

# ASSOCIATION OF ENGINEERING GEOLOGISTS

*"Serving Professionals in Engineering, Environmental, and Ground-Water Geology"*

## THE ROCKY MOUNTAIN SECTION NEWSLETTER

### MEETING DATE

**THURSDAY  
APRIL 12, 2001**

### TIME

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

### LOCATION

**WHITE FENCE FARM**  
6262 W. Jewell  
Lakewood, CO  
Between Wadsworth and  
Sheridan on Jewell

### COST

\$20 Members  
\$22 Non-members  
Free for Students

### RESERVATIONS

c/o AEG Reservation Line  
(303) 790-2161 x 243  
**BY NOON, MONDAY  
9 APRIL**

*For each RSVP, mention  
if you would like chicken,  
shrimp, or a vegetarian  
dinner.*

### **Grade a Road - Go to Jail:**

#### **A Saga of the Criminal Justice System**

Rex Upp, Upp Geotechnology, Inc, and AEG President



"I'm sorry I didn't call, but I've been in jail". With these words from his client, Rex Upp's saga began into the Criminal Justice System. At about 5:00 p.m. on a Friday in September 1996, sheriff deputies arrested the defendant (Rex's client) at his place of business. Because of the timing, he could not see a judge until Monday, when he was released from jail.

The defendant owns property in the Santa Cruz Mountains in the central Coast Range of California. As a result of road grading done in 1995 and 1996, six charges were filed against him including water pollution, grading without a permit, and grading without protecting adjacent properties. In trial, Rex testified on the following issues:

- The sandstone and shale that had blocked the highway was geologically different and could not have come from the defendant's grading.
- The blockage of a culvert and washout of a rural road downstream from the defendant's property had occurred long before his grading, based on the nature of the material blocking the culvert and the age of the washout scar.
- A slip-out on a highway road cut was not related to diversion of runoff but had a history of failures prior to 1995.
- Virtually all of the sediment that eroded from the defendant's grading remained in retention basins on the defendant's property.
- The debris flow that blocked the highway in the El Niño storm of February 1998 was caused by a slope failure in a different watershed from the defendant's grading.

The jury acquitted the defendant of grading without protecting adjacent property, presumably because there was no measurable off-site damage. The defendant was convicted of the other charges.

NOTE: RMS officers are having a business meeting with Rex prior to the meeting at 5:00 PM. Section members are encouraged to take advantage of this opportunity to meet with the Association President in person.

## Upcoming Events

- April 8, 2001      A tentative date has been set for the Spring RMS Field Trip. Dr. Christoph Goss of Rocky Mountain Consultants is trying to work out the final details and access requirements for the field trip to the Laramie-Poudre Tunnel Rehabilitation project. See the attached flier at the end of this newsletter for more details.
- May 10, 2001      May RMS Meeting. Speaker: Bob Watters, Univeristy of Nevada Reno and 2000/2001 AEG Jahns Distinguished Lecturer. Topic: Realism in volcano hazard zonation: Does geo-engineering help provide a more accurate assessment? Again, stay tuned for more details an upcoming newsletter!

## Other Upcoming Events

### Free Popular Geology Lectures

The Friends of Dinosaur Ridge have announced that the following "popular geology" lectures will be held at the Lutheran Church of the Master at the intersection of Jewell, Alameda Blvd., and Bear Creek Parkway in Lakewood, Colorado. All are free and open to the public. Contact 303-697-DINO (303-697-3466) for further information

- Tuesday, April 17, 2001, 7:00 pm      "The Colorado Geological Survey and Geologic Hazards in Colorado"  
Vicki Cowart, State Geologist and Director, Colorado Geological Survey
- Thursday, May 3, 2001, 7:00 pm      "History of Coal Mining in Jefferson County, Colorado"  
Chris Carroll, Colorado Geological Survey

## Section News

1. Peggy Ganse will be attending the mid-year Board of Directors Meeting on April 28 and 29 in Kansas City. If you have any suggestions/concerns/issues that you would like to have brought to the attention of Headquarters, please email Peggy before April 20.
2. The Association Awards Committee is still seeking nominations for the following three awards:
  - a. **Douglas R. Piteau Outstanding Young Member Award** - This award is presented to a Member or Associate Member who is age 35 or under, and has excelled in one (or more) of the following 3 areas: technical accomplishment, service to AEG (including local section involvement), or service to the engineering geology profession.

b. **Claire P. Holdredge Award** - This award is presented for a publication by a Member(s) within the past 5 years that is judged to be an outstanding contribution to the engineering geology profession.

c. **Floyd T. Johnson Service Award** - This award is presented to a Member for outstanding active and faithful service to the Association over a minimum of 9 years. Board members are not eligible until 1 year after leaving office. Nominations must be validated via endorsement by 3 Members having different Section affiliations. This award is not necessarily conferred annually.

**The deadline for nominations to be considered for awards in 2001 is May 30, 2001.** If you think any Rocky Mountain Section Members are deserving of these awards, please send nominations to Bill Cole, AEG Awards Committee Manager, c/o Cotton, Shires and Associates, Inc., 330 Village Lane, Los Gatos, CA 95030 (or to [bcole@cottonshires.com](mailto:bcole@cottonshires.com)). For more information, please consult the AEG Directory or website, or send questions to Bill Cole.

3. Judges needed for Colorado Science and Engineering Fair April 1-14, 2001, Colorado State University, Fort Collins, CO. If you have an interest in judging at the Colorado Science and Engineering Fair in Fort Collins, please contact Gina Holland (303-273-4634; [gina.holland@xcelenergy.com](mailto:gina.holland@xcelenergy.com)) as soon as possible! Additional judges are needed both for general judging and for the CO-AIPG award for "best earth science project". The judging will be held on Thursday, April 12.

4. Please forward newsworthy items for the RMS newsletter to Doug Boyer at [dboyer@do.usbr.gov](mailto:dboyer@do.usbr.gov)

## Newsletter Status

As was mentioned in last month's newsletter, paper copies of the newsletter have been discontinued as of the March 2001 newsletter due to rising reproduction and postage costs. However, paper copies will continue for those without established e-mail addresses and for those individuals that request to have a paper copy mailed to them. Those individuals who would like to continue to receive paper copies of the newsletter, please call the AEG-RMS reservation phone number and leave your name and message stating that you would like to continue to receive the paper copy of the newsletter.

## Section Website

The RMS website is up and running! And it looks simply outstanding! Peggy and her husband Jack have made great strides in getting this up and running. Members can look at meeting abstracts, download the newsletter, RSVP to meetings, and contact Section officers. The address is temporarily located at <http://home.earthlink.net/~jganse/aeg> until a permanent home is found.

## RMS Officer Contact List

Chairperson	Peggy Ganse, Haley & Aldrich, 303.534.5789, ext. 210, <a href="mailto:MAG@haleyaldrich.com">MAG@haleyaldrich.com</a>
Chair-elect	Tim Petz, Church & Associates, Inc., 303.463.9317, <a href="mailto:tpetz@geo-church.com">tpetz@geo-church.com</a>
Secretary	Jim Wright, GEI Consultants, Inc., 303.662.0100, <a href="mailto:jwright@geiconsultants.com">jwright@geiconsultants.com</a>
Treasurer	Sam Bartlett, U.S. Bureau of Reclamation, 303.445.3142, <a href="mailto:srbartlett@do.usbr.gov">srbartlett@do.usbr.gov</a>
Membership	Scott Walker, GEI Consultants, Inc., 303.662.0100, <a href="mailto:srwalker@geiconsultants.com">srwalker@geiconsultants.com</a>
Newsletter	Doug Boyer, U.S. Bureau of Reclamation, 303.445.3074, <a href="mailto:dboyer@do.usbr.gov">dboyer@do.usbr.gov</a>

## Student Night Report

A couple of photos from the February Student Night!



## Fall 2001/Spring 2002 Tentative Speakers

September – Open

October - Jim Lambrechts (Haley & Aldrich) – Ground Improvement of Compressible Clay Soil

November - Jon White (CGS) - Study of Collapsible Soils Across Colorado

December - Jon Caine (USGS) – Family Night, Pole to Pole - A Geologic Journey of Antarctica and Greenland

January - Bob Schuster (retired USGS) - Dams Built on Pre-Existing Landslides (keynote address at GeoEng 2000 in Melbourne)

February - Student Night

March, April, May – Open, AEG President

Please let Peggy Ganse or Tim Petz know if you or someone you know would be interested in giving a talk at an upcoming RMS meeting.

## AEG 2001 Annual Meeting

The St. Louis AEG Section is pleased to announce the St. Louis Annual Meeting. The joint meeting with American Institute of Professional Geologists (AIPG) will have some new formats and synergies with our allied organization. The meeting venue will be at the Hyatt, Union Station, St. Louis.

**Field Trips.** Six field trips are presently planned for pre- or post-meeting attendance. The topics and proposed dates follow. Contact Duane Kreuger [dtk@geotechnology.com] for more information.

- **St. Francois Mountains and Mine Tour** - 9/30/01 - 10/01/01
- **Characterization of Previously Mined Ground – Joplin, MO** - 9/30/01 - 10/01/01
- **Ozark Plateau Karst Geology** - 10/02/00
- **Abandoned Mine Reclamation Sites, Southern IL** - 10/02/00
- **Neotectonics of SE Missouri** - 10/05/00 (5 pm start on Friday) - 10/07/00

- **Weldon Spring Site Remedial Action Project - 10/06/00**

**Short courses.** Eight professional development and technical short courses are presently planned for pre- or post-meeting attendance. Topics of the four professional development courses are included below. Contact John Bognar [lbgstl@netscad.net] for more information on the professional development topics.

- **AIPG's Continuing Professional Development Program** (Tom Fails);
- **Practical Geoscience Ethics: Elements, Examples, and Education** (Dave Abbott and John Williams);
- **Section Officers Training** (John Bognar and Bill Siok, and perhaps Chris Mathewson);
- **Understanding Natural Geologic Hazards -- What Everyone Should Know** (Dr. Robert Font).

Topics of the four technical courses are presented below. Contact Karl Finke [nrfinck@mail.dnr.state.mo.us] for more information on the technical topics.

- **ASFE Loss Prevention Seminar-Field Representation**
- **Learning from our mistakes**
- **Karst Mitigation**
- **Use of Geosynthetics in Remediation.**

**Symposia.** Seven diverse symposia topics for the St. Louis Annual Meeting consist of both invited and volunteered abstracts. The symposia are planned for the three meeting days. If you are interested in participating as a speaker in one of these events, please contact the individual symposium chair directly. Contact Paul Santi [psanti@umr.edu] for more information on symposia overall.

**Aquifer Storage and Recovery** (Zhuping Sheng, and Mike Fahy)

**Case Studies of Innovative Approaches to Ground-Water Remediation** (Bill Niemann)

**Engineering Geology Solutions to Mitigating Karst** (Jim Vandike)

**Government and Mining** (Larry Nuelle and Larry Coen)

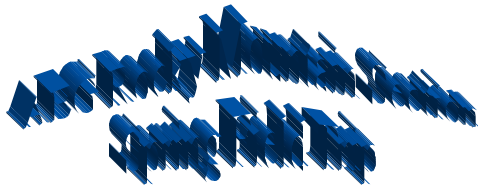
**Mid-Continent Earthquake Hazards** (Dave Hoffman)

**Overview of Recent Advances in Engineering Geology** (Paul Santi)

**Risk Assessment in Engineering Geology** (Jeff Keaton and Jerry DeGraff).

**Technical Sessions.** Technical sessions are planned for the three meeting days. Abstracts are requested for oral and poster presentations. Ten topics have been chosen to elicit interest. Abstracts on other topics are welcome and will be fit into the program. Abstracts will be selected from the submissions based on quality, professional content, and available space and time for presentation. The ten proposed topics are: **Case Histories in Engineering Geology; Coastal and River Engineering Geology; Earthquake Issues for Intraplate Regions; Engineering Geology for Construction Practices; Engineering & Environmental Geophysical Case Histories; Environmental Investigation & Clean-Up; Environmental Practice in EPA Regions V & VII; Geologic Solutions to Transportation Concerns: Highways & Waterways; Ground-water Investigations; and, Midwest US Geologic Hazards: Recognition & Risk Management.** Contact Greg Hemen [Gregory.L.Hemen@mvs02.usace.army.mil] for more information.

The abstract deadline is 1 MAY 01. Submitting an abstract is quite easy. The website for abstract submission is [www.aegweb.org/annual\\_meetings/2001/abstract\\_submittal.html](http://www.aegweb.org/annual_meetings/2001/abstract_submittal.html) Abstract authors are welcome to contact Technical Program Chair Hemen or Meeting Director Julie Keaton for information or discussion. Abstracts are formally submitted through the above website. Those submitting abstracts should expect a quick abstract receipt reply followed later by an acceptance notice in early June 2001.



**Laramie-Poudre Tunnel Field Trip**  
**Sunday, April 8 2001**  
**10:00am**

Owner: Tunnel Water Company (TWC)  
Engineer: Rocky Mountain Consultants Inc (RMC)  
Contractor: Robison Construction Inc (RCI)

Come join the Rocky Mountain Section of AEG and the Geotechnical Group of ASCE for a “don’t miss” field trip to the Laramie-Poudre Tunnel, located 55 miles west of Fort Collins in the scenic Poudre Canyon.

The Laramie-Poudre Tunnel gives credence to the expression "if you have seen one, you have seen them all". The initial construction and subsequent repairs have given this water tunnel every cross section imaginable, from bare rock rectangles to concrete arches, timber sets, steel liner plate, steel ribs, custom cans, and wood/concrete barrel sections. The tour, partially by train and partially by foot, will examine the complex metamorphic geology, properties of shear zones, old repairs, and current rehabilitation work. The tour will be for tunnel/mining/geotechnical engineers and engineering geologists with no claustrophobia.

RSVP: Christoph Goss, Resident Engineer RMC  
tunnelrat@mho.com  
cgoss@long.rmcco.com  
970-881-3990 (site office)

More information and directions will be provided prior to the trip to those who sign up. All participants will be required to sign a waiver releasing RCI, RMC, TWC, and the USFS of liability. ***Please RSVP at your earliest possible convenience as space is very limited.***

**Brief History of The Laramie-Poudre Tunnel**

The Laramie-Poudre Tunnel was built from 1910 to 1911 to bring irrigation water from the Laramie River and associated reservoirs to the Cache la Poudre River for use on northern Front Range farms. The tunnel was driven from both ends (initially) using drill and blast and hauling muck with mules. A temporary hydroelectric plant provided power and compressed air to both mining camps. The tunnel has been in use for 90 years and has required repairs in various sections during that time. The current rehabilitation project seeks to repair a collapse that occurred in May 2000 (completely blocking the tunnel) and fix future trouble spots.