Tuesday, September 30, 2014
8:30–5:15  Field Trip: Water Resources of the Kansas River Alluvial Aquifer (Holiday Inn conference entrance)
5:15–7:00  Conference Registration and Mixer (Holiday Inn Brazilian A)

Wednesday, October 1, 2014
7:00–8:15  Registration (Hallway), Poster Session Setup (Regency A&B), and Continental Breakfast (Regency C&D)
8:15–8:30  Plenary Session (Regency A&B)
            Introductions
            Welcome: Rex Buchanan, Interim Director, Kansas Geological Survey
            Announcements
8:30–9:20  Keynote Presentation—William Alley, Former Chief, USGS Office of Groundwater (Regency A&B)
            Fracking and Sustainability: Major Challenges in Earth Science Communication
9:20–10:00 Session I—Groundwater Modeling of Aquifer Systems (Regency A&B)
9:40–10:00 Simulation of Groundwater Flow and Chloride Transport in the Equus Beds Aquifer: Brian Klager and Brian Kelley
10:00–10:20 Break (Regency C&D), Visit Exhibits (Hallway)
10:40–11:00 Post Audit Results for the Platte West Well Field Groundwater Model: How Good Were Our Predictions? Luca DeAngelis
11:00–11:20 Improving Our Understanding of Groundwater in the Ozarks: An Overview of the U.S. Geological Survey Ozark Regional Aquifer Study: Brian R. Clark, Phillip D. Hays, and Anna Nottmeier
11:20–12:00 Session III—Karst Hydrogeology, Groundwater Resources (Regency A&B)
11:20–11:40 An Update on the Recharge Area of Selected Large Springs in the Ozarks: Jerry L. Prewett, James W. Duley, and Cecil Boswell
12:00–1:00  Lunch—provided (Regency C&D)
### Session IV A — Concurrent Session — Groundwater-Surface Water Interactions

**1:10–2:10**

- **1:10–1:30**  
  Consequences of Rapid Snowmelt Events on Soil Nutrient Loss in a Mesic Tallgrass Prairie, the Konza Prairie LTER Site, Northeastern Kansas: G. L. Macpherson

- **1:30–1:50**  
  Documenting Stream/Groundwater Interaction in the South Platte River: Douglas Hallum, Steven Sibray, and Leslie Howard

- **1:50–2:10**  

### Session IV B — Concurrent Session — Groundwater and Energy Production

**1:10–2:10**

- **1:10–1:30**  
  Combustion of Pine/Macroalgae Pellets of Varying Mixture Composition: Christopher Depcik, Edward Peltier, Val Smith, and Jin Ho Yun

- **1:30–1:50**  
  The Impacts of Carbon Dioxide Storage in the Saline Arbuckle Aquifer on Freshwater Aquifers in Kansas: Tiraz Birdie, Lynn Watney, Paul Gerlach, Michael Killion, Eugene Holubnyak, Jennifer Raney, Tandis Banjoli, Gene Williams, Minh Nguyen, and Brownie Wilson

- **1:50–2:10**  
  Potential Impacts of Hydraulic Fracturing on Drinking Water Resources: Steve Randtke

### Session V — Posters (Regency A&B) and Exhibits (Hallway) Session

**2:10–3:10**

View and discuss posters with authors; visit exhibits

- Surface and Groundwater Data Collection and Application for Integrated Water Management in Nebraska: Carol Myers Flaute, Mahesh Pun, and Jennifer Schellpeper

- Playa Wetland Distribution and Geomorphology in Western Kansas Using a LiDAR-Derived DEM: Melissa Goldade and William C. Johnson

- Groundwater-Level and Storage-Volume Changes in the Equus Beds Aquifer near Wichita, Predevelopment to 2014: Cristi V. Hansen and Joshua A. Whisnant

- An Analysis of the Ohio River Basin Water Balance and Future Predictions under a Warming Climate: Dave Howarth

- Development of a Modeling Tool for Determining Fully Appropriated Areas in Nebraska: Ruopu Li, Melissa Mosier, Mahesh Pun, Jessie Wietjes, Brandi Flyr, and Sudhansh Chinta

- CO₂ Flux from Grassland Headwater Streams: Michael Rawitch and G. L. Macpherson

- Nitrate in Groundwaters in Farmers Elevator Company Site, Sylvan Grove, Kansas: Samuel Stone, Shovan Barua, Michael Vega, Chris Steincamp, and Saugata Datta

- Groundwater Management Resources and Tools on the Kansas Geological Survey Website: Daniel R. Suchy, Brownie Wilson, Debora Stewart, and Dana Adkins-Heljeson

- Little Arkansas River and Equus Beds Aquifer Water Quality Before and Concurrent with Large-Scale Artificial Recharge, South-Central Kansas, 1995–2012: Daniel Tappa, Jennifer Lanning-Rush, and Andrew Ziegler
## Session VI A—Concurrent Session—Groundwater Management (Regency A)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Content</th>
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<tbody>
<tr>
<td>3:30–3:50</td>
<td>Ten Years of Integrated Water Management in Nebraska: Jennifer J. Schellpeper and Melissa Mosier</td>
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<tr>
<td>3:50–4:10</td>
<td>INSIGHT: Development of a Web-Based Water Information System: Brandi Flyr</td>
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<tr>
<td>4:10–4:30</td>
<td>Creating the Climate for Conservation: Nested Systems to Support Agricultural Community Adaptation to Groundwater Scarcity: Stephen Gasteyer</td>
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<tr>
<td>4:30–4:50</td>
<td>Groundwater Modeling as a Tool in Drought Management, Rock Valley Rural Water District, Sioux County, Iowa: Mike Gannon</td>
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## Session VI B—Concurrent Session—Groundwater Quality, Aquifer Characterization (Regency B)

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<tr>
<td>3:10–3:30</td>
<td>$\text{CO}_2$ as a Control on Microbial Activity in Anoxic Aquifers: Matthew Kirk and Qusheng Jin</td>
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<tr>
<td>3:30–3:50</td>
<td>A Case for Direct Groundwater Velocity Measurements: J. F. Devlin</td>
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<tr>
<td>3:50–4:10</td>
<td>Evaluating the Use of In-Well Heat Tracer Tests Monitored by DTS as a Method of Measuring Vertical Borehole Flow: Steve Sellwood, David J. Hart, and Jean M. Bahr</td>
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<tr>
<td>4:10–4:30</td>
<td>Characterizing a Glacial Till Aquitard using Ambient and Pumping Stresses: David B. Hisz</td>
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### Thursday, October 2, 2014

**7:00–8:00**  Continental Breakfast (Regency C&D)

**8:00–9:50**  Session VII—High Plains Aquifer (Regency A&B)

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<thead>
<tr>
<th>Time</th>
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<tr>
<td>8:00–8:10</td>
<td>Introduction to the session</td>
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<tr>
<td>8:10–8:30</td>
<td>The High Plains Aquifer: Past, Present, and Future: Erin M. K. Haacker, Anthony D. Kendall, and David W. Hyndman</td>
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<tr>
<td>8:30–8:50</td>
<td>Simulating the Land Surface Response to Drought and Climate Change Across the High Plains: Anthony D. Kendall and David W. Hyndman</td>
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<tr>
<td>8:50–9:10</td>
<td>WRF Model Sensitivity to Land Surface Model and Cumulus Parameterization under Short-Term Climate Extremes over the Southern Great Plains of the United States: Lisi Pei, Nathan Moore, Shiyuan Zhong, Lifeng Luo, Dave W. Hyndman, Warren E. Heilman, and Zhiqiu Gao</td>
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<tr>
<td>9:10–9:30</td>
<td>Assessing the Major Drivers of Water-Level Declines: New Insights into the Future of the High Plains Aquifer: James J. Butler, Jr., Donald O. Whittemore, and Brownie Wilson</td>
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**5:00–6:00**  Cash bar (Regency C&D)

**6:00–7:00**  Banquet (Regency C&D)

**7:00**  Speaker—Rex Buchanan, Interim Director, Kansas Geological Survey

Topic: Induced Seismicity
<table>
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<tr>
<td>9:50–10:10</td>
<td><strong>Break</strong> (Regency C&amp;D), <strong>Visit Exhibits</strong> (Hallway)</td>
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<tr>
<td>10:10–11:50</td>
<td><strong>Session VII—High Plains Aquifer (cont)</strong> (Regency A&amp;B)</td>
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<tr>
<td>11:10–11:30</td>
<td>Sedimentologic and Stratigraphic Characterization of Cored Sediments from the High Plains Aquifer System of Western Kansas: Greg A. Ludvigson, Jon J. Smith, John Doveton, Rolfe Mandel, Laura Murphy, Anthony Layzell, Randy L. Stotler, and Richard Sleezer</td>
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<tr>
<td>11:30–11:50</td>
<td>Recharge Characteristics of the High Plains Aquifer Near a Predominately Dry River: Molly Long, Donald O. Whittemore, James J. Butler, Jr., and Randy L. Stotler</td>
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<td>11:50</td>
<td><strong>Concluding Remarks, Invitation to Next Year's Conference</strong></td>
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