars and come see what the Nebraska Rural Water Association's Annual Conference is all about.

Finally, this will be the first year in many that the Nebraska Rural Water Association will be without one of its own; Russ Topp. Russ touched a lot of people's lives not only from a work aspect but just by being a wonderful person. Hopefully operators can share some of their experiences they had with Russ at this year's conference. It will be those experiences that help us get past the sadness that we feel by losing him. Rest in Peace my friend....



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Potential Threats to Our Groundwater

By Doug Buresh, Source Water Specialist

I'm looking forward to seeing many of you in Kearney when we kick off spring with our annual conference March 21-23. Hope this good, ol' Nebraska winter weather hasn't been too rough on you. Funny how things change over time, isn't it? Winter used to be my very favorite season. I have so many wonderful memories of past holidays spent with family at my grandparents' farms. A good chunk of those happy days were usually spent outside. We always loved playing in the snow as there was sledding to be done, snow angels to be made, and snowmen and snow forts to be built. And who doesn't like an old-fashioned snowball fight, right? After a fresh snow uncles and cousins would tromp through the creeks to hunt for rabbits. We even butchered a few hogs one cold Thanksgiving. These activities carried over to all the other snow days, too.

But not anymore, I hate the cold and snow more with each passing year. I still enjoy the holiday get-togethers, of course, but these days the cold creeps into my bones like some witch's spell that dissolves all the warmth away. Once my hands and feet get cold, I'm done. Wasn't it the wise old chief in *Dances with Wolves* who said, "At my age, a good fire is better than anything?" I can definitely relate. I will grant you that it's still pretty, but snow means only one thing for me now and that's all the work involved to clean it up - out in the cold. And then there's ice. Don't get me started on the ice.

Another thing that has changed is the challenge of supplying good, quality drinking water to our systems. Clean Water Act rules have changed and water quality is changing, but customers' expectations of getting cheap water that is safe to drink has not. For the most part, we in Nebraska are blessed with an abundance of clean groundwater. But we all face threats to our source water. The Groundwater Foundation lists groundwater contamination, overuse and depletion, nitrates, pharmaceuticals and personal care products, improperly managed on-site wastewater treatment systems (septic tanks) and other emerging issues as potential threats to our groundwater. Following is a brief description of each threat and steps we can take to protect our drinking water.

Some major sources of contamination include storage tanks (above and below ground), septic systems, uncontrolled hazardous wastes, landfills, chemicals and road salts and atmospheric contaminants. Drinking contaminated water can result in serious health problems, not only for people, but also for pets, livestock and wildlife. Toxins leaching

into groundwater can cause poisoning. Septic tank waste can spread disease like hepatitis and dysentery. And long-term exposure to pollutants may cause some types of cancer. It is far easier and much cheaper to keep these pollutants out of the groundwater in the first place than it is to treat it or replace contaminated wells with another source.

The Old Farmer's Almanac is predicting hot and dry weather for Nebraska this summer. Drought conditions are nothing new, of course. Remember 2012? Overuse of groundwater lowers the water table and can even cause land subsidence. Some areas of California are subsiding nearly a foot annually. During an extreme drought here, overuse can cause low-yielding wells to run dry. All water systems should have, at least, some kind of an emergency drought ordinance in place. DHHS has a useful water conservation and drought information page on their website that includes a template for a more comprehensive Water Shortage Emergency Response Plan. You can access it at: dhs.ne.gov/publichealth/Pages/enh pws conindex.aspx.

Nitrates have become a widespread problem in Nebraska. They are highly soluble and easily leach into groundwater. Fertilizers that run off from fields, lawns and golf courses cause much of the problem. This is called non-point source contamination because the nitrates are dispersed over a wide area. Nitrates also come from leaking septic systems or other improperly disposed of sewage, feedlots, industrial and food processing wastes and from erosion of natural deposits. Ingesting water with nitrate levels above 10 parts per million can cause methemoglobinemia in infants, as well as, other susceptible people. Researchers now believe high levels of nitrate may also cause non-Hodgkin's lymphoma. The MCL for Nitrate is 10 mg/L. Treatment to remove nitrates or replacing a contaminated well is expensive. Again, preventing contamination in the first place is preferred and much cheaper in the long run.

The following paragraph was reprinted with permission from The Groundwater Foundation's website:

Pharmaceuticals and personal care products (PPCPs) are a diverse group of chemicals including all human and veterinary drugs, dietary supplements, topical agents such as cosmetics and sunscreens, laundry and cleaning products, and fragrances and all the inert ingredients that are part of these products. PPCPs are introduced to the

Continued on page 14

environment as pollutants in a variety of ways including intentional disposal of unneeded PPCPs (flushing), bathing or swimming, discharge from municipal sewage or private septic systems, leaching from landfills, excretion by humans and domestic animals, runoff from confined animal feeding operations, discharge of raw sewage, accidental discharges to a groundwater recharge area, loss from aquaculture, and spray-drift from antibiotics used on food crops. A study by the U.S. Geological Survey published in 2002 brought attention to PPCPs in water. In a sampling of 139 susceptible streams in 30 states, detectable yet minute quantities of PPCPs were found in 80 percent of the streams. The most common pharmaceuticals detected were steroids and nonprescription drugs. Antibiotics, prescription medication, detergents, fire retardants, pesticides and natural and synthetic hormones The potential human health risks were also found. associated with minute levels of PPCPs in water in general and drinking water in particular is still being determined. Until more is known, there is much the public health and environmental protection community can do to educate the public about taking proactive steps concerning the use and disposal of PPCPs.

What can we do to help? Education is important. The Nebraska MEDS Coalition is a group working to educate the public about proper medication disposal. Several pharmacies across Nebraska now collect unused medications for proper disposal. Communities or organizations can also host a local PPCP take-back event or program. For more information visit: http://www.groundwater.org/get-informed/groundwater/products.html.

A septic system is an on-site wastewater treatment system used primarily in rural areas of Nebraska. Properly designed, installed and maintained septic systems pose little threat to groundwater. EPA, however, estimates that as many as 20 percent of all systems in the US malfunction in any given year. Most of these problems occur because of improper maintenance by the homeowner or no maintenance at all. The septic system needs to be inspected by a licensed professional every year or two and the tank pumped out as

Chris Johnson Matt Moul

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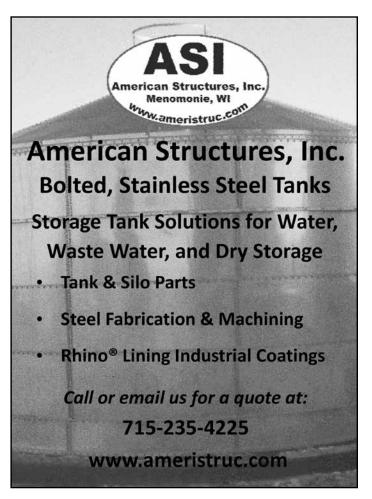
Water& Waste Water Solutions

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(402) 551-7995 (402) 553-5879 Fax necessary. When solids escape from the tank they plug the drainage field causing biological treatment of the sewage to stop. This allows bacteria, viruses and other contaminants to percolate into groundwater. If you don't have one, you should implement an inspection program for septic systems affecting your source water or an ordinance requiring owners to have their system inspected and pumped out regularly.

Other emerging issues include hydraulic fracturing and microplastics. Hydraulic fracturing is a process used by oil and gas producers to inject water under high pressures into bedrock or other formations to extract gas and oil. There has been much discussion lately about whether this is causing the earthquakes in Oklahoma and how it might affect groundwater. Microplastics are tiny plastic particles. Sources for these include microbeads found in soaps and cosmetics and the breakdown of larger plastic materials. The biggest concern is the ability of plastic to absorb other contaminants. Stay tuned in as more information becomes available on these issues.

Clean drinking water is a very valuable resource and it makes sense to protect it. One of the easiest ways to accomplish this is to develop a wellhead protection plan. Education is a key part of any plan. NeRWA is here to help if you need us.



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Standard Operating Procedures; aka "SOP"

By Mike Lucas, Wastewater Technician

In this article I would like to encourage you to consider creating and maintaining a Standard Operating Procedures (SOP) document. Many times systems experience the loss of an operator for one reason or another that has been employed by the system for some time. No one knows the system better than the operator. Especially in our smaller systems without an SOP their knowledge and the investment that the community has made in that operator may be lost. The new operator has to start from scratch. It takes a considerable amount of time and expense to get everything back up to speed and in compliance. An SOP can be as simple as what you do daily, weekly, monthly, annually, per permit period, etc. Not just what you do but also how you do it. It would be a great idea in some instances to video a procedure. An SOP needs to be specific to the system and it is a living document.

I've heard the arguments against doing an SOP including: I had to figure it out by myself; no one helped me; job security/turf protection; I'd be training my replacement so that it would be easier to eliminate me (I've seen that happen by the way); if I varied from the SOP then I would be liable, etc.

EPA doesn't understand not having an SOP. Tribal systems as sovereign nations answer directly to EPA and I've been told that they have SOP's for virtually everything.

If you are concerned about personal liabilities then you might call it "Suggested or Normal Operating Procedures." You might include a disclaimer at the end authorizing the

operator to vary from the SOP as deemed necessary by the operator at the time.

You may decide that in your particular situation that you prefer not to do an SOP. However, if you want to do one NeRWA stands ready to assist you. What greater legacy could you leave the community to which you have dedicated your years of service.







Reaching Out for Assistance

By Mike Stanzel, Circuit Rider

How many of you really know what the staff at the Nebraska Rural Water Association does?

I am asking this to see if I can get everyone's attention. I travel extensively throughout this great state and I am guessing I have probably worked in or visited 90% of all the towns under 10,000 population. We cannot assist towns with a greater population.

There are towns that call me on a regular basis to assist with leaks, locating, chlorination, paperwork, etc. And then there are towns that only call when it's something big like a leak locate or emergency disinfection, which is fine. Then there are several towns that never call at all, and that makes

me wonder if they really know what we do and what we can offer to our members. This especially applies to new operators that may not have even heard about us.

So this got me thinking about how to reach out to operators about what the Nebraska Rural Water Association can do to help them. The following are some of the services and equipment we offer. We do line locating, curb stop locating, valve exercising, pressure recording, leak detection, leak locating, hydrant flow testing, chlorination, all HHS required paperwork, mapping, vulnerability assessments, water and sewer rate studies, training - both onsite and classroom and source water protection plans. We have backflow testing equipment, a variety of water testing equipment, such as colorimeters and nitrate testers, pressure relief valves, a waterline freeze kit and a valve exerciser. This is only a basic list of what we own and what we offer. And all of these services and equipment are FREE of charge to our members, though donations are appreciated and used to maintain our equipment.

What really inspired this article was an incident I was informed about by one of our Board Members. An eighboring town had just recently sent their new maintenance man to obtain his grade 4 water license which he successfully passed. However the very first time he attempted to take his routine coliform sample, he obtained an E-coli positive. After investigation, chlorination, notification and a boil water notice, it was determined that the cause was from operator error. This most likely could have been prevented had he reached out to us for assistance.

Combining our field staff's total years of experience in this industry I am estimating that we have somewhere between 125-130 years of experience. Also, all of our contracts that we work under from USDA, EPA, and DHHS require us to perform a certain number of onsite visits per month. Randy Hellbusch and I, for example, have to have 30 contacts/onsite visits per month: working at a system for 1 hour = 1 contact, over 2 hours = 2 contacts, over 5 hours = 3 contacts (the max we can obtain per day per system). Please don't think you are bothering us if you need assistance with anything at all pertaining to your water and wastewater systems. Please contact us. We can help. That is our job.



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Read Your Mail!!

By Barney Whatley, Capacity Development Specialist

As most of you know, the Department of Health completes routine sanitary surveys on all community and non-transient, non-community water systems every three years and transient systems every five years. As a refresher, community systems are those water systems where twenty-five or more people live, non-transient, non-community systems are those where twenty-five or more of the same people work or go to school, and transient systems are those where twenty-five or more different people use the water.

When the field representative has completed the sanitary survey, they write a letter to the system noting any deficiencies that were discovered during the survey. This letter is then sent to the designated operator in charge of the system as well as to the registered owner of the system. The system then has 30 days to respond to the letter in writing to provide a schedule when the noted deficiencies will be corrected. Up until recently, failure to provide a written response resulted in a second letter being sent to the system, and the system being placed on the 2% list to receive a visit and assistance in responding.

Changes are taking place that will result in a violation being issued if the response is not received within the thirty-day time frame. This will likely result in public notice being required and will be a black mark on the system's record. It is imperative that you read all correspondence you receive from the state to insure that you are completing the things you need to do to keep your system in compliance. NeRWA is willing to assist any system in completing the written response to the sanitary survey, and all you need to do is call the office and request the assistance. As part of the 2% team, we are under contract to assist all systems under ten thousand population in complying with drinking water regulations.

We do receive copies of many of the sanitary survey letters, but we do not know if you would like some assistance if you don't tell us. The 120-day and one year time lines given in the letter are for correcting the deficiencies, but the violation will occur after the thirty-day limit. There is some flexibility in the longer timelines if there is a justifiable reason that they cannot be met, and we are willing to assist you in writing the response letter and explaining why an extension is needed for correcting the noted deficiencies.

Once the deficiencies have been corrected, it is important to notify the state field representative that this has been completed so the information can be recorded, avoiding the possibility of a violation for failure to correct the deficiencies. This notification needs to be completed prior to the time that you stated in the response that you would have the deficiency corrected. This will insure that the deficiency does not automatically pop up as not being corrected.

Please call me or the office if you would like some assistance in completing the written response to the sanitary survey letter. I would be happy to come visit you and assist you in completing the letter, using a timeline for corrections that you feel you can meet.



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USDA Rural Development Names Tammy Sherman as Western Nebraska Clerk of the Year

September 29, 2015—USDA Rural Development State Director, Maxine Moul, today presented a plaque to Tammy Sherman, Lodgepole Village Clerk, for her excellence in performance.

"It is a great pleasure to meet the clerk who helped her village complete a \$1.7 million wastewater project. She also assisted the Village in obtaining a Special Evaluation Assistance for Rural Communities and Households Grant (SEARCH) from us to have a preliminary engineering report of the village's water system. Thank you for your dedicated service," said Moul.

The North Platte Area Nebraska USDA staff nominated Tammy for the award "because she has been very instrumental in the Rural Development projects that have assisted in the village's needs. Today the village is planning a water project. Tammy is very organized and receptive to all requests. She has the greatest personality and the time and attention she gives to her job is to be commended," said Community Programs Specialist, Natalie Furrow.

USDA Rural Development Names Robin Christen as Clerk of the Year

October 1, 2015—USDA Rural Development State Director, Maxine Moul, today presented a plaque to Robin Christen, Anselmo Village Clerk, for her excellence in performance.

"It is a great pleasure to meet the clerk who helped her village complete an \$881,000 water project. Thank you for your dedicated service," said Moul.

The Kearney Area Nebraska USDA staff nominated Robin for the award "because she is always very responsive to requests for information and documentation, at times even anticipating what was going to be needed before the staff asked for it. She is helpful to her neighboring communities with questions they have about their systems. Her friendly, positive attitude



along with her motivation will help ensure that Anselmo is sustainable for future citizens," said Kearney Community Programs Specialists, Bert Mues and Cheryl Neverve.

WE NEED YOUR WATER TOWER...

We are running low on pictures of water towers. Send us your tower!!!

We are putting the water towers of Nebraska on our cover and are featuring a different tower on each issue. We have only used up a fraction of the towers in the state.

Let us add your name to our list and see how long it gets. Email a picture to salli@nerwa.org.



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NEBRASKA RURAL WATER ASSOCIATION SCHOLARSHIP APPLICATION 2016

Personal Data NAME First Last Middle ADDRESS______STATE___ZIP____ Eligible System Employee Data NAME_____TITLE____ CITY_____STATE___ZIP ADDRESS____ TELEPHONE MEMBER SYSTEM RELATIONSHIP TO APPLICANT EMAIL High School Data SCHOOL NAME______ GRADUATION DATE____ _____CITY_____ STATE ZIP YOUR CLASS RANK NUMBER OF STUDENTS IN CLASS YOUR GRADE POINT AVERAGE (Transcript must be submitted with application) LIST BELOW ANY ACADEMIC AWARDS, MEMBERSHIPS OR OTHER SPECIAL RECOGNITION YOU HAVE RECEIVED DATING BACK TO YOUR SOPHOMORE YEAR. College/University Data IS THIS YOUR FIRST YEAR OF HIGHER EDUCATION? YES_____ NO____ IF NO, CREDIT HOURS COMPLETED _____ NUMBER OF CREDIT HOURS REQUIRED TO GRADUATE COLLEGE GRADE POINT AVERAGE SCHOOL NAME CITY STATE ZIP ADDRESS _____ 4-YEAR COLLEGE/UNIVERSITY PLEASE INDICATE: _____2-YEAR COMMUNITY/JUNIOR COLLEGE VOCATIONAL TECHNICAL SCHOOL MAJOR COURSE OF STUDY___ Priority will be given but not limited to water related studies. (Proof of acceptance to the school or college must be included. For those already in college, a first semester transcript or grade report and second semester enrollment must accompany application) ON A SEPARATE PAGE IN 250 WORDS OR LESS, WRITE A BRIEF MESSAGE ON YOUR GOALS AS THEY RELATE TO YOUR EDUCATION. CAREER AND FUTURE PLANS **Certification** IN SUBMITTING THIS APPLICATION, WE CERTIFY THAT THE INFORMATION PROVIDED IS COMPLETE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE. FALSE INFORMATION WILL RESULT IN THE REVOCATION OF ANY SCHOLARSHIP GRANTED. Applicant's Signature Date Date Parent Signature

Nerwa Scholarship Application

The Nebraska Rural Water Association is pleased to announce it will be presenting two \$500 scholarships for higher education purposes for the school year 2016-2017 fall and spring semesters. The scholarship is available to children and stepchildren of member public water system employees. Employees of the Nebraska Rural Water Association Board of Directors and staff are not eligible. Interested persons should complete and submit the application in this mailing. Applications are due March 5, 2016. Please type or print — printing must be legible. Winners of the Scholarships will be announced at the conference in Kearney in March. Send all information to the NeRWA address.

Official Rules

This grant of Five Hundred Dollars (\$500) will be made to a student to defray the cost of tuition, books, or room and board at an accredited institution of higher learning approved by the Nebraska Rural Water Association (NeRWA). Disbursement of the money will be made upon presentation of winner's college or university invoice as proof of full-time enrollment. The scholarship money will be paid directly to the student, two hundred fifty dollars (\$250) per semester. The scholarship will be awarded to children or stepchildren of member utility system employees. In order to be eligible for scholarship, applicants must complete the application form in its entirety by filling in all blanks. If item is not applicable please place a N/A in the blank. Upon completion, return it to the NeRWA Scholarship Committee by the entry deadline, March 5, 2016. All applications will be first screened on the basis of leadership responsibilities in community and school activities as well as grade point average. Applicants will be evaluated on a comparative basis at the sole discretion of the committee. Decisions will be final. Application material and decisions of the committee shall be confidential. Acceptance of scholarship constitutes permission to use recipient's name and/or likeness for purpose of promotion.

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NeRWA Staff

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League of Municipalities

Nebraska Section, AWWA

AWWA Library Reference Listings

NeRWA Associate Members

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Amy Kemerling

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