

AEG Inland Empire Chapter Newsletter

of the Southern California Section

June 2017 Vol.13 No. 6

www.aegsc.org/chapters/inlandempire

June 2017 Meeting Announcement

“GORGONIO PASS WHERE IT ALL COMES TOGETHER”



Jonathan C. Matti
Geologist, U.S. Geological Survey

Wednesday, June 21, 2017
Location: Pinnacle Peak Steakhouse, Colton, CA

RSVP to aeginland@gmail.com by 5:00pm, Tuesday, June 20, 2017.

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Many thanks to our speaker this past month, Dr. Scott A. Anderson, the Richard H. Jahns Distinguished Lecturer for 2016–2017. Our selected topic and his presentation, “Solid as a Rock: How engineering geology relates to transportation asset management” was interesting and did not disappoint. I had a chance to talk with Dr. Anderson for some time about his commitment as this year’s Jahns Distinguished Lecturer. As expected, he has been traversing the country providing talks to various groups and universities on one of four topics. Considering the year-long appointment, he brought up the point of remembering to be enthusiastic while giving his talks because what may become repetitive and mundane to the presenter certainly should not be presented that way to the audience. His talk to the AEG-Inland Empire Chapter was anything but, and, on behalf of the membership, I want to thank Dr. Anderson for his time and effort. He indicated to me that following his presentation to us, he has a break in the lecture schedule before he continues as the 2016-17 Jahns Distinguished Lecturer with many other stops including presentations in Australia. Nice. Thanks again, Dr. Anderson.

I have made mention here in the past of our efforts and pursuit to become a Chapter within the Southern California Region of AEG. The AEG Board of Directors held their Mid-Year Board meeting in San Francisco on May 12 and 13 and now, unofficial word has come through from Kerry Cato that our application for Chapter status has been approved. This is very good news and while the notification is not yet official, I am very optimistic. We’re not sure when approvals were actually announced or made official but, we expect to get the official word from our Southern California Region representative, Eldon Gath in the very near future. In the words of Kerry Cato, **the AEG - Inland Empire Chapter rides again!! Whoop Whoop.**

The elevation of our status to Chapter may mean additional responsibilities from AEG National. I don’t understand all of the details but, it is my understanding the original formation of the Inland Empire Chapter, under the previous Southern California Section, did not necessarily follow the official pathway from what I’ve read in the AEG bylaws on how to establish a Chapter. But, we have been in existence since at least 2005 and will now get the recognition that we have worked for and that we deserve. Thank you all for helping to make this happen.

With the restructuring of AEG and the creation of Regions (we are in Region 2, the Southern California Region), we now have a Regional Representative in Eldon Gath. My understanding is Eldon will serve, in part, as our voice to AEG National. I’m not exactly sure of the extent of the representatives duties, responsibilities, and authority, and I have not received any information on exactly how this system works so, I’m a bit in the dark. I did notice when the AEG-Southern California Chapter held recent elections of officers, the ballots were reportedly submitted to Eldon, as the Regional Representative. I presume this may be one of the new procedures and I’ll talk to my counterpart at the Southern California Chapter as a source of information.

As we move toward our June meeting date and the subsequent summer hiatus of July, August, and September, we have sort of saved the best for last. Our speaker for June will be Dr. Jonathon Matti, geologist with the USGS. Dr. Matti will continue his discussion on the San Andreas Fault Zone with his lecture titled “SAN GORGONIO PASS—WHERE IT ALL COMES TOGETHER. His lectures are always very poignant and relevant resulting in typically larger than average attendance. So clear your schedules and we hope to see you at Pinnacle Peak in Colton on Wednesday, June 21st.

Greg Johnson
Chair, AEG Inland Empire Chapter (for real, I think)

Jonathan C. Matti

Geologist, U.S. Geological Survey

“GORGONIO PASS— WHERE IT ALL COMES TOGETHER”

SPEAKER BIOGRAPHY

A Geologist with the U.S. Geological Survey since 1975, Jonathan C. Matti received his B.S. and M.S. degrees in Geology from the University of California, Riverside in 1969 and 1971, and received his Ph.D. in Geology from Stanford University in 1978.



A general geologist, emphasizing regional geologic framework relating to geologic hazards and earth resources. His early research interest was Middle Paleozoic marine carbonate rocks in the Great Basin. Which was short lived, as his early USGS work took him to southern California. There he cut his teeth on plutonic and metamorphic rocks, and was introduced to faults of the San Andreas system in the San Bernardino and San Jacinto Mountains. He also was introduced to surficial earth materials (“soils” and landslides), which play a critical role in deciphering active and recently active tectonic systems.

In his career he has participated in a variety of applied- and basic-research investigations, including quadrangle-mapping in Las Vegas Valley (beneath all the casinos and golf courses), mineral-resource assessments of public lands in southern California, a regional evaluation of seismically induced liquefaction in the San Bernardino Basin, slip-rate analyses of strike-slip and thrust-fault zones, geologic studies in support of ground-water investigations in fault-bound basins, geologic mapping on the Twentynine Palms Marine Corps base, a modern geologic map of Joshua Tree National Park (coauthor), and the geologic framework and history of the San Andreas Fault system—both long term and short term (neotectonic framework).

ABSTRACT

The San Gorgonio Pass region is well known as a structural knot in the San Andreas Fault zone that evolved in Quaternary time. Accordingly, the “knot” has been widely investigated for its role in influencing regional fault patterns and regional strain budgets.

However, San Gorgonio Pass is not so well known as a region where several key elements of the San Andreas Fault system potentially come together in a way that informs the late Cenozoic structural and landscape evolution of southern California. Important elements include: (1) the SAF zone itself, a continental transform that evolved at ~6-5 Ma; (2) the coeval West Salton Detachment and its supradetachment sedimentary fill; (3) the Salton Trough that developed as the Gulf of California Transtensional Province propagated northwestward (landward) beginning at ~6.3 Ma; (4) the poorly understood escarpment of the Little San Bernardino Mountains—the NE margin of the evolving Salton Trough; (5) the enigmatic Banning Fault, an older element of the San Andreas Fault system (*sensu lato*) that preceded the advent of the San Andreas Fault (*sensu strictu*); (6) the left lateral Pinto Mountain Fault zone; (7) clockwise-rotating panels of the Eastern Transverse Ranges. Tectonic events within these structural systems yielded distinctive landscapes, all of which need to be integrated in order to understand the late Cenozoic geologic history of southern California over the last 10 million years. San Gorgonio Pass is a region where all these structural systems and their landscape elements seem to converge.

Questions explored in this talk include: (1) Were Pliocene and Miocene sedimentary rocks of the San Gorgonio Pass region deposited on the hangingwall of the West Salton Detachment? (2) How did the WSD interact geometrically and kinematically with the San Andreas Fault? (3) Did this interaction guide the structural evolution of the northwest head of the Salton Trough through time and space? (4) Has San Gorgonio Pass always marked the northwest head of the Salton Trough? (5) How did the coextensive and coeval evolution of the San Andreas Fault and the West Salton Detachment lead to the Little San Bernardino Mountains escarpment? (6) Can we reconstruct a late Cenozoic paleogeographic setting that accommodates the San Jacinto Mountains block, the Santa Rosa Mountains block, the Salton Trough, and the Little San Bernardino Mountains?

San Gorgonio Pass—where it all comes together—may provide answers to these questions and many others.

AEG-IE
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The AEG Inland Empire Chapter Newsletter is a monthly publication of the Inland Empire Chapter of the Southern California Section, Association of Environmental and Engineering Geologists. For more information visit the Chapter website: <http://www.aegsc.org/chapter/s/inlandempire>.

Submittals: Deadline, 25th of the month. Employment notices, job position announcements, and advertisements can be posted for a minimal fee. Newsletter circulation exceeds 300 people in greater inland areas of Southern California, and elsewhere.

E-Mail Address changes:
aeginland@gmail.com

AEG-IE JUNE MEETING DETAILS

Date/Time

Wednesday, June 21, 2017.

Social hour 5:30 - 6:30

Dinner 6:30 - 7:15

Announcements 7:15 - 7:30

Talk and Q&A 7:30 - 8:30

Location

Pinnacle Peak

2533 La Cadena Drive South

Colton, CA 92324

Cost

\$10/student with RSVP and proof of valid student ID

\$25/RSPV

\$30/walk-ins without RSVP

Parking is free

RSVP

aeginland@gmail.com

Deadline is COB Tuesday, June 20, 2017

(individuals who RSVP but do not attend may be charged if the final attendance does not meet the restaurant guarantee)

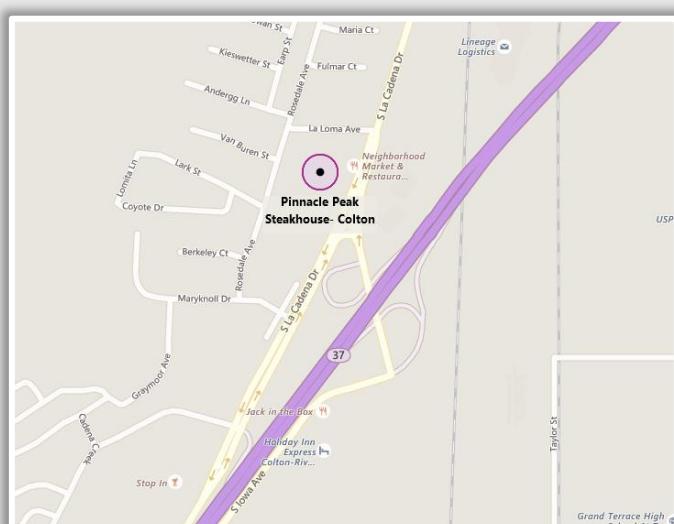
DIRECTIONS TO MEETING LOCATION

Directions: From I-215 Heading South:

1. Exit Barton Road and merge onto La Crosse Ave
2. Turn Right onto Barton Road
3. Turn slight Left onto La Cadena Drive South
4. Destination on right. (2533 La Cadena Drive South).

Directions: From I-215 Heading North:

1. Exit South Iowa Avenue.
2. Turn Right onto South Iowa Avenue
3. Continue onto La Cadena Drive South
4. Make a U-Turn at West La Loma Street
5. Destination on right. (2533 La Cadena Drive South).



AEGF SCHOLARSHIP OPPORTUNITIES

For California students, the AEG Foundation has six scholarship programs to support students, including scholarships for field camp, field research, scholarship and professional development at both the undergraduate and graduate levels. Academic scholarships are briefly described below. For the AEG Foundation scholarship application and specific information about each of our scholarship programs, please visit our website at www.aegfoundation.org.

We encourage students to apply for Foundation scholarships. Applications are only accepted online at www.aegfoundation.org/applications. First-time users will need to set up an account, but you can then apply for multiple scholarships from that account. Please read the criteria for each scholarship to determine if you are eligible.

You must be a student member of AEG to apply for AEG Foundation scholarships, but student membership in AEG is free! Go to www.aegweb.org to become a student member.

Faculty members, as members of academic institutions supporting students in Environmental and Engineering Geology, the AEG Foundation hopes that you will encourage students to apply for one or more of the many scholarships we offer. In addition, we hope that you will assist the students by completing recommendations for applications when or if you are requested.

Funds for Students

These Funds assist students to attend field camps, professional meetings, and support student research, scholarship, and professional development.

- **BEARDSLEY-KUPER FUND:** This scholarship was established in 2009 by Cathryne Beardsley with her daughter Dorian Kuper and son-in-law Tom Kuper. The fund provides financial support for field camp tuition and expenses.
- **CAROLINAS SCHOLARSHIP FUND:** This scholarship fund was established in 2015 by the AEG Foundation to support direct costs associated with the Carolinas Scholarships.
- **LEMKE FUND:** This scholarship was established in 2007 in memory of June and Richard Lemke and provides supporting funds to AEG Student Members presenting at professional meetings at which AEG plays a substantial role.
- **MARLIAVE FUND:** The Marliave Fund was established by AEG in 1968 and is in memory of Burton, Chester, and Elmer Marliave. This fund supports graduate and undergraduate Scholarships in Engineering Geology and Geological Engineering.
- **TILFORD FUND:** Established in 1998 in memory of Norman Tilford, a Past President and Executive Director of AEG, and professor at Texas A&M. This fund is distributed as grants awarded to graduate and undergraduate students in support of field studies.
- **STOUT FUND:** Established in 1994 by the Southern California Section in honor of Professor Martin Stout. This fund supports graduate and undergraduate students in environmental and engineering geology.

Latest Preliminary Alquist-Priolo Maps from California Geological Survey

The California Geological Survey recently issued, on December 15, 2016, preliminary AP maps for the **Los Angeles, Mount Wilson and El Monte quadrangles**. These are likely to be adjusted over the coming months as practitioners and specialists chime in. But for now they are the basis for where fault studies need to be conducted along the Raymond fault zone. According to our correspondence with City of LA geotechnical reviewers, these state maps take precedence and supersede city maps. We understand that the much-anticipated AP Map for the **Beverly Hills quadrangle** is in its final stages of development, and we all look forward to reviewing it and using it as a basis for our studies in west Los Angeles.

Stay tuned for updates and check in with the CGS website. Follow the link to download the maps, now available free online:

<http://www.conservation.ca.gov/cgs/rghm/ap>

AEG 60TH ANNUAL MEETING

September 10-16, 2017

Antlers Hotel, Colorado Springs, Colorado

Registration is now OPEN!

Deadline to submit abstracts

have been **extended to June 1, 2017**

For more information and updates, go to www.aegannualmeeting.org

REQUEST FOR FIELD SITES TO VISIT AND GUEST LECTURERS

Geol 430 - Engineering Geology will be taught Spring 2017 at CSU San Bernardino. We are looking for field sites to visit, so if you have a grading job, slope stability project, or fault trench, etc. then please consider letting this class visit on a Friday afternoon from April - May - or early June. Also, if you would like to give a guest lecture in class then please send an email; we are interested in hearing about what you do as an engineering geologist, a case history, or an important lesson you have learned in your career.

Contact Kerry Cato at kerry.cato@csusb.edu.

Latest Update from GMED, Los Angeles County

The Geotechnical and Materials Engineering Division (GMED) of the County of Los Angeles Department of Public Works is now accepting Building and Grading permit application document submittals through a web application at the following URL: <https://dpw.lacounty.gov/apps/esubmissions/gme/default.aspx>

Permit applications must be filed with Building and Safety before documents can be submitted to GMED because a plan check application number must be provided on the upload screen. First-time users are required to create a site login, which facilitates future submittals and provides contact information should it be determined that additional information is needed to process the submittal. Documents submitted through the web portal include consultant's reports, building/grading plans, permit applications, fee receipts, etc., and must be in Adobe PDF format. Submittal of hard copy (paper) documents to GMED is no longer required. Our web application will not accept plan check application numbers for applications filed through Land Development Division and some Contract Cities.

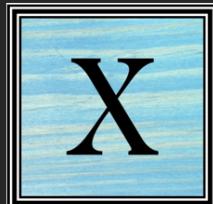
For information on submitting these projects, or for any other questions, please contact GMED at GMEDSubmittals@dpw.lacounty.gov, or (626) 458-4923.

BPELSG HAS TAC VACANCIES

The California Board for Professional Engineers, Land Surveyors and Geologists (BPELSG) is currently accepting applications to fill vacancies on its Geology and Geophysicist Technical Advisory Committees (TACs).

Please visit our website for more information www.bpelsg.ca.gov or contact Laurie Racca at 916-263-2406 or Laurie.Racca@dca.ca.gov.

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AEG-Southern California Section

- June 13, 2017 (Tu), Joint Meeting with ASCE, William Kane will be presenting “*Mitigating Debris Flow Hazards on California Hillsides*”, at Stevens’ Steak and Seafood in Commerce.
- July 19, 2017 (We), Joint Meeting with SDAG and SCGS, Mike Reader will present at El Adobe Restaurant in San Juan Capistrano.

For more information visit: <http://www.aegsc.org/>

AEG-Inland Empire Section

- June 21, 2017 (We), Jonathan C. Matti, Geologist with the U.S. Geological Survey, will be presenting “*GORGONIO PASS – WHERE IT ALL COMES TOGETHER*”, at Pinnacle Peak, 2533 La Cadena Drive South, Colton, CA 92324. \$10/\$25/\$30 student/reservation/door.

For more information visit: <http://www.aegsc.org/chapters/inlandempire/>

ASCE (Los Angeles Section)

Life Member Luncheon Meeting at ASCE LA Office, 1405 Warner Ave., Suite B, Tustin, CA 92780.

- June 1, 2017 (Th), 10:00am-12:30pm
- July 6, 2017 (Th), 10:00am-12:30pm
- August 3, 2017 (Th), 10:00-12:30pm
- September 7, 2017 (Th), 10:00-12:30pm

For more information visit: <http://www.ascelasection.org/>

ASCE (Orange County Branch)

- ASCE OC & EWRI presents “*Huntington Beach Desalination Project Ocean Plan Amendment Compliance*”, Irvine, CA, June 1, 2017 (Th), 11:30am-1:00pm.
- 2017 Golf Tournament, June 9, 2017 (Fr), 7am-2pm.

For more information visit: <http://www.asceoc.org/>

ASCE (San Bernardino-Riverside County Branch)

- Branch Annual Awards Banquet, June 28, 2017 (We), 5:30pm-8:30pm.
- Branch Lunch Meeting, July 19, 2017 (We), 11am-1pm.

For more information visit: http://www.asce-sbriv.org/asce_new/calendar.html

ASCE (San Diego Section)

- Summer Social, June 28, 2017 (Wed)- July 28, 2017 (Fr).
- Luncheon, September 27, 2017, 11:30am-1pm (We).
- Luncheon, October 25, 2017, 11am-1pm (We).
- Luncheon, December 20, 2017, 11:30am-1pm (We).

For more information visit: <http://www.asce-sd.org/> and <http://www.sandiego-ymf.org/calendar.html>

CalGeo

- June 22, 2017, South Regional Dinner Meeting. Ken Blom or Bill Black will be presenting “*Exploring the Subsurface: The Application of Geophysics in Geotechnical Projects*”, at Back Bay Conference Center, 3415 Michelson Drive, Irvine, CA 92612. Register by June 12, 20017. \$20/\$45/\$60 student/member/non-member. Parking is free.

For more information, visit: www.calgeo.org/

EERI (San Diego)

For more information, visit: <http://sandiego.eeri.org/>

(continued on next page)

GRA (San Diego Branch)

- June 28, 2017 (We), GRACAST: Professor Mike Young, The University of Adelaide, presents "Preparing a Robust Groundwater Sustainability Plan", (We), 12pm-1pm. \$75/\$100 early-bird/non-members.

For more information, visit www.grac.org/

IGS

Dinner Meetings are usually held every 1st Thursday of each month at LSA Associates, 1500 Iowa Ave, Suite 200, Riverside, CA 92507. 6pm-7:45pm. \$12.

- May 4, 2017 (Th), Chuck Houser, Project Manager at SCS Engineering in San Diego, presented "Got Calcite?", and Sadaf Kadir, 2017 Riverside County Science and Engineering Fair Student Winner, presented "The Effect of Urban Runoff on the Water Quality and Salinity of Lake Elsinore".

For more information visit: <http://www.inlandgeo.org/>

LA Basin

Lunch Meetings usually held every 4th Thursday of each month at The Grand at Willow Street Conference Center, 4104 East Willow Street, Long Beach, CA, 11:30am-1pm, 562-426-0555. \$5/\$20/\$25/\$30 student/retired/reservation/door.

- June 22, 2017 (Th), Bill Bartling, Department of Conservation DOGGER, will be presenting "Department of Oil, Gas and Geothermal Resources—Organization Renewal Plan and Update on Regulatory Progress and Impacts".

- July 2017, break for summer

For more information visit: <http://www.labgs.org>

SCGS

- June 5, 2017 (Mo), Robert Leeper, UCR, presents "Newly identified seismic hazards along the Newport-Inglewood fault zone: Evidence for repeated late Holocene coseismic subsidence events in the Seal Beach saltmarsh", at the Double Tree Club Hotel in Santa Ana, 6:00pm-9:30pm. \$15/\$30/\$35 university/member/non-member.

- July 19, 2017 (We), Joint Meeting with AEGSC and SDAG (see AEGSC)

- November 3-5, 2017 (9am Fr- 5pm Su), SCGS will hold their 2017 Field Trip in Mecca Hills area, led by Greg Shagam, SCGS 2017 President, and Dr. Art Sylvester, UCSB Professor and author of Roadside Geology of Southern California. The group will visit Box Canyon, Painted Canyon, and the South Eastern end of the Salton Sea.

For more information visit: <http://www.southcoastgeo.org/meetings.shtml>

SME

Meetings are usually held twice a year, one in the spring and one in the summer. No meetings have been announced for 2017.

- June 4-7, 2017, Rapid Excavation and Tunneling Conference, San Diego, <http://www.retc.org>.

For more information visit: www.mine-engineer.com/socalmining/

SDAG

Meetings are usually held every 3rd Thursday of each month at Geocon Incorporated, Upstairs Lounge, 6960 Flanders Dr., San Diego, CA 92121, 858-558-6900. Social hour starts at 5:30pm, with dinner following at 6:15pm. \$15/\$30/\$35 students/members/non-member.

- June 21, 2017 (We), Jorge Ledesma, Baja California, Mexico.

- July 19, 2017 (We), Joint Meeting with AEGSC and SCGS (see AEGSC)

- August 9, 2017 (We), Society of Military Engineers

For more information visit: <http://www.sandiegogeologists.org/Meetings.html>

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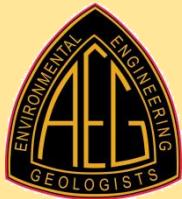
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AEG MEMBER BENEFITS

◆ Conferences -

You will find value at both Annual Meetings and Specialty Conferences and in the technical knowledge and continuing education you receive at these meetings.

[\(More Info\)](#)

◆ Networking Opportunities -

With over 3000 members, AEG provides you with access to a wide network of Environmental and Engineering geology professionals at both our local section meetings and at national conferences. [\(More Info\)](#)

◆ Publications -

AEG News, the Environmental & Engineering Geoscience Journal, and the *AEG Insider* contain relevant geoscientific information, updates on AEG activities, and engaging scientific interest stories. [\(AEG News\)](#) [\(AEG Insider\)](#)

With benefits like these, of course you want to be part of AEG! We encourage you to spread the word – talk to your co-workers, classmates and friends about AEG and all it has to offer.

REMEMBER:

- Student Membership is **FREE!**
- Graduating student receive their first year of full membership for FREE as our Graduation Gift to you (Contact us at aeg@aegweb.org to receive your gift)

If you have – **thank you!** Full members receive discounted registration for Annual Meetings and Specialty Conferences.

If you have any questions regarding your membership status or would like to join, please call one of our officers.