

The Official

# AEG OREGON CHAPTER NEWSLETTER

<http://www.aegoregon.org>

## Meeting Details:

Date: Wednesday, January  
4, 2023 7:00 pm Hybrid  
**Old Market Pub 6959  
SW Multnomah Blvd**

[RSVP](#)

**EVENT LIMITED TO  
30 IN-PERSON  
TICKETS, AND  
REQUIRES PRE-  
REGISTRATION AT  
RSVP LINK ABOVE**

## Agenda:

5:30- 6:30 pm SOCIAL  
6:30-7:00 pm dinner  
7:00 pm Presentation

## UPCOMING MEETINGS:

February 21, 2023--  
AEG President (Nate  
Saraceno)

March 21, 2023--  
Julian Waeber

April 18, 2023--  
Jahns Lecturer (Vince  
Cronin)

## Mosquito Creek Debris Flows: Risks and Mitigation



Over 30 debris flows deposited on the Historic Columbia River Highway (HCRH) during a two month period in the winter of 2020-2021. Debris flows reached the adjacent Union Pacific Railroad and encroached on the shoulder of Interstate I-84. Initial cleanup and containment of debris flow deposits was a cooperative effort between ODOT and UPRR. ODOT performed emergency response to reopen the HCRH and initial mitigation by diverting the creek channel and debris flow paths. The mitigation plan was expanded to further reduce the risk of debris flows reaching the HCRH. This presentation will provide an overview of ODOT response to the debris flows, emergency mitigation efforts during the winter and spring of 2021, and construction of more robust mitigation in 2022.



*Geologists have a  
saying - rocks  
remember.*

*Neal Armstrong*

## George Machan, PE



George has 48 years of experience in geotechnical engineering and project management. In the early 1970's, George earned a BSCE degree at UCONN and a MSCE degree at Purdue. He started his geotechnical career with Squier & Associates in 1975 in Lake Oswego. He joined ODOT in the statewide geotechnical office in 1984 and worked on many projects with major earthworks, ground improvement, and landslide mitigations. He subsequently transferred in 1991 as the lead project development manager for ODOT's portion of the Westside Corridor project, including widening of the Sunset highway from the zoo to Cedar Hills and the north section of OR-217, as well as the adjacent sections of light rail. George has been with Cornforth / Landslide Technology since 1996, focusing primarily on projects dealing with landslide mitigation and highway earthworks. His landslide projects have included the Beach Road debris flow landslide in Haines (Alaska), the Pioneer Mountain to Eddyville section of US-20 near Newport, Togwotee Pass landslides on US-26 near Yellowstone, the Rattlesnake Hills landslide near Yakima, Bonners Ferry rapid earthflow slide in northern Idaho, Scoby Hill landslide on SR-219 in western New York state, and the Punta Europa landslides in Equatorial Guinea.

## Michael Zimmerman, PE, GE, CEG



Michael is a Senior Engineering Geologist at Oregon Department of Transportation, Region 1. He has been with ODOT for the past four years after twenty-one years in geotechnical consulting in the Pacific Northwest. Much of his time over the past two years has been dedicated to post-wildfire geohazard cleanup from the Riverside Fire (Clackamas River Highway) and debris flows in the Columbia River Gorge. Growing up in a house built on the end moraine of the Wisconsin glacier in Illinois, his interest in geology started with a sample of the Canadian Shield collected from the gravel driveway. Michael completed a B.S. in geological engineering at University of Missouri-Rolla (now Missouri S&T) and a M.S. in geological engineering at Michigan Technological University. He is registered in Oregon as both a Certified Engineering Geologist and a Geotechnical Engineer and will gladly tell you that engineering pays the bills, but geology makes it fun.





## Message from the Chapter Chair

Hello Oregon Chapter!

We're getting the January newsletter out early this month, because the joint ASCE-AEG Annual Meeting is also early this year: **Wednesday January 4**. That means there's just enough time to celebrate the holidays, admire some nice geology (in the field or from your armchair), and then come back ready to catch up with engineers you haven't seen in person since the last in-person joint meeting in January 2020.

The joint meeting will be at OMP, and because it's a joint meeting, registration is capped at 30 people for ASCE and 30 people for AEG. **Please register early**. We won't be able to allow registration at the door. Virtual attendance through the Zoom meeting will be free, with "purchase" of a free virtual ticket through Brown Paper Tickets. There are two dates set for the event on Brown Paper Tickets. If you don't see the "Virtual Ticket" option on the site, click the date drop down menu to access the other date (see screen capture below). We're looking forward to a great presentation from George Machan (Cornforth Consultants) and Michael Zimmerman (ODOT) on the Mosquito Gorge Debris Flow Mitigation Project in the Columbia River Gorge. Construction for this season is just wrapping up, so I think we can look forward to hearing about the initial problem, the work completed so far, and what remains to be tackled next summer, once the Gorge thaws out again.



Virtual ticket registration seemed to go pretty smoothly last month, but we did note a couple kinks to resolve. Registration for the virtual meeting closed at the start time for the physical happy hour event (5:30). I think we've fixed that to allow folks to register for the virtual meeting at any time. Also, the link will be in your confirmation email. If you don't get a confirmation email, check spam. If you accidentally delete it or run into other connection problems, feel free to email me ([aine.mines@ccilt.com](mailto:aine.mines@ccilt.com)) and we'll try to trouble-shoot from OMP. We are still planning to start charging for virtual attendance at the February meeting.

In the meantime, we wish you a happy holiday season during these closing weeks of the year, and we look forward to seeing you in the new year!

Yours,  
Aine Mines  
AEG Oregon Chapter Chair 2022-2023

**AEG Oregon Chapter - January Meeting (joint with ASCE)**

Old Market Pub  
Portland, OR

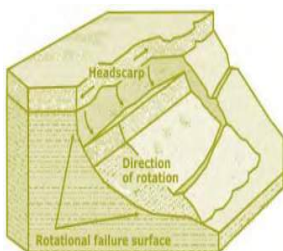
Date	Admission Level	Price	Quantity
Wed Jan 04, 2023 5:30 PM	Student	Free	0
	Government Member	\$20.00 (\$22.69 w/service fee)	0
	Professional Member	\$25.00 (\$27.99 w/service fee)	0

Event timezone is America/Los\_Angeles

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*Geologists are never at  
a loss for paperweights.*

*Bill Bryson*



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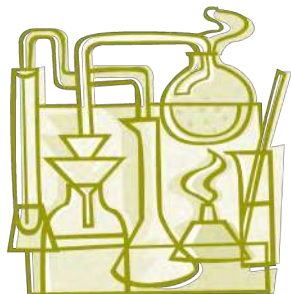
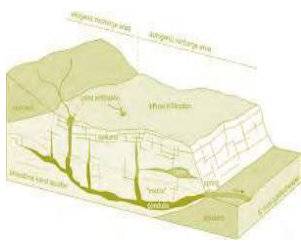
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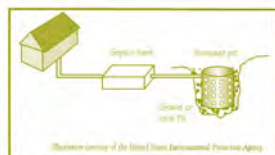
**Shotcrete**

**Avalanche Nets**

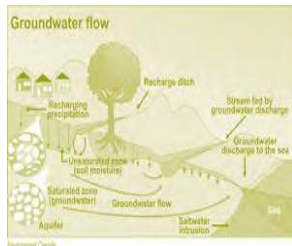
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Schematic of a Seepage Pit (Dry Well)



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*We learn geology the  
morning after the  
earthquake.*

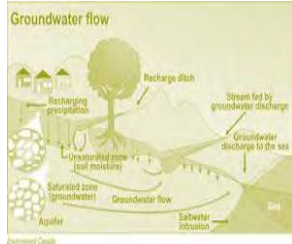
*Ralph Waldo Emerson*



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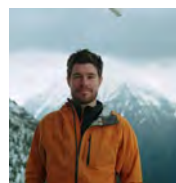
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## The AEG Oregon Chapter Newsletter

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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