

SAN DIEGO ASSOCIATION OF GEOLOGISTS

http://www.sandiegogeologists.org

SDAG MEETING ANNOUNCEMENT

Wednesday, August 28, 2019 *4th Wednesday*

A Tale of Two Subdivisions. From Hell. Desert View Drive and Soledad Mountain Road: A Case History of Lingering Geologic Hazards in Land Development in Southern California from a Regulatory Geologist's Perspective

Presented by: Robert N. Hawk, PG, CEG, CHG, PE, & GE

Where: Geocon Incorporated Office – Upstairs Lounge

6960 Flanders Drive

San Diego, CA 92121 (See Map)

When: 5:30 pm – Social Hour

6:30 pm - Dinner

7:30 pm – Presentation

Dinner: Mexican Buffet – Tacos, Rice and Beans, Chips, Horchata

Cost: \$30 Member, \$35 Non-Member, \$20 Students.

Reservations: Make your reservation online at http://www.sandiegogeologists.org/Meetings.html

no later than noon, Monday August 26, 2019. Reservations cannot be guaranteed after Friday at noon, but are always preferred over walk-ins. **EARLY**

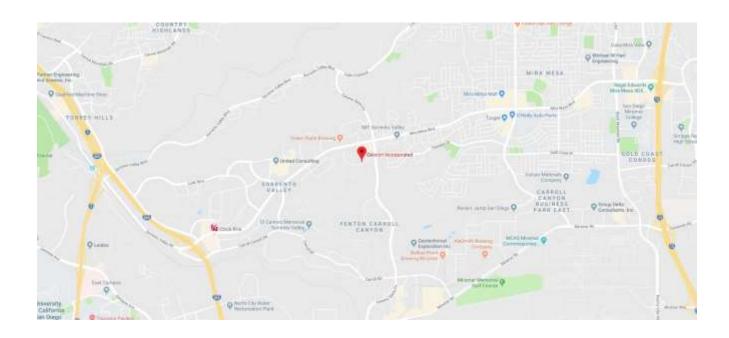
reservations well before the deadline are MUCH appreciated.

Directions:

<u>FROM INTERSTATE 805</u>: Take the Mira Mesa Blvd exit (Exit 27). Head east on Mira Mesa Blvd for roughly 2 miles. Turn right onto Flanders Drive and the Geocon office will be on your left in roughly 0.4 miles.

<u>FROM INTERSTATE 15</u>: Take the Mira Mesa Blvd exit (Exit 16). Head west on Mira Mesa Blvd for roughly 3.3 miles. Turn Left onto Camino Santa Fe and then turn right onto Flanders Drive. The Geocon office will be on your right in roughly 0.2 miles.

Map:



ABSTRACT

In 1959, a tract of land on the east side of Soledad Mountain was subdivided into lots and streets, and processed through the City of San Diego as an ordinary development. Designed by Wittman-Mann Engineers with the geotechnical observation of the grading done by Woodward-Clyde Consultants, the development was ordinary for that period of time in much of Southern California. Geologic evaluation was not typically performed nor required, and no geology licensure existed at the time, Although some firms like Woodward Clyde did have geologists on staff, it was also common practice simply to offer laboratory services such as compaction testing to land development operations without evaluating other aspects of the project. A few months following mass grading in 1961, a large landslide occurred destroying homes under construction. Following years of litigation, re-evaluation and redesign of the grading, the subdivisions were regraded to mitigate the landslide, and the project was built out in the early 1970's excluding the slide area. The landslide area was built out with residential homes in the 1980's. In 1985, the California Division of Mines and Geology (renamed the California Geologic Survey), mapped the area as an ancient landslide complex. In 1990, a new failure manifest in a portion of 5600 block Desert View Drive. In 1993, another separate landslide developed in the 5800 block of Desert View Drive. In October of 2007, a massive landslide destroyed 6 homes on the 5700 block of Soledad Mountain Road, and rendered over 100 temporarily uninhabitable due to utility destruction. In 2015, a geologic investigation for a storm drain replacement by the City of San Diego discovered portions of yet another ancient landslide underlying homes on other portions of the development. Unfortunate events/ poorly designed developments like this one have occurred in many parts of the country prior to the science of geology being applied to civil/geotechnical engineering, and continue to currently play out in other states where development has encroached into more difficult topography/geology and where geologic hazards have not been adequately addressed. This talk will focus on the sequence of events leading to problems on this development; and how those hazards can be managed by the municipality protect utilities, services and public liability for constituents from the

perspective of a former agency geologist.

THE GREATER SAN DIEGO

BIO

Rob Hawk earned his BSc in Engineering Geology from SDSU in 1980. He was enrolled in graduate studies in Civil Engineering at CSULB while working as a geotechnical consultant in Orange County and became licensed. He completed his MSc in Hydrogeology at SDSU in 1993

Mr. Hawk has experience with a variety of geotechnical projects in the Southern California area for the past 39 years. As a private geotechnical consultant, he has participated in, or managed preliminary geotechnical investigations and in-construction review for hillside, residential, and commercial development in Los Angeles, Orange, and San Diego Counties, as well as highway bridges in Imperial County. He has also worked on landfill evaluation and liner design. In rural development, he has provided groundwater resource evaluations, water budgets, and development of extraction wells. He also serves as a subject matter expert in litigation and arbitration of disputes.

Mr. Hawk has worked in the public sector for the City of San Diego as a Senior Engineering Geologist and Deputy City Engineer for over 20 years in various departments including Engineering and Capital Projects, Development Services, and Building Inspection He retired from the City in 2009, although he continued to work an additional 10 years for the City of San Diego Public Works as a provisional Senior Geologist and designated Deputy City Engineer for special projects. He has worked on the Soledad/Desert View development landslides since 1990. He currently is in private practice in geology and geotechnical engineering as a Principal Geologist at TerraCosta Consulting Group, and teaches Engineering Geology as a lecturer and mentor at San Diego State University. He is a licensed in California as a Professional Geologist, Civil -, and Geotechnical Engineer, and is both a Certified Engineering Geologist and Hydrogeologist.

UPCOMING MEETINGS

Meetings are usually held on the 3rd Wednesday of the month may change to accommodate the speaker and meeting place schedules. Check the SDAG website for updates

September 2019	NO MEETING (Field Trip September 27- 29)
October 16, 2019 Old Spaghetti Factory – San Marcos	Cenozoic Paleotectonics and Paleogeography of the Southwest Margin of North America By: Ron Blakey
November 2019	TBD

2019 SDAG EXECUTIVE COMMITTEE

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SDAG PRESIDENT'S CORNER

Greetings SDAG!

Our summer meetings wind to a close this month with our own Rob Hawk presenting "A Tale of Two Subdivisions. From Hell. Desert View Drive and Soledad Mountain Road: A Case History of Lingering Geologic Hazards in Land Development in Southern California from a Regulatory Geologist's Perspective." I hope to learn a few valuable things about his experience in regulatory work! Come on by the Geocon Lounge on Wednesday August 28th! (The 4th Wednesday). Get your signups in early.

Our 2019 Field Trip sign-up forms are attached to this announcement email. Looks to be a great trip Adam has prepared, get those sign-ups in!

See everyone on August 28th, the 4th Wednesday, at the Geocon Lounge!

Sincerely,

Ken Haase Geocon, Inc. 2019 SDAG President haase@geoconinc.com

ANNOUNCEMENTS

ONE-STOPWONDER CHALLENGE!

ONE OSW A MONTH IN 2019!

BEAPART OF SDAGHISTORY!

Have an idea for a one-day or half-day field trip?

Want to share your favorite aspect of San Diego geology?

Contact SDAG to schedule your One-Stop
Wonder!

Your OSW may be chosen to be included in SDAG's One Stop Wonder Guidebook!

Contact Monte Murbach for scheduling!

montemurbach@gmail.com

SDAG Field Trip 2019 OWENS VALLEY AND EASTERN SIERRAS

This year's trip will take us up Highway 395 through the Owens Valley and along the Eastern Sierras. The trip will take place from September 27 to 29, 2019 (Fri, Sat, Sun). We will be camping both nights at the Pleasant Valley Campground located about 8 miles WNW of Bishop. The trip will be planned as a full day Friday and Saturday and a half day Sunday. The trip will be focused on stops between Lone Pine and Convict Lake (exploring approx. 95 miles of the valley). Being in the rain shadow of the Eastern Sierras, the geologic exposures in this region are excellent and the diversity of the geologic features are second to none. We will be discussing and putting our hands on fault scarps, volcanic deposits (basalt flows and rhyolite tuffs), glacial moraines and other unique evidence of the geomorphology of the Owens Valley and Eastern Sierras. The map on Page 4 of the Sign-Up packet (see PDF attached to the announcement email) show a preliminary schedule of stops with the day of the field trip in parentheses. The itinerary is being refined and you don't want to miss this trip! The Owens Valley is a California gem that all geologists must experience at least once in their lifetime. For those not interested in camping, hotel accommodations in the Bishop area are available but are not included in the registration cost and must be reserved independently. We have 17 camp sites reserved for the trip. Each camp site is allotted 6 people and 2 vehicles (carpooling is critical for this trip!). A couple of these camp sites can accommodate an RV or trailer so please let me know if you plan on bringing either an RV or trailer as space is limited. The campground is located in beautiful meadow lands at the mouth of the Owens River Gorge. The river meanders through the campground with scenic views of the Eastern Sierras and White Mountains. The local fishing is quite good and you can literally cast a line from your tent! Fishing is catch and release only, so come prepared with the right equipment if you do plan on fishing in the morning or evening. It is your own responsibility to have a fishing license and abide by the local fishing laws. I can't wait for this trip and am excited to see everyone there! Also you can submit your reservation form during a meeting (paying by credit card with \$5 fee, cash or check) or you can mail in your reservation form and check to myself (Adam Avakian). See the PDF attached to the announcement email for more details.

Cheers!
Adam Avakian
2019 SDAG Vice President
Adam.avakain@dot.ca.gov
619-643-3122



SnapNHD is looking to hire an experienced geologist to review our natural hazard disclosure report and act as an ongoing advisor to the company. If you are interested in learning more, please contact will@snapnhd.com. A sample report can be found here: Sample Report

Dan Garren, a local geologist, is planning a field trip! He will be traveling to Nevada and Utah this fall exploring Cambrian formations, ancient reefs, and fossil deposits.

This 7-day trip requires a 4 wheel drive vehicle. They will be traveling north up the 395 to the ancient Bristle Cone forests of California, east to Nevada and the Gold Point area, eventually making their way to Utah.

If you have any interest, give Dan Garren a call or text at (760) 468-1516. E-mail garren54@gmail.com.

The State of California – Health and Human Services Agency, Office of Statewide Health Planning Development, Hospital Building Safety Board is looking to fill the Engineering Geologist position on the board that has recently become vacant.

The HBSB advises the Director of the Office of Statewide Health Planning and Development (OSHPD) on matters related to the administration of the Alfred E. Alquist Hospital Seismic Safety Act-the act that regulates the healthcare building industry in California. The HBSB also acts as the board of appeals regarding administration and enforcement of building code standards related to acute care Hospital and Skilled Nursing Facility projects submitted to OSHPD. Any person you and your organization nominate for this vacancy must have knowledge and/or experience in the hospital design and construction industry. I also request that nominees be able to make a firm commitment to attend the full board meetings as well as serving on committees and being involved in appeal matters, as appropriate. Board members receive reimbursement for their travel expenses while participating in board and committee meetings, and receive a \$100 per diem in discharge of their board related duties.

If you are interested in being a nominee for the position, the deadline for submission is August 20th.

You may e-mail Eldon Gath at gath@earthconsultants.com for more information.

The EERI San Diego Chapter invites you to two exciting events this August, a short course on seismic analyses tools and the second Kenji Ishihara Colloquium, happening on the beautiful campus of San Diego State University!

Short course on USGS Software Tools, August 21: Drs. Nicolas Luco, Peter Powers, and **Jorge Meneses** (M.EERI,2016) will present on various USGS web-based interactive tools available for site-specific ground motion hazard analysis. For more information, please click here.

The second Kenji Ishihara Colloquium, August 22-23: With a theme of "Seismic Lateral Displacements," this year's event includes an extraordinary lineup of geotechnical and structural engineering speakers from USA, Japan, and Chile. We've confirmed several prestigious speakers and will continue to add others. Click here for a list of speakers, their bios, and abstracts. At the colloquium, we'll also honor the lifetime contributions and achievements of Prof. T. Leslie Youd, Professor Emeritus, Brigham Young University with a gala dinner on August 22.

For more information and to register, please click <u>here</u>.

We look forward to seeing you all in beautiful San Diego!

Support SDAG/SDGS using AmazonSmile



What is AmazonSmile?

AmazonSmile is an automatic way for you to support the <u>"San Diego Geological Society"</u> (SDGS) SDAG's 501(c)(3) as your favorite public charitable organization every time you shop on Amazon at no cost to you at <u>smile.amazon.com</u>.

How do I select a charitable organization to support when shopping on AmazonSmile?

On your first visit to AmazonSmile smile.amazon.com, you need to select a charitable organization to receive donations from eligible purchases before you begin shopping. Please select the San Diego Geological Society. Amazon will remember your selection, and then every eligible purchase you make at smile.amazon.com will result in a donation to SDGS (SDAG).

How much of my purchase does Amazon donate?

The AmazonSmile Foundation will donate 0.5% of the purchase price from your eligible AmazonSmile purchases.

How can I learn more about AmazonSmile?

Please see complete AmazonSmile program details.

SDAG Research Tool

SDAG RESEARCH TOOL - A comprehensive listing of all papers published by SDAG, whether as annual field trip guidebooks or special publications, is now available on our website. Entries are sorted by primary author, or chronologically by date of publication, starting with our first guidebook in 1972, from Coast to Cactus in 2014, and finally on the Julian 'Road to Gold' in 2017. These can be accessed or downloaded as .pdf files. They are fully searchable in Adobe Reader or Acrobat, so if you are researching a topic, "oikocryst" for example, you can search for that keyword. This listing will be updated as new books are published. Thanks to Greg Peterson and Hargis + Associates, Inc., for making this possible. See the links below:

http://www.sandiegogeologists.org/SDAG_Pubs_authors.pdf

http://www.sandiegogeologists.org/SDAG_Pubs_chronological.pdf

Interactive Fault Map for San Diego - Tijuana

As part of the update for the San Diego-Tijuana Earthquake Planning Scenario, Working Group No. 1's "Fault Map Subcommittee" completed the first publicly available bi-national active and potentially active fault map (http://sandiego.eeri.org/?page_id=265). This interactive GIS map includes the first publicly available active and potentially fault map locations from the City of San Diego. The map also integrated the faults south of the border for a bi-national cross border view. This map is an on-going project as our knowledge increases about local active and potentially active faults.

You can expand the map legend on the left side to select layers that can be turned on or off for the map view. You can also select from 1 of 12 base maps at the base map icon. You can click on the fault line in your map layer view to see the meta-data source. In addition, the City of San Diego Seismic Safety Study Geologic Hazards & Faults Maps are available in the layer titled "GeoHaz SD City." Please note that the City "Zone 12 Potentially Active" fault layers was not included in this data, therefore you will need to use the City Maps to find Zone 12.

The Fault Map link is available at: http://www.sandiegogeologists.org/Faults map.html

Please contact Diane Murbach (<u>dianemurbach@gmail.com</u> 619-865-4333), Chair for the SDTJ Earthquake Scenario Working Group #1 - Earth Science, if you have any questions, or see any errors on this new fault map.

I would like to thank Carolyn Glockhoff for her endless GIS work, Jim Quinn and the City for providing their data and time, Jerry Treiman with CGS for his time preparing the Surface Rupture and providing their new State fault data layer, and Luis Mendoza at CICESE for providing the faults south of the border. Please contact Diane Murbach (dianemurbach@gmail.com), Chair for the SD-TJ Earthquake Scenario Working Group #1 - Earth Science, if you have any questions, or see any errors on this new fault map.

Diane Murbach (619) 865-4333

Engineering Geologist, C.E.G.

www.murbachgeotech.com

Request for 2019 SDAG/SDGS Publication Sponsors

On behalf of the San Diego Geological Society, Inc. (SDGS), a public benefit 501(c)3 nonprofit educational corporation, we would like to request tax deductible Donations for our San Diego Association of Geologists (SDAG) group. The list of paid Sponsors and the forms to become a Sponsor are located on the SDAG web site at: http://www.sandiegogeologists.org/Sponsors.html.

Your donation will further the SDGS mission to promote geology and related fields in the greater San Diego region, operating through the San Diego Association of Geologists (SDAG), a committee of SDGS. To achieve our primary educational objective, we organize frequent field trips and maintain a program of monthly meetings featuring speakers on current geological topics. We also publish field trip guidebooks and other publications related to geology and natural history. We encourage scholarship and research by awarding scholarships from the elementary through graduate levels. With your \$100 "EMERALD" donation, your name/business will be listed as a sponsor on the SDAG web site (http://www.sandiegogeologists.org/) and in the monthly SDAG meeting newsletters. With your \$500 "RUBY" or \$1,000 or more "DIAMOND" level donation, your business card will also be included on the SDAG web site and in the monthly SDAG meeting newsletters. In addition, as a "\$1,000 or more DIAMOND" level donation you will be presented with a thank you plaque.

Should you have any questions regarding a Sponsorship, please contact our non-profit SDGS Secretary (Diane Murbach) at 619-865-4333.

Call for Articles

SDAG invites members to submit articles on their current research or an interesting project they are working on for publication in the monthly newsletter. The article should be no more than 1 page in length. Photos are welcomed; too. Please submit articles to the SDAG secretary via email.

Geo Job Listings

Project Geologist Wanted

R. T. Frankian & Associates, Inc.

R. T. Frankian & Associates, Inc., a geotechnical engineering and engineering geology consulting firm since 1963, seeks a qualified individual for Project Geologist position. This position is to work on medium to large size land development-type projects, as well as to develop work within the public sector. The successful candidate must meet the following criteria.

The Project Geologist must -

- Possess BS/BA in Geology, with classes in geologic field mapping, stratigraphy/sedimentology, and structural geology
- Have 1-3 years experience in hillside grading in L. A. County or Southern California
- Be able to perform downhole boring logging, test pit logging, field supervision, slope stability analysis
- Be able to assist CEG with various aspects of land planning and development projects, **especially** field-related aspects
- Be willing to work in various aspects of the job (field, office, and as needed inspection)
- Possess excellent written and verbal communication skills, as well as excellent interpersonal skills
- Being a PG in the State of California is preferred but not required

Senior Engineering Geologist Wanted

R. T. Frankian & Associates, Inc.

R. T. Frankian & Associates, Inc., a geotechnical engineering and engineering geology consulting firm since 1963, seeks a qualified individual for the Senior Engineering Geologist position. This position is to work on medium to large size land development-type projects, as well as to develop work within the public sector. The successful candidate must meet the following criteria.

The Senior Engineering Geologist must -

- Possess BS/BA in Geology, with classes in geologic field mapping, stratigraphy/sedimentology, and structural geology
- Have 3-5 years experience in hillside grading in L. A. County or Southern California
- Be able to perform downhole boring logging, test pit logging, field supervision, slope stability analysis
- Possess excellent written and verbal communication skills, as well as excellent interpersonal skills
- Be willing to work in various aspects of the job (field, office, and as needed inspection)
- Be a CEG in the State of California

R. T. Frankian & Associates, Inc., offers a competitive salary, commensurate with experience and abilities, and a benefits package.

Email resumes to resumes@rtfrankian.com.

GEI Consultants, Inc. is a leading consulting engineering and environmental firm ranked #92 in the ENR top 500 (2018), with over 800 employees in multiple offices throughout the U.S. and Canada. We serve hundreds of government, energy, industry and institutional clients, and have completed 50,000 project engagements throughout the United States, Canada, and more than 20 other countries. Our technical experts are involved in dozens of specialty services emanating from our core solutions in water, energy, buildings, infrastructure and industrial.

We are seeking a full-time **Senior Engineering Geologist** for our Carlsbad, CA office. Experience in geologic investigations for dams and other water infrastructure projects is a plus.

Essential Responsibilities & Duties

- Manage the technical, financial, and client relationship aspects of a variety of geologic/geotechnical engineering projects throughout the country, with a geographic emphasis in California.
- Prepare technical scopes of work and budgets for proposals, and prepare requests for proposals for subcontractor services.
- Plan and lead the implementation of geologic/geotechnical site assessments and subsurface investigations, which include: field mapping, aerial photograph interpretation, rock and soil borings, surface and downhole geophysics, LiDAR analysis, preparation of technical reports, and providing technical oversight of subcontractors including review/approval of invoices and work proposals.
- Participate actively in professional organizations and conferences; deliver presentations, and write technical papers.
- Generate new business.
- o Prepare and deliver technical presentations to clients and regulators.
- This position has a field component; travel, and some overnight travel are required.

Minimum Qualifications

- B.S. in Geology; M.S. is a plus.
- P.G. and C.E.G. with registration in California.
- 10+ years of previous professional experience in engineering geology.
- Excellent technical report writing and communication skills.
- Willingness and ability to travel on short-term assignments as needed.
- Valid U.S. driver's license.

GEI is an EEO/AA/M/F/Vet/Disability employer

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For other opportunities within GEI, go to: https://geiconsultantsinc.ourcareerpages.com/

Trevet is an Environmental and Engineering Consulting Firm headquartered in San Diego, CA. We are seeking a **full-time staff level Geologist or Environmental Scientist**. Two to five years of experience preferred. At a minimum a bachelor's degree in geology, engineering, or a related scientific discipline is required. Must be eligible to work in the United States, and on Department of Defense installations. Ability to travel for extended duration (2 to 3 weeks) is required. The ideal candidate will possess great attention to detail, excellent written and verbal communication skills, and ability to work independently and within a team.

Duties will include a combination of field and office related tasks.

Field experience should include:

- Installation of soil borings using multiple drilling methods
- Describing soil using the USCS and ASTM classification systems
- Installing and abandoning groundwater monitoring wells
- Field sampling of groundwater, soil, and soil gas
- Remediation system operation and sampling

Field work may be performed at project sites with environmental media (e.g., soil, sediment, groundwater, surface water, etc.) that has been impacted with hazardous substances and/or hazardous wastes.

Office experience should include:

- Field data collection, analysis, and interpretation
- Preparation of data in visual, graphical, and tabular formats
- Technical report writing

Other Requirements

Familiarity with CERCLA/RCRA requirements

OSHA 40-Hour HAZWOPER Training with current 8-hour refresher class preferred.

Trevet is an Equal Opportunity Employer

Please apply at

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Seeking Industrial Hygienist/Radiation Safety Officer

Please contact:

Chris Baker Senior Environmental Specialist m: 562.331.4507 <a href="mailto:com/baker@mpmaterials.com/baker@mp

PHOTOS OF THE MONTH

If you would like to submit a photo, email them to secretary@sandiegogeologists.org and I will try and put them in the newsletter. Provide a short description of the picture.



Hargis + Associates, Inc. is an environmental consulting firm specializing in hydrogeology and engineering. We are headquartered in San Diego, California and have offices in Mesa and Tucson, Arizona. Our practice areas include all aspects of hydrogeology and engineering.

As a client service organization, we pride ourselves in being attentive and efficient in meeting our client's needs and solving their problems. In addition to our technical expertise, communication and responsive coordination are hallmarks of our reputation.

We invite you to explore our website to learn more about our firm and the services we provide. We welcome the opportunity to discuss our consulting expertise directly with you.

Contact: Dr. David R. Hargis



H&P Mobile Geochemistry is an industry-leading provider of environmental lab services. With ten mobile labs and five direct push sampling trucks and unparalleled experience, H&P's repertoire of environmental lab services includes many forms of environmental lab sampling techniques all the way to on site field analysis services. H&P has successfully and accurately performed environmental lab services delivering quality results to our clients for over 16 years.

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(800) 834-9888

Contact: Louise Adams or Suzie Nawikas



Contact: Rupert Adams, CEG

Geocon Incorporated

6960 Flanders Drive, San Diego, CA 92121 P| 858.558.6900

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Leighton is a multidiscipline engineering firm, providing geotechnical, environmental, and testing and inspection services. Founded in 1961, Leighton provides engineering solutions to public agencies, property owners, and facilities. With offices located in San Diego, Irvine, Los Angeles, Temecula, Rancho Cucamonga, Palm Desert, Santa Clarita, Ventura, and Bakersfield, we efficiently service any region of Southern California. Our professional staff of Registered Geotechnical Engineers, Professional Geologists and Certified Engineering Geologists, Registered Hydrogeologists, and Registered Environmental Assessors and Certified Inspectors provide decades of local experience for the successful completion of your projects.

For additional information, please contact Bob Stroh (rstroh@leightongroup.com)

Website link: http://www.leightongroup.com

- <u>Dr. Pat Abbott</u> SDSU Professor of Geology, Emeritus
- Marty and Sherry Bloom
- Joe Corones
- Greg Cranham Consulting Geologist
- Dr. Margaret R. Eggers, CHG <u>Eggers</u> Environmental, Inc.
- Karen Evans for Jim Evans (Deceased)
- Phil Farguharson Geology Guy
- Carolyn Glockhoff <u>Caro-Lion Enterprises</u>
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