



The Official

OREGON SECTION AEG NEWSLETTER

<http://www.aegoregon.org>

September Meeting Details

Tuesday, September 24th

Location: Old Market Pub

6959 SW Multnomah

Portland, Oregon

6:00 pm Social

6:45 pm Dinner

7:30 pm Presentation

Dinner: Pizza & Salad

\$20 Dinner (\$5 Students)

Reservations:

mwegner@cornforthconsultants.com
with "AEG Reservation" in
the subject line or 971-222-
2047 by 4pm Thur. Sept. 19

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

Upcoming Meetings:

Oct 15th Troy Fowler
Nov 19th AEG/AWG Meeting
Dec 17th TBA
Jan 21st ASCE/AEG Meeting
Feb 18th Brian Atwater
Mar 18th Laura Maffei
Apr 15th Jeff Coe
May 20th Student Poster Night

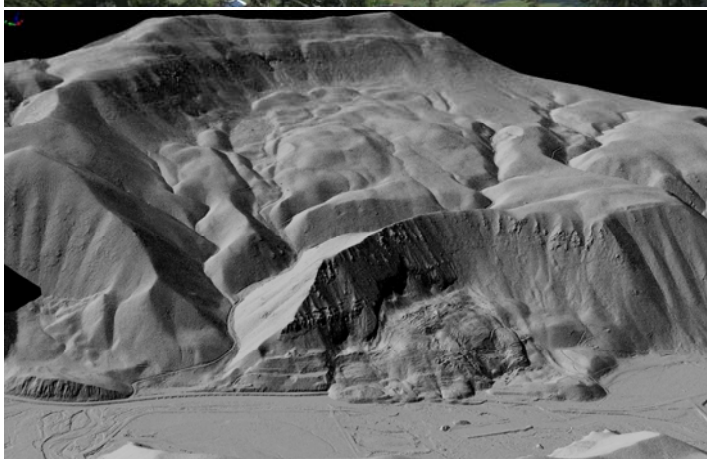


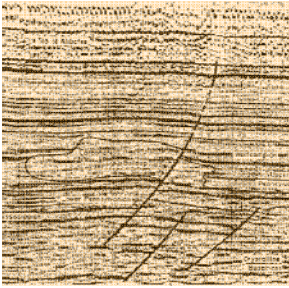
The 2009 Nile Valley Landslide - from Past to Present

Guest Speaker: Tom Badger

The October 2009 catastrophic failure of the Nile Valley landslide destroyed more than 2500 feet of State Route 410 near the community of Nile, Washington, located 25 miles northwest of Yakima. Numerous eyewitness accounts and Pacific Northwest Seismic Network records enabled the development of a detailed timeline of landslide evolution, which proved crucial for unraveling the modes in which it failed. An extensive drilling program, basalt chemistry, and geotechnical instrumentation were used to characterize the subsurface conditions, assess the stability of the various landslide domains, differentiate between the Nile Valley landslide and the gigantic Sanford Pasture landslide complex, and to develop mitigation designs. The failure was attributed to two separate translational mechanisms, one shallow and one deep, controlled by an adversely dipping assemblage of Grande Ronde Basalt flows with very weak sedimentary interbeds. Large portions of the landslide remain in a state of marginal stability or have exhibited post-failure creep. After evaluating a number of mitigation alternatives, a favored

alternative was selected that balanced a range of risk, geotechnical, environmental, societal, and cost factors. It entailed relocating the highway around and partially onto the landslide toe. The relocation, completed in August 2012, required re-channelizing a half-mile-long reach of the Naches River that had been inundated by the landslide, construction of a large shear key-buttress, and partial excavation and fill placement on the landslide toe. For the foreseeable future, instrumentation monitoring will continue to assess for reactivation or acceleration of landslide movements. Controversy continues over the potential resumption of gravel mining within the limits of the landslide.





Bio: Tom Badger, LEG, PE

Tom has a BS in geology from Western Washington University (1983) and an MS in geological engineering from the University of Nevada, Reno (2002). In 1984, he started work with the Washington State Department of Transportation on the I-90 Mt. Baker Tunnel project. Tom has been employed with WSDOT since, and currently serves as the Chief Engineering Geologist. During his nearly 30 year tenure with WSDOT, he's had the good fortune of working with and for many talented professionals on a great variety of transportation-related earthworks and structures, as well as many landslide and rockfall remediation projects. His geomorphologist mate has also hugely expanded his geological universe. He is a past chair (2000 and 2002) of the Washington Section of AEG, and a past chair (2003-2009) of the Engineering Geology Committee for the Transportation Research Board, National Academy of Sciences. He is licensed in Washington State as an engineering geologist, hydrogeologist, and professional engineer.

Message from the Chair

It is fall again and time for AEG. We welcome the 2013-2014 season with gratitude to outgoing AEG Oregon Chair Robin Johnston (AMEC) who served with gusto and dedication to the student and professional members. Past-Chair, Kevin Schleh (Reterro) has completed his tenure serving the Oregon Section, thanks Kevin! We welcome incoming secretary Stephen Hay (ODOT), thanks for joining the team Stephen! Linda Mark (ESA Vigil-Agrimis) will now step into the Chair-Elect role and Adam Reese (Apex) will become Treasurer. Mike Marshall (GRI) continues to fulfill the demanding position of program chair while Scott Braunsten (PBS) continues on as our newsletter editor. Keith Olsen (OSU) will continue as our website editor, and Ruth Wilmoth (Columbia Geotechnical, Inc.) continues as our membership chair. I (Darren Beckstrand, Cornforth Consultants) am stepping into the role as Section Chair, where I have big shoes to fill. We look forward to an exciting season!

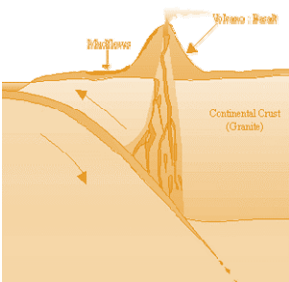
The 56th Annual AEG National Meeting in Seattle is scheduled for September 8 through 15. Please make the short drive north for great presentations showcasing your colleague's recent work. If you are unable to make it, I will provide an update during the September meeting.

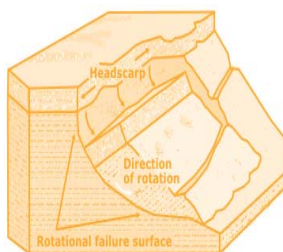
Please help to make this a fun and successful year by attending the meetings and staying engaged. See you soon.

Warm Regards,

Darren Beckstrand, CEG

Cornforth Consultants





Western States Soil Conservation, Inc.

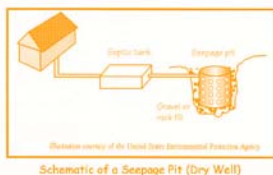
There is no limit to the depths we will go!



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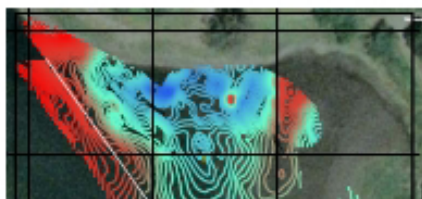
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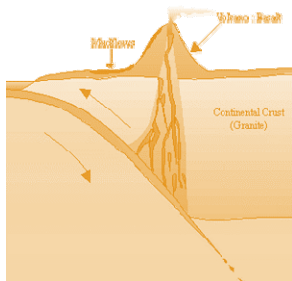
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*"Keen observation is at
least as necessary as
penetrating analysis"*

Karl Terzaghi



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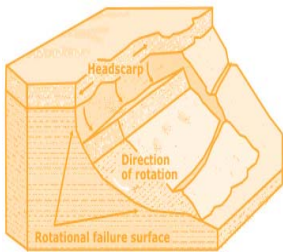
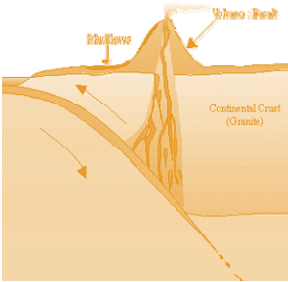
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The Oregon Section is also on the web at

<http://www.aegoregon.org>

National AEG webpage:

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The Oregon Section Newsletter

OREGON SECTION AEG NEWSLETTER is published monthly from September through May. Subscriptions are for members of AEG affiliated with the Oregon Section or other Sections, 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: Scott Braunsten, OR Section AEG Newsletter Editor, PBS Engineering and Environmental, 4412 SW Corbett Avenue, Portland, OR 97239, e-mail: scott.braunsten@pbsenv.com, phone (503) 417-7737. Electronic media is preferred. Deadline for submittal is the 25th of the month. Advertising: business card \$100/yr; ¼ page \$200/yr; ½ page \$350/yr; 1 page \$450/yr. Please notify Scott if you have a change to your email or mailing address.

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.

