



The Official

Newsletter

of the Oregon Section Association of Engineering Geologists

Serving Professionals in Engineering, Environmental, and Groundwater Geology

JANUARY 2003 SECTION MEETING JOINT MEETING WITH ASCE GEOTECHNICAL GROUP

SUE BEDNARZ, ENGINEERING GEOLOGIST, PARSONS BRINKERHOFF

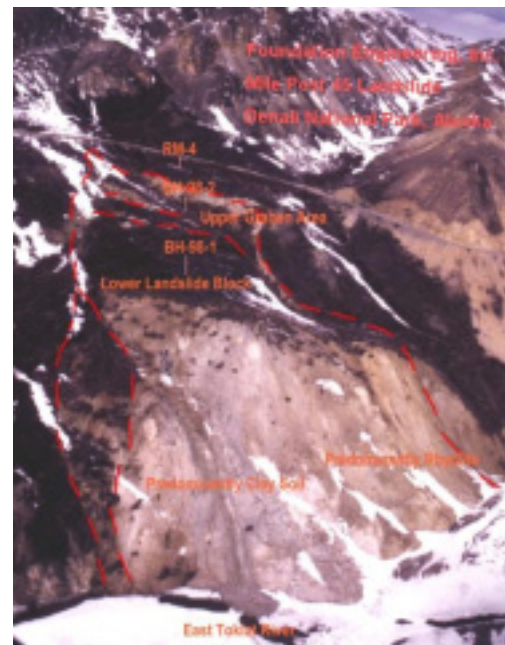
The Influence of Structural Geology on a Massive Landslide in Denali National Park, Alaska

A massive landslide located on the south side of Polychrome Mountain, threatens to disrupt the only access road to the interior of Denali National Park. The 35,000 m² landslide was first observed during the summer of 1990, with a 5 m high headscarp developing by 1996. The landslide is located directly below the park road on a bench above the East Toklat River. The site is underlain by rhyolitic flows and interbedded pyroclastic deposits of the Paleocene Teklanika Formation.

Investigations were conducted for a proposed road realignment around the landslide and to evaluate the likelihood that the landslide would grow to include the road. The field investigation involved numerous borings conducted in and around the landslide and extensive geologic mapping of the landslide and the surrounding slopes.

Our investigations revealed the slide was failing within pyroclastic materials that formed a wedge on the side of the East Toklat River Valley. Decomposed tuff forms a layer of high plasticity clay sandwiched between rhyolite flows. The entire geologic sequence dips on the order of 40 degrees to the east-southeast. Monitoring indicated the landslide is

moving to the southeast and down at 20 to 25 degrees. This movement vector parallels the apparent dip of the geologic sequence and thus, the landslide movement appears to be structurally controlled along a wedge formed by intersection of the pyroclastic bed with the river valley. Stability analysis and projection of the landslide wedge geometry indicated the main body of the landslide was unlikely to capture the road.



This Month's Meeting is on Tuesday January 21

Billy Reed's Restaurant & Bar
2808 NE Martin L. King Jr. Blvd
(1 block north of Knott St)
Portland, Oregon

\$25.00 buffet dinner (half price for students). Please make your selection from the options below:

Option 1: Kentucky Bourbon Chicken - Roasted breast of chicken with mushrooms, smoked bacon, flavored with aged whiskey, finished with a rich demi-glaze and a hint of cream

Option 2: Creole Seafood Pasta - Sauteed salmon and rock shrimp with

grilled andouille sausage, corn, peppers, onions, and garlic in a spicy cream sauce

Option 3: Roasted Veggie Pasta - Seasonal vegetables, smoked mozzarella, basil, and balsamic vinaigrette

Dessert options: Marionberry cheesecake or a chocolate cake.

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

Call URS at 503-222-7200 by 4 pm Thurs. Jan. 17 with your reservation. A reservation made is a reservation paid.

MESSAGE FROM THE CHAIR

Happy New Year to all! At the start of the season, back in September, I encouraged our members add or keep AEG in their schedules this year. So far, we have had four very well attended meetings. We have a new committee busy working to organize a joint AEG-ASCE Geotechnical Group short course on Rock Slope Hazards; more information on this short course will follow soon. We would like to have a field trip this year or during the summer if anyone has a field area to share that is new or hasn't been visited for a while. We have volunteers to help develop the idea into a field trip, so think about some projects you've been involved in the past few years. We need you, our members, to make our section the best it can be. Look for ways you can get more involved. Thanks to

everyone who is making time for AEG.

Last month's meeting was well attended and I want to thank everyone who called in their reservation by the deadline. There was a great improvement over past months; however, I have heard it takes several months to change a habit, and we did have a few folks show up without a reservation. So let's continue to make that extra effort to mark our calendars and call in. If you find you can't come to a meeting you already called in, please call back or find someone in your office who can go in your place.

This year we are breaking from a tradition of holding a joint AEG-ASCE General-ASCE Geotechnical Group meeting in February. The reason behind this is that our section was generally poorly represented at this meeting,

likely due to the more engineering and less geotechnical-geology nature of the selected presentations. This year, we have planned a joint AEG-ASCE Geotechnical Group meeting for our January meeting that will be of interest to both groups represented. The joint ASCE General-ASCE Geotechnical Group meeting will be held on January 29 (they had to change the date from February), if you are interested in the structural design and construction of the Crooked River Bridge. For our joint meeting with the ASCE Geotechnical Group, we will have our section member Sue Bednarz present her work on the Denali Landslide. See you there; take time right now to call in your reservation.

Ruth Wilmoth
AEG Oregon Section Chair

SHORT NEWS ITEMS

ASBOG: Dorian Kuper was elected President!

Membership Information: If your membership information has changed, please take the time to update through the AEG Website or by contacting our Chief Staff Executive Becky Roland at (303) 757-2926 x307

Green Briefcases: WE DO NOT HAVE ANYMORE!

Oregon Section Book: The 1998 publication "Environmental, Groundwater And Engineering Geology Applications from Oregon" Edited by Scott Burns, with articles by many Oregon Section members, is available from Nature of the

Northwest (DOGAMI Book Store at 800 NE Oregon St.), Powell's Book Store, Portland State Book Store (corner 5th and Mill), and Amazon.com.

"Seeking Old AEG Annual Directories": If anybody has any pre-1997 AEG annual directories, please email George Freitag, History Chair at gfreitag@gri.com. George is compiling our sections history. His mailing address is: GRI Inc., 9725 SW Beaverton-Hillsdale Hwy, Beaverton, OR 97005

Receive Your Newsletter by E-Mail: PLEASE TAKE THE TIME TO SWITCH TO THE E-MAIL

NEWSLETTER. This saves the Section money and simplifies the editor's job. Please send your e-mail address to or.aeg.news@cornforthconsultants.com

OREGON SECTION AEG NEWSLETTER is published monthly from September through May. Subscriptions are for members of AEG affiliated with the Oregon Section or other Sections, and other interested people who have requested and paid a local subscription fee of \$10.00. Email subscriptions 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.

Members
if you have already paid your dues,
THANKS!

WASHINGTON STATE PUBLIC GEOLOGY INFORMATION ALERT!!!

The Washington Governor's proposed 2003-2005 budget has just been released by the Office of Financial Management. The portion affecting the Department of Natural Resources is on the web at <http://www.ofm.wa.gov/budget03/recsum/490rs.htm>

Please note the section pertaining to the Geology Division's provision of public information. The staffing for that function is proposed to be reduced from 7 FTEs to half of one FTE. The description of that proposed change is:

Geology - Public Information

"This activity involves direct or indirect interaction with the general public, organized groups, and the educational community. Educational activities include support for special events, one-on-one interactions, and group visits by home schoolers. In addition, the division increases the availability of electronic versions of products in easily-accessible formats, and develops additional products directed toward a general audience, including road guides and State Park geologic maps.

"General Fund-State funding and associated staffing are eliminated for this activity on an on-going basis. Customers can pursue this information from federal, university, and private-sector sources."

Should this proposal be enacted by the Legislature, these are the most likely results:

- The library would be permanently closed. The collection would be

dispersed or put in permanent storage.

- Since the FTEs for the public information function is reduced from 7.0 to 0.5, both librarian positions would be eliminated
- The online "Bibliography of Washington Geology" would not be continued. It might be kept on the Department's website at least for a while, but without updates. The same would be true for the online Index to Geologic Mapping.
- Library participation in the National Tsunami Hazard Mitigation Program would cease. Publication of the newsletter for that program (TsuInfo Alert) would cease.
- Division publications would no longer be available in print. Only selected materials would be available online.
- All other public information functions would cease: No public outreach, no information provided to visitors.

As we all know, the state is faced with a \$2,000,000,000 budget shortfall. The Governor's budget makes difficult choices for programs statewide. The Legislature will be facing that same budget shortfall, and will be making those same kinds of very difficult decisions for all state programs.

The ball is now in the Legislature's court. Please contact your Washington Senator and Representative.

Washington Senators and Representatives, by Legislative District

1st District (NE King & S Snohomish counties, including areas of Bothell, Woodinville, Kirkland, Kenmore, Mountlake Terrace, Brier, and Lynnwood)

Rep. Al O'Brien (D): Olympia Office: PO Box 40600324 John L. O'Brien Bldg. Olympia, WA 98504-0600(360) 786-7928; Home address: P. O. Box 198 Mountlake Terrace, WA 98043(425) 771-2141; E-mail: obrien_al@leg.wa.gov; Homepage: http://www.leg.wa.gov/house/members/d1_1b.htm#1_1

Rep. Jeanne Edwards (D): Olympia Office: PO Box 40600321 John L. O'Brien Building Olympia, WA 98504-0600(360) 786-7900; E-mail: edwards_je@leg.wa.gov; Homepage: http://www.leg.wa.gov/house/members/d1_2b.htm#1_2

Senator ROSEMARY McAULIFFE
1st Legislative District: Represents northeast King County and south Snohomish County, including areas of Bothell, Woodinville, Kirkland, Kenmore, Mountlake Terrace, Brier, and Lynnwood. Legislative Office: 402-A John A. Cherberg Building; P.O. Box 40401; Olympia, WA 98504-0401; Telephone: (360) 786-7600; Fax: (360) 786-1999; Toll-Free Legislative Hotline: 1-800-562-6000; E-mail: mcauliff_ro@leg.wa.gov; District Voicemail: (425) 481-7459; Homepage: <http://www.leg.wa.gov/senate/members/senmem01.htm>

CALENDAR

February 19: Jon Hofmeister, DOGAMI, Landslide Modeling/Debris Flow Mapping

March 18: Willie Scott, USGS

CVO, Three Sisters Bulge Data

March 30-April 4: Cordilleran GSA in Puerto Vallarta

April 15: Student Night

May 20: Jon Allan, DOGAMI-Newport Office, Coastal Geomorphology Research.

CALL FOR PAPERS

39TH MEETING OF THE OREGON ACADEMY OF SCIENCES GEOLOGY DIVISION

Meeting: February 22, 2003, Saturday, Linfield College, McMinnville, Oregon

Abstracts:

- a) Due **January 12th, 2003**
- b) Email 250 word abstract to: Dr. Scott Burns, Dept. of Geology, P.O. Box 751, Portland State University, Portland, Oregon 97207; telephone: 503-725-3389; FAX: 503-725-3025; email: burnss@pdx.edu
- c) You can also mail the abstract on a disc to Scott.
- d) You need to fill out the abstract form that can be downloaded from the OAS website (www.wou.edu/oas) or call/write Scott Burns above.

Who is invited to speak? We are looking for good projects in geology and physical geography (geography division is inactive right

now). We always encourage faculty, graduate students and practicing geologists to present. We normally have 15-20 talks presented to an audience that has averaged between 35 and 50 over the past 10 years. Faculty, encourage your students to present – it gives them a publication!

Presentations: Each will be for 15 minutes. There will be mainly one screen and presentation is encouraged using slides or PowerPoint (projectors and computers will be available). We will also have an overhead available.

Schedule for the Day of February 22:

- 7:30–8:30: Refreshments and Registration (pick up pre-reg packets)
- 8:30–10:30: Morning Session 1
- 10:30–11:15: Posters and Refreshments

11:15–12:15: Morning Session 2

12:25–1:10: Lunch

1:20–2:30: Business Meeting,

Awards and Keynote Address

2:30–3:30: Afternoon Session 1

3:30–4:00: Refreshments

4:00–5:00: Afternoon Session 2 (if needed)

Registration: This meeting is a bargain! For a regular member, the cost for annual membership and meeting registration is \$27.00. For a student, the cost for annual membership and meeting registration is \$15. Those costs include the proceedings volume, refreshments, and lunch. To register, download the form from the OAS website at: www.wou.edu/oas or call/write Scott Burns at above address.

Questions: Call Scott Burns at 503-725-3389 or email him at burnss@pdx.edu.

AEG TILFORD FIELD SCHOLARSHIP

Applications are now being accepted for the Tilford Field Scholarships! Two will be awarded this coming spring - one to a graduate student and one to an undergraduate. The money will help the undergraduate with field camp or working on a field project for a senior thesis, and the graduate student will use the money for field work on their thesis.

It is named after Norman Tilford who was our past executive director and an outstanding engineering geologist in the field. The award is given to qualified student members of AEG who have demonstrated scholarship, leadership and participation in their university programs.

To find out more about this award, contact the AEG website

(www.aegweb.org) under the foundation subheading. Any questions, contact Debbie Green Tilford, chair of the NRT Scholarship Committee at tilgreen@aol.com.

If you are a student, consider applying. If you are a regular member and you know a qualified student, encourage them to apply.

WINTER QUARTER CLASSES AT PSU

G544: Well Dynamics, MW, 16:40-18:30, 4 credits, CH 69, Graham

G524: GIS for Natural Sciences, TuTh, 16:40-17:20, 4 credits, CH1, Percy

G510: Environmental Mineralogy, TuTh, 14:00-15:50, 4 credits, CH 69, Grathoff

Geog 514: Hydrology, TuTh, 16:00-17:50, 4 credits, CH418, Chang

CE542: In Situ Soil Testing, W, 16:00-18:50, 4 credits, SB2-148, Spang

CE565: Watershed Hydrology, TuTh, 14:00-15:50, 4 credits, Koch

CE569: Groundwater Hydrology, MW, 16:00-17:50, 4 credits, SB2-108, Johnson

(Continued on page 5)

MEMBERSHIP & LOCAL SUBSCRIPTIONS

Application forms for Membership in AEG can be obtained from Tim Blackwood, Membership Chair. He will also have copies at the monthly meetings. Membership is on a calendar year basis. If you are an AEG member, headquarters will also collect our Oregon Section dues of \$10, which supports our newsletter costs and, in part, the dinner costs for student members.

If you would like to subscribe to the local newsletter (comes out 9 times a year) without being an AEG member, fill out the form below and

mail or e-mail to Charlie Hammond, Oregon AEG Newsletter Editor. Note: this is only for people and organizations that wish to subscribe to our Newsletter without being members of AEG. Email subscriptions are free.

Copy this page and mail the subscription form with a \$10.00 check, payable to "Oregon Section AEG," to Charlie Hammond, Oregon Section AEG Newsletter Editor, Cornforth Consultants, Inc., 10250 SW Greenburg Road, Suite 111, Portland, OR 97223

MAIL ONLY SUBSCRIPTION
OREGON SECTION
AEG NEWSLETTER

NAME: _____

AFFILIATION: _____

E-MAIL(preferred): _____

MAILING ADDRESS: _____

TELEPHONE: _____

OREGON SECTION OFFICERS & COMMITTEE CHAIRS



Chair: Ruth Wilmoth, Columbia Geotechnical, Inc., (360) 944-7397, cgivanc@aol.com



Chair-Elect: Warren Krager, (503) 684-4902, wkrager@aol.com



Secretary: Rowland French, Northwest Geophysical Associates, Inc., (541) 757-7231, rowland@nga.com

Treasurer: Brent Black, Cornforth Consultants, Inc., (503) 452-1100, or. bblack@cornforth-consultants.com



Past Chair: Andrew Harvey, PBS Environmental, (503) 248-1939, andrew_harvey@pbsenv.com

PSU Student Chapter President: Julie Griswold, griswold@pdx.edu

Program Chairs: Jason Hinkle, Oregon Department of Forestry, (503) 945-7468, jhinkle@odf.state.or.us



Tim Richter, URS Corporation, Inc., (503) 948-7213, tim_richter@urs-corp.com

Membership Chair: Tim Blackwood, GeoEngineers, Inc., (503) 624-9274, tblackwood@geo-engineers.com

Field Trip Chair: Tom Kuper, Kuper Consulting, (503) 638-9722, dkper@-cybcon.com



History Chair: George Freitag, GRI, Inc., (503) 641-3478, gfreitag@gri.com

Newsletter Editor: Charlie Hammond, Cornforth Consultants, Inc., (503) 452-1100, or.aeg.news@cornforthconsultants.com



Assistant Newsletter Editor: Darren Beckstrand, Cornforth Consultants, Inc., (503) 452-1100, dbeckstrand@cornforth-consultants.com

Legislature Chair: position available

(Continued from page 4)

ESR 529: Environmental Impact Assessment, MW, 16:00-17:50, 4 cr, NH472, Maser

ESR520, Ecological Toxicology, MW, 16:00-17:50, 4 credits, NH 388, Foster

For more information, call Scott Burns, Portland State, 503-725-3389 or email him at burnss@pdx.edu

THANKS FOR SUPPORTING OREGON AEG!

Columbia Geotechnical, Inc.
Cornforth Consultants, Inc.
GeoEngineers, Inc.
Geo-Tech Explorations, Inc.
GRI, Inc.
Kuper Consulting
Northwest Geophysical Assoc, Inc.
Oregon Department of Forestry
PBS Environmental
Portland State University
URS Corporation, Inc.