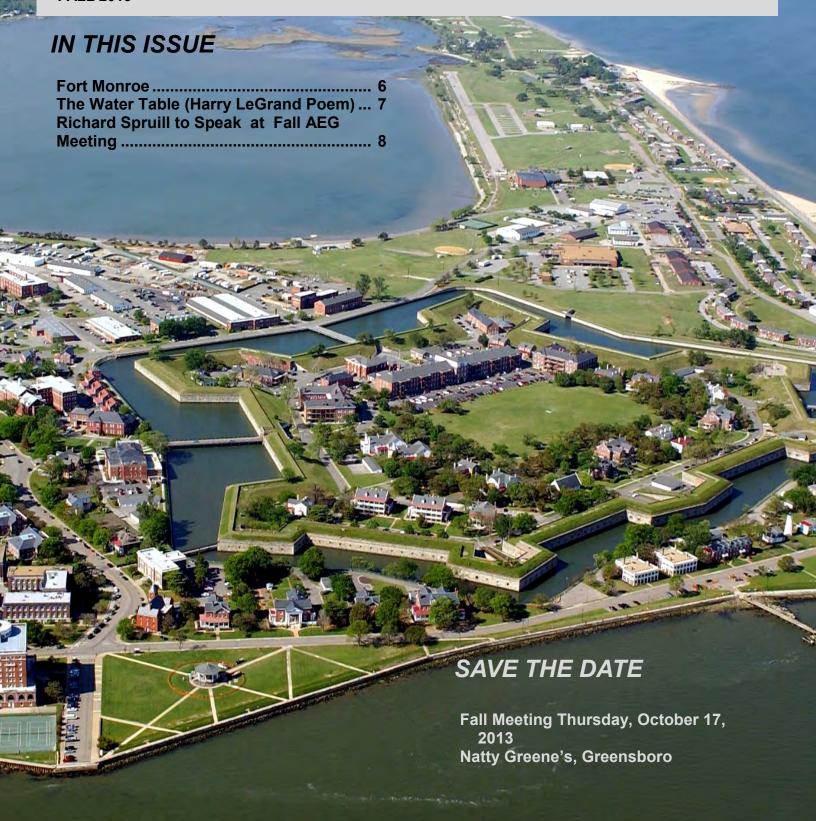


GEONEWS

Newsletter of the Association of Environmental & Engineering Geologists, Carolinas Section 2009, 2011, and 2013 AEG Section of the Year

FALL 2013



GEONEWS FALL 2013 Issue Date: October 21, 2013 TABLE OF CONTENTS

Articles and Reports	
Fort Monroe	
Richard Spruill to Speak at Fall Dinner Mee	eting .8
AEG Carolinas Section Board Meeting	
Minutes	10
Columns and Regular Features	
Message from the Chair by Alex Rutledge	3
GeoRamblings by Dr. Charles Welby	4
Treasurer's Report by Dr. Briget Doyle	4
Harry LeGrand Poetry Feature	7
Announcements	14
Job Opportunities (go to www.AEGCarolina	as.org
for the latest Job Opportunities)	
Education Section	12
Education News from the North Carolina	
Geological Survey	12
Upcoming Events	
Calendar of Events	16
Carolinas Section Stuff	
Deadlines for Submittals	2
Section Officers	
AEG Membership Application (flyer)	
Sponsor Application (flyer)	
Thanks to our Sponsors!	
,	

GeoNews is a publication of the Carolinas Section of AEG. There are four issues per year, with deadlines and issue publication dates listed below. We publish news of the profession, announcements, student member news, technical articles, and job openings.

Deadlines for submittal to AEG Carolinas GeoNews

(can be flexible depending on events)

Spring – deadline March 1, issue date March 21

Summer – deadline June 1, issue date June 21

Fall – deadline September 1, issue date Sept 21

Winter – deadline December 1, issue date December 21

Deadlines for submittal for the National AEG News:

March issue – January 15 June issue – April 15 September issue – July 15 December issue – October 15

AEG Carolinas SectionCurrent Officers and Contacts
Chair Alex Rutledge, P.G., P.E.,
<u>frutledge@schnabel-eng.com</u>
Vice Chair Madeline German.,
<u>madeline@smithgardnerinc.com</u>
TreasurerBriget Doyle, Ph.D., bdoyle@uscupstate.edu
Secretary Susan Kelly, susan.kelly@amec.com
Membership Chair Jake Sarna,
jsarna@espassociates.com
Student Liaison Rick Kolb, rick.kolb1@gmail.com
Social Committee Chair Adam Phillips,
aphillips@prismlabs.com
Past Section ChairPaul Weaver, P.E. ,
pweaver@espassociates.com
Advisor Jennifer Bauer, jennbbauer@gmail.com
Advisor Rick Kolb, rick.kolb1@gmail.com
AdvisorGary Rogers, grogers@schnabel-eng.com
Advisordary Rogers, grogerseschilaber engleom
AEG Carolinas Section Websitewww.aegcarolinas.org
WebmastersTami Idol, tami.idol@ncmail.net
Brad Isles, bcisles@gmail.com
Didu isles, busies egilidii.cuiii
AEC Notional Website
AEG National Website www.aegweb.org
GeoNews Editor

Jennifer B. Thomas, P.G. (2012-present)
(704) 491-7724jenthomas08@live.com
Past EditorJane Gill-Shaler, P.G. (2003-2012)
(336) 883-0170; cell (336) 687-6144
JaneHGillShaler@gmail.com
janehgill@stanfordalumni.org

Cover: (Wikipedia) Fort Monroe

Disclaimer: © 2013 Association of Environmental & Engineering Geologists - All Rights Reserved. Views expressed in this publication are not necessarily those officially representing the Association of Environmental & Engineering Geologists except where expressly stated.

MESSAGE FROM THE CHAIR

By Alex Rutledge, PG, PE Chair—AEG Carolinas Section

The Carolinas Section has had another very successful year, largely due to the hard work of our departing Chair, Paul Weaver. During the four years that Paul was Chair we have maintained active member and sponsor participation, provided teacher awards, sponsored short courses and various geoscience national meetings, and were awarded the annual Section of the Year award on two occasions! Paul plans to continue his efforts to support our section by spearheading the effort to bring the AEG National meeting to Asheville in 2019. Please join me in thanking Paul and those who worked hard to support him as Chair of our section during the last four years!

Approximately 20 people attended the Durham Bulls vs. Charlotte Knights social event on August 27 at Tobacco Road Sports Café in Durham. There was no cost to attend and sponsors paid for the beverages. We plan to organize a similar social event in the spring.

By the publication date of this article, our fall section meeting will have been held at Yao's in Asheville on September 20, which was a joint meeting with ASCE. Our next section meeting is planned for October in Greensboro at Natty Greene's Pub and Brewing Co.

The Carolinas Section will be giving away earth science tool kits to teachers attending the North Carolina Science Teachers Association (NCSTA) meeting which is scheduled for November 7-9 in Charlotte. NCSTA is teaming up with the National Science Teachers Association to cohost the event, which replaces the annual state conference this year. This is an annual event for us, and the teachers receiving the tool kits greatly appreciate our support. If you would like to volunteer to help us give out the tool kits, and/or if you would like to donate money to help us pay for the tool kits, your assistance will be greatly appreciated.

Rick Kolb has agreed to take over the role of Sponsorship Chair for the section. Jane Gill-Shaler has served in this position for many years, and is largely responsible for building and maintaining an excellent and faithful group of sponsors for our section. Thank you Jane for all you have accomplished as Sponsorship Chair, and thank you Rick for taking over such an important position for our section!

The election results are in for your Section Board of Directors: Alex Rutledge has been elected Chair, Madeline German has been elected to Vice Chair, Briget Doyle to Treasurer, and Susan Kelly to Secretary. The terms of office for the Board of Directors runs from the AEG Annual Meeting held in September to the next annual meeting. Paul Weaver will be moving into the role of Past Chair, and Rick Kolb has agreed to join Jennifer Bauer and Gary Rogers as section Advisor. As you can see, our section leadership is as strong as ever, with many experienced and dedicated individuals leading the way.

During my two-year term as Chair of your section, I plan to reinvigorate our section field trip activities, make improvements to our section website, including the addition of employment opportunity postings, and, of course, continue to support and lead our current section activities that have made us so successful in recent years.

As always, I encourage you to email me or other members of the Board with your suggestions and/or concerns related to our section. We are here to serve the needs of our membership, so your feedback is vital and welcome.

Sincerely,

Alex Rutledge, P.G., P.E. frutledge@schnabel-eng.com AEG Carolinas Section Chair



John Haselow, PhD, PE 200 Quade Drive Cary, NC 27513 (919) 678-0140 (P) (919) 678-0150 (F) jhaselow@redox-tech.com



AEG CAROLINAS SECTION 2Q TREASURER'S REPORT

By Dr. Briget Doyle, Section Treasurer

AEG Carolinas Section Treasurer's Quarterly Report March 31, 2013 to June 30, 2013



\$4,768.54 \$16,673.20 \$21,441.74

INCOME

Dinner Meetings

\$960.00 Dave & Busters, Concord, NC

Sponsorships

Eleven Sponsors \$3,350.00

Interest

\$2.08 Savings account SUBTOTAL - INCOME \$4,312.08

EXPENSES

Dinner Meetings

Raleigh \$5.33

Jahns Lecturer

Dinner and Travel Expenses \$635.57 Visiting Professional Visits

UNCC, Concord, Furman, UNCCH, NCState \$515.79

Annual Meeting Sponsorship

Field Trip and Technical Session \$1,000.00

AEG Foundation Donation

\$1,000.00 Johnston Operating Fund

Section Chair Travel

Mid-Year BOD and Annual Meeting BOD \$1,597.24 SUBTOTAL - EXPENSES \$4,753.93

BALANCE As Of June 30, 2013

Checking Account \$4,324.61 Savings Account \$16,675.28

TOTAL

\$20,999.89



Woman-Owned Small Business

Brad Elkins, M.S. Technical Sales & Support

1101 Nowell Road Raleigh, NC 27607

(919) 873-2204 ext. 173 Fax: (919) 873-1074 belkins@eosremediation.com www.eosremediation.com

GEORAMBLINGS: Some Thoughts and **Observations Over a Cup of** Coffee

By Dr. Charles W. Welby, Former AEG Carolinas Section Chair

At the start I had planned to provide some thoughts about how our everyday lives are influenced by things geological, the thoughts being generated as I had a cup of Burundi (small country in East Africa, one border being along the north end of Lake Tanganyika.) coffee. I was sitting in a coffee shop in Raleigh, one of the multitudinous coffee shops belonging to a national chain and wondering about the *Terrior* of the various coffees found on the menu.

My thoughts turned to the geological environment in which the coffee plants were grown, especially the soils and the bedrocks that provided the material for the soils. So turning to the Internet, I searched for information about coffee from various regions and the geologic settings in which they are found.

Extensive information about the soils exists out in the detailed literature, but the quick survey I undertook provided mostly general descriptions of the geologic settings, much on the economic importance of coffee production for various countries and regions, and "expert" comments on the particular tastes of the coffee. Comparisons of the coffees are prominent in the evaluations of coffee. Historically, coffee shops have played an important role in history, arts, and literature. How many of you, the readers, have not gone to a coffee shop for a meeting about some important company, professional society, or personal matter? Or gone to just relax a bit over some "Java." There is one restaurant chain which has several restaurants in the Raleigh area together with others across the country that has a painting depicting people having coffee and enjoying a meal, perhaps. One pair of customers, one with a pipe in his mouth, both with coffee cups in front and playing cards in hand, are concentrating on the one player's next move.



Monitoring & Recovery Well Specialists

JASON MANTAK

176 Commerce Boulevard Statesville, NC 28625 jmantak@gexnc.com

Tel: 704-872-7686 Fax: 704-872-0248 1-800-752-8853 (Continued from page 4)

One of the players has a card "hidden" in the ribbon around the crown of his hat. An interesting picture it is.

The following paragraphs address several countries and regions where coffee is a major export and as such has an importance influence on the economy of the individual country.

Coffee has recently become available from Burundi. Coffee as an export provides much of the income to this African Country. A rich soil, high elevation, and plenty of water forms the Terrior for Burundi coffee.

Tanzania is a major exporter of coffee with coffee seemingly being its largest export crop. The main growing regions are of volcanic origin, and especially important are regions on the north side of Kilimanjaro. Seems my fading memory does remind me of a movie about Kilimanjaro, but to my knowledge there was not much discussion of coffee in it. Another important growing area with volcanic connections is found around Mbeyea in western Tanzania between Lake Rukwan and Lake Malawi. Elevations here are in the 6000 ft. range.

Closer to "home" coffee grown in the Chiriqui Province of Panama with its volcanic scenery in the Highlands area and favorable climate is attractive for coffee tours and export of coffee. Another area of seeming importance for coffee production in Panama is around Baru Volcano with its proper Terrior of soils and climate. One comment about the coffee from this part of Panama is that it has a "deep richer flavor."

Coffee production began in Costa Rica in 1779 at locations in the Meseta Central, a location with ideal soil of volcanic origin as well as a favorable climate.

Coffee production is a world-wide agricultural endeavor. Time and space have put a bit of a crimp on additional discussion of other geographic locations for coffee as a crop. Of course, we often think of coffee being an important part of the Arabian culture and scene, and important coffees come from the Indonesian area.

Coffee production is not without environmental cost. Erosion of the coffee fields is of immediate and pressing concern. Streams and rivers may be polluted by the pulp and gel which is associated with the preparation of the coffee beans for roasting. As with organic matter from other sources decaying in rivers, it depletes the oxygen in the water.

Perhaps the lions in the Serengeti area of Tanzania which I happened to encounter one time could have found a good cup of Tanzanian coffee from the Mbyea area or Arusha area to help with their digestion after they had feasted on a Cape Buffalo meal. Some were digesting

their meal while lying on their backs with their feet vertically upward or on their sides with one hind leg canted at a 45 degree angle up into the air.

Within the U.S. one can always contemplate a pleasurable experience of a "lazy afternoon" with a cup of coffee at the *Café du Monde* in the French Quarter of New Orleans, or perhaps a *demi-tasse* of chicory-enhanced coffee after a dinner in New Orleans or even here in North Carolina.

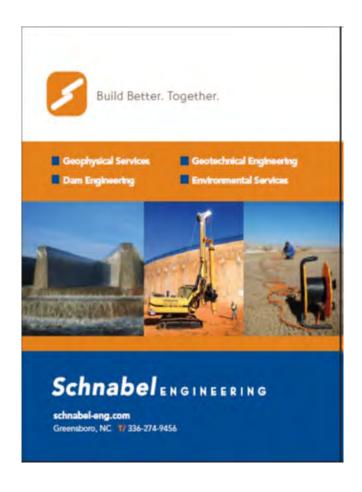
Not much geology here *per se*, but the type of coffee one enjoys, if one enjoys coffee, is strongly influenced by geologic events and the rocks left behind and the soils developing on the rocks.

So Here's to Cupping (tasting and comparing different coffees in a testing set up.)

QED

Charles W. Welby

Dr. Charles W. Welby is a former Section Chair for AEG Carolinas and a regular contributor to this newsletter. He may be reached at cww_ral@hotmail.com.



FORT MONROE: Even Historical Properties Need Environmental Study

Reprinted from Pyramid Environmental & Engineering Environmental Update Monthly

One of the nice things about the environmental consulting business is some of the interesting places we get to visit and work. Last year, we were contracted by the National Park Service to perform a Site Environmental Evaluation (sort of a BIG Phase I Environmental Site Assessment) at Fort Monroe, the largest stone built fort in the United States, completed in 1834. The fort has its own moat, and encompasses over 300 acres, including the fort and other buildings, parade grounds, and a beach club leased to a commercial vendor.

The fort was used as an active U.S. army base into the early 2000s, and as part of the BRAC (Defense Base Realignment Commission) program, is now being put into the hands of the National Park Service (NPS) as a national monument. Pyramid did a thorough overview of all environmental work performed at the fort, then performed additional research and testing, to give the NPS and the U.S. Army an idea of any outstanding issues or unknowns.

It was not all work though, as we had a chance to see the cell where Jefferson Davis was held as a prisoner after the Civil War, as well as the guest sign-in list of Building #1, constructed in 1819 and used for lodging visitors, including Robert E. Lee, who assisted in the design and construction of the fort, and Abraham Lincoln. During the Civil War, Fort Monroe became a destination for escaped slaves, as the commander of the fort refused to return them to Virginia landowners. It is also the first location within the Confederate States in which the Emancipation Proclamation was read.





800-779-8854 / ContactUs@aedi.biz NC, SC and VA Licensed and Certified WWW.AEDI.BIZ

For All Your Drilling Needs

Environmental - Geotechnical Auger, Mud Rotary, Air Rotary, Geoprobe

Certified NC DOT "DBE" Women Owned Business and HUB Corporation



THE WATER TABLE

By Harry LeGrand

Every landowner subconsciously has one Talking about it is vague when said and done. We may not see the water table Yet, its importance is no fable And to predict its character is a bit of fun.

Lying a short distance below the ground Beneath the hills it is shaped as a mound Infiltrating rainfall makes contact. The water table can play and act, Changing patterns with little or no sound.

The water table mirrors the slope of the land Almost, and that statement is powerful and grand The topographic map says we can see The water table and what it can be Good aquifer information is already at hand.

The water table is an environmental pulse to use It's a part of the water cycle on which to cruise Always moving up or down Here and there under ground

It is the pivotal item to make the news.

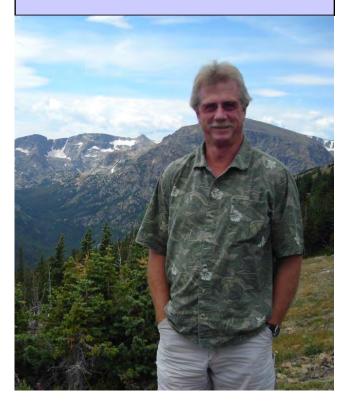
"Save our water table," an erroneous expression, Yet, on a bumper sticker as a good impression. People want to know its behavior Wishing for it to be a water savior Will it be a topic in a global warming session?





RICHARD SPRUILL TO SPEAK AT FALL DINNER MEETING

By Rick Kolb



Richard Spruill's Resume

Education – B.S. Geology (East Carolina University), M.S. Geology (East Carolina University), and Ph.D. in Geology (UNC-Chapel Hill - 1980)

Employment: Associate Professor of Geology/Hydrology – East Carolina University – Greenville, NC

Dr. Spruill is the three-term Chairman of the North Carolina Board for Licensing of Geologists, and the past President of the National Association of State Boards of Geology. He is a hydrogeologist specializing in the evaluation and development of the groundwater resources of the Atlantic Coastal Plain. He has worked closely with municipalities, industries (including the recreation industry), and the regulatory community to provide scientific insight during the planning and development of large-scale groundwater withdrawal projects. His areas of specific expertise include evaluation of the safe yield of aquifers and aquifer systems through detailed aquifer testing, wellhead protection planning, and the evaluation of the position and movement of the salt-water/fresh-water interface in coastal environments. He is particularly interested in groundwater protection regulations, such as the Capacity Use Area program administered by the Division of Water Resources, and he has played a significant role in bringing

to the forefront the major problems facing North Carolina groundwater users in the central Coastal Plain and in our coastal environments. His current research involves evaluation of the safe yield of the Cretaceous Aquifer System of the Central Coastal Plain of North Carolina. Along with several colleagues at ECU, he has developed an interest in flooding and estimation of flood recurrence intervals for typical Coastal Plain streams. He teaches courses in undergraduate general geology and petrology, and graduate courses in hydrogeology and computer applications in hydrogeology. He has also taught in the undergraduate summer geology field program in the four-corners region of the western United States for the last 19 years! Dr. Spruill is the Founding Director of the Coastal Water Resources Center at East Carolina University. Dr. Spruill is a co-owner of Groundwater Management Associates, Inc., a North Carolina based consulting hydrological firm.

FALL SECTION MEETING DETAILS:

Place: Natty Greene's Pub & Brewing

Company, 345 South Elm Street, Greensboro, North Carolina 27401

Date: Thursday, October 17, 2013

Time: 5:30 socializing begins/ cash bar;

7:00 dinner; 8:00 talk

Program: "ASBOG: Current Activities and Future Plans"

Cost: AEG members \$25, non-members \$30,

students FREE with college ID; Teachers

are \$10.

Reservations: Please make reservations with

Paul Weaver

Email: pweaver@espassociates.com



Judd Mahan, PG Project Manager

1560 Pisgah Drive Canton, North Carolina 28716 www.mountainenvironmental.com jmahan@mountainenvironmental.com 828-648-5556 toll free: 800-261-0031 fax: 828-648-1566 cell: 828-458-2240

Directions to Natty Greene's

*From the East or West: *

Take I-40 to Exit 218B, Freeman Mill Road North (also labeled as Coliseum Area). Go about 2-1/2 miles on Freeman Mill Road (the name will change to Edgeworth as you travel north) to Washington St. Turn right on Washington and go 5 blocks to S. Elm St. Turn right onto S. Elm, go about ½ block and park in the metered public parking lot on the right unless you are lucky enough to find a parking spot on Elm Street. The meeting will be in a private room (The Loft) on the third floor of Natty Greene's

*From the South: *

Take I-85 North and exit onto Business I-85 (about mile marker 120), then take Exit 122 (US 220, Future I-74). This will turn into Freeman Mill Road North, then to Edgeworth as you travel north. Go about 4 miles to Washington St. Turn right on Washington and follow the directions above.

*To return to the interstate: *

Go back the way you came on Elm and Washington St, passing over S. Edgeworth to S. Spring St. Turn left on S. Spring St. which will merge back into Freeman Mill Road. Freeman Mill Road will take you back to I-40.



ROBERT "BUTCH" STEVENS VICE PRESIDENT

PO BOX 1029, 501 MILLSTONE DRIVE, HILLSBOROUGH, NC 27278 (919) 644-2814 (800) 627-7920 FAX (919) 644-2817 bstevens@pwinc.com www.pwinc.com EAST SYRACUSE, NEW YORK (800) 782-7260 ENVIRONMENTAL AND GEOTECHNICAL DRILLING SERVICES



Douglas A. Canavello, P.G. President

503 Industrial Ave. (27406) P.O. Box 16265 Greensboro, NC 27416-0265

(336) 335-3174 ext. 121 (866) 545-9507 Fax (336) 691-0648 doug@pyramidenvironmental.com www.pyramidenvironmental.com





Environmental Conservation Laboratories

Cary, NC Lab:

ENCOCRY@encolabs.com Tel: 919-677-1669 Fax: 919-677-9846

Jacksonville, FL Lab:

ENCOJAX@encolabs.com Tel: 904-296-3007 Fax: 904-296-6210

Corporate Office:

ENCOORL@encolabs.com

407-826-5314

407-850-6945

Tel:

Fax:

10775 Central Port Drive, Orlando, FL 32824

AEG CAROLINAS SECTION BOARD MEETING MINUTES

By Madeline German

Roll Call 3:30PM – Paul Weaver (Chair), Alex Rutledge (Vice Chair), Briget Doyle (Treasurer), Madeline German (Secretary), Rick Kolb (Past Chair), Jenn Bauer (Advisor) and Susan Kelly (upcoming Secretary)

All 5 members of the Carolinas Section Board of Directors were present – Quorum obtained

Section Treasure's Report - Briget Doyle

Current Accounting: \$4,143.28 (Checking) + \$16,675.99 (savings) \$20, 819.27 (total)

We are looking forward to another great year with our fantastic sponsors.

A budget has yet to be established. Briget is going to work on this before the next board meeting. Paul will remain with the ability to sign and Briget will make sure both Paul and Alex have checks.

Section meetings 2013

The Asheville Meeting will be held at Yao's in Asheville on September 20th. From the board, Paul, Alex, Susan and Maddie are planning on attending. Paul will bring AEG's sound system. Rick will make up the sponsor poster and Maddie will bring it with her. ASCE announced the event at their last meeting. So far there have been 12 affirmative RSVPs.

Paul will organize the Greensboro meeting at Natty Greens. He has not finalized a speaker yet.

Social Committee

The Bulls game social event was successful. Approximately, 20 people met for the game and beverages at Tobacco Road in Durham. There was no cost to go and sponsors paid for the beverages. It is likely we will try to have another event like this.



Unfortunately, the field trip to the mountains has been postponed. Lack of a field trip coordinator has continued to create difficulties planning these events. Anyone interested in working with in this area can contact any board member.

We did pretty well this year with getting regular members to renew. We need to start a new push late this fall. All of us need to continue to talk up AEG to colleagues and business contacts to try and increase our member numbers.

We are looking forward to another successful year with the visiting professionals program. Most schools will be visited in the spring. Clemson, UNCW, ECU, Furman and UNC-Charlotte are all proposed for the 2014 year. Anyone interested in being a visiting professional should contact Rick Kolb.

Sponsors

Rick is managing the sponsorship duties for the Carolina's section. He plans to send renewal notices out about October 1, 2013. We will continue to provide bonus sponsorship months for new sponsors who sign up for 2014 in the last few months of 2013.

We would also like to announce a new sponsor: Foundation Repair Services.

Sponsors levels will be reviewed by Alex to determine if the current structure is still adequate for the growing sponsors list.

Newsletters are typically published the 21st of months 3, 6, 9 & 12. Articles to be included in the next newsletter should be submitted to Jennifer Thomas by the1st of the publishing month.

Website

We are still trying to "nail down" details of posting resumes and job openings on the Carolina's section website. Alex will discuss issues with Brad to determine how to filter, update, etc.

Alex will also start monitoring the website to make sure it stays current.

2019 AEG National Meeting

Paul has submitted the formal proposal, which was reviewed by Alex and Rick. The National Board tentatively approved Asheville for the 2019 national meeting at their May mid-year board meeting.

Planning will commence early 2014

Venue planned for the Renaissance. Paul will follow up with them to check potential renovation dates.

Credit Card Hardware/software has been purchased by Briget (Intuit Go Reader). She is going to test it out

(Continued on page 11)

Continued from page 10)

and bring to the Asheville meeting. If it works well, she will order a second device.

Seattle – Annual meeting

The Carolina's section is sponsoring 2 field trips and a Technical session.

Alex, Paul, Jenn, Maddie, and Briget will be attending the meeting.

Maddie motioned and Briget seconded for the company of the chair to receive an in-kind Gold level sponsorship as a thank you for the time committed to AEG. There were zero dissenting votes and Alex abstained from the vote.

Vapor Intrusion Conference

Conference date pushed back to tentatively January 23 & 24, 2014, due to the EPA not finalizing the regulations. We don't want to have a conference when significant changes could still be applied.

The committee has been meeting monthly.

Potential venue is the Embassy Suites in Cary.

There is a list of tentative speakers and topics; the committee is in the process of firming this list.

Planned 18 half-hour talks and one panel discussion.

Still looking into options for CLE's for attorneys.

Target is 200-400 attendees

The REDOX Conference will be held at the Renaissance in North Hills March 4 &5, 2014. AEG will have a booth and help with advertising.

Carolina Section Elections

Ballots were sent out in July. We have had 27 responses. September 1, 2013 was the deadline.

Section officers will be:

Chair: Alex Vice-Chair: Maddie

Treasurer: Briget (can't move up due to being on the

Foundation Board)

Secretary: Susan

Rick Kolb will become an Advisor along with Jenn Bauer and Gary Rogers

Paul will move to the Former Chair position

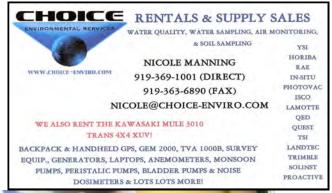
Briget has been asked to serve another term on the Foundation Board; therefore she announced this will be her last year on the Carolina's Section Board.

One face-to-face board meeting every year will be held in the fall or winter. The Schnabel office is the proposed location

We thank Paul for his tenure as the Carolina's Chair over the past four years and are excited to welcome Alex as the new chair.

The next section board meeting is proposed to be the face -to-face meeting at the Schnabel office. The call ended at 4:30 PM.

Submitted by Madeline German, Secretary, AEG Carolinas Section





SOIL

WATER

AIR



FULL SERVICE ENIVRONMENTAL LABORATORY • QUALITY DATA & SUPERIOR SERVICE
ON-LINE DATA MANAGEMENT—LOCAL REPRESENTATION• SMALL WOMEN-OWNED BUSINESS

EDUCATION SECTION

EDUCATION NEWS FROM THE NORTH CAROLINA GEOLOGICAL SURVEY

By Randy Bechtel, North Carolina Geological Survey

<u>2013 NSTA/NCSTA Area Conference – Charlotte,</u> N.C. - November 7-9, 2013

Mark your calendars for the National Science Teachers Association (NSTA) Area Conference in Charlotte, NC, "Racing Toward Science Excellence." The North Carolina Science Teachers Association (NCSTA) is teaming up with NSTA to co-host the event, which replaces the annual state conference this year.

Meeting registration is open. See the NCSTA website for IMPORTANT registration information www.ncsta.org/ Early bird rates end Sept. 20, 2013. Advance rates are available Sept. 21, 2013 - Oct. 11, 2013. Registration is also available onsite. Reduced rates are available to both NCSTA and NSTA members. Don't forget to join or renew your membership with NCSTA.

One can browse a schedule of events www.nsta.org/conferences/2013cha/

Rock Giveaway Event

The Society for Mining, Metallurgy & Exploration (SME), the N.C. Geological Survey and others are teaming up to provide rock and mineral samples from the southeast United States. This event is separate from the biannual NCSTA

Rock Giveaway organized by the N.C. Aggregates Association (NCAA) which will be held in 2014 at NCSTA.

SME is heading up this event through their newly formed Minerals Education Coalition (MEC) www.mineralseducationcoalition.org. The NCAA is graciously providing support even though it is their "off" year for this event – Thank you.

We will need plenty of assistance so please contact Rachel Grimes <u>grimes@smenet.org</u> or 303-948-4247, if you are able to help in some capacity or can pass along names of others who might be able to assist.

<u>Carolina Geological Society Field Trip</u> - November 8 -10, 2013

One Arc, Two Arcs, Old Arc, New Arc: A 21st Century Perspective on the Geology of the Carolina Terrane in Central North Carolina. For more information please visit their website carolinageologicalsociety.org/CGS/2013 Meeting.html

Teachers – this field trip will start in Salisbury, NC the weekend that NSTA/NCSTA ends AND it is literally just up the road from Charlotte so check it out if you can.

EarthScope Meeting - Raleigh, NC, in May 2013

The EarthScope National Office (ESNO) has posted the videos from the National Meeting on the EarthScope YouTube channel. You can find them at www.youtube.com/user/EarthScopeInfo. If you do not see a talk





EDUCATION SECTION

(Continued from page 12)

online, that means the ESNO was not given permission to publish the talk.

Additionally, you can view or download pdf files of the presentations on the EarthScope National Meeting website by clicking on the title of the talk on the agenda: www.iris.edu/hq/earthscope meeting/page/agenda.

K-12 Education

WRAL TV reported on Jul 21, 2013. House, Senate reach agreement on two-year state budget www.wral.com/house-senate-reachagreement-on-balanced-state-budget/12686564/ The North Carolina budget was passed and shortly thereafter was signed by the Governor. The budget effects K-12 education including ending pay increases for teachers earning Master's degrees and teacher tenure.

WRAL TV also reported on the adoption of the Common Core in their news report: Common Core offers promise, raises questions for education www.wral.com/common-core-offers-promise-raises-questions-for-education/12730840/

<u>Federal Education Programs in North Carolina - Race to the Top</u>

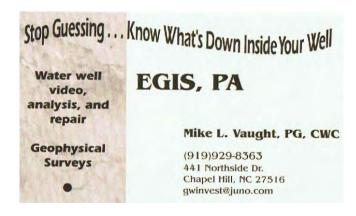
Guilford County Students To Get Tablets - This fall about 13,000 middle school students in the Guilford County Schools district will receive tablets. It's part of a \$30 million Race to the Top grant that Guilford won last year. Administrators and teachers will receive training from a company called Amplify in the coming months. Read more... wunc.org/post/guilford-county-students-get-tablets

To get Race To The Top weekly updates you can send your email address(es) to Michael. Yarbrough@dpi.nc.gov Communications Specialist, Race to the Top, Communication and Information Services, NC Department of Public Instruction.

North Carolina Office of Environmental Education by Marty Wiggins (NC DENR)

The North Carolina Environmental Education Certification Program, which is administered by the N.C. Office of Environmental Education and Public Affairs, continues to grow. Many classroom teachers find this program beneficial as it connects them to new resources and with nonformal educators and environmental professionals. The program increases environmental literacy, provides practice in environmental education teaching methods and fosters community leadership. It is a self-paced, experiential program and includes six different components: Instructional Workshops, Outdoor Environmental Education Experiences, Knowledge of Environmental Education Resources and Facilities, Teaching, a community Partnership Project and Continuing Education in Environ-Education. mental Visit www.eenorthcarolina.org for more information.

The office website is also a valuable resource for geosciences educators, and includes an educational event calendar, grants, an online environmental education database and other resources for educators and the public. Many of the resources are useful to users outside of North Carolina, and the site also partners with other southeastern states. Check out other state environmental education sites at http://southeastee.org/



ANNOUNCEMENTS

Carolinas Section Named 2013 Section of the Year

The Carolinas Section, along with the Oregon Section, has once again been named Section of the Year!

Upcoming North Carolina Association of Environmental Professionals (NCAEP) Event

Charlotte Dinner Meeting—2013 Legislative Updates, Dilworth Grille, 911 E. Morehead Street, Charlotte, NC, October 9, 2013, 5:30 PM

Jennifer Mundt, Senior Legislative Analyst with the Research Division of the North Carolina General Assembly, and Erin Wynia, Legislative and Regulatory Issues Manager with the North Carolina League of Municipalities, will brief us on enacted environmental legislation and forecast issues that may come before the 2014 General Assembly when it convenes in May.

News from KB Labs

KB Labs is now providing field services for the QROS "QED" hydrocarbon analyzer! This highly portable fluorescence spectrometer has the unique ability to rapidly analyze soils and waters onsite for petroleum components while simultaneously generating a fingerprint "snapshot" of each individual sample. Approved and in use for North Carolina DOT projects, the QED is credited with cost savings of over 50% compared to standard laboratory analysis. Using the QED for onsite information allows you to send far fewer samples to the lab for confirmatory analysis. With detection limits much lower than the UVOST-LIF probes plus the ability to provide quantified results for GRO, DRO, TPH and total PAH, the QED is extremely beneficial for assessments and excavations involving petroleum components. Under an agreement with QROS, KB Labs is the exclusive provider of field services for QROS. We can also help train your personnel to use the QED! A qualified and experienced operator can analyze up to 50 samples in a standard 10 hour day. Results are generated in an excel table containing both the analytical values and the fingerprint. Contact Kelly Bergdoll at KB Labs (352-367-0073) for further information.

National Groundwater Association (NGWA)

The 2013 NGWA will have its Groundwater Expo and Annual Meeting in Nashville, Tennessee December 3-6, 2013.

JennTec LLC Celebrates One Year in Business

One year ago your editor went into business for herself under the name JennTec LLC. Despite the not-so-wonderful state of the economy a year ago, I turned a profit in my first year. I've stayed busy performing Phase I Environmental Site Assessments and writing monitoring reports along with taking an occasional sample. My clients are national due diligence and assessment firms and environmental consultants who subcontract work to expand their work capacity or geographic reach. In the coming year I hope to expand my business to underground storage tank work/Phase II Assessments and asbestos inspections.



YOUR LAB OF CHOICE

- C Customer Focused
- H Honest
- O Open
- I Innovative
- C Committed to Excellence
- **E Environmentally Responsible**

Find out more about us at:

www.esclabsciences.com

or contact: Barry C. Kroll

Sales Manager – East Region

bkroll@esclabsciences.com

(704)614-2660

JennTec, LLC

Jennifer Thomas Environmental Contracting

P.O. Box 30334 Charlotte, NC 28230

704-491-7724



Phase I ESA Phase II ESA/UST State Trust Fund Geotechnical Investigations

jenthomaso8@live.com www.jenntecllc.com





Aggressive Fluid Vapor Recovery Trailer (AFVR)

Enviro-Equipment, Inc. (EEI) is pleased to announce the construction of another Aggressive Fluid Vapor Recovery (AFVR) Trailer, also referred to as Dual Phase Extraction (DPE) and Mobile Multi-Phase Extraction (MMPE). While we have sold AFVR Trailers to clients in the past, we now plan to stock AFVR Trailer units for rental or subcontracting. Clients have the option for as little or as much assistance from EEI as they require. Options range from renting and operating the system yourself to subcontracting EEI to do your entire AFVR event.

Key Features of our AFVR Trailers Include:

- Dekker Oil Sealed Liquid Ring 300 SCFM @ 25*HG
- Epoxy Coated KO Tank with Float Tree for Automatic Transfer Pump Operation
- Progressive Cavity Transfer Pump with Manifold and Totalizing Flow Meter
- Manifold allows pumping from KO Tank to Storage Tank AND Pumping From Storage Tank through Totalizing Flow Meter to discharge point simply by adjusting valves
- Vapor Phase Carbon Drom for Off Gas Treatment
- Ultra Silent Diesel Generator, 230volt 3 Phase, Push Start, Auxiliary 115 and 230V Outlets
- Galvanized Steel Inlet Manifold, 3" Header; (7) 2" Zones with Ball Valve and Vacuum Gauge
- Multiple Sampling Ports
- UL Listed Control Panel

EEI also carries all of the necessary accessories for AFVR events including "tanker truck" carn lock hoses, vapor phase granulated activated carbon media, thermo anemometers, photoionization detectors (PID), flame ionization detectors (FID), well head assemblies and stinger piping.

EEI is your one stop shop for rental of pilot test equipment or full scale remediation systems. We also custom build remediation systems on skids, in trailers or in buildings to your specifications. EEI is a Met Lab Certified Control Panel shop.

Enviro-Equipment, Inc. is your full service center for AFVR Trailers. We build them, so we can maintain and repair them. Whether it's a unit we built, you built or someone else built, we are your one stop service center. Contact Evan Chew at our Remediation Division. 1-986-655-8267 or email us at remediation@enviroequipment.com.

ENVIRO-EQUIPMENT, INC. "WHEN IT HAS TO WORK"

www.enviroequipment.com

CALENDAR OF EVENTS - 2013

Geological Events in the Carolinas

Courtesy of AEG Carolinas Section – www.aegcarolinas.org. Last updated October 2, 2013
Send updates/corrections to Rick Kolb, Duncklee & Dunham, rick.kolb1@gmail.com

Meeting Date, Time, and Location are Subject to Change – Please Verify Prior to the Meeting

Date: Thursday, Oct 17, 2013

Event: South Carolina Association of Environmental

Professionals monthly meeting

Location: 6:30 PM social, 7:00 presentation at Edens Building, 1221 Main Street; Columbia, South Carolina

Details: Basith A. Mohammed bmoham-

med@gesonline.com

Date: November 6, 2013 Event: NCBLG Board Meeting

More information: http://www.ncblg.org/calendar.html

Location: UNC Chapel Hill Geology Department

Note: All meetings are scheduled to begin at 9:00am; the

public is invited to attend.

Date: October 27-30, 2013

Event: Geological Society of America Annual Meeting

Location: Denver, Colorado

Information: http://

community.geosociety.org/2013AnnualMeeting/Home

Date: January 23 – 24, 2014.

Event: Conference on Vapor Intrusion in the Southeast-

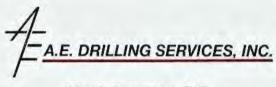
ern United States

Location: Embassy Suites in Cary

Information: Draft Final Vapor Intrusion Guidance Doc-

 $uments \ \underline{http://www.epa.gov/oswer/vaporintrusion}$

Contact: Rick Kolb, rick.kolb1@gmail.com



Mark Lassiter, P.G.

President

Two United Way Phone: (864) 288-1986
Fax: (864) 288-2272
Greenville, South Carolina 29607 E-mail: mlassiter@aedrilling.com

Date: TBD

Event: The North Carolina Association of Environmental Professionals (NCAEP) each year holds up to four dinner meetings in Raleigh, and over the last several years have been expanding meetings to Charlotte and Wilmington.

Location: TBD

Information: http://www.ncaep.org/meetings

Date: March 4-5, 2014

Event: Fourth Biennial Southeastern In Situ Soil and

Groundwater Remediation Conference

Location Renaissance Marriott at North Hills; Raleigh,

North Carolina

Information: http://www.redox-tech.com/About/

remediation-conference.html

Contact: conference@redox-tech.com









Natural Hazard Solutions – Accomplish your priorities for hazard protection.

Systems engineered for maximum protection are not just products, but tested and proven solutions for:

- · Debris flow
- Landslide
- Rockfall
- Slope instabilities
- Avalanche

Matching your cost-saving priorities for:

- Strength and durability
- Easy installation
- Simple maintenance

See more www.geobrugg.com



Geobrugg North America, LLC
Frank Amend, PE
Southeastern USA Regional Manager
PO Box 7453 • Rocky Mount, NC 27804-0453
Phone 252-937-2552 • Cell 252-904-6986
frank.amend@geobrugg.com
www.geobrugg.com



MEMBERSHIP APPLICATION



ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

MEMBER:

New Member Dues - \$95.00 First year of membership only.

☐ Full Member Dues - \$140.00*

Applicants for Member Class, including Full and New Members, shall hold a degree in geology, engineering geology or geological engineering, or a degree in a related professional field with 30 semester-hours of credit in the geosciences. In addition, the applicant shall be practicing in the field of Engineering Geology, Environmental Geology or Hydrogeology.

*Section Dues - Section dues are charged to all Full Members, invoiced separately. More information regarding Section dues can be found at www.aegweb.org.

AFFILIATE:

Affiliate Dues - \$100.00

Applicants for Affiliate Member Class shall be scientists or engineers who work with engineering geologists, or persons interested in environmental and engineering geology.

TEACHER:

☐ Teacher Dues - \$35.00

Applicants for Teacher Member Class shall be engaged in full-time teaching at the Primary, Secondary or post-secondary level in the area of Earth Science education or a related subject.

STUDENT:

Annual Dues - FREE

Applicants for Student Member Class shall be full-time students enrolled in an academic program in the geosciences or in a related field in engineering.

INTERNATIONAL:

☐ International Member Dues - \$35

Applicants shall hold the same requirements as for Member Class. International Members receive (online ONLY) the E&EG Journal, Annual Directory, Annual Meeting Program with Abstracts and the AEG NEWS.

AEG memberships are based on the calendar year. Applications received after October 1 will be entered for the following calendar year.



APPLICATION FORM

Please complete this form and mail it with your Annual Dues payment to the Association's Headquarters office for processing. New member applicants do not pay Section dues for their initial year of membership.

Haine.	
	nt your name as you would like it shown on your ip certificate.)
Date of E	Birth:
	authorize payment
Preferre	d Address:
Preferre	d Phone: Home Work School Mobile
Preferre	d E-mail:
Alternate	Address: Home Work School
Alternate	Phone: Home Work School Mobile
Alternate	E-mail: Home Work School
Desired (Class of Membership:
Annual D	ues Amount":
*Section De	ues not included. A separate invoice will be mailed to you.
Payment	Method:
-	k Enclosed
	☐ Master Card ☐ Discover ☐ AMEX
Name on	Card:
	r Address: Home Work School Other ided above, please provide card address)
_	
Card Num	har
	ber: Date:

(Signature)

Certification/Authorization:

My signature attests that, to the best of my knowledge, I meet the academic and practice requirements for the membership class I have requested and that all entries on this application are true and correct. I also authorize AEG to charge my credit card for the dues payment, if I selected the credit card payment option.

SUBMISSION: Send this form with your check or credit card authorization to: Association of Environmental & Engineering Geologists • PO Box 460518, Denver, CO 80246 Phone: 303-757-2926 • FAX: 720-230-4846 aeg@aegweb.org • www.aegweb.org



ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

Connecting Professionals, Practice and the Public



Student and New Graduate Member Application

Let the Association of Environmental & Engineering Geologists (AEG) show you the great benefits to being a part of the geology profession! AEG is geology in practice. Join us and see why our members LOVE their jobs!

Benefits of Student Membership Include:

- •Eligibility for Scholarships that provide funding for field camp, field studies, academic studies and travel to present at national meetings.
- Discounts for attending AEG's Annual and local Section Meetings, field trips, and short courses (sometimes you can attend for FREE).
- •Networking opportunities to potentially meet YOUR future employer! One member noted, "Every job I have had was a result of shaking hands at an AEG event!"
- •Free online access to Environmental & Engineering Geoscience, co-published with the Geological Society of America, AEG NEWS, and AEG's Annual Meeting Program with Abstracts.

Application Form

Email: aeg@aegweb.org: Website: www.aegweb.org

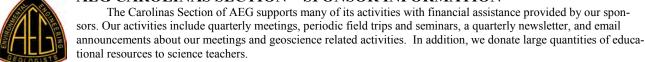


•STUDENT MEMBERSHIP IS FREE!

•PLUS, as AEG's gift to you for graduating, your first year of Professional Membership is FREE!

	NAME:
	Preferred Address:
	i
4	<u> </u>
	IPhone:
	IE-mail (Current Institutional Provider):
	1E-mail (Non-Institutional Provider):
hide in the	Anticipated Graduation Year:
	Please check one: Student New Graduate
	Submission: Send this form to:
The Land of the La	Association of Environmental & Engineering Geologists,
The state of the state of	PO Box 460518, Denver, CO 80246
The Day of the Latest	Phone: 303-757-2926: FAX: 303-757-2969:

AEG CAROLINAS SECTION – SPONSOR INFORMATION



We offer several levels of sponsorship, but they all have one goal: to keep the sponsor's name in front of our members and to bring you business. We have a real commitment to connecting our sponsors to potential buyers and will do all we can to help you build your business. Most of our members are practicing professionals with responsibility for selecting subcontractors, so our group is a great place to find new customers and to catch up with existing clients in an informal setting.

Our sponsors provide the financial support that allows us to have reasonably priced dinner meetings, host seminars, provide discounted dinner meeting costs for students and teachers, underwrite the cost of newsletters and our web site, provide geoscience mentors for students and young professionals, and support science education tools to our teachers and in our schools. All costs listed below are per year and end in December. New sponsorships received after October will continue to December of the following year.

Silver Sponsor (\$250):

GeoNews Newsletter: Business card size ad (2" high x 3-1/2" wide), four times per year.

Meetings: Listing on a Sponsor Poster, located at sign-in table. Verbal acknowledgement by name in Chairman's introductory comments.

Meeting Exhibits: Space for tabletop display at one meeting. Cost of meeting waived for one person on the exhibit date.

Email Announcements: Listing of your company name on each AEG Carolinas Section email announcement (our email list is currently over 1,000 people)

Web Page: Acknowledgement on the AEG Carolinas Section Web Page, www.aegcarolinas.org, with a link to your site.

Gold Sponsor (\$375):

GeoNews Newsletter: Quarter-Page ad (4-1/2" high x 3-1/2" wide), four times per year.

Meetings: Listing on a Sponsor Poster, located at sign in table. Verbal acknowledgement by name in Chairman's introductory comments

Meeting Exhibits: Space for tabletop display at two meetings. Cost of meeting waived for one person on the exhibit date. Email Announcements: Listing of your company name on each AEG Carolinas Section email announcement (our email list is currently over 1,000 people)

Web Page: Acknowledgement on the AEG Carolinas Section Web Page, www.aegcarolinas.org, with a link to your site.

Platinum Sponsor (\$500):

GeoNews Newsletter: Half-page ad (4-1/2" high x 7" wide), four times per year.

Meetings: Listing on a Sponsor Poster, located at sign in table. Verbal acknowledgement by name in Chairman's introductory comments.

Meeting Exhibit: Space for tabletop display at three meetings. Cost of meeting waived for one person on the exhibit date. Email Announcements: Listing of your company name on each AEG - Carolinas Section email announcement (our email list is currently over 1,000 people)

Web Page: Acknowledgement on the AEG Carolinas Section Web Page, www.aegcarolinas.org, with a link to your site.

Platinum PLUS Sponsor (\$600):

Same as Platinum, but with a FULL PAGE ad in GeoNews. Limited to 2 Sponsors per year.

GeoNews Newsletter Sponsorship Only

Businesses or individuals can also advertise in GeoNews without being a full sponsor. The annual rates for advertising in GeoNews are as follows:

> Business Card \$ 40.00 Quarter Page \$ 60.00 Half Page \$ 100.00 Full Page \$ 200.00

Please complete the form below and mail to Jane Gill-Shaler, AEG Carolinas newsletter editor. Please call or email if you have any questions (contact information below).

AEG Carolinas Section Sponsorship Form

Please begin our sponsorship of the Carolinas Section of the Association of Engineering Geologists. Our sponsorship level isPlatinum PLUS Section Sponsorship, \$600/year
Platinum Section Sponsorship, \$500/year
Gold Section Sponsorship, \$375/year
Silver Section Sponsorship, \$250/year
GeoNews Newsletter Sponsor Only (see above)
Name:
Address:
City, State, Zip:
Phone: Fax:
Contact Person:
Cell:
Email:
Website URL:
Date of Payment:
Something about your company (use back of page for more
room)

Please enclose a business card or email ad in jpg, pdf, or doc to Jane Gill-Shaler at janehgillshaler@gmail.com.

MAKE CHECK OUT TO AEG CAROLINAS

Snail mail form and payment to:

Rick Kolb, Duncklee & Dunham, 511 Keisler Drive, Suite 102, Cary, North Carolina 27518 (Modified 7/11/13

SPONSOR OR RENEW MEMBERSHIP AT WWW.AEGWEB.ORG!

Thank You, AEG Carolinas Sponsors!!

PLATINUM PLUS SPONSORS

Enviro-Equipment, Inc. 11180 Downs Road Pineville NC 28134 www.enviroequipment.com

Denise Chew, 704-588-7970, denise@enviroequipment.com, Brian Chew, 888-274-8929, brian@enviroequipment.com; We are a Woman-Owned Small Business, staffed by experienced professionals, committed to providing quality environmental equipment and products for rent or sale at reasonable rates. EEI is a stocking distributor of numerous environmental products for detection of air, water, and soil contamination

Geobrugg North America P.O. Box 7453 Rocky Mount NC 27804-0453 www.geobrugg.com

Frank Amend, 257-937-2552, frank.amend@geobrugg.com, Deborah Johnson, 252-937-2552, deborah.johnson@geobrugg.com; Geobrugg North America is a premier supplier of engineered rockfall protection and slope stabilization systems. Our wirework-based, unobtrusive, and ecology-friendly systems blend well with the natural surroundings. Well-proven anti-corrosion processes permit achieving a useful life up to 100 years and our installed systems require virtually no maintenance.

PLATINUM SPONSORS

Geotech Environmental Equipment, Inc. 2517 Noblin Road, Suite 103 Raleigh NC 27604 www.geotechenv.com

David Hathaway, 919-876-1535, davidh@geotechenv.com 1-800-293-5325; Geotech Environmental Equipment, Inc. manufactures and distributes sampling, filtration, analytical and remediation products for the ground and surface water industry. We also rent, sell, and service environmental sampling and monitoring equipment.

Pine Environmental Services, Inc. 8411 Garvey Drive, Suite 113 Raleigh NC 27616 www.pine-environmental.com

Paul Federline, 866-646-7463, pfederline@pine-environmental.com 919-713-0008; Pine Environmental Services, Inc., "The Environmental Supply and Support People" is the largest environmental supply and leasing company in North America. Pine is the leading provider of rental equipment in the nation with the latest instruments available. Pine Environmental Services, Inc. takes pride in their unprecedented customer support and competitive pricing. Extended hours of operation and after-hour emergency support are on hand.

GOLD SPONSORS

American Environmental Drilling 324 Fields Drive, Suite C Aberdeen NC 28315 www.aedi.biz

Guy Veni, 910-944-3140, guy@aedi.biz, Paul Chavaz, 910-944-3140, paul@aedi.biz; American Environmental Drilling, Inc. provides competitive full drilling services to North Carolina, South Carolina, and Virginia. Our services include: auger drilling, mud rotary, air rotary, geotechnical, geoprobe (direct push) and geothermal. Safety is a major factor in what we do and our drilling teams are fully trained and meet OSHA standards. We pride ourselves in being able to provide safe, reliable, fast, and efficient services. Our strong relationships with our clients allow us to understand their needs and be proactive in meeting their requirements. Cell: (910) 690-7569

ESC Lab Sciences 12065 Lebanon Road Mt. Juliet TN 37122

Barry Kroll, 800-767-5859, bkroll@esclabsciences.com 800-767-5859; ESC Lab Sciences is the only environmental laboratory certified to support your work nationwide from one location. No other lab is as accessible or prepared to handle your needs throughout the country.

Pyramid Environmental 503 Industrial Avenue Greensboro NC 27406 www.pyramidenvironmental.com

Doug Canavello, 336-335-3174, doug@pyramidenvironmental.com; Since 1990, as a professional, licensed engineering and geological

firm, Pyramid has the expertise to research and analyze relevant environmental regulations, potential hazards, clean-up alternatives and environmental protection issues to design and implement solutions for environmental problems.

SAEDACCO 9088 Northfield Drive Fort Mill SC 29707 www.saedacco.com

Peter Byer, 803-548-2180, pbyer@saedacco.com 803-548-2180; South Atlantic Environmental Drilling and Construction Co, Inc., (SAEDACCO), founded in 1993, is a southeast regional environmental services company. SAEDACCO is located in Fort Mill, SC and specializes in providing Direct Push, Drilling Construction, and Remediation services for the environmental industry.

Schnabel Engineering 11-A Oak Branch Drive Greensboro NC 27407 www.schnabel-eng.com

Gary Rogers, 336-274-9456, grogers@schnabel-eng.com, Robert Cannon, , reannon@schnabel-eng.com; Schnabel Engineering, Inc, is an ENR Top 10 geotechnical engineering firm. Schnabel offers highly specialized services in geotechnical engineering, geostructural design, dam engineering, tunnel and underground engineering, environmental and applied geoscience services, construction inspection and testing, and resident engineering services.

SILVER SPONSORS

A & D Environmental Services, Inc. 2718 Uwharrie Road Archdale NC 27263 www.adenviro.com

Scott Pearce, 336-803-1783, spearce@adenviro.com, Dan Martin, 336-434 -7750, dmartin@adenviro.com; A & D Environmental Services, Inc., is a full-service environmental and industrial company offering remedial, industrial, emergency response, waste management, and transportation services throughout the southeast.

AE Drilling Services, Inc. Two United Way Greenville SC 29607 www.aedrilling.com

Mark Lassiter, P.G., 864-288-1986, mlassiter@aedrilling.com; AE Drilling Services has provided geotechnical, environmental, water supply, and mineral exploration drilling services to fellow professionals for over 40 years.

CCI, 3434 Black & Decker Road, Hope Mills NC 28348. www.cci-env.com Mark Vestal, 910-484-7000, mark.vestal@cci-env.com. CCI is a full service environmental consulting company. Our services include asbestos abatement, remediation, demolition & specialty blasting.

Choice Environmental 1804 Holt Road Cary NC 27519-5984 www.choice -enviro.com

Nicole Manning, 919-369-1001, nicole@choice-enviro.com, Steve Jenkins, , steve@choice-enviro.com; Choice Environmental Services, LLC. We carry or rent backpack & handheld GPS, EEM2000, TVA1000B, Survey Equipment, Generators, Laptops, anemometers, monsoon pumps, peristaltic pumps, bladder pumps, and more. We also rent the Kawasaki Mule 3010.

EGIS, PA 441 Northside Drive Chapel Hill NC 27516 www.waterwellvideos.com

Mike Vaught, 9199298363, gwinvest@juno.com, Lynn Bressler, 9199298363, ; EGIS, PA specializes in downhole geophysical and borehole video inspection services. We can assist in well development and rehabilitation.

Environmental Conservation Labs (ENCO) 102-A Woodwinds Industrial Court Cary NC 27511 www.encolabs.com

Jim Hays, 919-467-3090, jhays@encolabs.com, Susan Purser, , spurser@encolabs.com; ENCO operates three full-service environmental labs. Our commitment to quality and unsurpassed service makes ENCO the lab of choice with environmental professionals.

Thank You, AEG Carolinas Sponsors!!

EOS Remediation, LLC 1101 Nowell Road Raleigh NC 27607 www.eosremediation.com

Brad Elkins, 919-873-2204, belkins@eosremediation.com info@eosremediation.com; EOS Remediation leads in producing scientifically-tested, field-proven products for Enhanced Anaerobic Bioremediation, Enhanced Aerobic Bioremediation and Bioaugmentation. EOS Remediation's products are specifically developed and designed for cost-effective, in situ treatment of groundwater

ESP Associates, P.A. 7204 W. Friendly Ave., Suite G Greensboro NC 27401 www.espassociates.com

Paul Weaver, 336-267-2165, pweaver@espassociates.com; ESP Associates with offices in Fort Mill, South Carolina and in Wilmington, Raleigh, Concord, and Greensboro, North Carolina. Providing Civil Engineering, Water Resources, Mobile 3D Mapping, 3D Laser Scanning, Geotechnical Engineering, Materials Testing, Special Inspections, Geophysics, Hydrographic Surveys, Transportation Geotechnical Engineering, Environmental Engineering, GIS, Landscape Architecture/Land Planning, and LEED services since 1986

Foundation Repair Services, Inc. Kevin Day at (704) 464-4563 www.foundationrepairservices.com;

Foundation Repair Services, Inc. is a Charlotte foundation-repair company that solves complex geotechnical and structural problems on a daily basis. Our scalability lets us deliver results on projects large and small, simple and complex. We believe proper planning from the beginning can minimize or eliminate problems, change orders, and shut downs that slow down your project. Flexibility and creativity when solving foundation problems are our strongest assets. We offer commercial foundation services, residential foundation repair, landslide protection and repair, basement wall repair, and slope stabilization.

Garco, Inc 2242 Carl Drive Asheboro NC 27203 www.egarco.com Al King, 336-683-0911, alk@egarco.com; Garco, Inc. provides Environmental, Industrial, & Recycling Services.

Geologic Exploration, Inc. 176 Commerce Blvd. Statesville NC 28625 www.geologicexploration.com

Matt Tischler, 800-752-8853, mtischler@gexnc.com, Steve Taylor, 704-872-7686, ; Geologic Exploration is a full service environmental drilling contractor, specializing in monitoring and recovery wells. We also perform rock coring, packer testing, well abandonment, and other environmental services.

KB Laboratories 25132 SW 1st Avenue Newberry FL 32669 www.kbmobilelabs.com

Todd Romero, 352-472-5830, toddr@kbmobilelabs.com; KB Laboratories, Inc. Our mission is to provide high quality mobile analytical and MIP direct sensing technology services meeting the on-site needs of engineering and consulting firms requiring rapid characterization of environmental contaminants.

Mountain Environmental Group 1560 Pisgah Drive Canton NC 28716 www.mountainenvironmental.com

Judd Mahan, 828-648-5556, jmahan@mountainenvironmental.com 800-261-0031; Mountain Environmental provides environmental and industrial services such as waste transport and disposal, reme-

diation, UST removal, drilling, AVFR, emergency response, industrial cleaning, XRF lead-based paint inspections and asbestos abatement.

Pace Analytical Inc. 9800 Kincey Avenue, Suite 100 Huntersville NC 28078 www.pacelabs.com

Korey Drew, 704-875-9092, korey.drew@pacelabs.com, Kelly Dillon, 9196181498, kdillon@pacelabs.com; Pace Analytical Services is a full service sampling and analytical testing firm operating a network of laboratories and service centers nationwide.

Parratt-Wolff, Inc. 501 Millstone Drive Hillsborough NC 27278 www.pwinc.com

Butch Stevens, 919-644-2814, bstevens@pwinc.com; Parratt-Wolff, Inc., is a full-service environmental and geotechnical drilling firm.

Prism Laboratories P. O. Box 240543 Charlotte NC 28224-0543 www.prismlabs.com

Angela Overcash, 800-529-6364, aovercash@prismlabs.com, John Weiss, , jweiss@prismlabs.com; Since its inception in 1992, Prism Laboratories, a woman owned small business certified company, has been committed to providing the highest level of quality analytical services and technical support to our customers in the environmental monitoring, water quality and waste disposal market. Our team of highly qualified professionals is focused on ensuring ontime delivery of accurate and precise analytical results, while working one on one with our customers to provide customized service to suit each client's specific requirements. Prism Laboratories is NE-LAC and DOD accredited, holds State certifications throughout the Southeast and maintains an extensive list of accreditations and memberships pertinent to the analytical testing and environmental monitoring industry.

Regenesis 123 Ridgecrest Drive Greenville SC 29609 www.regenesis.com

Drew Baird, PG, 864-240-9181, dbaird@regenesis.com 800-529-6364; Our mission is to develop, manufacture and market advanced, innovative technologies for the restoration or remediation of natural resources such as groundwater and soil. Regenesis' efforts are driven by and focused on technology performance, customer needs and cost-effectiveness. Looking forward, we will seek out and explore new technologies for the prevention and/or remediation of a broad range of environmental concerns.

Redox Tech LLC, 200 Quade Drive, Cary NC 27513. www.redox-tech.com John Haselow, 919-678-0140, jhaselow@redox-tech.com. Redox Tech is a small environmental remediation firm that specializes in in situ remediation of soil and groundwater. Founded in 1995, Redox Tech is one of the leading remediation subcontractors in the US, providing state-of-the-art services in delivery and formulation for in situ remediation. Redox Tech provides remediation services from conceptual design, bench-scale testing, and pilot-scale testing through full-scale remediation. Our specialties include in situ chemical oxidation, chemical reduction, aerobic and anaerobic bioremediation, and metals stabilization. Our technical knowledge and experience allow our professional staff to think creatively to help design and implement solutions that work best for our clients in addition to providing turn-key remediation services.

Our sponsors are a valuable resource for the funding of meetings, outreach and educational programs. Please honor their support by giving them your business. If you don't see your company name here, contact our sponsor chair, Rick Kolb at rick.kolb1@gmail.com or Paul Weaver, pweaver@espassociates.com.net for sponsorship information, or fill out and mail the Sponsorship form on page 28 in this issue.

You may also renew or join our sponsors online at www.aegweb.org.

Consider becoming a national AEG Sponsor!