

The Official

AEG OREGON CHAPTER NEWSLETTER

<http://www.aegoregon.org>

March Meeting Details
Tuesday, March 20th
Location: Old Market Pub
6959 SW Multnomah Blvd
Portland, Oregon
6:00 pm Social
6:45 pm Dinner
7:30 pm Presentation
Dinner: Salad and Pizza
\$25 Dinner Exact Change Appreciated Students FREE with RSVP (\$5 if no RSVP)

Reservations by 4 pm Friday
March 16th at
<http://aeg-or-2018-03.brownpapertickets.com>

**There is a \$2 surcharge for
those who do not reserve by
the deadline**

Upcoming Meetings:
Apr 18th John Wakabayashi
May 15th Nick Zenter
Student Poster Night

Rattlesnake Hills Landslide: Overview and Monitoring

Guest Speaker: Charlie Hammond

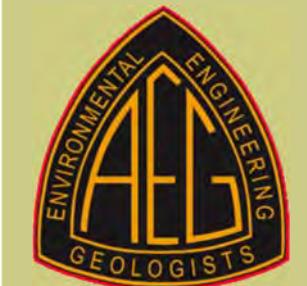
The Rattlesnake Hills Slide is located less than 3 miles south of Yakima, WA, on the southeast side of Union Gap, where the Yakima River cuts through an east-west-trending ridge. The ridge is a tectonic anticline known as Rattlesnake Hills (to the east of the gap) and Ahtanum Ridge (to the west) that rises 2,000 feet above Yakima Valley. The slide is on the south flank of the asymmetric anticline, which dips 10 to 20 degrees at Azimuth 190 degrees. Rock formations in a quarry at the site are Saddle Mountains Basalt and Wanapum Basalt of the Columbia River Basalt, with an interbed of the Ellensburg Formation.

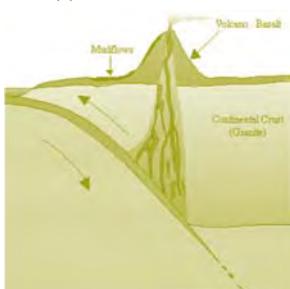


The Saddle Mountains Basalt overlies a 5-foot thick sedimentary interbed of clay, silt, sand and fine gravel, including coal and lahar seams. The basalt has tight to open joints and fractures and is rippable at the quarry. The Ellensburg interbed also exhibits shear textures, interpreted to be associated with bedding-parallel slip and the tectonic folding. The basalt formation is essentially dry. Surface water readily infiltrates the ground, even within the floor of the quarry.

The Rattlesnake Hills Slide is a translating block landslide approximately 4 million cubic yards in volume, 1,700 feet long (north-south), 850 feet wide (east-west) and 200 feet thick. The slide block is in tension and is moving downdip at relatively constant rates that vary across the slide from approximately 0.17 to 0.25 feet per day (2 to 3 inches per day).

Groups that are monitoring the landslide include: Columbia Asphalt & Ready-Mix, Cornforth Consultants/Landslide Technology, Washington Geologic Survey, Washington Department of Transportation, Yakima County, and Yakama Nation. In addition, other monitoring assistance and research is provided by: Pacific Northwest Seismic Network, University of Washington, University of Oregon, and representatives from the Embankments Dams and Slopes Committee of the American Society of Civil Engineers. Regional experts from UW and WSU have also volunteered their experience.





Bio: Charlie Hammond

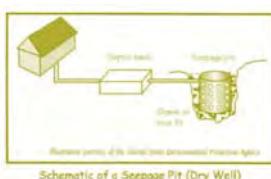
Mr. Hammond has 30 years of experience as an Engineer Geologist investigating landslide and rockfall hazards and risks, seismic hazards, soil and rock material sources, groundwater and dewatering, soil and rock tunneling, and other complex geologic hazard considerations.

Mr. Hammond is a registered professional engineering geologist in Oregon and Washington and has a Bachelor of Arts degree in Geology from Whitman College in Walla Walla, Washington, and a Master of Science degree in Geology from New Mexico Institute of Mining and Technology in Socorro, New Mexico.

Message from the Chair

Thanks to everyone who attended the February-ish meeting. It felt like forever since the January AEG/ASCE joint meeting. Even on short notice with the reschedule, we had terrific attendance watching Dr. Ray Wells of the USGS discuss the topic of *Large dextral motion on the Gales Creek fault, NW Oregon*. Truly a terrific presentation and it was definitely one of our best so far this year – certainly in the top 6! There was even whistling and cat calling at the end, which I can only assume is a first for an Oregon Chapter of AEG monthly meeting.

Because we shifted our last meeting to the fourth week in February, we now have a short time until the March meeting on March 20th. I know everyone has been curious who this TBD person is – and it turns out it is Charlie Hammond with Cornforth Consultants. Charlie will be presenting on *Rattlesnake Hills Landslide: Overview and Monitoring*. The landslide has recently been in the news with questions about its future rate and amount of movement. I accidentally caught a national FOX News broadcast about it a couple weeks ago – listening to a “correspondent” trying to reiterate the technical findings of professional consultants and WSDOT left some gaps. The presentation will certainly be a relevant and interesting assessment of a famous landslide.



As many of you are aware, AEG organization has changed management firms recently. As part of the transition, there is a delay in the being provided the current list of active members. Please remember that your memberships expired at the end of the year. If you have forgotten, please renew today and encourage fellow students and professionals to become new members!

Although we are 2 ½ years away from the 2020 AEG National Meeting in Portland, we are kick starting the planning process. Several members volunteered to be part of the planning committee during the proposal but times change and some of these folks are no longer in the area. If you are still interested in partaking, please let Linda Marks and/or myself know. This notification is also a call for members who may now want to join the planning committee, including an affinity for volunteering to be the Chair or Co-Chair for the conference. Our preliminary kick-off meeting is tentatively scheduled for March 23rd at 5 PM at a TBD location. Additional information will be provided at our upcoming monthly meeting.

As a reminder once again, our 61st AEG Annual Meeting / 13th IAEG Congress is scheduled for September 15th to the 23rd, at the Hyatt Regency in San Francisco. Registration is now open - be sure to register today! For meeting information and updates visit www.aegweb.org/SanFrancisco2018 Call for Published Papers is now open. Submit your abstract today!

Look forward to seeing everyone at our March meeting.

Mark Swank, CEG
AEG Oregon Chapter Chair

“Keen observation is at least as necessary as penetrating analysis”
Karl Terzaghi

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

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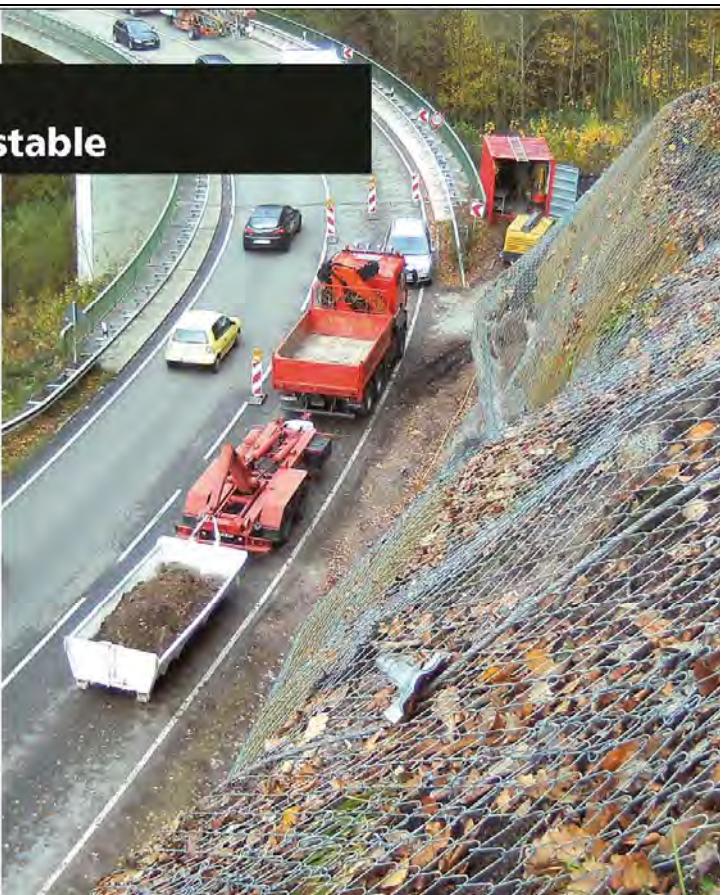
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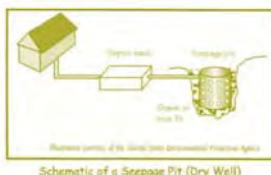


Illustration courtesy of the U.S. Geological Survey, Environmental Science Agency

Schematic of a Seepage Pit (Dry Well)

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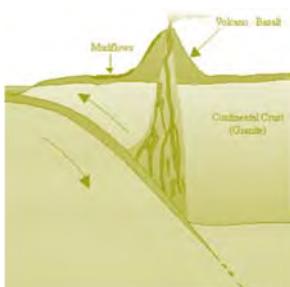
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*"Keen observation is at
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Karl Terzaghi



An aerial photograph of the Vancouver Waterfront Redevelopment project. The image shows a large industrial complex with several large buildings and parking lots, situated next to a rail line. A prominent feature is a long, narrow peninsula or breakwater extending into a body of water. The surrounding area includes more industrial buildings, some green spaces, and a network of roads and streets. The overall scene illustrates a major urban and industrial transformation along a waterfront.



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A professional geophysical survey in progress in a rugged, mountainous landscape. A surveyor in an orange vest is operating a piece of equipment, with a large, vertical, multi-layered rock face in the background.



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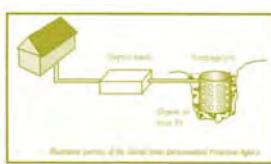


Illustration courtesy of the U.S. Environmental Protection Agency

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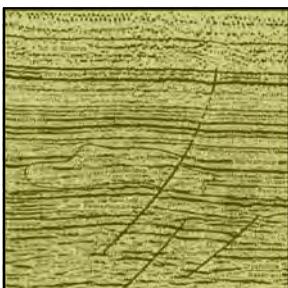


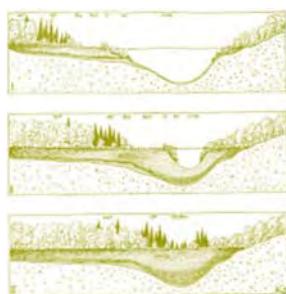
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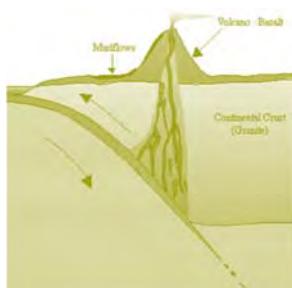
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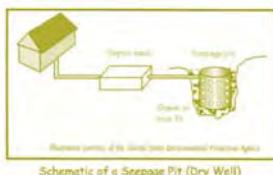
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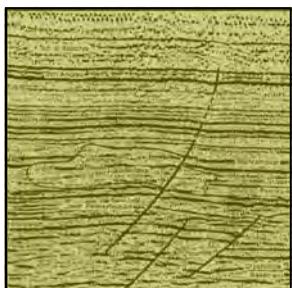
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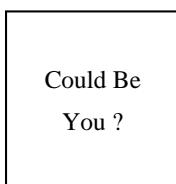
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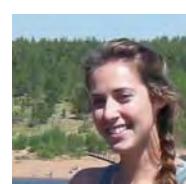
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The AEG Oregon Chapter Newsletter

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.

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