

# AEG Inland Empire Chapter Newsletter

of the Southern California Section

July 2013 Vol.9 No. 10

[www.aegsse.org/chapters/inlandempire](http://www.aegsse.org/chapters/inlandempire)

## July 2013 Meeting Announcement

### ***ROUGH-HEWN LAND:***

*A Geologic Journey from California to the Rocky Mountains*

**Dr. Keith Meldahl**

Professor, Mira Costa College [KMeldahl@miracosta.edu](mailto:KMeldahl@miracosta.edu)

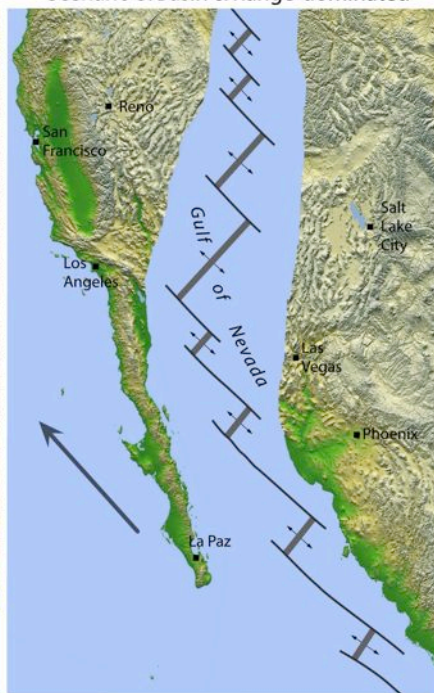
Scenario 1: San Andreas-dominated



Scenario 2: Walker Lane-dominated



Scenario 3: Basin & Range-dominated



Thursday, July 18, 2013,

Temecula Public Library

RSVP to [aeginland@gmail.com](mailto:aeginland@gmail.com) by **Monday July 15, 2013**

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**AEG-IE  
Chapter Officers**

**Chair**

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[djohnston@petra-inc.com](mailto:djohnston@petra-inc.com)

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**Jeff Fitzsimmons**  
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**Vice Chair - South**

**Frank Jordan**  
Consulting Geologist  
(909) 877-1324  
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[dvgaddie@yahoo.com](mailto:dvgaddie@yahoo.com)

**Secretary & Newsletter Editor**

**Kerry Cato**  
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(951) 834-2619  
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**Field Trip Chairman**

**Mark Spykerman**, Earth  
Systems Southwest,  
[mspykerman@earthsys.com](mailto:mspykerman@earthsys.com)

**Membership Chairman**

**Richard Orr**, Leighton Group,  
[Rorr@leightongroup.com](mailto:Rorr@leightongroup.com)

**Past Chairs:**

Debbie Kunath, 2012;  
Frank Jordan, 2005, 2011;  
Douglass Johnston, 2010;  
Kerry Cato, 2009;  
Mike Cook, 2008;  
Rick Gundry, 2007;  
Gary Wallace, 2006

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/chapters/inlandempire>

Submittals: Deadline, 28<sup>th</sup> of the month. Employment notices, job position announcements, and advertisements can be posted for a minimal fee. Newsletter circulation about 170 in greater inland areas of Southern California, and elsewhere.

E-Mail Address changes:  
[aeginland@gmail.com](mailto:aeginland@gmail.com)

## Chair's Message

It's hard to believe but we are essentially wrapping up our AEG calendar year already! Time does move so very quickly but the end of our year also marks the time for our very important Chapter elections. In this month's newsletter you will find a ballot for voting on the various Board of Officer positions. Even if you are not considering serving our geological community, please cast your vote! The officer positions include Chair, Vice Chair North, Vice Chair South, Secretary and Treasurer. We also have the field trip coordinator position(s) available which is a once-a-year commitment.


As of the moment we still are looking for someone with leadership qualities to fill the Vice Chair South position. The majority of our recent and forthcoming officers are from the "northern" part of our IE territory so it would be very refreshing to see a southern Riverside County geologist step in and make a difference. In addition to the current nominated geo's, there is always an extra spot for fill-in candidates so don't let a nominated individual get in the way of your goal of becoming an officer and running for a position. Now I know you will all be so very heartbroken (insert sarcasm here) that I will not be returning as Chair for another term, but we will be turning over guidance of our Chapter in October to the highly capable and committed Mr. Dave Gaddie. This will be Dave's farewell tour as he has been dutifully serving our organization in various capacities nearly since its inception in 2005. Dave has most certainly "paid his dues" and will continue to deliver a high level of service to our geologic community in this next AEG year; however we will be looking for someone new to take

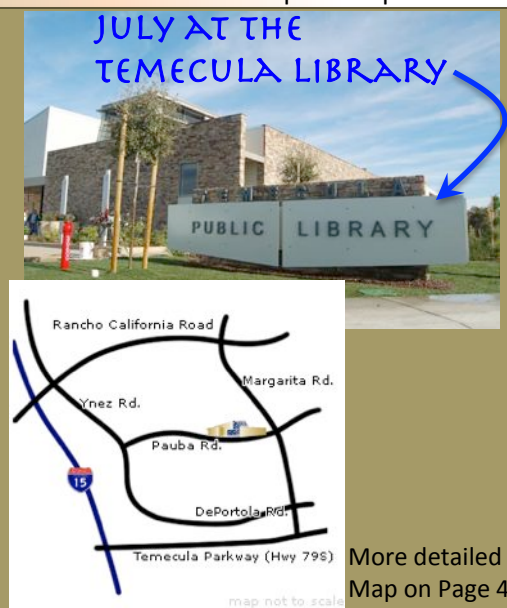
the reins and move our Chapter into 2015.

Also, if you're not aware, following this month, the next two months our Chapter will be essentially dark (no planned meeting events) as August will be a time for summer vacationing and September is AEG's annual national convention, this year in Seattle, WA. Our upcoming diner meeting will be held at the Temecula public library where we are very pleased to host Dr. Keith Meldahl, professor of geology & oceanography at Mira Costa College in Oceanside. This talk will be more of a "big picture" presentation an overview of California geology over the past 200 million years. We have a capacity of about 35-40 at the library so please RSVP early to our last meeting for the summer!

Again please make sure you cast your vote for the officer election and I hope to see you all of you who could not make last month's meeting this time on Thursday, July 18 in Temecula!

Best regards,

  
Douglass Johnston, Chair,  
AEG Inland Empire Chapter





# Dr. Keith Meldahl, ROUGH HEWN LAND

## ABSTRACT

Some of the most intriguing and spectacular geology on Earth occurs in the American West. In this talk, we'll hit the road to explore the geologic story of the West during Mesozoic and Cenozoic time. During the last 200 million years, North America, migrating west as the Atlantic Ocean opened, collided with or overrode several oceanic plates that once floored parts of the ancient Pacific Ocean. One of these plates, the Farallon Plate, drove many of the tectonic events that shaped the West during Mesozoic and Cenozoic time. We'll visit outcrops that reveal four big developments that happened from the subduction and eventual annihilation of the Farallon Plate:

- 1) Multiple terranes collided with continent's leading edge, assembling the westernmost states and planting lode gold in California.
- 2) Mountains sprouted in an eastward-migrating wave to culminate in the uplift of the Rockies, which were subsequently buried, and then exhumed.
- 3) Vast quantities of subduction-generated magma rose up to spew volcanic fire across the landscape while seeding the deep crust with precious metals.
- 4) The tectonic system evolved from compression/subduction-dominated to extension-dominated, producing the Basin and Range Province and

the Great Basin within it, where active seismicity and GPS measurements foretell of incipient continental rifting and a future ocean basin somewhere in the western deserts.

## Speaker Biography

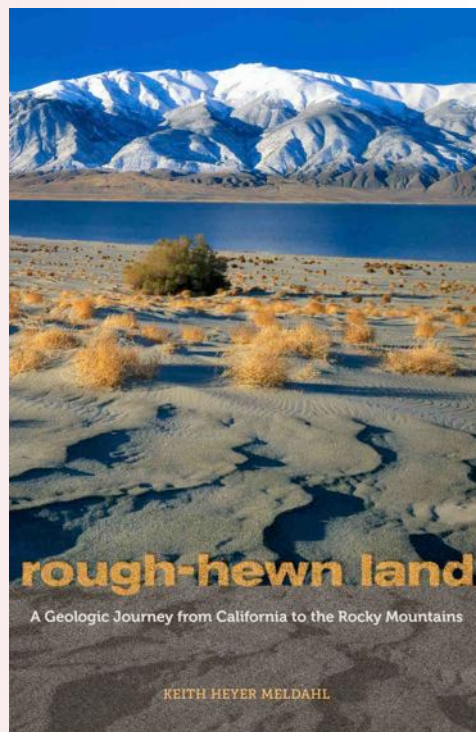


Keith earned his doctorate in geology at the University of Arizona in 1990. From there he became a professor at Oberlin College in Ohio, where he spent seven years before moving to Mira Costa College in northern San Diego County. He has been at Mira Costa College since 1997.

Keith's long-term interest in the American West is both professional (for the outstanding geology and great rock exposures) and personal (for the scenic beauty and opportunities for outdoor adventure). Keith is also a fan of western history. These combined interests in history and geology led to his first book, *Hard Road West: History and Geology along the Gold Rush Trail*. To produce that book,

Keith followed the wagon trails of the westbound pioneers from gold rush days, and blended their story with the geologic story of the land that they crossed on their way to California.

Today's talk is based on Keith's second book: *Rough-Hewn Land: A Geologic Journey from California to the Rocky Mountains*. The book is the product of more than two decades exploring the geology and human history of the American West. Copies of *Rough-Hewn Land* will be available for purchase for \$20 (cash or personal check).



## AEG

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

# AEG-IE July 2013 Meeting Details

**Date & Time** July 18 –Thursday

Social 5:00 to 6:00 pm  
Dinner 6:00 to 6:45 pm  
Announcements 6:45 to 7:00 pm  
Talk and Q&A 7:00 to 8:15 pm

**Location** Temecula Public Library, Temecula, CA**SEE DIRECTIONS BELOW****Meal** **Dinner Menu (catered by Pat n' Oscars Restaurant):**

-Hot breadsticks                      -Barbeque Wings  
-Baked Chicken                      -Greek Salad  
-Baked pasta                          -Barbeque Ribs  
-Non-alcoholic drinks and water

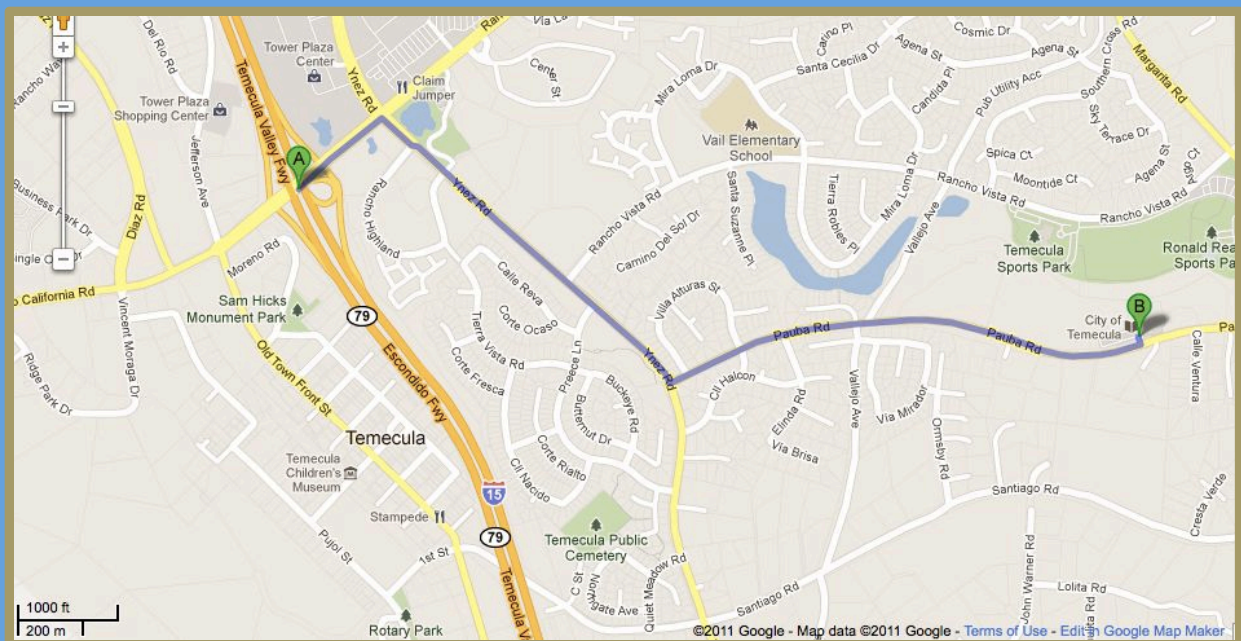
**Cost** \$25 for Professionals and \$10 per Student**RSVP** [aeginland@gmail.com](mailto:aeginland@gmail.com) **Deadline is Monday July 15, 2013**

-- --On RSVP indicate: "MEAL + TALK" Or "TALK ONLY."

**Location:** Temecula Public Library, Temecula, CA, Community Room A  
30600 Pauba Rd., Temecula, CA**Directions:**

From I-15, EXIT at Rancho California Rd. and proceed 0.2 miles northeast to the first light at Ynez Rd and take a right (south). Proceed 0.8 miles southeast on Ynez to the second light at Pauba Road. Take a left on Pauba Rd. and proceed 0.9 miles northeast. The Temecula Public Library is the large building on the north side (left) of the road.

Go through the Library's main sliding glass door entrance and Community Room A will be on the right past the large glass sculpture.



## Election Ballot

### AEG Inland Chapter Election For 2013-2014

**Instructions:**

1. Circle your selection for each of the four positions or write in your own candidate.
2. Sign and print your name.
3. Return the ballot in person at the July 17 Chapter meeting or email a pdf copy to [aeginland@gmail.com](mailto:aeginland@gmail.com) before the meeting. In order to be counted, ballots must be received by August 1, 2013

**Slate of Candidates****Chair****David Gaddie**

Write-in \_\_\_\_\_

**Vice Chair, North****Jeff Fitzsimons**

Write-in \_\_\_\_\_

**Vice Chair, South**

\_\_\_\_\_

Write-in \_\_\_\_\_

**Treasurer****Mark Doerschlag**

Write-in \_\_\_\_\_

**Secretary****Shaun Wilkins**

Write-in \_\_\_\_\_

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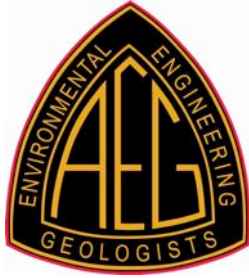
**Member Verification**

Print Name

\_\_\_\_\_

Signature

\_\_\_\_\_



# AEG MEMBER BENEFITS

- You find value in our **conferences** - both [Annual Meetings and Specialty Conferences](#) - and in the **technical knowledge and continuing education** you receive at these meetings.
- You appreciate **networking opportunities** in local settings, at [Section meetings, and at national conferences. With over 3,000 members, AEG provides you with access to a wide network of Environmental and Engineering geology professionals.](#)
- You love our **publications** - the [AEG NEWS, the Environmental & Engineering Geoscience Journal, and the AEG Insider - with their relevant geoscience information, updates on AEG activities, and engaging scientific interest stories.](#)

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

Remember:

- New Membership is just \$95 (First Year of Membership only)
- Student Membership is FREE
- Graduating students receive their first year of full membership for FREE as our Graduation Gift to you (Contact [aeg@aegweb.org](mailto:aeg@aegweb.org) to receive your gift)
- If you have not renewed, there is still time to renew your membership for 2013, just \$140, plus Section Dues.
- 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 or Renew today, please call AEG Headquarters at 303-757-2926 or email \[AEG@aegweb.org\]\(mailto:AEG@aegweb.org\).](#)



## OTHER MEETINGS

### AEG-Southern California Section:

July 9, 2013 (Tuesday). Topic: ***“Geomorphic studies in the Cheviot Hills, West L.A.”*** Speaker: **Miles Kenney**, PhD., Kenney Geoscience. Location: Double Tree, 7 Hutton Center Dr., Santa Ana. For more information visit: <http://www.aegsc.org/>.

### ASCE (Geo Institute Inland Empire Chapter): TBD.

For more info visit: <http://www.asce-sbriv.org/index.html>.

**GRA:** October 8-9, 2013. 29<sup>th</sup> Biennial Groundwater Conference & 22<sup>nd</sup> GRA Annual Meeting: ***“California’s Groundwater Future in the Balance: Integrating Quantity & Quality in a Changing Climate.”*** Location: Sacramento, CA.

For more info visit: <http://www.grac.org/>.

**IGS:** July 11, 2013 (Thursday). Topic: ***“The Early Ocean and Life: A View From Australia 1.4 Billion Years Ago.”*** Speaker: **Kevin Nguyen**, UCR Graduate Student. Location: LSA Associates offices at 1500 Iowa Avenue, Riverside, CA.

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

### LA Basin: TBD.

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

### SCGS: TBD

For more info about SCGS visit: <http://www.southcoastgeo.org/>.

**SDAG & SCGS:** July 17, 2013 (Wednesday). Topic: ***“An Update on the Mars Science Lab Project: Curiosity at its Best!”***. Speaker: **Jill Krezoski**.

For more info visit: <http://www.sandiegogeologists.org/>

## STUDENT SEEKING EMPLOYMENT

**NIDAL ATALLAH** has recently graduated from the MS program in Engineering Geology at Kent State University, OH and is seeking employment; he was a student under Dr. Abdul Shakoor. Nidal Atallah has been a Fulbright Scholar for the years 2011 through 2013. If you would kindly bring any employment opportunities to his attention he would appreciate it. He is quite mobile geographically. Nidal’s resume with contact information is attached to this newsletter.

# NIDAL ATALLAH

540 South Water Street, Kent, OH 44240 / Cell: 3303892526/ [nidalatallah@gmail.com](mailto:nidalatallah@gmail.com)

## **Professional Summary:**

I have worked as a researcher on environmental and water-sector projects. I am currently completing my Masters degree in Engineering Geology at Kent State University. My work ethic is to be dedicated, hard working, organized, and interactive.

## **Skills:**

Research and reporting	Soil Mechanics	Stereonet Analysis Software
Microsoft Office Suite	Rock Mechanics	Geologic Mapping
GIS-ArcMap Software	Environmental Assessment	Petrography

## **Honors & Awards:**

- Fulbright Scholar (2011-2013)
- ASCE-AEG-PGS Student Night- One of three oral presentation award winners (April, 2013); presentation topic: *"An Investigation of the Rock City and Cause of Piping Problems at Mountain Lake, Giles County, Virginia"*
- Earlham College-International Student Tuition Scholarship (2005-2009)

## **Education:**

**Master of Science:** Engineering Geology, Current  
**Kent State University** - Kent, OH

**Bachelor of Science:** Geo-Sciences, 2009

**Earlham College** - Richmond, IN

Minors: Chemistry and Politics

Graduated with honors.

## **Work History:**

**Water and Sanitation Project Materials Consultant**, 10/2010 to 10/2011

**Development and Reconstruction Bureau (D.A.R.B) Ltd** – Ramallah, Palestine

Main duties involved providing technical support to clients on infrastructural project equipment and validation of certifications according to international standards such as ISO and EN.

**Water and Environmental Researcher**, 07/2009 to 11/2010

**Palestinian Hydrology Group (PHG)** – Ramallah, Palestine

A position fulfilling multi-disciplinary tasks in research on development projects such as the following:

Water, Sanitation and Hygiene Monitoring Program (WaSH MP), Red Sea- Dead Sea Conveyance Project (RSDSC), Jericho City Water Master Plan.

**Resident Assistant (R.A)**, 09/2008 to 11/2009

**Students Development and Residence Life Office- Earlham College** – Richmond, IN

**Teaching Assistant (T.A)**, 09/2008 to 08/2009

**Geo-Sciences & Chemistry Departments- Earlham College** – Richmond, IN

GEOS 211: Physical Geology (Fall, 2008), GEOS 111: Environmental Geology (Spring, 2009), CHEM 331: Equilibrium and Analysis (Spring, 2009)

## **Affiliations:**

Association of Environmental and Engineering Geologists (AEG), American Association of Petroleum Geologists (AAPG), Sigma Gamma Epsilon (SGE), Kent State University AEG Student Chapter (KSAEG)- President, The Emergency Water, Sanitation and Hygiene Campaign (E-WaSH).



**Research:**

Kent State University: Masters thesis research project titled "*An Investigation of the Origin of Rock City and Cause of Piping Problems at Mountain Lake, Giles County, Virginia*".

Earlham College: A Keck Foundation funded project titled "*Quantitative Analysis of Trace Metal Concentrations in Springwood Lake, Richmond, IN*".

**Laboratory and Field Skills:**

ICP-AES, GFAAS, XRF, grain size distribution, hydrometer test, Atterberg limits, direct shear test, compaction test, compaction permeameter, uniaxial compressive strength, density determination, slake durability test, point load test, Schmidt hammer, tensile strength test, consolidation test, total station surveying, slug and pump tests, and discontinuity mapping.

**Language Skills:**

English (proficient), Arabic (proficient), French (conversational), Hebrew (basic).

## DRAFT FINAL MEETING AGENDA

### 2013 SAM Fall Forum

September 26, 2013

County of San Diego Operations Center, Conference Center Hearing Room,  
5520 Overland Avenue, San Diego, CA

- |                         |  |
|-------------------------|--|
| <b>7:30 - 8:00 am</b>   | <b>REGISTRATION AND CONTINENTAL BREAKFAST</b>  |
| <b>8:00 - 8:15 am</b>   | <b>Welcome, Introductions and Discussion of Possible New Technical Work Groups</b> <ul style="list-style-type: none"><li>• SAM Forum Steering Committee Chair Doug Roff, PG, CEG, CHg (AECOM)</li></ul>  |
| <b>8:15 - 9:15 am</b>   | <b>Agency Updates</b> <ul style="list-style-type: none"><li>• DEH (Carol Fenner, PG) [including status of LTCP review of all cases]</li><li>• RWQCB (Sue Pease) [including soil reuse waiver]</li><li>• DTSC (Roger Vintze)</li></ul>  |
| <b>9:15 - 9:40 am</b>   | <b>The Curious Case of Rising Groundwater Levels in Kearny Mesa</b> <ul style="list-style-type: none"><li>• Tony Sawyer, PG, CEG, CHg; (DEH)</li></ul>   |
| <b>9:40 - 10:00 am</b>  | <b>BREAK</b>   |
| <b>10:00 - 10:30 am</b> | <b>Coastal Groundwater Investigation Results</b> <ul style="list-style-type: none"><li>• Wes Danskin, USGS</li></ul>   |
| <b>10:30 - 11:15 am</b> | <b>New DTSC Regulations/Guidelines Related to New Toxicity Values for TCE and PCE and use of U.S. EPA Regional Screening Levels (RSLs) in the Human Health Risk Assessment process</b> <ul style="list-style-type: none"><li>• William S. Bosan, PhD, DTSC</li></ul>   |
| <b>11:15 - noon</b>     | <b>Vapor Intrusion Workshop - Regulatory and Industry Updates</b> <ul style="list-style-type: none"><li>• DEH updates – Kevin Heaton, PG, CHg; (DEH)</li><li>• Guidance updates: EPA-OSWER, EPA-OUST, DTSC, ITRC, ASTM – Louise Adams (H&amp;P Mobile Geochemistry), Suzie Nawikas (H&amp;P Mobile Geochemistry), G. Todd Ririe, PhD, PG (BP), and/or Blayne Hartman, PhD (Hartman Environmental Geoscience)</li></ul> |
| <b>noon - 12:15 pm</b>  | <b>QUESTIONS AND CLOSURE</b>   |

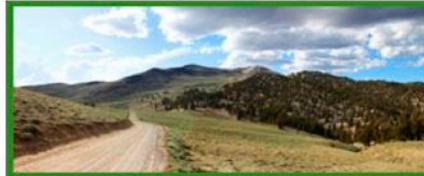
*For complete Forum Presentations and current SAM manual see SAM's website:*

[http://www.sdcounty.ca.gov/deh/water/sam\\_update\\_agenda.html](http://www.sdcounty.ca.gov/deh/water/sam_update_agenda.html)

[http://www.sdcounty.ca.gov/deh/water/sam\\_manual.html](http://www.sdcounty.ca.gov/deh/water/sam_manual.html)

*"Environmental and public health through leadership, partnership, and science"*

# ANNOUNCEMENTS & OTHER MEETINGS



May 23, 2013

## Join us for CIR's Fourth Annual Exploration of the White Mountains of Eastern California

July 13 - 16

Trip web site: [www.cirweb.org/whites](http://www.cirweb.org/whites)

Enjoy four days of geology, wildflowers, ancient trees and birds in the majestic alpine wilderness of the White Mountains, in Inyo National Forest, on the eastern edge of the Owens Valley.

Limited to just 30 people, our group will stay at the Crooked Creek Station (10,200'), part of the University of California's White Mountain Research Station complex. Knowledgeable and enthusiastic scientist/naturalists will guide our group through the variety of geological and ecological communities found in the Whites, as we study and enjoy the fascinating natural history of this scenic and unique California mountain range, emphasizing geology, botany and bird-life. The Whites are home to ancient bristlecone pines (*Pinus longaeva*) - the oldest trees in the world.

We are privileged to have as our 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 us through this fascinating alpine ecosystem. We will again 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. Our 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.

Day-time drives and hikes will take us above 11,000'. Though hiking will not be strenuous, participants should be able to acclimatize to this high altitude.

**Cost:** \$430 (\$415 for CIR members) - includes 3 nights' indoor accommodations and use of research station facilities, nine delicious meals, naturalists, and online access to materials (animal and plant checklists, bibliography and more).

To check space availability and to register, visit the registration page: <http://www.cirweb.org/whites/reg.htm>. You can sign up online, or send us a check made payable to "CIR" to: Channel Islands Restoration, 550 Maple Street, Unit F. Carpinteria CA 93013. Please Include your name, home address, home and cell numbers, and email. A trip information packet will be sent upon receipt of the trip fee.

**For more information and to register, visit the trip web site:**

[www.cirweb.org/whites](http://www.cirweb.org/whites)

**View the trip Video:**

<http://www.youtube.com/watch?v=jLIQ3IVfqrU>