



AEG SACRAMENTO

Monthly Bulletin and Meeting Announcement

Happy New Year!

Welcome to another great new year as a member of AEG Sacramento! We are looking forward to another exciting year of great speakers, seminars and field trips...but as always we need your help to make it happen! So make a resolution to get involved with AEG and help make this year the best yet!

This month, we kick things off with one of our own, Keith Millard, as he presents an overview of the emergency repairs made to Mosquito Road in Placerville following a sizeable slope failure last year. So be sure to come join us next week as we start another fun year in the Sacramento Section!

Section Meeting Date: January 30, 2006

Meeting Location: **Sudwerks in Davis**, 2001 Second Street, adjacent to I-80: get off at Richards, turn right, right on 5th, then right on L St ;left on Second St to Sudwerks, under the Pole Line Rd bridge superstructure fronting I-80 Fwy.

Meeting Schedule:

- 5:30 - 6:30 Sign-In & Social Hour
- 6:30 - 7:30 Dinner & Announcements
- 7:30 - 8:15 Speaker Talk & Slide Show
- 8:15 - 8:30 Questions & Answers

WHEN HISTORY AND GEOLOGY COLLIDE: LANDSLIDE REPAIR ON A GOLD-RUSH ERA ROADWAY

Keith E. Millard, C.E.G and Jason D. Little, Staff Geologist
Youngdahl Consulting Group, Inc.

Abstract:

The original Mosquito Road was constructed from Placerville, California as a narrow winding route across the American River canyon sometime in the mid 1800's during the Gold Rush. Undocumented slope failures since the road's initial construction have prompted realignments and placement of non-engineered fills that most likely date to early in the last century.

A recent slope failure occurred after heavy rains saturated fill soils and adversely-jointed Mesozoic granites, manifesting as a semi-liquefied flowing mass, taking with it numerous jointed bedrock blocks that completely buried the road.

Subsurface drilling and lab testing enabled a FEMA-funded emergency repair design. The approved roadway repair consisted of fast-track installation of a soldier pile wall featuring 26 piles along a narrow switch-back with rock anchor tie-backs to resist block-topple failure potentially overturning the wall.

Geologic evidence indicates the presence of an older, larger landslide which has slowly propagated uphill from the river. Although this older landslide does not appear to have contributed to the recent landslide, the risk for future large-scale movement cannot be ruled out. In spite of the consequences, FEMA and the county road department concluded that the short-term benefits of repairing this historic access across the American River outweigh the long-term risks.

Keith E. Millard, C.E.G

Youngdahl Consulting Group, Inc.

Keith Millard earned his Bachelor of Science degree in geology from California State University - Fresno in 1990. Since then, his experience with such firms as BSK & Associates, Terracon Consultants and Youngdahl Consulting Group has taken him to Idaho, New Mexico, Nevada, and throughout Arizona and California. While working at Youngdahl, Mr. Millard achieved licensure as a Professional Geologist and Certified Engineering Geologist, and in the last few years he has been developing a wealth of experience on a variety of slope stability projects. Mr. Millard currently serves as the Scholarship Committee Chair and a regular board member for the Sacramento Section of AEG, is an active member of S.A.G.E. (Surveyors, Architects, Geologists and Engineers of El Dorado County) as well as the Naturally Occurring Asbestos Laboratories' Working Group.

A Message from Your Board

by
Eric Chase

Greetings AEG Members,

As we start the new year, your Sacramento Section Board has been busy arranging speakers for our upcoming section meetings. This month, we have our own Keith Millard, C.E.G., chairman of our Scholarship Committee, speaking on the Mosquito Road emergency landslide repair completed by Youngdahl Consulting Group in the Placerville area. Keith's boss and co-author, former section Chair Roy Kroll, presented this talk at the AEG national meeting in Boston, and it is a great one, featuring not only the technical obstacles overcome but the project management issues which were huge. Next month we will have Dr. Sandy Figuers, who will be speaking on construction vibrations and their effects on adjacent improvements and psyches. In March, we will have the delightful Dick Hilton of Sierra College talking about vertebrate paleontology in Northern California. We have a number of other speakers in the works as well, and details will be presented on the section website as they are confirmed.

Your chairman has been busy as well, having been recently named to AEG's Strategic Planning Committee, joining past section chair Bruce Hilton, past AEG president Darrell Schmitz, and many others. We will be meeting in Denver next month to develop implementation strategies for the goals identified in our most recent member survey and formalized in the SPC workshop in Anchorage last August, which I also attended. This work is at the core of making our association responsive to the needs and desires of its membership. My role lies in implementing the goals for increasing student membership and increasing benefits for student members nationwide. It is a real treat to be working with my colleagues at the national level.

Finally, I am most excited about our spring workshop this year, Rock Slope Stability, chaired by Sac section member Pat Jenks and assisted by Drew Kennedy. The workshop will be held April 20-21 at the Wildlands Fire Training Center at McLellan Business Park. National experts in rock slope stability analysis and mitigation will be on hand for the two day course. This workshop will be heavily attended so look for the announcement coming your way very soon and make your reservation. See you at the meetings!

Eric Chase
AEG Sacramento Section Chair

January 2007 AEG Meeting Facsimile Transmittal Sheet

(or e-mail to the address below)

To: Lisa Breckenridge (Wallace-Kuhl & Associates, Inc.)

email: LBreckenridge@wallace-kuhl.com

Phone: (916) 372-1434

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From: _____

Or You Can Sign Up Online at: www.aegsacto.org

Subject: January 2007 AEG Sacramento Section Meeting

Date: January 30th, 2007

Place: **Sudwerks in Davis**
(For directions, see page 1)

Time: 5:30 - 6:30 PM - Sign In and Social Hour
6:30 - 7:30 PM - Dinner & Announcements
7:30 - 8:15 PM - Speaker Talk and Slide Show
8:15 - 8:30 PM - Questions and Answers

On the Menu: *Saurbraten*
Vegetable Lasagna
Fresh Stir-fried Vegetables
Mashed Potatoes
Garden Salad

Cost: \$28 member (w/ RSVP) \$30 nonmember and walk-ins

Notes: First 5 Students (w/RSVP) Eat For Free!
Additional Student RSVPs: \$5.00 Student Walk-ins: \$10.00
Alcoholic beverages are available for those 21 and over on a cash basis.

The header image features a scenic landscape with mountains and a sky filled with clouds and a bright sunburst. The text 'AEG Sacramento 2006' is written in a blue, cursive font across the top, and 'Event Calendar' is written in a yellow, cursive font below it.

AEG Sacramento 2006

Event Calendar

January 30th	Keith Millard, Youngdahl Consulting Group Landslide Repair on a Gold Rush Era Roadway
February 27th	Dr. Sandy Figuers Construction vibrations and their effect on adjacent improvements
March 27th	Dick Hilton, Sierra College Vertebrate paleontology in Northern California
April 20-21st	Rock Slope Stability Workshop
April 24th	TBA
May 29th	TBA