

WELL LOG

A PUBLICATION OF THE WISCONSIN WATER WELL ASSOCIATION

Fall/Winter 2023

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LETTER FROM THE PRESIDENT

By Rick Peterson, WWWA President

I hope that you can find some time to read through this edition of the Well Log. Our staff spends a lot of time and effort to put forth a quality newsletter that is worth your valuable time and helps you run an efficient and costeffective business.

If you read the Summer 2023 issue, you know we have started to bring back some of the old traditions that were featured in much earlier editions of the publications. One of them being crossword puzzles (see page 15) and another being trivia. Congratulations to Marci with Clean Water



Testing who was the first to answer the riddle in the previous Well Log correctly! The correct answer was "a button".

The first person to email the WWWA office at info@wisconsinwaterwell.com with the correct answer to the following trivia question will receive a WWWA brand box. Good luck!

What does the letter T and an island have in common?

As we head toward year-end, I want to remind you all to get your continuing education completed. If you haven't yet registered for CE, remember that the Virtual CE Platform closes on December 1st.

I would like to take a moment to thank our dedicated and hard-working staff, Jenni, Hope, and their team. The work they do in getting the Continuing Ed Platform up and running so smoothly, getting the credits to the DNR in a timely manner and the work that they do assembling, editing, and getting a professional-looking product as the Well Log to print is very much appreciated. Kudos to you all!

Rick Peterso

Rick Peterson, Clean Water Testing 920-841-3904, rick.peterson@cleanwatertesting.com



2023 WWWA BOARD OF DIRECTORS

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WWWA MEMBERSHIP UPDATE

As of November 1, 2023

LIFE TIME

ASSOCIATE MEMBERS

FULL MEMBERS 2nd Member from the same company



JOIN TODAY! MORE DETAILS ON PAGE 27!

EXECUTIVE DIRECTOR'S MESSAGE: FEET ON THE GROUND: MAKE A DIFFERENCE BY ADVOCATING FOR THE GROUNDWATER INDUSTRY

By Jenni Kilpatrick, WWWA Executive Director

Advocacy within the groundwater industry plays a vital role in driving positive change, influencing policies, and promoting the collective interests of professionals and stakeholders. Being actively engaged in your industry's advocacy efforts not only benefits your business or profession, but also contributes to the overall advancement and well-being of the industry.

The Wisconsin Water Well Association is fortunate to work with Jeff Beiriger, WWWA Government Relations Advisor, who constantly keeps us in touch with what is going on in Madison. Jeff provides our members with upto-date information through presentations at the Annual Conference and Continuing Education sessions, along with articles in the Well Log, video updates on the website, and email/social media communications. Jeff's advocacy efforts are made stronger by YOU – the feet on the ground for the groundwater industry.

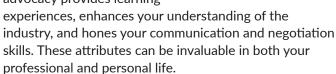
Understanding Industry Advocacy

Industry advocacy involves promoting and supporting a particular industry's goals, interests, and concerns. These efforts can encompass a range of activities, including lobbying for favorable legislation, addressing regulatory issues, raising public awareness, and engaging in community initiatives.

Participating in industry advocacy can bring about several benefits:

- a. Influencing Policies: By engaging with industry advocacy, you have a say in the development of policies that affect your industry. Your voice and opinions can shape regulations, taxation, trade agreements, and more.
- b. Networking Opportunities: Involvement in advocacy allows you to connect with like-minded professionals, policymakers, and industry leaders. These relationships can lead to collaborations, partnerships, and mentorship opportunities.
- c. Enhancing Credibility: Active involvement in industry advocacy can boost your credibility as a professional or business entity. It shows that you are committed to the well-being of your industry and are willing to invest time and effort to support its growth. The true definition of "knowledge is power"!

d. Personal and Professional Growth: Engaging in advocacy provides learning



Ways to Get Involved:

a. Join Industry Associations:

The Wisconsin Water Well Association is dedicated to promoting the interests of groundwater professionals. Joining such associations provides a platform for advocacy, networking, and staying informed about industry-related matters.

For more information about joining the Wisconsin Water Well Association, please visit: https://www.wisconsinwaterwell.com/join-or-renew-membership

b. Participate in Lobbying Efforts:

Get involved in lobbying campaigns that align with your industry's goals. This could involve writing letters, making phone calls, or meeting with legislators to express your views and advocate for policies that benefit your industry.

The Wisconsin Water Association is hosting a Legislative Day on Thursday, March 7th in Madison. Look in the mirror and you'll see the most important and most effective lobbyist for our industry. Survey after survey shows the same thing: When it comes to influencing an elected official, nothing makes a bigger and more lasting impression than a visit from YOU - the constituent.

Over a working lunch, we'll talk about the make-up of the State legislature and talk about how a bill really becomes a law. Afterward, we'll discuss some of the key initiatives of the Association and discuss ways to present information to your legislators and their staff in a way that has the greatest impact.

Later, we'll head to the State Capitol where you can meet with legislators from your Senate and Assembly Districts as well as others who serve on key legislative

Executive Director's Message continued on next page

SKILLED TRADE SCHOOL, LLC MAKING STRIDES

By Jenni Kilpatrick, WWWA Executive Director

As you are aware from the previous issue of the Well Log, the Wisconsin Water Well Association contributed \$10,000 to Skilled Trade School, LLC, a Wisconsin-based educational academy that includes a Driller Academy, Welder Academy, Septic Academy, Water Academy and Asphalt Academy.

Due to growing concern pertaining to the work force shortage and lack of public awareness of the industry, the association has identified a need for onsite, in-person, experiential type of training for learners to get more engaged learning through hands-on training. Classroom training is important, but so is getting to use equipment and engaging with the experienced, experts who are handling well drilling and pump installation work in the field every day.

The Driller Academy provides a curriculum based on the knowledge required to begin a successful drilling career. Courses are taught by experienced professionals, in the fields of Geology, Hydrogeology, Workplace and Rig Safety, Grouting, Well Development, Well Abandonment, Well Rehabilitation, Well Pumps, Fracking, Geothermal and various drilling applications including Directional, Sonic, Caisson, and Casing Hammer.

Skilled Trade School, LLC has truly hit the ground running – most recently launching their website: https://www.myskilledtrades.com. The application process is underway for the spring semester of 2024, as the school prepares to welcome its first cohort of students. Their communications team is promoting the school, industry, and curriculum at area schools, and beginning to coordinate participation in local career fairs. Promotional efforts will be expanding into other areas of the state, as well, and if your local school district is interested in learning more, please feel free to reach out to info@myskilledtrades.com for more information.

The WWWA understands the concern of where the next generation work force is going to come from and intends to do everything that can be done to expose others to the field to ensure its existence for years to come.

Please look for additional updates in the Well Log, and by email, soon. Feel free to reach out to info@ wisconsinwaterwell.com with any questions.

Executive Director's Message continued from previous page

committees. After our meetings, we'll gather again at a local establishment (TBD) to talk about our meetings and how to continue the relationship with your elected officials.

There is no cost to participate in this event. Stay tuned for more information.

c. Educate and Raise Awareness:

Share your industry's story and the importance of its work with the public. Utilize social media, blogs, public speaking engagements, or op-ed articles to educate others about the industry's impact on society and the economy.

Getting involved in your industry's advocacy is an empowering way to contribute to the betterment of your

profession and the groundwater industry as a whole. By actively participating in advocacy initiatives, you can help shape policies, improve industry standards, and create a positive impact that lasts for generations to come. Remember, every voice matters, and your involvement can make a significant difference.

855-947-9837 / info@wisconsinwaterwell.com •

Sincerely,

Jenni Kilpatrick, CAE Executive Director



WISCONSIN WATER WELL ASSOCIATION ANNUAL CONFERENCE

Kalahari Resort and
Convention Center
1305 Kalahari Drive
Wisconsin Dells, WI 53965

ATTENDEE REGISTRATION



JANUARY 17-18, 2024

EVENT OVERVIEW

The 2024 WWWA Annual Conference is an opportunity for attendees to receive their required continuing education credits, while also creating lifelong professional connections. This family-friendly event includes CE classes, the trade show, awards banquet and silent auction, raffles, the annual bowling tournament and more.

CONTINUING EDUCATION

The WI DNR requires licensed water well drillers, heat exchange drillers, pump installers and rig operators to attend six (6) hours of continuing education during each calendar year for each license held. The WWWA provides 6 hours of continuing education for water well drillers and pump installers on Thursday. If you have any questions, please contact the WWWA office.

RAFFLE

Make sure to purchase your tickets for a chance to win one of MANY amazing prizes! Ticket sales will begin at the General Membership Meeting on Wednesday, January 17th. The drawings will be held in the exhibit hall on Thursday, January 18th.



HOTEL Kalahari Resort and Convention Center 1305 Kalahari Drive Wisconsin Dells, WI 53965

Room Reservations: 1-877-254-5466

\$125/night Single or Double Occupancy-Standard Room upgrades and weekend reservations are subject to

increased rates. Contact the hotel for rates and availability.

Room rates available until December 16, 2023. Reservations must be made by calling the hotel directly at 877-254-5466. **Mention "WWWA 2024 Room Block" to receive the discounted rate.** You can also reserve your room online: https://book.passkey.com/e/50363587

MEMBERS ONLY

Special Deal for WWWA Members

Become a 2024 member, make your hotel reservation AND pay your registration fee before 5:00 pm on December 31, 2023 to receive a *\$100 Kalahari Gift Card!*

Rooms must be booked under the WWWA room block.



SCHEDULE-AT-A-GLANCE

Program and speaker specifics will be provided in advance of the Conference.

Wednesday, January 17, 2024

9:30 am - 12:30 pm **DNR Advisory Meeting**(private meeting, by invitation only)

12:30 pm - 1:30 pm

Breakout Session: Up to 1 CE Credit

1:30 pm - 2:30 pm

Breakout Session: Up to 1 CE Credit

3:00 pm - 4:00 pm

General Membership Meeting: Regulatory/ Legislative; Marketing; Elections; WWWA

Updates

4:00 pm - 7:00 pm

Reception: Reception; Scholarship and Lifetime

Awards Presentation; Silent Auction



Thursday, January 18, 2024

7:00 am - 8:00 am

Breakfast

8:00 am - 12:00 pm

General Session and Breakouts Including DNR Update/Session

Up to 4 CE Credits

12:00 pm - 1:00 pm

Lunch

12:00 pm - 5:00 pm

Trade Show: Exhibits; Children's Area; Raffle Prizes; Reception: 1 CE Credit per year for

attending trade show

1:00 pm - 2:00 pm

Breakout Sessions: Up to 1 CE Credit

2:00 pm - 3:00 pm

Breakout Sessions: Up to 1 CE Credit

5:00 pm

Trade Show Ends

7:00 pm - 8:00 pm

WPWS Happy Hour & Prize Giveaway

8:00 pm - 10:00 pm

Annual Bowling Tournament



ATTENDEE REGISTRATION FORM Please fill out a separate form for each attendee.

Scholarship Donation Family Members Attending Contact Information The WWWA is a family friendly association. Bring your The Edwin Huntoon/Owen Williams Scholarship was Please register using this page, or online established to reward students planning to obtain a families and make a mini-vacation out of the trip! As (preferred) at www.wisconsinwaterwell.com higher education. Each year, scholarships are based on always, there will be a fun kids area in the tradeshow. Full Name: the availability of funds provided through contributions Immediate family members may participate for free. (As it will appear on badge) from Wisconsin Water Well Association Members. Please list names: Company Name: Are you able to make a contribution this year? Spouse/companion:____ (If applicable) ☐ Item for Silent Auction:_____ Child #1 Age: Mailing Address: ☐ Monetary Contribution: \$_____ State: Zip: Child #4_____ Age:____ Mobile: _____ Age:___ Child #6____ Other Phone: **Participation Counts** Any special needs?: Total # (including you) attending License #____ Wednesday, January 17th Reception:_ Mark all that apply: Total # of children participating in the Children's Area of the Trade Show: ☐ Pump Installer ■ Water Well Drilling Rig Operator ☐ Water Well Driller Total # (including you) attending ☐ Other License: Thursday, January 18th Bowling Event:____ ☐ Heat Exchange Driller (or Heat Exchange Drilling Ria Operator) PAYMENT INFORMATION **Conference Cost:** ☐ Member = \$150 ☐ Non-Member = \$190 Note: Onsite registration rates are \$250 for members; \$290 for non-members, register in advance to save! **Exhibit Hall Only:** ☐ Member = \$50 ☐ Non-Member = \$90 Note: Immediate family (spouse and children) are complimentary. Additional Sponsorship Total \$ TOTAL \$ **QUESTIONS?** If you have questions regarding the 2024 WWWA Annual Conference, please contact us: Office: 855-947-9837 • info@wisconsinwaterwell.com PLEASE MAIL WITH PAYMENT TO: Or pay by credit card - VISA, MasterCard, American Express or Discover We cannot accept emailed credit card information. Please FAX (414-755-1346), mail, or register online.

Wisconsin Water Well Association 6737 W. Washington St., Suite 4210 Milwaukee, WI 53214 FAX: 414-755-1346 Questions? 855-947-9837 or info@wisconsinwaterwell.com

> Please make a copy for your records

Name on Card: Credit Card #: Exp. Date: Signature:

LOBBYIST REPORT: GOVERNMENT RELATIONS UPDATE

By Jeff Beiriger, WWWA Government Relations Advisor

I remember when we used to get the news at 6 p.m. and 10 p.m. And when the paper was delivered first thing in the morning. And I'm not sure what was wrong with that system except that somebody decided that we needed more news, most likely because it was a cheap way to fill up a programming schedule. So, the news came on at 12 p.m., 5 p.m., 6 p.m. and 10 p.m. Then 6 a.m. and 7 a.m.

And then the first Gulf War happened, and CNN was there to report, minute-by-minute, as if our watching influenced the outcome. It didn't. But we were hooked on the idea of constant news. We were "in the know" thanks to cable news channels.

Then came the Internet, and we couldn't wait until 6 a.m. for the paper, or for our weekly roundup of written news, courtesy of Time, or Newsweek. Or, can you imagine, a monthly magazine, with in-depth reporting.

Suddenly, our watching did matter. It did affect the news. Our reactions became part of the story or, minimally, the basis for the next story. And we needed a next story because there wasn't any limit on how big the paper could be. Speed was rewarded more than research. Speed and quantity are now the favored assets of news reporting.

I tell you all of this because it's getting harder and harder to get the news about what's happening in our country and around the world because there are bigger, sexier stories – stories that create clicks and create more content for talking heads – that are crowding out important stories.

Like stories about water. And importantly, what those stories might mean not just for an industry, but for our country and the world. Try to live without your phone for a day. Or the Internet. It might make you crazy. It might bring you a welcome respite from constant messaging. Either way, you can survive. There are backups – old technology – that we can use to get through the day.

But what backup do we use when the wells run dry? When the reservoir is empty or when the groundwater or surface water is contaminated, what then? We forget just how critical we are to the functioning of our society....

If you don't know the story of the Dust Bowl, there was a period of time in the 1920s and 1930s when an entire section of our country was rendered virtually inhabitable because of an extended drought. The topsoil was lifted by the prairie winds into three- and four-mile-wide fronts, 10,000 feet high, that would drop the soil and bury homes and fields, covering what few plants had survived. Livestock had to be destroyed.

One of the solutions that was adapted was the use of wells which were drilled into the Ogallala Aquifer. It's a massive store of water, but since World War II and the first use of diesel-fueled pumps, the amount of water being drawn has far outpaced the recharge. How big is the deficit today? The shortage is now equal to the flow of the Colorado River. Time eighteen. It's a huge deficit with a whole lot riding on the solution. The farms in the area produce a staggering amount of food. Reducing production could have catastrophic effects on food stability for the U.S. and other countries.

Reducing the amount of water being withdrawn will not solve the problem, it will only make the supply last longer. Perhaps 100 years longer, according to some scientists. But between now and then, what is grown will be altered. How people live will be altered.

So, where do people look to farm? Where do they look to live?

They look to states like ours, where we are sitting on top of a groundwater supply estimated to be 1.2 quadrillion gallons, which looks something like this when written out – 1,200,000,000,000. It's hard to get a handle on just how much that is, but think big. A quadrillion is a million billion of something. And that part after the decimal point? That would be 200 trillion of something. It's a lot...

And if the Ogallala Aquifer isn't enough, consider the story of the Lake Mead Reservoir. While the water levels have come up this year, there is still a huge deficit when

Lobbyist Report continued on next page

Lobbyist Report continued from previous page

it comes to the supply available to meet the demands of states in the Southwest. For instance, Arizona will have to cut 512,000 acre-feet of its Colorado River water supply next year. Absent the increase in the aquifer this year, they would have had to have cut an additional 80,000 acre-feet of water. Either way, Arizona needs to reduce water use by around 20 percent, or about 193 billion gallons. The story is similar for Nevada, Colorado, New Mexico, and other states. Again, the quest for more water for the U.S. population intensifies.

Had enough? Consider the Great Lakes states. Still plenty of water in the lakes and in the ground, but more and more of the groundwater has seen PFAS contaminations, rendering it unusable at worst and in need of treatment at best. Again, more people are looking for clean water.

Water is moving from commodity status – like salt – to something more akin to silver, gold, or diamonds. It's a precious resource. Except we can live without precious gems and metals.

It's hard to know what comes next, but Wisconsin will likely become a destination state in the near future. More people wanted more water.

As leader of the industry responsible for providing and protecting our groundwater resources, what will our response be? Are we ready to meet the challenges of greater demand for our services? Do we have the workforce and the equipment we need? If not, will we stand by if pressure mounts to remove critical safety measures, such as codes and licenses? Not saying it will happen, but the pressure will be there. Will we make tough decisions to protect our groundwater supply, using only what can be recharged? If we don't, does Wisconsin do the same route as the Great Plains and the Southwest? Then where do we go for water?

Without factoring in anything else, this is a supply and demand issue. It doesn't get nearly the attention that politics do. Or even higher gas prices. And yet it is absolutely essential to our quality of life. It's what we need to be aware of and talking about today. It's not a local issue because it will affect food supplies and population movement. The spotlight is moving, searching. In time, it will come to rest on us – people in Wisconsin, regulators working on groundwater issues, and our industry.

It sounds dystopian, and maybe a little depressing, but the potential is there. You may be the hero of this story. You may be the last, best defense.

Now consider telling that story to someone wanting to get into our trade. It's tough, it's hard, it's dirty. Got it. It's absolutely critical and we need you....

WWWA CLASSIFIED ADVERTISEMENTS

By Hope Vandenhouten, WWWA Coordinator

As a membership benefit, WWWA has a Classified Ad section of the website. For FREE, WWWA members may post used equipment or surplus product on this section of the website, and all visitors to the WWWA website.

Classified Ad Details:

- Non-members may post at \$175 per posting, payment required prior to posting.
- Postings are limited be limited to 250 words + contact information/details.
- Posts may have up to four (4) images/photos included.
- Posts are published for up to 30-days or until they're sold, whichever comes first.

- WWWA office has full editing rights on posts.
- WWWA office has full discretion of whether or not a post is published.
- Posts are intended to offload used or over purchased equipment and product.
- Posts are not intended for sale of new items.

A SAFETY LIFESTYLE

By Ron Peterson

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Safety in the groundwater industry needs to be so much a part of our lifestyle that being safe becomes automatic.

Accidents are typically the result of someone being in a hurry and overlooking a potential problem. When there is an incident, it almost always inadvertently involves innocent people, whether directly or indirectly. They also usually cost significant amounts of money, time, pain, and—frequently—jobs.

People may talk about good luck, but it is almost always the result of careful and thorough planning, while bad luck is pretty much the exact opposite—it is overlooking details and inadequate planning. I truly believe we create our own luck.

If safety is to be truly effective, it must become a lifestyle. If we take intentional risks in our private lives, we will, whether intentionally or inadvertently, take risks in our professional lives as well. When we take risks, it almost always impacts someone else.

While training can help, we need to live in such a way that safety is a natural and habitual focus in our lives.

Every job or project has potential risks and hazards. We need to evaluate all aspects of the job including access to location, equipment to be used, personnel, and level of training and skill of personnel.

Don't Take Shortcuts

I was once on a diamond coring job in a remote area of the western United States. The driller was ready to make a connection and reached for a 10-foot rod on the rod pile. The pin end was closest to him, and he needed it to be pin-down to make a connection, so as he picked it up, he let the pin end go down and raised the box.

There was a rustling noise and then an unexpected guest joined us on the floor right between the driller's feet—a 5-foot rattlesnake! It had been warming itself in the rod and was irritated at being disturbed.

There was a bit of rapid movement and a few choice words spoken but fortunately the snake was not fully awake, and no one was harmed. The snake actually moved fast enough to escape uninjured as well.

Crisis avoided, but I can assure you that driller has always tipped the rods away from him after that. The

lesson learned: Always be aware of your surroundings.

PPE Is a Must

I was working on a roofing crew years ago, and no one wore a hard hat or safety glasses when they were on the job. I was tending the tar vat one day when one of the workers knocked a rock loose and it fell toward us. Fortunately, it didn't hit anyone in the head. Unfortunately, it lit in the tar vat and the hot tar splashed onto my face and sealed my eyes and nose shut.

It took two hours to clean the tar off my face before I knew if I could see. There are two lessons to be learned from this one:

- Be aware of your surroundings.
- Make sure you always wear appropriate personal protective equipment.

Be Prepared

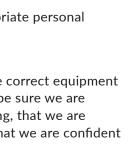
We need to make sure we have the correct equipment and tools to do the job. We need to be sure we are familiar with the tools we will be using, that we are familiar with how to use them, and that we are confident they will work as expected.

Make sure that you confirm the job, the expected procedures, and the desired objectives with the client or customer. This will ensure that you understand and meet the customer's needs and their expectations. Remember, the only dumb question is one that you have and don't ask.

Make sure you also know when and who to call for help. Always have their phone numbers ready and available. And use them when you need them!

One of the things that we do now is recognize and review near-misses. Initially this seemed like a waste of time, but it is definitely a positive for us. It causes us to evaluate the situation where there was no damage done and take precautionary measures in the future to make sure it doesn't recur and result in an accident.

A Safety Lifestyle continued on next page



A Safety Lifestyle continued from previous page

Being Safe All the Time

I said at the start of this column that safety needs to be an automatic part of our life. It must be so ingrained in our personality that we automatically do things the safe way. It needs to be a part of all aspects of our life: home, recreation, work, wherever.

If we cut corners and do things in an unsafe manner in any aspect of our life, we may find ourselves slipping and letting that behavior surface in the other aspects of our life.

When you go out in the morning to drive your vehicle, whether it is your work vehicle or your personal vehicle, do a quick walk-around to make sure it is safe to drive. Are there any obstructions, animals, toys . . . or children in the way? Do the tires look properly inflated? Check the oil to make sure that the engine is safe to start. Check the dash lights to make sure that you have no warning lights lit up.

Always be aware of your surroundings. Is there anything that can cause you a problem? If you're at the shop, are the surface levels clear to walk on? If you are at a work site, is the area clear of debris? If it is a drilling site, is there drilling fluid anywhere that may be slick and compromise your footing? Are there any hoses or equipment lying around? We always want to do our best to avoid any slips, trips, or falls.

Is everything around you properly secured? Are all protective guards in place on operating equipment?

There are many protocols that when properly followed ensure we are safe. Make sure that if they are not properly followed, the appropriate people are notified to correct the situation.

We should always error on the side of caution. If there is ever any doubt, play it safe!

Providing water well contractors with unparalleled quality products, service, and support!

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THE PFAS ISSUE - IN A NUTSHELL....

By Jeff Beiriger, WWWA Government Relations Advisor

At a recent meeting of the WWWA, I discussed a piece of legislation related to PFAS. By now, you probably know that PFAS is an abbreviation for a group of chemicals – what have come to be known as "forever chemicals" – that are found in pretty much any product used to prevent one thing from sticking to another. Examples are non-stick cookware, certain types of papers (Tootsie Roll wrappers, for instance), and rain gear. You'll find it in lots of other products too, like carpeting and firefighting foams.

The chemicals were developed decades ago by companies such as Chemours, DuPont, and Corteva. There are others that manufactured these products too and they made a lot of money selling their wares. The problem is, PFAS is toxic, having been linked to numerous health problems, including liver damage and forms of cancer.

This sort of situation isn't new to us. We've seen it with asbestos, lead paint, CFCs, PCBs, and other products. What seems to be a useful chemical is introduced and adopted by countless manufacturers. And then the product is deemed unhealthy and production stops and the cleanup – both of the chemicals and the legal responsibility – begins.

Earlier this year a settlement was reached that would provide nearly \$2 billion that can be used to remove PFAS from drinking sources. The settlement was designed to address the hundreds of claims that were filed seeking damages for the PFAS that entered public water supplies.

But what about private wells? What happens in those instances?

Recently, wells in the Town of Stella, northeast of Rhinelander, were found to be contaminated with PFAS. The wells testing far above the EPA standard for drinking water. While Wisconsin doesn't have a groundwater standard for PFAS just yet, it will be compelled to adopt the EPA standard within a few years.

So private well users can't use their wells and they are being provided with bottled water. And the issue isn't confined to Stella. It's in many areas of the state, and that creates real challenges.

One of the things that makes this even more challenging is that there isn't a whole lot of research –

yet – about plant uptake of PFAS in water that is used for irrigation. Nor are there enough studies to show how much PFAS is in the animals that we consume, and we know that they're getting



their water from the same place as the humans on most farms. So, even if we can control the amount of PFAS in an aquifer, in the private well, at the building, or at the tap, it's unlikely we could completely eliminate the exposure to PFAS.

Certainly, there are efforts to find all of the places where PFAS is being used and eliminating those sources. And there are efforts to survey for those places where PRAS was in use, and may have affected the groundwater. Sometimes, the PFAS would soak into the ground. Sometimes, it was incorporated into the soil as industrial waste.

And mostly, everything that has happened related to PFAS was perfectly legal at the time, which brings us back to the manufacturers.

If they settle their claims for billions of dollars, that's great. That money can be used to "fix" the PFAS problem. But what happens when that money runs out? OR what happens when it doesn't make its way to all of the affected parties because others have staked their claims – think large, municipal wells rather than individual, private well owners?

When the money is gone, and the manufacturers have their settlements, lawsuits will still be filed, only this time, the person whose property was affected by PFAS is going to look for anyone and everyone who knew or should have known that their water was contaminated by PFAS.

Let's say you put a new well in service in 2000. You didn't test for PFAS. But what if it was there? Are you responsible? Or let's say you tested in 2023 and the water is good. But in 2025, the water contains PFAS. Should you have known about the water in other parts of the aquifer? That it could become contaminated?

Let's say you install a high capacity well. If that water contains PFAS and creates a run-off to an adjacent

The PFAS Issue continued on next page

The PFAS Issue continued from previous page

property that tests above the PFAS threshold, is the owner of the high capacity well responsible? Is the driller?

This is a really tricky issue, and everyone is going to want a solution, and everyone is going to want someone else to be responsible for fixing the problem. It's not enough to win all of the lawsuits that could be filed. Defending the lawsuits could bankrupt a company.

That's why we're paying attention to legislation related to liability for PFAS. If you follow all of the rules and regulations as they exist today, and a problem is discovered tomorrow, some of the legislation being discussed today would limit your liability so that you would only be responsible if you violated a standard that's in place today.

As one commentator noted, PFAS is a generational issue. Probably the most similar issue out there today

is climate change, and that's been politicized, with clear battle lines drawn between the major political parties. There seems to be a consensus on PFAS – at least for now – that it's something that needs to be addressed. The issue touches on the environment, for certain, but it also touches on our cities and our rural areas, and that means constituents of both parties are looking to the government for answers today and, hopefully, a solution in the future.

Those answers and that solution will almost certainly involve the private sector too, and that means our industry, and others, will be partners in what comes next. Today, there's not a lot to do except to become more informed about the issue. But soon, it will be our industry on the front line, making things happen and continuing our legacy of protecting public health and safety.

Protection that matters

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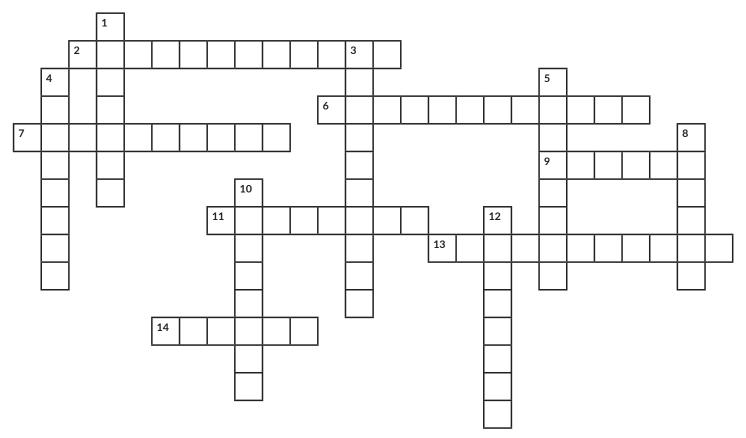
EMC Milwaukee Branch

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DOWN

- Unbroken solid rock, overlaid in most places by soil or rock fragments. In most wells, the well casing is driven into bedrock. Aquifers within the bedrock provide a water source for the well
- 3. The rock / soil mixture that sits atop bedrock 4. The portion of the well that extends above the ground
- 4. The portion of the well that extends above the ground
- 5. A condition in which the water in your well has a pH value of above 7.0. Highly alkaline water can be problematic for your well system
- 8. A perforated material used to filter media such as sand from entering the well pump
- 10. The process by which soluble materials in the soil, such as salts, nutrients, pesticide chemicals or contaminants, are washed into a lower layer of soil or are dissolved and carried away by water
- 12. The hole drilled to construct a well. Most boreholes for domestic wells in Maine are slightly larger than the well casing until they reach bedrock, at which point they become slightly small than the well casing

ACROSS

- 2. The removal of salts from saline water to provide freshwater
- 6. The ability of a material to allow the passage of a liquid, such as water through rocks
- 7. The relatively flat area adjoining a river or lake that may be covered with water during a flood
- 9. A condition in which the water in your well has a pH value of below 7.0. Highly acidic water can be problematic for your well system
- 11. Water added to an aquifer
- 13. Water that flows or seeps downward and saturates soil or rock, supplying springs and wells
- 14. Steel or plastic pipe placed in the borehole to keep it from collapsing. The casing is driven into the borehole wall to seal it off from surface water contamination

See Correct Answers on listed on the bottom of page 26

DNR UPDATES

By Marty Nessman, Private Water Supply Section Manager

REMINDER: 2024 LICENSE AND REGISTRATION RENEWALS BEGIN OCTOBER 1ST

Renewals for the 2024 calendar year can be processed online beginning October 1st. A link to the portal is provided here:

Environmental Licensing and Certification Online Renewal Portal (wi.gov)

Drillers and Pump Installers are strongly encouraged to renew their credentials online. Renewing online saves the state significant time and resources. It also reduces the likelihood that you will encounter problems during the processing of your renewal application and fees. Applications will continue to be mailed as they have in past years. If you receive an application for renewal of one of your credentials by mail after already having renewed that credential online, you can disregard

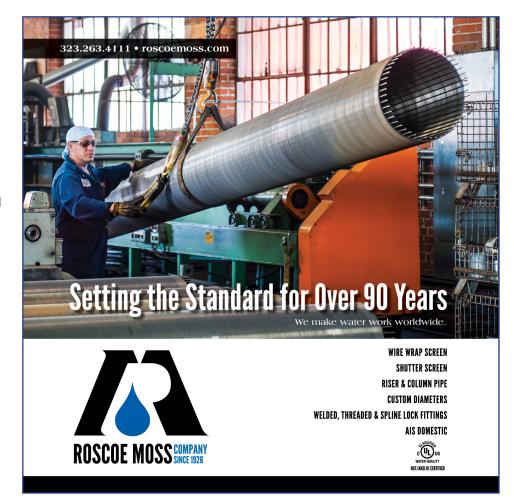
the mailed application. It often happens that the paper application is already in process or is already in the mail when the online renewal was processed.

Important reminders for renewals:

- Six credits of 2023 continuing education attendance is required to be eligible to renew for 2024.
- Individual licensees and registrants are not eligible to renew a credential (individual license or registration) until 2023 continuing education requirements for that credential have been fulfilled. Exemptions apply to first year licensees and registrants.
- Before a business or rig operator registration can be renewed, the designated supervisor must renew and acknowledge that they will continue to act as the registrant's supervisor in 2024.

- If you attend the final 2023 WWWA in-person continuing education sessions on October 3rd, allow at least one week for the attendance data to be sent to the DNR and processed before attempting to renew your credential online.
- A User ID or password is not needed to pay your renewal fees online. Select the "Pay Without Registering" option at the e-Payment system page to process your credit card payment.

Questions regarding renewals or continuing education status can be directed to: DNRDGLicensing@wisconsin.gov. •



2023 VIRTUAL CONTINUING EDUCATION PLATFORM

VIRTUAL CONTINUING EDUCATION

Registration is open for the 2023 Virtual Continuing Education Platform! All courses MUST be completed by 11:59PM to be valid for renewing your 2024 license/s.

Courses are broken down into hour-long segments, giving you the freedom to complete one hour individually on a rainy afternoon or do three hours of education over a weekend.

You are also able to see your completed credits in realtime and print off completion certificates immediately after finishing your course.

Pump Installer, Well Driller, and Heat Exchange Well Driller are currently being offered.

To get started sign up online and pick the courses that interest you! Check out the courses we have to offer this year below:

To get started sign up online and pick the courses that interest you! Check out the courses we have to offer this year below:

CE SESSION COUNTS

as of 11/1/23

IN-PERSON		ONLINE
2023 Annual Conference	212	
Wisconsin Dells	132	332
Green Bay	72	as of
Stevens Point	73	11/1/23
Madison	20	

DNR Program Updates

Marty Nessman

1 = PI; 1 = WD; 1 = HE

This session will cover updates on the Private Water Supply Section and how they affect licensed drillers, pump installers and rig operators. Specific updates on staffing, code revisions and other relevant information will be discussed.

Grouting and Placement

Jim Hutmacher, CWD PI

1 = PI; 1 = WD; 1 = HE

This session will cover all types of grouting, sealing, and decommissioning wells using all products used currently in the water well industry.

Seen and Unseen Flow in Wells

Dave Hart, PhD

1 = PI: 1 = WD: 1 = HE

Even in wells that aren't being pumped or flowing artesian, water can be moving between aquifers. This can create problems, especially if water is flowing from an aquifer with poor quality water into an aquifer with high quality water. In this presentation, we'll look at some examples of flow, how it's measured, why it happens.

Groundwater Industry Update – A Look at the Rules and Regulations Affecting YOUR Industry

Jeff Beiriger, Government Relations Advisor, Wisconsin Water Well Association

1 = PI; 1 = WD; 1 = HE

The groundwater industry is a highly-regulated industry. And why wouldn't it be, given its importance. Simply stated, public health and safety is a priority for every citizen. This session will look at all of the various regulations and talk about what's new and how those changes affect your business and your customers.

Drill Bits and Pump Pieces

Dick Milaeger

1 = PI; 1 = WD; 1 = HE

The Drill Bits portion of the presentation will discuss present and past challenges in the drilling business, successes, and failures, drilling obstructions. The Pump Pieces portion of the presentation will cover issues and failures of pumping equipment, challenges with failures, fishing and production.

WI DNR American Rescue Plan Act (ARPA) Well Compensation Grant Program

Aaron Kent, Sandy Chancellor & Emily Mitchell

1 = PI; 1 = WD; 0 = HE

This on-demand session will provide an overview of the WI DNR American Rescue Plan Act (ARPA) Well Compensation and Well Abandonment grant Program. Information will be provided regarding eligibility criteria and the application and grant award process. This information will familiarize licensed well driller, pump installer and rig operators with the program which will be helpful for those who have clients who meet program eligibility.

Continuing Education continued on next page

Continuing Education continued from previous page

Sandstone Aquifers: Their Evolving

Hydrogeology and Role in Regional Hydrology

Eric Hiatt, PhD

1 = PI; 1 = WD; 1 = HE

Wisconsin's sandstone aquifers have highly variable hydrologic properties. These sandstones provide opportunities to demonstrate fundamental processes that sand, and sandstones undergo in the evolution of aquifer properties. This course is designed for professionals who are not geologists or experts in sedimentary rocks, and it will highlight the factors that control the distribution and aquifer properties of sandstones.

POWTS & Wells 201 - The Impact of Septic System Density Elizabeth "CeCe" Rudnicki

1 = PI; 1 = WD; 0 = HE

In 2022, CeCe's presentation covered the basic concepts of wastewater recycling and a discussion about how SPS 383 addresses methods for protecting drinking water supplies including setbacks and regulations. The 2023 presentation will use the SWIGG study and the UWSP Groundwater Quality Viewer to focus specifically on what types of groundwater issues we see in Wisconsin and how septic systems density can create a problem for well water.

Why are Wisconsin's Karst Aquifer so Vulnerable to Contamination?

Maureen Muldoon, PhD

1 = PI; 1 = WD; 1 = HE

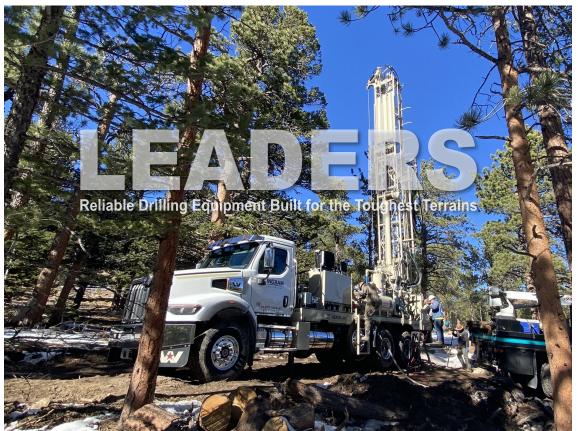
Maureen started her career with the WGNHS in 1987. In 1998 she moved to UW-Oshkosh for 21 years where she was a professor of Geology. She has recently returned to the WGNHS where she conducts research that focuses on applied groundwater questions throughout Wisconsin. Her interests include investigation of groundwater quality and flow in carbonate rocks, relationship between geology and hydraulic properties, land-use impacts on groundwater quality, and delineation of wellhead protection zones. She is a licensed professional geologist and hydrologist in Wisconsin.

OSHA Procedures and Trenching Emphasis Program

Mary Bauer

1 = PI; 1 = WD; 1 = HE

This session with provide an explanation on how OSHA prioritizes job sites inspections and what happens when we conduct inspections. Trenching hazards will be discussed along with the standard to prevent trench collapses. Other hazards relating to digging or drilling will be discussed.





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The WWWA Well Log circulates to 1500+ industry representatives spanning three different states (Wisconsin, Illinois and Michigan) with top articles from the DNR, marketing professionals, industry leaders and business owners.

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Full page (bleed)	* 8 ¹ / ₂ " x 11"	N/A
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Quarter page	3 3/4" 4 3/4"	N/A

*Bleed Ads need to allow an additional 1/8" on all sides for trimming.

WPWS UPDATES

ANOTHER SUCCESSFUL GOLF OUTING

By Jeff Beiriger, WPWS Executive Director

September 21 was another picture-perfect day for our golf outing! About 40 people joined us for the WPWS golf outing at Trappers Turn in Wisconsin Dells for a day of relaxation and camaraderie.

Many thanks to our event sponsors:

- Franklin Electric
- Headwater Wholesale
- Rep-Rite Burk
- Rundle-Spence
- Walter Products
- Wisconsin Water Well Association

While we play more for pride than the prizes, our topscore went to the group of Jerry Ellis, Rob Spence, Bill Darby, and Aaron Gilson (pictured below). The group came in at 6 under par!





Flag event prizes went to the following:

Arbor Course

Vince Hannesson – Longest Putt

Jerry Ellis -Closest to the Pin

Canyon Course

Bill Darby - Longest Putt

Dan Schlenz- Closest to Pin

Jake Bowling - Longest Drive in Fairway

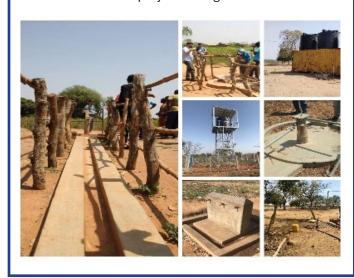
Look for an announcement soon regarding our Spring and Fall 2024 events!





PROCEEDS SUPPORT WELL PROJECTS IN UGANDA

Funds from all of our outings are used to help support well projects around the world. We are now working with the Warren and Donna Pett Memorial Foundation on well projects in Uganda.



MACHINE GUARDING AND POWER TOOL SAFETY

By Alexandra Walsh

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Crushed hands and arms, severed fingers, and blindness are just part of a list of possible machinery- and tool-related injuries.

A good rule to remember is any machine or power tool part, function, or process that may cause an injury must always be safeguarded. When operating machines and power tools, an accidental contact with and even simply being in the vicinity of machines and tools in operation can create workplace hazards that must be controlled or eliminated.

Machine Guarding

According to OSHA, employee exposure to unguarded or inadequately guarded machines is prevalent in many workplaces. As a consequence, OSHA notes that workers who operate and maintain machinery suffer close to 18,000 amputations, lacerations, crushing injuries, and abrasions—and more than 800 deaths per year.

OSHA further points out that amputation is one of the most severe and crippling types of injuries in the occupational workplace, and often results in permanent disability.

Supervisor Responsibilities

Supervisors should ensure that the following requirements are met:

- Employees receive training in machine guarding.
- No modifications are made to machine guards without the manufacturer's prior approval.
- Employees are prevented from removing manufacturerprovided guards from any piece of equipment.
- Damaged or unprotected equipment is removed from service.
- Machines and machine guarding devices are periodically inspected.
- All safety equipment is maintained.
- Only qualified and trained employees operate equipment.

Employee Responsibilities

Employees should be held responsible for:

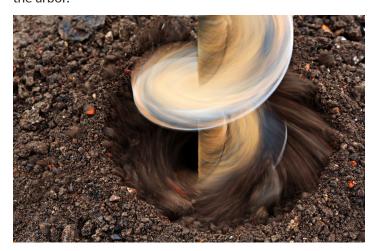
- · Attending machine guarding training
- Operating and maintaining machine guards in a safe

manner according to training

- Reporting all machine guarding issues to the supervisor
- Following lock out/tag out procedures.

Operation

A machine should never be left unattended with the control switch in the "On" position. Also, no blades, cutter heads, or collars should be placed or mounted on a machine arbor unless it has been accurately sized and shaped to fit the arbor.



If blades are dull, badly set, improperly filed, or improperly tensioned, they should be immediately removed from service. Sharpening or tensioning saw blades or cutters must be done only by qualified employees.

Electrical Safeguards

All machinery must be installed according to the National Electric Code (NEC) and to the manufacturer's requirements. If machines have exposed non-current-carrying metal components, they have the potential to become energized and should be grounded.

Control switches should be available to employees at their operating positions, so they don't need to reach over moving parts of machinery. Also, machine controls must not be wedged for continuous operation.

Machines that are not adequately safeguarded to protect

Machine Guarding continued on next page



Machine Guarding continued from previous page

the employee during an under-voltage situation or a power failure must have an under-voltage protective device installed. This device prevents the machine from starting up after a power interruption is over, which in some cases could expose the employee to the danger of moving parts.

Before performing maintenance or major adjustments to moving parts that require panels and guards be removed, all machine energy sources or energy isolating devices must be locked out or tagged out.



According to OSHA, employee exposure to unguarded orinadequately guarded machines is prevalent in many workplaces.

Maintenance Requirements

Qualified employees should adhere to the following safety protocols during the routine maintenance of machine guards and machinery:

- Lock and tag out power supply prior to repairing the guard.
- Use only replacement parts equivalent with those in the original design.
- Do not alter the guard or guard parts.
- Do not add any parts not supplied by the manufacturer nor delete any parts supplied by the manufacturer.
- Keep the machine and its guards in clean and safe operational condition.

Inspection

A planned inspection and maintenance program should be consistent with the machine manufacturer's recommendations. Only trained and qualified employees should be permitted to inspect, maintain, and repair machine guards in accordance with the manufacturer's specifications. No repairs should be made unless the machine is locked out.

Care and Use

Most machine guards are designed to be fixed to the machine. These guards must not be removed unless authorized by the manufacturer or by a qualified employee. Machine guards should be removed if they are designed to be removed for cutting device changes or to make small cuts. Only qualified repair operators should remove all other guards.

Any irregularities in the operation of machine guards should be immediately reported to the supervisor. Malfunctioning machine guards affect the safe operation of machinery and will render the machine unfit for service until the irregularities are corrected.

If at any time a machine guard needs repaired, or is defective or unsafe, remove the machine from service until its guards have been restored to a safe operating condition. Place an "Out of Service Tag" on the machine and labeled with the employee's name, date, and a description of the problem. Provide this information to everyone on the team.

New and Rented Equipment

Prior to first-time use, all new or rental machines should be inspected by a qualified employee to ensure compliance with the provisions of the company safety program. For new equipment, an initial inspection will verify that the equipment is suitable for its intended use. All machines should meet the design and construction requirements identified in general industry standards.

Power Tool Safety

Power tools help workers easily perform tasks that otherwise would be difficult or impossible. However, these simple tools can be hazardous and have the potential for causing severe injuries when improperly used or maintained.

All hazards involved in the use of hand and power tools can be prevented by following five basic safety rules:

- Keep all tools in good condition with regular maintenance.
- Use the right tool for the job.
- Examine each tool for damage before use.
- Operate the tool according to the manufacturer's instructions.
- Provide and use the proper protective equipment.

Employees who use power tools and are exposed to the hazards of falling, flying, abrasive, and splashing objects or exposed to harmful dusts, fumes, mists, vapors, or gases must be provided with the particular personal equipment necessary to protect them from the hazard.

Machine Guarding continued on next page

Safety Precautions

Supervisors should provide training and observe employees' work motions while on the job to verify that they understand the proper way to safely use power tools.

Power tools must be fitted with guards and safety switches. They are extremely hazardous when used improperly. Exposed moving parts of power tools—belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, and chains—must be guarded.

Employees using electric tools must be aware of several dangers. Among the most serious hazards are electrical burns and shocks.

To prevent hazards associated with the use of power tools, workers should observe the following general precautions.



- Follow the instruction manual before using any power tool
- Always wear safety goggles or glasses with side shields.
- Use a respirator for dusty operations or where other respiratory hazards may be present.
- Wear hearing protection where there are high levels of noise.
- No loose-fitting clothing, jewelry, or dangling objects should be worn.
- Long hair must be tied back.
- Training is required on the use of each tool prior to use.
- Tools that have been damaged or are unsafe must be tagged out of service.

- Avoid carrying the tool by the electric cord.
- Work area must be free of any debris that could be ignited by hot tools, chips, or sparks.
- Make sure the power switch is off before plugging in the power tool.
- Check that all appropriate tool guards are in place and working.
- Keep cords away from sharp edges, heat, and other hazards.
- Properly clean and store tools that are not in use.
- Secure all tools that have sharp blades or edges.
- Turn off and unplug the tool before making any adjustments or changing accessories.
- Only use accessories specifically supplied or recommended by the manufacturer.
- Never use power tools in wet or damp conditions.
- Never use a tool that is damaged or malfunctioning in any way.
- If the tool has a three-pronged plug, make sure a threepronged extension cord is plugged into a three-pronged outlet.
- Make sure cutters or blades are clean, sharp, and securely in place and never use bent, broken, or warped blades or cutters.
- Stay focused while operating.
- Always keep a firm grip with both hands.
- Warn anyone in close proximity to move to a safe distance.

Remember, any power tool with moving belts, pulleys, chains, drums, gears, spindles, and other rotating or moving parts must be equipped with safety guards. Equally important to remember is those safety guards must never be removed so safety can always be at the forefront of what you do.

Alexandra Walsh is the vice president of Association Vision, a Washington, D.C.-area communications company. She has extensive experience in management positions with a range of organizations.

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WATER TERMS CROSSWORD PUZZLE KEY

DOWN

1. Bedrock

1. Bedrock

3. Overburden

4. Wellhead

5. Alkaline

8. Screen

10. Leaching12. Borehole

ACROSS

2. Desalination

6. Permeability

7. Floodplane

9. Acidic

11. Recharge

13. Groundwater

14. Casing



Wisconsin Water Well Association (WWWA)

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2024 WWWA MEMBERSHIP

There are countless benefits to being a dues-paying member of the WWWA. While many are intangible, WWWA members receive discounted event registration, including registration for Continuing Education and the option to participate in special 'member-only' perks like the annual scholarships, contributions to the tri-annual *Well Log* and more.

Please visit <u>www.wisconsinwaterwell.com</u> to find a more detailed listing of membership benefits and details on the networking and educational opportunities coming in 2024.

The Board of Directors hopes that 2024 will continue to be a strong membership year with many returning and new members who will help the WWWA fight for what's good and right – *Water the Wisconsin Way: Fresh. Clean. Safe.*

Dues to the Wisconsin Water Well Association are not deductible as charitable contributions for federal income tax purposes, but may be deductible as ordinary and necessary business expenses.

We hope to have your support! CONTACT INFORMATION — I want to be a WWWA member in the 2024 year. Full Name: Note: Membership Fee is per individual (not per company), valid January 1 - December 31, Company: _____ Mailing Address: _____ City, State, Zip: Phone: Alternate Phone: ■ \$150 = FULL MEMBERSHIP (VOTING) - FIRST Member from a member company **PAYMENT DETAILS** \$100 = FULL MEMBERSHIP (VOTING) - ADDITIONAL Members from same company ☐ Check enclosed payable to: WWWA License # Full Members MUST hold at least one license ☐ Charge my credit card \$ _____ Mark all that apply: □ Pump Installer ☐ Heat Exchange Driller ■ Water Well Driller ☐ Heat Exchange Drilling Rig Operator Name: ☐ Other License: ☐ Water Well Drilling Rig Operator Exp. Date: ____ \$75 = ASSOCIATE MEMBERSHIP (NON-VOTING) CVV #: ____ License # Mark all that apply: ☐ Employee of a Full Member ■ Manufacturer Rep ■ Engineer Please return by fax: but who does NOT hold a license □ Scientist □ Consultant 414-755-1346 □ Family Member □ Technician ☐ Health Official or scan/send to: ■ Supplier/Distributor ☐ Hydrogeologist ☐ State Government Official ☐ Manufacturer info@wisconsinwaterwell.com □ Geologist Other:_ or mail to address at top. PRINTED NEWSLETTER OPTIONS **WEBSITE ADVERTISING** Any questions, please call: Full Page Ad: □ \$1,300 full year / □ \$475 single issue □ \$180 = Large Banner Ad (380 x 380 pixels) Half Page Ad: ☐ \$700 full year / ☐ \$250 single issue 855-947-9837 Quarter Page Ad: ☐ \$500 full year / ☐ \$175 single issue **DONATIONS** Scholarship Fund: \$ ☐ Silent Auction Item:





January 17-18, 2024

2024 Annual Conference
Kalahari Resort and Convention Center
Wisconsin Dells, WI

January 19, 2024

Continuing Education Roadshow
Kalahari Resort and Convention Center
Wisconsin Dells, WI