



Thursday, March 25, 2010 - Joint AEG/ASCE Dinner Meeting

Topic: Snoqualmie Pass I-90 Road Widening Project

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

Place: Red Lion Inn, 11211 Main St, Bellevue, WA

Please RSVP with your dinner entrée preference (Grilled Northwest Salmon, or Tortellini Gargonzola) via: ASCE website www.seattlegeotech.org, e-mail to rsvp@seattlegeotech.org; or phone to Ghada Ellithy at (206) 695-6793 by 4:00 PM on Tuesday March 23rd, 2010 for the advance RSVP rate. Please let ASCE know in advance if you would like to cancel. \$35 with advance RSVP; \$40 with reservations made after March 23rd deadline or at the door; and \$15 for non-reimbursed public agency employees and students. You can pay via Paypal or credit card online, or at the door by cash or check payable to "ASCE Seattle Geotechnical Group". This month's sponsor Holocene Drilling has made it possible for the AEG Washington Section to provide free meals to a limited number of geology/environmental students with advance approval. Please contact Paul Zehfuss for more information at aegmeetings@gmail.com or call Paul at Shannon & Wilson at 206-695-6828.

Speakers: Randy Giles, P.E. • Chuck Vita PhD, PE, GE • Norm Norrish, P. ENG., P.E

Abstract: Improving travel across Snoqualmie Pass has been a challenge since the early days of road building. Snoqualmie Pass continues to present the same challenges and some new difficulties that the WSDOT must overcome as they reconstruct and widen I-90 just east of the summit. In 2005, the Washington State Legislature provided funding for the first of several phases to reconstruct and widen Interstate 90 from Hyak to Easton. This first phase of work is located along Keechelus Lake and involves several challenging aspects, including avalanche chutes, unstable slopes, landslide areas, rugged topography, ESA species, high traffic volumes and short construction windows. Current plans incorporate some distinctive features such a new six-lane snowshed, wildlife crossings, large retaining walls and extensive rock excavation with slope reinforcement along Keechelus Lake.

The I-90 Widening Project will be presented by three people who have played a major role in the project.

- **Randy Giles** is the WSDOT I-90 Project Director and will give summary of the project scope, provide a status update, and touch on a few of the interesting project features.
- **Chuck Vita**, a Senior Principal Engineer with URS, will provide an overview of the geotechnical challenges along the 5-mile alignment that crosses rugged mountainous terrain, steep colluvium slopes, soft lacustrine (lake) clays, and deep, liquefaction-susceptible floodplain soils. Major challenges have included stabilization of liquefiable soils at bridge abutments and along structural walls, as well as stabilization of seismically unstable colluvial foundation soils. Chuck will then discuss the major earth retention issues associated with the 1100-ft long 6-lane snowshed, including an overview of a statistical reliability analysis developed for estimating rock socket design capacities.
- **Norm Norrish**, a rock engineering specialist, will provide an overview of the rock slope excavations planned for the I-90 Snoqualmie Pass East Project. This will include engineering and geologic issues for key aspects of rock slope design as well as a summary of the geotechnical investigations that were performed. This will be followed by a description of the forensic work undertaken for the 1957 rock slope failure, the new findings relative to that slide, and the resultant design impacts for the proposed I-90 alignment around the infamous "Slide-Curve".

Speakers-Bios→

AEG WA Section Officers:

John deLaChapelle, Chair Golder Associates Inc. jdelachapelle@golder.com 452-883-0777	Chip Barnett, Vice Chair GeoEngineers, Inc cbarnett@geoengineers.com 425-861-6019	Fred Becker, Treasurer The Riley Group fbecker@riley-group.com 425-415-0551	Paul Zehfuss, Secretary Shannon & Wilson phz@shanwil.com 206-695-6828
--	---	---	---



ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS
WASHINGTON SECTION
Meeting Announcement

Bios:

Randy Giles, P.E. is a project manager with 19 years experience in highway related design, construction administration, and project management. He graduated from the University of Utah with a B.S. in Civil Engineering. He is currently the I-90 Project Director for the Washington State Department of Transportation responsible for developing a series of projects to reconstruct Interstate 90 just east of the summit of Snoqualmie Pass. Randy manages a co-located team of WSDOT and consultant staff for engineering, environmental services, communications and administrative functions.

Chuck Vita Ph.D., P.E., G.E. is a Senior Principal Engineer with URS in Seattle and has been the principal geotechnical engineer on the I-90 Snoqualmie Pass project since November 2008. Chuck has 37 years of geotechnical and geo-environmental experience on hundreds of civil engineering projects. As part of his I-90 project efforts, Chuck has used his expertise with statistical and probabilistic methods to maximize effective use of available data with professional judgment for improved engineering risk management and decision making. He received his BS and MS in Civil Engineering from U.C. Berkeley and his PhD from the University of Washington.

Norman I. (“Norm”) Norrish, P. ENG., P.E. is a rock engineering specialist with 35 years of experience in the application of rock mechanics to mining, transportation, and civil construction projects including senior level project responsibility for the investigation, design and construction management of transportation projects in mountainous terrain throughout Western North America. He has worked internationally in Peru, Chile, Columbia, Panama, the Philippines, the former Soviet Union and the Peoples Republic of China. Mr. Norrish contributed significantly to Transportation Research Board Special Report 247, Landslides: Investigation and Mitigation. Over the past ten years he has made 40 presentations of NHI training course #132035 “Rock Slopes” to state DOTs throughout the US. He is the Principal and Co-Founder of Wyllie & Norrish Rock Engineers Inc.

Recent AEG Dinner-Meetings

February 18, 2009 - Author and geologist David Williams presented portions of his new book, *Stories in Stone: Travels Through Urban Geology* that weaves together the cultural and natural history of building stone from across the United States and the world. For his presentation to AEG David also included the source area, mining methods, and use of building stones in Washington State, and discussed the more exotic rocks that have reached the city of Seattle. For more information, you can go to his web site: www.storiesinstone.info. The meeting was held at Ivar’s Salmon House, Seattle. We gratefully acknowledge Shannon & Wilson, Inc. of Seattle for sponsoring several geology students at the dinner-meeting.

January 28, 2010 - Red Robinson (Shannon & Wilson), and Dick Sage (Sound Transit) presented on the *Beacon Hill Station and Tunnels - State of the Art Construction in Difficult Ground Sound Transit Link Light Rail, Seattle*. Over 200 people attended this meeting which has hosted jointly between AEG and ASCE. The Beacon Hill Station is the deepest, mined structure of its size in soft ground using Sequential Excavation Mining techniques for tunnel structures up to 40 feet in diameter in North America. “Red” Robinson and Richard Sage discussed the many project components and discussed the geologic conditions anticipated vs. those encountered, and the overall construction of the station and tunnels. The meeting was held at Red Lion Inn, Bellevue. We gratefully acknowledge GeoEngineers. Inc. of Redmond for sponsoring several geology students at the dinner-meeting.

Wait, there’s more AEG news→

AEG WA Section Officers:

John deLaChapelle, Chair Golder Associates Inc. jdelachapelle@golder.com 452-883-0777	Chip Barnett, Vice Chair GeoEngineers, Inc cbarnett@geoengineers.com 425-861-6019	Fred Becker, Treasurer The Riley Group fbecker@riley-group.com 425-415-0551	Paul Zehfuss, Secretary Shannon & Wilson phz@shanwil.com 206-695-6828
--	---	---	---



2009-2010 AEG WASHINGTON SECTION CALENDAR

2009-2010 Dinner Meetings:

- October 15, 2009 - Bo McFadden (GeoEngineers), Microsoft’s West Campus Development, Redmond, Washington.
- November 19, 2009 – Frank Shuri (Golder Associates) speaks on the White King Uranium Mine, Environmental and Geotechnical Investigations and Mitigation. La Quinta, Tacoma.
- December 14, 2009 – Holiday Party, Personal slide shows from AEG members and family, Pizza and beer, gift raffle, food drive. Duane Kreuger, the current AEG President, will give a 10-20 minute presentation on the status of AEG at the national level. Piccora’s Pizza, Seattle.
- January 28, 2010 – Red Robinson (Shannon & Wilson) and Rich Sage (Sound Transit), Beacon Hill Tunnel (joint meeting with ASCE), Red Lion Inn, Bellevue.
- February 18, 2010 - David Williams, author of *Stories in Stone: Travels Through Urban Geology*. Ivar’s Seafood, Seattle.
- March 25, 2010 – Randy Giles (WSDOT), Chuck Vita (URS), and Norm Norrish (Wyllie & Norrish Rock Engineers Inc.), Snoqualmie Pass 6-Lane Widening Project (joint meeting with ASCE), Red Lion Inn, Bellevue.
- April 22, 2010 – Tentative- Dave Norman (State Geologist - WDNR) talks on Division's activities, status of library, etc., La Quinta, Tacoma.
- May 26, 2010 – Paul Marinos (2010 AEG Jahns Distinguished Lecturer). Topic to be determined.

2009-2010 Field Trips:

- May 14-16, 2010 – Field trip to the North Olympic Peninsula. This is part one of a two part field trip being organized jointly with AEG and AWG (Association for Women Geoscientists). Part two, to Western Olympic Peninsula, will occur sometime in Fall 2010 or Spring 2011. Official announcement and registration instructions will be sent out soon.

Wait, there’s more AEG news→

AEG WA Section Officers:

John deLaChapelle, Chair Golder Associates Inc. jdelachapelle@golder.com 452-883-0777	Chip Barnett, Vice Chair GeoEngineers, Inc cbarnett@geoengineers.com 425-861-6019	Fred Becker, Treasurer The Riley Group fbecker@riley-group.com 425-415-0551	Paul Zehfuss, Secretary Shannon & Wilson phz@shanwil.com 206-695-6828
--	---	---	---



Other News & Events:

The Washington State Geologist Licensing Board is meeting March 9, 2010 9 AM at the University of Washington in Seattle. Please visit our website to view the agenda
<http://www.dol.wa.gov/business/geologist/geoboardmtg.html>

Haiti Earthquake Report. Here is a just-released link to a geotechnical reconnaissance report on the information available and captured at and around Port-au-Prince. The report was compiled by a group known as the Geo-Engineering Extreme Events Reconnaissance (GEER) Association, a group affiliated with the Earthquake Engineering Research Institute (EERI) http://www.geerassociation.org/GEER_Post%20EQ%20Reports/Haiti_2010/Cover_Haiti10.html Then click on "Geotechnical Engineering Reconnaissance of the 2010 Haiti Earthquake" and signify the download to your computer. This news was kindly forwarded to me by AEG Member Bob Anderson (California Seismic Safety Commission staff)

The Northwest Scientific Association (NWSA) Annual Meeting, this year being cohosted by the Cascadia Prairie-Oak Partnership and Northwest Lichenologists, will be at Centralia College March 24–27th. You can find more information:
<http://www.centralia.edu/academics/earthscience/nwsa/2010meeting.htm>

Wait, there's more AEG news→

AEG WA Section Officers:

John deLaChapelle, Chair Golder Associates Inc. jdelachapelle@golder.com 452-883-0777	Chip Barnett, Vice Chair GeoEngineers, Inc cbarnett@geoengineers.com 425-861-6019	Fred Becker, Treasurer The Riley Group fbecker@riley-group.com 425-415-0551	Paul Zehfuss, Secretary Shannon & Wilson phz@shanwil.com 206-695-6828
--	---	---	---

RESEARCH GALA 2010

The University of Washington
Department of Earth and Space Sciences

First Annual Spring Research Symposium
Come Join the F-*ESS*-tivities...

For Information:

<http://earthweb.ess.washington.edu/essgala>

Schedule of Events:

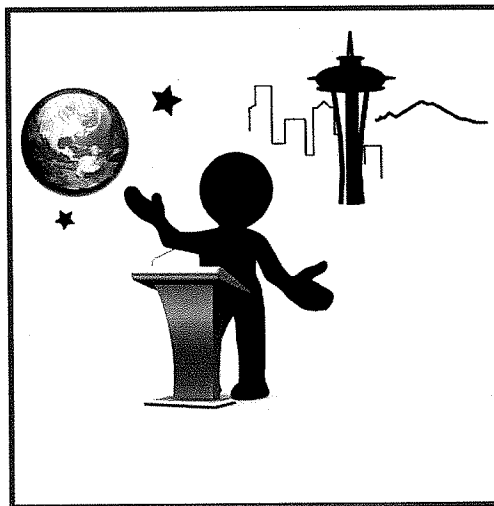
Research Forum: Thursday and Friday, April 1-2, 9:30am-5:00pm
Johnson Hall, Room 170 (oral presentations)
Johnson Hall, South Wing 1st Floor (poster presentations)
Keynote Speaker: April 1st, 3:30-4:30pm

Gala Reception:

Thursday, April 1st, 5:00-9:00pm
Location TBA Coming Soon, University of Washington
Food and Beverages Provided

Award Ceremony:

Friday, April 2nd, 4:00pm



Help the Gala:

To donate please visit the website above or call (206) 543-1190