

NISQUALLY CHAPTER OF THE
ASSOCIATION OF ENVIRONMENTAL &
ENGINEERING GEOLOGISTS

The Official

AEG Nisqually Chapter Newsletter

Meeting Details

Tuesday March 7th

Location: Mercato Ristorante

111 Market St NE

Olympia, WA

6:00 pm Social

7:00 pm Presentation

Dinner: Pizza and Salad

\$25 Member or Non-Member

\$15 Educators or Job Seekers

\$5 Student

Virtual attendance is free

Upcoming Meetings:



Cosi Hill – A landslide with a highway problem

The landscape surrounding the Cosmopolis area of US 101 has historically had several areas of shallow and deep seated slope instability. These slides have occasionally impacted portions of the highway, and a deep seated landslide occurred less than a mile away from the subject project in 2018. Prior to January 2020, however, no evidence of recent global instability had been observed at the project site for approximately 30 years. While some settlement was recorded in the 1990s and a surficial failure occurred in 2015, these failures were not indicative of deep seated slope movement and were patched by WSDOT maintenance crews. Early in January 2020, cracking in the pavement along US 101 was observed, and similar to the highway maintenance in 2015, these cracks were patched after being attributed to shallow slope movement. Less than a month later, a 2 foot tall head scarp formed overnight in the westbound lane of US 101. Within two weeks, as the landslide continued to move downslope, the head scarp grew to 6 to 7 feet tall. This presentation will discuss the geotechnical design of the landslide repair and show some of the details of the highway restoration.



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Please RSVP by 4 pm Monday, February 6th if you plan on attending in person.

RSVP at:

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

COVID vaccination required for in-person attendance

Zoom Meeting Info:

[https://us02web.zoom.us/j/87036030163?
pwd=VHo4cGdJYmxsN2pNRnB6cUhSaVRaUT09](https://us02web.zoom.us/j/87036030163?pwd=VHo4cGdJYmxsN2pNRnB6cUhSaVRaUT09)

Meeting ID: 870 3603 0163

Passcode: 074845

One tap mobile

+12532158782,,87036030163#,,,,*074845# US (Tacoma)

+12532050468,,87036030163#,,,,*074845# US

Upcoming Meetings:



Bio: Veronica Raub

Veronica Raub is a Geotechnical Engineer with the WSDOT State Geotechnical Office. While she primarily develops recommendations for Fish Passage projects, she has also had the opportunity to work on a landslide stabilization and Snoqualmie Pass since joining WSDOT. Prior to working at WSDOT, Veronica worked in consulting for 5 years and focused on residential and commercial projects. She graduated from Saint Martin's University in 2015 with her BSCE and from the University of Washington in 2016 with her MSCE.



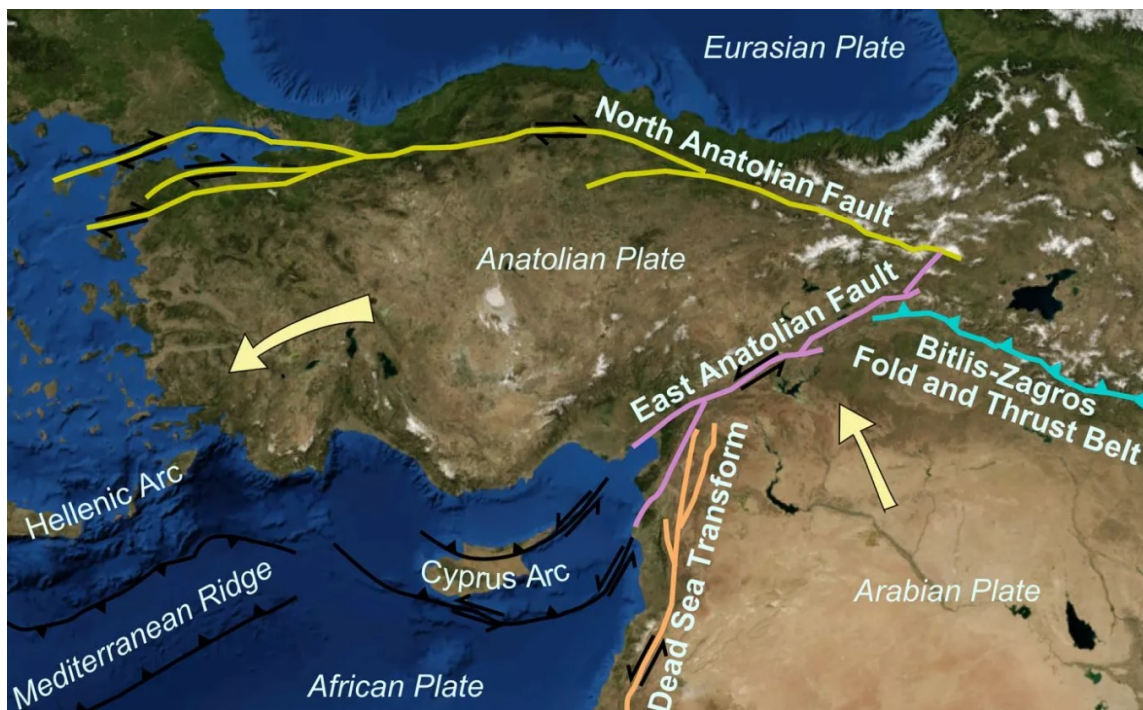
Message from the Chair

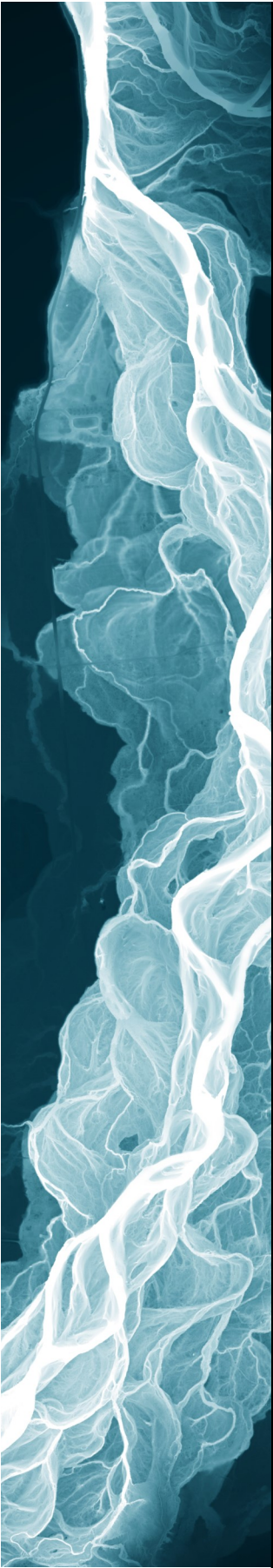
Zelma Maine Jackson – leading the way for inclusivity in the field and beyond

In celebration of the Department of Ecology's 50th anniversary this year, the agency has been highlighting stories on how Washington state's commitment to environmental protection has developed and the results that commitment has achieved. One of their amazing stories is that of Zelma Maine Jackson, who is a pioneer for women, and specifically women of color, within the geologic sciences. She spent 25 years working for the agency's Nuclear Waste Program throughout her career, and continues to advocate for clear pathways for more young people of diverse backgrounds to choose sciences as career paths. If you would like to learn more about Zelma and her story, you can do so [HERE](#). travels!

Earthquake Preparedness

In the early morning hours of Monday, February 6th, two massive earthquakes followed by a series of tremors hit the Gaziantep province in Turkey. Reports of ground movement have been reported up to 1,000 miles from the epicenter. The devastation is wide-spread and nothing short of tragic. As I write this, the numbers of casualties continue to rise.





Like Turkey, the Pacific Northwest is tectonically structured to host massive earthquakes that can level buildings and cause large scale devastation. As most Geologists are well aware, the questions regarding a Cascadia Subduction Zone event are not a matter of “if”, but “when” the next one will hit.

Although we can not prevent these types of natural disasters, we are able to prepare for them in order to save lives and reduce property damage.

1. Drop, Cover and Hold On

- A. **Drop** down onto your hands and knees before the earthquake knocks you down. The most common injuries during an earthquake are a result of falling and unnecessary movements.
- B. **Cover** your head and neck (and your entire body if possible) underneath a sturdy table or desk. If none are available, get down near an interior wall or next to low-lying furniture that won't fall on you and cover your head and neck with your arms and hands.
- C. **Hold** onto to your shelter (or to your head and neck) until shaking stops. Be prepared to move with your shelter if the shaking shifts it around.

2. Make an Emergency Plan

- A. Create a family emergency communications plan that has an out-of-state contact. Plan where to meet if you get separated. Make a supply kit that includes enough food and water for several days, a flashlight, a fire extinguisher and a whistle.

3. Protect your home and office space

- A. Secure heavy items in your home like bookshelves, refrigerators, water heaters, televisions and objects hanging on the walls/shelves.
- B. Consider obtaining an earthquake insurance policy. Standard homeowners' insurance does not cover earthquake damage.

Shakeout.org has a wealth of knowledge you can use to practice earthquake safety, including readymade slides to teach students about earthquake drills.

Cheers,
Brittany Dayley
aegnisqually@gmail.com

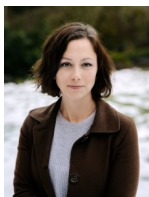
Current Job Postings:

Job Title (Linked)	Employer	Closing Date
<u>State Geologist (California)</u>	California Department of Conservation	Continuous
<u>Engineering Geologist – Interns (3X)</u>	WsDOT Geotechnical Headquarters	03/12/2023
<u>Natural Resource Scientist 3/NR Scientist 2 In-Training, Forest Practices Science Team Geologist</u>	Washington Department of Natural Resources	03/15/2023
<u>Principal Engineer or Geologist/Hydrogeologist</u>	Integral Consulting	Continuous
<u>Hydrogeologist – Entry to Mid-level</u>	Robinson Nobel (Tacoma, WA)	Continuous

Meetings Sponsor Updates:

We are seeking sponsorship. We accept support big and small. If you are interested in supporting our chapter, please reach out to us at aegnisqually@gmail.com

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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.

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