Los Angeles Chapter of the WateReuse Association

M E E T I N G S U M M A R Y

Location:	Rowland Water District
Address:	3021 Fullerton Rd Rowland Heights, CA 91748
Purpose:	Bi-Monthly Meeting
Date and Time:	June 10, 2014 from 11:30 a.m. – 1:30 p.m.
Distribution:	Los Angeles WateReuse Association Chapter Members

Lunch: Sponsored by Trussell Technologies

Below is a summary of highlights from the February, bimonthly member meeting of the LA Chapter of the WateReuse Association.

1) Venue host presentation: Rowland Water District's Recycled Water System (Dusty Moisio)

Established in 1953 to serve 200 farmers and ranchers, Rowland Water District (RWD) now serves 58,000 people through 13,500 service connections in portions of Rowland Heights, Hacienda Heights, La Puente and the cities of Industry and West Covina.

Until recently, RWD's potable water supply was 100 percent reliant on imported water purchased through Metropolitan Water District. They recently began tapping local groundwater supplies through a Joint Use Agreement with neighboring agencies. The first interconnection was completed in January, 2014 and the second interconnection is currently under construction. The groundwater is chloraminated prior to distribution.

RWD's recycled water has increased from 295 acre-feet per year (afy) in 2002 to 1310 afy in 2014, and currently comprises 8 percent of its total water supply. Sources include locally impaired groundwater, a nearby Superfund site, and from the San Jose Creek Water Reclamation Plant (SJCWRP, through multiagency agreements with the City of Industry and LA County Sanitation Districts.)

RWD is in the process of expanding its recycled water distribution system. They are currently installing nearly 5 miles of new recycled water pipelines which will greatly improve the available supply of recycled water to our customers. Ultimately, RWD will be able to sell recycled water to other water agencies and offset potable water demands of future developments.

RWD retrofitted existing customers irrigation systems at parks, schools, nurseries and commercial properties for recycled water use, at no cost to the customers in the initial phases and no new employees were hired for the retrofits.

Challenges that RWD faced in the system expansion have included freeway and railroad pipeline crossings, complex written agreements with contractors, property managers, and outside Board of Directors, discovery and correction of onsite cross-connections, and the Engineering Report had been created for dual plumbed sites. Lastly, a financial penalty was

imposed on properties unwilling to use recycled water (there was just one resistant customer that did not want to irrigate the parkway around a shopping mall.)

Future expansion includes expanding a locally impaired ground water source, completing phase 3 of the recycled water system expansion, utilizing recycled water for new 3,500 home development, and industrial customers. In addition, a new interconnection is being considered between SJCWRP and Pomona WRP through Walnut Valley Water District.

Dusty's presentation can be found on the LA Chapter WateReuse website.*

2) Lunch sponsor presentation: Soil Aquifer Treatment Process for Potable Reuse: Comparison of Two Disinfection Strategies (Sangam Tiwari)

Sangam discussed the results of study underway for the WateReuse Research Foundation and Upper San Gabriel Valley Municipal Water District (Upper District) using chlorine and ozone disinfection in conjunction with soil aquifer treatment (SAT) for potable use.

Public Works currently recharges stormwater and imported water at the Santa Fe Spreading Grounds and Upper District is planning a recycled water recharge project as another source of groundwater replenishment.

The pilot testing mimicked the spreading ground operations in which the basins are filled (typically for 1 week) and then allowed to drain and dry (for about 2 weeks). This cyclic process helps to restore infiltration rates, aid pest control, and aerate the vadose zone.

The two test systems received chlorinated wastewater or ozonated wastewater as influent to the downflow test columns representing the vadose zone, made up of aquifer material from San Gabriel Valley area. The effluent from these columns were then delivered into an upflow column representing the saturated zone, below the water table.

Preliminary findings indicate that SAT is excellent for removal of constituents of emerging concern (CECs), NDMA and bulk organics (as measured by TOC, UVA and EEM). Additionally, ozonation enhances SAT by removing CECs and producing more biodegradable organics.

Employing such treatment enhancements can allow tighter project boundaries with respect to nearness to drinking water wells, can reduce the amount of diluent water needed and allow for a higher recycled water contribution (RWC), and could increase public support for potable reuse projects.

The study will continue with additional CEC removal testing and microbial challenges.

John Robinson asked about whether a similar study conducted in 1993 for the Upper District was considered. Reymundo Trejo, Chief Engineer of the Upper District, was not familiar with the previous study mentioned and asked John if he could send it to him. John also asked whether the results may be locking the Upper District into a specific technology for their groundwater reuse replenishment project. Reymundo explained that this WRRF study (with an expert panel) simply provides an option that could allow the District to maintain spreading of the project's planned 10,000 afy recycled when less stormwater is available for dilution

Tom Love suggested that it might be worthwhile to compare the fluorescence of the recycled water effluent to stormwater to demonstrate the relative water quality.

Sangam's presentation can be found on the LA Chapter WateReuse website.*

3) Water Recycling Legislative/Regulatory Updates (Raymond Jay)

Raymond noted that June is critical time for state legislation as the budget must be adopted by June 15 and at the end June the November ballot is addressed. He provided updates on the following legislative items pertinent to recycled water use:

- *AB 2282 Building Standards–Recycled Water Infrastructure*: Leaves adoption of it up to the Building Standards Commission – There is some concern about how it would be used with respect to requirements for new developments. Should be heard in Committee next week.
- *AB 2636 CalConserve Water Use Efficiency Revolving Fund*: Funding could go to agencies to loan funds to local entities for recycled water and conservation projects. A longer load period is offered for disadvantaged communities.
- *AB 2417 CEQA Exemption for Recycled Water Pipelines:* Sponsors may withdraw because there would need to be hearings for traffic, and the exemption may not be available for open space, so more burden being placed on these elements. Also, the 8-mile length may have been too long. Bill may be put on hold.
- Other Recycled Water Legislation
    - AB 2071 – Allows recycled water use for drinking by pasture animals, but not for dairy cows. Use is voluntary. Requires CDPH to research and evaluate
    - AB 2403 – Concern that pipelines should not be double-assessed
    - AB 2443 – Allows another entity to provide recycled water lines where the local water agency does not.
    - AB 1699 – Addresses how fine sand grain-like plastic particles (used, e.g., in cosmetics) that survive treatment processes are handled. Do they bind contaminants (CECs) that sanitation districts need to be concerned about?
    - AB 2712 – Sponsored by OCWD to make sure there are no road blocks from the public for treatment of groundwater.
    - SB 104 – Addresses how to handle home generated pharmaceuticals.
- 2014 Water Bond:
    - Governor has not selected a preferred bond – several include set-asides for recycled water and groundwater cleanup
    - WateReuse Association's position is that it would accept $500M with $5B bond, and would want $1B for recycled water projects with an $11B bond

- Viable bond proposals seem to be: AB 1331 (Rendon), AB 2043 (Conway), SB 848 (Wolk)

- Federal Legislation:
  - Emergency Drought Relief – through WaterSMART – mostly farmer relief
  - WRRDA (all water infrastructure – including ports, levees, etc.) – ready for President's signature – will include WIFIA funding for recycled water and desalination

- State Legislation:
  - Statewide Recycled Water General Permit – emergency bill, avoids CEQA – revisions to monitoring requirements - apply through Regional Board for irrigation and industrial uses.
  - Groundwater Reuse Recharge Project regulation – draft regulation removed discussion of volumes and underground retention requirements; instead refers to percent dilution; retention time must be greater than the response time and is considered on a case by case basis. The regulations were approved through the Emergency Regulation Process and effective June 18, 2014.
  - Drinking Water Program reorganization from CDPH to SWRCB – effective July 1, 2014.

Raymond's presentation can be found on the LA Chapter WateReuse website.*

4) Technical Topic: Recycled Water Retrofit Design Considerations (Maria Alvarez)

This is one of several technical topics were identified during a survey conducted earlier in the year.

Maria stepped through some issues that are considered as recycled water customer retrofit projects are undertaken. There are specific requirements that must be adhered to regarding installation of additional meters, additional signage, pipeline rerouting and labeling, irrigation pattern changes to protect fountains, etc., CDPH separation requirements for potable water systems, mainline alignment connection, backflow prevention, training of an Onsite Supervisor, and plans for LA County DPH approval. Typically, the local city responsibility ends at the site meter.

Implementation stages include developing usage area commitments with respect to User Agreements that define responsibilities during the design, construction and operational phases of the project, and conditions of development. Specific issues related to the design (e.g., disposal capacity, geotechnical considerations), construction (sequencing, safety considerations) and operation (water quality/quantity, irrigation operations and cross connection testing) must also be addressed.

Costs to retrofit sites can range from $5,000 for a small site to $20,000 for a large site.

Maria's presentation can be found on the LA Chapter WateReuse website.*

5) California State Section Update (Monica Gasca)

- The CA Section Executive Director, Dave Smith, is retiring at the end of July.
- Los Angeles will be hosting the 2015 CA Section Annual Conference at the Biltmore Hotel in downtown. A brainstorming meeting is scheduled for June 19. Contact Conference Co-chair Monica Gasca if you would like to volunteer.

6) Chapter Updates

a. Approval of April Chapter Meeting Notes – approved.

7) Focus Areas

a. Funding Opportunities (John Robinson)

John highlighted the following items:

- MWD Onsite Retrofit Program – funding has been increased to $195/acre-foot, for 5 years of use – applications available online July 1 – Ray Mokhtari/MWD is primary point of contact.
- DWR – Prop 84 – Round 3 – split into 2 – Part 1 $200M, in progress (applications submitted). $250M for Part 2 – greater likelihood of local project funding (Round 1 likely going to central valley)
- SDWA SRF - $500K per planning study, $20M per project and $30M per entity
- Clean Water SRF - still has $200M
- WRFP – will sunset Dec. 2015 – state sometimes even forgives interest (although it is only 1%)
- Most WaterSMART funding is completed.
- Infrastructure Funding Fair – July 30 (DWR, SWRCB) at LA County DPW
- SWRCB – Clean Beaches Initiative Grant program – re: coastal impact projects
- Drought Response Outreach – capture/treatment/infiltration/reuse of stormwater – might adjust to include recycled water
- National Science Foundation – Environmental Engineering R&D Grant – deadline 10/30/14

John's updated handout can be found on the LA Chapter WateReuse website.*

8) Other Topics

a. Thierry Rivard from TreePeople asked whether recycled water was available at hydrants so they could truck a few thousand gallons to water trees planted last year as part of their reforestation activities. It was suggested that Burbank and LA-Glendale Water Reclamation Plants (LA Bureau of Sanitation) would be good points of contact.
b. The updated Irrigation Users Manual is complete and can be obtained from Earle Hartling/LACSD (ehartling@lacsd.org)
c. Newsletter – Considering adding a bloopers section, Regulators Corner, discussion of funding

9) Membership Roundtable (Kraig Erickson)

LA County Parks has received an $850K grant for a park in East LA to redo the irrigation system and convert turf to drought tolerant plants. They will be tearing out parking lots and putting in permeable paving. Sustainable Park Design has menus of projects including solar installations and smart controllers, but need more efficient heads. Looking for resources to support implementation of the design. There are limited opportunities to hook up parks to recycled water due to distance to nearest trunk lines.

Matt Elsner/Burbank – Received a letter from Caltrans District 7 saying they are required to reduce water use by 50 percent on highways, including recycled water. Although it may not appear appropriate to be watering when residents are restricted to 3-days/week, Burbank feels that the solution is clear signage.

There is confusion about meeting the SBX7-7 requirement of 20 percent water conservation by 2020. It should be widely understood that recycled water helps with compliance. Maybe WateReuse can help spread the word.

There was a question about when the equestrian center will be moving off potable water for dust control. This is part of the Bette Davis park and the plan is to provide recycled water from LA-Glendale Water Reclamation Plant. Glendale will hire contractor through IRWMP funding.

10) Next Meetings

- August 12, 2014 – Host: Metropolitan Water District; Sponsor: TBD
- October 14, 2014 –Host: City of LA, Bureau of Sanitation; Sponsor: CH2M HILL
- December 2, 2014 - Host: TBD; Sponsor: TBD

Los Angeles Chapter Officers for 2014

Raymond Jay, President	213-217-5777	rjay@mwdh2o.com
Kraig Erickson, Vice President	805-550-5232	kerickson@rmcwater.com
Judi Miller, Secretary/Treasurer	213-228-8236	judi.miller@ch2m.com
Monica Gasca, Chapter Trustee	562-908-4288 x2838	mgasca@lacsd.org
John Robinson, Past-President	626-375-9389	jrobinson@johnrobinsonconsulting.com

* The presentations from this meeting can be found at:
http://www.watereuse.org/sections/california/losangeles/meetings

Meeting Attendees

Member	Organization
Abraham Razon	Los Angeles/Bureau of Sanitation
Albert Perez	Los Angeles Dept. of Water and Power
Anita Matlock	Rain Bird Corp.
Anson Pira	City of LA IWMD
Asif Sheikh	Burbank Water and Power
Don Zylstra	West Basin MWD
Dusty Moisio	Rowland Water District
Earle Hartling	Sanitation Districts of Los Angeles County
Fred Gerringer	Trussell Technologies
Jim Smith	Los Angeles County Dept. of Parks and Recreation
Jocelyn Carrillo	Los Angeles/Bureau of Sanitation
Joe Walters	West Basin MWD
John Robinson	John Robinson Consulting, Inc.
Judi Miller	CH2M HILL
Kraig Erickson	RMC Water and Environment
Luis Macias	Los Angeles Dept. of Water and Power
Maria Alvarez	AECOM
Matt Bequette	Los Angeles/Bureau of Sanitation
Matt Elsner	Burbank Water and Power
Monica Gasca	Sanitation Districts of Los Angeles County
Ray Mokhtari	Metropolitan Water District of So. Calif.
Raymond Jay	Metropolitan Water District of So. Calif.
Reymundo Trejo	Upper San Gabriel Valley MWD
Robert Bueras	Los Angeles County Dept. of Public Health
Saba Saeed	Valencia Water Company
Sangam Tiwari	Trussell Technologies
Sergio Flores	Valencia Water Company
Seth Carr	Los Angeles/Bureau of Sanitation
Sereywath Keng	City of Los Angeles/Bureau of Sanitation
Shadi Bader	Burbank Water and Power
Sharona Sokolow	UCLA
Thoerry Rivard	TreePeople
Tom Love	DR Consultants
TOTAL ATTENDEES:	34