



# THE ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

*Connecting Professionals, Practice and the Public*

SOUTHERN  
CALIFORNIA  
SECTION

## NEWSLETTER – July 2012

SOUTHERN  
CALIFORNIA  
SECTION

### **OFFICERS**

Chair - David Perry, [david.perry@amec.com](mailto:david.perry@amec.com), 323-889-5326

Vice Chair – Vacant

Treasurer – Shant Minas, [shant@aessoil.com](mailto:shant@aessoil.com), (818) 552-6000 x109

Secretary – Edmond Lee, [edmond@geoconceptsinc.com](mailto:edmond@geoconceptsinc.com), (818) 994-8895

Newsletter Editor – Christy Confar, [cconfar@groupdelsol.com](mailto:cconfar@groupdelsol.com), 805-300-1025



**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)**

**No Section meeting is scheduled for July. Stay tuned for the upcoming August Meeting!**

July 2012

## **Chair's Column**

By David Perry

Happy summer time Southern California AEG members

I hope everyone enjoyed their midweek 4th of July vacation. We will take a summer recess in July and return in August for a much anticipated presentation by Mr. Richard Slade, Upper Los Angeles River Area (ULARA) Watermaster. This will be the first time in about 20 years that the Southern California Section has heard from our court-appointed Watermaster. We plan to hold the August meeting at either Stevens Steak House or the AirTel Plaza in Van Nuys. An abstract of the presentation will be forthcoming in the August Newsletter, but as a preview, we will hear about water quality and basin producers, as well as the effectiveness of some of the major remediation projects in the San Fernando Valley.

Thanks to all who attended the excellent geophysical perspective of Southern California seismicity, presented in June by Dr. Hauksson of Caltech. We packed the upstairs meeting room with over 60 geologists and engineers from as far away as San Diego, Riverside, and Kern Counties. The distribution of the seismicity was explained in terms of both static and kinematic parameters of the crust. For those who had difficulty in viewing the screen, please contact me if interested in a journal paper on the subject recently prepared by Dr. Hauksson.

Five field trips and six short courses are being offered at the Annual Meeting to be held September 15th to 23rd in Salt Lake City. The technical program and abstracts should be available soon. The early registration discount ends on August 1st, so please be sure to sign up early and save. More information on the meeting and the website link is presented below.

## **Annual 55<sup>th</sup> AEG National Meeting**

ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS 55th ANNUAL MEETING  
Salt Lake City, Utah  
Hilton Salt Lake City Center September 15-23, 2012

Nestled in the heart of the downtown business and entertainment district and only eight miles from the Salt Lake International Airport, the Hilton Salt Lake City Center enjoys the most convenient location in the Salt Lake Valley. This AAA Four-Diamond hotel is loaded with

July 2012

amenities and is situated within three city blocks of over 60 restaurants, two shopping malls, historic Temple Square, and the Genealogy Research Center. The surrounding Wasatch Mountains offer adventure, excitement and beauty. Numerous canyons around the valley offer splendid fall hiking and unrivaled biking for all ages. The snowcapped mountains embraced by the warm colors of the fall foliage make Utah the destination.

Click on the following link for more information on the meeting, to register for the meeting, and get conference information: <http://www.aegweb.org/home/professionals/meetings-and-events/aeg-annual-meeting/2012-salt-lake-city>

Early registration discount ends August 1, 2012. Be sure to sign up early and SAVE!

### **BPELSG Announcements**

Visit <http://www.geology.ca.gov/> for news, meeting announcements, notices, and exam information.

**NOTICED JUNE 26, 2012 - MEETING OF THE LAND SURVEYING TECHNICAL ADVISORY COMMITTEE OF THE BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS** – Click on the following link for more information: [http://www.bpelsg.ca.gov/about\\_us/meetings/agendas/lstac\\_notice\\_agenda\\_july\\_2012.pdf](http://www.bpelsg.ca.gov/about_us/meetings/agendas/lstac_notice_agenda_july_2012.pdf).

**POSTED JUNE 22, 2012 - BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS BOARD MEETING MATERIAL** – Click on the following link for more information: [http://www.bpelsg.ca.gov/about\\_us/meetings/materials/6\\_2829\\_12\\_meeting\\_material.pdf](http://www.bpelsg.ca.gov/about_us/meetings/materials/6_2829_12_meeting_material.pdf).

**NOTICED JUNE 15, 2012 - OFFICIAL NOTICE AND AGENDA FOR THE BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS BOARD MEETING** – Click on the following link for more information: [http://www.bpelsg.ca.gov/about\\_us/meetings/agendas/06\\_12\\_board\\_short\\_agenda.pdf](http://www.bpelsg.ca.gov/about_us/meetings/agendas/06_12_board_short_agenda.pdf).

**ANNOUNCED JUNE 8, 2012 - FALL EXAMINATION ANNOUNCEMENT** - The California Specific Examination will be administered as a Computer Based Test (CBT) on October 9, 2012; the Certified Engineering Geologist, Certified Hydrogeologist and the Professional Geophysicist Examinations will be administered as Computer Based Tests (CBT) on October 10, 2012. All candidates will receive a letter from the CBT vendor with instructions on when and how to schedule their examination once all applications have been reviewed and approved (there is no online link for this announcement).

July 2012

**ANNOUNCED MAY 31, 2012 - RELEASE OF THE APRIL 2012 ENGINEERING AND LAND SURVEYING EXAMINATION RESULTS** – Click on the following link for more information: <http://www.bpelsg.ca.gov/applicants/apr12results.shtml>.

**POSTED MAY 3, 2012 - APRIL 2013 INDUSTRIAL EXAM ADMINISTRATION** – Click on the following link for more information: [http://www.ncees.org/Exams/PE\\_exam.php](http://www.ncees.org/Exams/PE_exam.php).

**ANNOUNCED MAY 3, 2012 - INFORMATION REGARDING RENEWAL FEES** – Click on the following link for more information: [http://www.bpelsg.ca.gov/licensees/renewal\\_fees.pdf](http://www.bpelsg.ca.gov/licensees/renewal_fees.pdf).

**ANNOUNCED MAY 2, 2012 - INFORMATION REGARDING NEW EXAMINATION FEES** - New examination fees for geologists are now in effect. Click the above link for more information. Click on the following link for more information: [http://www.pels.ca.gov/applicants/new\\_fees.pdf](http://www.pels.ca.gov/applicants/new_fees.pdf).

**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> for the links to the laws.

### **DTSC Announces REA Program Closure**

DTSC has announced that the REA Licensure Program is closed as of July 1, 2012 and no longer exists. As part of the Budget, on June 27, 2012 the Governor also signed SB 1018 (Committee on Budget and Fiscal Review, Chapter 39, Statutes of 2012). Among a number of other things, SB 1018 has repealed the Department of Toxic Substances Control's (DTSC) authority for the Registered Environmental Assessors (REA) Program. As of July 1, 2012, the REA Program will no longer exist.

DTSC proposed the elimination of the REA Program in this year's budget considerations, primarily because DTSC believes that the program is unnecessary and unenforceable, and more importantly, it is largely duplicative of and inconsistent with federal environmental professional standards that have been adopted since the creation of the REA Program. DTSC believes the elimination of the REA Program will standardize requirements for environmental professionals conducting environmental assessments under other statutory programs, and make them consistent with federal requirements.

**REA I 2012 Annual fee payments received and the processing fee for new, five year renewal and reinstatement applications that were "pending" review will receive refunds in four to six weeks**

July 2012

after July 1, 2012. REA II will receive a prorated annual fee refund and the processing fee for "pending" applications.

Please note that the online registry will no longer be available after July 1, 2012.

Please see the attached notice from DTSC attached to the end of this newsletter for more information.

### **Other Meetings**

**INLAND GEOLOGICAL SOCIETY JULY MEETING**, Thursday July 12th meeting. The speaker will be Dr. Jeremy Conkle, UC-Riverside, speaking on "A Survey of Groundwater Quality in the Beaumont Groundwater Management Zone". Please RSVP your dinner reservations to Dixie Lass asap at either [dixie.lass@att.net](mailto:dixie.lass@att.net) or 951-784-2168. More information is attached to the end of this newsletter.

**"Ecological Islands" CIR's THIRD exploration of the White Mountains of Eastern California, July 14 - 17 2012, Sponsored by Channel Islands Restoration.** CIR is privileged to have as principal field staff Dr. Tanya Atwater, emeritus professor of geology at UC Santa Barbara, and Steve Junak, botanist and herbarium curator at the Santa Barbara Botanic Garden. Both of these extraordinary scientists and educators will guide the trip through this fascinating alpine ecosystem. CIR will also be joined by Santiago Escruceria, who is an environmental educator with years of experience leading international bird watching trips and birding excursions for the Mono Lake Committee and others. The relaxed pace will also include hiking opportunities and visits to the Schulman Grove (location of the almost-5,000 year old Methuselah tree) and to the Patriarch Grove. Evenings will feature campfires, astronomy sessions and natural history slide shows. Visit <http://www.cirweb.org/whites/> for more information and to register.

**South Coast Geological Society 2012 Field Trip, October 12 through 14, 2012.** The South Coast Geological Society is looking eastward towards the Palm Springs area, the San Jacinto Mountains and the northern Coachella Valley for their 2012 Field Trip. They are currently seeking papers for the Guidebook that will be published in support of this trip. Papers addressing topics related to geology, tectonics, engineering geology, hydrogeology, hydrology,

July 2012

Quaternary geology, paleontology, environmental issues, geomorphology, and archaeology of the eastern Inland Empire, San Jacinto Mountains, the northern Coachella Valley and surrounding areas. The trip is going to be conducted October 12, 13 and 14th.

More information on the field trip is available on the SCGS website at <http://www.southcoastgeo.org/>

### **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](http://careers.aegweb.org/jobs#/results/filter=%28state_province%3Acalifornia%29&resultsPerPage=100&showMoreOptions=true&selectedTab=bti-facets-discipline&view=single).



**Certified**  
**SMB / WMBE / UDBE**

---

[www.WoodwardDrilling.com](http://www.WoodwardDrilling.com)

ROCK CORING   AIR/MUD ROTARY   DIRECT PUSH  
OVER-WATER BARGE DRILLING   HOLLOW STEM AUGER

RYAN@WOODWARDDRILLING.COM OR 707-374-4300



## **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](mailto:cconfar@groupdelsol.com). Advertisement rates are shown in the box below.

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

	<u>Month</u>	<u>Year</u>
▪ Business Card	\$30	\$200
▪ ¼ Page	\$40	\$300
▪ ⅓ Page	\$50	\$400
▪ ½ Page	\$55	\$450
▪ Full Page	\$70	\$550

**AEG SoCal website posting only**

**\$20/month or \$200/year**

Professionals,  
Practice, &  
The Public



**AEG Member Benefits**

**PUBLICATIONS**

- National newsletter *AEG NEWS*
- National peer-reviewed *JOURNAL OF ENVIRONMENTAL & ENGINEERING GEOSCIENCE*, co-published with the Geological Society of America

**WEBSITES**

- National Website
- Southern California Section and Chapter Websites

**MEETINGS**

- Monthly Southern California Section Meeting
- Monthly Inland Empire Chapter Meeting

**INFORMATION**

- Regulatory updates
- Licensure updates from the Board of Professional Engineers & Land Surveyors

**CONTINUING EDUCATION & SKILL DEVELOPMENT**

- Chapter sponsored annual Short Course
- Chapter sponsored annual Field Trip

**\*\*\* Free Student Memberships \*\*\* Students invest in YOUR CAREER!**





# ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

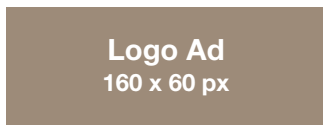
**NOW AVAILABLE**  
**Web Advertising for your Business or Organization**  
**on [www.aegweb.org](http://www.aegweb.org)**

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](mailto:aeg@aegweb.org)  
Visit us on the web: [www.aegweb.org](http://www.aegweb.org)

## AD DIMENSIONS / FILE SPECIFICATIONS

### LOGO AD



**Logo Ad**  
160 x 60 px

*(Proportions are fixed; actual size is dependent on monitor resolution)*

#### STATIC

*(Ad displays continuously)*

**File Dimensions:**  
160w x 60h pixels

**File Type\*:** GIF, JPG  
*(Animation is not supported for logo ads)*

**Max File Size:** 50k

**Colors:** RGB

#### ROTATING

*(Ad will be looped with up to 4 additional ads, each displaying for 5 seconds)*

**File Dimensions:**  
160w x 60h pixels

**File Type\*:** GIF, JPG  
*(Animation is not supported for logo ads)*

**Max File Size:** 50k

**Colors:** RGB

### SKYSCRAPER AD



**Skyscraper Ad**  
190 x 240 px

*(Proportions are fixed; actual size is dependent on monitor resolution)*

#### STATIC

*(Ad displays continuously)*

**File Dimensions:**  
190w x 240h pixels

**File Type\*:** GIF, JPG

**Max File Size:** 150k

**Max Animation Length:**  
5 seconds

**Colors:** RGB

#### ROTATING

*(Ad will be looped with up to 4 additional ads, each displaying for 5 seconds)*

**File Dimensions:**  
190w x 240h pixels

**File Type\*:** GIF, JPG

**Max File Size:** 150k

**Max Animation Length:**  
5 seconds

**Colors:** RGB

*\*All animated images must be in GIF format only.*



# ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

## ORDER FORM

Company Name \_\_\_\_\_  
 Contact Name \_\_\_\_\_  
 Billing Address \_\_\_\_\_  
 \_\_\_\_\_  
 City \_\_\_\_\_  
 State \_\_\_\_\_ Country \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_  
 Phone \_\_\_\_\_ Mobile \_\_\_\_\_  
 Fax \_\_\_\_\_ Email \_\_\_\_\_

### AD RATES

Ad Size	Location	Frequency		Static / Rotating**	Cost per		Net Rate
		Year	6 Mo		Year	6 Mo.	
Skyscraper	Home Page	<input type="checkbox"/> Year	<input type="checkbox"/> 6 Mo.	Static	\$1500	\$900	\$ _____
Skyscraper	Home Page	<input type="checkbox"/> Year	<input type="checkbox"/> 6 Mo.	Rotating	\$500	\$300	\$ _____
Logo*	Home Page	<input type="checkbox"/> Year	<input type="checkbox"/> 6 Mo.	Rotating	\$200	\$120	\$ _____
Skyscraper	Secondary Page (All)	<input type="checkbox"/> Year	<input type="checkbox"/> 6 Mo.	Rotating	\$250	\$150	\$ _____
Skyscraper	Secondary Pg. (1 specific pg.)	<input type="checkbox"/> Year	<input type="checkbox"/> 6 Mo.	Static	\$150	\$90	\$ _____
Skyscraper	Secondary Pg. (3 specific pgs.)	<input type="checkbox"/> Year	<input type="checkbox"/> 6 Mo.	Static	\$300	\$180	\$ _____
Skyscraper	Secondary Pg. (All pgs.)	<input type="checkbox"/> Year	<input type="checkbox"/> 6 Mo.	Static	\$600	\$360	\$ _____
Logo*	Secondary Pg. (1 ad per page)	<input type="checkbox"/> Year	<input type="checkbox"/> 6 Mo.	Static	\$50	\$30	\$ _____
Logo*	Secondary Pg. (1 ad for 5 pages)	<input type="checkbox"/> Year	<input type="checkbox"/> 6 Mo.	Static	\$200	\$120	\$ _____

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

**TOTAL \$** \_\_\_\_\_

#### 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 \_\_\_\_\_

Name on card \_\_\_\_\_

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

July 2012

\* The deadline for submitting an advertisement for next month's newsletter is August 31, 2012.

Christy L. Confar, P.G., R.E.A.  
Principal Geologist  
Del Sol Group CA  
1710 N. Moorpark Road, Suite 226  
Thousand Oaks, CA 91360  
mobile - 805.300.1025  
fax – 805.532.2280  
[cconfar@groupdelsol.com](mailto:cconfar@groupdelsol.com)

## REA Program Elimination

### **Summary**

The Department of Toxic Substances Control (DTSC) proposed eliminating the Registered Environmental Assessors (REA) Program because this program is no longer helpful or necessary. This will standardize requirements for environmental professionals conducting environmental assessments under other statutory programs, and make them consistent with federal requirements.

Eliminating the REA Program would eliminate an overlapping and duplicative professional certification program. California already requires licensing for the other disciplines that are involved with supervising hazardous waste cleanups, including engineers, geologists, geophysicists, and hazardous waste contractors.

### **Improving Efficiency and Reducing Waste**

This elimination will result in an overall cost savings for DTSC, and in the long term, for the regulated community as well.

### Unnecessary and Unenforceable

- The REA Program was created in 1987 to help businesses comply with environmental standards. In recent years, interest in the program has diminished, and the program has not resulted in any measurable enhancements in environmental protection for the state.
- Enforcement tools are not provided in statute; therefore, DTSC's enforcement of the professional standards of the REA Program has been ineffective. The Department of Consumer Affairs California Board for Professional Engineers, Land Surveyors and Geologists has had to assist DTSC to address particularly egregious situations.
- Performance standards and qualifications, established in statute, are too general and subjective. Poor work quality devalues the REA certification and can pose a risk to the public and the environment. Substandard REA work may also necessitate additional investigation and/or remediation, previous work to be redone, or permitting, financing, construction and/or occupancy to be delayed. All of this imposes unnecessary costs on businesses.

### Duplicative of Superior Federal Standards

- U.S. EPA adopted the All Appropriate Inquiries (AAI) Rule, which requires Environmental Professionals to have more experience than the basic level of REA to conduct the same work, which causes confusion, uncertainty, and potentially the loss of liability protections.
- Registrants in the California REA Program self-certify their qualifications and there is no way to confirm they actually have the necessary education and experience.
- This elimination will shift resources away from a program that is no longer valuable in the presence of a more meaningful and effective federal program, and allow DTSC to focus on its core regulatory responsibilities.

# Inland Geological Society

July 2012

Newsletter of the Inland Geological Society

Volume 28 No. 7

**This Meeting:**  
**Thursday,**  
**July 12<sup>th</sup>**

**Time:**  
Social: 6:00pm  
Dinner: 6:30pm  
Lecture: 7:00pm

**Location:**  
**LSA Associates**  
**1500 Iowa Ave**  
**Suite 200**  
**Riverside, CA**  
**92507**  
(Map on Pg. 4)

**Coming to**  
**Dinner?**  
**Please RSVP:**  
**By Monday 7/9**  
**(951) 784-2168**  
**dixie.lass@att.net**

## **In this Issue:**

- June Speaker – Dr. Jeremy L. Conkle ..... 1-2
- Upcoming Events/IGS Meeting Schedule..... 3
- Current IGS Officers ..... 4
- **LSA MEETING LOCATION MAP** ..... 4

## **July Speaker:**

**Jeremy L. Conkle, Ph.D.**

**Post-Doctoral Scholar**

**Department of Environmental Science, University of California, Riverside**

## **A Survey of Groundwater Quality in the Beaumont Groundwater Management Zone**

*Abstracts*

Groundwater contamination is a major concern as ~40% of California residents consume it in their household. In rural arid regions where there are concentrated animal feed operations (CAFOs), crop production, high concentrations of septic systems or even domestic fertilizer usage there is the potential for excess nutrients to enter groundwater storage basins. A 2007 study by Wildermuth Environmental Inc. found high nitrate levels in the Beaumont Groundwater Management Zone (BMZ) and determined that this was likely due to either the high concentrations or improper functioning of septic systems. The study was highly criticized for having too few sampling sites and that many of the sampling sites were too close to septic systems. Nevertheless, strict regulations were placed on new home construction utilizing septic systems. This work was requested in response to the criticisms of the Wildermuth study. In this

*(Continued on page 2)*

*(Continued from page 1)*

study we sampled 40 groundwater wells and took 11 surface water samples. Water samples were examined for isotopes, pharmaceuticals and personal care products and general water chemistry. Using principle component analysis four distinct groundwater zones within the basin observed. Of these four zones, Zones 1 and 3 were the most heavily influenced by anthropogenic wastes from the Beaumont Wastewater treatment plant and septic systems respectively. Zone 2 exhibited some signs of anthropogenic contamination, while Zone 4 was relatively clean.

***Biography:***

**Dr. Jeremy Conkle** earned dual bachelor's degrees in biology and chemistry at Longwood University in Farmville, VA. Following graduation he worked as a chemist on hazardous waste cleanup sites, emergency responses and natural disasters for an EPA contractor. He continued to work for the contractor while completing a Masters in Environmental Studies at the College of Charleston in 2006. Jeremy completed his Ph.D. in Oceanography & Coastal Sciences at Louisiana State University in 2010, where he studied the fate and transport of "emerging contaminants" in wetland ecosystems. During the past 2 years he has been a post-doctoral scholar at UCR where he has continued to study emerging contaminants as well as legacy pesticides such as PCBs and DDT.

## **STUDENTS**

**Did you just graduate? Or maybe you have  
Been working on a research project?**

**Do you want to practice your presentation  
before your defense? Are you looking to  
meet your future employer?**

**Present your research at  
an upcoming IGS meeting!**

**Contact Jon Smith, Debbie Kunath or Steve Mains  
to get your name in the schedule!**