OREGON CHAPTER OF THE ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

January 2018

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The Official

AEG OREGON CHAPTER NEWSLETTER

http://www.aegoregon.org

January Meeting Details

Wednesday, January 3rd

Location: IBU Public House

4439 SW Beaverton-Hillsdale Highway

Portland, Oregon

6:00 pm Social

7:00 pm Dinner

8:00 pm Presentation

$35 Dinner-Private
$30 Dinner-Public
$10 Dinner-Student

Reservations by 4 pm Monday January 1st at

http://aeg-or-2018-01.brownpapertickets.com

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

Upcoming Meetings:

Feb 20th Ray Wells
Mar 20th TBD
Apr 19th John Wakabayashi
May 15th Nick Zenter
Student Poster Night

Joint AEG/ASCE Meeting

The Geotechnical State of Oregon's Dams

Guest Speaker: Keith Mills, PE, GE

PLEASE NOTE MEETING DATE

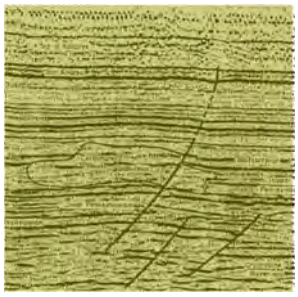
Dams are very important infrastructure and a key part of Oregon's water supply resiliency. Most of these dams are earth-embankment, and many of these were constructed well over 50 years ago. Our understanding of hydrologic, geologic and geotechnical risk has changed greatly since many of these dams were built. This presentation will focus on seismic, internal erosion (piping), slope stability and spillway erosion issues and deficiencies that may exist at some of these dams. Current practice with regard to identifying, confirming and addressing these potential deficiencies will be discussed,

The largest dams in the state are owned and/or regulated by the Federal Government, while the Oregon Water Resources Department (OWRD) regulates the greatest number of dams. Most dams owned or regulated by Federal Agencies have been analyzed and generally rehabilitated for deficiencies. OWRD has one of the oldest dam safety programs, since the 1928 failure of the Saint Francis dam in California. A small number of state regulated dams have been rehabilitated, with analysis showing that after rehabilitation dams will perform well under all anticipated loading conditions. Many other dams have received little repair or rehabilitation attention since construction, and were mostly designed as homogenous fill. Recent inspections and excavations into these older dams indicate that many contain material other than what is shown in the design. Improving safety will require addressing the backlog of dams with deficiencies, and is described in Oregon's 2017 Integrated Water Resources Strategy. To be successful, modification of authorities and additional engineering analyses are both essential.

Bio: Keith Mills, PE, GE

Keith is the State Engineer for the Oregon Water Resources Department in Salem. In that role, he is the manager of Oregon's dam safety program. He began working for that agency as the dam safety engineer in 2011, and is actively involved with the Association of State Dam Safety Officials (ASDSO), including co-organizing a 2016 Seismic Safety of Dams conference in Sacramento. He has been to over 250 dams, many on an annual basis.

He received a BS in Forest Engineering and an MS in Civil Engineering (Soil Mechanics and Foundation Engineering) from Oregon State University. His specialty has been the stability of natural slopes and embankments. For much of his career he worked for the Oregon Department of Forestry on geotechnical applications to forestlands and forest operations. He has been to almost every named place in the great state of Oregon, and enjoys trying to understand local geology, meteorology, hydrology and vegetation and their effects on water and transportation infrastructure.

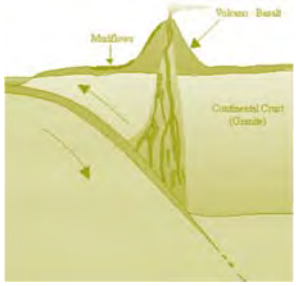


Message from the Chair

Thanks to everyone who attended the December meeting where speakers Bryan Wavra and Derrick Hayes with Geostabilization International (GSI) presented the results of ODOT's response to the landslide failure along OR224 at MP 10 that prompted the closure of the highway. Their presentation focused on the procurement timeline and final design build solution post-emergency declaration that required rapid analysis and construction of a landslide mitigation package consisting of drainage and structural solutions. We really appreciate them sharing their work on the project.

Our upcoming January meeting is scheduled for January 3rd. We are having our annual joint AEG/ASCE at the same venue as last year's joint meeting – IBU Public House on Beaverton-Hillsdale Highway. Needless to say, I'm certain we are all hoping for better road conditions than last year. Keith Mills, PE, GE from the Oregon Water Resources Department will be presenting on *The Geotechnical State of Oregon's Dams*.

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!



As we near the end of 2017, I want to remind all current Oregon Chapter members that your memberships will expire at the end of the year. Please renew today and encourage fellow students and professionals to become new members! The long-term success of our Chapter and AEG nationally only occurs with the continual growth of membership. If you are interested in creating a new chapter within the Oregon Chapter boundaries please let me know or contact Linda Mark, AEG Region 3 – Pacific Regional Director (lmark@esassoc.com).

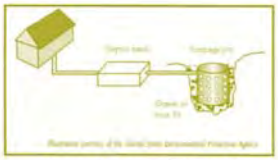
Mark Swank, CEG
AEG Oregon Chapter Chair

Winter Term Classes at PSU

Registration is now open for PSU. To find a class, go to the PSU home-page (www.pdx.edu); or Geology Department (www.pdx.edu/geology) -- from the drop-down Quick Menu -- click "find a class". Then choose winter 2017; and on the search list, just "Geology". It will show all the courses for winter term with times, instructors, rooms, etc.

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

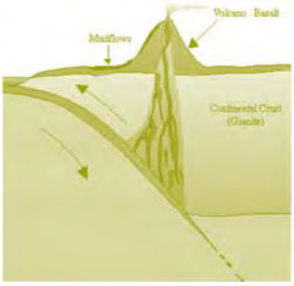
Hans Cloos

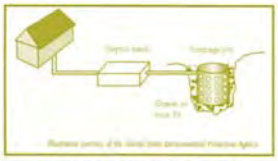


Schematic of a Seepage Pit (Dry Well)

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

Karl Terzaghi

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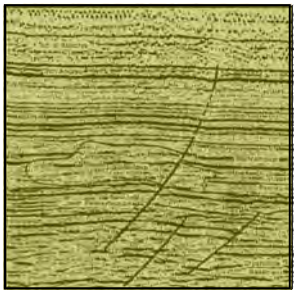

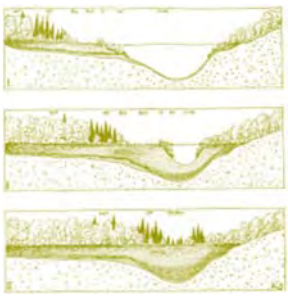

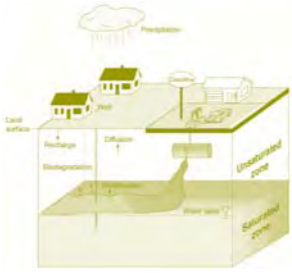

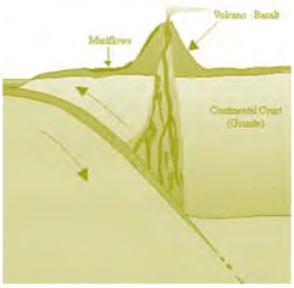

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National AEG webpage:
http://aegweb.org

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Past Chair:
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Thanks For Supporting AEG

Aspect Consulting, Columbia Geotechnical, Cornforth Consultants, Federal Energy Regulatory Commission (FERC), GRI, NACSE, Oregon Department of Transportation, OSU, PBS Engineering and Environmental, Portland State University

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: Scott Braunsten, AEG Oregon Chapter Newsletter Editor, PBS Engineering and Environmental, 4412 SW Corbett Avenue, Portland, OR 97239, e-mail: scott.braunsten@pbsusa.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.