

## EARTH SCIENCE TEACHER WEEKEND AT NE-NC GSA, 2017

### Saturday March 18

#### **10:00 AM – 1 PM Field Discovery Workshop**

##### ***Streams as Classrooms: Impacts of Mine Discharge, Stormwater Runoff and Hydraulic Fracturing Fluids***

Guides from the Montour Run Watershed Association will show us how this polluted stream near the Pittsburgh International Airport was cleaned up using new environmental methods. Pictures and data from this visit can be used in the classroom to teach earth science, chemistry and biology topics. There is no additional fee for this field activity. (photo courtesy of the Montour Run Watershed Association).



#### **2:30 – 4:00 PM Saturday Afternoon Keynote Address for K-12 Teachers Sponsored by PAESTA, the Pennsylvania Earth Science Teachers Association**



Photo by Geoff Haines-Stiles, for Earth: The Operators' Manual

##### ***Climate Research for the Classroom*** Dr. Richard Alley, Penn State University.

A world-renowned climate researcher who works in Antarctica and Greenland will update us on the 'big picture' of climate change, emphasizing aspects that can be best addressed in the K-12 classroom.

#### **4:00 – 5:00 PM Teachers Reception and Networking Event Sponsored by PAESTA, the Pennsylvania Earth Science Teachers Association**



### Sunday, March 19

#### **8:30 AM – 11:30 AM Technical Session 1**

##### ***Teaching Climate and Energy to a K-12 Audience***

Climate and energy are complex topics. There are many ways to approach K-12 teaching of climate and energy depending on availability of maps/images, data, and instructional method. This session will highlight a variety of pedagogical approaches to teaching climate and energy for formal/informal K-12 audiences, including connections to societal issues.

#### **Noon – 1:00 PM Panel Discussion**

##### ***Ask-a-Geologist: Teachers Ask, Experts Answer***

A panel of specialists in subject matter of interest to K-12 teachers (including Dr. Ken Coles, an educational specialist and author of a new Atlas of Martian Geology) will answer questions about earth science content.



#### **1:00 PM - 3:00 PM Technical Session 2**

##### ***New Strategies and Best Practices for Teaching Climate and Energy***

What works best when teaching about climate and energy in formal and informal K-12 educational settings? This session will use both traditional printed posters and teacher-assembled bulletin boards to share exciting new ideas and proven best practices for climate and energy lessons.