

# ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS Southern California Chapter

"Connecting Professionals, Practice, and the Public."

# NEWSLETTER – 3<sup>rd</sup> Quarter 2023

# **new!** Officers

Chair – Daniel Schneidereit, City of Los Angeles Vice Chair – Jason Moore, Fugro Treasurer – Robert Woodford, Woodford GEO Secretary – Solishia Andico, City of Malibu

Visit the Southern California Section Website: www.aegsc.org

Our meeting this month is on Wednesday, October 11, at Victorio's in North Hollywood. We will be welcoming Professor Barry J. Hibbs from California State University, Los Angeles, who will be presenting on new wetlands that have appeared on the shores of the retreating Salton Sea. He calls it "Identifying Terrestrial Groundwater Inputs to New Wetlands on the Shores of the Retreating Salton Sea, CA"

\*\*\*\* Greetings, AEG members! We are excited to relaunch the AEG Southern California Chapter, and look forward to seeing you at the upcoming meetings. \*\*\*\*

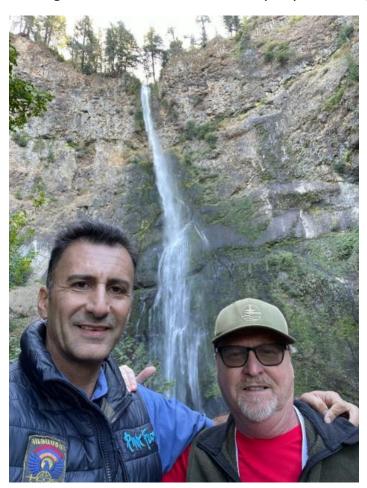
# **Regional Director's Column**

By Darrin Hasham

September 26, 2023

The Southern California Chapter of AEG is working to resume our place in the hierarchy of AEG chapters where we were once in the upper echelon. We have resumed in-person meetings, and this is our second quarterly newsletter of 2023. Our newly elected secretary, Solishia Andico, has been instrumental in making the newsletter happen.

I just attended the annual meeting in Portland Oregon. The meeting was a great success and meeting attendance has returned to pre-pandemic participation levels. The Southern California



So. California Member Shant Minas with Director Hasham at Multnomah Falls at a stop during the "Landslides and Engineering Geology in the Columbia River Gorge" field course before the AEG annual meeting in Portland Oregon, September 2023.

Chapter was well represented with local members attending, moderating, and presenting. Although the Pacific northwest has a reputation for rain, we had excellent weather for the field courses held at the front end of the conference and during the week; unfortunately, the rain did arrive for the trailing Saturday field course to Mount Saint Helens although I heard from attendees that it was still an awesome experience. I found it interesting to learn that the Cascade Ranges are named after the Columbia Cascade, a series of rapids in the Columbia River that created challenges to river navigation before the construction of a lock to allow bypassing the rapids. The rapids were the result of the Bonneville landslide, part of a mega-slide complex that slid into the Columbia River gorge. So, in an indirect way, the mountain range is named after a landslide.

The annual meeting was followed by the Board of Directors (BOD) meeting, which I attended as the representative from southern California. At the BOD meeting business such as approving budgets and a review of the committee and affiliated associations is conducted. The most important thing that will reshape AEG at the national level is the adjustment of chapter boundaries, which is something that is reviewed every five years in accordance with our bylaws. The review is intended to attempt to level the number of members in each region. There are no changes proposed to any of the California Regions. Our bylaws state that no State can be added to another State that has more than one region, and California has two regions, the only state that has more than one. As your representative on the board please do not hesitate to reach out if you have any questions or concerns.

Next Year's annual meeting will be held in Philadelphia, Pennsylvania from September 10 through 14<sup>th</sup>. The venue will be Hilton Philadelphia at Penn's Landing. Field courses will include Edelman Fossil Park, one of the only open dig fossil parks east of the Mississippi, and Wissahickon Park where the Wissahickon schist is well exposed.

The 2025 annual meeting will be held in Chicago Illinois. Look for more information in future newsletters and on the national organizations website: <a href="https://www.aegweb.org/">https://www.aegweb.org/</a>

Speakers for future meetings are needed. If you have been working on a fantastic project that has value to share – new technology, lessons learned, or creative solutions, please volunteer to present. The only way that we can keep our organization moving forward is to have informative and entertaining meetings.

Upcoming meetings yet to be scheduled will include the new President of AEG, Sarah Kalika, and the Richard Jahns Distinguished Lecturer, Cynthia Palomares.

**Note to student members**: A variety of scholarships are available from the AEG Foundation. Financial assistance for students ranges from travel grants to attend conferences, such as the AEG annual conference, to significant awards designed to offset the expense of summer field programs. Awards range from \$500 to \$5,000. If you are interested in applying for one or more scholarships, the time to start preparing your applications is **now**. All scholarship **applications are due on January 15**<sup>th</sup> each year. More information can be found here: https://aegfoundation.org/grant-scholarships/

# **Chair's Column**

By Dan Schneidereit

September 26, 2023

My name is Dan Schneidereit, your "new" chairman of the Southern California Section. The engineering geologists working in the City of Los Angeles may know me (hopefully not a bad thing), but for the rest of you, here's a little bit about me. In the early 1980's I studied geology at California State University, Northridge. Those of you who were there at that time know what a great educational experience that was. For most of my career I've worked for a variety of geotechnical firms, including Leighton and Associates, Earth Systems Southern California, Allan E. Seward Geology, and Petra Geosciences. I was fortunate to have many good mentors at all of these companies. They are too many to mention but I am grateful to them all.

Between 2012 and 2013 I began working for the City of Los Angeles Department of Building and Safety (DBS). My main task was reviewing geotechnical reports for all sorts of projects in the city. When I left Petra my bosses told me I will be quite bored reviewing others work and no longer doing my own. Nothing could be further from what this job has been like. The City of LA has such a wide variety of geology and geologic hazards; I've never been bored one day here. The perspective of what is the standard of practice of engineering geology has been fascinating and to be able to influence what that is has been exciting.

I've been a member of the Southern California Section of AEG since the late 1980's. Early on, I tried to regularly make the monthly meeting from Westlake Village to somewhere near downtown LA (Steven' Steakhouse?). I know what dedication it takes to do that. Though I always was glad I went and felt like I got something from it. Although it got a little more difficult the busier I got and had my own family to care for. I admire all of the past chairs I remember and could only hope to live up to a part of the example they set. I am very happy to be a part of the renewal our section is striving for and am especially grateful for the work and inspiration of Darrin Hasham. I look forward to meet a lot of you and always feel free to contact me. Any suggestions for speakers, or any other activities is welcome.

# **October Chapter meeting**

We hope you will join us for the AEG Southern California meeting on **Wednesday, October 11**<sup>th</sup>, Victorio's Ristorante, North Hollywood.

The speaker will be Dr. Barry Hibbs of California State University, Los Angeles. Dr. Hibbs has taught at California State University, Los Angeles since 1998, where he instructs courses in groundwater hydrology, water quality, watershed analysis, field methods in hydrology, and groundwater management. Dr. Hibbs received a B.S. in Geology from Arizona State University, an M.S. in Hydrogeology from the University of Nebraska Lincoln, and a Ph.D. in Hydrogeology from the University of Texas at Austin. He is a Fellow of the Geological Society of America, a recipient of Cal-State LA's Outstanding Professor Award, and a recipient of the National Ground Water Association Keith E. Anderson Award. Dr. Hibbs' research focuses on the hydrogeology of arid basins; stream/aquifer interactions; isotope and trace element hydrochemistry; and hydrology of urban areas.

DR. Hibbs is a regular presenter to the Chapter and frequently brings several students to the meetings. He is an advocate for our Chapter/Organization. Please come and show your support and appreciation.

Presentation Topic: IDENTIFYING TERRESTRIAL GROUNDWATER

**INPUTS TO NEW WETLANDS ON THE SHORES** 

OF THE RETREATING SALTON SEA, CA

New wetlands have appeared near the north and west shores of Salton Sea, Bombay Beach area and Niland Area, California. The wetlands have developed atop semi-perching confining units formed from deposits of "Ancient Lake Cahuilla." This lake had various periods of filling over the last 2000 years, and the lake eventually disappeared around year 1580. Several factors are responsible for the retreating shoreline of Salton Sea, including drought, reduction of seepage from irrigation canals due to canal lining, more efficient agriculture, and short term transfers of Colorado River project water to southern California cities. Wetlands are appearing at locations around the retreating Salton Sea where there is a significant source of terrestrial water. On the north shore in the Bombay Beach area, lining of the Coachella Canal in 2006 is responsible for ending a significant input of canal seepage of Colorado River project water. The Coachella Canal was lined a few decades earlier in the Niland area, but extensive agriculture continues to bring imported water to agriculture providing direct project water and drain water to wetland habitat in the Niland area. Other terrestrial water inputs along the north shore are not especially common, except from temporary winter and local monsoonal rains. At Bombay Beach, the perennial source of terrestrial water comes from a thermal artesian aguifer that supplies water to recreational spas and a fish farm via artesian wells. Waste flows from the thermal spas and fish farm provide input to several local channels that drain into the new wetlands, providing a constant perennial source of water. The artesian wells tapping the thermal aguifer are completed from 110 to 300 m deep, with temperatures reaching 55 to 80 degrees C at the wellheads. The higher temperatures are associated with the deeper wells. Salinity of groundwater issuing from these artesian wells is in the 4100 to 5200 mg/L TDS range, with a consistent sodium-chloride hydrochemical signature. The thermal groundwater is probably at least 10,000 years old, with no tritium detected and carbon-14 near 3.5 PMC. Water isotopes tested in the thermal artesian water is consistent with a slightly cooler period, and a locally derived source (-71 del D and - 8.7 del O18) with no evidence of any imported Colorado River water. The provenance of the thermal, pluvial groundwater is probably to the north of Salton Sea. Fish farm aquaculture is a notable source of nutrients (N and P) in the flows going into the Bombay Beach wetlands, but no other thermal discharge is a notable source of N or P. In the Niland area, stable water isotopes show that almost all of the water flowing into wetlands is imported Colorado River water, brought to the Niland area for irrigation purposes. In a peripheral but interesting part of the study, the source of water issuing from the Moving Mud Spring near Niland (also called the Niland Geyser, or the Moving Mud Spring, Mundo) is evaluated with stable water isotopes.

**Speaker: Mr. Barry Hibbs, Ph.D. in Hydrogeology,** Fellow of the Geological Society of America

Meeting date: Wednesday, October 11th

**Location:** Victorio's Ristorante, 10901 Victory Boulevard, North Hollywood, CA 91606, 818-762-9000.

**Time**: 5:45 pm Social Hour, 6:45 pm Dinner, 7:30 pm Program

**Cost**: \$45 per person with reservations in advance for AEG members, \$50 without reservations (at the door), FREE for students with a valid student ID and current AEG Student membership, the Student Membership is FREE as well, so join and get a free dinner.

**Reservations**: Please email Darrin Hasham at: DHASHAM@EARTHSYSTEMS.COM, call (909) 380-3289, or reply to this email!

No meeting in December due to the holidays.

Please make reservations prior to 3 p.m., Tuesday, October 10th.

# **Looking Ahead:**

#### **Earth Science Week Kits:**

AGI's Earth Science Week is October 8 - 14, 2023 with the theme "Geoscience Innovating for Earth and People." K-12 science/geology teachers can receive a free Earth Science Week Toolkit containing everything needed to prepare for Earth Science Week. If interested, please email contact@aegweb.com with your address. (1 tool kit per teacher).

Tool kits are also available to purchase from AGI, If Chapters or Members would like their own, or to provide some to their local educators.

**Geotechnical and Environmental Training:** Gregg Drilling is hosting a 4-hour training seminar for geotechnical and environmental field staff and technicians on October 21. Training will include:

- Coffee & light breakfast
- Rotation through four instructional stations
- Hands-on demonstration of field techniques with various equipment
- Instruction by industry experts: Kelly Cabal (CPT) & Dr. Xenia Worth, Cal State Fullerton (Soil sampling & logging)
- Catered lunch before you go!
- Hearing & eye protection provided. Please bring a hard-hat (extras will be available) The morning instructional seminar is designed to aid field staff in familiarizing themselves with various site investigation techniques. They will learn how each piece of equipment is used in specific situations or soil conditions. Problem solving techniques and on-site decision making will also be discussed. Attendees will rotate through each station for approx. 45-mins each.

# <u>Topics covered include:</u>

- Cone Penetration Testing, seismic and specialized testing (vane shear, pressuremeter, SPT energy calibration) Instructor: Kelly Cabal with Gregg Drilling and Dr. Anne Lemnitzer with UCI
- Soil classification, auger and rotary drilling/coring. Instructors: Dr. Xenia Worth with Cal State Fullerton, Megan Porter, Lyle Murphy with Gregg Drilling
- MiHPT and High resolution site characterization (HRSC) and Remediation. Instructors:
   Dan Pipp with Geoprobe, Pace Analytical, Stacey Telesz with Evonik, Jake Wilson with Gregg Drilling
- Direct push & environmental sampling. Instructor: Brandon Moses with Gregg Drilling & Orion Environmental

# Location & Preparation:

Gregg's Southern California headquarters in Signal Hill. Please park near the back equipment yard @ 2718 Gaviota St., Signal Hill.

Event will be outside so please prepare accordingly based on the weather forecast, event will go on rain or shine. Please bring a hard-hat if you have one. Hearing and eye protection will be provided by Gregg Drilling.

#### Cost:

Registration price is \$100 starting September 21st - REGISTER NOW! Students can register for a 50% discount, please contact Kelly Cabal: <a href="mailto:kcabal@greggdrilling.com">kcabal@greggdrilling.com</a> if you are a full time student.

# **OWTS Training and REHS Continuing Education:**

The City of Malibu is offering a training opportunity where you will be able to earn eight (8) hours of the required class time for REHS continuing education units.

Date: Monday, October 30, 2023 Time: 8:00 AM to 5:00 PM

Location: Malibu City Hall at <u>23825 Stuart Ranch</u> Road, Civic Theater (No food or drink is allowed).

Space is limited. RSVP and pay the fee by **October 16**, **2023**.

- \$25 includes the training and lunch OR
- \$75 includes the training, certification, and lunch

You can mail a check to Malibu City Hall or contact Wastewater Management Program Specialist Diana Rosas if you wish to pay by credit card <a href="mailto:drosas@malibucity.org">drosas@malibucity.org</a>.



# National Association of State Boards of Geology (ASBOG) Exam Deadlines

Good luck to everyone taking the upcoming Geologist-in-Training, Fundamentals of Geology, Practice of Geology, California Specific, Certified Engineering Geologist, Certified Hydrogeology, and Professional Geophysicist exams during early October!

# <u>Upcoming Exam Dates</u>

A complete application must be submitted 100 days prior to the scheduled exam date. Applicants are encouraged to submit their application well in advance of the 100 days in order to allow sufficient time for each professional reference to complete their response to the

reference, for the applicant to submit all of their relevant transcripts, complete and pass the Laws and Rules exam, and for the applicant to request a verification of ASBOG exams passed outside of California (if applicable). For information on the exam registration process visit the BPELSG website.

- March 5, 2023: Professional Geologist California Specific Exam
- March 15, 2024: Geologist-In-Training Certification, Fundamentals of Geology, Practice of Geology
- October 1, 2024: Professional Geologist California Specific Exam
- October 4, 2024: Geologist-In-Training Certification, Fundamentals of Geology, Practice of Geology

New application final filing date is April 29, 2023. Re-examination form final filing date is July 1, 2024.

 October 2, 2024: Certified Engineering Geologist, Certified Hydrogeologist, Professional Geophysicist

# **Job Openings**

**Senior Geologist:** The Washington Geological Survey is looking for a self-motivated, experienced, and enthusiastic senior geologist with a passion for post-fire landslide hazards to develop and lead a new program within the Survey. The new Post Fire Debris Flow Hazard Program will fill a critical need in Washington for assessment of landslide hazards in areas affected by wildfires. This position will be responsible for planning and leading post-wildfire emergency assessments of geologic and hydrologic hazards, installing and maintaining post-fire monitoring equipment, and developing pre- and post-fire geologic and hydrologic maps and models for planning purposes. This position also provides technical assistance to local and state agencies regarding planning and mitigating post-wildfire geologic and hydrologic hazards. The new program will sit within the Survey's Landslide Hazard Program, an active and growing team of geologists and geoscientists dedicated to understanding landslide hazards in Washington. If you enjoy teamwork, are enthusiastic about collaborating with local, state, and federal partners, and have a deep interest in post-fire hazards and their impact on communities, you would be a perfect fit for this position. We look forward to your application! The recruitment closes on 10/11/2023.

# Apply here:

https://www.governmentjobs.com/careers/washington/jobs/4203839/post-fire-debris-flow-program-manager-nr-sci4

**Tenure-line Engineering Geology Assistant Professor:** We seek an outstanding scholar and committed teacher who will establish an innovative and inclusive research and teaching program in Engineering Geology, complementing existing departmental strengths and bridging the earth sciences and engineering fields, particularly geological and geotechnical engineering. Candidates should have experience working with various Engineering Geology approaches,

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including but not limited to seismicity code and subsurface and geomorphic investigations. The successful candidate should have experience in earth structure interactions and recognition, interpretation, and prediction of natural processes, examining geological conditions, geological hazards, and/or construction-related design, mapping, and forensics of engineered structures. They should be able to teach General Geology, Surface Processes, and Field Techniques, as well as lower- and upper-division courses in Engineering Geology. The successful candidate will be expected to contribute to and participate in the life and development of the department, advise students from diverse ethnic, cultural, and socioeconomic backgrounds, serve on committees, and coordinate research and teaching needs with CSUF's Civil and Environmental Engineering Department.

A complete online application must be received by electronic submission to be considered. To apply, please visit http://hr.fullerton.edu/careers/Faculty.php, choose "full-time faculty", and search for position 519002. Please direct all questions about the position to Dr. W. Richard Laton at wlaton@fullerton.edu or call 657-278-7514. All application materials must be received by November 15th, 2023.

# YEAR 2023 CONTRIBUTORS NEEDED

Contributions from corporations and individual members are greatly appreciated. Contributors will be listed in our newsletter throughout the year and can post their logo or business card in the newsletter if so desired. Please mail contributions made out to **AEG** Southern California to our section treasurer, Robert Woodford.

# **MEMBERSHIP RENEWAL**

For those of you who have not yet renewed, are unsure about your membership status or did not receive your membership dues statement, please contact AEG Headquarters at <a href="https://www.aegweb.org">www.aegweb.org</a>. You can renew your membership online. Please update your membership if you wish to continue to receive future issues of the newsletter. newsletter.

If you would like to submit content to the newsletter (i.e., job posting, news, updates), please contact Solishia at <a href="mailto:soandico@gmail.com">soandico@gmail.com</a>.

If you would like to be featured in our newsletter, please consider sponsoring an AEG meeting by contacting Darrin Hasham at <a href="mailto:dhasham@earthsystems.com">dhasham@earthsystems.com</a>