



The Official

Newsletter

of the Oregon Section Association of Engineering Geologists

Serving Professionals in Engineering, Environmental, and Groundwater Geology

NOVEMBER 2004 SECTION MEETING

GUEST: Jim O'Connor, USGS

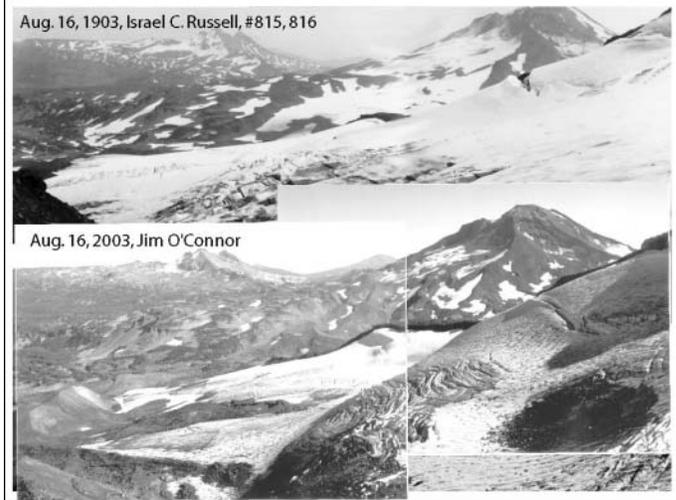
PRESENTATION: Our Vanishing Glaciers: 100 years of Glacial Retreat, Central Oregon

Alpine glaciers respond sensitively to decadal scale changes in temperature and precipitation. Glaciers along the length of the Cascade Range have shrunk remarkably since their most advanced Little Ice Age positions of the early-to-mid 1800s. This has especially been the case in the Three Sisters Wilderness Area in central Oregon where 17 named glaciers covered 24 km² during their maximum Little Ice Age advance but now cover less than 7.5 km². The first recorded observations of Three Sisters glaciers were by USGS geologist Joseph S. Diller, who noted that the Three Sisters area "probably afford[ed] the most interesting field for glacial studies in the United States, with the exception of Alaska. Subsequent maps and photos document substantial glacier shrinkage since then, which has been a topic of at least local interest since at least the 1930s. Glacier retreat in the Three Sisters mirrors trends worldwide and reflects both regional warming of as much as 2 degrees (Celsius) since the late 19th century.

BIO: Dr. O'Connor has been with the US Geological Survey since 1991

in research appointments at the Cascades Volcano Observatory, the USDA Forest Service Pacific Northwest Research Station, and most recently as a research hydrogeologist in Portland. He is also currently an adjunct Associate Professor at PSU. Jim received his Ph.D. and M.S. from University of Arizona, and his B. A. from University of Washington.

Diller Glacier, Middle Sister, OR



This Month's Meeting is on Tuesday November 16

Widmer Gasthaus
929 North Russell Street
Portland, Oregon 97227

6:00 pm Social
 7:00 pm Dinner
 8:00 pm Presentation

\$15.00 dinner (\$7.50 for students)
 \$3.50 per pint (please purchase drinks in the meeting room, bar purchases won't count)

Buffet Menu: Greek Salad,
 Smoked Salmon Wraps, Corn
 Medley, Mashed Potatoes,
 Chicken Schnitzel,
 Vegetarian Pasta Marinara

Call 503-639-3400, or email
 <glenda.christman@amec.com> with
 "AEG Reservations" in the subject
 line, by 4 pm Thurs. Nov. 11 with
 your reservation. There is a \$2.00
 surcharge for those who do not
 reserve by the deadline, so call now!

MESSAGE FROM THE CHAIR

We had a well attended meeting in October with a dramatic presentation by Jamie Shick of URS, Portland, and Norm Norrish, of Wyllie & Norrish, on an extensive slide which took out WA Hwy 20 in the North Cascades a year ago. The talk was well attended, despite the low number of reservations. This is a perennial problem which makes it hard for us to plan with the restaurant or pub. This month we have added the option to **register by email** in hopes of getting an increased percentage of reservations. Glenda, at AMEC, has graciously agreed to take reservations either by phone, 503-639-3400, or email, glenda.christman@amec.com. If by email please include "AEG Reservations" in the subject line. We are in the process of setting up a permanent email address which will be forwarded to the appropriate person (currently Glenda).

Please note the **changes in the**

calendar: This month's meeting has been moved to the normal 3rd Tuesday, Nov.16, with Jim O'Conner speaking on the Three Sisters glaciers. On December 14 (the 2nd Tuesday) David Bieber, the current AEG President, will speak on "Naturally Occurring Asbestos – Science and Politics." It would be nice to have a good showing for Dave, it should be a great talk. In January we will be hosting the joint meeting with the ASCE Geotechs. Gary Irwin, with the City of Portland, will talk on geotechnical aspects of *The Big Pipe* project, the West Side CSO Tunnel.

Changing subjects, an item on **national science policy** and **public access to federally funded research** came to me over the AEG Board list server. For a full discussion I urge you to go to the American Geological Institute (AGI) Government Affairs web site: http://www.agiweb.org/gap/legis108/public_access.html.

Simply put, the feds would like to make all publications, which result from federally funded research, available free of charge from government web sites. It's great to have the Public Access, but who pays, and what will be the role of scientific publications. The plan would rely on the scientific journals for peer review, but then would trump any exclusive rights. The current proposal will start with the National Institutes of Health (NIH) but is expected to expand to the entire scientific community. Comments are due to the NIH on or before Nov. 16, so go to the AGI website, get your thoughts together, and let them be heard.

Finally, I will miss you on Nov. 16 as I have minor, elective surgery scheduled for Nov. 15 and will not be able to travel to Portland. See you all in December.

Rowland French
AEG Oregon Section Chair

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NEWS ITEMS

Dick Iverson has been named the 2005 Jahns Distinguished Lecturer

Iverson is a graduate of Iowa State University (B.S., 1977) and Stanford University (M.S., 1980; M.S., 1981; Ph.D., 1984), where he was a student in several of Richard Jahns' classes and subsequently a teaching assistant to Jahns in his graduate course in Engineering Geology. Since 1984 Iverson has worked at the U.S. Geological Survey's Cascades Volcano Observatory in Vancouver, Washington, where his current position is Senior Research Hydrologist.

Iverson is a Fellow of the Geological Society of America and a past recipient of the Society's E.B. Burwell Award (1991) and Kirk Bryan Award (2001). Much of his research has emphasized the mechanics of post-failure landslide and debris-flow motion, modeling and measurement of hydrologic processes that trigger landslides, and statistical forecasting of areas likely to be inundated by future landslides and debris flows. Iverson has additionally worked on diverse topics ranging from erosion of desert soils to deformation of subglacial till layers and volcanic lava domes. He instigated construction of the USGS debris-flow flume in central Oregon in 1991 and thereafter has directed research at the facility. He is an Affiliated Professor at the University of Washington, Seattle, and was recently a guest scientist at the Isaac Newton Institute for Mathematical Sciences, Cambridge University. He is an Affiliated Professor at the

University of Washington, Seattle, an Adjunct Professor at Portland State University, and was recently a guest scientist at the Isaac Newton Institute for Mathematical Sciences, Cambridge University.

The 2005 Jahns lectures are titled *Dynamics of Debris Flows and Rock Avalanches* and *Long-term Behavior of Slow-moving Landslides: Measurements and Mechanics*. Both lectures will include video footage of relevant experiments conducted at the USGS debris-flow flume as well as descriptions of pertinent field data and mechanical analyses. Iverson will deliver whichever lecture is requested.

AEG Section and Student Chapter Support Committee

In response to the member survey conducted in January 2004, AEG has formed a Section and Chapter Support Committee (S/CSC) to develop new methods to actively assist Sections and Chapters and their programs. This is a key component of the Strategic Plan recently approved by your Board of Directors. The S/CSC will work to address Goal II of the Strategic Plan. You can review the Strategic Plan goals in the June 2004 issue of AEG News, Vol. 47, No. 2. The committee consists of 10 people from AEG Sections and Chapters throughout the country. Ruth Wilmoth (Columbia Geotechnical) is on the committee, and Drew Harvey (PBS Engineering and Environmental) is serving as committee chair.

Two immediate tasks have been initiated: 1) Developing a clearinghouse of program information to give Sections and Chapters ideas for speakers and presentations, and 2) Developing training/orientation programs for chairpersons and officers both in their work as a Board member and roles within their sections.

The S/CSC is in the process of talking with all Section and Chapter chairpersons to get information on their successful programs, meetings, speakers and other events, and their use of officer duty guidelines. The S/CSC welcomes any input from present and past Section officers, and any other members, in helping the committee do our best in addressing these first goals. Please feel free to contact Drew Harvey at (503) 417-7693; andrew_harvey@pbsenv.com

AEG Oregon Section Website Seeks Sponsors:

The Board is pleased to announce the opportunity for corporate sponsorship of our Oregon Section website <www.aegoregon.org>. Companies can have their name, logo, and link to their website displayed on the Oregon Section website for a nominal fee of \$100 per year. Benefits of sponsorship include high visibility within the AEG community and support of the AEG section. Email George Freitag (gfreitag@gri.com) if interested or for more information.



Oregon Section AEG Board meeting

AEG OREGON CALENDAR

Dec 14: David Berber, AEG President, Naturally Occurring Asbestos

Jan 18: Gary Irwin, West Side CSO, Joint Meeting with ASCE Geotech

Feb 15: Ryan Shelby, Geo-Tech Explorations, Drilling Methods

Mar 22: Matt Rea, US Army Corps, Willamette River Basin Management

Apr 19: Student Night at PSU

May 17: Jeff Keaton, subject TBA

THANKS FOR SUPPORTING OREGON AEG!

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scriptions are free.

News items are invited and should be sent to: Charlie Hammond, OR Section AEG Newsletter Editor, Cornforth Consultants, 10250 SW Greenburg Road, Portland, OR 97223, email: <or.aeg.news@cornforthconsultants.com>,

phone (503) 452-1100. Electronic media is preferred. Deadline for submittal is Friday three weeks before each meeting.

Please notify Charlie if you have a change to your email or mailing address.

WWW.AEGOREGON.ORG & WWW.AEGWEB.ORG
