Groundwater Resources Association of California

EST. 1992

26th Groundwater Resources Association Annual Meeting

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
Moderator: Tim Parker, Parker Groundwater Management

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. – 10:55 a.m.

Moderators: **Track 1A:** Dan Gamon, Department of Water Resources
Track 1B: Lisa Porta, CH2M
Track 1C: Kevin Brown, San Francisco Bay Regional Water Quality Control Board

Track 1A — **SGMA Data #1**
GSP Data Gap Management for Small and Large Data Sets
- *Claire Kouba, Dudek*

Track 1B — **SGMA Modeling and other Tools #1**
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**
A More Relevant Metric for Groundwater Cleanup
- *Murray Einarson, Haley & Aldrich*

10:55 a.m. – 11:15 a.m.

Track 1A — **SGMA Data #1**
Benefits and Experiences with Centralized Databases in Groundwater Sustainability and Vulnerability Assessments
- *Paul Thorn, Ramboll*

Track 1B — **SGMA Modeling and other Tools #1**
Assessment of Interconnected Subbasins for SGMA Water Budgets – Appropriate Use of Available Models
- *Reza Namvar, Woodard & Curran*

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

11:15 a.m. – 11:35 a.m.

Track 1A **SGMA Data #1**
DWR's SGMA Technical Assistance - Building Capacity to Achieve Sustainability
- Steven Springhorn, Department of Water Resources

Track 1B **SGMA Modeling and other Tools #1**
Sustainable Groundwater Management Act (SGMA) Technical Assistance: Climate Change Datasets for use in GSP Development
- Tyler Hatch, Department of Water Resources

Track 1C **Contaminant Trends**
1,4-Dioxane in California's Drinking Water – Source Assessment and Total Exposure Estimation
- Thomas K.G. Mohr, Santa Clara Valley Water District

11:35 a.m. – 11:55 a.m.

Track 1A **SGMA Data #1**
Groundwater Monitoring Protocols for Seawater Intrusion - Examples of Challenges and Experiences in a Coastal Groundwater Basin
- Kathleen Kuepper, United Water Conservation District

Track 1B **SGMA Modeling and other Tools #1**
Recalculation of the Sustainable Yield for the Chino Basin
*- *Mark Wildermuth, Wildermuth Environmental, Inc.*

Track 1C **Contaminant Trends**
TCE in Sanitary Sewers: Characterizing Spatial and Temporal Variability and Extent and Risk Assessment Strategies
- Anthony E. Miller, Entanglement Technologies, Inc.

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.

Moderators: **Track 2A:** Michael Burns, ESA
Track 2B: Steven Phillips, United States Geological Survey
Track 2C: Sarah Beganskas, University of California, Santa Cruz

Track 2A **SGMA Planning #1**
New Draft BMP: Developing Sustainable Management Criteria
- Trevor Joseph, Department of Water Resources

Track 2B **SGMA Modeling and Other Tools #2**
Data Management Strategies for Integrated Model Development
- Dirk Kassenaar, Earthfx Inc.

Track 2C **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 **SGMA Planning #1**
Will Water Rights Conflicts Rupture SGMA Collaboration?
- Gina Nicholls, Nossaman LLP

Track 2B **SGMA Modeling and Other Tools #2**
Addressing Inconsistency of MODFLOW and IWFM Water Budgets for SGMA Modeling
- Reza Namvar, Woodard & Curran

Track 2C **Collegiate Colloquium**
Linking Field and Laboratory Studies to Investigate Enhanced Nitrate Removal Using Permeable Reactive Barrier Technology
- Galen Gorski, 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
- Robert Abrams, Jacobson James & Associates, Inc.

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.

Moderators:
Track 3A: Tara Moran, Stanford Water In The West Program
Tim Parker, Parker Groundwater Management
Track 3B: Adam Hutchinson, Orange County Water District
Track 3C: Charles Ice, County of San Mateo

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**
SF Bay Water Board's Approach to Evaluating Contaminated Groundwater Discharges to Surface Water
- Ross Steenson, San Francisco Bay Regional Water Quality Control Board

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 Chromium-6 Analyzer Helps Monitor Performance of Chromium Remediation in Real-Time
- Tom Williams, Aqua Metrology Systems

4:40 p.m. – 5:00 p.m.

Track 3A **Land Use Planning and Groundwater Resources Management Under SGMA Panel**
- Paul Gosselin, Butte County Department of Water and Resource Conservation

Track 3B **Groundwater Replenishment #1**
Implementation of Agricultural Managed Aquifer Recharge in the Central Valley: Large Scale Long-Term Success?
- Thomas Harter, UC Davis

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

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.

Moderators: **Track 4A:** Jacob Vind, Ministry of Foreign Affairs of Denmark
Track 4B: Adam Hutchinson, Orange County Water District
Track 4C: Murray Einarson, Haley & Aldrich

Track 4A **Sustainable Groundwater Management: Lessons Learned Over 20 Years of the "Danish SGMA"**
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 **Sustainable Groundwater Management: Lessons Learned Over 20 Years of the "Danish SGMA"**
Data Acquisition and Data Management in the Danish Groundwater Mapping Program (SGMA)
- Max Halkjaer, 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 Woyshner, Balance Hydrologics, Inc.

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

9:00 a.m. – 9:20 a.m.

Track 4A **Sustainable Groundwater Management: Lessons Learned Over 20 Years of the "Danish SGMA"**
3D Hydrogeological Conceptual Model Building in Denmark
- Torben Bach, I-GIS

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
- Lee Hovey, TRC Solutions

9:20 a.m. – 9:40 a.m.

Track 4A

Sustainable Groundwater Management: Lessons Learned Over 20 Years of the "Danish SGMA"
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 Kimberlina 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. Break (Atrium-Solarium)

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

Moderators: **Track 5A:** TBD
Track 5B: Ali Taghavi, Woodard Curran
Track 5C: TBD

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

10:35 a.m. - 10:55 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

10:55 a.m. – 11:15 a.m.

Track 5A

Surface Water/Groundwater
Data Collection for Assessing Surface Water-Groundwater Interaction
- Rodney Fricke, GEI

Track 5B

Tools for Visualization and Analysis
TBD

Track 5C

Regional Groundwater Quality
Identifying Areas of Degrading and Improving Groundwater-quality Conditions in the State of California
- Bryant Jurgens, USGS

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.

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

Track 5C **Regional Groundwater Quality**
Occurrence, Fate, and Remediation of the Emerging Contaminant 1,2,3-Trichloropropane
- Eric Suchomel, Geosyntec Consultants

11:40 a.m. – 11:50 a.m. Presentation of Student Oral and Poster Awards (Atrium-Solarium)

12:00 p.m. – 1:00 p.m. Lunch (Atrium-Solarium)

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

1:10 p.m. – 1:25 p.m. Announcement of 2018 David Keith Todd Lecturers

1:25 p.m. – 2:25 p.m. Water Availability and Sustainability in California's Central Valley: Past, Present, and Future
- Dr. Claudia Faunt, United States Geological Survey

2:25 p.m. – 3:25 p.m. The Use of Geophysical Methods for Groundwater Evaluation and Management
- Dr. Rosemary Knight, Stanford University

3:25 p.m. – 3:30 p.m. Closing Remarks
- Jim Strandberg, Conference Chair

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