Inland Geological Society

Oct. 2008

Newsletter of the Inland Geological Society

Volume 24 No. 10

This Meeting:
Wednesday, October 1st

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 Friday 9/26
(951) 782-3295
dlass@waterboards.ca.gov

In this Issue:

October Speaker:

Dr. Sally McGill

California State University, San Bernadino

Latest Pleistocene Slip Rate of the San

Abstract

Among the active faults of California, the San Bernardino section of the San Andreas fault has had one of the most profound discrepancies between slip rates at geodetic versus geologic time scales. The 5-mm/yr slip rate inferred from elastic block modeling of geodetic data (Meade and Hager, 2005) is dramatically less than the Holocene slip rate of 24.5 +/- 3.5 mm/yr measured by Weldon and Sieh (1985) at Cajon Creek (at the northwestern end of the San Bernardino stretch of the fault). I will present the results of three new slip-rate measurements for the San Bernardino strand of the San Andreas fault, each spanning the past 30,000 years or so. These new results show that the slip-rate decreases southeastward from Cajon Creek to a value in the low teens (mm/yr) at both Badger Canyon (near Cal State San Bernardino) and Plunge Creek (in Highland). Between Cajon Creek and Badger Canyon, an intermediate rate in upper teens (mm/yr) is measured at Pitman Canyon (in Devore), suggesting gradual transfer of right-lateral slip from the San Andreas fault to the San Jacinto fault as one moves southeastward from Cajon Creek toward Badger Canyon. Within this proposed region of slip transfer, the two fault zones parallel each other and are only 2.5 km apart for a distance of 15 km along strike.

This work was conducted in collaboration with Ray Weldon, Katherine Kendrick and Lewis Owen.

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Biography:
Sally McGill is a professor of geology at California State University, San Bernardino, Department of Geological Sciences, where she has been teaching since 1991. Her research focus has been on paleoseismology and slip rates of faults in southern California with particular emphasis on the San Andreas fault. She received her BA in Geology (geophysics option) from Harvard and Radcliffe Colleges (1985), MS in Geology from California Institute of Technology (1989) and her Ph.D. in Geology at California Institute of Technology (1992).

Job Opportunities

The **County of Los Angeles, Department of Public Works, Geotechnical & Materials Engineering Division**, currently has opportunities in Alhambra, CA for the following positions:

Engineering Geologist

$7,168.36—$7,990.36 Monthly
$7,383.82 - $8229.82 Monthly (Effective 01/01/09)
Exam Number C-4371-L (posting date: August 4, 2008, open until filled)
Position requires a California State Certificate of Registration as an Engineering Geologist. A valid CA Class C Driver License or the ability to utilize an alternative form of transportation when necessary. This position includes standing or walking most of the time, with bending, stooping, squatting, twisting, and reaching; including working on irregular surfaces, occasionally lifting objects weighing over 25 pounds, and frequent lifting of 10-25 pounds. Applicant must provide a copy of his or her college transcripts at time of filing (unofficial transcripts are acceptable).
Job Description: An Engineering Geologist is responsible for performing a combination of the following essential job functions: conduct engineering geological investigations and Phase I/II environmental site assessments (A Phase I Environmental Site Assessment (ESA) documents the presence of recognized environmental concerns in accordance with current standard practice and Federal regulations prior to the acquisition of property, right-of-way or easements by the County; A Phase II ESA documents the presence of subsurface contaminants, in accordance with current standard practice and government regulations through the use of drilling or other investigative method along with collection and analyses of soil and/or groundwater samples followed by evaluation and interpretation of data to form conclusions and recommendations); prepares geologic and environmental investigative reports; performs and evaluates hydrogeologic investigations; reviews, evaluates, and field checks plans for development projects; provides technical review of engineering geologic reports and Phase I/II environmental site assessments for development projects; conducts grading and construction inspections of projects to verify anticipated conditions; conducts meetings, discussions, and other communications with consultants, developers, engineers, etc.; determines the most appropriate exploratory techniques to use for a given project; prepares and analyzes cost estimates for geologic investigations and environmental site assessments; evaluates and analyzes geologic and environmental data to develop conclusions and recommendations for development projects; prepares bid specifications, evaluates bid responses and oversees geologic and environmental work performed on County projects by outside consultants; and drives vehicles to and from worksites.

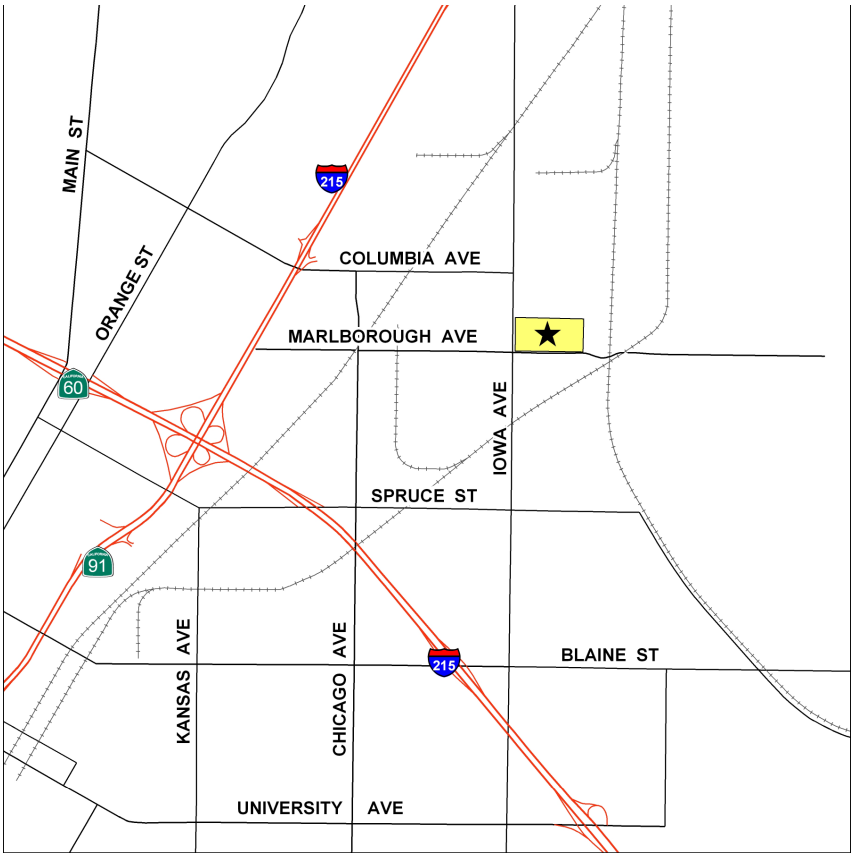
Engineering Geology Assistant

$4,868.00—$6,074.55 Monthly
$5,014.18 - $6,229.18 Monthly (Effective 01/01/09)
Exam Number C-4362-G (posting date: August 4, 2008, open until filled)
Position requires graduation from an accredited college with specialization in geology or engineering geology and a valid CA Class C Driver License. This position includes standing or walking most of the time, with bending, stooping, squatting, twisting, and reaching; including working on irregular surfaces, occasionally lifting objects weighing over 25 pounds, and frequent lifting of 10-25 pounds. Applicant must provide a copy of his or her college transcripts at time of filing (unofficial transcripts are acceptable).
Job Description: An Engineering Geology Assistant is responsible for performing a combination of the following essential job functions: assists in conducting engineering geological investigations and Phase I/II environmental site assessments; reviews existing geologic and environmental literature to determine potential geologic and environmental concerns affecting a project site; provides geologic logging of 24" diameter boreholes. Hollow-stem auger borings and backhoe trenches; operates and maintains electronic equipment used in geological investigations and environmental assessments; provides field mapping for preparation of geologic maps and cross sections; interprets data observed from stereo pairs of aerial photographs; conducts inspections of construction projects to verify anticipated conditions; conducts meetings, discussions, and other communications with consultants, engineers, etc.; determines rock type and engineering characteristics of field samples; evaluates and analyzes geologic and environmental data to develop conclusions and recommendations for construction projects; prepares all necessary equipment and supplies and performs groundwater monitoring at County facilities; and drive vehicles to and from work sites.

County of Los Angeles, Department of Public Works, 900 South Fremont Avenue, Lobby Floor, Alhambra, CA 91803-1331
24-hour Job Line (626) 458—3926 Website: http://dpw.lacounty.gov

IGS MEETING LOCATION:

LSA Associates, Inc.
1500 Iowa Ave, Suite 200
Riverside, CA 92507



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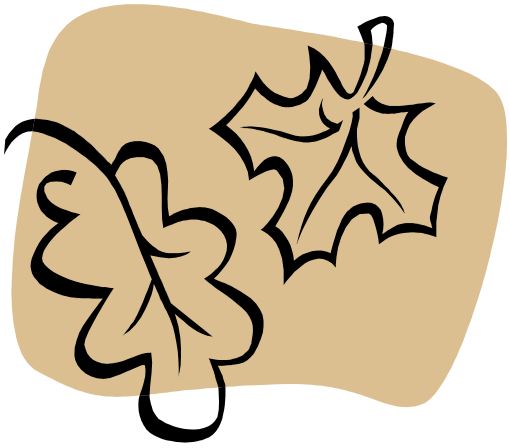
Upcoming Meetings/Events

Rock & Gem Shows—Various locaitons
Various rock and mineral shows will be throughout southern California. To find one nearest you, visit www.rockngem.com/showdates.asp

AEG—Inland Empire Chapter Meeting
Wes Danskin, U.S. Geological Survey-San Diego, will be giving a new talk regarding the Bunker Hill Basin at the November meeting. The meeting will be in Murrietta, CA, **Wed., Nov. 19, 2008.** For more information, please visit



IGS is STILL looking for speakers for 2009 meetings!

The 2008 schedule for speakers has been completed! With 2009 right around the corner, we are starting our new 2009 schedule for speakers! If you know anyone who would like to speak at an IGS meeting (maybe you?) or have any suggestions for the 2009 schedule, please contact Thom or Steve.

IGS Meeting Schedule

November 6, 2008 (Thursday)
Dr. David Jessey, Cal Poly Pomona
Basaltic volcanism in the southern/central Owens Valley and its relationship to Neogene tectonics

December 3, 2008 (Wednesday)
Venessa Fava
Paleoecological and paleoenvironmental reconstruction of the Sycamore Canyon member of the mio-pliocene Puente formation, Chino Hills, San Bernardino County, California

January 8, 2009 (Thursday)
Dr. Jeff Fitzsimmons, John R. Bylerly, Inc.
Loma Linda Fault

February 4, 2009 (Wednesday)
Dr. Matthew Kirby
Paleoclimate of Southern California

March 5, 2009 (Thursday)
TBA

April 1, 2009 (Wednesday)
TBA

May 7, 2009 (Thursday)
TBA

June 3, 2009 (Wednesday)
TBA