

2014 Pacific Northwest Ground Water Exposition

When: March 28-29, 2014

Where: Red Lion Hotel
909 N Hayden Island Drive
Portland, OR

Cost: \$55

Contact: Barbette Howell 614-898-7791 x568, telephone 6124-898-7786, fax

Continuing Education Credit (CEC) for the courses that comprise this event have been assigned as follows:

- **“Water Systems Primer and Refresher” seven hours (7).** The instructors were Chris Preston, Product Design Engineer and Product Manager for Xylem (formerly ITT); Alan Bixler, Product Specialist for Submersible Water Pump Systems for Grundfos Pumps North American Region; Kyle Lanier, Franklin Electric; Jim Hartmann, Franklin Electric; Wind Evans, Flexcon Industries, **Three and one-half (3.5) CEC.**
- **“Large Ground Water Heat Pump Systems: Costs, Benefits, and Pitfalls Groundwater Geothermal Heat Pumps”, one (1) hour.** The instructor was Kevin Rafferty, P.E. **One (1) CEC.**
- **“Federal OSHA Update for the Groundwater Industry”, one (1) hour.** The Instructor was Abe Mutawe, OSHA Compliance Safety and Health Officer, **One (1) CEC in safety category.**
- **“Guidelines for the Vertical Borehole Construction for Closed Loop Heat Pump Systems”, Kevin B. McCray, CAE, CEO, National Ground Water Association. One (1) CEC.**
- **“Pumping Tests Are Not About Water - They Are About Information” one (1) hour.** The Instructor was F. Michael Krautkramer LHG RG CPG – Robinson Noble Inc. **One (1) CEC.**
- **“Strategic Planning for Association Leaders and Future Leaders”, one (1) hour.** The instructor was Kevin B. McCray, CAE, CEO – National Ground Water Association. **One (1) CEC.**
- **“Washington Well Construction Code Requirements”, two (2) hours.** The Instructor was William E. Lum II, Licensed Geologist/Licensed Hydrogeologist, Washington Department of Ecology. **Zero (0) CEC’s.**
- **“Living on the Edge: The Tortured Hydrogeology of the Pacific Northwest Region, two (2) hours.** The Instructor was W. Todd Jarvis, PhD. **Two (2) CEC’s.**
- **“Issues (Legislative and Membership) Update in the Pacific Northwest States”, one (1) hour, March 28, 2014.** Presenters: State officers from Alaska, Idaho, Oregon, and Washington. **One (1) CEC.**

- **“Effective Grouting and Sealing Practices”, one (1) hour, March 28, 2014.** The Instructor was Bob Oliver, Regional Manager – CETCO’S Drilling Products Group. **One (1) CEC.**
- **“Arsenic, Iron, Manganese and Hydrogen Sulfide: What To Do When Standard Solutions Don’t Work”, one (1) hour.** The instructor was Todd Krause, P.E., registered in Washington and Oregon; currently sits on Washington State Department of Ecology’s Technical Advisory Group for Well Construction. **One (1) CEC.**
- **“Educating Your Customer”, one (1) hour.** The instructor was Ken McCray, CAE, National Ground Water Association. **One (1) CEC.**
- **”Impacts of Stormwater Permitting on the Groundwater Industry”, one (1) hour.** The instructor was Lisa Cox, Municipal Stormwater Manager – Washington Department of Ecology. **One (1) CEC.**
- **“Exempt Wells: Impacts to Our Industry”, one (1) hour.** The instructors were Jeremy Bach, Bach Well Drilling; F. Michael Krautkramer, LHG, RG, CPG – Robinson Noble Inc. **One (1) CEC.**
- **“Roundtable Discussion: The Groundwater Industry’s Greatest Challenge”, one (1) hour.** The Presenter was Kathy Butcher, CMP, National Ground Water Association. **One (1) CEC.**