

# SUSTAINABILITY

## IN A TIME OF CHANGE

*Preliminary Technical Program*



### 2013 CA-NV AWWA SPRING CONFERENCE

Nearly 200 Technical Sessions  
Over 100 Exhibits  
Numerous Networking Opportunities & More!

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CONFERENCE LOCATION:

**TROPICANA RESORT**

March 25 - 28, 2013  
Las Vegas, NV

## SAVE THE DATE



CALIFORNIA-NEVADA SECTION  
American Water Works Association

[www.ca-nv-awwa.org](http://www.ca-nv-awwa.org) for conference details

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## COMMITTEE PRESENTING

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Environmental Health & Safety	2B; 12A	Tuesday, March 26; Wednesday, March 27
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Pipeline Rehabilitation	23	Thursday, March 28
Recycled Water	14A	Wednesday, March 27
Recycled Water	14B	Wednesday, March 27
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Joint Session: Recycled Water & Water Treatment		
Research	4	Tuesday, March 26
Joint Session: Water Treatment		
Safe Drinking Water Act	9	Tuesday, March 26
Security & Emergency Planning	12B	Wednesday, March 27
Joint Session: Environmental Health & Safety		
Security and Emergency Preparedness	12C; 20	Wednesday, March 27 & Thursday, March 28
Security and Emergency Preparedness	3	Tuesday, March 26
Joint Session: Communications & Customer Relations		
Source Water Quality	22	Thursday, March 28
System Control Technology	13B	Wednesday, March 27
Joint Session: Asset Management & Information Management		
Tanks, Reservoirs & Structures Maintenance	8	Tuesday, March 26
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**Tuesday, March 26, 2013**

## **Session 1 – Operators/Distribution System Water Quality**

2:00 PM – 2:30 PM

### **Lead and Copper Rule Sampling Made Easy**

David Heumann, Los Angeles Department of Water & Power

Learn the techniques for facilitating Lead and Copper Rule Residence sampling, sampler recruitment and retention, and increasing customer identification with their role in LCR monitoring.

2:30 PM – 3:00 PM

### **So You Want To Buy A Mixer/Aerator For TTHM Reduction?**

Terry McKinney and Patrick LaBruzzo,  
City of Santa Cruz

Learn about up-to-date research and purchasing issues on mixer/aerator systems and how to potential build your own in-house aerator.

3:00 PM – 3:30 PM

### **Trihalomethane Stage 2 Compliance**

H. Kenneth Hudnell,  
Medora Corp. & UNC - Chapel Hill

Learn about up-to-date research and purchasing issues on mixer/aerator systems and how to potential build your own in-house aerator.

3:30 PM – 4:00 PM

### **Chloramination and Nitrification: Measurement Strategies for Process Control**

Grady Moore, HACH

Learn the basics of chloramine chemistry as well as the consequences of failure to properly control the process, including nitrification. Process control strategies and test methods will be discussed.

4:00 PM – 5:00 PM

### **Ice Pigging**

Kevin Barnes, Utility Services Company, Inc.

Learn the implications of cleaning the distribution lines in their water systems to impact the water quality.



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## **Session 2A – Joint Session: Environmental Health & Safety / Operators**

10:30 AM - 12:00 PM

### **Dealing with Naturally Occurring Asbestos, Transite Pipe & Other Contaminants**

Michael Sharp, Hazard Management Services, Inc.

Learn the training and knowledge required to conduct safe work practices while working with transite pipe. We will provide information on the importance of training your employees of safe work practices and handling of contaminated soil, asbestos pipe, an other hazardous situations.

2:00 PM - 2:30 PM

### **Understanding Employee Exposure to Asbestos Containing Materials in the Potable Water Industry**

Steve Ross, City of North Las Vegas

Learn of the current safe work practices and handling of A/C materials in the potable water industry. This session will endeavor to describe the efforts conducted at the Las Vegas Valley Water District (Las Vegas Valley Water District) to improve established programs to deal with regulatory compliance and personnel concerns associated with A/C materials.

2:30 PM - 3:00 PM

### **Lock Out Tag Out for the Water Distribution System: An Los Angeles Department of Water & Power approach**

Tonya Howard-Taylor, Los Angeles Department of Water & Power

Participants in this session will learn about the regulations for controlling energy releases, what components are needed for an effective LOTO program in water distribution, and how Los Angeles Department of Water & Power has developed and implemented this program.

3:00 PM - 3:30 PM

### **Tragic Accidents in the Water Utility Field**

Keith Saddler, Los Angeles Department of Water & Power

Learn what tragic accidents happen in the water utility field and why we need to have a robust safety program, which can improve the attitudes towards safety and preventing injuries and deaths.



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**Preliminary  
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**Tuesday, March 26, 2013**

***Session 2B – Environmental Health & Safety***

3:30 PM - 4:00 PM

**Navigating the Waters of Air Compliance in California**

Greg Buncab, Alameda County Water District

Learn about California air regulations as they apply to water utilities.

4:00 PM - 4:30:00 PM

**Walking the Green Walk**

Evan Jacobs, California American Water

Learn how California American Water established a statewide “Green Team” to incorporate sustainable practices into our every day operations.

4:30 PM - 5:00 PM

**Leveraging Technology to Improve Operational Efficiency**

Jon D. Handy, Target Solutions

Learn how to reduce administration and overhead costs through the use of new web based technologies while improving compliance with regulations, particularly in the areas of training and certifications.

5:00 PM - 5:30 PM

**Why? Pollution Prevention, EMS, and Cost Savings?**

Carolyn Johnson, Las Vegas Valley Water District and Annalisa Helm, Las Vegas Valley Water District

Learn how to save money, reduce operating costs, ensure environmental compliance by minimizing environmental impacts of daily operations and implementing innovative sustainable measures – real examples revealed!

***Session 3 – Joint Session: Security and Emergency Preparedness / Communications & Customer Relations***

2:00 PM – 5:30 PM

**CalWarn/NV-WARN/AZWARN Joint Exercise Risk Communication**

Ray Riordan, CalWARN

Learn how to be effective collaborators with other agencies producing public messages and how to produce public action to a single cause of safety.



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**Tuesday, March 26, 2013**

**Session 4 – Joint Session: Water  
Treatment/Research**

2:00 PM - 2:30 PM

**Release of Cyanobacterial Metabolites Due to  
Preoxidation Processes**

Eric Wert, Southern Nevada Water Authority

Learn about the risk of releasing cell bound cyanobacterial metabolites (microcystin-LR, MIB, and geosmin) due to common preoxidation processes.

2:30 PM - 3:00 PM

**Dual-Media Deep-Bed Filter Pilot Study for  
Penitencia Water Treatment Plant**

Ryan Klemencic & Lei Hong, Santa Clara Valley Water District

Learn effective techniques in conducting a pilot study with dual-media filters, and experience and challenges in process optimization and selection of desired filter media configurations.

3:00 PM - 3:30 PM

**Removal of 1,2,3-TCP with PAC**

Zaid K. Chowdhury & Jacqueline Shaw, ARCADIS USA, Inc.

Learn about the upcoming cVOC rule and its implications for both groundwater utilities and surface water utilities. Utilities that occasionally augment their surface water supply with banked groundwater have the potential for cVOC contamination, including 1,2,3-TCP. This talk will present 1,2,3-TCP removal data

through conventional surface water treatment practices, such as PAC and flocculation / sedimentation.

3:30 PM - 4:00 PM

**Evaluation of Low Pressure Membrane Retrofit  
to Expand a Water Treatment Plant**

Joseph Wong, Brown and Caldwell

Learn how membranes can be retrofitted into existing filter basins to expand the filtration capacity several fold in an existing conventional water treatment plant.

4:00 PM - 4:30 PM

**Los Angeles Department of Water and Power  
Filtration Plant and Reservoir UV Projects  
Update**

Ben Kuhnel, Malcolm Pirnie, Inc.

Learn about the progress of design and construction of the largest UV facilities in California and the creative approaches used to deliver these projects on schedule.

4:30 PM - 5:00 PM

**Removal of perfluoroalkyl compounds from  
water using anion exchange resins**

Nastaran Afnani, Southern Nevada Water Authority and University of Nevada, Las Vegas

Learn about the process of removing perfluoroalkyl compounds from water using anion exchange resins.



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**Tuesday, March 26, 2013**

***Session 4 – Joint Session: Water  
Treatment/Research (CONTINUED)***

5:00 PM - 5:30 PM

**Year-around Bottom Water Withdrawal and  
Treatment for Minimizing the Impact of Anoxia  
and Algae Blooms**

Keisuke Ikehata, Pacific Advanced Civil  
Engineering, Inc.

Learn the power of comprehensive water  
quality monitoring combined with computer  
modeling in effective water quality  
management in the source water reservoirs.





## **Session 5 – Water Management & Efficiency**

10:30 AM - 12:00 PM

### **Graywater Irrigation for a Lifetime of Customer Water Savings**

LeAnne Ravnale, Scotts Valley Water District

Learn the key role these measures play in outdoor water conservation programs; potential customer water savings and return on investment and rebate programs and costs to utilities; permitting and California code requirements to protect public health and water quality; and professional installer training programs.

2:00 PM - 2:30 PM

### **A Strategy for Ensuring a Sustainable Water Supply**

Tracy Hemmeter, Santa Clara Valley Water District

Learn strategies for addressing different challenges and threats to long-term water supply reliability, how stakeholder input on those strategies was considered, and one agency's approach to ensuring a sustainable water supply.

2:30 PM - 3:00 PM

### **Including Climate Drivers in Your Planning Will Increase Sustainability, Save You Big Bucks, and is Easy To Do**

Karen Raucher, Stratus Consulting

Learn how to identify the most likely changes in temperatures and precipitation, the impacts

and implications of these changes, and how addressing these changes today - where in most cases small incremental increases in spending are all that are needed - will provide significant cost savings in the future.

3:00 PM - 3:30 PM

### **IBM Smart Water Pilot Study for Reduction of Non-Revenue Water in San Diego, CA**

Sean Sudol, Richard Brady & Associates

Participants in the session will learn about the application of IBM Smart Water technology for reduction of Non-Revenue Water in the City of San Diego.

3:30 PM - 5:00 PM

### **Looking to the Future – Improving the Reliability of Water Supply in California**

Juliet Christian-Smith, Senior Research Associate, Pacific Institute; Cindy Paulson, Executive Director, CUWA; Grace Chan, Manager, Resource Planning & Development Section, MWD

Learn of future challenges to water supply, from climate change to funding, and urban water agency actions to respond. The panel will assess plans to improve future water supply reliability and will address the question of whether we are doing enough to meet future demands.



**Tuesday, March 26, 2013**

**Session 6 - Energy**

10:30 AM - 12:00 PM

**Sustainability Through Energy Use Reduction and Efficiency**

Neil M. Worthen, CEA, Rural Community Assistance Corporation

Learn how to identify the biggest “energy wasters” in their facilities, how to calculate the break-even point (payback) of retrofitting obsolete equipment, how to conduct their own Level 1 (in-house) energy audit, and how to select and hire a certified industrial energy auditor for a Level 2 audit.

2:00 PM - 2:30 PM

**An Approach to Integrating a Hydraulic Model into Daily Pumping Operations**

Brian K. Bowler, P.E, Las Vegas Valley Water District

Learn how the Las Vegas Valley Water District utilizes a well calibrated hydraulic model of its distribution system to prepare 24-hour pumping schedules to be implemented by an EWQMS.

2:30 PM - 3:30 PM

**Is There an Oversight in UV Reliability?**

Grant Van Hemert, Schneider Electric

Learn about how critical power is in UV reliability. The participants will gain an understanding of what is required, and how this can be applied to actual facilities.

3:30 PM - 4:00 PM

**Case Studies: Utilities Managing the Water Energy Nexus**

Gary Wong, OSISOFT, LLC

Learn how water utilities are using real-time operations data to sustainably manage energy and water. Their successes are repeatable, scalable, and provide a great return on investment. This is an excellent opportunity to leverage and collaborate with their peers.

4:00 PM - 4:30 PM

**Cucamonga Valley Water District Automated Demand Response**

Michael R. Maestas, Cucamonga Valley Water District

Learn of Automated Demand Response including its challenges and benefits including: working with outside agency timelines, discovering the ability to fund SCADA projects with new resources, creating relationships with outside agencies, and technical knowledge of the scope of project.



**Tuesday, March 26, 2013**

**Session 7 – Engineering & Construction**

10:30 AM - 11:00 AM

**Construction Bidding 101**

Bob Zaiser, Filanc Construction Co.

Learn how construction cost estimating is approached by the contractor and improve construction cost estimating by the agency and design engineers.

11:00 AM - 11:30 AM

**Implementing Design/Build for Wastewater Projects**

Iraj Asgharzadeh, City of San Diego and Omar Rodea, J.R. Filanc Construction Company

Learn the difference between the tradition DB and DBB and other alternative delivery method. Also they will learn the benefits of DBB and when DBB is not applicable to a water infrastructure project.

11:30 AM - 12:00 PM

**Construction Management 101**

Jeff Inferrera, ICM Group

Learn how to apply construction management principles to produce a better project and project experience working relationship.

2:00 PM - 2:30 PM

**Learn How to Improve on Construction Specifications from the Suppliers Perspective**

Jeff Everett, H&D Supply Waterworks

Learn of the impacts of specification writing on the cost and completion of projects and how to

apply principles that will improve construction project execution.

2:30 PM - 3:00 PM

**Challenges and Lessons Learned Using HDPE Piping Systems**

Tim Karlstrand, Carollo Engineers

Learn the difference between the tradition DB and DBB and other alternative delivery method. Also they will learn the benefits of DBB and when DBB is not applicable to a water infrastructure project.

3:00 PM - 3:00 PM

**Case Study: Design and Construction Challenges - Replacing a 1920's-vintage 26-inch riveted steel pipeline with a 24-inch PVC pipeline**

Scott Hamren, Helix Water District

Learn special considerations required for installing 24-inch pipe in busy streets while avoiding utility conflicts. Discussion of jacking and boring a 36-inch casing via contract change order.

3:30 PM - 4:00 PM

**Case Study: Replacing a 1956 critical 40-inch Aerial Pipeline Crossing Before Failure Occured**

Tim Williams, Kennedy/Jenks Consultants and Tony Barela, San Juan Water District

Learn how to plan for a challenging project, how to respond to surprises that were encountered during construction, and how to adapt the project to address these challenges, and still complete the project on-time without violating environmental permitting requirements.



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## ***Session 7 – Engineering & Construction (Continued)***

4:00 PM - 4:30 PM

### **Case Studies: Challenges of a Constructing Multiple Pipe Materials from a Contractor's Perspective**

Bill Williams, Mountain Cascades

Learn the benefits of engaging a heavy civil pipeline contractor in the pipeline design process, and complement the owner and designer on the project. The benefits will be a more concise and improved design over the entire life of the pipeline asset, improve the spatial and operational issues early on, increase competitive bidding, minimize contractors risk, and typically lower bids and reduces the change orders.

4:30 PM - 5:00 PM

### **Water Service Line Materials – Central Valley Case Studies**

Bo Boetteicher, Underground Solutions, Inc.

Learn about implementing a water service water line replacement program and how to plan for and overcome the challenge to minimize impacts to each customer.



**Tuesday, March 26, 2013**

***Session 8 – Tanks, Reservoirs & Structures Maintenance***

2:00 PM – 2:30 PM

**Seismic Retrofit of a Water Storage Tank: Foundation Replacement**

Stephen W. Meier, P.E., S.E., Tank Industry Consultants

Learn a viable alternative to decommissioning seismically deficient water storage tanks.

2:30 PM - 3:00 PM

**Latest Advances for Cathodic Protection of Above Ground Storage Tank Bottoms**

Jack Ripley, Corpro Companies, Inc.

Learn how cathodic protection is an economical method for controlling corrosion on the bottoms of ASTs.

3:00 PM - 3:30 PM

**Rehabilitation of Municipal Wells in Palo Alto, CA**

Craig Smith, URS Corporation

Learn how to execute a rehabilitation project of municipal water wells.

3:00 PM - 4:00 PM

**Wire-wrapped Tanks: A 70 Year History of Sustainability**

Daniel J. McCarthy, Preload, Inc.

Learn the evolution of key design and detailing practices; durability and performance; and evolution of professional industry standards.

4:00 PM - 4:30 PM

**What is “Expected Coating Life” for a Water Tank?**

Michael Doolittle, Tank Industry Consultants

Learn how to achieve the maximum service life for the coatings on water storage tanks and other steel plate structures.

4:30 PM - 5:00 PM

**Improving Chloramine Disinfectant Levels in the Distribution System: Combined Results from Mixing and Residual Boosting in Tanks**

Peter S. Fiske, PAX Water Technologies, Inc.

Learn how to reliably boost disinfectant residual levels in water storage tanks, and how automated residual control systems can be used to improve the stability and consistency of residual disinfectant in tanks and in the surrounding distribution system.

5:00 PM - 5:30 PM

**Trihalomethane Removal System – Tank O&M**

Mike Bartkus, Utility Service Company, Inc.

Learn how to effectively remove and reduce TTHM levels within the distribution systems within an energy efficiency application. They will see how the tank condition can impact the water quality.



**Tuesday, March 26, 2013**

***Session 9 – Safe Drinking Water Act***

2:00 PM - 2:30 PM

**Federal Drinking Water Regulatory Update**

Bruce Macler, USEPA

Learn about the USEPA's most recent Safe Drinking Water Act regulatory issues

2:30 PM - 3:00 PM

**State of Nevada Drinking Water Regulatory Update**

Jennifer Carr, NDEP

Learn about the State of Nevada's most recent Safe Drinking Water Act regulatory issues.

3:00 PM – 3:30 PM

**Permitting Consecutive Connection Water Systems and Secondary Chlorination**

James Weingart, NDEP

Learn about water quality challenges associated with large water users', such as casinos', water distribution systems and on-going regulatory efforts for these types of systems.

3:30 PM - 4:00 PM

**Electronic Delivery of Consumer Confidence Reports - AWWA Surveys and EPA Rule Review**

Adam Carpenter, AWWA

Learn about AWWA's consumer and utility consumer confidence report electronic delivery surveys, as well as EPA's review and the implications of EPA's recent actions on the federal CCR Rule.

4:30 PM - 5:00 PM

**What you need to know about UCMR3**

Monica Van Natta, UL LLC

Learn how to comply with the new UCMR regulation including required testing, sampling and reporting.



**Wednesday, March 27, 2013**

**Session 10 Financial Mgmt.**

9:00 AM - 9:30 AM

**Golf Course Water Use Under Water Budgets**

Mitchell Morgan, Southern Nevada Water Authority

Learn about steps the water purveyors are taking to encourage water conservation in the golf industry amidst a lengthy drought on the Colorado river and how golf courses in the Las Vegas valley area responded to these efforts.

9:30 AM - 10:30 AM

**Achieving Revenue Stability While Allowing for Essential Water Usage**

Sanjay Gaur, Raftelis Financial Consultants

Learn of options water agencies have in order to achieve revenue stability, while balancing other objectives such as promoting conservation, affordability, equity and ease of implementation.

10:30 AM - 11:30 AM

**Considering Water Budget Rates? One City's Approach**

Kyrsten Burr-Rosenthal, City of San Diego

Learn the challenges of evaluating an alternative water billing methodology.

1:30 PM - 2:30 PM

**GASB 68 - Accounting and Financial Reporting for Pensions**

Kevin Starkey, CPA & Richard Green, CPA, Macias Gini & O'Connell LLP

Learn about GASB 68 and a broad understanding of the requirements, the timing for implementation, and how it will impact the financial statements.

2:30 PM - 3:00 PM

**Pension Fund Reform - How Other States are Coping**

Brian King, Mesirow Financial

Learn the range of options is related to addressing ongoing pension problems.

3:00 PM - 3:30 PM

**BREAK**

3:30 PM - 4:00 PM

**Don't Get Behind! Keep on Top of Your Revenue Needs**

Theresa Jurotich, P.E., CDM Smith

Learn why it's important to regularly adjust rates.

4:00 PM - 4:30 PM

**Carlsbad Desalination Project Public-Private Partnership**

Dana Frieauff, San Diego County Water Authority

Participants in this session will learn about the public/partnership agreement between the San Diego County Water Authority and Poseidon Resources for development of the Carlsbad Desalination Project, with a focus on the purchase price, general allocation of risks, and financing.



## Session 11 - Operators

9:00 AM - 10:00 AM

### **Best Practices for Replacing Existing or Instating New Water Services Using the Trenchless Methods**

Ty Green, TT Technologies, Inc.

Learn how to safely, properly, and efficiently use the trenchless methods and tools of "Split and Pull" for water service replacement and rehabilitation and pneumatic boring tools for new service installations.

10:00 AM - 11:00 AM

### **Corrosion Control and Cathodic Protection for Water Pipelines and Treatment Plants**

Saibal "Sam" Mitra, CORRPRO

Learn the causes of corrosion, how to mitigate corrosion, and how to maintain corrosion control systems in the distribution system and at treatment plants.

11:00 AM - 11:30 AM

### **Better Distribution System Management With Remote PRV Station Monitoring**

Roger Lah, Cla-Val

Learn that there are relatively new means available to get vital information from most valve stations and how that can significantly improve their system performance in terms of water quality, pressure management, and system life. And that some water districts have successfully instituted changes to better manage their system based on the new PRV station information.

1:30 PM - 2:00 PM

### **Operating Your Career – An Operator's Perspective of the Water Industry**

Clemens Heldmaier, Montara Water & Sanitary District

Find out the many rewarding challenges and career opportunities the Water Operations field has to offer. Utilize your hands-on field work experience and education to become a well rounded operator and future manager.

2:00 PM - 2:30 PM

### **Main Break Emergency Response - Procedures and Lessons Learned**

Jeff Page, Montara Water and Sanitary District

Learn how running a crew during a water main break emergency response requires a cool head and quick action. This presentation details the procedures and lessons learned by a Superintendent of Operations of a small water utility over his 20 plus years of experience.

2:30 PM - 3:00 PM

### **Sampling After a Main Repair**

Scott Rovnpera, City of Benicia

Learn about the California Code of Regulations/Safe Drinking Water Act Title 22 requirements of sampling for bacteriological contamination after performing repairs on a water main.

3:00 PM - 3:30 PM

**BREAK**





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## **Session 11 – Operators (CONTINUED)**

3:30 PM - 4:30 PM

### **Chemical Metering Pumps, Accessories and Feed System**

Rich Hopkins, Hopkins Technical Products, Inc.

Learn that a chemical feed system is not just a tank and pump. Participants will also learn how the pump and ancillary equipment are to be installed correctly and simplified mathematical equations for chemical feed dosage.

4:30 PM - 5:00 PM

### **Oxidation and Disinfection Fundamentals**

Craig Thompson, Kennedy/Jenks Consultants

Learn about the relative strength, advantages and disadvantages, and cost of oxidants, including ozone, chlorine, chlorine dioxide, chloramine, and potassium permanganate that are used to treat drinking water supplies.

5:00 PM - 5:30 PM

### **Coagulation Fundamentals and Optimization**

Craig Thompson, Kennedy/Jenks Consultants

Learn about the relative strength, advantages and disadvantages, and cost of coagulants, including aluminum sulfate (alum), ferric chloride, poly-aluminum chloride, and ferric sulfate that are used to treat drinking water supplies.



## **Session 12 A – Environmental Health & Safety**

9:00 AM - 10:30 AM

### **Excavation Regulatory Review**

Don Evans, State of Nevada Safety Consultation and Training Section

Learn about soil classifications, protective devices, regulations pertaining to excavations and overall safety related issues.

10:30 AM - 11:00 AM

### **Lake Mead Intake No. 3: An Update on Progress and Challenges**

Erika Moonin, SNWA

Learn first-hand from the project manager the issues, activities and challenges being faced and resolved on the Lake Mead Intake No. 3 project.

11:00 AM - 11:30 AM

### **Reporting Potable Water Discharges in Nevada**

Kirk Medina, City of North Las Vegas

Learn the importance of obtaining an Individual Maintenance discharge permit for potable water systems. It will identify how field discharge reports are used to collect all of the data needed for submitting discharge monitoring reports.

## **Session 12B - Joint Session: Environmental Health & Safety / Security & Emergency Planning**

1:30 PM - 2:00 PM

**Assessing Risk of River Contamination by Hazardous Material (HazMat) Released During**

### **a Rail or Highway Accident**

Shawn Stoddard, Truckee Meadows Water Authority

Learn how a conditional probability model of risk can be developed using sparse database of events. This model can be adapted to model a range of risks of interest to water utilities.

2:00 PM - 3:00 PM

### **Are Your People And Systems Protected?**

Grant Van Hemert, Schneider Electric

Learn four different types of threats that face each facility, and ways to address them. These threats include, Intruder, Natural, Cyber, and Electrical hazard.

3:00 PM - 3:30 PM

### **BREAK**

## **Session 12C - Security and Emergency Preparedness**

3:30 PM - 4:30 PM

### **Earthquake Risk Analysis Methodology Using AWWA J100**

Donald Ballantyne

Learn how to apply AWWA J100 to analyze a water system for seismic risk.

4:30 PM - 5:30 PM

### **Latest Disaster**

Learn from “battle-tryed” emergency managers about the lessons learned and best practices from recent emergency incidents.

**Wednesday, March 27, 2013**



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## Session 13A - Information Management

9:30 AM - 10:00 AM

### Optimizing Your Customer Information System

Kelly Virtue, Westin

Learn the benefits of using an effective Customer Information System (CIS) for improved utility business performance.

## Session 13 - B - Joint Session: Asset Management / System Control Technology / Information Management

10:00 AM - 11:30 AM

### Asset Management & CMMS

Kurtis Warne, SEMS Technologies

Learn a better way of managing current day-to-day operations, while learning best practices that will save time and help fund additional projects through proper maintenance practices, better tracking/history, and budget planning.

1:30 PM - 2:30 PM

### SCADA Forensics

Kevin Trott, IDModeling, Inc

Learn how to use SCADA forensics to determine system operation. This effort is considered a best practice for macro-calibration of EPS operational models.

2:30 PM - 3:00 PM

### Explore SCADA Data Using GIS

Ali Diba, Spatial Wave

Learn how to connect their SCADA data to their GIS system to support the hydraulic modeling

activities and to gain a better understanding of their distribution system operations.

3:30 PM - 4:00 PM

### GIS in the Water Industry

Matthew Brown, SDCWA

Learn how GIS and related technologies were used at the San Diego County Water Authority.

4:00 PM - 4:30 PM

### GIS – A Comprehensive System to Sustain Asset Life

Suzanne Timani, ESRI

Learn of available technologies that have a comprehensive system to create, manage and maintain information about their assets and be able to use the analytical tools to make better decisions.



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**Preliminary  
Technical Program**

## **Session 13 - B - Joint Session: Asset Management / System Control Technology / Information Management (CONTINUED)**

4:30 PM - 5:00 PM

### **GIS Field Deployment – Contra Costa Water District’s Experience With a Full Scale Field Deployment Pilot Test Project**

Dave Huey , Contra Costa Water District

How we built a full scale test project that included a broad cross section of field personnel to test field deployment of our GIS on multiple platforms and devices including secure network hot spots on field vehicles.

5:00 PM - 5:30 PM

### **Using GIS for Predictive Modeling/Analytics and Financial Planning**

Heather Schuchard, Mueller Service Company

Learn the importance of GIS as a decision making tool for maintenance, remediation and capital investment planning based on 'real world' examples.



**Wednesday, March 27, 2013**

10:30 AM - 11:00 AM

**Session 14 - A - Recycled Water**

9:00 AM - 9:30 AM

**IPR Trumps Landscape Irrigation**

Steve Friedman, HDR

Learn that Indirect Potable Reuse can be a key component of any water resource portfolio at an affordable cost.

9:30 AM - 10:00 AM

**Applying Risk Reduction Principles to Direct Potable Reuse**

Erin D. Mackey, Carollo Engineers

Learn about what engineering practices could be incorporated into the design and control of advanced treatment systems for direct reuse and what some of the inherent trade-offs (e.g., complexity, cost) and regulatory hurdles might be.

10:00 AM - 10:30 AM

**Renewed Interest for an Indirect Reuse Groundwater Replenishment Project**

Reymundo Trejo, Upper San Gabriel Valley MWD

Learn about past efforts to supplement water demands in San Gabriel Valley with recycled water, specifically information on project approach to meet regulatory goals and piloting efforts of an advanced treatment system.

**A Successful Wastewater and Water Agency Partnership for Expanding Recycled Water**

Hossein Ashktorab, Santa Clara Valley Water District

Learn about a successful partnership that has and will lead to recycled water expansion.

11:00 AM - 11:30 AM

**Disinfection Capability of Membranes as Tertiary Filters**

Douglas Drury, Clark County, Water Reclamation District

Learn about the capabilities and applications of UF membranes.

1:30 PM - 2:00 PM

**Embracing Alternate Water Sources as a Way to Augment SFPUC's Water Supply Diversification Goals**

Paula Kehoe, San Francisco PUC

Learn how San Francisco is developing and implementing programs to allow and encourage on-site non-potable water systems. The presentation will explain the regulatory process step-by-step and provide guidance for others interested in implementing a local regulatory program.



**Wednesday, March 27, 2013**

**Session 14 - B - Joint Session:  
Recycled Water/Research/Water  
Treatment**

2:00 PM - 2:30 PM

**Ozone Use in Recycled Water**

Keel Robinson, WEDECO

Learn that ozone is a powerful solution for providing high quality reclaimed water, and that ozone addresses many of the concerns with reuse applications including being a strong disinfectant, removing micropollutants, and improving the aesthetic qualities of water.

2:30 PM - 3:00 PM

**Alternative Frameworks for Estimating Ozone  
Disinfection Efficacy in Water Reuse  
Applications**

Sujanie Gamage, SNWA

Learn disinfection strategies and monitoring tools in Water Reuse; Ct approach and alternative frameworks to monitor disinfection; efficacy using ozone; UV and fluorescence monitoring.

3:30 PM - 4:00 PM

**The Synergy of an Ozone + UV System**

Andrew Salvesson, Carollo Engineers

Learn about the pathogen and pollutant barriers from a combined ozone and UV system and understand the economic value of this combined approach

4:00 PM - 4:30 PM

**Formation of Nitrosamines During Ozonation  
in Potable Water Reuse Applications**

Erica Marti, UNLV

Learn about the formation of nitrosamines due to ozonation of wastewater, which is a barrier for using ozone in potable water reuse applications. Attendees will be informed on specific precursors and several factors that influence the formation of N-nitrosodimethylamine.

4:30 PM - 5:00 PM

**Applicability of Ozone and Biological Activated  
Carbon for Potable Reuse**

Daniel Gerrity, UNLV

Learn the applicability of alternative treatment trains for potable reuse applications in the context of recently developed public health criteria.

5:00 PM - 5:30 PM

**Ozonation of a Non-Nitrified Secondary  
Effluent before Water Reuse Treatment**

Fredrick W. Gerringer, Trussell Technologies, Inc.

Learn about the benefits and challenges of ozonating a non-nitrified secondary effluent before MF and RO. Ozonation had impacts on many aspects of treatment, including EfOM characteristics, MF performance and backwash water quality, RO performance, NDMA formation, and emerging contaminant concentrations.



**Wednesday, March 27, 2013**

**Session 15 - A - Joint Session: Water Management & Efficiency / Communication and Customer Relations**

9:00 AM - 10:00 AM

**Knowledge is Power... and Efficiency: Results from Irvine Ranch Water District's Pilot Program with WaterSmart Software**

Nathan Adams (Irvine Ranch Water District) and Peter Yolles (WaterSmart Software)

Learn how to use social norms to drive water use efficiency while maintaining customer satisfaction; how to tailor messaging to avoid "drift back to average"; and which households reduce and what actions they've taken.

10:00 AM - 10:30 AM

**ECO PRO 20X2020: Promoting Water Conservation Gardening to Public Workers & Residents**

Thomas Martin, Water Replenishment District of Southern California

Learn what the Water Replenishment District of Southern California offers in terms of training for landscape water conservation for both residents and municipal landscape maintenance crews.

10:30 AM - 11:30 AM

**The New Irvington Tunnel Groundwater Management Program – A Case Study of Public Collaboration**

David Tsztoo, P.E., San Francisco Public Utilities Commission

Learn about the methods the SFPUC used to develop a replicable public outreach model and innovations to mitigate the complex groundwater environmental challenges that would otherwise hinder successful completion of the NIT Project.



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CALIFORNIA-NEVADA SECTION  
American Water Works Association  
**Preliminary  
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## **Session 15 - B - Water Management & Efficiency**

1:30 PM - 2:00 PM

### **Residential Outdoor Water Conservation Programs – Until Now, the Water Savings Have Been Generalized. The City of Roseville Does the Math**

Melanie Holton, Brown & Caldwell and Lisa Brown, City of Roseville

Learn how water savings from outdoor conservation programs varies with respect to program specifics such as incentive amount, landscape area, and marketing strategies.

2:00 PM - 2:30 PM

### **Field Study of Uniformity Improvements from Multi-Stream Rotational Spray Heads and Associated Products**

Michael Drinkwine, Southern Nevada Water Authority

Learn the real world increase in DU improvements achieved by retrofitting traditional sprinkler irrigation systems with newer technology nozzles, and some of the issues that occur.

2:30 PM - 3:00 PM

### **Sustain San Marcos: A Presentation Abstract on Vallecitos Water District's Garden Makeover and Rain Barrel Workshop to Encourage a Reliable Future**

Torrey Webb, Vallecitos Water District

Learn measures taken to control costs, streamline construction, critical reception and the overall effect on promoting sustainability at our District.

3:00 PM - 3:30 PM

**BREAK**





**Wednesday, March 27, 2013**

**Session 15 - C - Water Well  
Technology**

3:30 PM - 4:00 PM

**Well Project Contributes to Reliable Ground  
Water Supplies for Antelope Valley - East Kern  
Water District**

David Ferguson, Kennedy-Jenks

Learn of Antelope Valley-East Kern Water Agency (AVEK) Water Bank and how they have leveraged a water supply project into a regulatory compliance tool for meeting the Stage 2 D/DBP Rule for THM compliance - allowing AVEK to remain of free chlorine and avoid the switch to chloramines.

4:00 PM - 4:30 PM

**Optimizing Well Efficiency Through Improved  
Design and Construction Techniques**

Kevin McGillicuddy, Roscoe Moss Co.

Learn the critical components of the well design process including formation sampling, gravel pack selection, slot size selection, and well development. Learn how these processes can maximize well production potential with minimal losses and improve cost efficiency.

4:30 PM - 5:30 PM

**The Role of Radial Collector Wells in Sustaining  
Ground Water Production**

Henry Hunt, Layne-Ranney

Learn about radial well installation and development technology. Several west coast well situations will be presented.

5:00 PM - 5:30 PM

**Well Maintenance and Rehabilitation  
Techniques – Las Vegas Valley Water District’s  
Experience with Maximizing Well Life and  
Production**

Erin Cole, Las Vegas Valley Water District

Las Vegas Valley Water District employs a variety maintenance and rehab techniques based on the age, construction, and purpose of the well.



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**Wednesday, March 27, 2013**

## **Session 16 - Materials Performance**

9:00 AM - 9:30 AM

### **HDPE Fatigue and Surge Analysis and Design**

Camille George Rubeiz, PE, PPI

Learn how to design HDPE pipe for working pressure, surge pressure and fatigue based on AWWA standards and manuals C901, C906, M55 and ASTM F714.

9:30 AM - 10:30 AM

### **A Review and Comparison of HDPE and Fusible PVC Pipelines**

Todd Jorgenson, Riverside Public Utilities

Learn about HDPE and fusible PVC pipelines in depth and will provide a general guideline as to the applications, strengths and weaknesses of both materials.

10:30 AM - 11:30 AM

### **Methods of Pipe Repair**

Scott Bennett, Romac Industries, Inc.

The attendee will learn the correct installation method and manufactures requirements for many pipe products such as repair clamps, couplings, tapping sleeves and service saddles to name a few. The correct tools needed for installation and pipe identification will be discussed as well as different products that may offer a more efficient repair

1:30 PM - 2:00 PM

### **Performance of Pipes in Earthquakes**

Camille George Rubeiz, PE, PPI

The state of California has experienced the 4th largest earthquake in US history. Learn the performance of pipes during earthquakes in the US (California), Japan and other countries, and potential solutions to minimize the failure due to extreme events like earthquakes and Tsunamis.

2:00 PM - 2:30 PM

### **Bendable PVC For Water Service Laterals**

Doa J. Meade, P.E., Las Vegas Valley Water District

Learn of a case study in service lateral materials where a large water utility learned the cause for one material's failures, another material's disadvantages and discovered an alternative material's potential and tested its viability.

2:30 PM - 3:00 PM

### **Corrosion and Its Control for Ductile Iron Pipelines with Polyethylene Encasement**

Mr. Paul H. Hanson, P.E., Ductile Iron Pipe Research Association

Participants in this session will learn of the research and development of polyethylene encasement for controlling external soil corrosion on ductile iron pipelines. The highlights of this presentation include the review of three in-place locations where ductile iron pipe protected with this method of corrosion control has been inspected.



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**Wednesday, March 27, 2013**

**Session 16 - Materials Performance**

**(CONTINUED)**

3:00 PM - 3:30 PM

**BREAK**

3:30 PM - 4:30 PM

**Residential 13-D Installations, Statistics,  
Components, Construction**

Bruce Lecair, National Fire Sprinkler Association

Learn all aspects of Residential Fire Sprinkler  
Systems and the benefits to homeowners living  
in residences constructed with Fire Sprinklers.



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**Wednesday, March 27, 2013**

## **Session 17 - Backflow**

9:00 AM - 12:00 PM

### **Test Procedures & Diagnostics of Backflow Assemblies**

Henry Chang, USC-FCCCHR

1:30 PM - 3:00 PM

### **Repair of Backflow Assemblies, Part I**

Jim Purzycki, BAVCO

2:00 PM - 3:00 PM

### **Repair of Backflow Assemblies, Part I**

Jim Purzycki, BAVCO

3:00 PM - 3:30 PM

### **BREAK**

3:30 PM - 5:30 PM

### **Repair of Backflow Assemblies, Part II**

Jim Purzycki, BAVCO



**Wednesday, March 27, 2013**

**Session 18 – Meters**

9:00 AM - 9:30 AM

**The Reduction of Lead in Drinking Water Act and Lead-Free Alternatives**

Bridget Berardinelli, Sensus Meter

Learn how to prepare for pending lead legislation applying to water meters and details about the four leading lead-free meter alternatives.

9:30 AM - 10:00 AM

**Large Meter Replacement Program**

Oscar Alcantar, City of Sacramento

Learn the importance of correcting misapplied meters and the revenue increase potential of maintaining accurate water meters.

10:00 AM - 10:30 AM

**Using Correlated Leak Detection to Extend the Benefits of a Utility's AMI Investment -- Best Practices in Water Resource Management and Impacts on Utilities**

Bernard Dunham, Delta Engineering Sales

Learn the functionality and benefits of monitoring and controlling a utility's water pipeline network using correlated leak detection. When interfaced to a utility's existing AMI system, discover how correlated leak detection can be monitored remotely.

10:30 AM - 11:00 AM

**AMI Implementation At EMWD**

David Lopez, Eastern Municipal Water District

Learn the "real" benefits, shortcomings and pitfalls of AMI implementation.

11:00 AM - 11:30 AM

**Ultrasonic Water Meters for Commercial & Industrial Metering**

Greg Land, Master Meter Inc

Learn the difference between a mag meter and an ultrasonic meter, and whether solid state technology is a fit for the attendees.

1:30 PM - 2:00 PM

**Basics of Large Water Meter Testing**

Darren G. McMillan, U.S. Metering and Technology

Learn the benefits and basic requirements for setting up a large meter testing program.



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**Preliminary  
Technical Program**

**Wednesday, March 27, 2013**

## ***Session 18 – Meters (CONTINUED)***

2:00 PM - 2:30 PM

### **How to Quickly and Effectively Deploy a Large Scale AMI System**

Bud Tickel

2:30 PM - 3:00 PM

### **Water Supply Management using AMI Technology**

Bernard Dunham, Delta Engineering Sales

Learn the functionality and benefits of automated metering, types of AMI technologies available within the water industry and how utilities are using the data provided.

3:00 PM - 3:30 PM

### **Advance Water Efficiency by Improving Meter Accuracy at Extended Low Flows**

Tracy Quinn

Provide water suppliers with information about water meter accuracy at extended low flows and why this is an important and timely issue in California and Nevada. Additionally, we are hoping to garner support for a proposal to revise the AWWA Meter Standards



**Thursday, March 28, 2013**

**Session 19 –Asset Management**

9:00 AM - 9:30 AM

**Development of an Asset Management Program on a Shoestring Budget**

Jack Bebee, Fallbrook PUD

Learn how to utilize a combination of in-house resources and outside expertise to initiate steps necessary to have an effective asset management program tailored to smaller agencies.

9:30 AM - 10:00 AM

**Identifying Annual Pipeline Improvement Rates to Meet Level-of-Service Goals and Performance Standards**

Katie Miller, SFPUC

Learn the SFPUC's risk scoring approach, prioritization ranking, level of service goals development, performance standard establishment, break data analysis, condition assessment plans, pipeline forensic program formulation, and CIP development. Also learn how to establish appropriate repair and replacement rates for aging infrastructure.

10:00 AM - 10:30 AM

**Long-Term Capital Improvement Planning Using KANEW Model**

Rajat K. Chakraborti, CH2M Hill

Learn how to plan aging infrastructure for asset management and sustainable service for the

water infrastructure; as well as focus on key components of infrastructure for rehabilitation.

10:30 AM - 11:00 AM

**Using RIVA to Prioritize Pipeline Replacement**

Zora Bindra, Westin

Many utilities struggle with identifying which water mains to replace in a given timeframe. Use of predictive renewal and rehabilitation tools such as RIVA can greatly simplify the decision process and justify increased R&R expenditures to mitigate future risk from pipeline failures. This session will provide an actual case study showing the benefits of using RIVA to prioritize main line replacements.

11:00 AM - 11:30 AM

**Pipeline Infrastructure Replacement Program: A Scientific Approach to Ranking Pipes for Replacement at San Jose Water Company**

Bill Tuttle and Jacob Walsh

Learn how to prioritize pipelines most in need of replacement based on propensity to leak and system criticality.

11:30 AM - 12:00 PM

**Benefits and Challenges of Capital Project Validation**

Erin Baker, Santa Clara Valley Water District

Learn what capital project validation is, the benefits of capital project validation, and potential issues that may arise during implementation of a validation process.



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**Thursday, March 28, 2013**

***Session 20 - Security and Emergency Preparedness***

9:00 AM - 10:00 AM

**Building Water Resiliency with US EPA's Community-Based Water Resiliency Tool**

Marvin Young, US EPA

Learn to better understand interdependencies between water and other community services; assess their own water preparedness needs; identify resources specific to those needs, and advance their community's water preparedness efforts.

10:00 AM - 1:00 PM

**Tablet/Mobile Technology in Water Symposium**

Tripat Mangat, IGA

Learn about current Common Operating Picture development activities for emergency management on mobile platforms and how to integrate mobility with a water utility's IT infrastructure and become engaged in inter-agency collaboration for response and recovery and use that resource to improve operational efficiency.





## Thursday, March 28, 2013

### **Session 21 - Desalination**

9:00 AM - 9:30 AM

#### **Delivering Desal: How Do You Do It and What Does It Cost?**

Andree Johnson, Richard Brady & Associates

Learn about operational and institutional issues associated with integration of a new water supply source into a regional water supply portfolio and an innovative approach to addressing these issues while minimizing distribution costs.

9:30 AM - 10:00 AM

#### **Reverse Osmosis for Salinity Control at the Yucaipa Valley Water District – A WISE Project**

James Vickers, Separation Processes

Learn how recycled water salinity control is an important consideration for groundwater basin management.

10:00 AM - 10:30 AM

#### **West Basin's Road Map to a Full Scale Ocean Water Desalination Facility**

Diane McKinney, West Basin Municipal Water District

Learn the approach and subsequent challenges and accomplishments West Basin has encountered during this step-wise approach to a full scale ocean water desalination facility.

10:30 AM - 11:00 AM

#### **Understanding and Controlling Energy Costs for Membrane Systems**

Douglas Brown, AECOM

Learn the typical energy requirements for membrane filtration and reverse osmosis system and how to control energy related costs.

11:00 AM - 11:30 AM

#### **Zero Liquid Discharge from a High Salinity Waste Stream**

Frank Schubert, Combined Solar Technologies

Learn about a successful project that achieves zero liquid discharge treating a high salinity wastewater stream (20,000 mg/L). The facility is fueled with waste biomass. Its emissions conform to stringent California Air Resources Board limits while producing water that is near potable in quality.

11:30 AM - 12:00 PM

#### **Water Supply with Dynamic Variables: A Santa Cruz Case Study**

Susie O'Hara, City of Santa Cruz

Learn about the 2.5 MGD scwd2 Regional Desalination Project and the dynamic variables, such as shifting demand projections, supply losses to habitat conservation and climate change, which greatly influenced the programmatic evaluation.



## Thursday, March 28, 2013

### **Session 22 – Source Water Quality**

9:00 AM - 9:30 AM

#### **SNWA Air Conditioner Condensate Study**

Kent Sovocool, Southern Nevada Water Authority

Learn about the resource potential of condensate, a byproduct of air conditioning. The presentation includes quantification of volumes and chemical analyses of condensate collected from residential A/C units.

9:30 AM - 10:00 AM

#### **Quagga Mussel Veliger Motility after Exposure to Oxidants**

Julia Lew, Southern Nevada Water Authority

Learn how chloramination was chosen as a pre-treatment for SNWA and why this is expected to protect intake structures from quagga mussel infestation.

10:00 AM - 10:30 AM

#### **From Contaminated Groundwater to Potable Water: Turning our Past Sins into Valuable Assets**

James Collins, Malcolm Pirnie/ARCADIS

Learn about current applications where contaminated groundwaters that were once considered to be problems are successfully becoming sustainable assets for utilities in the Southwest.

10:30 AM - 11:30 AM

#### **Groundwater/Surface Water Interaction: Measure, Model, Mitigate? The Ventura River Example**

Jordan Kear, Kear Groundwater

Learn the methods of evaluation of the surface and groundwater interaction in a southern California river under intense regulatory and public scrutiny.

11:30 AM - 12:00 PM

#### **Aquifer Storage and Recovery Regulatory Milestone and Its Impact on Local Projects**

Christian E. Petersen, West Yost Associates

Learn how to utilize a new regulatory tool for the permitting of ASR projects in California. ASR is an important tool in helping many California communities stretch their water supplies and adapt to climate change.



**Thursday, March 28, 2013**

**Session 23 – Pipeline Rehabilitation**

9:00 AM - 9:30 AM

**Predicting Pipeline Damage From a Seismic Event for Catastrophic Reserve Budgeting**

Matthew Kennedy, GHD Inc.

Learn an applied methodology for predicting widespread pipeline failures from a seismic event that can be utilized for quantifying damage and developing budget reserves for utility repairs. The methodology is founded on the literature and USGS seismic research and utilizes GIS.

9:30 AM - 10:00 AM

**Seismic Retrofit of a Transmission Aqueduct Crossing the Rodgers Creek Fault**

Kent Gylfe, Sonoma County Water Agency and Ahmed Nisar, InfraTerra, Inc.

Learn about the assessment, design, and implementation approach utilized to mitigate the potential risk of a catastrophic pipeline rupture for a water supply transmission main crossing a high risk seismic fault in an urban environment

10:00 AM - 10:30 AM

**Renewal of Water Mains Using Trenchless Technologies**

Serge Terentieff, East Bay Municipal District

Learn under which specific site conditions they could use either HDD or pipe bursting, as a viable alternative to open trench, for the routine replacement of their water mains. Attendees will also learn about potential cost savings and reduced community and

environmental impacts, as well as limitations associated with these technologies.

10:30 AM - 11:00 AM

**Delta Diablo Sanitation District's Pittsburg Recycled Water Pipeline Pipeline Rehabilitation Using Alternate Methods**

Anne Prudhel, Carollo Engineers

Learn about a practical case study in the design, application, and construction outcome of using alternate installation methodology in lieu of more conventional methods for a challenging pipeline alignment.

11:00 AM - 11:30 AM

**Close Interval Surveys Provide Valuable Information on Pipeline Corrosion**

Glenn Wilson, V&A Consultants

Learn the benefits of close interval testing on pipelines.

11:30 AM - 12:00 PM

**Pipe Bursting Water Mains**

George Mallakis, TT Technologies and Drew McIntyre, NMWD

Learn the basics of pipe bursting including the process, planning, design and applications of pipe bursting for water main distribution systems.

12:00 PM - 12:30 PM

**HDD Using Ductile Iron Pipe**

Learn about the use of ductile iron pipe for horizontal directional drilling and explains the Dorwart method for calculating the estimated pulling loads for flexible restrained joint ductile iron pipe. The paper will provide an analysis of two high profile projects that had a total of seven HDD pulls.



**Thursday, March 28, 2013**

**Session 24 – Water Treatment**

9:00 AM - 10:00 AM

**UV Disinfection Regulatory Issues with Medium Pressure UV Systems: Real-World Solutions to Overcome Uncertainty**

Christine Cotton, Malcolm Pirnie/ARCADIS

Learn the low wavelength issues with MP UV systems; the current state of research being conducted to understand disinfection implications of low wavelengths; case studies for how operating UV facilities addressed this issue and regulatory uncertainty; case studies for how facilities under design and construction have addressed this issue; and recommendations for utilities considering MP UV systems for disinfection.

9:30 AM - 10:00 AM

**The Big Picture: How Safe is Safe in the Treatment of Drinking Water for Public Systems**

Rhodes Trussell, Trussell Technologies

Learn the history behind drinking water quality concerns that have driven the extent of treatment and contemporary issues that warrant a re-evaluation of how to answer the how safe is safe question.

10:00 AM - 10:30 AM

**The Art of Arsenic Treatment**

Brian Shoener, Provost & Pritchard

Learn the key items to consider when evaluating coagulation filtration treatment for arsenic removal such as raw water analysis, pilot studies, treatment filter design, backwash handling, solids disposal, construction and operation.

10:30 AM - 11:00 AM

**Pursuing Sustainable, Lower-Cost Nitrate Removal in California's Central Valley and Beyond**

Erin D. Mackey, Carollo Engineers

Learn how biological treatment can provide environmentally friendly, lower-cost removal of nitrate and other contaminants.

11:00 AM - 11:30 AM

**Fixed Bed Biofilm Reactor for the Removal of Ozonation Byproducts**

Holly McNaught, Southern Nevada Water Authority

Learn how a fixed bed biofilm reactor (FBBR) may provide removal of BOM while minimizing operational concerns. A pilot-scale study demonstrated the ability of indigenous microorganisms to colonize plastic media and remove up to half of the assimilable organic carbon (AOC).



**Thursday, March 28, 2013**

**Session 25 – Management  
Development and Leadership**

9:00 AM - 10:00 AM

**Innovative Evolution: A Focus on New  
Methods for Solving Today’s Challenges**

Grant Van Hemert, Schneider Electric

Learn about how various companies such as engineers, contractors, suppliers, and others have expanded to offer unique solutions. The participant will learn how to look beyond the traditional scope of supply to find better solutions to challenges.

10:00 AM - 11:00 AM

**Now What? Sustaining Change with the  
Employee Survey Action Plan**

Michael DeSousa, CPS HR Consulting

Learn the practical management actions that will make the employee survey a catalyst for meaningful action instead of one more well-intended but stalled project.

11:00 AM - 12:00 PM

**Career Boot Camp: 10 Ways to Become Better  
Prepared**

Robert Burg, Executive Vice President, Ralph Andersen & Associates

Learn about the critical skills and abilities needed to advance in a highly competitive environment.

12:00 PM - 1:00 PM

**Six Strategies for Supporting  
Board/Management Conduits**

Dr. Billie Blair, Change Strategists, Inc.

Learn the keys to making an organization work successfully in the face of modern-day challenges as well as the roles and strategies for management/board relationships and interactions in the management and policy-making arenas.



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**Thursday, March 28, 2013**

## ***Session 26 – Communications and Customer Relations***

9:00 AM - 9:30 AM

### **Integration of Social Media, the Web and Mobile Apps**

Tenille Otero, SDCWA

Learn how the San Diego County Water Authority is integrating social media, the web, and mobile apps to communicate to the public

9:30 AM - 10:30 AM

### **Time for a Facelift - Updating Your Agency Web Site**

Shannon Reed, Irvine Ranch Water District

Learn how to refresh/redesign their agencies website. With all the information needed through the key actions. From the RFP process to the interview/firm selection to kick off meeting to launch.

10:30 AM - 11:00 AM

### **“Seeing is Believing” for the Water Purification Process**

Alma Rife, City of San Diego Public Utilities Department

Learn about the City of San Diego’s Water Purification Demonstration Project’s comprehensive outreach program with a particular emphasis on its facility tour program and its benefits.

11:00 AM - 12:00 PM

### **Collaborating with the Community to Get Your Project Approved - A Case Study on IRWD’s Biosolids Project**

Shannon Reed, Irvine Ranch Water District

Learn strategies to work with the community to garner support and approval for potentially controversial projects.

12:00 PM - 1:00 PM

### **Water Works for You!**

Darcy Burke



# WE APPRECIATE YOUR DEDICATION THANK YOU!

We would like to sincerely thank all of our committees and hard working volunteers that developed this technical program and help to support our conferences. Such support from experts and industry professionals is greatly appreciated and essential to the advancement of the drinking water community.

## Conference Leadership

Conference Director	Tammie Myers, Park Water Company
Asst. Conference Director	Michael Gualtieri, La Habra Heights Water District
Technical Programs Director	Jessica Adams-Webber, SRT Consultants
Local Arrangements Committee Chair	Nass Diallo, P.E., Las Vegas Valley Water District

## Business Administration & Leadership Division

Division Chair	David Shank, San Diego County Water Authority
Division Vice-Chair	Grant Hoag, Black & Veatch
Committee Chair	Shannon Reed, Irvine Ranch Water District
	Communication & Customer Relations Committee
Committee Chair	Scott Curran, San Diego County Water Authority
	Financial Management Committee
Committee Chair	Douglas Spiers, Westin Engineering
	Information Management Committee
Committee Chair	Christine Hawkins, San Diego County Water Authority
	Management Development & Leadership Committee

## Operations & Maintenance Division

Division Chair	Brandyn Hancocks, Golden State Water Company
Division Vice-Chair	Dale Gonzales, California Water Service Company
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	Environmental Compliance & Safety Committee
Committee Chair	Jim Wollbrinck, San Jose Water Company
	Security and Emergency Preparedness Committee
Committee Chair	Michael Johnson, Stockton East Water District
	Systems Control Technology Committee
Committee Chair	Patrick Sweeney, CSI Services, Inc.
	Tanks, Reservoirs & Structures Maintenance Committee

## Operators Division

Division Chair	Bill Cardinal, Calaveras County Water District
Division Vice-Chair	Ken Heard, City of Fresno
Committee Chair	Colin Chung, GHD Consulting, Inc.
	Asset Management Committee
Committee Chair	Tim Williams, Kennedy/Jenks Consultants
	Engineering & Construction Committee
Committee Chair	Richard Souza, Stanford University Utilities Division
	Operators Committee



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Committee Chair

Craig Thompson, Kennedy/Jenks Consultants  
Safe Drinking Water Act Committee

## Water Distribution Division

Division Chair

Stephen Gay, Long Beach Water Department

Division Vice-Chair

Drew McIntyre, North Marin Water District

Committee Chair

Patricia Robinson, Retired, Long Beach Water Department  
Backflow Programs Committee

Committee Chair

John Standi, Golden State Water Company  
Meters Committee

Committee Chair

Drew McIntyre, North Marin Water District

Committee Chair

Pipeline Rehabilitation & Corrosion Committee  
Todd Jorgenson, City of Riverside Public Utilities  
Materials Performance Committee

## Water Resources Division

Division Chair

Joe Wong, Brown & Caldwell

Committee Chair

William "Bill" Faisst, Brown and Caldwell  
Desalination Committee

Committee Chair

Katie Porter, Malcolm Pirnie/ARCADIS  
Energy Committee

Committee Chair

Jack Bebee, Fallbrook Public Utility District  
Recycled Water Committee

Committee Chair

Nass Diallo, Las Vegas Valley Water District  
Water Management & Efficiency Committee

Committee Chair

Kevin McGillicuddy, P.G., Roscoe Moss Company  
Water Well Technology Committee

## Water Quality Division

Division Chair

Willie Frehner, Southern Nevada Water Authority

Division Vice-Chair

Joy Eldredge, City of Napa

Committee Chair

Katherine Lawson, Golden State Water Company  
Distribution System Water Quality Committee

Committee Chair

David Hokanson, Trussell Technologies, Inc.  
Research Committee

Committee Chair

Joy Eldredge, City of Napa

Committee Chair

Water Treatment Committee

Bruce Cabral, Santa Clara Valley Water District

Source Water Quality Committee

## Young Professionals Standing Committee

Committee Chair

Brandon Stipe, AECOM

Young Professionals Committee