

EPP and Center for Climate and Energy Decision Making

Sponsored Seminar

Trudy E. Bell
Senior Writer
University of California High-Performance
AstroComputing Center
Presenting on:



"Extreme Weather and Today's Engineered Infrastructure: Lessons from the Great Easter 1913 Flood"

April 22, 2014
12 noon
(Lunch served at 11:50am)
Baker Hall 129 Conference Room
Department of Engineering and Public Policy

Seminar Abstract:

The United States had no warning. The nation's most widespread natural catastrophe struck Easter weekend 1913 in what Mabel T. Boardman (volunteer head of the Red Cross who succeeded its founder Clara Barton) later called "an epidemic of disasters". On Good Friday, March 21, widespread hurricane-force winds from Canada to Mexico downed communications across the eastern half of the U.S. Then on Easter Sunday, March 23, destruction began in earnest as a dozen tornadoes roared through five states. Also beginning Easter Sunday, widespread torrential downpours precipitated record flooding across all or parts of 15 states, immobilizing the industrial heart of the nation and wreaking death and devastation.

Based on both historical documents and recent reports from governments, engineering organizations, and insurers, this talk will ask: what might be the impact and consequences to our nation's engineered infrastructure—not just buildings, highways, bridges, and railroads, but also airports, dams, levees, wastewater treatment plants, nuclear power plants, transmission lines, and internet servers—if an identical 1913-scale storm system struck the U.S. in the same places today?

Speaker Bio:

Trudy E. Bell (M.A., history of science/American intellectual history, New York University), a former editor for *Scientific American* and *IEEE Spectrum* magazines, has been researching the monumental 1913 storm system and flood and its societal consequences since 2003. She is the author of *The Great Dayton Flood of 1913* (Arcadia, 2008) and half a dozen articles. In 2009, she was a Filson Fellow in residence at the Filson Historical Society in Louisville, Kentucky, to support her research on the 1913 flood in the Ohio Valley. For the disaster's centennial in 2013, she was interviewed in several regional PBS TV documentaries and gave invited lectures at conferences and public forums in several states. Since 2012, she has maintained a blog called *"Our National Calamity": The Great Easter 1913 Flood,* posting results of original research in both history and meteorology. Since 2011, she has also been senior writer for the University of California High-Performance AstroComputing Center (UC-HiPACC). She has also edited six reports for the Union of Concerned Scientists.