

Association of Ground Water Agencies - American Ground Water Trust

# AGWA – AGWT Annual Conference

“Everything aquifers and groundwater management”

Wednesday, February 15 and Thursday, February 16, 2017

Radisson Hotel Ontario Airport, 2200 East Holt Boulevard, Ontario, California 91761

In cooperation with Groundwater Resources Association and the California Groundwater Coalition



## Background

The first AGWA/AGWT joint conference was held in Ontario, CA in 2000. Since then, this annual event has provided an important information exchange and networking opportunity for California’s water agencies, utilities and water districts, and for all water professionals (scientific, engineering, managerial, legal, environmental, regulatory), end-users of water, and local and state elected officials involved with water policy issues. The focus of every program has been on current groundwater management issues in California.

## Event Sponsors



Continuing Education: Applications pending

MCLE credit by the State Bar of California (expected)  
Water Operator Licenses - Contact Hours (expected)

## Wednesday February 15th

8:15 – 9:15 REGISTRATION (Coffee, pastries and view exhibits)

9:15 – 9:30 WELCOME, OPENING REMARKS FROM AGWA AND AGWT  
Anthony Zampello, Chairman, Association of Ground Water Agencies  
Andrew Stone, Executive Director, American Ground Water Trust

9:30 – 10:00 **Keynote 1** To be announced soon

10:00 – 10:30 **Keynote 2** To be announced soon

10:30 – 10:50 BREAK

10:50 – 12:20 Session 1

### CLIMATE CHANGE IMPACTS TO GROUNDWATER, ESPECIALLY AS THEY RELATE TO SGMA

Moderator:

Abhishek Singh, Manager, California Operations, Senior Water Resources Engineer, INTERA Inc., Torrance, CA

Climate change models indicate that hydrologic flow regimes in California are likely to change and drive changes in agricultural practices and land-use, and add pressure on an already stressed groundwater system. SGMA lists climate change as a key component of groundwater sustainability plans (GSP) that must include an accounting and assessment of the total annual volume of groundwater and surface water entering and leaving a basin. The projected water budget is required to evaluate hydrologic uncertainty associated with projections.

The panel will discuss how impacts of climate change on groundwater can be characterized, evaluated, and incorporated into sustainability planning.

THE PERFECT STORM: A CHANGING CLIMATE IN A NEW WORLD OF GROUNDWATER REGULATION

Wes Miliband, Attorney, Stoel Rives, LLP, Sacramento, CA

GROUNDWATER SUSTAINABILITY AND CLIMATE CHANGE - A GSA PERSPECTIVE

Jay Jasperse, Chief Engineer, Director Groundwater Management, Sonoma Co. Water Agency, Santa Rosa, CA

MODELS AND DATASETS FOR ASSESSING CLIMATE CHANGE IMPACTS ON GROUNDWATER SUSTAINABILITY

Abhishek Singh, Manager, California Operations, Senior Water Resources Engineer, INTERA, Inc., Torrance, CA

12:20 – 1:30 LUNCH

1:30 – 3:00 Session 2

### SOUTHERN CALIFORNIA WATER MANAGEMENT

Moderator:

To be announced

GROUNDWATER BASINS MASTER PLAN (Utilizing groundwater storage and resources more effectively)

Jason Weeks, Watermaster and Manager of Water Resources, Water Replenishment District, Lakewood, CA

UPDATE ON CADIZ WATER PROJECT

Scott Slater, President and CEO, Cadiz, Inc. Los Angeles, CA

PLANNING FOR UNCERTAINTY: COLORADO RIVER WATER TRANSFERS TO SOUTHERN CALIFORNIA

Bill Hazenkamp, Manager, Colorado River Resources, Metropolitan Water District, Los Angeles, CA (invited)

3:00 – 3:20 BREAK

3:20 – 5:00 Session 3

**AFTER SGMA: CHALLENGES OF SUSTAINABLY MANAGING GROUNDWATER**

Moderator:

Dr. Stephen J. Cullen, PG, Principal Hydrogeologist/Sr. VP, Daniel B. Stephens & Associates, Inc., Santa Barbara, CA

The Sustainable Groundwater Management Act, enacted in January 2015, established compliance milestones for reaching sustainable groundwater management. This session presents experiences and lessons learned in the pursuit of achieving the sustainability goal. The speakers draw from case studies and data derived from specific adjudicated basins where the goal of groundwater sustainability is a critical component of a workable water rights settlement or judgement by examining sustainability indicators that are also identified in SGMA.

**LESSONS LEARNED IN DEVELOPING DEFENSIBLE GROUNDWATER BUDGETS AND EVALUATING SUSTAINABILITY INDICATORS**

Gregory Schnaar, PhD, Daniel B. Stephens & Associates, Inc., Silver Spring, MD

**CHALLENGES AND EXPERIENCES IN SUSTAINABLE GROUNDWATER MANAGEMENT IN THE CHINO BASIN**

Peter Kavounas, PE, Chino Basin Watermaster, Rancho Cucamonga, CA

**GROUNDWATER SUSTAINABILITY, SALINITY, AND NITRATE: THE CENTRAL VALLEY AND THE SANTA ANA WATERSHED**

Joe LeClaire, PhD, Associate, CDM Smith, Irvine, CA

**SGMA - ALTERNATIVE ANALYSIS FOR THE CENTRAL BASIN**

Brian Partington, PG, CHG, Water Replenishment District of Southern California, Lakewood, CA

5:00 – 6:30 RECEPTION - CASH-BAR (Hors D'Oeuvres)



**Thursday February 16th**

7:30 – 8:30 REGISTRATION (Coffee, pastries and view exhibits)

8:30 – 10:10 Session 4

**EFFICIENT/COST EFFECTIVE WELLFIELD MANAGEMENT**

Moderator:

Brian Villalobos, PG, CHG, CEG, Principal Geohydrologist, GEOSCIENCE, Claremont, CA

Using the already reduced water supplies in Southern California efficiently and cost effectively is the goal of all those responsible for supplying water to a growing population. This session will look at methods for efficiently managing groundwater basins, future planning to optimize all available water supplies, and the current thought on more efficiently managing wellfields and maximizing well capacities.

**EFFECTIVE WELLFIELD OPERATIONS USING KEY WELLS – THE CONCEPT**

Johnson Yeh, Ph.D., PG, CHG, Principal, GEOSCIENCE, Claremont, CA

**25 YEARS OF WELLFIELD MANAGEMENT USING KEY WELLS AND ANNUAL GROUNDWATER AUDIT**

Warren Back, Engineering Manager - Operations, Rancho California Water District, Temecula, CA

**THINKING INTO THE FUTURE FOR SUSTAINABLE GROUNDWATER BASIN MANAGEMENT**

Joe Zoba, General Manager, Yucaipa Valley Water District, Yucaipa, CA

**MODERN TECHNOLOGIES IN WELLFIELD MANAGEMENT: PRODUCING THE MOST WATER AT THE LEAST COST**

Mark Williams, Ph.D., PE, President, GEOSCIENCE, Claremont, CA

10:10 10:30 BREAK

10:30 – 12:00 Session 5

**CHROME 6 – HOW TO TREAT IT – EMERGING TECHNOLOGIES**

Moderator:

Terry Foreman, Groundwater Consultant, Camarillo CA

The session will showcase recent technology breakthroughs in the effectiveness and economics of water treatment systems to remove and reduce Chrome 6 and arsenic. With lower treatment costs it may be possible to bring into inventory groundwater sources previously abandoned as too expensive to treat.

**REDUCING TREATMENT COSTS FOR CHROME 6 AND OTHER METALS IN GROUNDWATER**

Bill Ketchum, President, ATEC Systems Associates, Seattle WA

**MAKING A STRONG CASE FOR A WEAK BASE (*Chrome 6 Treatment Results*)**

Norman Sendler, Water Treatment Specialist, Layne, Mesa, AZ

**COACHELLA VALLEY CHROME 6 TREATMENT SOLUTIONS**

Steve Bigley, Director of Environmental Services, Coachella Valley Water District, Coachella, CA

12:00 – 12:15

Special Guest Presentation

**THE MAN WHO THOUGHT HE OWNED WATER**

Tershia d'Elgin, Author, San Diego

12:15 – 1:30 LUNCH

1:30 – 3:30 Session 6

**GROUNDWATER RECHARGE AND THE STORMWATER - (MS4) PROGRAM**

Moderator:

Anthony Zampiello, Chairman, Association of Ground Water Agencies

This session involves the requirements that the state has imposed on cities to meet the new MS4 requirements. Discussion will include how storm water is conserved, spread and recharged to augment groundwater supply, and will consider the impacts on water quality from recharge operations.

**COMPLIANCE WITH MS4 REGULATIONS**

Oliver Chi, City Manager, City of Monrovia, Monrovia, CA (invited)

**STORMWATER...HOW IT IS MANAGED FOR CONSERVATION AND FLOOD PROTECTION**

Keith Lilley, PE, Los Angeles County Department of Public Works, Water Resources Division, Alhambra, CA

**SITING AND DESIGN OF LARGE STORMWATER CAPTURE RECHARGE BASINS IN SOUTHERN CALIFORNIA**

Trey Driscoll, PG, CHG, Principal Hydrogeologist, DUDEK Engineering, Encinitas, CA

3:30 WRAP-UP AND ADJOURN

Anthony Zampiello, Chairman, Association of Ground Water Agencies

Andrew Stone, Executive Director, American Ground Water Trust