Greetings all,

It is a great honor to write to you all today as your newly elected North Carolina Groundwater Association president. I would like to start off by saying “Thank You” to our former president, and my close friend, Bill Magette, for the great job he has done serving as our leader over the last few years. I look forward to many more years of his mentorship as he continues to be our current ‘past president’.

With that said, I would like to take some time to introduce myself. As a third generation driller, I have the privilege of working alongside my father and uncle as one of three co-owners of Yadkin Well Company. I currently hold certifications in North Carolina, South Carolina, Virginia, and Tennessee, as well as holding NGWA CWD/CVCLD credentials. Over the last 23 plus years since graduating high school, I have drilled wells as far east as Selma/Princeton and reaching to Murphy to the west. All along these paths, relationships have been made with counties and contractors. During the last 2c 0.100 well rule update, I had the privilege to sit on the round table with state regulators, and during the recent grout law I was able to create relationships in the state House of Representatives. In retrospect, I believe those experiences are what led me to this position of serving as your president of the NC Groundwater Association. It is my hope that the experiences of my past will better allow me to relate to you and your location, both in county and geologic knowledge. Please know that my door is always open.

May it never be said that NCGWA does not have our citizens and their health in our top priority. I hold firm to the mission statement that we will continue to provide, protect and preserve North Carolina’s greatest resource. By providing meaningful educational events, monitoring local, state and federal legislative agendas, as well as fostering an open, accountable relationship with the well contractor’s commission, I feel confident that together we can continue to uphold our mission.

I’m happy to report that our association is strong, but we need you all to be involved; sign up employees and your spouse, and please be sure to attend our featured events. As former US President Teddy Roosevelt said, “speak softly and carry a big stick”…you are that ‘big stick’. The more members we have, the bigger the stick, so join us! Together we will do great things. Remember, no other organization in NC is working to keep you in business more than the NCGWA.

On behalf of the NCGWA, I would like to thank everyone that took the time to attend our Winter Trade Show in January, and a huge “thank you” to the sponsors that devoted time and resources into our association. We have two exciting events coming up in the next few months, so be sure to check out the article on those events in this newsletter.

I look forward to shaking your hand and meeting you all!

Keep turning to the right,

Matthew Brown, President NCGWA
STATEMENT OF PUBLISHER
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PUBLICATION DATES
Articles and ad deadlines are the first day of
MARCH  JUNE  SEPTEMBER  DECEMBER

Any and all NCGWA members are encouraged to send information on past or coming events or news articles that would be of interest to other well drillers. Please send profiles of well drillers/companies that you feel deserve to be highlighted in our newsletter.

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Elaine Christian, NCGWA, Raleigh, NC (919-876-0687)

Worth Pickard Scholarship
The N.C. Ground Water Association offers the Worth Pickard Scholarship to eligible students who are currently enrolled or who have been accepted into an accredited college or university.

Consideration will also be given to those seeking specialized courses of study, if the applicant is employed or otherwise involved in some area of the ground water industry.

For eligibility requirements visit:

For an application visit:

The deadline for the 2023 scholarship application is April 15, 2023.

Contact the NCGWA office at 919-876-0687 for more details.
Mark your calendars for two upcoming events! Spring Drilling Day in Marion, NC and the annual NCGWA Golf Tournament in Wilson, NC.

Friday, March 31st we would like to invite you all to a hands on drilling day featuring Gefco, Bariod, Mudslayer, Epiroc, and many more! We will be drilling a well that will serve the new expansion of Equipment International, a group providing training to missionaries whom travel the globe.

So mud drilling in the mountains?? Yes, you heard right! We invite you to come watch us drill and set casing with mud rotary, and observe a mud reclaimer clean the mud. Is this technique something we would use in the piedmont or mountains?? Come and be educated on the many uses of this drilling method. We will also be demonstrating how an air hammer operates, followed by drilling the well with air once the casing is set. These demonstrations will provide a great opportunity for prospective Level A exam persons to observe and learn terms and theories that could be of benefit when taking the exam!

A barbecue lunch will be provided by the famous folks of Countryside BBQ, sponsored by Drilling Equipment Sales. We will also be raffling off a really nice shotgun, courtesy of Air Drilling/Geologic Exploration of Statesville, NC. This hands on drilling day will account for 6 hours of continuing education. I look forward to meeting you all there! We would like to thank all of our many sponsors, that number too many to list for fear of leaving some out.

In April, NCGWA will host its annual Wilson Con-Ed and Golf Tournament. This is always an exciting event to attend! John Boyette is heading up the event, and as always, a famous BBQ lunch will be enjoyed! Can you tell we are real NC people with all the BBQ? Stay tuned for more information on this event, as the topics to be covered have not been finalized.

Keep turning to the right, Matthew Brown, President NCGWA

Registration forms are available at the ncgwa website, [https://ncgwa.org/](https://ncgwa.org/)

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**NORTH CAROLINA GROUND WATER ASSOCIATION**

**2023 Spring drill day**

**FRIDAY, March 31 | Equipment International | Marion, NC**

126 Rockhouse Road, Marion, NC 28752

**Friday, March 31, 2023**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00 am</td>
<td>Welcome and Schedule, Matthew Brown</td>
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<tr>
<td></td>
<td>Introduction to job site set up</td>
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<tr>
<td>8:00 am – 8:30 am</td>
<td>Permitting and Site Selection, Matthew Brown</td>
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<td></td>
<td>Equipment set up, Jonathan Kamionka</td>
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<tr>
<td></td>
<td>Methods of Drilling</td>
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<tr>
<td>8:30 am – 9:30 am</td>
<td>Mud Mixing, Mark Whittle and Jim La Porte</td>
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<tr>
<td></td>
<td>Operation and function of Mud Cleaning Systems</td>
</tr>
<tr>
<td>9:30 am – 9:45 am</td>
<td>Break</td>
</tr>
<tr>
<td>9:45 am – 11:45 am</td>
<td>Drilling the Grout and Casing hole, Jaime Meade</td>
</tr>
<tr>
<td></td>
<td>Operation of the Air &amp; Mud Rotary Drills</td>
</tr>
<tr>
<td>11:45 am – 1:00 pm</td>
<td>Lunch and time with vendors, shot gun drawing</td>
</tr>
<tr>
<td>1:00 pm – 2:00 pm</td>
<td>Set Casing and Clean up Mud Equipment, Jonathan Kamionka /Jim La Porte</td>
</tr>
<tr>
<td>2:00 pm – 2:15 pm</td>
<td>Break</td>
</tr>
<tr>
<td>2:15 pm – 4:15 pm</td>
<td>Down the Hole Hammer Drilling, Matthew Brown/Reggie Martin, Keystone</td>
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<td></td>
<td>Grouting of casing</td>
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</tbody>
</table>
Save the Date! April 27th is the date of our 6th annual golf tournament which will be held at the Wedgewood Golf Course. It will also be the 23rd year of Con-Ed in Wilson.

We have 4 hours of con-ed in the morning along with hot donuts and coffee. Master Trooper Scott Baker will be giving us several updates. Richard Spruill will be speaking on Hydrogeology and Well Hydraulics for Drilling Contractors. Jason Berry will cover several topics: The Entrepreneur’s Ladder/6 steps to Build a Brilliant Business/The 5 Ways to Increase Profit. After our CE classes, Parker’s Barbeque will be serving eastern NC BBQ before the tournament starts.

We have normally 12-16 4 man teams. If you don't have a team just sign up and we will put you together with other fellow drillers or manufacture reps. Put this date on your calendar and make plans to attend! We look forward to seeing everyone this spring! Registration form will be coming soon to the ncgwa website.

Thanks, John Boyette

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### Thank You to Our 2023 Trade Show Exhibitors

<table>
<thead>
<tr>
<th>Company</th>
<th>Phone</th>
<th>Company</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.Y. McDonald Mfg.</td>
<td>(919) 741-8855</td>
<td>Mitsubishi Materials USA</td>
<td>(980) 312-3159</td>
</tr>
<tr>
<td>ActionCOACH/Business Growth Partners</td>
<td>(336) 703-7546</td>
<td>NC WCCC</td>
<td>(919) 707-5882</td>
</tr>
<tr>
<td>Baroid IDP</td>
<td>(803) 360-9732</td>
<td>NC811</td>
<td>(336) 707-4528</td>
</tr>
<tr>
<td>Charger Water Filtration</td>
<td>(434) 205-3463</td>
<td>Pentair Flow Technologies</td>
<td>(800) 426-9446</td>
</tr>
<tr>
<td>Cotey Chemical Corp</td>
<td>(806) 790-4533</td>
<td>Preferred Pump</td>
<td>(336) 373-5900</td>
</tr>
<tr>
<td>DAB Pumps</td>
<td>(843) 729-6513</td>
<td>Preferred Sources</td>
<td>(704) 504-3111</td>
</tr>
<tr>
<td>Drillers Service</td>
<td>(828) 431-3263</td>
<td>Rakestraw-Bankers Insurance</td>
<td>(336) 280-0321</td>
</tr>
<tr>
<td>Drilling Equipment Sales</td>
<td>(828) 322-3056</td>
<td>Rock Drill Sales</td>
<td>(720) 891-7164</td>
</tr>
<tr>
<td>Eastern Driller Mfg Co.</td>
<td>(717) 684-3070</td>
<td>Roscoe Moss Company</td>
<td>(614) 395-8495</td>
</tr>
<tr>
<td>Eijkelkamp North America</td>
<td>(908) 892-4550</td>
<td>Rotary Drill Service</td>
<td>(828) 465-0132</td>
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<tr>
<td>Flint and Walling</td>
<td>(260) 615-0896</td>
<td>Simmons Manufacturing Co</td>
<td>(864) 216-1152</td>
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<tr>
<td>Franklin Electric</td>
<td>(321) 356-6752</td>
<td>South Atlantic Jubilee</td>
<td>(855) 987-7469</td>
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<tr>
<td>GEFCO</td>
<td>(580) 341-9702</td>
<td>Water Chemistry</td>
<td>(540) 343-3618</td>
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<tr>
<td>Grundfos</td>
<td>(913) 227-3400</td>
<td>Water Systems Council</td>
<td>(704) 658-8730</td>
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<tr>
<td>Hole Products</td>
<td>(320) 616-0210</td>
<td>Water-Right</td>
<td>(920) 460-6094</td>
</tr>
<tr>
<td>Keystone Drill Services</td>
<td>(814) 443-2670</td>
<td>Webtrol Pumps</td>
<td>(314) 631-9200</td>
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<tr>
<td>Manufacturers Assoc. of NC</td>
<td>(704) 562-7460</td>
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### Thank You to Our Trade Show Sponsors!

- **Drillers Service - Diamond Level**
- **Preferred Pump - Platinum Level**
- **Franklin Electric - Platinum Level**
The NCGWA would like to send a special thank you to Kristie Waters with Venable Brothers Well Construction in Walnut Cove for helping with the auction held at the annual trade show. Kristie has helped for many years with the clerking at the auction. We don’t know what we would do without her. Thank you Kristie!!
NGWA Fly In - March 22-23, 2023

The Fly-In will focus on two days of advocacy surrounding the industry’s most pressing policy issues. Attendees will meet with their representatives in Washington, D.C., and be given the opportunity to discuss priorities such as expanding grants for private water well owners, PFAS, managed aquifer recharge, workforce development, and new regulations for CDLs and CMVs. The Fly-In will also include a full day of policy presentations and networking opportunities.

The 2023 Fly-In will include:

- Guest speakers from Capitol Hill, the administration, and partner organizations
- Great networking opportunities and social events
- A legislative briefing to prepare attendees for meetings on Capitol Hill
- A day of Capitol Hill meetings arranged by NGWA staff
- And much more to be announced!

A full schedule of events is available but registration ends February 27. So don’t wait and register. Just go to https://www.ngwa.org/get-involved/advocacy/fly-in for registration information.

Please contact Ben Frech at bfrech@ngwa.org with any questions you may have and we will see you in Washington, D.C.!

Road Salt Found to Impact Groundwater Throughout Year

To reduce hazardous road conditions caused by snow and ice, many counties, municipalities, homeowners, and others use deicers. Salt is the most common option to treat roads.

But how might road salt impact groundwater? Does it have impacts only in winter, or does it have lasting impacts year-round?

These are key questions that Rachel McQuiggan, a researcher at the Delaware Geological Survey, and colleagues wanted to answer. In their research, they monitored stormwater and groundwater at an infiltration basin.

“Most stormwater management practices are designed to protect surface waters,” McQuiggan said. “Infiltration basins, and even some types of green infrastructure, are designed with the idea that stormwater benefits from a natural ‘filtering’ of contaminants as it infiltrates through soil, and contaminants dilute as that recharge mixes with existing groundwater.”

She adds that these are used to prevent contaminants like salt from being discharged straight into surface water. But in states like Delaware, groundwater contributes up to 80 percent of the water in rivers and streams. This means that salt will eventually reach rivers and streams, just on a longer timescale.

The researchers monitored the infiltration basin from mid-May 2019 to mid-February 2022 to evaluate the impact road salt had on groundwater quality. One aspect of their findings showed that geological complexity, such as differences in subsurface soil properties, influenced how salty stormwater moved through groundwater.

The researchers explained it is important to consider things like placement, depth, and frequency of monitoring groundwater to get the full picture.

The team also found that groundwater is impacted by road salt throughout the year, not just during winter. This is because the salt is retained in the soil in the infiltration basin. Salt is made of sodium and chlorine atoms, and chloride more easily moves in water. However, sodium more easily latches onto soil particles.

Taken from the Water Well Journal. To read the complete article please visit https://waterwelljournal.com/road-salt-found-to-impact-groundwater-throughout-year/
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**North Carolina Ground Water Association - Membership Application**

**Active Members: Contractors Division**
*Any person engaged in the business of well drilling. *Any person engaged in the business of monitoring well drilling. *Any person engaged in the business of installing, maintaining, and repairing pumps and who is authorized to execute contracts in connection therewith but does not engage in the business of water well drilling.

**Active Members: Non-Contractors Division**
- Manufacturing: Any person engaged in manufacturing equipment, materials, or supplies in the ground water industry.
- Water Equipment Wholesalers and Suppliers: Any person which does no contracting for the drilling of water wells and/or installation and servicing of water pumps, and which:
  * is an established wholesaler maintaining warehouse and stock of pumps, pump parts and other water handling equipment which are sold regularly to dealers and/or contractors for resale; or
  * is engaged in the business of supplying equipment, rigs or tools or rendering specialized services to the water well industry from an established place of business in its trading area.
- Technical: Any person engaged in the supervision, regulation, evaluation, development or investigation of underground water supply installations or related to technology or any individual in an accredited university, college or preparatory school, public or private, studying or teaching subject matter embracing the water well industry.

**Associate Members:** Any eligible person interested in the work of the Association who is not eligible to become an active member may become an Associate Member.

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**Active Members-Contractors, $75 per person, per year**

**Active Members-Non-Contractors, $75 per person, per year**

**Associate Members $75 per person, per year**

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1. Name ________________________________ Commission Issued Certification #   _________
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3. Street/P.O. Box _______________________________________ Fax ___________________
4. Town/State/ZIP/County_________________________________________________________
5. Email ______________________________________

Please check what type of membership and fill out your information and send it, along with your payment, to NCGWA, P.O. Box 41368, Raleigh, NC  27629. Make checks payable to NCGWA. If you have any questions, please call 919-876-0687.