Association of Engineering Geologists



Southern California Section

NEWSLETTER - February 1990

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2550 Beverly Blvd. Los Angeles, CA 90057

Dinner Meeting Tuesday February 13th

- The Quiet Cannon Restaurant
 901 North Via San Clemente
 Montebello
- Cost \$20.00 (Full-Time Students Free)
- For reservations call by February 9th

 Marion (818) 889-0844 (Grover Hollingsworth & Assoc.)
 (Leave Your Name & Number of People in Your Party)

Make reservations by Noon on the Friday before the Meeting

- 5:30 Social Hour
- ☐ 6:45 Dinner

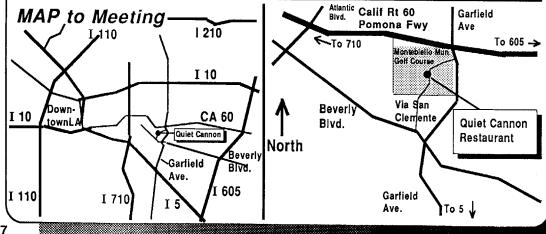
7:30 Announcements

- 🔲 8:00 Program
 - 9:00 Section Affairs

Program

TOPIC The Role of Fire in Erosion Processes and Debris Flow Generation

SPEAKER Wade Wells, Hydrologist with the U.S. Forest Service's Forest Fire Research Laboratory at Riverside



Program

Topic & Speaker

The Role of Fire in Erosion Processes and Debris Flow Generation Wade Wells

The "mudslides" and flooding that occur after fires in California and other parts of the western U.S. are generally the result of special conditions created by the fire which make hillslopes and watersheds extremely unstable and sensitive to even the mildest of storms. Most of the floods and "mudslides" are actually debris flows. These debris flows are common but poorly understood occurrences in many parts of the western U.S. In the past they have typically occurred in fairly remote areas and have caused little, if any, economic damage. As wild lands become increasingly urbanized, the problem of fires and flooding (the socalled fire-flood sequence) pose a more serious social and economic problem Wate Wells has studied these debris flows for over ten years and will discuss some of his finding s and opinions about the conditions and processes responsible for them.

Wade Wells is a research hydrologist at the U.S. Forest Service's Forest Fire Laboratory in Riverside, California. One of his major research interests has been the fire-related debris flows and flooding that occurs in California and other parts of the western U.S. He holds two bachelor's degrees from the U. of Idaho and a master's degree from the U. of Arizona. He has been a Visiting Assistant Professor at U.C Riverside. He served on the team that investigated the 1983 floods, debris flows and landslides in Utah for the Committee on Natural Disasters, National Research Council (NRC), and on the Committee on Methodologies for Predicting Mudflow Areas, NRC. In addition, he has served as a consultant on geologic hazards associated with wildfires for several local firms and government agencies. He has been at the Forest Fire Laboratory since 1977.

THIS MONTH

February 1990



Kelly E. Rowe Hydrogeologis

Last month our speaker was R. K. Bob Canfield, Emergency Preparedness Coordinator for the City of Los Angeles. He is also the assistant to Shirley Mattingly, the Director of Emergency Preparedness for the City of Los Angeles. Bob Canfield spoke in lieu of Shirley Mattingly about the City's role in the International Decade for Natural Disaster Reduction (IDNDR). He said one of the main roles this administrative office has is to keep in focus the potential for a number of natural disasters that may occur in our area and to plan for steps to be taken following the disasters. He also told of the many disasters that have occured in the short history of the Los Angeles area which prompted the formation of the Emergency Preparedness office. As a result, the City of Los Angeles is better prepared to handle disasters. This planning is recognized as a good example to follow by many other communities throughout the world. It is why the City of Los Angeles is actively participating in the IDNDR. A key to the success of the Emergency Preparedness office is to have organized practice through mock disaster drills, to maintain public awareness of potential disasters, and to have plans prepared for disasters, to be approved by our polititians. To the polititians and the public it is easy to lower the priority of the effects of a potential disaster before it occurs. Once it does occur, however, plans should be ready for funding and implementation.

We regret to report that **Dr. George Heim** died of a heart attack on December 22nd, 1989. At the time of the attack he was on a skiing trip with his family in Illinois. **Dr. Heim** was an outstanding engineering geologist and a credit to our profession. **Mike Ploessel, with McClelland Consultants,** announced that a **scholarship fund for needy students** in the name of **Dr. Heim** is set up. Contributions should be sent to

George E. Heim Memorial Fund Gary Wheaton Bank Attention: Lorraine Vanbuskirk East Wesley North Cross Wheaton, IL 60187

The American Society for Testing and Materials (ASTM) Committee D18 on Soil and Rock held a symposium on Geotechnical Applications of Geophysics on June 29 in St. Louis, MO. Borehole geophysical specialists interested in evaluating the draft standard guide for this subject are invited to join/contact ASTM Committee D18 through Bob Morgan, ASTM, 1916 Race St., Philadelphia, PA 19103-1187 (215-299-5400).

According to a November 1989 notice from the California Board of Registration for Geologists and Geophysicts, related to procedures for considering and issuing licenses, ... "Exams will be given only once a year in 1990 and 1991." It is also interesting to note that the decision on exams, from the filing deadline date to the board decision date, has been taking longer in recent years. "...For example, in 1987, the board made a decision on the spring exam with 175 days, but for the December examination, 196 days were required befor the board could make a decision. In 1988, the decision making time was 236 days. As the number of candidates climb, the correcting of exams take additional time. Based on the 875 candidates (1989), the board selected 330 days for its time

Continued from page 2

period for reaching a decision. As additional data is collected, for the actual time needed for 1989 and 1990, the board will readjust it's time frames by amending the regulations." Therefore, examinees from 1989 should expect to be notified about their test about a year after they submitted their applications.

The Geology Alumni Assoc. from San Diego State Univ. (SDSU) will hold their 4th annual field trip on Feb. 23-25, in Painted Canyon. It is located about 5-1/2 miles northeast from the town of Mecca, and about 34 miles southeast from Palm Springs. Because there are no facilities you will have to bring everything you need. If you need additional information call Bill Elliott (619) 586-0870.

This is the last month the newsletter advertises for you to renew your annual fees. Please note that your local section fees operate the section's activities and the annual fees to International AEG do not help operate the section. Therefore, based upon the response we get from the returned mail you will simply be on or off the newsletter mailing list. If you have any questions about getting on the mailing list feel free to call the Secretary/Newsletter Editor - Kelly E. Rowe (714)474-9344 or (818)965-4048.

Eldon Gath, AEG SCS Vice Chariman, has planned in the next few months some more interesting speakers. In March Dave Jackson, from UCLA, will speak about California Eathquakes and Crustal Deformation: The Emerging Role of Geodetics.

As a result of the request in the newsletter last month, regarding predictions on precipitation in the next few months within the southern California area, David W. Poppler, Supervising Engineering Geologist with the LA County DPW Land Development Division provided the following prediction. This prediction, weather forecast for the period from January to April, is from Pacific Weather Analysis, of Santa Barbara (805) 969-3354.

Seasonal Precipitation Outlook

"Based on a system of selective climatology there continues to be a trend toward higher probabilities in the "Dry" category for the January to April period. Simply stated, statistics show that when high pressure has persisted near the west coast during November and December with a lack of any strong mid latitude westerlies in the eastern Pacific, the remainder of the winter season is most likely to be below normal to normal.

Although Pacific westerlies do appear to be increasing at northern latitudes there is still no hint of a breakdown in the high off So. Calif. Most notable among recent years which have turned wet late in the season are 1962-63 and 1985-86. Both of these, however, were marked by very strong westerlies north of Hawaii. Best analog years, though far from perfect, are 1976-77 and 1988-89."

Although not totally unexpected, this pessimistic view certainly poses questions on how we can best deal with, what may be, a long-term trend. Based upon these conclusions, it is predicted that southern Californians can expect to bear an enhanced awareness on water conservation, protection and development issues. Conservation may include enforced water rationing, increased education on how and when to irrigate, motivations toward the exchange of high water use ground-cover plants to low water use plants, and reuse of wastewater for irrigation or for enhanced ground-water recharge. Protection may include a more aggressive team of government agencies to clean-up and to prevent wastes discharged to land and water supplies. Development issues may include the need by water agencies to increase the cost of water we use to finance emergency water supply projects, such as use of more expensive local ground-water supplies, i.e., deepening wells, lowering the positions of well pumps and treatment/use of marginally potable supplies of ground water.

In the January issue of the newsletter the name of Richard P. Lozinsky, Ph.D., Geologist with Leighton & Assoc. was misspelled. Richard was kind to speak at the December meeting about and to show slides of his observations in the epicenter area following the October 17, 1989 Loma Prieta Earthquake.

Positions Available

Career Opportunity For Geotechnical/Civil Engineer

Immediate openings are available for a California registered candidate with 5 to 10 years experience. Projects will include bu not be limited to landfill design and construction which entails liner systems, surface and subsurface drainage, and pipeline design. Also, future possibilities may include setting up a soil testing laboratory and remediation systems design Excellent communication and writing skills required, hydrology experience a plus.

CONTACT: (818) 848-0214

or send resume to:

Law Environmental, Inc. 3320 N. San Fernando Blvd. Burbank, CA 91504 Attn: J. Johnson

Career Opportunity For Senior Hydrogeologist & Staff Environmental Scientist

Management and staff level positions are available in the Burbank office. Salary is negotiable and commensurate with experience. Management positions requirements: California registrations, 5 to 10 years of experience, excellent communication and supervisory skills. Computer literacy a plus. CONTACT: (818) 848-0214

or send resume to:

Law Environmental, Inc. 3320 N. San Fernando Blvd. Burbank, CA 91504 Attn: J. Johnson

Career Opportunity For Geoenvironmental Project Managers

Openings are available for Geoenvironmental/Waste Management Project Managers in Ventura, Los Angeles, and Sacramento offices. Duties will include development and management of environmental assessment, soil and groundwater contamination/remediation projects. Requirements are a record of successful project development and management; B.S or M.S degree (preferred), 3+ years experience registration and excellent technical and communication skills. Salary is negotiable and is commensurate with experience.

CONTACT: (805) 644-5535

or send resume to:

McClelland Consultants.

Attention: Michael R. Ploessel 2140 Eastman Avenue

Ventura, CA 93003

Career Opportunities For Engineering Geologists

Several positions are available in the Riverside County Planning Department. Current Opening: Special Projects Division. Successful candidate would perform geological research and analysis for environmental impact statements and the seismic safety and other safety elements of the County General Plan. Duties would include, for example, review of outside reports and assistance to other County departments as needed. Qualifications: Bachelor's degree in geology or engineering geology. Selection procedure-Applicants who meet the minimum requirements will be referred to the department for employment consideration. Monthly salaries range for the following positions from: Assistant Eng. Geol.: \$2,731; Junior Eng. Geol.: \$2,691 to \$3,334.

CONTACT: (714) 787-6125

or send resume to:

Riverside County Personnel Dept.

County Administrative Center 4080 Lemon Street, Room 109 Riverside, CA 92501-3664

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Positions Available

Advertisements for Student & Part-Time "Positions Available" are Welcome. There is no charge for advertisement.

Career Opportunity For Hydrogeologists, Geologists & Environmental Engineers

Openings are available for entry level (0-4 yrs experience) Hydrogeologists, Geologists and for senior level Environmental Engineers. Openings are available in the City of Industry office and the expanded Newport Beach office. In addition, positions for experienced ground water and soils remediation specialists are available in offices throughout the United States. Salary is negotiable and is commensurate with experience.

CONTACT: (818) 965-4048

or send resume to:

Geraghty & Miller, Inc. Attention: N. Thomas Sheahan 17800 Castleton St. #175 City of Industry, CA 91748

> Career Opportunities For Engineering Geologists

Several positions are available in the LA County DPW. Engineering Geology Assistant: Salary - \$2,611 - \$3,233/mo, Requires BS/BA in geology or engineering geology. Senior Engineering Geology Assistant: Salary - \$2,754 - \$3,411/mo, Requires BS/BA in geology or engineering geology and one year related experience. Principal Engineering Geology Assistant: Salary - \$3,065 - \$3,797/mo, Requires BS/BA in geology or engineering geology and three years related experience in problems in design, construction and O&M of structures. Engineering Geologist: Salary - \$2,611 - \$4,260/mo, Requires California Certification as an Engineering Geologist CONTACT: (818) 458-2141 or (800) LACoDPW or send resume to:

Los Angeles County Dept. of Public Works
Recruitment & Selection Sect.

900 South Fremont Avenue

Alhambra, CA 91803

Career Opportunity For Geotechnical Engineer

Openings are available for Geotechnical Engineer: Salary \$3,977 - \$4,941 and \$4,323 - \$5,371/mo. Duties are to direct or assist in direction of Geotechnical Engineering Unit; directs the preparation of, and in some cases, reviews comprehensive and complex geotechnical reports, and may coordinate the preparation and review of geotechnical and geological reports with Engineering Geologists.. Requirements are authority to use the title Geotechnical Engineer issued by the California Board of Registration. Candidates to file for the April 1990 examination.

CONTACT: (213) 485-2442

or send resume to:

City of Los Angeles Dept. of Bldg & Safety Personnel Dept. Room 100

City Hall South 111 E. First St. Los Angeles, CA 90012 or Van Nuys Branch City Hall 14410 Sylvan Street

> Career Opportunity For Senior Engineering Geologist

Opening is available for a Senior Engineering Geologist. Duties will include planning and supervision of comprehensive engineering geological studies and be the Senior Consultant on complex multi-disciplinary projects. Requirements are M.S degree, 5+ years experience C.E.G. and excellent technical and communication skills. Salary is negotiable and is commensurate with experience.

CONTACT: (805) 644-5535 or send resume to:

McClelland Consultants.

Attention: Michael R. Ploessel 2140 Eastman Avenue Ventura, CA 93003

Seminars/Meetings/Field Trips

FEBRUARY 1990

5"Crustal Habitat of Gold Mineralization in Southern California: Perspectives from CALCRUST Seismic Profiling" San Diego Association of Geologists Meeting. El Adobe Restaurant, 31891 Camino Capistrano, San Juan Capistrano, CA. 6:00 Attitude Adjustment; 7:00 Dinner; 8:00 Program. 4-9"Operation Precipitation Estimation & Prediction (In conjunction with 70th Annual AMS Meeting)." Anaheim, CA. CONTACT: Dr. Constantine P. Georgakakos, Iowa Inst. of Hydraulic Research, The University of Iowa, Iowa City, IA 52242 (319) 335-5222.

12-16"Groundwater Pollution and Hydrology" San Francisco, CA. CONTACT: Groundwater Associates of Princeton, Omni Environmental Corp., The Princeton Corporate Center, 3 Independence Way, Princeton, NJ 08540 (609)243-9399

19-22"Hydrocarbon Contaminated Soils and Groundwater: Analysis, Fate, Environmental and Public Health Effects and Remediation" Newport Beach, CA. Amer. Environmental Management Corp.; Applied Geosciences; ARCO; et.al. CONTACT: Paul Kostecki (413-545-4610), School of Public Health, university of Massachusetts, Amerherst, MA 01003.

19-23"Introduction to Groundwater Monitoring" Indianapolis, IN. International Ground Water Modeling Center (IGWMC). CONTACT: IGWMC (317)283-9458 Holcomb Research Institute, Butler University, 4600 Sunset Ave., Indianapolis, IN 46208

23-25"4th Annual San Diego State Univ. Geology Alumni Association Field Trip in Painted Canyon - Mecca Hills" North of Salton Sea. CONTACT: (619)586-0870 William J. Elliott, Field Trip Chairman 1989-90, P.O. Box 541, Solana Beach, CA 92075

MARCH 1990

1"Papers due for: Mojave Desert Quaternary Research Symposium (May)" TheMojave Desert Quaternary Research Center San Bernardino County Museum. CONTACT: (714)798-8570. Jennifer Reynolds, Editor LMDQRC San Bernardino County Museum, 2024 Orange Tree Lane, Redlands, CA 92374

12-15"3rd Annual Symposium on Application of Geophysics to Engineering and Environmental Problems (SAGEEP '90)." Colorado School of Mines, Golden. CONTACT: Sageep '90. c/o Colorado ARC Enterprises, Ltd., 133 S. Van Gordon, Suite 200, Lakewood, CO 80228 (303-980-1648 18-23"ACSM Annual Meeting '90: Countdown to the 21st Century" Denver, CO. . American Congress on Surveying and Mapping, CONTACT: (703) 241-2446. ACSM, 210 Lettle Falls St., Falls Church, VA 22046.

19-22"NCGA '90" Anaheim, CA. National Computer Graphics Association. CONTACT: (800) 225-NCGA or (703) 698-9600, NCGA 2722 Merilee Drive, Suite 200, Fairfax, VA 22031 19-23"5th Seismic Design and Analysis of Small and Medium Earth and rockfill Dams" St. Louis,

19-23"5th Seismic Design and Analysis of Small and Medium Earth and rockfill Dams" St. Louis, MO. Univ. of Missouri at Rolla Continuing Education (UMRCE). CONTACT: UMRCE (800)752-5057 Continuing Education, 119 Mechanical Engineering Annex, UMR, Rolla 65401-0249

Note"Day In The Field With Tom Dibblee" has been rescheduled for "some time in the Spring '90" CONTACT: (213) 598-0595 U.S. Geologic Services - Arthur R. (Dick) Brown

APRIL 1990

2-6"12th Annual Groundwater Analysis and the Design of Dewatering Systems" Orlando, FL. Univ. of Missouri at Rolla Continuing Education (UMRCE). CONTACT: UMRCE (800)752-5057 Continuing Education, 119 Mechanical Engineering Annex, UMR, Rolla 65401-0249

2-6"4th Annual Short Course on Soil Dynamics and Foundation Engineering" St. Louis, MO. Univ. of Missouri at Rolla Continuing Education (UMRCE). CONTACT: UMRCE (800)752-5057 Continuing Education, 119 Mechanical Engineering Annex, UMR, Rolla 65401-0249

8-12"High Level Radioactive Waste Management" CONTACT: ASCE.

9-11"UNIX*C +" San Francisco, CA. USENIX Association. CONTACT: USENIX Conference Office, (714)588-8649 22672 Lambert St., Ste. 613, El Toro, CA 92630.

16-20"14th Embankment Dams-Soil Aspects" Orlando, FL. Univ. of Missouri at Rolla Continuing Education (UMRCE). CONTACT: UMRCE (800)752-5057 Continuing Education, 119 Mechanical Engineering Annex, UMR, Rolla 65401-0249

22 EARTH DAY - 20 YEARS LATER", at locations throughout the U.S. and around the world. Theme: What has happened over the last 20 years and what direction are we going to preserve and improve our living space.

30-5/4"12th Annual Fundamentals of Grouting" Denver, CO. Univ. of Missouri at Rolla Continuing Education (UMRCE). CONTACT: UMRCE (800)752-5057 Continuing Education, 119 Mechanical Engineering Annex, UMR, Rolla 65401-0249

MAY 1990

14-18"Hands-on 5-day Laboratory May 19-24" Rolla, MO. Univ. of Missouri at Rolla Continuing Education (UMRCE). CONTACT: UMRCE (800)752-5057 Continuing Education, 119 Mechanical Engineering Annex, UMR, Rolla 65401-0249

18-21"Presentation of Papers & Field Trip for: Mojave Desert Quaternary Research Symposium "TheMojave Desert Quaternary Research Center S B County Museum. CONTACT: (714)798-8570. Jennifer Reynolds, LMDQRC SB County Museum, 2024 Orange Tree Lane, Redlands, CA 92374 UNIX 1990.

21-22"International Symposium on Mapping & Geographic Information Systems" San Francisco, CA CONTACT: A. Ivan Johnson 7474 Upham CT. Arvada, CO 80003 (303)425-5610.

Local Meetings

Coast Geological Society: Dinner meetings every third Tuesday of the month, October-June; American Legion Hall, 83 S. Palm St., Ventura, CA.

Inland Geological Society, Dinner Meeting third Thursday of each month, San Bernardino County Museum, Orangetree, Redlands, CA Contact: Jay Martin (714)888-2422.

Los Angeles Basin Geological Society: Lunch meetings third Thursday of every month; now at Luminarias Restaurant, Monterey Park, CA

San Diego Association of Geologists: Dinner meetings third Wednesday of every month-locations throughout San Diego area. Contact: (619)292-8030 (Leighton & Assoc., San Diego office) San Joaquin Geological Society: Dinner meeting second Tuesday of every month except July-September, American Legion Hall, 2020 "H" Street, Bakersfield, CA

South Coast Geological Society, Inc.: Dinner Meetings first Monday of each month, Revere 4 House, 900 West First Street, Tustin, CA

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It's Time to Renew Your Annual Fees for the AEG Southern California Section. Your annual fees to AEG

International do not include the Section fees. The \$20.00 fee covers the operation of the section through publishing & mailing the monthly newsletter, paying for expenses of program speakers, meals for students at meetings, and the expense of our lobbyist in Sacramento.

You will <u>not</u> receive an invoice for renewal other than the notice located here. This is the last renewal notice that will be printed in the newsletter for the 1990 calendar year. You will notice on your mailing label, to the right of your name, the month and year when your fees will be due. Past this date you will no longer receive copies of the section newsletter. You can ignore this notice if you recently made the effort of renewing. Members are, however, encouraged to paticipate at any time of the year.

To renew, send a check in the amount of \$20.00 made out to "AEG" or "Association of Engineering Geologists" to the Section Secretary/Newsletter Editor at the address below. Please note any change of address on the mailing label below or on the form to the right.

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Kelly E. Rowe AEG Secretary/Newsletter Editor c/o Geraghty & Miller, Inc. 17800 Castleton Street, Suite 175 City of Industry, CA 91748





