26th Groundwater Resources Association Annual Meeting

2017: Time for Collaboration and Innovation
Toward Sustainable Management of Groundwater for Quality and Supply

PRELIMINARY AGENDA

OCTOBER 3-4, 2017
Hilton Arden West
2220 Harvard Street, Sacramento, CA
PRELIMINARY
AGENDA

TUESDAY, OCTOBER 3, 2017

7:00 a.m.  Registration/Continental Breakfast (Atrium-Solarium)

Plenary Session (Eagle/Berryessa/Tahoe/Shasta Ballroom)

8:00 a.m.  Welcome – Chris Peterson, GRA President & Jim Strandberg, Conference Chair
8:15 a.m. – 9:30 a.m.  Panel Session – Call to Action to Recharge California’s Depleted Aquifers
9:30 a.m.  Student Flash Poster Presentations
9:45 a.m.  Meet the Sponsors and Exhibitors
10:00 a.m. – 10:30 a.m.  Break (Atrium-Solarium)

Concurrent Sessions:

Track A - Eagle/Berryessa  Track B - Tahoe/Shasta  Track C - Brandywine

10:35 a.m. – 11:05 a.m.
Track 1A  SGMA Data #1  
1. SGMA Data Gap Management for Small and Large Data Sets  
   - Claire Kouba, Dudek

Track 1B  SGMA Modeling and other Tools #1  
2. Assessment of Interconnected Subbasins for SGMA Water Budgets – Regional Collaboration and Model Selection Process  
   - Christina Buck, Butte County Water and Resource Conservation

Track 1C  Contaminant Trends  
3. A More Relevant Metric for Groundwater Cleanup  
   - Murray Einarson, Haley & Aldrich

11:15 a.m. – 11:35 a.m.
Track 1A  
4. Benefits and Experiences with Centralized Databases in Groundwater Sustainability and Vulnerability Assessments  
   - Paul Thorn, Ramboll

Track 1B  
5. Assessment of Interconnected Subbasins for SGMA Water Budgets – Appropriate Use of Available Models  
   - Reza Namvar, Woodward & Curran

Track 1C  
6. Re-Assessment of Ecological Risk at a Mature Near-Bay Petroleum Site Due to Emerging Polar Degradation Metabolite Contaminants  
   - Arnab Chakrabarti, Terraphase Engineering

11:35 a.m. – 11:55 a.m.
Track 1A  
7. SGMA Data #1  
   - Steven Springhorn, Department of Water Resources

Track 1B  
8. Sustainable Groundwater Management Act (SGMA) Technical Assistance – Climate Change Datasets for use in GSP Development  
   - Tyler Hatch, Department of Water Resources

Track 1C  
9. Contaminant Trends  
   - Thomas K.G. Mahr, Santa Clara Valley Water District

12:00 p.m. – 1:30 p.m.  GRA 2017 Annual Meeting & Awards Luncheon (Atrium-Solarium)
1:30 p.m. – 1:50 p.m.  Break (Atrium-Solarium)
1:50 p.m. – 2:10 p.m.
Track 2A  SGMA Planning #1  
10. New Draft BMP: Developing Sustainable Management Criteria  
   - Trevor Joseph, Department of Water Resources

Track 2B  
11. Data Management Strategies for Integrated Model Development  
   - Dirk Kassenaar, Earthfx Inc.

Track 2C  
12. Collegiate Colloquium  
   - Stochastic Management of Non-Point Source Contamination: Joint Impact of Aquifer Heterogeneity and Well Characteristics  
     - Christopher Vincent Henri, UC Davis

2:10 p.m. – 2:30 p.m.
Track 2A  
13. Will Water Rights Conflicts Rupture SGMA Collaboration?  
   - Gina Nicholls, Nossaman LLP

Track 2B  
14. Addressing Inconsistency of MODFLOW and IWFM Water Budgets for SGMA Modeling  
   - Reza Namvar, Woodward & Curran

Track 2C  
15. Collegiate Colloquium  
   - Linking Field and Laboratory Studies to Investigate Enhanced Nitrate Removal Using Permeable Reactive Barrier Technology  
     - Galen Gierski, UC Santa Cruz
2:30 p.m. – 2:50 p.m.
Track 2A  SGMA Planning #1
Mutual Benefits of GSA and Remediator Cooperation on Groundwater Basin Health and Sustainability
- Jason House, Woodard & Curran

Track 2B  SGMA Modeling and Other Tools #2
Drought Stress Tests for Water Supply: Residential Well Impacts and Economic Externalities
- Rob Gailey, UC Davis

Track 2C  Collegiate Colloquium
Re-evaluating Tracer Results in a Low Effective Porosity, High Anisotropy Aquifer
- Menso de Jong, UC Santa Barbara

2:50 p.m. – 3:10 p.m.
Track 2A  SGMA Planning #1
Adapting to Climate Change and Drought for California's Communities
- Ruth Langridge, UC Santa Cruz

Track 2B  SGMA Modeling and Other Tools #2
Development and Application of the Stanislaus County Hydrologic Model

Track 2C  Collegiate Colloquium
A Long term Percolation Monitoring Program Utilizing Fiber Optic Distributed Temperature Sensing
- Patrick O’Connell, CSU Long Beach

3:10 p.m. – 3:35 p.m.
Break (Atrium-Solarium)

3:40 p.m. – 4:00 p.m.
Track 3A  Land Use Planning and Groundwater Resources Management Under SGMA Panel
- Pete Parkinson, American Planning Association California Chapter

Track 3B  Groundwater Replenishment #1
Capturing Lost Stormwater for Additional Long Term Sustainable Water Supply – an Active Recharge Project for the Tributaries of the Santa Ana River
- Brian Villalobos, Geoscience

Track 3C  Innovative Site Characterization
Evolution of the Conceptual Site Model under Regulatory Changes and Technological Advances
- Amy Wilson, TRC Solutions

4:00 p.m. – 4:20 p.m.
Track 3A  Land Use Planning and Groundwater Resources Management Under SGMA Panel
- Jack Rice, California Farm Bureau Federation

Track 3B  Groundwater Replenishment #1
Coupling Distributed Stormwater Collection and Managed Aquifer Recharge: Field Application, Modeling, and Implications
- Sarah Beganskas, UC Santa Cruz

Track 3C  Innovative Site Characterization
Perfluorinated Compounds Monitoring in Response to the U.S. EPA Health Advisories
- Kevin Calcagno, Eurofins Eaton Analytical

4:20 p.m. – 4:40 p.m.
Track 3A  Land Use Planning and Groundwater Resources Management Under SGMA Panel
- Iris Priestaf, Todd Groundwater

Track 3B  Groundwater Replenishment #1
Strategic Siting of Managed Aquifer Recharge & Maximizing Recharge Potential by Leveraging Geologic Heterogeneity in the South American Groundwater Sub-basin, CA
- Stephen Maples, UC Davis

Track 3C  Innovative Site Characterization
Data from Online Chromium6 Analyzer Helps Monitor Performance of Chromium Remediation in Real-Time
- Tom Williams, Aqua Metrology Systems

5:00 p.m. - 7:00 p.m.  President’s Reception and Poster Session (Atrium-Solarium)
WEDNESDAY, OCTOBER 4, 2017

7:15 a.m. Registration/Continental Breakfast [Atrium-Solarium]

Concurrent Sessions:

Track A - Eagle/Berryessa  Track B - Tahoe/Shasta  Track C - Brandywine

8:20 a.m. – 8:40 a.m.

Track 4A  Danish Office of Public Affairs-Water Technology Alliance Perspective
Airborne Geophysics to Map Groundwater - Case Studies from Around the World
- Bill Brown, SkyTEM

Track 4B  Groundwater Replenishment #2
On-Farm Flood Capture and Recharge at an Organic Almond Orchard in the Central Valley:
Recharge Rates, Soil Water and Salt Profiles, Chowchilla, California
- Philip Bachand, Bachand & Associates, Inc.

Track 4C  Advances in Site Remediation
Controlled Release Environmental Reactants – In Situ Soil and Groundwater Remediation of
Recalcitrant Compounds and Emerging Contaminants of Concern
- Lindsay Swearingen, Specialty Earth Sciences LLC

8:40 a.m. – 9:00 a.m.

Track 4A  Danish Office of Public Affairs-Water Technology Alliance Perspective
Data Acquisition and Data Management in the Danish Groundwater Mapping Program (SGMA)
- Max Halvorsen, Ramboll

Track 4B  Groundwater Replenishment #2
Assessing Natural Recharge and Managing Withdrawals from a Fractured Granitic Aquifer in
Coastal California During a Multi-Year Drought to Wet-Year Cycle
- Mark Waysonhe, Balance Hydraulics, Inc.

Track 4C  Advances in Site Remediation
Optimizing the Performance of Zero Valent Iron for the In-Situ Chemical Reduction of Chlorinated
Ethers
- John Freim, OnMaterials

9:00 a.m. – 9:20 a.m.

Track 4A  Danish Office of Public Affairs-Water Technology Alliance Perspective
3D Hydrogeological Conceptual Model Building in Denmark
- Torben Bach, IGIS

Track 4B  Groundwater Replenishment #2
90 Years of Groundwater Replenishment on the Oxnard Coastal Plain: Past Successes and
Concerns for the Future
- John Lindquist, United Water Conservation District

Track 4C  Advances in Site Remediation
Sustained Remediation of Chlorinated Solvents Using In-Situ Formation and Regeneration of Ferrous
Sulfide
- Jessica Barros, TRC Solutions

9:20 a.m. – 9:40 a.m.

Track 4A  Danish Office of Public Affairs-Water Technology Alliance Perspective
Modeling and Planning Applications for Groundwater Management with Real Time and Distributed
Web-based Resources
- Steve Blake, DHI

Track 4B  Groundwater Replenishment #2
Increasing Groundwater Recharge Capacity in the Southern San Joaquin Valley, Shafter Wasco
Irrigation District: Construction of Kimbarkina Recharge Project
- Sam Schaefer and Dana Munn, GEI

Track 4C  Advances in Site Remediation
Successful Bioremediation of 1,4-Dioxane and 1,2-DCA in a Dilute Plume
- Jacob Chu, Haley & Aldrich

9:40 a.m. – 10:10 a.m.

Track 5A  Surface Water/Groundwater
Monitoring for Impact of Chino Basin Management Plans on Santa Ana River Riparian Habitat
- Andrew Malone, Wildermuth Environmental, Inc.

Track 5B  Tools for Visualization and Analysis
Groundwater Recharge Assessment Tool (GRAT): Integrating geo-spatial data to determine GSA
recharge potential
- Daniel Mountjoy, Sustainable Conservation

Track 5C  Regional Groundwater Quality
Managing Freshwater Resources: Insights from New Zealand’s Changing Management Regimes for
Managing the Nation’s Freshwater Resources
- Suzie Greenhalgh, Landcare Research

10:15 a.m. - 10:35 a.m.

Track 5A  Surface Water/Groundwater
Using Data to Set Minimum Thresholds and Measurable Objectives that Can Avoid Undesirable
Results to GDEs
- Melissa Rohde, The Nature Conservancy

Track 5B  Tools for Visualization and Analysis
Identifying New Sites and Sources of Contamination Impacting Public Water Supply Wells – the
Spatial Prioritization Geographical Information Tool (SPGIT)
- Rick Fears, Dept. of Toxic Substance Control

Track 5C  Regional Groundwater Quality
Measuring and Modelling Soil Water Balance and Nitrate Leaching of Perennial Crops in New
Zealand
- Karin Muller, Plant & Food Research

10:35 a.m. - 10:55 a.m.

Track 5A  Surface Water/Groundwater
Data Collection for Assessing Surface Water-Groundwater Interaction
- Rodney Frickie, GEI

Track 5B  Tools for Visualization and Analysis
A Hybrid Machine-learning Model to Predict and Visualize Nitrate Concentration Throughout the
Central Valley Aquifer, California
- Katherine Ransom, UC Davis

Track 5C  Regional Groundwater Quality
Identifying Areas of Degrading and Improving Groundwater-quality Conditions in the State of
California
- Bryant Jurgens, USGS
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| 11:15 a.m. – 11:35 a.m. | **Track 5A**  
  Surface Water/Groundwater  
  Quantifying the Relationship Between Stream Flow and Groundwater Elevations to Assess Stream Depletion and the Effects on Groundwater-Dependent Ecosystems  
  - Andrew Kopania, EMKO Environmental, Inc. | **Surface Water/Groundwater** |
| 11:40 a.m. – 11:50 a.m. | **Track 5B**  
  Tools for Visualization and Analysis  
  Developing a Basin-wide 3D Hydrogeologic Model to Support a Numerical Flow Model  
  - Gary Vanderslice, Lytle Water Solutions | **Tools for Visualization and Analysis** |
| 12:00 p.m. – 1:00 p.m. | **General Session (Eagle/Berryessa/Tahoe/Shasta Ballroom)**  
  Announcement of 2018 David Keith Todd Lecturers  
  Water Availability and Sustainability in California’s Central Valley: Past, Present, and Future  
  - Dr. Claudia Faunt, United States Geological Survey  
  The Use of Geophysical Methods for Groundwater Evaluation and Management  
  - Dr. Rosemary Knight, Stanford University  
  Closing Remarks  
  - Jim Strandberg, Conference Chair | **General Session** |

**Groundwater Resources Association of California**

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