Greetings, AEG Southern California Section Member! Please join us for the upcoming SoCal Section Meeting.

Visit the Southern California Section Website: [www.aegsc.org](http://www.aegsc.org)

**Upcoming AEG Meeting Date: ***Tuesday, April 10, 2012*****

Meeting Location: Victorio's Ristorante, 10901 Victory Blvd (about 2 blocks east of Vineland Ave), North Hollywood, CA 91606, (818) 762-9951

Meeting Time: 6:00pm Social Hour, 7:00pm Dinner, 8:00pm Presentation

Cost: $30 per person with reservations, $35 without reservations, $15 with a valid Student ID.

*Reservations: Please contact Shant Minas at shant@aessoil.com or 818-552-6000x109 by Friday April 6, 2012

**Speaker: Jeffrey R. Keaton, PhD, PE, PG, D.GE, F.ASCE, F.GSA, Senior Principal Engineering Geologist, Vice President, Geotechnical Practice Leader, AMEC**

**Topic: Scour at Bridge Foundations on Rock: NCHRP Project 24-29 Overview**
Chair’s Column

By David Perry

Stay tuned for next month’s chair’s column.

April Speaker

Jeffrey R. Keaton is Geotechnical Practice Leader for AMEC. He has degrees in Geological Engineering, Geotechnical Engineering, and Geology. He has been employed by consulting firms for 42 years, and in AMEC’s Los Angeles office of since July 2005 where he is a Senior Principal Engineering Geologist and Vice President. He was the president of AEG in 1992 and the Jahns Lecturer in 2004. He currently serves as Chair of the Technical Coordination Council of ASCE’s Geo-Institute.

Contact Information:

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Speaker Abstract

Scour at Bridge Foundations on Rock: NCHRP Project 24-29 Overview

Rock scour is a rock-water interaction phenomenon. National Cooperative Highway Research Program Project No. 24-29 is geotechnical site characterization in scour-relevant terms for use by hydraulic engineers. Project goals are time-rate of scour and design scour depth at bridge foundations on rock for integration with Federal Highway Administration Hydraulic Engineering Circular HEC-18, “Evaluating Scour at Bridges”. Rock scour in natural channels is related to five processes: 1) physical and chemical weathering of exposed rock surfaces, 2) soluble-rock dissolution, 3) cavitation, 4), durable-rock quarrying and plucking, and 5) degradable-rock abrasion and grain-scale plucking. Defining ‘rock’ for scour purposes is just as problematic as it
is for other engineering applications because physical properties range from strong soil to better than concrete. Bridge sites in Florida, Oregon, New York, Utah, and California visited in 2008 provided a range of conditions, data, and samples for the project. Check-list guidance aids in determining which scour processes can be dismissed and which deserve evaluation. Quarrying and plucking of jointed rock is a threshold process governed by turbulence intensity, flow velocity, and rock block size and geometry. Numerical modeling of threshold rock-block plucking and predicted scour depth relative to pier diameter was performed for this project by AquaVision Engineering, Lausanne, Switzerland. Hydraulic loading for degradable rock material is expressed as stream power (hydraulic shear stress × flow velocity) because it incorporates all flow parameters and can be accumulated over time. Probability weighted flood frequency captures the range of flow conditions and is converted to average annual scour. Long-term observations of scour divided by cumulative stream power for the same period represent the empirical scour number. Modified slake durability test results expressed as equivalent scour depth and stream power represent the geotechnical scour number. Design scour depth is the product of the probability weighted average annual scour and the remaining life of a bridge structure or the product of cumulative stream power for the life of a bridge and the appropriate scour number.

SMGB Board Updates

**Governor’s New Appointments to the SMGB**


**Thomas Barry**, 47, of San Francisco, has been appointed to the State Mining and Geology Board. Barry has been a senior geologist at Shaw Environmental and Infrastructure Group since 1997. He was a geophysicist at JR Associates from 1996 to 1997, a project manager and geologist for Ogden Environmental and Energy Services Inc. from 1995 to 1996, an environmental planner and geologist for Pacific Basin Environmental Consultants Inc. from 1994 to 1995 and a geophysicist and utility surveyor for JR Associates from 1990 to 1994. Barry is a member of the Association of Environmental and Engineering Geologists and the Northern California Geological Society. This position requires Senate confirmation and the compensation is $100 per diem. Barry is registered decline-to-state.
April 2012

**Jelisaveta Gavric**, 39, of Sacramento, has been appointed to the State Mining and Geology Board. Gavric has been a legislative advocate at the California Association of Realtors since 2005. She was a senior geologist at Schlumberger Water Services from 2004 to 2005 and an engineering geologist for the California Department of Water Resources 2000 to 2004. Gavric was a hazardous substances engineering geologist for the California Department of Toxic Substances Control from 1999 to 2000 and a geologist for Jacobs Engineering from 1997 to 1999. This position requires Senate confirmation and the compensation is $100 per diem. Gavric is registered decline-to-state.

**Ron Hughes**, 55, of Gold River, has been appointed director of the Office of Technology Services at the California Technology Agency. Hughes has been president of the California Data Center Design Group since 2002. He was the director of data center design at Telegis Networks from 2000 to 2002. Hughes served in multiple positions at the Stephen P. Teale Data Center from 1990 to 1999. He worked at the California State Controller’s Office from 1980 to 1990 in multiple positions, including staff services manager. This position requires Senate confirmation and the compensation is $129,000. Hughes is registered decline-to-state.

**Dan Reding**, 51, of Vacaville, has been appointed to the State Mining and Geology Board. Reding has been financial secretary for operating engineers for the Local Union 3 since 2009. He has served in various roles with the Operating Engineers Local Union 3, including treasurer from 2006 to 2009, district representative from 2005 to 2006 and business representative from 2003 to 2005. Reding was a member of the Local Union 3 working underground for Cal Smith & Sons from 1984 to 1985. Reding is a member of the Operation Engineers Local Union 3 Trust Funds, Crane Owners Trust Fund and International Foundation of Employee Benefit Plans. This position requires Senate confirmation and the compensation is $100 per diem. Reding is a Democrat.

**Michele Steeb**, 43, of Gold River, has been appointed to the Prison Industry Board of Directors. Steeb has been chief executive officer for the St. John’s Shelter for Women and Children since 2007. Steeb served as vice president of public affairs at the California Chamber of Commerce from 2003 to 2007. She was chief executive officer at IBT Financial from 1997 to 2001 and political affairs manager for Congressman Tom Campbell from 1993 to 1996. This position does not require Senate confirmation and there is no compensation. Steeb is a Republican.
Proposed Elimination of the State Mining and Geology Board

The Governor’s proposed budget for FY 2012-13 contains provisions to “streamline” state government operations by eliminating many boards and commissions, including the State Mining and Geology Board. (SMGB). The SMGB’s authority and function would be transferred to the Director of the Department of Conservation. This transfer would shut the door on public access to the board and its operations, and it would eliminate a check-and-balance of authority between the board and the Director. Without the SMGB, the Department of Conservation would lose a valuable source of independent technical expertise and experience-based policy advice.

Budget hearings will begin again in May after the “May revise” of the Governor’s budget is published. Interested parties may contact the leaders listed below to express their opinions on the continuation of the SMGB. Senator Simitian chairs the Senate Budget Committee, Senators Lowenthal and Fuller are members of his committee. Copies of letters to the Budget committee may be sent to Resources Secretary John Laird and the Director of the Dept. of Conservation, Dr. Mark Nechodom. Assembly committee hearings will also likely be held. Committee assignment for the Assembly will be available later.

Contact Information for Senators, Governor, Resources Secretary, & Department Director:
April 2012

**BPELSG Announcements**

Visit [http://www.geology.ca.gov/](http://www.geology.ca.gov/) for news, meeting announcements, notices, and exam information. No New updates since the March 2012 newsletter – the following announcements are carried over:

**ADDED FEBRUARY 3, 2012 - 2012 LAWS NOW AVAILABLE** - The 2012 Geologist and Geophysicist Act, the Professional Engineers Act, the Professional Land Surveyors' Act, and the Regulations Relating to the Practices of Geology and Geophysics and the Practices of Professional Engineering and Land Surveying are now available on the Board's website. Click the following link [http://www.geology.ca.gov/laws/index.shtml](http://www.geology.ca.gov/laws/index.shtml) for the links to the laws.


**ADDED JANUARY 20, 2012 - ONLINE ADDRESS CHANGE SUBMITTAL** - Applicants and licensees may now submit their address change notifications to the Board via our new online system. Click the following link [https://www.dca.ca.gov/webapps/pels/address_change.php](https://www.dca.ca.gov/webapps/pels/address_change.php) for the online submittal form. NOTE: It is the responsibility of the applicant or licensee to notify the Board of any change to their address of record within 30 days of the change. The Board is not responsible for the applicant's or licensee's failure to receive official mailings from the Board due to the applicant's or licensee's failure to timely notify the Board of a change of address.

**POSTED JANUARY 12, 2012** - California Specific Examination for Professional Geologist will be administered as a computer based test (CBT) beginning March 14, 2012. All candidates will receive a letter from the CBT vendor with instructions on when and how to schedule their examination.


**TECHNICAL ADVISORY COMMITTEE MEMBERS WANTED** - Click the link [http://www.geology.ca.gov/licensees/tacwanted.shtml](http://www.geology.ca.gov/licensees/tacwanted.shtml) for information regarding becoming a Technical Advisory Committee member.

**EXPERT CONSULTANTS WANTED - ENFORCEMENT** - Click the link [http://www.geology.ca.gov/licensees/tewanted.shtml](http://www.geology.ca.gov/licensees/tewanted.shtml) for information regarding becoming an Expert Consultant for the Geologist and Geophysicist Program enforcement unit. Experts are needed to help review enforcement complaint investigations.

**EXPERT CONSULTANTS NEEDED TO ASSIST WITH EXAMINATION DEVELOPMENT** - The Board is recruiting Professional Geologists, Professional Geophysicists, Certified Engineering
Geologists, and Certified Hydrogeologists to assist with the development of licensing examinations. Please click the link http://www.geology.ca.gov/licensees/smeswanted.shtml for additional information. The Board appreciates your interest in the professions and your willingness to assist in the licensure process.

**Other Meetings**

So Cal AEG’s Inland Empire Chapter is hosting a meeting on Thursday April 12, 2012 featuring Brock O’Kelley of MolyCorp and technical presenter for the meeting. The meeting topic is “An Update on Project Phoenix, the re-opening of the modernized Mountain Pass Rare Earth Element Mine, California.” The meeting will be held at CSU-San Bernardino, Dept. of Geosciences. Contact aeginland@gmail.com for additional information and reservations. Reservations are due by Monday, April 2, 2012.

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**Program Speaker: Brock O’Kelley - Molycorp Technology Fellow**

Brock O’Kelley has been with MolyCorp for over 25 years, starting in 1985 at the Louviers, Colorado separations facility as a Process Engineer. In 1990, he was transferred to the Mountain Pass, California mine as Superintendent of the Rare Earth Separations plant. Over the years, he has held a variety of positions at Mountain Pass including Operations Manager, Technology Manager and Director of Technology. Most recently, Mr. O’Kelley became MolyCorp’s first Technology Fellow, where he is responsible for development of processes and process improvements being utilized in MolyCorp’s Project Phoenix, a $780M rebuild of the Mountain Pass production facilities. Brock graduated from the Colorado School of Mines in 1974 with a B.S. in Mineral Processing and Extractive Metallurgy. He has experience in the lead belt of Missouri, iron and steel in East Chicago and Indiana, and oil shale in Colorado.

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**CAREER OPPORTUNITIES**

Current career opportunities in California are posted on our section website at http://aegsc.org/jobs/.

Additional career opportunities in California are also posted on AEG’s national website on the Careers page at http://careers.aegweb.org/jobs#/results/filter=%28state_province%3Acalifornia%29&resultsPerPage=100&showMoreOptions=true&selectedTab=bti-facets-discipline&view=single.
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.

If you would like to post an ad in the newsletter, please contact Christy Confar at cconfar@groupdelsol.com. Advertisement rates are shown in the box below.

<table>
<thead>
<tr>
<th>Company &amp; Employment Advertising</th>
<th>Newsletter (includes website posting)</th>
<th>Month</th>
<th>Year</th>
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**AEG SoCal website posting only**

$20/month or $200/year
Now Available
Web Advertising for your Business or Organization
on www.aegweb.org

Web advertising with AEG will allow you to reach thousands of Environmental and Engineering Geologists, and reaching the right audience is essential to the success of your advertising efforts. Targeted web-advertising is a proven and cost-effective way to reach consumers. AEG’s website, with an average of over 3,000 page views per day, ensures that you will not only be reaching your target audience, but reaching them often. We are now offering a variety of advertising options on our new website to fit your budget and needs. Start growing your business today!

Call or email to find out more! 303-757-2926 aeg@aegweb.org
Visit us on the web: www.aegweb.org

### AD DIMENSIONS / FILE SPECIFICATIONS

#### LOGO AD

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#### ROTATING

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| File Type*: | GIF, JPG |
| (Animation is not supported for logo ads) |
| Max File Size: | 50k |
| Colors: | RGB |

#### SKYSCRAPER AD

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#### ROTATING

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| Max File Size: | 150k |
| Max Animation Length: | 5 seconds |
| Colors: | RGB |

*All animated images must be in GIF format only.

**Proportions are fixed; actual size is dependent on monitor resolution.**
ORDER FORM

Company Name
Contact Name
Billing Address

City
State Country Zip/Postal Code
Phone Mobile
Fax Email

AD RATES

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*Animation is not supported for Logo Ads. **Ad will be looped with up to 4 additional ads, each displaying for 5 seconds.

URL that ad should link to when clicked:

List secondary page headers, if needed: (up to 5)
1.
2.
3.
4.
5.

Need Help? Call Becky Roland at (303) 757-2926

Banner Type: ☐ Standard ☐ Animated
Deadline:
12:00 Noon ET, 5 working days prior to the go-live date.
Ads begin when payment is received.
Call for extended term discount.

PAYMENT

Payment: ☐ Cash ☐ Check ☐ Credit Card
Credit Card Payment
☐ Visa ☐ MasterCard ☐ American Express ☐ Discover
Exp. Date Account number

Signature

Send this application along with your check made payable to AEG or your credit card authorization to:
Association of Environmental & Engineering Geologists
PO Box 460518 • Denver, CO 80246

ADVERTISEMENT AUTHORIZED BY:

Name
Company
Date
Signature

☐ By signing above, I acknowledge that I have read and agree to the Publisher’s Conditions and Copy Regulations.

Publishers Conditions & Copy Regulations
(1) All advertising is subject to publisher’s approval. The publisher reserves the right to reject any advertising. (2) The publisher’s liability for any error will not exceed the charge for the advertisement in question. (3) The publisher, while taking all care, assumes no responsibility for the inaccurate reproduction of digitally submitted advertisements resulting from improper file preparation, including but not limited to artwork, graphics, color, and type. (4) The publisher assumes no liability for any reason should it become necessary to omit an advertisement. (5) All ads must be paid in full at either the yearly or 6 month rate before an ad will be inserted on the website. (6) Rates are guaranteed for up to 30 days only for signed contracts. Rates are subject to change without notice. (7) All advertisements are accepted for the website entirely on the representation that the agency and/or advertiser are properly authorized to publish the entire contents and subject matter thereof. The agency and/or advertiser will fully hold harmless and indemnify the publisher against any all claims, etc., arising directly or indirectly from posting any advertisement or based on or arising out of any matter or things contained in the advertisement.

SEND ALL AD MATERIAL TO:

Becky Roland, Chief Operating Officer
PO Box 460518 • Denver, CO 80246
phone (303) 757-2926 • fax (303) 757-2969
aeg@aegweb.org
The deadline for submitting an advertisement for next month’s newsletter is April 30, 2012.

Christy L. Confar, P.G., R.E.A.
Principal Geologist
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Thousand Oaks, CA 91360
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fax – 805.532.2280
cconfar@groupdelsol.com