Association of Environmental and Engineering Geologists

The Rocky Mountain Section Newsletter

NOVEMBER 2008

MEETING DATE

THURSDAY NOVEMBER 13th, 2008

TIME

5:45 p.m. Social Hour
6:30 p.m. Dinner
7:30 p.m. Presentation

LOCATION

Berthoud Hall, Colorado School of Mines
1516 Illinois St.
Golden, Co 80401
Room 205
See Map Below

COST

$25 Members
$27 Non-members
Students, free first time then$10

RESERVATIONS

Kristi Ainslie
(303) 440-5236
or
meetings@aegrms.org
or
WWW.AEGRMS.ORG

BY NOON, TUESDAY NOVEMBER 11TH

Engineering Geology Problems and Practice in New Zealand

Paul M. Santi
Department of Geology and Geological Engineering
Colorado School of Mines

After five months of teaching, travelling, and assisting in engineering geology field trips in New Zealand, I have developed the opinion that they are a "risk-aware" society, but not a "risk-averse" society. That is, their technical capabilities are substantial, so identifying and quantifying various natural hazards are carried out much the same as in the US. However, they seem to have much more freedom to apply solutions that might not be considered here because they lack precedent, expose those involved to too much liability, or seem better oriented to a smaller and more sparsely distributed population. Consequently, their wide array of engineering geology problems spawns a wide array of responses. A short list of these problems includes:

- Dams astride fault zones
- Extensive hydroelectric systems vulnerable to damage by landslides
- Young landslide dams
- Water storage ponds sited on landslide headscarp grabens
- Recent earthquakes
- Massive rock avalanches
- Effects of rock avalanches on glacier advance
- Debris flows
- Large-scale sediment erosion and aggradation problems
- Volcanism, tsunami, impenetrable rainforest, and angry seals

Examples of these problems and some of the associated solutions serve to illustrate the breadth of issues confronting engineering geologists in New Zealand and the factors governing their responses.

Rockfall protection system over faculty housing at Kaikoura field station

Flexible joint between two independent dams comprising the Clyde Dam along alignment of River Channel Fault

Words from the Chair

First of all, let's say thank you to everyone who turned out for last month's meeting. We had an interesting presentation on the formation and failure of natural earth dams from the distinguished Jahn's Lecturer Dr. John Clague. John is wrapping up his tour as the Jahn's Lecturer and making way for the new Jahn's Lecturer, Dr. Edmund Medley. Stay tuned for an announcement about a date for Dr. Medley's visit to our section.

This month we are pleased to have Dr. Paul Santi of the Geological Engineering department at the Colorado School of Mines present a talk on "Engineering Geology Problems and Practice in New Zealand". This should be a fantastic presentation as New Zealand is so geologically active that the residents of New Zealand have had to develop some new ways of dealing with geologic hazards.

Finally, let's also welcome all of the new and continuing AEG Rocky Mountain Section officers for this year: Kristie Ainslie (Newsletter), Jill Carlson (Treasurer, Website), Steve Compton (Past Chair), Tyler Benton (Student Chair), David Cushman (Membership), Julia Frazier (Secretary), Ed Friend (Newsletter), Adam Prochaska (Vice Chair).

We hope to see everyone at the meeting in November!

Sean Harvey, GIT

Earth Science Literacy Initiative

The NSF-supported Earth Science Literacy Initiative has prepared a draft document outlining what every citizen should know about earth science, and we are seeking community input on the draft. We hope that you will take the time to provide your input, because this document will provide a clear and concise summary of the fundamental ideas in earth science for policy makers, educators, students, and the general public.

In order to read and comment on the draft, please go to http://www.earthscienceliteracy.org before October 31st, 2008. We will then incorporate community comments, add graphics, and release a revised draft by early December. The final document will be printed toward the end of January.

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2008-2009 Upcoming Meeting Presentations

November 13, 2008	Paul Santi	New Zealand!
December 11, 2008	Vince Mathews	Family Night
January 8, 2009	*Open*	
February 12, 2009	AEG President	President's speech
March 19, 2009	Student Night	
April 9, 2009	*Open*	
May 14, 2009	*Open*	

If you are interested in Presenting at an AEG meeting contact Sean Harvey at chair@aegrms.org

Earth Science Literacy Initiative

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This document complements the efforts of the Ocean, Climate and Atmospheric science communities in defining the big ideas and supporting concepts essential for an earth system literate public. The Earth Sciences draft was developed through an NSF-supported, 350-participant online workshop held in May, 2008 and a 35-participant, in-person writing workshop held in July, 2008. These workshops brought together scientists from a broad representation of the geosciences, including mineralogists, petrologists, resource explorationists, sedimentologists and stratigraphers, paleontologists, tectonicists, geophysicists, geomorphologists, low-temperature geochemists and biogeochemists, continental dynamicists, volcanologists, geohazard specialists, and members of the freshwater hydrologic science community.

This is a critical time for our science - the geosciences can play a critical role in helping society meet the challenges of natural hazards and human impacts on the environment. Please help us make this document the best it can be!

Geo-velopment: The Role of Geological and Geotechnical Engineers in new and Redevelopment Projects

For more information on Geo-velopment see the attached flier.

GEI Consultants, Inc.
Attn: Kristi Ainslie
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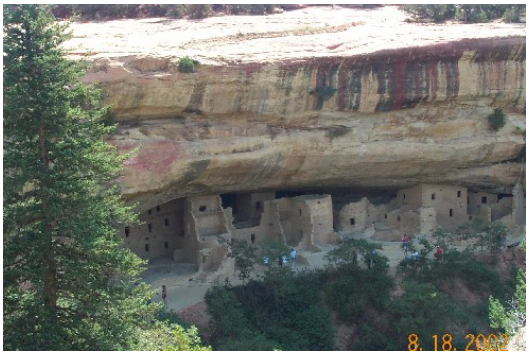
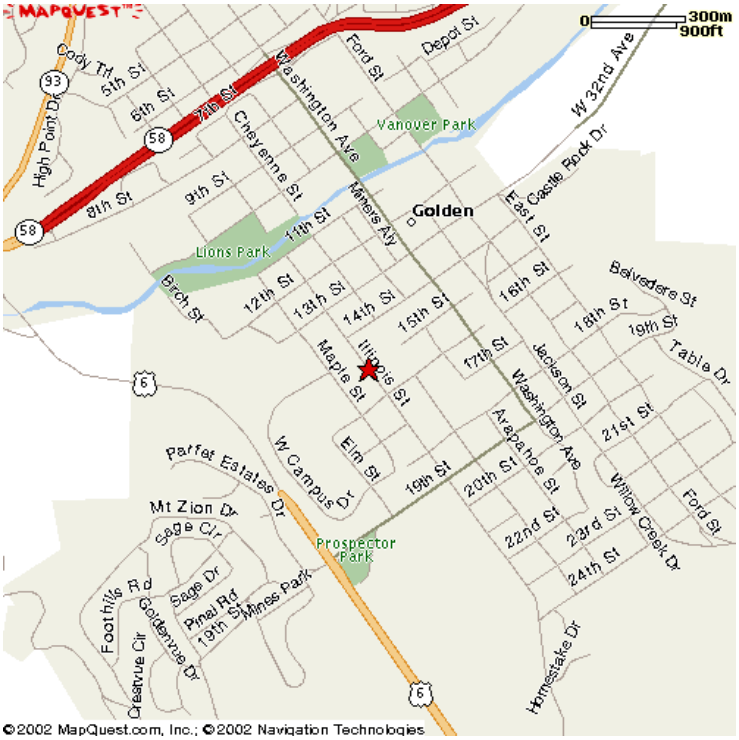
www.aegrms.org





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