

February 2020
Volume 3, Number 4

NISQUALLY CHAPTER OF THE
ASSOCIATION OF ENVIRONMENTAL &
ENGINEERING GEOLOGISTS

The Official

AEG Nisqually Chapter Newsletter

February Meeting Details Tuesday, February 4th

Location: Mercato Ristorante

111 Market St NE
Olympia, WA

6:00 pm Social

7:00 Presentation

Dinner: Pizza and Salad

\$25 Member or Non-Member

\$15 Educators or Job Seekers

\$5 Student

Please RSVP by 4 pm Friday,
Jan. 31st at:

<https://aeg-nisqually.brownpapertickets.com>

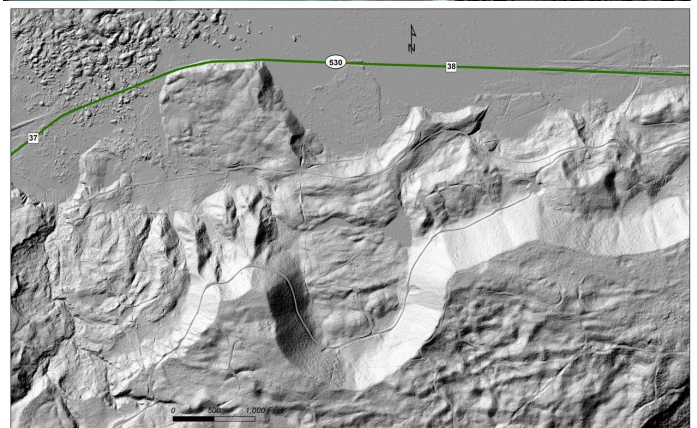
Upcoming Meetings:

Mar 3rd Ken Neal/Will Gallin
Mar 19th Jahns Lecturer
April 7th Susan Schnur/Eric Smith
May 5th TBD



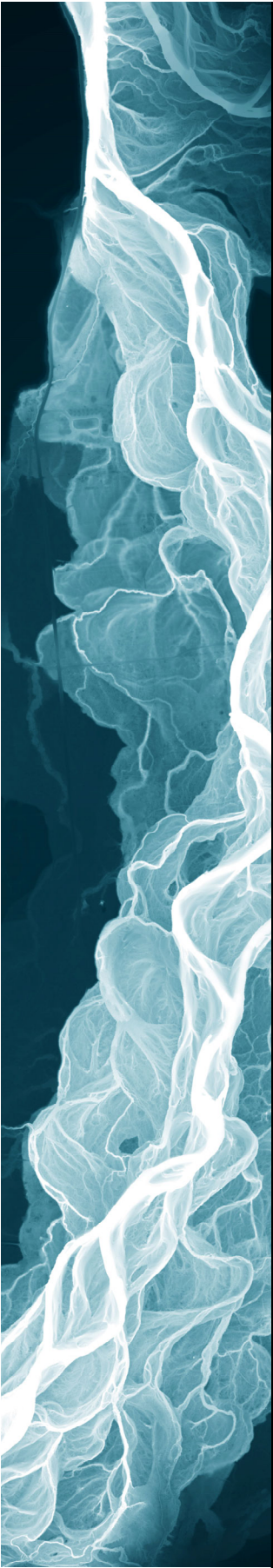
First-time landslides in Vashon advance glaciolacustrine deposits

Some of the largest and most mobile landslides in the Puget Sound basin, like the 1997 Woodway and the 2014 SR 530 (Oso) landslides, source from intact Vashon advance glaciolacustrine sediments that underlie many of its coastal and valley slopes. Multi-year records of pore pressures within these deposits proximal to these first-time landslides show no to minor seasonal flux. Furthermore, only minor pore pressure responses to multi-day to multi-week episodes of heavy precipitation have been detected. Disparate horizontal and vertical (anisotropic) hydraulic conductivities and overlying aquitards and high-conductivity units intercept and inhibit rapid recharge of underlying deposits. This evidence complicates the conventional application of precipitation's important short to intermediate-term role on landslide initiation for the case of first-time landslides within these deposits. So, what other factors might exert greater influence on slope instability, where failure surfaces should develop in these sequences, and how large could landslides become? Progressive, long-term strength loss of stiff clays is likely an important factor. Shear strength is also anisotropic, which strongly controls the shape and location of the failure surface, and, coupled with burial depth, the volume of the landslide.



Bio: Tom Badger

Tom has a BS in geology (1983) from Western Washington University and an MS in geological engineering (2002) from University of Nevada, Reno, and holds LEG, LHG, and PE licenses in Washington. After retiring in 2016 from 32 years of fulfilling work with WSDOT Geotechnical Division, the last 4 years serving as Chief Engineering Geologist, Tom now grazes in other marine and terrestrial pastures. Tom's been chair of the Washington Section of AEG (before the Nisqually Section defected) and the Transportation Research Board Engineering Geology Committee, and has lectured and published extensively on slope hazards and managing the associated risks.



Message from the Chair

Happy New Year!

Looking forward to seeing everyone at meetings in the coming months. Make sure you renew your AEG membership and indicate Nisqually as your local chapter, the dues help sustain chapter events. While renewing your membership, it is possible to be a member of multiple chapters if you want to stay affiliated and show your support. I just re-enrolled as a Puget Sound Chapter member for only \$20.

Next Meeting Feb 4th—Tom Badger

We are all looking forward to the next meeting where we will hear about Tom Badger's recent work on slope stability related to Vashon advance glaciolacustrine deposits in the Puget Lowland. Our Co-Chair Gabe Taylor will be hosting at Mercado in Olympia.

More in March

We will have two meetings in March. On Tuesday March 3rd we will discuss two topics at our normal location here in Olympia Ken Neal will give an update on the latest news about geology licensing in Washington State. Will Gallin will discuss on the Court of Appeals opinion on the appeal of Futurewise & Pilchuck Audubon Society v. Snohomish County and GMA Hearings Board. This opinion may affect geologically hazardous areas in the critical areas ordinances.

On March 19th we will have a joint meeting in Tacoma with the Puget Sound Chapter hosting the Jahns Lecturer, Scott Lindvall.

April, a two for one on the 7th:

We'll have two great speakers for the April 7th meeting, Susan Schnur and Eric Smith. Susan will present on the Washington Geological Survey's WA 100, a geotourism and education project on the unique geology of 100 sites in Washington State! Eric will present on the Speelyai Landslide, a WSDOT emergency stabilization project on State Route 503 just north of Lake Merwin in south central Washington.

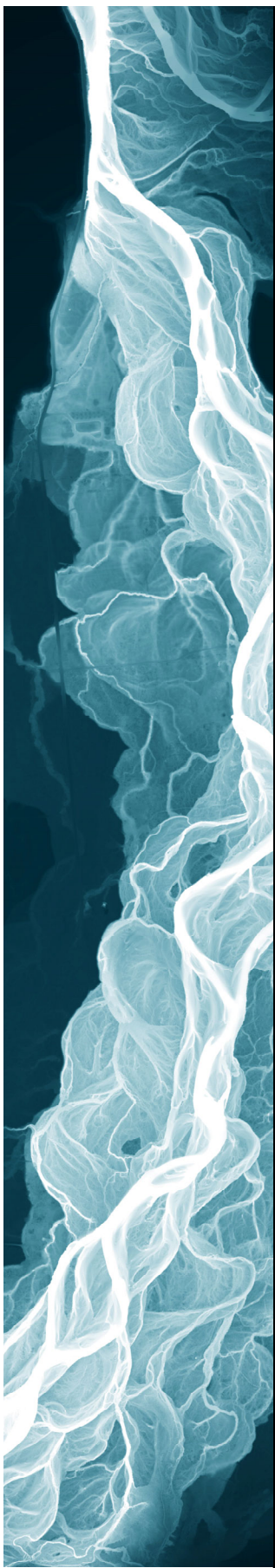
Joint ASCE and AEG meeting

We're working with the Tacoma-Olympia ASCE section to host a joint meeting this spring either in April or May. Look forward to details about this soon.

Rock on,

Trevor

trevor.contreas@dnr.wa.gov





Message from the Annual Meeting Co-Chair

Happy Holidays! January marks 7 months, **yes 7 months**, until we host the 2020 Annual Meeting here in Portland! We continue our planning process and have reached a couple of milestones. First and foremost, our website is up and running <https://www.aegannualmeeting.org/>. Though a work in progress that contains some relict 2019 meeting information, it is populated with the key 2020 meeting components, including the meeting dates and the hotel, Field Courses, Guest Tours, and Special Event descriptions. The website also includes a tab for Sponsor & Exhibitor Information. I encourage everyone to take a tour of the site to get more up to date on the meeting offerings.

Hotel registration is now available and the time for submitting technical abstracts is rapidly approaching, so be on the lookout. When visiting the website, you may notice currently only two Field Courses are offered. Although we are confident two more Field Courses will come to fruition, because of scheduling, we have interest in adding a fifth and are seeking someone to be the field trip leader. If you have an inspiration, please let me or Tim Shevlin know.

Our Publicity Committee has been hard at work as well, advertising to our partner organizations such as GSA and reaching out to local and regional colleges and universities. Although our planning committee is well staffed:

- The Field Course Committee could use an additional volunteer or two for support
- This is a far cry from the number of volunteers we will need as the meeting approaches, and especially during the meeting – from moderators, hosts, coordinators, etc.
- Students are key to our pool of volunteers, so please be sure to remind them. An added benefit is registration is free for some student volunteers!

If you have any comments, questions, and thoughts, please feel free to reach out to me or our meeting's co-chair Mike Marshall.

Mark Swank, PDX 2020 Annual Meeting Co-Chair

Section Officers & Committee Chairs



Chair:

Trevor Contreras

Washington Geological Survey

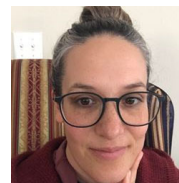
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Gabriel Taylor

WSDOT



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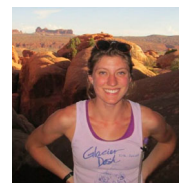


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National AEG webpage:

<http://aegweb.org>

The AEG Nisqually 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 NISQUALLY CHAPTER NEWSLETTER is published monthly from September through April. Subscriptions are for members of AEG affiliated with the Nisqually Chapter or other Chapters, and other interested people. E-mail subscriptions are free.

Mailing List sign up link: **<http://eepurl.com/c5gyKn>**

