

Association of Ground Water Agencies - American Ground Water Trust

AGWA – AGWT Annual Conference

“Everything aquifers and groundwater management”



Monday, February 12 and Tuesday, February 13, 2018

Gateway Hotel, 2200 East Holt Boulevard, Ontario, California 91761
(Formerly the Radisson Hotel)



[See website for field visit opportunity to Cadiz Water project](#)

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 is on current groundwater management issues in California.

Approved for CA Drinking Water Operators – 11 Contact Hours

Approved for CA Attorneys – 8 General Credits

Cadiz Water Project Field Trip Approved for CA Drinking Water Operators – 1 Contact Hour



Sunday Feb 11th

Pre-conference field trip to
Cadiz Water Project in
Mojave Desert.

Details and sign-up at
www.agwt.org/events

Limited space available.

Monday February 12 - 2018

7:30 – 8:30 REGISTRATION

8:30 – 8:45 WELCOME, OPENING REMARKS FROM AGWA AND AGWT

Anthony Zampello, Chairman, Association of Ground Water Agencies
Andrew Stone, Executive Director, American Ground Water Trust

8:45 – 9:15

Keynote Presentation:

Brandon Goshi, Manager of Water Policy and Strategy, Metropolitan Water District of Southern CA, Los Angeles, CA

“THE WATER FIX”



Brandon Goshi’s expertise is in long-term strategy and defining approaches to maintain reliable water supplies for Southern California in the face of growing challenges and uncertainties. With Metropolitan for more than twenty years, Brandon now leads a team responsible for the planning and analysis of water supply, demand and storage portfolio. He oversees development of regionally-based water resource programs, policies and strategies for Metropolitan’s 5,200 square-mile service area with a population of nearly 19 million. Brandon has played a key role in the development of many of Metropolitan’s strategic policies, outlined in the Integrated Resources Plan, Regional Urban Water Management Plan, Water Surplus and Drought Management Plan, and Water Supply Allocation Plan.

9:15 – 10:45

LEGAL ISSUES: SGMA IMPLEMENTATION IN SOUTHERN CALIFORNIA

Panel moderator:

Bradley J. Herrema, JD, Attorney, Brownstein Hyatt Farber Schreck, Los Angeles, CA

Groundwater's value to California water purveyors has never been higher. With the effect of implementation the Sustainable Groundwater Management Act coming to bear, new legal issues are emerging. This session will include a roundtable discussion on emerging current issues, focusing on the intersection of SGMA's application in and lessons learned from adjudicated groundwater Basins.

ADJUDICATED GROUNDWATER BASINS AND THEIR APPLICATION IN SGMA AND THE DEVELOPMENT OF GSPs.

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

Stefanie Morris, JD, Partner, Best Best & Krieger LLP, Sacramento, CA

Toby Moore, PhD, PG, CHG, Water Resources Manager and Chief Hydrogeologist, Golden State Water Company, Anaheim, CA

Bob Page, Principal Management Analyst, County of San Bernardino, San Bernardino, CA

10:45 – 11:00 BREAK

11:00 – 12:30

MEASUREMENT AND MANAGEMENT OF GROUNDWATER PUMPING UNDER SGMA

Panel moderator:

David L. Jordan, PE, Principal Hydrogeologist, INTERA Inc., Torrance, CA

SGMA requires measurement and reporting of groundwater pumping but leaves selection of methodology open to each GSA. This session will present information on direct measurement (metering) and indirect measurement (power records and remote sensing), along with insight into how some agencies are developing pumping allocations based on pumping data they are currently collecting.

DIRECT FLOW METERING – ON-FARM AND SGMA CONSIDERATIONS

Daniel Pelikan, PG, CHG, Geologist, Geosyntec Consultants, San Diego, CA and

Doug Baumwirt, PG, CHG, Principal Geologist, Geosyntec Consultants, San Diego, CA

METHODS FOR INDIRECT MEASUREMENT OF AGRICULTURAL PUMPING FOR SGMA

Abhishek Singh, PhD, Senior Water Resources Engineer, INTERA Inc., Torrance, CA

REMOTE SENSING DATA REQUIREMENTS AND METHODS FOR THE ESTIMATION OF AGRICULTURAL WATER CONSUMPTION FOR SGMA

Guillermo Martinez, PhD, PE, Water Resources Engineer, INTERA, Austin, TX

DEVELOPMENT OF PUMPING ALLOCATION GUIDELINES FOR SGMA: A CASE STUDY

Bryan Bondy, PG, CHG, President and Principal Hydrogeologist, Bondy Groundwater Consulting, Inc., Ventura, CA

12:30 – 1:40

LUNCH

1:40– 3:10

SGMA IMPLEMENTATION: FOX CANYON GROUNDWATER MANAGEMENT AGENCY AND BORREGO VALLEY GROUNDWATER SUSTAINABILITY AGENCY

Panel moderator:

Trey Driscoll, PG, CHG, Principal Hydrogeologist, Dudek Engineering + Environmental, Encinitas, CA

SGMA allows each GSA to define what constitutes a "significant and unreasonable" impact to groundwater sustainability indicators. It authorizes the local GSA to define measurable objectives and interim milestones. It requires the GSP to define how progress toward achieving sustainability will be measured. This session focuses on how SGMA will be implemented at the local level starting with writing the GSP. Topics will include the critical role of the conceptual hydrogeologic model, approaches to defining "significant and unreasonable", addressing concerns of stakeholders in interconnected basins, and methods for including operational flexibility in measurable objective and interim milestone development.

USING GROUNDWATER MODELS TO EVALUATE UNDESIRABLE RESULTS

Lindsay Swain, PG, CHG, Senior Hydrogeologist, Dudek, Auburn, CA

SUSTAINABILITY INDICATORS AND UNDESIRABLE RESULTS UNDER SGMA

Jill Weinberger, PhD, PG, Senior Hydrogeologist, Dudek, Encinitas, CA

CASE STUDY: DEVELOPING A MONITORING NETWORK TO EVALUATE SUSTAINABILITY INDICATORS

Doug Baumwirt, PG, CHG, Principal Geologist, Geosyntec, San Diego, CA

and,

Zoë Carlson, Environmental Specialist, DUDEK, Santa Barbara, CA

3:10 – 3:30

BREAK

3:30 – 5:00

INTEGRATING SURFACE WATER PROCESSES AND GROUNDWATER, AVOIDING DETRIMENTAL EFFECTS

Panel Moderator:

Stephen (Steve) Cullen, PhD, PG, Principal Hydrogeologist/Sr. VP, Daniel B. Stephens & Associates, Santa Barbara, CA

This session will be focused on the intersection between surface water and groundwater and will discuss concepts and incorporate project lessons learned with respect to instream flow maintenance, groundwater salt-loading and management, artificial recharge, non-point sources of contaminants, and increases in TDS due to irrigated agriculture consumptive use.

SANTA ANA RIVER WASTE LOAD ALLOCATION AND ITS GROUNDWATER IMPACTS

Mark Norton, PE, Water Resource & Planning Manager, Santa Ana Watershed Project Authority (SAWPA), Riverside, CA

ENHANCING WATER FLOWS IN CALIFORNIA STREAM SYSTEMS FOR MAINTENANCE OF CRITICAL HABITAT

Kevin DeLano, Geologist, California State Water Resources Control Board, Sacramento, CA

STORMWATER/GROUNDWATER CONJUNCTIVE USE IN THE SANTA CLARA RIVER WATERSHED

Tony Morgan, PG, CHG, Deputy General Manager/GW & Water Resources Manager, United Water Cons. Dist., Santa Paula, CA

INTEGRATING SURFACE WATER AND GROUNDWATER THROUGH MANAGED AQUIFER RECHARGE

Amy Ewing, PG, Hydrogeologist, Daniel B. Stephens & Associates, Inc., Albuquerque, NM

5:00 – 6:30

RECEPTION (Cash bar)



Tuesday February 13 - 2018

8:30 – 10:00

GROUND WATER ISSUES AND POTENTIAL SOLUTIONS THROUGH THE INTEGRATION OF SCIENCE AND POLICY

Panel Moderator:

Steven J. Sentes, Sr., Executive Director, Chino Basin Water Conservation District

Intensifying competition for existing water resources by industry, agriculture, and an ever growing and thirsty urban population makes managing groundwater supplies a critical challenge deserving immediate attention and focus. Affordable drinking water and environmental supplies can be severely impacted by overdraft and over allocation of the resource. Moving Into the 21st century the development of resilient and sustainable water supplies may be achieved through integrated Science and Policy.

CONSIDERATIONS IN DEVELOPMENT OF A CHINO BASIN WATER BANK

Ed Means, President, Means Consulting LLC, Orange County, CA

(Co-author recognition: Kirby Brill PE, John R. Thornton, Jim Cathcart and Sarina Sriboonlue)

NORTH BASIN GROUND WATER PROTECTION PROJECT

Roy Herndon, PG, CHG, Chief Hydrogeologist, Orange County Water District, Fountain Valley, CA

GROUNDWATER RECHARGE IN THE SAN JOAQUIN VALLEY OPPORTUNITIES AND CHALLENGES

Alvar Escriva-Bou, PhD, Research Fellow, PPIC Water Policy Center, San Francisco, CA

10:00 - 10:30

Keynote Presentation:

Katie Mika, PhD, Water Policy Advisor, Mayor Garcetti's Office of Sustainability, Los Angeles. CA

“BALANCING PLANS TO INCREASE STORMWATER CAPTURE AND WASTEWATER REUSE WITH IMPACTS ON FLOW IN THE LA RIVER”



The presentation will cover the complex relationships between multiple aspects of urban water management in the LA River watershed, including stormwater management and local water supply. Capturing additional stormwater at a watershed-scale, in combination with full reuse of the wastewater in our region, offers great potential to simultaneously clean up our local waterbodies and increase our local potential water supply. However, if Los Angeles maximizes water recycling and stormwater capture and infiltration, the impacts on flows in the LA River could be severe and key decision makers will have to consider multiple paths forward.

Dr. Katie Mika's expertise is in integrated water management and surface water quality in the Los Angeles area. As a UCLA Institute of the Environment and Sustainability postdoctoral scholar working on UCLA's Sustainable LA Grand Challenge, she researched the potential to improve water quality and maximize local water supply in the City of LA through increasing stormwater capture and the use of recycled water and local groundwater basins.

10:30 – 10:50 BREAK

10:50 – 12:20

GROUNDWATER ISSUES BEYOND THE LOS ANGELES BASIN

Panel Moderator

Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH

This session has a focus on three groundwater resources situations in arid zones of California where research, innovative technologies and management strategies are in play to characterize groundwater potential.

POLITICS vs. SCIENCE - UPDATE ON THE STATUS OF THE CADIZ WATER PROJECT

Scott Slater, JD, President, Cadiz, Los Angeles, CA

CONFLICTS IN PROVIDING A RELIABLE GROUNDWATER SUPPLY AND GEOTHERMAL DEVELOPMENT ON THE EAST SLOPE OF THE SIERRAS

Mark Wildermuth, PE, Principal Engineer, President, Wildermuth Environmental Inc., Lake Forest, CA

USGS RESEARCH IN GROUNDWATER BASINS IN THE MOJAVE

Allen Christensen, Hydrologist, US Geological Survey, San Diego, CA

12:20 – 1:20 LUNCH

1:20 – 2:50

ESTABLISHING WATER BUDGETS AND SAFE YIELD UNDER SGMA—WHEN ARE MODELS NEEDED?

Panel moderator:

Mark Williams, PhD, PE, Vice president, GEOSCIENCE, Claremont, CA

This session will provide project case studies of all of the different approaches for determining water budgets and safe yield and provide a discussion of when ground water and surface water modeling tools are needed, and when other methods may be suitable. We will discuss the current approaches and present case studies of basin-wide modeling using lithologic models, watershed models, and groundwater models, and compare these tools to some of the more traditional approaches to estimating water balances and safe yield.

OVERVIEW OF CURRENT AND HISTORICAL APPROACHES FOR DETERMINING WATER BUDGETS AND SUSTAINABLE YIELD

Dennis Williams, PhD, Founder & President and,

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

ADVANTAGES OF USING SURFACE WATER MODELS AND GROUNDWATER MODELS FOR BASIN WATER BUDGET DETERMINATION.

Peter Leffler, PG, CHG, Principal Hydrogeologist, Luhdorff & Scalmanini, Woodland, CA

CRITICAL CONSIDERATIONS IN MODELING FOR LONG-TERM SUSTAINABLE YIELD AND SUSTAINABLE GOAL INDICATORS

Johnson Yeh, PhD, PG, CHG, Principal Geohydrologist, Geoscience, Claremont, CA

2:50 – 3:00 BREAK

3:00 – 4:30

**INNOVATIVE PROJECT APPROACHES TO DEVELOPING RESILIENT WATER SUPPLIES
IN THE FACE OF REGULATORY AND CLIMATIC CHALLENGES**

Panel moderator:

Samantha Adams, Principal Scientist, Vice President, Wildermuth Environmental, Lake Forest, CA

California water agencies face many challenges in planning to meet the future water demands of their customers: uncertainty of the impacts of climate change on supplies and their reliability, constantly evolving regulations, minimizing environmental impacts and financing capital improvements. In this session, case studies of innovative regulatory and project approaches to improving local water supply reliability in the face of these challenges will be presented. Panelists will discuss the technical, regulatory and economic demonstrations needed to obtain support from board members, regulators, customers, and other key stakeholders for these outside-the-box solutions.

CONVINCING YOUR LEADERSHIP TO PURSUE UNCONVENTIONAL MANAGEMENT AND REGULATORY COMPLIANCE STRATEGIES.

Margie Armstrong, Director of Strategic Programs, Elsinore Valley Municipal Water District, Lake Elsinore, CA

BUILDING REGIONAL CONSENSUS AND REGULATORY SUPPORT FOR THE SAN JUAN WATERSHED PROJECT

Dan Ferons, PE, General Manager, Santa Margarita Water District, Santa margarita, CA

EVOLUTION OF A MAXIMUM BENEFIT REGULATORY STRATEGY FOR SALT AND NUTRIENT MANAGEMENT IN THE SANTA ANA REGION

Hope Smythe, Executive Officer, Santa Ana Regional Water Quality Control Board, Riverside, CA

4:30 WRAP-UP, Continuing education sign-out and ADJOURN

ONTARIO CONFERENCE AND WORKSHOP – REGISTRATION OPTIONS:

AGWA/AGWT ANNUAL GROUNDWATER CONFERENCE Monday and Tuesday, February 12 & 13, 2018		
Complete information below or register on-line at www.agwt.org/events		
	Two Day	One Day
	Feb 12 AND 13	Feb 12 OR Feb 13
YOU MUST CHECK ONE: →	<input type="checkbox"/>	<input type="checkbox"/> or <input type="checkbox"/>
General Registration*	<input type="checkbox"/> \$430	<input type="checkbox"/> \$235
AGWT Member*	<input type="checkbox"/> \$405	<input type="checkbox"/> \$210
Full-Time Student* (ID required at Registration)	<input type="checkbox"/> \$120	<input type="checkbox"/> \$80
Download of presentation ppts (Registrant Price)	<input type="checkbox"/> \$30	
Exhibit Table (personal registration also required)	<input type="checkbox"/> \$300	
<i>*Registration Includes: access to exhibits, reception, breaks and lunch(s)</i>		
Total for all checked boxes \$		
Call (800 423 7748) or provide information on-line to be an event sponsor		
Sept 11 th Field trip to Cadiz water project (Only available to two-day registrants) [Space limited] See web-site for details. Check box <input type="checkbox"/>		

SPEAKER REGISTRATION ONLY! - AGWA/AGWT ANNUAL CONFERENCE

Speakers receive complimentary registration for the day of their presentation

Speaker Presentation Date Feb 12 Feb 13
 Attending (day not presenting) Feb 12 - \$100 Feb 13 - \$100

Payment Information:

CHECK [payable to: American Ground Water Trust] **AMEX** **VISA/MC**
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MAIL TO:
 American Ground Water Trust
 50 Pleasant Street, Suite 2
 Concord, NH 03301-4073

FAX: (603) 228-6557

TEL: (603) 228-5444

? QUESTIONS:
 (800) 423-7748
 9:00-4:00pm (EST)

Register on-line at www.agwt.org/events

[On-line registration or fax completed registration form to 603 228 6557](http://www.agwt.org/events)