

The Official

# AEG OREGON CHAPTER NEWSLETTER

<http://www.aegoregon.org>

## Meeting Details:

Date: Tuesday, November  
7th, 2023 7:00 pm Hybrid

## RSVP

In-Person \$25 Cash or check.  
Cards please use link above.

**Old Market Pub 6959**  
SW Multnomah Blvd

## Agenda:

5:30- 6:30 pm social  
6:30-7:00 pm dinner  
7:00 pm presentation

## UPCOMING MEETINGS:

**December 13, 2023**--Josh Wagner: Constructability Lessons on a Multi-Phase Rockfall Mitigation Project at a Hydroelectric Facility

**January 2023**--Joint AEG/ASCE meeting

**February 21, 2022**--TBD

**March 21, 2022**--TBD

**April 18, 2022**--TBD

**May 2023**--Student Poster Night

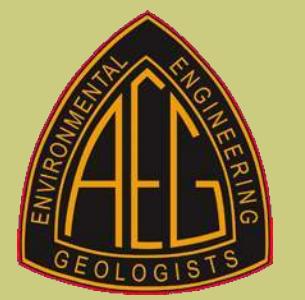
**June 2023**--TBD

## Haines Beach Road Landslide - Geology, Instrumentation, and Monitoring



The Beach Road Landslide in Haines, Alaska occurred on December 2, 2020 when regional weather produced an 'atmospheric river' that delivered historic precipitation and caused significant snowmelt. Several local, state, and national agencies along with local volunteers responded to the event conducting emergency search and rescue operations, and evaluations of the landslide and adjacent terrain. In February 2021, Landslide Technology (LT) along with prime consultant R&M Consultants, Inc. (R&M) were contracted by the State of Alaska Department of Transportation and Public Facilities (DOT&PF) to conduct geotechnical investigations and analyses.

The LT and R&M team conducted a winter reconnaissance in late February 2021. Results of the reconnaissance along with desktop studies of available information were documented in a *Preliminary Findings Report* dated April 8, 2021. After the snowpack cleared in 2021, geotechnical investigation and instrumentation tasks were performed. In June over 20 test pits were conducted at road grade and higher elevations within and adjacent the slide extents. In July a reconnaissance was conducted and surface extensometers were installed along an eastern tension crack. An extensive subsurface exploration plan, including 12 borings with depths



*Geologists have a  
saying - rocks  
remember.*

*Neal Armstrong*



from 40 to 120 feet, was implemented from July to October 2021. Instrumentation was installed in all borings including vibrating wire piezometers and in-place-inclinometers (MEMS ShapeArray systems from Measurand). All instrumentation was connected to an Automatic Data Acquisition System (ADAS) for remote collection to facilitate periodic evaluation and analysis.

This presentation will delve into the details of the geotechnical investigations, interpretations of the site conditions, and stability analysis; and what it reveals about the potential for additional slope movements.

## **Benjamin A. George, PE, CEG, RG**

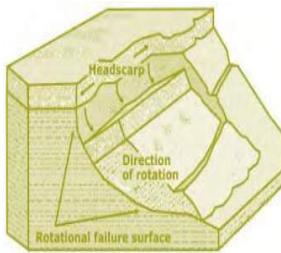
Senior Associate Engineer - Landslide Technology



Ben has over 18 years of geotechnical and geological engineering experience in the Pacific Northwest including numerous projects in Alaska. He graduated from the Colorado School of Mines in 2002 with a B.Sc. in Geology and Geological Engineering, and in 2004 with a M.Sc. in Geological Engineering. He holds professional engineer licensure in six states, certified engineering geologist licensure in two states and registered/professional geologist licensure in three states. He has spent the majority of his professional career at Cornforth Consultants, Inc./Landslide Technology. His has expertise in slope stability evaluations for both rock and soil, geohazard risk reduction design, and rock cut slope design. As a trained rope access Level II technician from the Society of Professional Rope Access Technicians (SPRAT, he has extensive experience conducting and managing on-slope work efforts for both design and construction of rockfall and rock slope mitigation efforts. He has extensive experience with preparation of plans, specifications, and engineer's estimates along with providing construction observation services. Ben resides in Portland, Oregon with his wife and two boys.

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*Neal Armstrong*



## Charles M. Hammond, CEG, RG

### Senior Associate Engineering Geologist - Landslide Technology



Charlie has over 35 years of engineering geology experience investigating landslide and rockfall hazards and risks, seismic hazards, soil and rock material sources, groundwater and dewatering, soil and rock tunneling and complex geologic conditions. He has consulted on projects in 16 of the United States and one country in Central West Africa. His landslide specialty work includes detailed interpretation, reconnaissance mapping, geologic and geomorphic assessment, subsurface investigation, modeling, causation analysis and risk assessment of future ground movement. He works on individual landslides and regions of widespread ancient landslide terrain. 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. Charlie resides in Portland, Oregon with his wife, dog, and cats, while the kid grew up and moved away.

## Message from the Chapter Chair

Welcome to Fall Oregon Chapter,

Hopefully the recently cooling weather coupled with the incoming change of season has you reflecting back on a successful summer full of field work, and finds you looking forward to time spent catching up on work and winding down with family for the holidays. I also hope you're looking forward to catching up with colleagues at one of the Chapter's many fantastic meetings this year. This month Charlie Hammond and Ben George will be presenting their work on the Beach Road Landslide in Haines, Alaska. I had the opportunity to see Charlie's extraordinary talk on this project at the annual meeting, and I'm looking forward to getting a little deeper dive into the details.

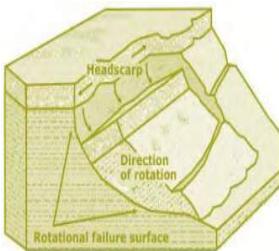
In December we will be hosting Josh Wagner, who will be presenting on Constructability Lessons on a Multi-Phase Rockfall Mitigation Project at a Hydroelectric Facility. Josh has been sharing some details and photos with me, and this one is sure to be an exciting talk that you won't want to miss. Please note that we incorrectly sent the wrong date in the October newsletter. The meeting will occur on Wednesday, December 13<sup>th</sup>. January will be the joint meeting between Oregon AEG and ASCE. We are still confirming the date and speakers, but we can confirm that the talk will be on a local bridge project that had to deal with a landslide impacting one of its abutments....stay tuned! We have tentatively confirmed the first week of March for the distinguished Jahns Lecturer, Cynthia Palomares, to visit the Oregon Chapter. Cynthia has many fantastic presentations available, and we are looking forward to her visit. Lastly, we are still looking to fill a couple presentations slots this year, so if you have a topic you'd like to present on, we'd LOVE to hear from you.



The Oregon Chapter is planning to host a Zoom meeting to discuss what local industry has planned in light of the recent sunsetting of gINT, and the transition to Open Ground. It seems many of our federal agencies, State DOTs, and private industry folks have varying plans in place that could require multiple software suites depending on who is working with whom. If you are interested in being part of the conversation, please reach out to Nick Farny at [nicholas.farny@dot.gov](mailto:nicholas.farny@dot.gov). We will be limiting the total number of participants, and hope to include representatives from the groups mentioned above.

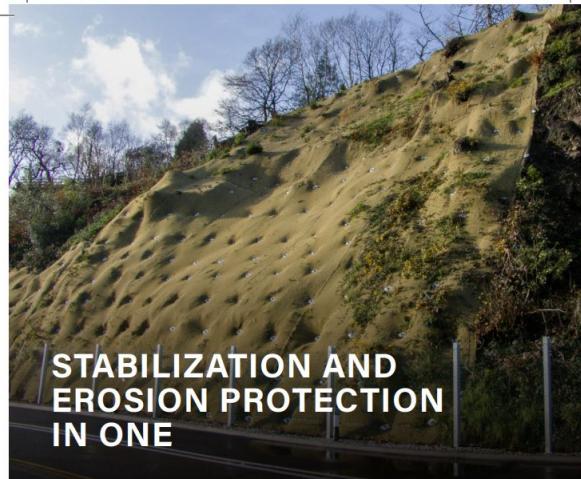
I look forward to seeing you all in November!

Ryan Cole  
AEG Oregon Chapter Chair 2023-2024



*Geologists are never at  
a loss for paperweights.*

*Bill Bryson*



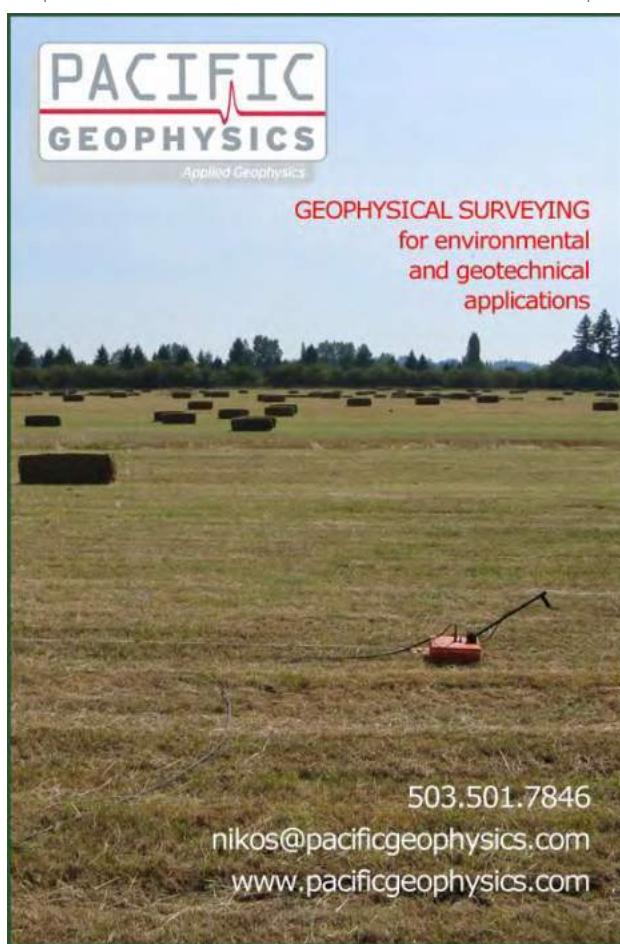
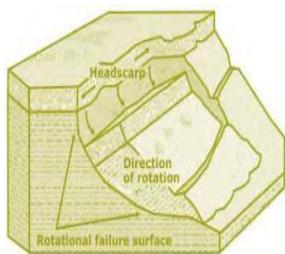
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*Bill Bryson*



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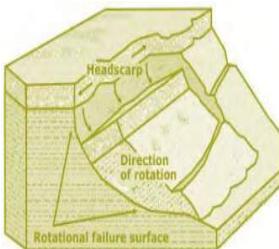
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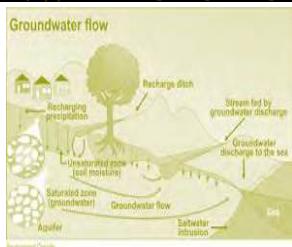
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*Ralph Waldo Emerson*

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## Chapter Officers & Committee Chairs



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Ryan Cole  
FHWA Western Federal Lands  
ryan.cole@dot.gov



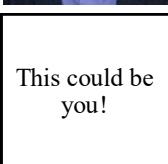
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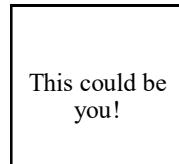
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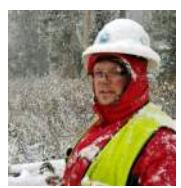
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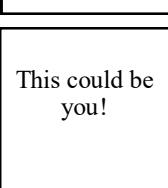
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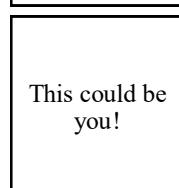
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Nicholas Farny  
FHWA Western Federal Lands  
nicholas.farny@dot.gov



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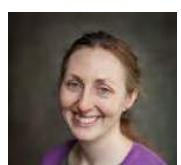
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## The AEG Oregon Chapter Newsletter

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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