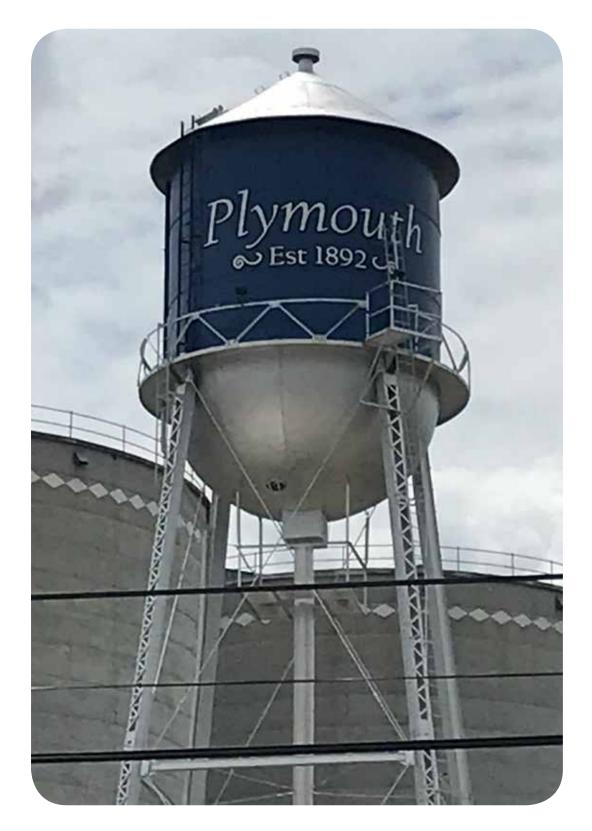
Issue 4/2019

Nebraska Rural Water Association



Nebraska Good Water News

Making Hydrant Flushing EASIER!

Our New USABlueBook Aluminum Dechlorination Diffuser

lets you safely neutralize chlorine/chloramines during hydrant flushing. Lightweight and easy to use, it reduces spray pressure while dechlorinating water—simply add dechlorination tablets. As part of the USABlueBook family of products, this diffuser is guaranteed to deliver great performance at a great price.

Aluminum Dechlorination Diffuser 96741

\$ 999.95

Many accessories are available. See our website or catalog for more information.





Also available...

2¹/₂" Flow Testing Diffusers include a gauge so you can easily measure flow during hydrant flushing. A built-in baffle and rotating head let you control discharge pressure and direction.

Flow Testing Diffuser with Carrying Case, 100 psi5Flow Testing Diffuser with Carrying Case, 160 psi5

53145 \$ 537.95 53146 537.95

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Nebraska Good Water News

"Keeping Our Water Safe"

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

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.

Issue 4/2019

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Website: www.nerwa.org

On the cover:

The Plymouth Water Tower.

[&]quot;This Institution is an Equal Opportunity Provider and Employer."

How'd We Do and Letters From...

Sonation for the p Mike Stangel. re Brownvilles Jon water leak Brownvilles Village Board The VILLAGE of STEINAUER STEINAUER, NEBRASKA Aug 20,2019 Nebraska Rural Water Association 3390 Ponderosa St. Wahoo, Ne. 68066 The village board of Steinauer would like to give a big "Thank You" to Mike Stanzel and Pat Peterson for their technical assistance, and to Charles Buckley for his excellent camera operation on locating our trouble spots in our sewer system. Your organization is a big help to operation of locating our nousle spots in our sewer system. Your organization is a big help our small community. We really appreciate your help with our sewer and our water system. Please accept the enclosed Thank You, Sincerely, Village Board of Steinauer, Byford_Schmit/Chairman Schemer

Phone 797-2020

Village of Denton P.O. Box 132 Denton, NE 68339

September 23, 2019

Nebraska Rural Water Association 3390 Ponderosa Drive Wahoo, NE 68066

Dear Nebraska Rural Water Association,

The Village of Denton would like to thank you for assisting our town numerous times. Recently we received help for a water and sewer rate study and sewer samples. Mike Stanzel is always quick to respond when our utility supervisor calls on him for help in locating a water leak.

The support of the NeRWA staff is valuable to our community. Thank you!

Sincerely,

Charlotte Te Brink Village Clerk/Treasurer

VILLAGE OF WATERBURY

P.O. BOX 25

WATERBURY, NE 68785

We wish to thank you for all the help you have given the village in the past year , so we are making a donation to your Organization.

Village Clerk

Ruth Greenough

VILLAGE OF EAGL INCORPORATED 1891

727 S 1SI STREET / PO BOX 130 EAGLE, NEBRASKA 68347 OFFICE 402-781-2748 FAX 402-781-2775

August 6, 2019

Nebraska Rural Water Association 3390 Ponderosa Drive Wahoo, NE 68066

Dear NeRWA,

On behalf of the Village Board of Trustees, we would like to thank the NeRWA staff for assisting our Water Department with the location and installation of a stop box at a residence in Eagle this summer. Additionally, the knowledge of your staff has assisted us in other endeavors such as a water rate study and chlorination over the years.

We always appreciate the help, expertise and professionalism we receive from the staff and look forward to continuing the great relationship we have with the Nebraska Rural

Please accept this donation to your equipment fund and thank you again for your

Sincerely,

ha

Nick Nystrom, CMC Clerk/Treasurer Village of Eagle

VILLAGE OF CONCORD P.O. BOX 49 CONCORD, NEBRASKA 68728-0049 (402) 584-2395

September 9, 2019 Nebraska Rural Water Association 3390 Ponderosa Drive Wahoo, NE 68066

On behalf of the Concord Village Board of Trustees, I want to thank you for the help given to us over the past few years. donation to help with the expenses in the upkeep

Please find enclosed a of your equipment.

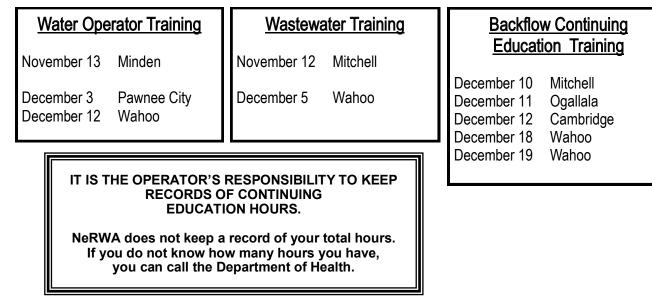
Again, thank you for your willingness to aid us in our efforts.

Sincerely,

Robert L. Clarkson Board Chairman

NERWA

NeRWA 2019 TRAINING



This is renewal year for all Grade 1-4 water licenses and Grade 6 backflow licenses.

Make sure you have enough hours before the end of the year—10 CEUs for each license. Above are the remaining classes for 2019.

If you need hours, register early to guarantee a place in the class especially WAHOO BACKFLOW CLASSES. These will fill up quickly. The December backflow classes need to be prepaid. You can send a check in with your registration if mailed. If you register online, you can pay with a credit card. If you have not paid and we start getting an overflow, your registration will be taken off the list.

You can also call the NeRWA office with credit card information.

NO phone registrations for fee based classes.

NeRWA 2020 TRAINING

Water Operator Training			Wastewater Training		Backflow Continuing Education Training		
April 7 May 5		Mitchell Hartington	TO BE ANNOUNCE		ED	January 22	Chadron
June 1 July 7 Augus Octobe	10 st 4 er 14 nber 17	Sutton Gordon O'Neill McCook Mullen Tecumseh				January 23 February 4 February 6 April 21 April 23 April 28 September 8 September 10 October 13	Sidney Nebraska City Stanton Cairo Crete Wahoo McCool Junction Ord South Sioux City
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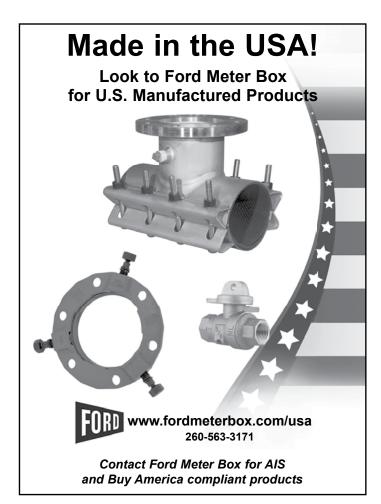


Emergency Planning vs Contingency Planning

By Barney Whatley, Source Water Protection Specialist

All Public Water Supplies in the state of Nebraska are required to have an emergency plan which must be updated at least every three years. Emergency plans should consider all emergencies that might occur with a water system and the steps that are needed to correct the problem and get the system back up and providing safe drinking water to its customers. These plans look at electricity loss, storage loss, major main breaks and transmission line breaks, well problems and other emergencies that can occur and affect the system's ability to provide service to its customers. There are usually contact persons listed with their phone numbers, allowing operators to contact these people or companies to get help on the way.

In addition to the emergency plan, source water protection plans need to include a contingency plan, which should



look at unusual and major issues that cannot be easily corrected with a phone call. The tornado that went through Pilger and the failure of the Spencer dam are two instances of emergencies that go beyond a standard emergency plan. In Pilger, the majority of the town was destroyed by the tornado, and it was not even easy to know what street, if any, you were standing on. The emergency plan was a great help in getting assets into the town to assist with recovery operations, but there were many things missing, just because they were not considered. Many local people brought in equipment to clear the rubble, but they were not aware that water shutoffs to services were under the rubble, and many of these were damaged during the rubbish removal. This required the curb stops to be dug up and the shutoffs repaired before the service lines could be shut off and water pressure restored.

When the Spencer dam was breached during the March flooding, the transmission line for Boyd County Rural Water District #2 was washed out where it crossed the Niobrara River. This left the system without a source of water, and it became a major undertaking to get the supply restored. Standard emergency plans look at an alternate supply in case of a loss of source, but it was soon evident that trucking water to the system to maintain pressure was not going to be feasible in the long run. Bottled water could be acquired for drinking purposes, but showering, laundry, and other domestic uses could not be handled with bottled water and required more than the system could reasonably truck in.

The solution to this problem was to locate irrigation wells, which were then tested to Title 179 standards and connected to the system to supply water. These wells were frequently tested for coliform bacteria, and notices were issued to use the water for non-drinking purposes only. This action did allow the system to reestablish and maintain pressure in the system, but it would have been quicker to do this if the irrigation wells had been tested in advance to determine their suitability for potable purposes. These are things we will be looking at in future contingency plans to help systems get back under pressure and supplying their customers quicker, even if it is only for non-drinking purposes. Contingency planning cannot necessarily prevent disasters, but it can make recovery quicker and possibly even less expensive.



Full Cost Pricing

By Randy Hellbusch, Circuit Rider

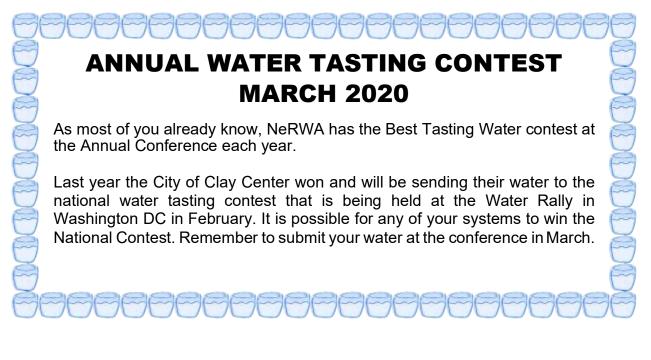
NeRWA gets many requests from many water systems to assist with rate setting. One of the first things we usually discover is that the water system is being subsidized in one form or another. This is not the case with Rural Water systems as they have no other form of revenue to rely on. Very few municipal systems actually rely on water revenues only to run their water system. Funds are many times transferred from another account, i.e. electric, general, etc. Imagine that you are an electric customer in a community, but have no water service. Is it fair that part of your monthly electric bill is being used to subsidize water users? In the current economic climate, these funds historically being robbed to help out the water system are also becoming strained. It is becoming increasingly more essential that all utilities become self supporting. This is where we come to the term FULL COST PRICING.

On the surface, this sounds fairly simple and obvious. Take the annual O&M plus Debt Service and that appears to be the amount of revenue we need to generate. But let's take a closer look. If we are generating just enough to cover annual operating costs and make our loan payment, what happens when a well goes down, the tower needs painting, meters need to be replaced, pump controls fail, etc.? In reality, what we usually see is the old, "Let's take it out of the general fund, there is money in there!" This approach doesn't show much fiscal responsibility. Every time money is transferred out of another account something suffers, whether it is streets, parks, library, electric, etc. The money transferred usually was meant for another purpose. That isn't the biggest reason for FULL COST PRICING however.

The main point I want to impress on you is that when we look at rates and revenues, we need to be thinking ahead. We need to assure that enough money is being generated to cover our O&M costs and Debt, but we also need to look at Sustainability factors. The components of a water system aren't designed to last forever. Many of them require periodic maintenance or replacement. We need to be sure that when that time comes we are prepared financially to keep our system running and that our customers are getting the service and clean water they deserve and expect. Sadly, the good old days of, "Well, we will just get a grant if we need one," are over.

I have attended many board and council meetings and have learned that one of the hardest things to sell decision makers on is the need for a reserve. I can't count the times I have heard, but we aren't in this for a profit. This is very true, however if your system needs repair and the money isn't there to do the work, it is your rate payers who suffer in the end. The general public is much more acceptable to small rate increases more frequently than for a huge jump in rates because the system wasn't prepared and didn't set the money aside. If you would like assistance in being sure your system is generating the proper revenue to remain sustainable give us a call, we would be glad to help.





The water contest is to be held at the Annual Conference in Kearney. A panel of distinguished taste testers will judge all samples. The winner will be announced at the banquet on Tuesday, March 10. The winning system will compete against finalists from the other 49 states in the National Contest at the National Rural Water Association Water Rally in Washington DC.

Contest Rules:

- 1. Must be a member of Nebraska Rural Water Association
- 2. Sample must be from a Nebraska public water supply system
- 3. One entry per water system
- 4. Water must come before any point-of-use treatment
- 5. Water must come from the distribution system
- 5. Water should be in clean, unmarked gallon container
- 6. Entry form must accompany sample

Water must be received by 3:00 pm on Monday, March 9, at the conference registration table.

Water System: _____

Submitted by: _____

If at all possible, please call our office in advance at 800-842-8039 or 402-443-5216 or email to salli@nerwa.org to let us know you are entering. Thank you.



Crazy Nebraska Weather

By Mike Stanzel, Circuit Rider

It's been another crazy summer again, torrential rains, flooding, extreme heat and humidity. After 4 months of this you might think you would never see cold weather again. I literally had my A/C on Monday and then it was 43 degrees by Thursday. You know what they say about Nebraska, if you don't like the weather just hang around a few days. You guessed it, cold weather is just around the corner and by the time you read this article, it may have already arrived. Once again it's time to batten down the hatches for winter.

There are a few things to keep in mind before the cold weather arrives. Well houses are always a concern. Be sure to check those heaters to make sure they are functioning properly. It's not a bad idea to have two sources of heat. In some well houses you may be using heat lamps as a supplemental heat source. If you use two different sources of heat, I would recommend wiring them into two different electrical circuits. If for some reason a fuse or breaker is tripped on one circuit, the other circuit will hopefully keep the pipes from freezing until your morning rounds.

Now that you have your well houses nice and warm every mouse in the county will try to take up residence there for the winter. Remember if you have a rodent problem, use glue traps or snap traps. Stay away from mouse poison. Mouse poison or any kind of unapproved chemicals are a bad idea in or around wells. If you know where the little critters are getting into the well, use some steel wool to plug their holes. Mice won't chew through steel wool.

Remember those old fire hydrants that didn't want to drain back this fall when you conducted your biannual main flushing? Be sure to check them to see if they are still full of water. You can use a large nut on the end of a light chain to drop down the barrel of the hydrant to determine if they are holding water. If they are, you will want to siphon or pump them dry before they freeze up.

Check those main valve boxes that like to fill with gravel, water or both. Try to get these flushed out before cold weather. A heavyweight plastic sheet folded up and put under the valve box lid might help keep a lot of dirt and gravel out or Styrofoam mud plugs can also be purchased from your favorite supplier.

Remember the water tower you were trying to keep full last summer? You will probably need to operate it differently this winter. You may want to move your low water setting lower to achieve a longer fill cycle. This will allow the well to run longer and pump more warm water into the tower to help prevent ice build up.

Winter is also a good time to catch up on that dreaded paper work that there is never time for in the summer. In between pushing snow, salting streets, scooping sidewalks, thawing pipes, fixing water main breaks, trying to start equipment in sub zero weather, you will have plenty of time to send out the cross connection control surveys for the tenth time, update your emergency plan, prepare your 2 and 10 year plan, write an operation and maintenance manual and send in your Bacti sample site plan. I think you're starting to get my drift here. If you would like some help with the paper work this winter be sure and give me a call.



Nebraska Rural Water Association

Annual Conference Pre-Registration

March 9-11, 2020 Younes Conference Center Kearney, Nebraska

Name (1 person per form) Water System/Company Name	Pre-Registration
Billing Address	Deadline is March 2. THERE IS A \$25 LATE FEE
Certificate Address	AFTER February 24
City, State, Zip	
Attendee's Email	

(Certificates will be emailed if an email address is provided)

I am the Voting Delegate_____

License numbers MUST be on this form: WO: _____ BF____ WW ____ WD____ IF NUMBERS ARE NOT LISTED, IT WILL DELAY YOUR CERTIFICATE.

REGISTRATION INCLUDES TRAINING MATERIALS, MEALS AND BREAKS. <u>No registrations after March 2</u>. Registration fees after this date and on-site will increase by \$50. Monday is free for all utility/rural water board members. Board Members can attend Tuesday and Wednesday for the price of meal tickets. Board members who are also licensed operators and want CEUs need to register as an attendee. **PLEASE REGISTER ONLY ONCE.**

IF YOU SUBSTITUTE FOR AN ALREADY REGISTERED PERSON AFTER MARCH 5, THERE WILL BE AN EXTRA \$25 CHARGE

I am a Board Member attending Monday (no charge)_____ (Cost of meals only for additional days) Check if attending: Tues_____ Wed _____

DAYS ATTENDING	Member	Member after February 24	Non-Member	Non-Member after February 24
FULL CONFERENCE (all meals)	\$375.00	400.00	\$400.00	\$425.00
MONDAY (evening meal)	\$100.00	125.00	\$125.00	\$150.00
TUESDAY (lunch & evening meal)	\$175.00	\$200.00	\$200.00	\$225.00
WEDNESDAY (breakfast & lunch)	\$125.00	\$150.00	\$150.00	\$175.00

All meals are included for each registration. Please indicate below if you will be staying for the evening meals. You will not be charged for them if you are registered—it's for a more accurate count. Guests need to purchase a ticket for every meal. The breakfast on Wednesday is complimentary for all registered for the conference.

Extra meal tickets available	Guest Tickets	Cost	Total	Your Meals	Name of guest	
Mon evening		\$25	\$		Registration \$	
Tues lunch		\$15	\$		Tickets \$ Total \$	
Tues Banquet		\$30	\$		NeRWA member: Bill Payment enclosed	
Wed lunch		\$15	\$		Non-members—Payment must accompany registration or pay when checking in.	
To Register: Online: www.nerwa.org (If you register online, DO NOT mail one) Fax: 402-443-5274 Mail: Nebraska Rural Water Association 3390 Ponderosa Street Wahoo, NE 68066					CERTIFICATES WILL NOT BE ISSUED AND HOURS WILL NOT BE SUBMITTED TO STATE AGENCY UNTIL PAYMENT IS RECEIVED.	
					When making room reservations, mention you are with NeRWA	
				1S	DATE REGISTRATION RECEIVED:	
CANCELLATION POLICY: Cancellations after March 2 and NO SHOWS will be charged a \$25 fee to cover cost of materials.						
For NeRWA office use only: Payme					ayment received Check #	
Hours: WO	BI	F	_ww	WD	Certificate mailed	



What's in your water?

By Scott Finke, Circuit Rider

Ever wonder what you are testing for in your water? You get a sample box in the mail and it says take this sample on this date whether it be voc's, soc's, nitrates or other samples. Next time you should take a look at the results when you get them back and just see what you sampled for. There are a lot of different things that you sample for: lead, arsenic, nitrates, iron, manganese and hundreds more.

Chemicals migrate into water from old pipes, industry, agriculture and other sources. Many have no taste, color or smell. Water from a utility can spend 3-7 days traveling through old pipes before reaching your home, where plumbing and fixtures can also influence water quality. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

With all the hype going on in Flint, MI with the lead exposure, in the near future you will have to get rid of all the lead in your system. You can inform your customers how to reduce the chance of exposure to lead. Here are some examples:

Only use water from the cold tap for drinking and cooking.

If the tap has not been used in more than half an hour, flush water through the faucet for 30 seconds to a minute before using it.

Remove and clean the aerator on the faucet (also called screens) on a regular basis.



Location: 4428 South 108th Street Omaha, NE 68137

(402) 551-7995 (402) 553-5879 Fax Just remember there will probably be more sampling coming down the road, so happy sampling.

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- Pump Test Labs
- Video Surveying
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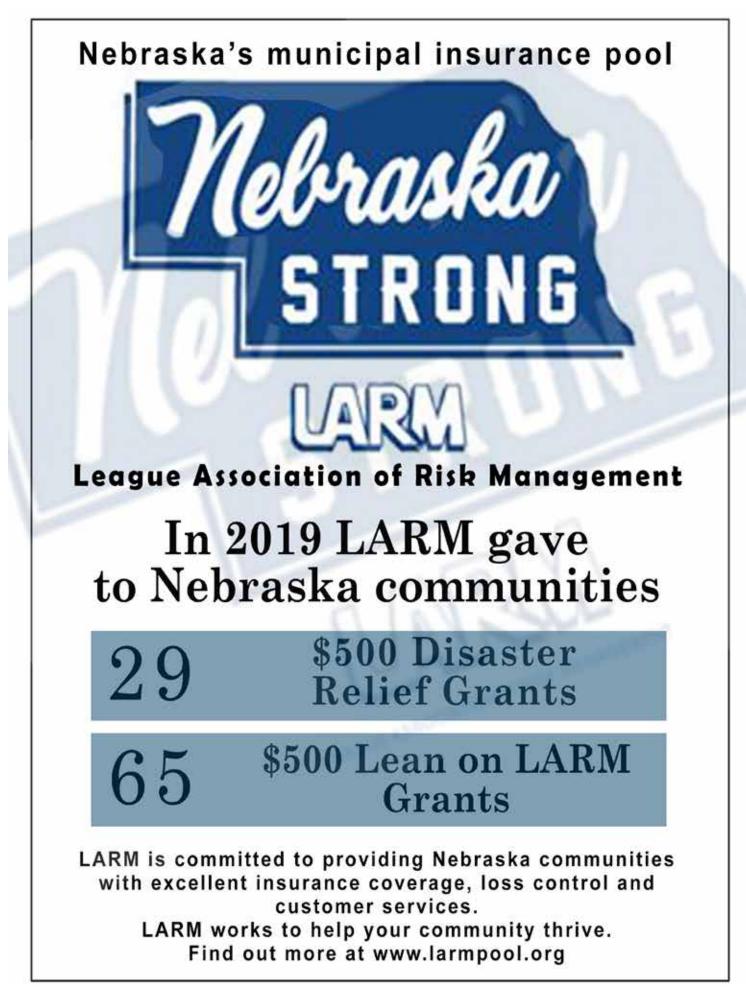
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Gary McCracken, Branch Manager Shad Yarrington, Salesman

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Doug Yantzie, Municipal Manager

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





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NERWA







Your Succession Plan

By Mike Lucas, Wastewater Technician

What is your succession plan? Do you have one? A succession plan involves cross training others to replace you should you leave your current position or worse yet there is an untimely demise. It's very important that you have a plan and it should be in full cooperation with the governing body. The goal is to allow for a smooth transition.

As a multi-talented utility employee, it is extremely difficult to find a replacement for you. I often hear that the public or Boards/Councils think that they can just hire anyone off the street to replace you. "**THEY ARE WRONG**," not in today's world. Maybe in the old days they could, but not today. Today a utility person needs to have computer skills, maintain compliance with ever more stringent environmental laws, have social and negotiating skills, many times they are subject to "on



call" 24 hours a day seven days a week, often are required to pass tests and maintain multiple certifications, and on and on. Also, nobody has the institutional knowledge of the system that you have. Bar none! Every time an employee leaves, a huge public investment is lost.

Governing bodies also need to be informed regarding "comparability" both in regard to benefits and salaries if they ever hope to hire anyone that is remotely qualified. Don't give me this, "Nobody wants to work anymore," either. Consider the new hire that wants to do a good job and gets discouraged because the former employee left with no direction regarding the job requirements. Many times I've heard that a long-time employee retires and in order for the Board to hire a replacement they have to give them a much higher salary and better benefits than the former employee received because the Board hasn't kept up with inflation and comparability. When this happens, there is unrest throughout the employee ranks and good luck trying to get assistance from the former employee.

I hear all sort of reasons why people don't want to cross train others, such as, no one helped me, job security, it may require an additional employee, and so forth. Your rate paying owners of the system deserve better. It is incumbent on both employees and governing bodies to have an updated current succession plan.

NeRWA, and certainly myself personally, stand ready to help systems, Boards and employees as requested. Please feel free to share this article with your governing body.





Fall Conference

By Pat Petersen, Training Specialist

Everyone knows the old saying "Time flies when you're having fun." I feel there is a lot of truth to those words. Planning a conference can be anything but fun, but I know after having the pleasure of planning 7 of these fall conferences, one word seems to come out of the operators in attendance at our fall conference....FUN! Don't get me wrong. There is a lot of learning and networking that goes on in Gering but the relaxed atmosphere is a pleasant escape from the hustle and bustle of the summer grind. The staff at the Monument Inn and the Gering Civic Center once again provided the hospitality, the excellent accommodations, and, of course, great meals for all of us in attendance.

With changes being proposed in drinking water regulation and possible changes to unregulated contaminant monitoring, we felt it would be a good time to inform operators of these changes during the stand alone "Rules Update" Pre-Conference. The Pre-Conference was held on Tuesday, September 24 and included a lead and copper update that also touched on manganese proposals, O&M requirements, RTCR assessments and sampling procedures to help keep you out of the assessment process. Due to vacancies in the rule manager positions, Rich Koenig and Doug Woodbeck were the presenters for the pre-conference. Thanks for filling in guys!

Following the pre-conference was the annual trek out to the Riverview Golf Course. 44 golfers in all took part in the fun event. Several vendors also shared in the fun by sponsoring holes and pin prizes. Sponsors for the golf event were Barco, HOA Solutions, Iowa Pump Works, Johnson Service, MC Schaff and Associates, Municipal Supply, RFC Consulting, Sargent Drilling and Viking Industrial Painting. Elliott Sanitation Equipment provided refreshments for the golfers at the event. Thanks to all of you! Your generosity means a lot to not only the NeRWA but the operators as well! Next year we will have to see if Mother Nature will keep the lights on for us a little longer or we may have to play 9!

Wednesday morning kicked off with the annual trap shoot and poker run. 15-20 participated in the trap shoot which was sponsored by Municipal Automation. 6-7 men participated in the Poker Run which produced a winning hand of 4 deuces!! Thanks to Johnson Service and Area 7 Field Rep Tony Martinez for sponsoring the Poker Run. With all of the fun festivities for the day complete, it was time for a quick afternoon of learning. Andy Kahle and Justin Nelsen gave us a quick regulatory update, followed by a USDA update and a capacity development session. Wednesday finished with Area 6 Field Rep Dave Jundt and Area 3 Field Rep Rich Koenig discussing and showing pictures of the devastation left by the March 2019 floods that consumed their field areas. I may ask that this presentation be given at the annual conference.

Social hour, sponsored by the crew at Core and Main, kicked off the Wednesday night banquet and awards ceremony. Doug Woodbeck presented Steve Schanaman from the City of Scottsbluff with the Outstanding Operator Award. Congratulations, Steve, on a job well done!

After breakfast Thursday morning a full day of learning sat before us. Topics such as tank divers, locating, backflow, wastewater and water roundtables, board training and even source water planning made for a quick 6 hour day. Operators also enjoyed a wonderful lunch and several were lucky enough to win one of the many door prizes donated by vendors and the NeRWA. After lunch, the next two hours flew by and just like that....the conference was complete!

After all was said and done, over 130 operators visited the conference and 27 (the most vendors since I have been planning this) were a part of this FUN conference. It is a long week for all of us who travel over 400 miles one way for this event but it really is beautiful in Western Nebraska. If you are ever given a chance to attend this conference, believe me, it is worth it! Next year's fall conference is scheduled to be a little earlier due to a conflict with our national organization. The dates will be September 1, 2, and 3 of 2020.

Finally, as I wrap up this long story I will never forget to thank all of those who make these conferences so great. After arriving back from our National Conference this year, we had 4 days to get everything ready to go. Well, when we walked into the office, Salli, Amy, and Carol had it in the boxes and ready! Thank you for all of your help. All of my co-workers, Mike, Randy, Scott, Charles, Barney, and Ken, thanks for all that you were able to do. Operating board members also attended. Thank you for all of your moral support and your presence. It's great to have you there! Mike Lucas was unable to make the trip but he will be there next year!

Hope to see you all at the Annual Conference in March!

NEBRASKA RURAL WATER ASSOCIATION SCHOLARSHIP APPLICATION 2020

Personal Data					
NAME					
Last	First		Middle		
ADDRESS		CITY	ST	ATE	ZIP
Eligible System Employee Data					
NAME		TITLE			_
ADDRESS		(S	TATE	ZIP
MEMBER SYSTEM	TE	LEPHONE			
RELATIONSHIP TO APPLICANT_	EMAIL_				
High School Data					
SCHOOL NAME					
ADDRESS	CITY		S	TATE	ZIP
YOUR CLASS RANK	NUMBER OF STUDENTS IN C	LASS	YOUR GRADE	POINT AV	VERAGE
College/University Data IS THIS YOUR FIRST YEAR OF H					
NUMBER OF CREDIT HOURS RE				NT AVERA	\GE
SCHOOL NAME					
ADDRESS		CITY		STATE_	ZIP
PLEASE INDICATE:	4-YEAR COLLEGE/UNIVER 2-YEAR COMMUNITY/JUNI VOCATIONAL TECHNICAL	OR COLLEGE			
MAJOR COURSE OF STUDY					
ہ For those already in college, a fi)	Priority will be given but not limited rst semester transcript or grade i			nent must	accompany application)
Essay ON A SEPARATE PAGE IN 250 EDUCATION, CAREER AND FUT		BRIEF MESSA	GE ON YOUR GOA	ALS AS TH	HEY RELATE TO YOUR
Certification IN SUBMITTING THIS APPLICATI OF OUR KNOWLEDGE. FALSE II					
Applicant's Signature	D	ate			
Parent Signature	D	ate			

NeRWA SCHOLARSHIP APPLICATION

The Nebraska Rural Water Association is pleased to announce it will be presenting two \$1000 scholarships for higher education purposes for the school year 2020-2021 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. Applications are due March 1, 2020. Please type or print – <u>printing</u> <u>must be legible</u> and papers must be <u>clean</u>. Winners of the Scholarships will be announced at the Annual Conference in March. Send all information to the NeRWA address. DO NOT FORGET TO EITHER SEND THE TRANSCRIPT AND GRADES OR HAVE THE SCHOOL SEND THEM. Your application will not be valid unless everything is received.

Official Rules

This grant of \$1000 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, \$500 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 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.





System Assessments, Why Bother?

By Ken Halvorsen, System Specialist

The 1996 amendment to the Safe Drinking Water Act added Capacity Development to assist public water systems in improving their financial, managerial, and technical status. It basically means a system has or does not have the ability to function as an independent business. A system needs to have the finances to maintain and repair their infrastructure, the management that understands the needs and requirements of the system and an operator who can keep the system running smoothly and consistently deliver safe drinking water to its customers. Keeping this in mind, how can system owners and operators accurately determine if they are doing a good job in these three areas?

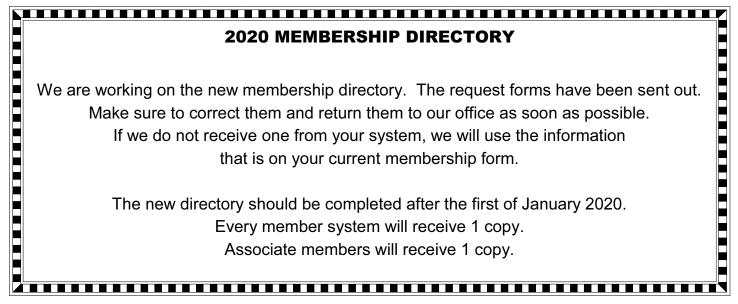
One way to assist in this determination is to complete an assessment of the system. Nebraska Rural Water has a self-assessment tool for Nebraska Public Water Supply Systems to use. It asks many questions concerning the financial, managerial and technical ability of the system to operate as a business. In completing the assessment, the operator and owner of the system will become more familiar with the system's capabilities and shortcomings. Questions with a "no" answer or the answer is not known should encourage the system to investigate this aspect of the system. It can then be determined what actions can be taken to properly answer the question.

There is another assessment tool that is available to systems. A comprehensive system assessment has

been developed as a gauge of the effectiveness of the State Revolving Fund (SRF) Loans in improving or maintaining a system's capacity to operate. There are three ways a system is likely to have this assessment completed. A system that is financed through the SRF fund will undergo an assessment prior to receiving the funding. Two to four years after the project is completed, the system will undergo a follow-up assessment. The comparison of the two assessments will help to determine whether the funding aided in increasing or maintaining the capacity of the system. This is an important step in the funding process, as the results of these assessments will help demonstrate that the funding the system received is accomplishing the task for which it was intended.

Systems can also request the extensive assessment without having an SRF loan. Any system wishing to have an assessment completed can contact me at 402-607-9750, ken@nerwa.org or the NeRWA office and schedule a time for this to be done. When the assessment is completed, the system will receive a copy along with a list of goals for the system and the necessary actions for the goals to be achieved.

It is important for all water systems to be operated in the best manner possible and an assessment of the system's current operations can act as a guide for needed improvement.



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Hello, Nebraska!

By Charles Buckley, Wastewater Technician

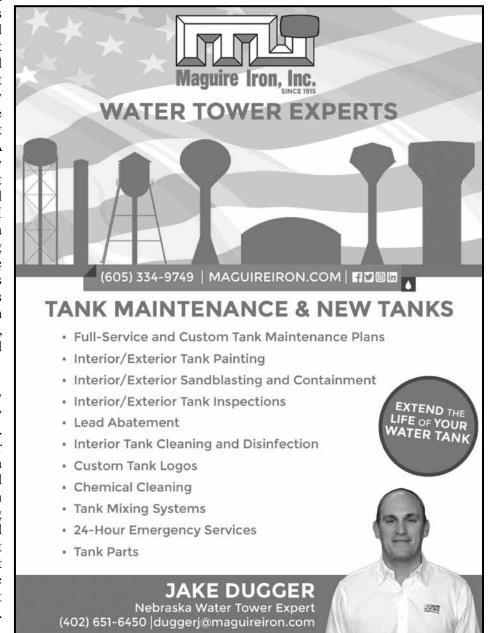
Hello! I am Charles Buckley. My friends call me Buck. I am the new Wastewater Tech for Nebraska Rural Water. I had heard they were adding a second wastewater tech position. It sounded like a good fit for me with the opportunity to stretch my legs by getting out to meet and to assist other operators throughout the state.

It all started for me when a friend of mine from PeopleService asked if I would be interested in helping

out a few days a week. After I put forty hours in the first week I was hooked. Before that I never realized what was behind turning on the faucet or flushing the toilet. Quickly I found out that you never knew what the next day would bring. After being taught by a great operator, I started taking care of a bunch of small SIDs with different water and wastewater operations. A position opened within the company for a fulltime operator in Arlington. At that time I had my water Grade 3 and my wastewater Grade 2 licenses and I was raring to go. I enjoyed making a difference in the community, making the water better and maintaining the collection system. Some other goals we achieved were changing old meters out and going to a radio read system and mapping valves, curb stops, hydrants, manholes, water mains and collection lines.

After several years of dealing mostly with water I felt the need to get to know more about wastewater treatment. I took a position as a wastewater operator in the city of Fremont. Soon after a spot came open in the lab and I was all in. I had a great teacher in my boss. He taught me proper testing techniques, the types of tests and the meaning of the tests and the test results. He also taught me different adjustments of the system to change the results. He also showed me what to look for in the operation of the plant. After nearly two months on the job and going to the Gering conference. I have met a lot of great operators and I look forward to meeting the rest of you. We live in a great state unlike any other with great communities who are there for one another. GO BIG RED!

If you are in need of any wastewater assistance, feel free to call me at 402-277-6632.



NERWA

NeRWA Annual Conference YOUNES CONFERENCE CENTER

March 9-11, 2020

The annual conference is just four months away. Below are the hotels we will have room blocks in.

We are starting to line up the training sessions and will be sending out the topics in our Technical Action Update in December. The full agenda should be out in January. If you are interested in registering early, the registration form is in this magazine.

Kearney Hotels:

Ask for NeRWA room blocks

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

Regulation / Recommendation / Peer Regulation

By Tom Goulette, President, NeRWA Board of Directors

Most, if not all, public drinking water systems in Nebraska rely on title 179 drinking water regulations for guidance. We are subject to periodic review through our sanitary surveys. We are required to post or publish a Consumer Confidence Report on an annual basis. This report, that is required, lists all the things a public drinking water system is required to test for and also lists any non-compliant test results that the system experienced over the past year. There are approximately 600-700 systems in the state that have a population under 10,000. Those over 10,000 have a slightly different set of testing requirements and some of those are for monitoring purposes.

Most of us have experienced dirty water issues and have been able to resolve them with simple flushing and occasionally we will experience those problems when the system is required to chlorinate. Then it gets ugly for a while because the chlorine is cleaning the distribution system and releasing the buildup of Iron (Fe) and Manganese (Mn). So back to the drawing board and you start flushing the system again. You maintain a chlorine residual because the last thing you want added is a coliform hit. Anyway, I think you all get the picture of the challenges.

When you operate a water system one of the things you are always looking at is the clarity of the water. Most operators do that on a regular basis when they are taking their routine Bac-t test. In most cases the main things that can discolor are Iron and Manganese so when you look at the sample and it's clear you're doing a good job as a water operator! Right! Iron and Manganese are just aesthetics and considered a secondary contaminant! Not now!!

This is what happens when regulation becomes recommendation and then peer regulation begins. We are all paying for the effects of Flint, Michigan and some of the others that have been in the news lately. But when you have something such as this come along it isn't long before the public gets behind something that is not a regulation. They want something done to provide safe water regardless of the cost or impact to the water system. When you live, work and raise children in a small community you try to do all the right things to remedy the situation. The public quickly forgets that you also have a vested interest in "doing it right." Here is what you need to do. You can wait until the NDEE comes through and tests your system or ask one of the NeRWA Circuit Riders to test for you. Keep in mind that those test results can vary but if you are near any of the thresholds listed in the "recommendation" you need to start talking to your Board about possible treatment or other sources.

Be ready for "peer regulation." You will need to inform your public that this will be coming and your Board will need to begin planning for the next steps. This will have a tremendous negative financial impact on Nebraska water systems throughout the state.

If you have any questions, you can call or email any of the NeRWA Field Staff or any of the NeRWA Board of Directors.

The following public notice is intended to provide information and recommendations for citizens regarding recent testing of drinking water samples for manganese.

Water samples were collected by the City this summer that showed levels of manganese exceeding 1,000 micrograms of manganese per liter of water. Manganese is a naturally occurring mineral found in soil, rock, food and water. It is an essential nutrient required for many body functions, from the digestion and metabolism of nutrients to supporting bone health. The typical U.S. diet contains between 2,000-7,000 micrograms of manganese per day and the Food and Drug Administration recommends 2,000 micrograms (equivalent to 2 milligrams) of manganese per day for those 4 years of age and older. Manganese is commonly found in drinking water sources at levels around 50 micrograms per liter. However, levels above this can have an off taste, color or odor and cause staining in sinks or on laundry.

Although manganese is naturally occurring and an essential nutrient at low levels, exposure to high levels may be associated with adverse central nervous system effects, particularly for formula-fed infants. Infants not only have a developing nervous system but higher absorption and lower excretion of manganese than older children or adults do, so they are more sensitive to the effects of high levels of manganese.

Manganese is not regulated under the Safe Drinking Water Act but the U.S. Environmental Protection Agency does have a lifetime health advisory for manganese of 300 micrograms per liter. This level is considered to be protective of even the most vulnerable in the population, formula-fed infants. Drinking water with levels greater than 300 micrograms per liter, however, should not be used for preparing formula for infants. Filtered or bottled water should be used. In the community, however, it is recommended that ALL citizens use filtered or bottled water for drinking until such time as the newly proposed manganese treatment plant is up and running. This notice is for drinking water only, as the goal is not to remove all exposure to this essential nutrient but to minimize your exposure to high levels. If you are interested in more information about testing or treating your drinking water for manganese, please see the engineer information below.

The Nebraska Department of Health and Human Services did approve a Filtration System pilot study. At a special meeting the City Council did authorize ordering the filters. While the units are being constructed Engineering Services will be finalizing plans and specifications to be submitted to the Nebraska Department of Health for final approval. The plans and specifications have not been submitted to HHS.

Sue Dempsey, MS CPH	
DRINKING WATER DIVISION	I

Administrator

Nebraska Department of Health and Human Services OFFICE: 402-471-0510 | FAX: 402-471-6436

DHHS.ne.gov | Facebook | Twitter | LinkedIn

Iron and Manganese Testing and Treatment

Iron (Fe) and manganese (Mn) are typically present in drinking water in 3 basic forms, and knowing the forms and concentrations of iron and manganese helps in the selection of the appropriate treatment.

- **Dissolved (soluble)** very small minerals in water that pass through a 0.2 micrometer lab filter. If the water sample is clear at first but contains red or black particles after sitting in a glass for 24 hours, dissolved (soluble) iron or manganese is present.
- **Colloidal** small particles that are suspended in water and that are difficult to filter out. If the water has a red or black tint but particles cannot be seen and do not settle out after 24-hours, colloidal form is likely to be present.
- **Particulates** larger insoluble mineral particles that precipitate out of water (you can see them). Particulates are visible in the glass, either before or after the water sits.

In a water distribution system, it may be possible that soluble and insoluble forms are found together. Water with soluble iron and manganese may contain insoluble forms that slough off the water pipes. Therefore, it is beneficial to test for both total and dissolved forms. The appropriate treatment technologies will depend upon the concentrations of iron and manganese, overall water quality (e.g., pH, temperature, etc.) and whether the iron and manganese are dissolved, colloidal, or particulate:

- 1. If the water is **highly colored and cloudy**, it is probably the iron and manganese particulates that slough off the water pipes. A good point of entry bag filter or cartridge filter should successfully remove the particulates.
- 2. If there are both visible particulates and dissolved iron and manganese, the water should first be filtered and then treated with an oxidation-filtration process <u>or</u> an absorption process with ion exchange (a water softener).
- 3. For **dissolved iron and manganese**, an ion exchange softener should help to remove it. Effectiveness may be limited to a few ppm (parts per million) of dissolved iron and manganese however, so you may have to work with the vendor to optimize the softener for iron and manganese removal. Another option is the use of a combination sediment filter followed by a polyphosphate cartridge. Using polyphosphate does not remove the dissolved iron and manganese but it prevents it from precipitating out of solution and it is typically suitable only for lower concentrations. Our design standards don't recommend polyphosphates for Fe/Mn concentrations greater than 1 ppm.
- 4. For dissolved/colloidal iron and manganese an oxidation-filtration process is probably the best bet. Filter media in this type treatment include birm, greensand, manganese dioxide and other catalytic filter media. Commercial brands may include Fleck, Filox, Clack MTM and others. An ion exchange softener may not be very effective because the very small colloids can affect the performance of ion exchange resins.

If possible, select a treatment unit certified by NSF, Underwriter's Laboratory (UL), or Water Quality Association (WQA) to remove the contaminant(s) you are concerned with. These organizations do not certify treatment units for all contaminants. If a certification is not available for iron and manganese, you may want to consult a drinking water treatment professional.

Summary of Evaluations

NeRWA Gering Conference September 24-26, 2019

1. Which best describes your position?

- a. operator/manager 39
- b. administrative 1
- c. board member 0
- d. plumber 1 1
- e. lawn service
- f. State/federal rep.
- g. clerk
- h. other 3 - industrial ww, maintenance worker, streets/sewer

2

0

2. Why do you attend the NeRWA conference?

- a. The training classes 11 b. Prizes and entertainment 2 c. The vendors d. Chance to meet with other operators 5
- 35 e. All of the above

Things you liked and why?

- Well organized and hosted
- Different agenda items
- Lead and Copper Rules In the preconference, entertainment
- Good conference, good location
- As usual everything was great
- Everything
- Networking
- Obtaining CEU hours in the western half of the state •
- Speakers
- Golf, good venue •
- Location and pump control class
- Always learning something new •
- Speakers, sessions-informative, venue ٠
- Vendors, different topics, motel •
- ٠ Golf
- Most everything
- Everything
- Very good information
- Lots of vendors with displays and good information
- Location, food, vendors, presenters
- Talking to other operators
- Hotels and staff
- ٠ Training sessions, speakers
- The whole conference was very good. Keep up the good work.
- Topics, speakers, visual aids ٠
- Good speakers, great venue
- Golfing and meeting new people-classes were informative-learning about floods back east ٠
- Training
- Good to see more vendors-legislative update was not rushed

- Good presentations
- Presenters, exhibits and information from each speaker
- New rule update to keep informed
- The information I learned
- Variety of vendors, good information, speakers very knowledgeable
- Speakers
- Informative speakers, meals
- Great fellowship
- Location
- Everything, seeing other operators
- All the extra activities

Things you disliked and why?

- Nothing I can think of
- Regulatory update
- Nothing at all
- Lack of wastewater hours
- Hearing people's cell phones
- AC was too cold
- Having to stay for 3 days to get needed hours
- Every year has the same sessions
- Speakers that went over the allotted time
- One comment about certain "type" of customers in small systems made it sound like they don't deserve good water, are problematic for profitability
- Unable to hear some presentations
- Some topics were redundant
- Same classes as always

Any suggestions for future conferences?

- None
- Wastewater topics in the preconference
- More topics on industrial wastewater
- A class specific to tested material to aid in passing a test
- Analytics, administration and regulation classes would be good
- Having 5 CEU hours each day
- More training sessions for well drillers
- Fire hydrant testing and rebuilding
- More wastewater hours
- Leave it in Gering
- Trench safety
- Roundtable discussions
- Wastewater collection system operation and maintenance
- Investigation for collection system
- Variety of sessions and hands on training-sessions geared towards prepping for certification courses
- Bowling
- Tour Gering and Scottsbluff water treatment center

Additional Comments:

Good job!

GUIDELINES FOR RENEWING OPERATORS' LICENSES

This article addresses all fee-based training including all Wastewater certification, Backflow certification, Backflow continuing ed, Trenching and Confined Space classes and both conferences. Any class or conference that has a fee needs to be registered for by faxing a registration, mailing a registration or registering online. WE DO NOT TAKE ANY PHONE REGISTRATIONS OR EMAILS ASKING TO REGISTER SOMEONE FOR A FEE-BASED CLASS.

All water and backflow licenses need to be renewed by December 31, 2019. The next license period is from January 1, 2020, to December 31, 2021.

The hours required for renewal for each license are listed below : (These hours are not something new.)

- <u>Water</u> and <u>backflow</u> 2-year renewal period requiring 10 continuing ed hours. The end of the renewal period is always December 31 of odd numbered years. An easy way to remember this is just 5 hours per year. Start early in the renewal period to get your hours. <u>The last three months of the second year get very busy</u>. Always register early! We have people trying to register for classes in October thru December close to the date of the class. Truth is that the October, November and December classes are full 2 to 3 months before these classes. Then people are scrambling in the last months of the second year to get into classes and there just aren't any openings unless there is a cancellation.
- 2. <u>Wastewater</u> 2-year renewal with 20 continuing ed hours required. The end of the renewal period varies depending on when you get your license.

When you attend a class and get a certificate, keep that certificate in a place where you can easily find it. You get a certificate at every training class. You can use your certificates to prove you attended a class. If you lose a certificate, we will issue a second one. After that, a certificate will cost \$20.

We send flyers for the training classes out to all our members. Classes are always published in our quarterly magazine which also is mailed to all our members. We publish a training calendar each year with all our classes on it which is available to all member operators. Our training calendar is on our website, <u>www.nerwa.org</u>. One of the best things for all operators to do is to bookmark this to keep updated on class dates, where they are held and what is on the agendas. The agendas for the classes are posted about a month before the class. Our website is available to everyone, not just members. In those rare instances, any cancellations or rescheduled classes will also be on the website as soon as they are changed.

If you are not a member and would like to receive these flyers, you can become a member with our individual membership. This costs \$50/year.

When you register online for any fee-based class, you can also pay online. If you choose not to pay, we will bill you. THERE IS ONE EXCEPTION: <u>ANY</u> backflow class that is held in the last 3 months of the renewal year needs to be paid for prior to the class. If payment is not received, it will be assumed that the person who registered is not attending the class and the space will made available to someone on the waiting list. The reason for this is that people register for classes, find out they have enough hours or something comes up, and they do not call to cancel. There are ALWAYS waiting lists for our Wahoo classes. We have ended up with available spaces in these classes on the day of the class and if we had known ahead we could've filled them with someone on the waiting lists.

Nebraska Good Water News

Nebraska Rural Water Association - 3390 Ponderosa Drive - Wahoo, NE 68066 Home | Office | Membership Info | Training | Annual Conference | Fall Conference | EXPO



NeRWA Contact Information:

Nebraska Rural Water Association 3390 Ponderosa Street Wahoo, NE 68066

Office phone numbers:

800-842-8039 402-443-5216 Fax: 402-443-5274 Website: www.nerwa.org Email: office@nerwa.org

<u>Cell #</u>

Charles Buckley Scott Finke Ken Halvorsen Randy Hellbusch Mike Lucas Pat Petersen Mike Stanzel Barney Whatley Carol Jasa Amy Kemerling Salli Kemerling

402-277-6632 402-607-2249 402-607-9750 402-443-8535 402-443-6157 402-277-6699 402-672-9084 402-480-4297



<u>Email</u>

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