

# San Diego Chapter Newsletter



# **Our Mission**

The San Diego Chapter of the WateReuse Association provides a forum for the exchange of information to promote the beneficial use of recycled water in the San Diego region.

# **Event Updates**

# 2014 WateReuse California Annual Conference



The WateReuse California Annual Conference is the premier statewide conference devoted to sustaining supplies through water recycling and desalination. The conference is designed for individuals, organizations, and agencies that are associated with or interested in the design, management, operation, and use of water recycling and desalination facilities and projects in California. Join WateReuse March 16-18, 2014 at the Newport Beach Marriott in Newport, Beach, CA for a great conference!

The conference will feature technical presentations, educational workshops, a technical tour, receptions, an awards luncheon, the annual Gordon Cologne Breakfast, a plenary session about direct potable reuse, and the popular exhibition component.

March 16-18, 2014
Newport Beach Marriott Hotel
Newport Beach, CA
For more information on workshop agenda and to register for the event go to <a href="https://www.watereuse.org/conferences/california/14">https://www.watereuse.org/conferences/california/14</a>

# 18th Annual Water Reuse & Desalination Research Conference



Join WateReuse for the 18th Annual Water Reuse & Desalination Research Conference on May 19-20, 2014 at the Westin Las Vegas! The WateReuse Research Foundation's Annual Conference brings together leading researchers to present key findings and practical solutions. This conference provides a unique forum for water reuse and desalination water professionals to network with researchers and discuss current and future research needs, trends, and solutions to water scarcity issues.

You will not want to miss this opportunity to learn about new developments and trends emerging from current and ongoing research.

May 19-20, 2014 Westin Las Vegas Las Vegas, NV

For more information on workshop agenda and to register for event go to <a href="https://www.watereuse.org/">https://www.watereuse.org/</a> foundation/research-conference-18

# **Meeting Announcements**

NEXT MEETING: April 9, 2014 9:00am-11:00am Location: TBD JULY MEETING: July 16, 2014 Location: TBD OCTOBER MEETING: October 15, 2014 Location: TBD



# **Researching Options for DPR**

The City of San Diego is undertaking groundbreaking research with assistance from the WateReuse Research Foundation's Direct Potable Reuse (DPR) Initiative. Since no regulations currently exist for DPR in California, the initiative aims to advance the development of DPR in California and aid in fulfilling the California Department of Public Health's (CDPH) research and data needs.

Senate Bill 918 directs the CDPH to form an expert panel to help investigate the feasibility of developing uniform water recycling criteria for DPR. A final report on that investigation is due to the California Legislature by December 31, 2016. CDPH may consider the ongoing studies from the DPR Initiative as part of its investigation. From August 2011 to July 2012, the City tested water purification technologies at its Advanced Water Purification (AWP) Facility by purifying one million gallons a day of recycled water using microfiltration/ultrafiltration, reverse osmosis, and advanced oxidation with ultraviolet light and hydrogen peroxide. As a result of this testing, the City found that water purification is a feasible option for supplementing San Diego's drinking water supplies.

Operation of the City's existing AWP Facility continues as additional research is done to help define guidelines for DPR. This additional research is grant funded by state propositions 50 and 84. San Diego's AWP Facility is ideal for these studies because it is housed with full-scale components that have proven success in previous studies. Also, the water produced during the testing is added to the existing recycled water distribution system.

The primary health concern of potable reuse is the risk of pathogens remaining in the purified water. To that end, a core concept of potable reuse requ- Community Outreach Specialist lations is protection of public health through a mul- San Diego Public Utilities Department tiple-barrier system. In the case of DPR, the absence of an environmental buffer could be compensated through the following:

- Additional treatment process that increases overall system redundancy and reliability
- · Enhanced water quality monitoring for each treatment process
- · Failsafe readiness



Multiple research studies are being conducted at the AWP Facility to evaluate the potential options that could compensate for the absence of an environmental buffer in DPR. Biologically activated carbon filters and ozonation equipment are being installed in January. These additional treatment barriers are being tested for their ability to

provide public health protection equal to or greater than the retention of purified water in the San Vicente Reservoir.



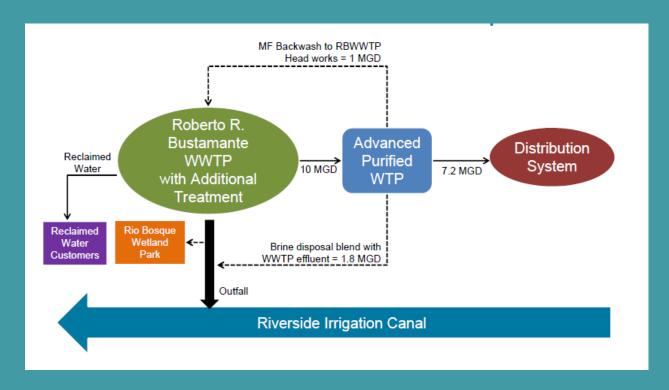
To learn more about the City's water purification efforts, visit www.purewatersd.org or tour the AWP Facility by registering online at www.purewatersd.org/tours.shtml.

#### **Danielle Thorsen**

### **Direct Potable Reuse Project Underway in El Paso**

Historically, the City of El Paso, TX has relied on a combination of groundwater and surface water from the Rio Grande to meet its potable demand. One notable component of this portfolio is the 27.5 MGD Kay Bailey Hutchison Desalination Plant, currently the world's largest inland desalination facility. However, because prolonged conditions of extreme drought continue to limit available water from these traditional sources, the City is committed to increasing the use of more local and renewable supplies. Consequently, El Paso Water Utilities (EPWU) has engaged ARCADIS to develop a 10 MGD Advanced Purified Water Treatment Plant (APWTP) for recycling treated wastewater via direct potable reuse (DPR).

Due to unavailable surface water and poor quality groundwater, EPWU is unable to utilize an environmental buffer in conjunction with reuse. Moreover, unlike many other planned DPR projects in the US, treated water from the APWTP would be blended directly into the potable water distribution system. A schematic of concept is shown in the figure. Upon completion, the EPWU DPR project will be only the second of its kind worldwide, after the one in Windhoek, Namibia commissioned over a half century ago in 1958.



The first phase of the project is currently underway and involves conceptual design, to be followed by pilot testing, detailed design, and construction. EPWU and ARCADIS are working closely with state regulators at the Texas Commission on Environmental Quality (TCEQ) to ensure that the DPR project provides EPWU customers with a reliable, high quality source of potable water with appropriate safeguards. This pioneering project will not only provide a more sustainable source of water supply for the City of El Paso, but is also expected to help pave the way for similar DPR efforts around the country.

#### **Brent Alpspach**

Senior Environmental Engineer Arcadis

Recycled Water Program

# Recycled Water Site Supervisor Certification Training

The City of San Diego . Public Utilities Department

Class Information:

Thurs. Jan. 16, 2014 Thurs. Feb. 27, 2014 Thurs. Apr. 10, 2014 Thurs. May 22, 2014 Thurs. July 10, 2014 Thurs. Aug. 21, 2014 Thurs. Oct. 2, 2014 Thurs. Nov. 20, 2014

8:00 a.m. – 12:00 p.m. City of San Diego Public Utilities Dept. Training Center 5510 Kiowa Drive La Mesa, CA 91942

#### Cost:

\$60 per person
No on-site registration
No refunds
Payable by check only
Checks payable to:
"City Treasurer"

#### **Enrollment deadline:**

Ten days prior to start of class or when class limit is reached

Send registration form and payment to: RWSS Coordinator Public Utilities Department 5510 Kiowa Drive La Mesa CA 91942





This half-day course is designed to provide recycled water users in the state of California with the necessary information required to become fluent in the operational practices of recycled water. The \$60 registration fee includes learning materials and a supervisor identification card. Course objectives include:

- Roles and responsibilities of a Site Supervisor at a recycled water use site.
- Identifying potential and direct cross-connections and learning appropriate preventative measures.
- Practicing appropriate techniques for the safe and efficient use of recycled water.

Testing materials will be available in Spanish.







The Public Utilities Department is authorized by IACET to offer .4 CEUs for this program.

#### **Recycled Water Site Supervisor Registration Form**

First Name	Email
Last Name (will appear on the certification card)	Class Date Requested – First Choice
Organization/Business Name	Class Date Requested - Second Choice
Street Address	CEUs Requested
City, State, Zip	For more information, please contact: Desmond Stecher 619.668.2090 dstecher@sandiego.gov
Phone	

Printed on recycled paper. This information is available in alternative formats upon request.

Public Information Office October 2013

#### **GOT NEWS??**

For more information on submitting articles please email Sarp Sekeroglu at ssekeroglu@rbf.com

MS 43A

# For more information about our local section please visit www.watereuse.org/sections/California/sandiego

## **Our Members**

Membership forms are available at www.watereuse.org/sections/california/sandiego/membership

ARCADIS-Malcom Pirnie

Atkins (formerly PBS&J)

Bailey Environmental Associates, LLC

**Black & Veatch Corporation** 

Brown & Caldwell

Carollo Engineers

**CDM Smith** 

CH2M Hill

Chambers Group

City of Encinitas

City of Escondido

City of Poway

City of San Diego

City of Vista

Coombs-Hopkins

Dudek

D N Tanks formerly DYK Incorporated

Fallbrook Public Utility District

**GHD** 

**Habitat Restoration Sciences** 

Helix Water District

J-Power USA

Infrastructure Engineering Corporation

**KEH & Associates** 

Kennedy/Jenks Consultants

Katz & Associates

Mellano & Company

Olivenhain Municipal Water District

**Otay Water District** 

Padre Dam Municipal Water District

RBF Consulting, A Baker Company

Rick Engineering Company

Rincon del Diablo Municipal Water District

**RMC Water & Environment** 

San Diego County Water Authority

San Diego Golf Course Superintendent's Association

San Dieguito Water District

San Elijo Joint Powers Authority

Santa Fe Irrigation District

Separation Processes, Inc.

Spears Manufacturing Co.

Surfrider Foundation

TRG & Associates

Trussell Technologies

Vallecitos Water District

Valley Center Municipal Water District

Water Conservation Technology International

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Elmer Alex, PE