

## Los Angeles Chapter of the WaterReuse Association MEETING SUMMARY



**Location:** Metropolitan Water District of Southern California  
Weymouth Water Treatment Plant  
Weymouth Water Quality Laboratory-Building 50

**Address:** 700 North Moreno Avenue  
La Verne, CA 91750

**Purpose:** Bi-Monthly Meeting

**Date and Time:** June 11, 2013 from 11:30 a.m. – 1:30 p.m.

**Distribution:** Los Angeles WaterReuse Association Chapter Members

### **Lunch: Sponsored by Rain Bird**

Below is a summary of highlights from the June member meeting of the LA Chapter of the WaterReuse Association. The meeting was followed by a tour of the Weymouth WTP Water Quality Laboratory coordinated by Jeffry Dennis, Terri Slifko, and Ric De Leon of Metropolitan Water District.

#### **1) Presentation by Rain Bird**

Anita Matlock, Rain Bird Area Specification Manager, provided an overview of Rain Bird Corporation's non-potable irrigation equipment. Regulations such as the March 2012 International Green Construction Code include sustainability measures such as a 50 percent limitation for the use of potable water for irrigation. This has led to an increased demand for recycled water and stormwater harvesting systems. Challenges for these systems are the high chlorine and salt content, seasonal fluctuations and pressure issues.

Anita described some lessons learned from a case study of Legoland. In 1998, irrigation systems were failing at the site due to the higher chlorine content of the recycled water. Rotors got stuck and diaphragms failed due to the degradation of the rubber components by chlorine. This led to the conversion to EPDM for valve diaphragms. In 2009, they encountered the same problems with irrigation spray heads. Legoland worked with Rain Bird to develop its RD1800 series. The unique features of this system, including embedded identification, debris blockage and water loss prevention are highlighted in Anita's presentation material.

Pressures from recycled water systems tend to be lower than from potable water systems. Rain Bird manufacturers booster pumps, pumps for industrial use, as well as filtration systems. Rain Bird also provides systems for rain water and HVAC condensate harvesting.

Anita described Rain Bird's philosophy as "committed to intelligent use of water" and their staff provide technical expertise and training for irrigation and industrial customers. She also promoted the availability of landscape rebates and water savings incentive programs from water agencies. Rain Bird offers assistance with design and implementation of irrigation systems.

Carlos Borja indicated that DPH is interested in irrigating lawns without spray technologies, i.e., using tubing for subsurface irrigation. LADWP is experimenting with this application in a park in Tarzana.

A question was raised regarding the cost associated with the use of a copper shield to prevent clogging (e.g. from root intrusion). Anita indicated that it costs about 15 percent more than standard tubing.

Another question was raised regarding who typically pays for the booster pump if the recycled water pressure is lower than the potable water that had been previously provided. This cost is usually borne by the customer, although it varies according to individual situations.

*Anita's presentation can be found on the LA Chapter WaterReuse website\*.*

## 2) Legislative/Regulatory Updates

***Anyone interested in taking over the tracking and reporting of Legislative/Regulatory issues should contact Raymond or any of the other Board members.***

Raymond briefed the chapter on the following key regulations related to recycled water use:

- By the end of May, bills had to make it out of their house of origin.
- *AB803 Water Recycling Act of 2013* – Sponsored by WaterReuse. Attempts to resolve conflicts in recycled water regulations, e.g., the Health and Safety code requires that all recycled water spills be reported while the State Water Code only requires reporting of spills greater than 50,000 gallons. Also allows compliance with permit limits for the discharge of ATPW (Advanced Treated Purified Water) be determined at the point where the ATPW enters the conveyance facility but prior to commingling with any raw water.

The Title 17 and Title 22 issues that were addressed in last year's version of this bill were removed from AB803 on 4/22/13 and may be proposed in separate amendment. In an attempt to preserve some of these revisions, WaterReuse met with an IAPMO (International Association of Plumbing and Mechanical Officials) representative, who were the main opposition to the bill, to discuss including the use of swivel ells and hose bibs at cemeteries back into the bill. IAPMO agreed to the hose bib amendment, but are not ready to support the swivel ell recommendation (although they acknowledge that they are not necessarily against it, either). The requirement at cemeteries has been to have dual systems (tertiary recycled water for irrigation and potable water for hose bibs). It was mentioned that use of swivel ells has been estimated to increase recycled water use in the state of California by 10-20K afy.

AB803 has been read in the Senate once and amendments are expected soon.

- *AB322 Water Recycling* – Sponsored by the San Diego County Water Authority and the City of San Diego. Promotes completion of CA Department of Public Health's (CDPH) Direct Potable Reuse feasibility study in a timely manner. CDPH indicates that it does not have the capacity to handle the requirements of SB918 that included this effort. The latest amendment to this bill allows non-state funds to be used to



advance this goal. It is widely acknowledged that the State's recycled water goals cannot be met through irrigation alone and that Indirect Potable Reuse and DPR need to be considered.

- *AB1200 Recycled Water Agricultural* – This bill would authorize pilot testing to see whether recycled water can be effectively be used to supplement agricultural holding ponds. Four sites in Napa and Sonoma Valleys would be monitored for water quality impacts.
- *AB145 SWRCB: Drinking Water Program* – This bill addresses the potential for moving the Drinking Water Program out of CDPH and to the State Water Resources Control Board (SWRCB), primarily to assure that rural communities are better able to be served under the State Revolving Fund program. A coalition letter captures opposition from agencies. The Legislature generally supports this bill.
- *AB764 Biocremation* – WaterReuse is not taking a position on this bill. It would allows a pilot of at least five sites for biocremation. The bill made it out of its house of origin and will be heard by the Environmental Quality Committee. Raymond noted that the bill is a bit “toned down” from last year’s version.

*Raymond’s presentation can be found on the LA Chapter WaterReuse website\*.*

### 3) Los Angeles County Department of Public Health Update

Carlos Borja, Chief Environmental Health Specialist, provided some observations and perspectives on behalf of LA County DPH.

- Carlos clarified that the discussions around DPR involved CDPH and not LA County DPH. (Apparently there has been some confusion around this issue.)
- In LA County, CDPH has delegated authority for recycled water systems to LA County DPH. It is important to get plans and engineering report to LA County DPH as early as possible. Recently a dual-plumbed building contacted LA County DPH during final inspection and changes were required. Changes are much less costly on paper during design than they are once constructed.
- A free listing of approved backflow devices is available from USC (the approving agency). <http://www.usc.edu/dept/fccchr/list.html>
- *The following is a post-meeting note from Carlos:*  
The question has come up, what constitutes an approved organization that approves backflow devices as stated in Title 17, per:  
California Code of Regulations, Title 17. Public Health  
Division 1. State Department of Health Services  
Chapter 5. Sanitation (Environmental)  
Subchapter 1. Engineering (Sanitary)

Group 4. Drinking Water Supplies

Article 2. Protection of Water System § 7601. Approval of Backflow Preventers.

*Backflow preventers required by this Chapter shall have passed laboratory and field evaluation tests performed by a recognized testing organization which has demonstrated their competency to perform such tests to the Department.*

Carlos indicates that this question is being discussed at the State level and he has requested an update.

- A question was posed to Carlos about the number of inspectors that LA County DPH has on staff to conduct all of this work. Carlos replied that much of this work can be conducted through the strong working relationships with water districts, who are the “eyes & ears” of what’s going on out there. He noted that LA County DPH wants to improve its relationships with Building and Safety Departments. He advised agencies to know their Building and Safety Departments and their directors. For example, the City of LA has been revamping procedures for materials used for recycled water systems so as to reduce replacement needs. Building and Safety Departments typically do not deal with irrigation systems, though as they typically stop their reviews at the backflow devices as they are primarily concerned with dual-plumbed buildings. Irrigation systems are not a priority for them.
- Carlos reminded the meeting participants that LA County DPH requires one meter for each parcel, i.e., they do not want transmission lines from one parcel to another, or drilling across streets with private laterals.

#### 4) California State Section Update

Monica Gasca, our LA Chapter Trustee, provided the following reminders:

- National WateReuse Conference – September 15-18 in Denver. (Early registration ended August 2; deadline to submit for posters was June 24.)
- WateReuse Research Foundation webinar – June 13: Maintaining Recycled Water Quality in Distribution Systems

#### 5) Chapter Updates

- a. Approval of April Chapter Meeting Notes – Approved by the LA Chapter membership.
- b. Chapter Newsletter Update – Shadi Bader reported that the latest newsletter was sent out on June 10. The newsletter team is seeking an agency or consultant spotlight for the next quarterly newsletter.

## 6) Focus Areas

### a. *Draft Groundwater Reuse Replenishment Regulation Update*

Judi Miller and Raymond Jay provided a brief update on the status of this regulation that was last drafted (informally) on March 28, 2013 and is required, per approved legislation (SB918) to be adopted by December 31, 2013. WaterReuse CA submitted additional comments to CDPH in May 2013. It is unclear, though, if any of these comments will be accepted in the final draft. There will be at least one more opportunity to provide feedback to CDPH on the draft regulation once the formal rulemaking process begins and the draft regulation is officially posted.

### b. *Rainwater Harvesting*

Kraig Erickson provided the following update on the 2013 Plumbing Code changes. He noted that local agencies have their own requirements as well.

- There are two pertinent chapters that we have been focusing on:
  - Chapter 16 – Addresses gray water, recycled water, on-site treated nonpotable water
  - Chapter 17 – Addresses collecting and storing rainwater
- Specific highlights of these chapters can be found in Kraig’s presentation
- Publication date: July 1, 2013; Effective date: January 1, 2014
- A question was raised as to whether connection of rainwater or gray water to a nonpotable system with an RP backflow prevention device needs to be permitted by LA County DPH. Carlos Borja responded that LA County DPH does not require permits for rainwater not hooked up to a sewer or gray water with sewer connection; however complex gray water system with surge tanks that are not connected to sewer do need to be permitted.

*Kraig’s presentation can be found on the LA Chapter WaterReuse website\*.*

### c. *Funding Opportunities*

John Robinson, provided the chapter with an overview of current funding opportunities at the local, state and federal levels.

#### Local

- Local Resources Program (LRP) from Metropolitan Water District
- Metropolitan Foundational Action Plan for member agencies and retail agencies – due July 3 for recycled water projects. They are looking for “innovative” recycled water projects and will provide up to \$500K each with 50/50 match, up to a total of \$3M.
- Metropolitan Water District Conservation Program - Onsite retrofit qualifies for conservation funding based on associated water savings from reduced overspraying.

#### State

- Regarding contaminated groundwater and desalination: Prop 50
- SWRCB: Prop 13 – funds for recycled water feasibility studies with 50/50 match up to \$75K



Federal

- USBR (Dennis Wolf): Accepting applications for Title XVI funding – need to send environmental documentation

**7) Other Topics**

- a. *Industrial Use Committee* – No new info to report.
- b. *Firefighting with Recycled Water* – Earl Hartling reported that this document is nearly complete and the draft version will be posted to the WaterReuse website for review by the membership.
- c. *Revision to LACRWAC Recycled Water Users Manual* – Earl indicated that the final version of this updated manual will be downloadable rather than distributed broadly as hard copies as was done with the original manual. Once finalized, WaterReuse membership approval will be sought and an effective date identified. Hard copies will be sent to the four LA area DPH agencies for their approval: LA County DPH, Long Beach DPH, Vernon DPH and Pasadena DPH.

**8) Membership Roundtable – Projects, Regulatory Issues, Financing, etc.**

Kraig Erickson facilitated a discussion by the meeting participants focusing on smaller projects.

- The Watershed Conservation Authority (a sub-agency to Rivers and Mountains Conservancy) had purchased a former duck farm and the local water company had increased costs twice in 6 months. They are now looking at bringing in recycled water from LA County Sanitation Districts' San Jose Creek Water Reclamation Plant. They are currently in the decision-making process and are seeking funding options.
- LA County Parks and Recreation is hooking up 20+ acre-foot site with Upper San Gabriel Valley Municipal Water District for a park area, converting their existing irrigation system to recycled water.
- Walnut Valley Water District is putting in a booster pump to feed irrigation systems at 5 services, schools, and a condominium complex.
- A question was raised regarding the use of recycled water for construction dust control. Carlos Borja responded that it is notably welcomed, but its feasibility depends on the location of the site and proximal availability of recycled water. Labeling is needed as is truck driver training. Trucks cannot then be used for hook up to domestic water hydrants without proper cleansing.
- LA Equestrian Center – There was a question about the status of this site being serviced with recycled water from the Burbank Water and Power. They currently use potable water for dust control and landscape irrigation but this project is still being considered.



**Los Angeles Chapter of the Water Reuse Association**  
**JUNE 11, 2013 MEETING SUMMARY**



**9) Next Meetings**

- August 13, 2013 – Host: Long Beach Water Department; Sponsor: CDM Smith
- October 8, 2013 – Host: Castaic Lake Water Agency; Sponsor: TBD
- December 3, 2013 – Host: TBD; Sponsor: Carollo Engineers

**Los Angeles Chapter Officers for 2013**

Raymond Jay, President	213-217-5777	<a href="mailto:rjay@mw2h2o.com">rjay@mw2h2o.com</a>
Kraig Erickson, Vice President	805-550-5232	<a href="mailto:kerickson@rmcwater.com">kerickson@rmcwater.com</a>
Judi Miller, Secretary/Treasurer	213-228-8236	<a href="mailto:judi.miller@ch2m.com">judi.miller@ch2m.com</a>
Monica Gasca, Chapter Trustee	562-908-4288 x2838	<a href="mailto:mgasca@lacs.org">mgasca@lacs.org</a>
John Robinson, Past-President	626-375-9389	<a href="mailto:jrobinson@johnrobinsonconsulting.com">jrobinson@johnrobinsonconsulting.com</a>

*If you would like to receive future Los Angeles Chapter meeting announcements or be removed from the Chapter Roster please contact Judi Miller.*

\* The presentations from this April, 2013 meeting can be found at:  
<http://www.watereuse.org/sections/california/losangeles/meetings>

**Meeting Attendees**

<b>Member</b>	<b>Organization</b>
Anita Matlock	Rain Bird
Asif Sheikh	Burbank Water and Power
Bertha Ruiz-Hoffmann	Los Angeles County Department of Parks and Recreation
Bryan Trussell	Trussell Technologies
Carlos Borja	Los Angeles County Department of Public Health
Charles Gruel	Los Angeles Department of Water and Power
Cheryl Ann Villegas	Valencia Water Company
Chris Demonbrun	Los Angeles Bureau of Sanitation
David Hokanson	Trussell Technologies
Dusty Moisio	Rowland Water District
Earle Hartling	Sanitation Districts of Los Angeles County
Eric Smith	CDM Smith
Fred Garringer	Trussell Technologies
Gerry Filteau	Separation Processes, Inc.
Glenn Van Eekhout	Los Angeles County Department of Public Health
Gordon Phair	City of Palmdale
Harmik Aghanian	Carollo Engineers
Iwen Tseng	Los Angeles County Department of Public Works
Jeffry Dennis	Metropolitan Water District of Southern California
Jim Smith	Los Angeles County Department of Parks and Recreation

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Jocelyn Carrillo	Los Angeles Bureau of Sanitation
Joe Walters	West Basin Municipal Water District
John Robinson	John Robinson Consulting, Inc.
Judi Miller	CH2M HILL
Kira Alonzo	Metropolitan Water District of Southern California
Kirk Allen	Los Angeles County Department of Public Works
Kraig Erickson	RMC Water and Environment
Luis Macias	Los Angeles Department of Water and Power
Matt Bequette	Los Angeles Bureau of Sanitation
Matt Knudsen	City of Palmdale
Monica Gasca	Sanitation Districts of Los Angeles County
Parag Kalaria	MWH
Peter Peuron	Forest Lawn
Rachel Davis	Long Beach Water Department
Ray Mokhtari	Metropolitan Water District of Southern California
Raymond Jay	Metropolitan Water District of Southern California
Reymundo Trejo	Upper San Gabriel Valley MWD
Robert Young	RMC Water and Environment
Rosalba Santana	Los Angeles Department of Water and Power
Seth Carr	Los Angeles Bureau of Sanitation
Shadi Bader	Burbank Water and Power
Sharona Sokolow	UCLA
Terri Slifko	Metropolitan Water District of Southern California
Tony Umphenour	Burbank Water and Power

TOTAL ATTENDEES: 45