

2012 Fayetteville Shale Symposium

March 20-21, 2012 · Holiday Inn Convention Center · Fort Smith, Arkansas

Tuesday, March 20, 2012

8:00 Registration

10:00 Opening Ceremonies—Flag Presentation and Welcome, Honorable Sandy Sanders of Fort Smith

Session 1: Natural Gas Development and Surface Water Interactions

10:15 **KEYNOTE SPEAKER:** Hydraulic Fracturing Operations – What is Really Going on Down There? Mark Boling, Executive Vice President and General Counsel, Southwestern Energy Company

10:45 USGS Surface-Water Studies in the Fayetteville Shale, Jaysson Funkhouser, Arkansas USGS

11:05 Development of a Tool to Assess Soil and Sediment Contamination with Respect to Background Environmental Values, Tony Crump, US Forest Service

11:25 Ozark National Forest BMP Reviews, Rick Monk, Ozark National Forest Service

12:00 Keynote Luncheon

Disposal of Hydrofracking-Waste Fluid by Injection into Subsurface Aquifers Triggers Guy-Greenbrier Earthquake Swarm in Central Arkansas, Scott Ausbrooks, Geohazards and Environmental Geology Supervisor, Arkansas USGS

Session 2: Natural Gas Development and Groundwater Interactions

1:45 **KEYNOTE SPEAKER:** Is Hydraulic Fracturing of Shale Gas Responsible for Observed Water Well Contamination Issues?, Ian Duncan, Research Scientist, Bureau of Economic Geology, University of Texas at Austin

2:15 USGS Groundwater Studies in the Fayetteville Shale, Tim Kresse, Arkansas USGS

2:35 ADEQ Groundwater Data in the Fayetteville Shale, Roger Miller, Arkansas Department of Environmental Quality

2:55 Microseismic Fracture Mapping and Diagnostics, Bob Launhardt, Halliburton

3:15 Break



Presented by:



AWRA
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Session 3: Natural Gas Development and Biological Interactions

- 3:30 Changes to Monitoring Protocol in Response to Natural Gas Development, Randy Easley, Fort Smith Water Utilities
- 3:50 Stream Restoration Projects, Page Shurgar, Streamworks Mitigation Services LLC
- 4:10 Water Quality in the Upper Little Red River Watershed, The Nature Conservancy, Speaker TBA
- 4:30 Monitoring Fish in the Fayetteville Shale Area, Mark Oliver and Steve Filipek, AR Game and Fish

5:00 Poster Presentations and Exhibitor Reception

The poster session will feature a student poster competition; more details TBA. Conference exhibitors (to date) include HACH Hydromet, YSI, VAISALA and Aquatic Informatics.

7:00 Evening Social in Downtown Fort Smith



Wednesday, March 21, 2012

- 7:30 Breakfast, Posters, and Exhibits

Session 4: Natural Gas Development and Environmental Regulations

- 8:30 **KEYNOTE SPEAKER:** Environmental Issues and Shale Plays in the South Central United States, Michael Overbay, Regional Ground Water Center Coordinator, USEPA Region VI
- 9:00 Protecting Resources while Protecting Federal Mines, John Dykes, Bureau of Land Management, Division of Mineral Resources
- 9:20 Permits and Mitigation in the Fayetteville Shale, Sarah Chitwood and Kyle Clark, US Army Corps of Engineers Little Rock District
- 9:40 Permits and Riparian/Non-Riparian Water Use, Chris Soller, AR Natural Resources Commission
- 10:00 Field Inspector's Tasks, Steve Johnson, Arkansas Department of Environmental Quality
- 10:20 Break

Session 5: Natural Gas Development and Economics

- 10:40 **KEYNOTE SPEAKER:** State and Local Government Benefits and Costs of Natural Gas Extraction, Wayne Miller, University of Arkansas
- 11:10 Environmental and Economic Effects to Counties, Honorable Preston Scroggin and Jimmy Hart, Faulkner and Conway County Judges
- 11:30 Maintaining State Highways in the Fayetteville Shale Area, Elisha Wright-Kehner, Arkansas State Highway and Transportation Department

12:00 Keynote Luncheon

Marcellus Shale Play, Dennis Risser, Groundwater Specialist, Pennsylvania USGS

Session 6: Wateruse and the Arkansas State Water Plan

- 1:30 **KEYNOTE SPEAKER:** Updating the State Water Plan, Edward Swaim, Water Resources Division Manager, Arkansas Natural Resources Commission
- 2:00 Water Use in North Arkansas, Terry Holland, Arkansas USGS
- 2:20 General Discussion and Future Symposiums
- 3:00 Adjourn