

# Newsletter

## Inland Empire Chapter News

Southern California Section, Association of Environmental and Engineering Geologists

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Aug 6, 2007 (19-Jal-07)

Vol. 3, No.8

-- Installment of New Officers 2007-2008 --

## “Fecal Contamination of urban streams and beach area of Santa Barbara”

**Wednesday 15-August-2007**

5:00 - 6:15 Geologist Orientation Lounge  
6:30 - 7:15 Dinner/Meeting Banquet Room  
7:30 - 8:30 Presentation Banquet Room

### Marie Calenders Family Restaurant, Temecula

(Meeting Cost \$22 - 25, Order from Banquet Menu)

(includes tax/tip/gratuity)

(Fund-raising donation suggested is \$5.00, or more)

*(RSVP/Directions below)*

**Meeting Details** at right (see inside)

**RSVP Due** by c.o.b. 10-Aug-07

e-mail or call no. above:

[rick.gundry@verizon.net](mailto:rick.gundry@verizon.net)

### Chapter Officers

Chapter President  
Rick Gundry  
Inland Geologic  
(see above e-mail, phone no.)

Vice President North  
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Kleinfelder Associates  
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Vice President South  
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(951) 252-8926  
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Doug Cook  
RMA Geosciences  
(909) 393-9700  
[DCook@rماغrp.com](mailto:DCook@rماغrp.com)

Secretary  
David Gaddie  
Riverside County  
[DGadie@retlma.org](mailto:DGadie@retlma.org)

### *This Month's Speaker :*

*Dr. John A. Izbicki, Research Hydrologist, Water Resources Division, US Geological Survey, San Diego, California*

### **Abstract**

*E. coli* and enterococci concentrations in shallow wells near the ocean in Santa Barbara, California beach range from less than the detection limit to 1,300 and 13,000 MPN/100 ml, respectively, and may be a source of fecal indicator bacteria (FIB) contamination to recreational beaches. Potential FIB contamination from ground-water was evaluated over several tidal cycles at the beach/ocean interface during a high-amplitude “spring tide” and during decreasing-amplitude tides between spring and neap tide. Seepage-meter measurements of ground-water discharge at the beach/ocean interface varied with tidal stage reaching a maximum of  $6.9 \times 10^{-4}$  cm/s at low tide, and were similar to estimates derived from  $Rn^{222}$  data.  $Ra^{224/223}$  activities yielded offshore mass-mixing velocities of 0.06 cm/s, suggesting rapid dilution of FIB from ground water in near-shore ocean water. During the falling tidal stage after “spring tide”, FIB concentrations in near-shore ocean water exceeded primary contact standards for recreational water and were higher than

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Communication Chair  
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Cato Geosciences  
w/ David Gaddie  
w/ Rick Gundry

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Speakers/Facilities Chair *ad hoc*  
CCGO Liaison *volunteer*  
Rick Gundry

Past Presidents  
Frank Jordan 2005  
Gary Wallace 2006

The AEG Inland Empire Chapter  
*Newsletter* a monthly publication  
of Inland Empire Chapter of the  
Southern California Section,  
Association of Environmental  
and Engineering Geologists. For  
more information visit websites  
shown in Newshead page 1

Submittals: Deadline 28<sup>th</sup> of the  
month. Employment notices,  
job position vacancy announce-  
ments no cost. (See notice  
inside this *Newsletter*)

Address changes: Send e-Mail to  
Rick Gundry.

Advertisements: *Newsletter*  
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FIB concentrations in shallow ground water near the beach/ocean interface. Increases in ammonia and phosphorous concentrations during this falling tidal stage were greater than could result from ground-water discharge, but were consistent with contributions from kelp and other detritus along the high-tide line that also may harbor FIB from birds and other animals. Samples from wells and the near-shore ocean also were analyzed for genetic, fatty-acid, wastewater-indicator, fecal-sterol, and optical-property data to help determine the source of FIB. A ground-water-flow model will be used to assess movement of water and FIB along the cross section assuming scenarios of ground-water recharge, tidal fluctuations, stormflow and sewer discharge to beach sands.

NOTE: The talk will be supplemented with discussion of urban stream contamination reflecting streamflow work..

### Speaker Biography

John Izbicki attended West Virginia University, Penn State University, and obtained a Ph.D. from the University of California Riverside in 2000. Dr. Izbicki worked as a hydrologist for the U.S. Geological Survey for 25 years and spent the last 15 years in southern California. While in California, he has focused on studies designed to apply environmental tracers to further the understanding of physical hydrologic processes. These studies addressed issues related to seawater intrusion and brine invasion, natural and artificial recharge processes, stormwater and beach contamination, well-bore hydraulics, and the occurrence and distribution of trace elements in desert environments.

### Message from the Chapter President

The Inland Empire Chapter will not hold a meeting in September. Instead, the AEG Meeting you can attend instead is the 2007 50<sup>th</sup> Annual AEG Meeting in September, "Golden Anniversary in A Golden State". For those of us there we can meet there, meet them there, and meet many other professionals as well. (See other information at the Section and National web-pages on this huge meeting with a very significant technical content.)

I am happy to Officially announce the New Officers for the term 2007-2008, elected Officially at the July 18, 2007 meeting in Riverside, will be as follows:

|                      |  |
|----------------------|--|
| Chapter President    | <b>Mike Cook</b> , Kleinfelder, Inc, Redlands        |
| Chapter Treasurer    | <b>Lisa Battiato</b> , Kleinfelder, Inc, Temecula    |
| Vice President North | <b>Doug Cook</b> , RMA Geosciences, Chino            |
| Vice President South | <b>Mitch Bornyasz</b> , Leighton & Assoc, Temecula   |
| Chapter Secretary    | <b>Dave Gaddie</b> , Riverside County Planning Dept. |

Official Installation of 2007-2008 Officers will occur at the August meeting, along with an award ceremony. The Officers-Elect will become Official Officers on 1-October-2007 through 30-September-2008. Welcome and congratulations to them.

The financial status of the Chapter is very strong, and exceeding a year ago, and provided about \$6,000.00 to area students and Universities. A report on this will be forthcoming to the Officers, and for future news at a later time. The Chapter co-sponsored or sponsored 3 continuing education or short courses this year, and also contributed to student assistance.

The Chapter was represented at meetings at three local Universities involving the AEG/GSA Distinguished Lecturer, John Moylan (Cal Poly Pomona, California State University, San Bernardino, and University of California Riverside, and also assisted several many student costs at several Chapter meetings.

Representatives of the Chapter also attended or participated in certain California State Mining and Geology Board, and California Board for Geologist and Geophysicist Board meetings in several southern California localities (Riverside, Santa Ana and San Diego).

The Inland Empire Chapter will be a Sponsor for the 2007 Annual Meeting. The Chapter is sponsoring 3 of the 50 days of news that will be published in the *Los Angeles Times* newspaper, regarding significant geological hazards or events occurring in the last 50 years, as follows:

- 1999 Hector Mine Major Earthquake, M 7.1
- 1992 Landers Major Earthquake, M 7.3  
(and 1992 Big Bear Moderate Earthquake, M1 5.3
- 1964 Good Friday Alaskan Great Earthquake, M 9.2  
and the devastating Tsunami

The Inland Empire Chapter is also a Sponsor for the 2007 Annual Meeting of the California Section of the American Institute of Professional Geologists (AIPG), to be held on a Steamboat on the River in Sacramento in September. (See details, below.)



## Thanks

Thanks to the 10 Professionals attending the July Meeting, as follows:

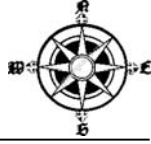
**Stephen Testa** (Speaker) California State Mining and Geology Board; **Doug Cook**, RMA Geosciences; **Mike Cook**, Kleinfelder Incorporated; **Rick Gundry**, Inland Geologic; **Mark Spykerman**, Earth Systems Southwest; **James Larwood**, Petra Geotechnical, Inc.; **Doug Johnston**, Petra Geotechnical, Inc; **Lisa Battiato**, Kleinfelder, Incorporated; **Frank Jordan**, John R. Byerly and Associates, Inc.; and **Dr. Kerry Cato**, Cato Geosciences.

## Meeting Details and Location

**Advance RSVP is required.**

Location. The meeting site is located in the City of Temecula on Rancho California Road, just east of the I-15 Freeway:

Marie Calenders Family Restaurant  
29363 Rancho California Road  
Temecula, CA 92591-5201  
(951) 699-9338



Directions to Meeting. From the I-15 freeway in City of Temecula, EXIT Rancho California Road to TURN East. On Rancho California Road east from the 1-15 proceed east 0.2-mile and turn RIGHT (South) and park.

Banquet Meal Menu Selection. Select from the following basic items:

Country Steak Dinner  
Roasted Turkey Dinner  
Meatloaf Dinner  
Top Sirloin Steak  
Fresh Lemon-Pepper Salmon  
Artichoke Mushroom Chicken

All Dinners include Caesar salad, cornbread and fountain drinks, iced tea or coffee. Also includes slice of Apple, Chocolate Cream or Lemon Meringue Pie.

\*No Host Bar: Drinks, etc., additional

## Future Meetings

SEP Mon-Fri Sep. 24-28, 2007, Los Angeles, CA

### **Golden Anniversary in the Golden State**

-- **2007 50<sup>th</sup> Annual AEG Meeting**  
Association of Environmental and  
Engineering Geologists

Special Anniversary Meeting in Southern California  
— AEG founded in Southern California —  
Sheraton Universal, Los Angeles, California

NOV Weds. Nov. 14, 2007, Cal State San Bernardino

CSUSB Geology Club & AEG Joint Meeting

-- "Latest Pleistocene slip rate of the San  
Bernardino strand of the San Andreas fault"

Dr. Sally McGill, Professor of Geology, Geology  
Department, Cal. State Univ., San Bernardino, CA

## SHORT COURSES

**Continuing Education Ongoing Short Course**  
"An Introduction to Landslides or Mass Wasting"

An Online course  
AIPG Accredited (3.5 CEU's)  
rgfont@geosciencedm.com,  
[slbishop@geosciencedm.com](mailto:slbishop@geosciencedm.com)  
[www.geodm.com](http://www.geodm.com) Robert Font, Ph.D.

## Inland Empire Chapter Section/National Contact Information

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<http://www.aegsc.org/chapters/inlandempire>

AEG Southern California Section Web-site

<http://www.aegsc.org/>

Association of Environmental and Engineering Geologists (Headquarters)

<http://www.aegweb.org>

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