



ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS
Southern California Section
"Connecting Professionals, Practice, and the Public."

NEWSLETTER – February 2010

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Upcoming AEG Meeting Date: *March 1, 2010*****

**Meeting Location: Stevens Steak and Seafood House,
5332 Stevens Place, Commerce, CA 90040**

Speaker: 2010 Jahns Distinguished Lecturer Dr. Paul Marinos

Topic: Ongoing challenges in Engineering Geology for Tunnelling in Difficult Ground

Joint ASCE/AEG Meeting Date: *March 17, 2010*****

**Meeting Location: Stevens Steak and Seafood House,
5332 Stevens Place, Commerce, CA 90040**

Speaker: Hannes Richter, G.E.

Topic: Case History of the June 1, 2005 Bluebird Canyon Landslide

****** We have two meetings in March, one hosted by AEG for the Jahns Lecture on March 1; and another co-hosted with ASCE on March 17. See below for further details. In addition, this month's newsletter has important information regarding the Board of Geologists and Geophysicists transition to BPELS, as well as important dates for national and regional events from AEG COO Becky Roland. Read On!**

Chair Column

Peter Thams

Hello Section and a belated Happy New Year! We'll be kicking off the new year in the City of Commerce at Steven's Steakhouse. I'm looking forward to seeing everyone there. There has been a good deal of activity regarding the transfer of responsibility for the Geologists and Geophysicists Act (Act) to the Board for Professional Engineers and Land Surveyors (BPELS) that I will try to address below.

Professional Engineers in California Government (PECG) Assembly Bill 1431

The employee union PECG, who represents geologists working for the state, has sponsored a bill to put one additional member on BPELS, requiring that person to be licensed under the Act, and change the name of the board to include geologists and geophysicists. This bill was carried through the Assembly by Member Hill from the Bay area, and passed by a vote of 68 to 0 on the Assembly floor on January 27, 2010. The bill now must clear the Senate and be signed by the Governor to become effective. AEG representatives, John Pfeiffer from the Sacramento Section, Erik Olsberg from the San Francisco, and I, met with Assembly Member Hill's staff along with PECG's lobbyist in December to discuss amending the bill to include at least two persons licensed under the Act, a geologist and a geophysicist. We were told at that meeting that no amendments would be considered until the bill passed the Assembly, but once that happened they would work with us to amend it as Senate bill, and so we'll see if that can be accomplished. Getting an amended bill through the Senate may be doable, but getting the Governor to sign it is another story. According to Steve Baker, PECG's lobbyist, the Governor is opposed to adding public members to the board, which would be a necessary component of the amended bill, since current law requires an equal or greater number of public members to be professional members. This could go a couple of ways, we could get the bill amended and the Governor could refuse to sign it (quite possible), or we could just let the PECG bill go through Senate as written in which case the Governor will likely sign it, but it will be inadequate for our needs.

So we needed to think a bit about how to approach the necessary amendments to AB 1431, and came up with a few options. We've included those options below in this newsletter so I'm not going to discuss them all here. The option we've chosen to pursue maintains the size of the board at thirteen members (the unamended PECG bill increases the size of the board to fourteen - opposition to it on this basis was discussed by BPELS), and this is accomplished, of course, by replacing two positions currently held by engineers with a geologist and geophysicist. As with everything we have pursued throughout this process, this option has its critics, but curiously enough only from the geologic community thus far. There appears to be concern that requesting this would cause outrage from the engineering community and derail all efforts to reform the board to accommodate geologists. I have not seen any evidence that this is likely to occur, in fact, at the January 27, 2010 BPELS meeting, Geotechnical Board Member Jim Foley, offered that since he will be termed out in July, his seat might be a good one to be reallocated for geologists. I think we should give the engineering community a little

credit and assume that given sound justification and a logical explanation we can count on their support.

Here's how it goes, BPELS is currently made up of five engineers, one land surveyor, and seven public members. Of the engineering disciplines, the **three practice acts** are represented and **two represent title acts** *from other branches of engineering*. If we were to request parity on this basis, we would ask for four members to represent our **two practice acts** and **two title acts**. This would, in turn, require at least three additional public members and four if you want to have an uneven number on the board. This option has zero chance of even finding an author to carry the legislation and the Governor would veto it if it passed. So to achieve parity, the obvious thing to do is to replace the two title acts currently on the board with representative of the two practice acts from the Geologists and Geophysicists Act. Engineers still maintain a majority of technical members on the board and all practice acts regulated by the board, including the land surveyors, would then have a representative on the board. There is really no logical argument to oppose this, although some have questioned the need to have a geophysicist on the board due to the relatively small number of licensees. In my mind, the relatively small size of the regulated community is justification in itself to have a member on the board where they would otherwise be insignificant. Furthermore, the boards are required to have more public members than professional members so that the professions can't dominate the boards and override the interests of the public in favor of the profession, so the concept of limiting the influence of any particular profession is already in play. Anyone concerned that the engineering community will suffer by losing two seats on the board should consider a few things 1) the budget allocated to administration of the Engineer's act is roughly ten times that of the geologist's act, 2) geologists have lost their entire board and 80% of its staff, and 3) it gives BPELS a stronger footing in sunset review hearings coming up in 2011.

The replacement option is attractive on all levels. It is fair, it achieves the Governor's desire to consolidate regulatory functions, and it does not increase the size of the board. Putting all these things together it should be relatively easier to get support for this in the senate and ultimately the Governor's signature.

Preliminary Injunction/Writ of Mandate/Declaratory Relief

Legal action to overturn ABx4 20 continues. The hearing on injunctive relief was rescheduled to March 15th to see if an agreement could be reached that would address concerns with regard to representation on the Board and operations/representation at the staff level within BPELS. So far no agreement has been reached and a recent proposal was rejected because it required legislative remedies. In the meantime, the Attorney General's office has filed a demurrer, which is scheduled to be heard on February 9th. The demurrer is basically a request to have our case dismissed and its filing is pretty much automatic in cases against the state. In responding to the demurrer, we will have the opportunity to have our basic arguments heard in court, and if we prevail through this process we will know that we have a case and will be in a much stronger position going forward. On the flip side, the process could result in our case being dismissed by the court. At least then we will know where we stand. We have exercised our right to amend our complaint, which will take the February 9th meeting off calendar and be rescheduled. The petition for the Preliminary Injunction will be abandoned,

since the board and staff are already gone, and a request for Writ of Mandate to re-establish the board will take its place.

Potential Settlement Agreement

Last week we sent around an amended settlement agreement to membership (see below) that details our demands of BPELS in terms of administering the Geologists and Geophysicists Act. After the January 27, 2009 BPELS meeting, John Pfeiffer, Bruce Hilton, and I met with BPELS Executive Officer, Dave Brown and Counsel, Gary Duke, to discuss the settlement agreement. It was a good meeting and we were able to reach agreement on most issues. If the Work Force Study currently underway and anticipated to be complete this week recommends additional staff and includes licensed professionals, we will have the basis for settlement agreement, and given reasonable assurances that the recommendations of the Work Force Study will be included in a Budget Change Proposal and approved, we should be able to settle the lawsuit and revisit the issue of reestablishing an independent board through legislation, sometime down the road and, hopefully, under a more friendly administration.

Paul Marinos
AEG 2010 Jahns Distinguished Lecturer

Dr. Paul Marinos has been named the 2010 Jahns Distinguished Lecturer. The Association of Environmental & Engineering Geologists (AEG) and the Engineering Geology Division of the Geological Society of America (GSA) jointly established the Richard H. Jahns Distinguished Lectureship in 1988 to commemorate Jahns and to promote student awareness of engineering geology through a series of lectures offered at various locations around the country. Richard H. Jahns (1915 – 1983) was an engineering geologist who had a diverse and distinguished career in academia, consulting and government.

Dr. Paul Marinos received a Mining Engineering degree from the School of Mines of the National Technical University of Athens, Greece in 1966, a postgraduate degree in Applied Geology from the University of Grenoble, France, and his Doctorate in Engineering Geology from the same University in 1969. He worked for French and Greek design and construction companies until 1977 and then was elected as Professor at Democritus University in Northern Greece. Since 1988 Dr Marinos has been Professor of Engineering Geology in the School of Civil Engineering in the National Technical University of Athens and has served as head of the Geotechnical Section of the School for several years. From 2001 to 2004 and from 2006 to 2008 he was the Director of a Graduate Course in Tunneling and Underground Construction. He was a visiting Professor in the Geology Department of the University of Grenoble (1987) and of the School of Mines in Paris (2003).

Dr Marinos is a member of AEG and GSA and fellow of the Geological Society of London. He is a past President of the International Association of Engineering Geology and the Environment (IAEG), immediate past president of the Geological Society of Greece and honorary member of the International Association of Hydrogeologists (IAH).

Dr Paul Marinos has received several awards, including the Hans Cloos medal of IAEG, and the Andre Dumont medal of the Geological Society of Belgium. He was selected for the presentation of named lectures, including the 6th Glossop Lecture in London (2002), the 19th Rocha Lecture in Lisbon (2002), the 33rd Cross Canada Lectures Tour (2005), and the Rock Mechanics annual Lecture in Madrid (2006).

Dr Marinos and his team conduct research on a variety of applications of geology to engineering, mainly rock mass characterization, weak rock properties and behavior, with special emphasis to tunnel design. His work also covers landslides, dam geology, and engineering in karstic terrain. His other significant interest is the protection of historic monuments and archeological sites. Dr Marinos has authored or co-authored over 300 papers in journals or major conference proceedings. He was a key or invited lecturer in more than 40 conferences or special events. He has given lectures to University Courses or Workshops, among them the Federal Technical University (EPFL) in Lausanne, Switzerland, the Polytechnico of Turin, Italy, the University of Durham, U.K., the University of Coimbra, Portugal, the University of Kobe, Japan, the Black Sea University Romania, the Aristotle University of Thessalonica, Greece, and the Griffiths University, Australia. He has edited proceedings published by international publishers. Dr Marinos is a member of the Editorial Board of a number of prominent journals as "Engineering Geology", "Bulletin of the International

Association of Geology”, “Landslides”, “Environmental Geology”, “Rock Mechanics” and from 2009 “Environmental and Engineering Geosciences”.

Dr Paul Marinos has extensive industrial experience having served as consultant, independent reviewer and member of consulting boards or panel of experts on major civil engineering projects in Greece, France, India, Iran, Jordan, Morocco, Portugal, Saudi Arabia, South East Asia, Spain, Sweden, and Turkey.

The title of Dr. Marinos’ lecture for the March 1 AEG meeting is:

Ongoing challenges in Engineering Geology for Tunnelling in Difficult Ground (Abstract)

The growth of infrastructure needs has increased demands for the excavation of tunnels in poor ground or varying geological conditions. This development includes site investigation techniques, analytical design method (notably numerical), risk analysis, techniques of construction, and monitoring. The assessment of ground for design has to be based on a sound understanding of the regional geological rules and the establishment of a geological model where data and conditions are translated into an engineering geology description. Examples of geological models and cases from both mountain and urban tunnels under complex or difficult geological conditions are presented. These include the base tunnels in the Alps in a variety of conditions at great depth, tunnels through heavily folded formations with shear zones and cataclasites, Metro works in heterogeneous and weak ground and the selection of the appropriate TBM, and the project for the Gibraltar strait tunnel.

Tunnel design requires knowledge on the quality of the material in which the tunnel will be constructed. Engineering design requires numbers and the lecture explores and discusses methods that can be used by Engineering Geologists to assess the geological factors that have an impact on the design. Since the attempt of Terzaghi (1946) to describe the characteristics of rock masses, a number of rock mass classifications have been developed and play an important role in tunnel design, providing input data on strength and deformation properties of the ground for numerical models. Together with the rock mass properties, the in situ stresses field has to be estimated or measured and this is one of the most difficult tasks. Although the role of engineering geology has been extended into the area of defining the design parameters, the idealization process, in the form of numerical analysis, should be driven by sound geologic reasoning together with the engineering logic.

The understanding of real behaviour is indeed absolutely necessary before any calculation is attempted. Thus, the engineering geological “I.D” of the geomaterial and the stress environment define this ground behaviour such as:

- Brittle failure of strong massive rock under high stress level.
- Gravitational falling or sliding of blocks or wedges defined by intersecting structural features or “chimney” type failure, or ravelling in disintegrated and heavily broken and loose masses.
- Formation of a “plastic” zone by shear failure under high stress relative to the strength of the rock mass with deformation problems or even squeezing.
- Swelling, in case of appropriate mineralogical constitution.

Comments on the methods for design for each of those cases are discussed and the presentation concludes with a discussion on excavation methods in conventional tunneling construction with special attention to support devices in order to deal with squeezing ground. Examples from a number of tunnels from around the world illustrate the design and construction procedures discussed.

AEG & ASCE GEOTECHNICAL GROUP JOINT MEETING
LOS ANGELES SECTION
MEETING NOTICE
Wednesday, March 17th, 2010

**CASE HISTORY OF THE JUNE 1, 2005 BLUEBIRD CANYON LANDSLIDE IN
LAGUNA BEACH, CALIFORNIA**

Hannes H. Richter, G.E.
 Geofirm/Stoney-Miller Consultants, Inc.

Abstract

The presentation includes geotechnical findings and remedial construction activities for the June 1, 2005 Bluebird Canyon Landslide in Laguna Beach, California. The failure occurred in bedrock terrain, and was initiated by an elevated groundwater level from the 2004-2005 Winter's high rainfall. The resulting risks to the public improvements and the community included downstream flood hazard, headscarp retreat, potential mudflow-debris flow hazards along the landslide margins, and the potential loss of three more public streets. The emergency mitigation and the eventual public infrastructure repair were conducted in two Phases. Phase I consisted of winterization of the slope by removal of the destroyed homes, surface regrading and drainage control, dewatering, removal of slide debris in the Bluebird Canyon drainage, installation of a storm drain, construction of a gravity buttress in the canyon, and stabilization of the headscarp with a temporary tieback /shoring wall. This work was fast-tracked and required constant coordination between the design and contracting teams to respond to difficult field conditions. Phase II included removal of the majority of the landslide mass, construction of two soil-cement shear keys, placement of a subdrain network, and placement of engineered fill to rebuild the slope.

Bio

HANNES RICHTER, GE, is the chief geotechnical engineer at Geofirm/Stoney-Miller Consultants, Inc. He earned Bachelor of Science in Civil Engineering from California State Polytechnic University, Pomona, and a Master of Science in Geotechnical Engineering from University of California, Berkeley. He has over 30 years of geotechnical experience throughout the United States involving a diverse range of residential, commercial, industrial, and governmental projects, and has consulted to the City of Laguna Beach for over 15 years. Mr. Richter has participated in many comprehensive landslide investigations, monitoring programs and stabilization efforts, both for new construction projects and as a forensic expert.

SOCIAL HOUR:	5:30 p.m.
DINNER:	6:30 p.m.
PROGRAM:	7:30 p.m.
PLACE:	Stevens Steak House 5332 Stevens Place, City of Commerce Southwest Corner of I-5 & Atlantic Boulevard
PRICE:	\$35 with reservation (free with valid Student ID) \$40 at the door
RESERVATIONS:	M. Ronald Yeung
By e-mail to:	mronyeung@gmail.com

Please make reservations by e-mail prior to 12 noon, Friday, March 12, 2010

Re: BGG Transition to BPELS**From Charles Nestle, President, California Association of Professional Geologists**

In the following ten pages is the 1st Amended Proposed Settlement Agreement submitted to the Attorney General. The first settlement agreement was ultimately rejected out of hand by the A.G. based on the A.G.'s opinion that some of the demands required legislative action to implement. This dismissal followed weeks of discussion and negotiation, wherein progress toward a mutually acceptable solution appeared imminent. This first revised agreement excludes elements that may require legislation, and we hope will be acceptable to all parties. If accepted, the lawsuit filed by the California Association of Professional Geologists will be dropped.

In addition to filing with the Attorney General, this proposed agreement has been submitted to David Brown (david_brown@dca.ca.gov) the Executive Officer of the Board for Professional Engineers and Land Surveyors (BPELS), and the Board's attorney. We expect this proposed agreement to have been discussed with agenda items 7 and/or 8 at BPELS meeting in Sacramento on Wednesday, January 27. Although not included in the board packet sent to all board members, it fits within the context of two existing agenda items.

Charles Nestle
President, CAPG
cnestle@dpw.lacounty.gov

SETTLEMENT AGREEMENT and RELEASE

This Settlement Agreement and Release (hereinafter "Agreement") is entered into between and among California Association of Professional Geologists (hereinafter "CAPG") and Brian Stiger in his capacity as the Director of the California Department of Consumer Affairs (hereinafter "Stiger"), and Arnold Schwarzenegger in his capacity as the Governor of California (hereinafter "the Governor"), who may be collectively referred to hereinafter as the "Parties."

RECITALS

WHEREAS, Assembly Bill (AB) x4 20 was passed on July 22, 2009 during a special session of the Legislature called to address a fiscal emergency;

WHEREAS, ABx4 20 included a provision for abolishment of the Board for Geologists and Geophysicists (hereinafter "BGG") and transfer of authority for administration of the Geologist and Geophysicist Act (the "Act") to the Board for Professional Engineers and Land Surveyors (hereinafter "BPELS");

WHEREAS, California Association for Professional Geologists, Inc. (hereinafter "CAPG"), representing a group of Geologists and Geophysicists licensed and regulated by BGG, filed a Complaint for Declaratory Relief (hereinafter "Declaratory Relief Action") naming Governor Arnold Schwarzenegger as a Defendant, seeking to determine the Constitutionality of the portion of ABx4 20 pertaining to BGG;

WHEREAS, CAPG filed a concurrent Application for Preliminary Injunction naming Stiger as a Defendant, and seeking to enjoin him from implementing the portion of ABx4 20 pertaining to BGG, which is the subject matter of this Agreement;

WHEREAS Stiger implemented ABx4 20 in its entirety on or about October 23, 2009 and transferred authority of the former Board for Geologists and Geophysicists to the BPELS;

WHEREAS, CAPG has alleged in its Application for Preliminary Injunction that BPELS is unqualified to administer the Act in that its Board lacks representative Geologists or Geophysicists and its staff lacks licensed personnel with the requisite knowledge of Geology and Geophysics that CAPG and concerned licensees deem necessary to administer the Act;

WHEREAS, BPELS has indicated a good faith willingness to address the concerns of Geologists and Geophysicists by holding Town Hall Meetings to hear their concerns and by this Agreement hopes to address such concerns to the satisfaction of the concerned licensees and CAPG through actions it has the authority to take at a Board or staff level;

WHEREAS the Hearing on CAPG's Application for Preliminary Injunction and Declaratory Relief Action (collectively "the Action") is currently pending;

WHEREAS, the Parties desire to fashion a remedy that will ensure preservation of the integrity of the Geologist and Geophysicist professions while the administration of the Act is under the authority of BPELS;

WHEREAS, the Parties, without the necessity of litigation or adjudication on any issues of fact or law, and without any admission of liability, wish to settle all claims, contentions and disputes related to the Action once and for all;

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

TERMS

1. **No Admissions.** In making this Agreement, no Party to this Agreement is admitting the validity or sufficiency of any claims, allegations, assertions, contentions or positions of any other Party, or the validity or sufficiency of any defenses to any such claims, allegations, assertions, contentions, or positions. The Parties hereto desire to resolve the matters which are the subject of pending Action in an amicable fashion and have entered into this Agreement in good faith and with the desire to fashion their own remedy and settle all disputes between them.

The Parties hereby covenant and agree as follows:

2. **Geology Program.** BPELS shall establish a separate staff level Geology Program within BPELS, whose staff shall include the two person years transferred from BGG under ABx4 20, and a full-time Geology Program Director and others as may be recommended by the Work Force Study, who shall handle and oversee all matters related to administration of the Act;

3. **Geology Program Director.** BPELS shall employ, within sixty (60) days of this Agreement, a full-time, Certified Engineering Geologist or Professional Geologist as the Geology Program Director who shall oversee the day-to-day operation of the Geology Program and its employees within BPELS. The Geology Program Director shall have at least seven (7) years experience as a licensed Geologist but may *not* also be a licensed engineer. This position may be filled by a full-time, state civil service employee or a

contractor whose responsibilities will be those of BGG's former Executive Officer and will specifically include, but will not be limited to:

a. Screening all complaints against unlicensed practice of Geology or Geophysics and taking appropriate enforcement action and/or making recommendations to BPELS (via the Geology Program Committee described below) for appropriate action;

b. Reviewing all examination applications to ensure that only qualified applicants are allowed to take the Geology, Geophysics or Certified Hydrogeologist and Engineering Geologist examinations;

c. Vetting of subject matter experts to be used for generation of examination questions for the California-specific, Engineering Geology, or Hydrogeologist examinations and expert witnesses to be used in enforcement actions; and

d. Representing BPELS in ASBOG membership activities.

4. Geophysicist Oversight. BPELS shall employ, within sixty (60) days of this Agreement a Geophysicist, licensed for at least seven (7) years, who shall be called on by the Geology Program Director as needed to:

a. Review complaints against the unlicensed or negligent practice of Geophysics and take appropriate enforcement action and/or make recommendations to BPELS (via the Geology Program Committee described below) for appropriate action; and

b. Review all examination applications to ensure that only qualified applicants are allowed to take the Geophysics examination;

c. Vet Subject Matter Experts to be used for generation of examination questions for the Geophysics examination and expert witnesses to be used in Geophysics enforcement actions.

5. Geology Program Committee. BPELS shall establish a Geology Program Committee comprised of at least five (5) volunteers who shall regularly meet in person or via teleconference at duly noticed meetings open to the public.

a. Three members of the Committee shall constitute a quorum.

b. The Committee shall be comprised of at least one Geophysicist **and** one or more licensed Geologists, Certified Engineering Geologists, and/or Certified Hydrogeologists.

c. The Geology Program Committee shall regularly meet with Geology Program staff no less frequently than quarterly, in advance of BPELS Board meetings and in sufficient time to make recommendations at BPELS' next Board Meeting, regarding matters pertaining the Geology Program.

d. The Geology Program Committee shall make recommendations for appropriate action to BPELS' Board regarding matters pertaining to administration of the Act which BPELS Board shall adopt unless Good Cause for denial exists;

6. Examination Schedules. BPELS shall maintain all currently scheduled Geology, Geophysics and Certification licenses or examinations, unless otherwise recommended by the Geology Committee or modified by subsequent legislation;

7. Subject Matter Experts. BPELS shall interview Subject Matter Experts previously vetted by the former BGG for evaluation of examination materials and

participation in enforcement actions until new Subject Matter Experts shall have been designated by the Geology Program Director or Geophysicist for possible use as current Subject Matter Experts;

8. File Retention. BPELS shall maintain all files of the former BGG separately from other BPELS files subject to destruction according to DCA's and/or BPELS' written records retention schedule, except that some enforcement action files may be retained longer on recommendation of the Geology Program Director or Geology Program Committee;

9. Enforcement Actions Against Engineers for Geology Practice. BPELS shall diligently pursue to conclusion any open past or future complaints against *Engineers* deemed to be engaged in the unlicensed or negligent practice of Geology or Geophysics, on review and recommendation by the Geology Program Director and/or Geology Program Committee.

10. Assignment of Separate Legal Affairs Counsel. DCA Legal Affairs shall assign separate legal counsel (independent of BPELS' assigned legal counsel) to advise BPELS' and/or the Geology Program Director regarding prosecution of complaints against Engineers related to the practice of Geology or Geophysics.

11. Definition of Roles. DCA, on its own, or by and through BPELS, shall not undertake any action or proposal to restrict, redefine or undermine the roles of Geologists or Geophysicists unless such action or proposal has been reviewed and/or recommended by the Geology Program Committee;

12. Separate Accounting. DCA shall maintain a separate accounting for funds generated from administration of the Act (hereinafter "Geology Program Funds") and

shall not “lump” such funds into BPELS’ account. Geology Program Funds shall only be used by BPELS to administer the Act, which shall include payment for the Geology Program contract personnel and expenses related to the Geology Program Committee described herein;

13. Dismissal of Application for Preliminary Injunction. As consideration for Stiger’s acceptance and his further agreement to direct DCA, BPELS, and Legal Affairs to comply with this Agreement and each of the terms, CAPG agrees to accept the terms and covenants described above and shall promptly dismiss its Action with prejudice;

14. Dismissal of Declaratory Relief Action with Prejudice. As consideration for Schwarzenegger’s acceptance and agreement with the terms described herein, CAPG agrees to accept the terms and covenants described above and promptly dismiss the Declaratory Relief Action or other litigation as may be pending at the time of execution of this Agreement;

15. Mutual Releases. The Parties, and each of them, for themselves, their insurers, their successors-in-interest, agents and/or assigns, do fully and forever release, acquit and discharge one another, and their affiliated and/or subsidiary companies, together with any and all past, present and future employees, agents (whether ostensible or actual), officers, directors, shareholders, insurance carriers, attorneys, successors, predecessors, assigns, and servants from and of any and all claims, demands, rights, and causes of action of every kind, nature or character, whatsoever, whether known or unknown, suspected or unsuspected, actual or potential, absolute or contingent, pending or anticipated, including, without limitation, any claims for damages as not yet

occurred, which they may have, which may arise from the facts and allegations which are the subject of this Agreement.

16. No Further Claims. The Parties, and each of them, further agree that they will not institute any action, claim or proceeding in any court or other tribunal for relief based in whole or in part upon any act, action, claim or demand which is the subject of this Agreement unless enforcing a breach of this Agreement;

17. Forbearance. The Parties hereby covenant and agree never to commence or prosecute either individually or on behalf of any other person and/or entity, against any other Party, or any of them, any action or proceeding based upon a claim that is the subject matter of this Agreement, and this Agreement shall constitute a judicial bar to the institution or maintenance of any such action or proceeding.

18. Full Agreement. This Agreement constitutes the full and entire agreement between the Parties hereto and each such Party acknowledges that there is no other agreement, oral and/or written, between the Parties hereto.

19. Execution in Counterparts. This Agreement may be executed in counterparts, with the same force and effect as if executed in one complete document.

20. Authority. Each individual signing this Agreement warrants and represents that s/he has full authority to execute the Agreement on whose behalf s/he so signed.

21. Construction. The Parties to this Agreement, and each of them acknowledge (i) this Agreement and its reduction to the final written form is the result of extensive good faith negotiations between the Parties through their respective counsel to the extent each deemed such counsel necessary, (ii) said CLIENT and/or their counsel have carefully reviewed and examined this Agreement before execution by said Parties, or

any of them, and (iii) any statute or rule of construction that ambiguities are to be resolved against the drafting Party shall not be employed in the interpretation of this Agreement.

22. Costs. The Parties shall bear their own fees and costs with respect to the claims being released herein, however, in the event that any Party should bring an action or other proceeding for the enforcement of, or seek a declaration as to, or assert by way of defense, any term or provision of this Agreement, then there shall be an award of reasonable attorneys' fees and costs to the prevailing Party or Parties pertaining to such enforcement action.

23. Duration of Agreement. This Agreement shall remain in full force and effect for so long as BPELS retains authority for administration of the Act and/or until subsequent legislation modifies or supersedes this Agreement.

24. Severability. Should legislation action specifically supersede this Agreement or any of its terms, or should any of the terms herein be declared invalid or unenforceable, the remaining terms shall remain in full force and effect.

25. Signatures.

BY: ARNOLD SCHWARZENEGGER AS
GOVERNOR OF THE STATE OF
CALIFORNIA:

Dated: _____

BY: BRIAN STIGER AS DIRECTOR OF
THE CALIFORNIA DEPARTMENT OF
CONSUMER AFFAIRS

Dated: _____

BY: CHARLES NESTLE, PRESIDENT
CALIFORNIA ASSOCIATION OF
PROFESSIONAL GEOLOGISTS, INC.

Dated: _____

REVIEWED AS TO FORM:

OFFICE OF THE ATTORNEY
GENERAL, ATTORNEYS FOR
DEFENDANTS

Dated: _____

DEUTSCH & ASSOCIATES,
ATTORNEYS FOR PLAINTIFFS

Dated: _____

January 2010 AEG Announcements: from Becky Roland, AEG COO

1. 2010 Annual Meeting in Charleston, South Carolina; September 20-25. The registration forms will be available on or around February 1st, 2010 on AEG's website (www.aegweb.org). Also, the deadline for submittal of abstracts is April 1st, 2010.

2. 2010 Shelmon Conference. The dates are set for May 13 through May 15, 2010. Location will be Galveston, Texas. Registration forms and venue information will be available in early February on AEG's website (www.aegweb.org).

3. E-publishing update. The Journal of Environmental & Engineering Geoscience will be available to Members electronically soon. Look for more details in the coming months. Also, the Editors of the Journal want your technical papers and peer-reviewed articles for publication! Please contact Abdul Shakoor if you need more information or go to <http://eeg.allentrack.net/cgi-bin/main.plex>.

4. Student Members. The Student and Young Professional Support Committee has developed numerous programs to help you with everything from starting a student chapter, the Visiting Professionals Program and writing your resume – just visit AEG's website and navigate through the Students tab. You can follow the Committee on Facebook at New Geologist. Also, if you are an AEG Student Member who recently graduated or are about to graduate, you are eligible to receive Full Member benefits FREE for one year after graduation. Just contact AEG HQ for more details.

5. AEG AWARDS. As you saw in the January edition of the AEG *NEWS*, nominations for most of our Association Awards are due soon. A brief summary of the Award deadlines is included below;

Honorary Member 3/15/10

Floyd T. Johnston Service 4/15/10

Piteau Outstanding Young Member 4/15/10

Terzaghi Outstanding Mentor 03/31/10

Holdredge 4/15/10

Outstanding Section 5/1/10 (based on annual report)

Outstanding student chapter 6/15/10 (based on annual report)

Student Professional Paper 5/1/10

Outstanding Reviewer of E&EG 5/1/10

AEG Publication 5/1/10

Schuster Award- 4/15/10

Jahn's Lecturer 3/21/10

6. *Living With Unstable Ground*, the publication that the AEG helped to sponsor publication of, is available to AEG Members for only \$5.00 plus shipping, just contact AEG Headquarters.

7. Nominations for the Executive Council are due to Past President Mark Molinari by March 15, 2010.

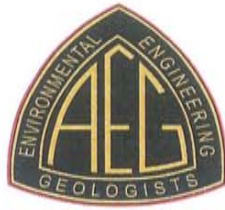
AEG North Central Section Short Course May 18-19, 2010

A New World in Geophysics

About the Course

Sponsored by the North Central Section of the Association of Environmental and Engineering Geologists, the short course is designed for practicing Civil Engineers, Geologists, Engineering Geologists, Archaeologists, Law Enforcement Investigators, Consultants, Owners, Managers and others responsible for development or evaluation of site characterization studies that might benefit from the application of modern geophysical methods. Many of us were exposed to geophysics during our undergraduate or graduate studies, which may have been completed many years ago now. There has been much progress in geophysics since your undergraduate studies. This course will bring you up-to-date with the latest developments in geophysical methods for land, water, and subsurface characterization. In addition to providing the student with the working knowledge of each of the available geophysical tools, pitfalls in subcontracting geophysical services will be presented. After you complete this course, you will be an informed consumer of geophysical services and be capable of scoping and applying the correct geophysical methods to solve your particular problem. Course participants will earn 2.0 hours of Continuing Education Credit.

Please see attachment below for more information.



Association of Environmental & Engineering Geologists

NORTH CENTRAL SECTION

"Serving Professionals in Engineering, Environmental and Groundwater Geology Since 1957"

New World in Geophysics

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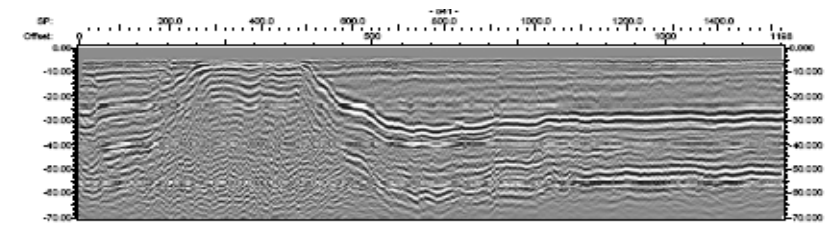
The Course Schedule

Day 1 - Methods Discussion

Morning session: Introduction (overview of topics)

- Seismic refraction
- Seismic reflection
- Seismic surface waves (MASW)
- Resistivity
- SP, IP
- EM, VLF
- GPR
- Gravity
- Magnetics
- Borehole
- Water-borne
- Airborne

Afternoon session: Outdoor Stations with Field Demonstrations



Day 2 - Applications and Limitations

Morning Session:

Exploration approach (scope of work - phased and sequential surveys, need multiple methods)

Client / contractor / geophysicist interaction

Limitations and pitfalls (noise sources, geometry, tomographic artifacts, smoothing)

Specific Applications -

- Karst (resistivity, refraction tomography, MASW, GPR, gravity?)

- Buried fracture mapping

- Depth to bedrock (refraction and reflection, MASW)

- Groundwater contaminant plume mapping

- Buried tanks, utilities, UXO

- Site characterization / brownfields

- Archaeology and forensics

- Downhole characterization (fractures, voids, glacial sediments, shear-wave surveys, water flow)

- Structures (existing infrastructure characterization - rebar, drain tiles)

- Water-borne geophysics

- Landfills

- Underground mines and voids / subsidence risk

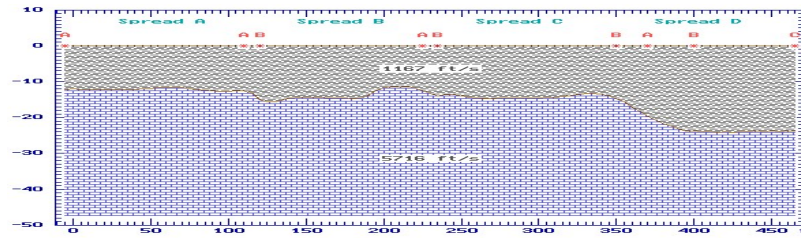
- Wetlands

- Alternative energy

- Carbon-dioxide sequestration

- Orebodies and mines, industrial minerals

Afternoon session: Stations with Data Interpretation/Data Reduction Demonstrations



About the Course Instructors-

The course is taught by geophysics experts who are experienced with daily application of a wide range of geophysical tools for a variety of purposes.

Dr. Philip Carpenter- Dr. Carpenter is Professor of Environmental Geophysics, Engineering Geology, and Seismology at Northern Illinois University in DeKalb, Illinois. He received a PhD in Geoscience from New Mexico Institute of Mining and Technology in 1984. He has worked in oil/gas exploration at Chevron USA, Inc. and Mobil Oil. This was followed by employment in the seismology group at Los Alamos National Laboratory in New Mexico, where he did research on methods of detecting underground nuclear tests. He then joined NIU where he has been employed for over 20 years. Dr. Carpenter's research interests include: (1) Environmental geophysics: noninvasive detection of pollution from landfills and hazardous waste sites, both in the U.S. and China; (2) geophysical surveys over karst areas; (3) earthquakes and ambient ground vibrations in the Midwestern U.S.

Dr. Timothy Larson- Dr. Larson is Senior Geophysicist with the Illinois State Geological Survey (ISGS) under the administration of the University of Illinois at Urbana-Champaign. He received a PhD in geology from that university in 1990. Since 1980 he has worked for the ISGS as a geologist and geophysicist. His major research interests include: hydrogeophysical research and case studies; research and case studies using primarily resistivity and seismic refraction techniques but also EM, GPR, and gravity; seismicity of Illinois and neotectonics

of the Central U.S.; shallow seismic reflection studies; studies of shallow heat and moisture flow; and crustal studies of McMurdo Sound, Antarctica.

Dr. Ahmed Ismail- Dr. Ismail is a Geophysicist with the Illinois State Geological Survey (ISGS) under the administration of the University of Illinois at Urbana-Champaign. He received a PhD in applied geophysics from the University of Missouri-Rolla in 2003. Dr. Ismail worked as a researcher with the National Research Institute of Astronomy and Geophysics, Cairo, Egypt, from late 2003-early 2005; as a post-doctoral research assistant at the University of Missouri-Rolla from 2005-early 2006; and in his present position with ISGS since 2006. Publications he has co-authored include: *Misleading Interpretation of Shallow Seismic Methods, Three Case Studies from MASW, P-Wave Reflection and SH-Wave Reflection Surveys* (Symposium on the Application of Geophysics to Engineering and Environmental Problems, 2009); *Near Surface Characterization of a Geotechnical Site, North East Missouri, Using Shear Wave Velocity Measurements* (Near Surface Geophysics Journal, European Association of Geoscientists & Engineers, 2007); *Ground-Penetrating Radar: A Tool for Monitoring Bridge Scour* (Environmental and Engineering Geosciences, 2007); *Imaging glacial sediments and underlying bedrock in Illinois using surface wave data acquired by a land streamer* (Highway Geophysics - NDE Conference, St. Louis, Missouri, December, 2006).





About the Morton Arboretum-

The Morton Arboretum is an outdoor museum of trees and other plants from around the world. The 16 miles of hiking trails have been carefully planned to enhance your experiences on the grounds. These trails lead you through plant collections, natural areas, and other scenic landscapes. Several trails are paved, but most are wood-chipped.

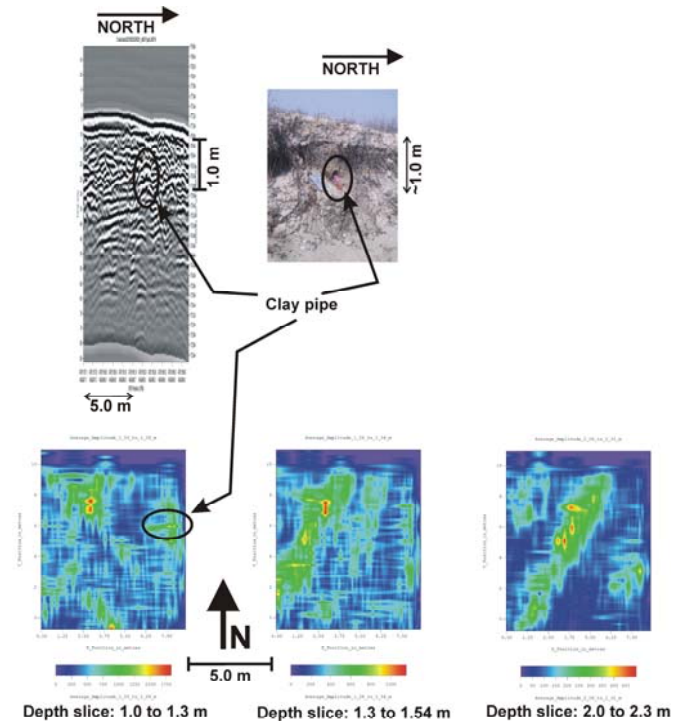
Have you ever seen a majestic tree reflected in a clear pond? Have you listened carefully to the vibrato of frogs coming from silent lakes and marshes? Water is an integral part of the Arboretum—not only because it nourishes the trees and grassy areas around it, but because it nourishes people, too. Sit quietly beside Lake Marmo, Meadow Lake, or Sterling Pond. Reflect on the natural beauty you see there. The lakes, ponds, marshes, and rivers throughout the Arboretum attract birds, animals, wildflowers, and nature lovers.

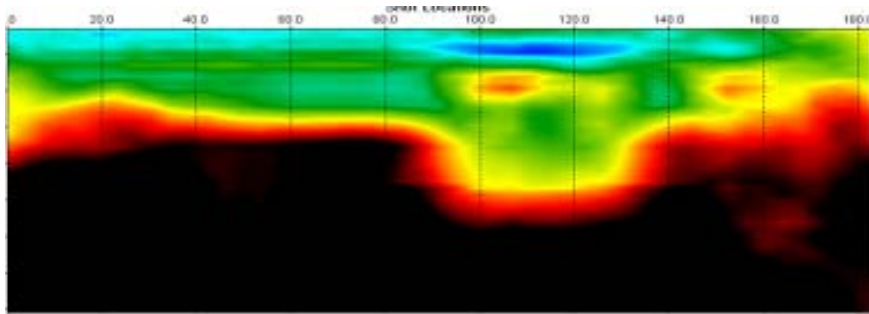
Schulenberg Prairie is one of the oldest planted prairies in the Midwest. It's lush with flowering plants from April through October, resplendent with asters and

grasses in September and October and alive with migrating birds in November and December. Schulenberg Prairie is home to at least 500 different plant species. Be sure to stop at the Prairie Visitor Station.

About the Meeting Space-

The short course will be held in the Founder's Room at the Thornhill Education Center on the Arboretum grounds. The Founder's Room, with its ornate bookcases, marble fireplace, intimate alcove, and stained glass windows, is a visual step back into the early 20th century.





Where to Stay-

www.stayinlisle.com

Visitor information about Lisle, Illinois and the surrounding area.

Hilton Lisle/Naperville

3003 Corporate West Drive, Lisle, IL 60532

Phone: 630-505-0900

Fax: 630-505-8948

From the Arboretum, take Route 53 to Warrenville Road and turn right. Go 1.5 miles west. The hotel is on the left.

Hyatt Lisle

1400 Corporate Drive, Lisle, IL 60532

Phone: 630-852-1234

Fax: 630-852-1260

From the Arboretum, drive south on Route 53 just past Warrenville Road and turn right.

Marriott Hickory Ridge Conference Center

1195 Summerhill Drive, Lisle, IL 60532

Phone: 630-971-5000

Fax: 630-971-6956

From the Arboretum, drive south on Route 53 for about three miles and turn right on Summerhill Drive. The hotel provides complimentary transportation within a five-mile radius, which includes The Morton Arboretum and the Lisle Metra Train Station. Transportation must be pre-arranged.

Wyndham Lisle-Chicago Hotel

3000 Warrenville Road, Lisle, IL 60532

Phone: 630-505-1000

From the Arboretum, take Route 53 to Warrenville Road and turn right. Go about 1.5 miles, and the hotel is on the right.

Taxi Services in Lisle

It is about a five-minute cab ride between the train station in Lisle and the Arboretum. A few local taxi services are:

- American Taxi at 630-920-9480
- A M Regional Taxi at 630-971-8888
- My Chauffeur Limo Service at 847-376-6169
- DuPage Limo Service at 630-941-3080 or 800-426-9890

Accessibility

All buildings and paved garden paths and trails are accessible to strollers and wheelchairs.

Registration Form

Please make checks payable to "AEG North Central Section". If you sign up for Continuing Education Credits you will be mailed a certificate after completion of the course and will earn 2.0 CEU credits. If you are not registering online, you may mail the form and a check to:

AEG North Central Section (c/o Dr. Kevin Richards)
1530 Willow St.
Lake Forest, IL 60045

Registration Form
AEG North Central Section Short Course
New World in Geophysics
May 18-19, 2010

1. Tuition Fees/Donations:

- \$_____ Corporate Sponsor** (Platinum Level \$1000, Gold Level \$500)
\$_____ AEG Members (\$350)
\$_____ Professional (Early Registration* \$350, Other \$450)
\$_____ Student (Early Registration* \$100, Other \$125)
\$_____ Continuing Education Credit Certificate (2.0 hours - \$5)
\$_____ New AEG Member (\$75 for new member dues plus \$275 for Tuition = \$350 total)
\$_____ Total

**Corporate Sponsorships are also available. Sponsor contributions will be used to cover the costs of the course and for activities for Geo-science Students in the North Central Section area. Your sponsorship will be recognized in future course advertisements, the AEG Newsletter, at an AEG Section Meeting, and on course materials. In appreciation of your donation, tuition fees are waived for Corporate Sponsors under the following schedule; Platinum Sponsors - up to 4 short course attendees, Gold Sponsors up to 2 short course attendees.

*We have extended the due date for Early Registration. Please mail your registration forms by January 31, 2010 to receive the discounted early registration fee.

2. Please complete for each registrant:

Name: _____

Position: _____

Company/Firm: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____

Email Address: _____



_____ I need special accommodations. Please contact me.

For further information on the benefits of AEG Membership, please go to <http://www.aegweb.org>

Chapter Meetings

Inland Empire:

For the latest information and updates, please visit <http://www.aegsc.org/chapters/inlandempire/>

Central Coast:

For the latest information and updates, please visit <http://www.aegsc.org/chapters/centralcoast/>

San Diego:

For the latest information and updates, please visit <http://www.aegsc.org/chapters/extremesocal/>

National Business Donation

- **Platinum** - \$1,000
- **Gold** - \$500
- **Silver** - \$250

Company name, address and contact information are presented in AEG News and section receives 10% of donation. A national donation does not yield a line in our local section newsletter.

**Company & Employment Advertising
*Newsletter (includes SoCal website posting)***

	<u>Month</u>	<u>Year</u>
▪ Business Card	\$10	\$100
▪ ¼ Page	\$20	\$200
▪ ⅓ Page	\$30	\$300
▪ ½ Page	\$35	\$350
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SoCal website posting only

\$20/month

AEG offers two ways to increase your company's visibility for under \$100 per year. Each *Annual Report and Directory* and each issue of *Environmental & Engineering Geoscience* includes the Professional Index. Available only to AEG members, this is a great way to promote your company. For \$80 per year, you can be included in both the Directory and Journal.

Many of our members use this index to find colleagues to assist with projects or to recommend their services to others. Don't miss your chance to be included in the *2010 Annual Report and Directory*. Reservations are due by December 31 to secure your listing.

Pricing is:

\$30 – *Annual Report and Directory*
\$60 – *Environmental & Engineering Geoscience*
\$80 – Both publications

You can order online at

<https://aegweb.org/i4a/forms/form.cfm?id=23&pageid=4837&showTitle=1>

or call Cathy Wilson at 303-757-2926.

* The deadline for submitting an advertisement for next month's newsletter is February 26.

YEAR 2010 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** to our section treasurer, Dave Perry.

2010 MEMBERSHIP RENEWAL

For those of you who have not yet renewed **(the deadline was November 1)**, are unsure about your membership status, or did not receive your membership dues statement, please contact AEG Headquarters at www.aegweb.org. You can renew your membership online. Please update your membership if you wish to continue to receive future issues of the newsletter.

*****NOTICE: Proposed New AEG Publication*****

WHO'S WHO in SO CALIFORNIA ENGINEERING GEOLOGY
The Evolution of Engineering Geology in Southern California

Have you ever wondered "Whatever happened to___?" or "I've heard of ___ , who is he?"

The undersigned have decided to try to prepare an internet publication with the above title, which will include biographies of engineering geologists in southern California. We would like you to share your biography (autobiography) with other EGs. If you have worked on an interesting project, others would like to know about it.

If we limit each autobiography to 3 pages of text, plus photos, this publication would be more than 1,000 pages long. Therefore, we plan to utilize a proposed new AEG Foundation internet website, where there is no limit to total pages, and we can use color photos. Also, this new website will be available for no-charge access, worldwide, thus spreading the word on the history and evolution of engineering geology, and southern California's immense contribution.

We suggest (not require) three criteria for inclusion: 1. That you are a CA licensed CEG; 2. That you are now or once were a member of AEG; 3. That you have enough years of professional experience to relate one or more significant projects you have worked on. We believe there are more than 250 such EGs in southern California. This will be an evolving internet site where new autobiographies can be added.

We will also include Memorial biographies of past notable geologists in southern California. So far, we have identified 30, including John Buwalda, Ian Campbell, Tom Dibblee, Rollin Eckis, Perry Ehlig, Richard Jahns, John Mann, F.L. Ransome, Charles Richter, Dottie & Marty Stout, Gene Waggoner. Biographies of 14 of these notable geologists were published for the recent AEG Annual Meeting, in "History of the Association's First 50 Years," available from AEG HQ, contact Julie Keaton or Becky Roland.

Here is a CHECKLIST FOR YOUR AUTOBIOGRAPHY:

Complete NAME, address, phone, email; BIRTH DATE and place; UNIVERSITY(s) attended, major(s), degree(s), year(s); MILITARY service; FIRMS/AGENCIES you worked for; up to 3 significant PROJECTS you worked on; possibly relate a serious or humorous INCIDENT; a MENTOR you may wish to acknowledge; professional SOCIETIES, HONORS, AWARDS; HOBBIES; up to 5 PUBLICATIONS; PHOTOS of yourself and of projects (scanned images preferred).

So, if you wish to be included in this new internet publication, prepare your autobiography and email it with photos to: allen@hatheway.net and in the Subject box, type: So. Cal. Geologist. Or mail it to Allen Hatheway, 10256 Stoltz Dr., Rolla, MO 65401. Please, no more than 3 pages of text, single-spaced, Times New Roman, 12 pt.

Please pass this notice on to those you may know who no longer get this Newsletter.

In the spirit of camaraderie, we thank you,

Richard Proctor
 Allen Hatheway
 David Rogers
 Larry Cann
 Bob Lynn

EMPLOYMENT OPPORTUNITIES & ADVERTISING

The California Geological Survey is hiring engineering geologists.

CGS needs to recruit and hire new engineering geologists to maintain staffing levels as staff retires or moves on. This may not be the obvious time to look for a job with the state, but CGS gets most of its funding through special funds and contracts, not the general fund. When CGS needs to hire, an announcement is posted on the State Personnel Board's "VPOS" web site (<http://jobs.spb.ca.gov/wvpos>). Searching for "Engineering Geologist" there will find the positions that the State is now accepting applications for. Those currently include a position in CGS's Geologic Mapping Program. That position is listed as within the Department of Conservation. See the web page for the full job description and application instructions. Please note that to be hired by the state, a candidate must pass and place in the highest three ranks on a civil service exam. The Engineering Geologist exam, jointly developed by the Department of Conservation and the Department of Water Resources, is an online qualifications appraisal. It is possible to take the exam at the same time you send in an application, but both steps are required. The online application and "supplemental questionnaire" (exam) are at this web page.

<http://jobs.ca.gov/CASPB/sup/BulPreview.asp?R1=095699&R2=00103756&R3=9PB02>

http://jobs.spb.ca.gov/wvpos/more_info.cfm?recno=415797

Chris Wills
Supervising Engineering Geologist
California Geological Survey
801 K St. MS 12-32
Sacramento, CA 95814-3531

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Company & Employment Advertising <u>Newsletter (includes SoCal website posting)</u>		
	<u>Month</u>	<u>Year</u>
▪ Business Card	\$10	\$100
▪ 1/4 Page	\$20	\$200
▪ 1/3 Page	\$30	\$300
▪ 1/2 Page	\$35	\$350
▪ Full Page	\$50	\$500
<u>SoCal website posting only</u>		
\$20/month		

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