



**Thursday, November 19, 2015—AEG Dinner Meeting**

**Topic:** A Challenging Emergency Rockfall Project along the North Cascades Highway

**Speaker:** Marc Fish, L.E.G, Washington State Department of Transportation

**Time:** 5:30 – Social Hour  
 6:30 – Dinner  
 7:30 – Program

**Place:** La Quinta Inn & Suites, 1425 East 27th Street, Tacoma, WA 98421, 253-383-0146

**RSVP:** Please RSVP for the meeting by emailing Sevin Bilir at [secretary@aegwashington.org](mailto:secretary@aegwashington.org) by 4 PM on Monday, November 16. Please let her know in advance of the meeting if you would like to cancel. No shows will be billed.

**Dinner:** *Romance of Italy Buffet Dinner:* Caesar Salad, Chicken Parmesan, Baked Lasagna with Herbs, Cheese Tortellini and Penne Pasta, Marinara and Alfredo Sauces, Hot Vegetable Medley, Hot Garlic Bread, Chef’s Variety of Desserts

**Cost:** \$35 for members; \$40 for non-members; \$10 for students. If you can’t attend the dinner, but would like to attend the talk, the cost is \$10. Non-members always welcome! Pay by check, cash, or credit card at the door. Please make check payable to AEG.

\*\*Attention students: Student membership in AEG is now free. Please follow this link [www.aegweb.org](http://www.aegweb.org) and click on the orange membership tab if you are interested in becoming a member of AEG.

**Abstract:** On Monday December 16, 2014 the WSDOT Geotechnical Office was requested to inspect a rock slide that occurred at a previously known unstable slope location along State Route 20 near mile post 142.5. Fortunately, this slope was located along a section of the highway that happened to be closed for the winter. Our initial on-highway review indicated that approximately 7500 yds<sup>3</sup> of material failed from the slope and came to rest on the highway. Our on-slope inspection revealed that approximately 11,000 yds<sup>3</sup> of highly distressed phyllitic rock remained on the slope, bound upslope by a ±5-ft-wide tension crack. The tension crack was located approximately 100 feet above the highway and was about 70 feet long. The detached rock mass was perched on an irregular set of joints dipping adversely out

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Meeting Announcement**

of the slope at roughly 50°. There were also indications that the rock mass had moved since the initial failure, or was still moving. Through repeated ground-based Lidar scans over several months, up to 4 feet of additional movement was measured without the occurrence of a catastrophic failure. The emergency mitigation project had significant issues to overcome that included safety and environmental concerns, contracting issues, weather, and pressure to open the highway early due to a mild winter. The slope remediation included real-time slope monitoring, routine ground-based Lidar scanning, the use of a long-reach excavator, slope scaling, surface and trim blasting, debris removal, and slope reinforcement.

**Bio:** Marc works as an Engineering Geologist for the Washington State Department of Transportation and manages their unstable slopes program. He is a licensed Engineering Geologist in the state of Washington and has over 20 years of experience conducting geotechnical line work and mitigating rock slopes and landslides.

**2015-2016 AEG WASHINGTON SECTION CALENDAR AND ANNOUNCEMENTS**

**2015-2016 Dinner Meetings:**

- September 17, 2015 (Thu)—Jared Smith, P.E. (Engineers Without Borders); Nepal Earthquake Recovery; Joint meeting with ASCE; Best Western Executive Inn, Seattle, WA.
- October 15, 2015 (Thu)—William J. Perkins, L.E.G., P.E. (Shannon & Wilson); Elliott Bay Seawall Project: Seismic Design and Construction of Seattle’s New Seawall; Best Western Executive Inn, Seattle, WA.
- November 19, 2015 (Thu)—Marc Fish, L.E.G. (WSDOT); A Challenging Emergency Rockfall Project along the North Cascades Highway; La Quinta Inn & Suites, Tacoma, WA.
- December 10, 2015 (Thu)—Holiday Party, Personal slide shows from AEG members and family, pizza, gift raffle, food drive. Location TBD, Seattle, WA.
- January 21, 2016 (Thu)—Brandy Rinck (SWCA Environmental Consultants); Joint meeting with AWG; Best Western Executive Inn, Seattle, WA.
- February 18, 2016 (Thu)—Annaliese Eipert, LG (Aspect Consulting); InSAR (synthetic-aperture radar) Technology and Applications. Location TBD, Seattle, WA.
- March 17, 2016 (Thu)—TBA

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- April 21, 2016 (Thu)—Paul Santi, Ph.D. (Colorado School of Mines), 2015–2016 AEG President; Debris Flows Following Wildfire in the Western U.S.; Location TBD, Seattle, WA.
- May 19, 2016 (Thu)—Jerome De Graff (Jahns Lecturer) and Student Posters; Best Western Executive Inn, Seattle, WA.

**Renew Your AEG Membership:**

Membership Has Benefits! Renew your membership on-line at [www.aegweb.org](http://www.aegweb.org) (look for the red “Join AEG” tab on the home page). Or if you prefer, call AEG at 844-331-7867 to complete your renewal over the phone.

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