OREGON CHAPTER OF THE ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

October 2018

Volume 3, Number 2

The Official

AEG Oregon Chapter Newsletter

http://www.aegoregon.org

MEETING DETAILS

Date: **Tuesday, Oct 16, 2018**

Location: **Old Market Pub**

6959 SW Multnomah Blvd
Portland, OR 97223

Evening Agenda:

6:00 pm Social Hour

6:45 pm Dinner

7:30 pm Presentation

Reservations:

Web: **https://aeg-or-2018-10.brownpapertickets.com**

Phone: (971) 222-2045

Fees: **$25 Private Industry**

$20 Public Agencies

Free for Students

Deadline:

Noon, Monday, Oct 15, 2018

$2 surcharge for those who do not reserve by the deadline.

UPCOMING MEETINGS:

Nov	19th	Andrew Fountain
Dec	18th	TBD
		(This could be you)
Jan	15th	Doug Boyer
		(Joint ASCE Meeting)
Feb	19th	Weston Thelen
Mar	26th	Debra Green
Apr	16th	Bill Burns
		Will Struble
May	21st	Student Poster Night

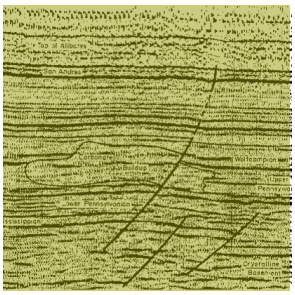
Surface Fault Rupture Hazards: Engineering and Community Response Guest Speaker: Dr. Alan Hull, CEG (Golder)

It is almost 50 years since the California Legislature passed the Alquist-Priolo Earthquake Fault Zoning Act in response to the damage from the 1971 San Fernando earthquake and surface fault rupture. While California's strict zoning and regulatory responses have not been replicated elsewhere in the world, governments and key industries worldwide have developed standards and guidelines to try and mitigate the shaking and surface rupture hazards posed by tectonically active faults. In parallel, science has greatly increased our understanding of the coseismic faulting process, developed new measures for the intensity of earthquake shaking, and importantly, ways to capture uncertainties into predictive models.

This presentation uses examples from around the world to illustrate ways the mining, oil and gas and pipeline industries approach to the potential impact of surface fault rupture and related hazards in engineering risk analyses. Examples will explore how faults at sites from both seismically active and quiescent areas are evaluated, and how the results, including uncertainties, are incorporated into probabilistic and deterministic models. Case studies will show the variety of regulatory approaches used within and beyond California; and to explore the needs of engineers and regulators from ongoing scientific inquiry.

Bio: Dr. Alan Hull, CEG

Dr. Alan Hull is a Senior Practice Leader at Golder Associates in Portland OR. Alan is a California-registered engineering geologist who focuses on paleoseismology, earthquake hazard assessment and incorporating the effects from seismically active faults in engineering analysis and design. Prior to joining Golder in 2001, Alan spent 20 years with the New Zealand Geological Survey (now GNS Science) undertaking basic and applied paleoseismic research, including fault trenching and marine terrace studies. His consulting assignments for mining, oil and gas, government, and utility clients have been to understand and quantify the hazards from potentially seismogenic faults, probabilistic seismic hazard analyses (PSHA); and the engineering geology at sites in Africa, Asia, Central America, Europe, North and South America; and the South Pacific. Alan has authored more than 50 peer-reviewed journal articles and numerous client-focused reports. Alan was a member of the 2016-2018 Expert Panel supporting the update of California Geological Survey SP 42-- Earthquake Fault Zones: A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California.



Message from the Chair

Well it's fall once more, and that means we're all starting to get back into the stride of daily life without the distractions of long sunny days on the beach sipping margaritas or Coronas with lime. Sigh….. But it also means that we come back as a community to enjoy our monthly gatherings, converse with old friends and colleagues, and to listen to some wonderful presentations. Our last meeting was a perfect start to the season with Curran Mohney's informative talk "Transportation Resilience: Vulnerable Threads in an Unstable Fabric".

I must apologize for the excessive noise that many of you heard during the talk coming from the hallway at Old Market Pub (OMP). I especially apologize to Curran. Noise is something that we've always struggled with at the OMP venue, and the Chapter Board has discussed the issue several times in the past. We have again talked with the OMP management and they have agreed to close part of the hallway to other patrons during our meetings. This will help but may not fully buffer us from the background noise. We have also considered purchasing sound barriers to help buffer the noise, but there are some code issues associated with that idea as well. We always have the option of changing venues entirely. Although OMP has been home base for our regular meetings for many years, and has served us well, it's not 100% conducive to presentations. Therefore, we would like to hear your opinions concerning if we should stay at OMP or look for an appropriate alternative venue.

Christopher Humphrey, R.G., C.E.G.
Oregon AEG Chapter Chair

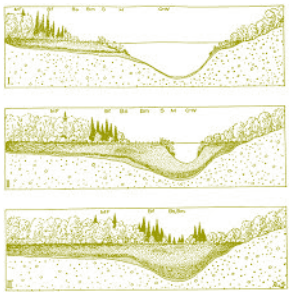
"Keen observation is at least as necessary as penetrating analysis"

Karl Terzaghi

Defending Licensure **Opinion Courtesy of Christopher Humphrey**

Many of you know recently there has been a general movement througout the U.S. to reduce government regulations, and some of these efforts have focused on reducing the number and power of state licensing boards. Professional licensure is seen by some to be a burdensome requirement that limits private competition and free enterprise and geology licensing boards have not been immune from being targeted for elimination in some states. I am unaware of any current significant threats to geology licensure in Oregon or Washington, but this could change in the future, and tends to move quickly. If we are ever called to defend our state licenses, we should be able to clearly communicate how qualified, licensed geologists serve the public interest.

In my opinion, there are two main reasons to have state regulated geology licensure, (1) to protect the public health, safety and welfare from unqualified practitioners, and (2) to ensure the ability of qualified geologists to practice independently. Although geologist should care about both reasons, most states are only concerned about the first, the protection of the public. However, the ability of geologists to practice independently is essential not only for the protection of the public, but also for our ability to communicate why having licensed geologists is important.

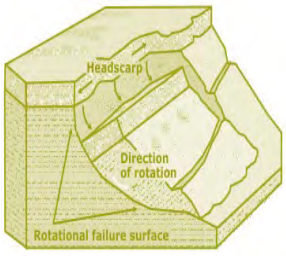


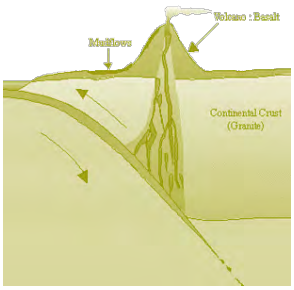
Although most geologists work as part of a team, with other licensed and unlicensed professionals working on the same projects; licensure, by definition, assumes that the licensed professional has the ability and legal right to practice independently within their licensed field of practice. If, as a community, we are unable to clearly communicate to law makers why licensed geologist are qualified to work independently and how this independent practice serves the public, then they will be less likely to see the need for geologic licensure; for how does it serve the public interest if licensed geologists still require oversight by other professionals?

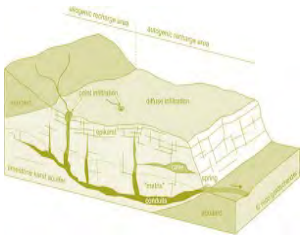
I hope that we will never have to defend our licenses in Oregon and Washington, but if that day does come, we should clearly understand what licensure is and how it serves the public.

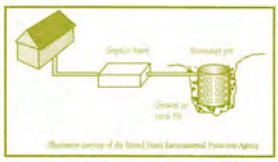
"The earth is large and old enough to teach us modesty."

Hans Cloos

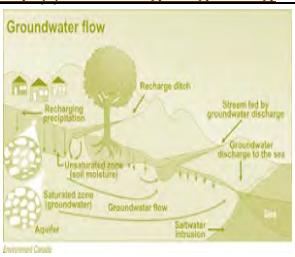








Schematic of a Seepage Pit (Dry Well)



"A soil adapted to the growth of plants, is necessarily prepared and carefully preserved; and, in the necessary waste of land which is inhabited, the foundation is laid for future continents, in order to support the system of the living world.."

James Hutton

Chapter Officers & Committee

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The Oregon Chapter is also on the web at
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National AEG webpage:
http://aegweb.org

Subscribe to the newsletter by sending any e-mail to aegoregon-subscribe@groups.electricembers.net

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Here are two opportunities of a life time...

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Thanks For Supporting AEG

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The AEG Oregon Chapter Newsletter

The Association of Engineering Geologists (AEG) contributes to its members' professional success and the public welfare by providing leadership, advocacy, and applied research in environmental and engineering geology. AEG's values are based on the belief that its members have a responsibility to assume stewardship over their fields of expertise. AEG is the acknowledged international leader in environmental and engineering geology, and is greatly respected for its stewardship of the profession.

AEG OREGON CHAPTER NEWSLETTER is published monthly from September through May. Subscriptions are for members of AEG affiliated with the Oregon Chapter or other Chapters, and other interested people who have requested and paid a local subscription fee of $10.00. E-mail subscriptions are free. News items are invited and should be sent to: Ben George, AEG Oregon Chapter Chair-Elect, Cornforth Consultants, Inc., 10250 SW Greenburg Road, Suite 111, Portland, OR 97223, e-mail: bgeorge@ccilt.com, phone (503) 452-1100. Electronic media is preferred. Deadline for submittal is the 25th of the month. Advertising: business card size $100/yr; ¼ page $200/yr; ½ page $350/yr; 1 page $450/yr.