

Location: Central Basin Municipal Water District
Address: 6252 Telegraph Rd.
Commerce, CA 90040-2512
Purpose: Bi-Monthly Meeting
Date and Time: April 11, 2017 from 11:30 a.m. – 1:30 p.m.
Distribution: Los Angeles WaterReuse Association Chapter Members

Lunch: Sponsored by RMC, a Woodard & Curran Company

Below is a summary of the highlight from the April 2017, bimonthly member meeting of the Los Angeles Chapter of the WaterReuse Association.

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

1. **Venue host presentation: Central Basin Renaissance** (*Kevin Hunt/CBMWD, Donald Jones/CBMWD and Joe Walters/Purple Pipe Consulting*)

Central Basin Municipal Water District (CBMWD) went through a challenging period from 2010 through 2015. During this time, Central Basin had multiple general managers, chief financial officers, several lawsuits, strained relationships with retail agencies, and had generally lost its focus. This began to change at the end of 2014 when the attention of the legislature brought about a state audit. A team of four to five state auditors was provided with access to all CBMWD's operations and documentation, including personnel and files. The audit resulted in 32 recommendations and CBMWD has since implemented 31.5 of them, except for eliminating a car allowance for directors which was, instead, reduced. CBMWD now has an 8-person board and is moving forward with a path focused on expanding its delivery of recycled water.

In 2015, CBMWD began to consider recycled water delivery as a mechanism to establish financial stability. There was an existing conveyance system in place and there was room to expand. The goals of the recycled water program were to identify existing customers and train staff to bring on more customers. Engineering staff began contacting recycled water purveyors and sent out surveys to all the retail agencies. A list of target sites was developed after meeting with the purveyors. The sites were first evaluated through Google Earth to identify the amount of irrigable land and verify the projected demand for recycled water. Over 40 sites were considered, in addition to the existing CIP projects, and CBMWD is currently pursuing implementation of about one site per month. During the process a series of steps were established to outline the evaluation of future site conversions.

For this next year, CBMWD has a Prop 84 grant to provide the design and environmental documentation for delivery of recycled water to the disadvantaged communities of Lynwood, Bell Gardens, and South Gate. They are currently pursuing Prop 1 funding for construction. The single largest recycled water pipeline is in La Mirada, can supply 700-750 acre-feet per year (afy) and is a partnership between Suburban Water Systems, the City of La Mirada, and CBMWD. This

project includes a reservoir and pump station and is also awaiting Prop 1 funding. Consultants are beginning to see that CBMWD has changed and they are receiving a greater number of responses to their RFPs.

Question: What is the source of recycled water?

Answer: CBMWD gets tertiary treated recycled water from Los Angeles County Sanitation Districts and is contracted to use 10,500 afy which they hope to fully utilize by 2020. Since the wastewater flows have not increased, the demand may exceed the supply and there may be constraints to accessing this supply source.

2. Sponsor presentation: Recycled Water System Optimization (*Brian Dietrick/RMC, a Woodard & Curran Company*)

In November 2016, RMC became part of Woodard & Curran. Woodard & Curran was founded in 1979 and is an employee-owned firm. Prior to the acquisition, RMC was only based in California; it now has representation in every state and across 28 offices with headquarters in Portland, Maine. Woodard & Curran offers treatment system design, construction, startup, collection and distribution, asset management, instrumentation control services, and stormwater management. They also have an environment and energy group, infrastructure and manufacturing, operations and maintenance, and construction. They have over 200 people devoted to operations and have employees operating facilities including 12 water treatment and 32 wastewater treatment plants. The focus of this presentation was to discuss the recycled water projects within and outside of California.

The University of Connecticut is a state funded university. Several years ago, there was an effort to expand the school and bring in students which translates to higher water demand. The university gets their water from a well field next to a river and in 2005 a drought resulted in parts of the river running dry. There was a subsequent mandated reduction in pumping from the well field. Implementation of a recycled water program was necessary to meet the reduction requirements and meet the water demand. A wastewater treatment plant already serves the university and they implemented a 3 MGD tertiary facility with microfiltration, ultraviolet (UV) light and chloramine disinfection. The university's central utility plant uses this water for cooling tower makeup water and boiler blowdown as well as for irrigation.

Conserve II is a project located 20 miles north of Orlando, Florida. In the 1980's, there was a group of agricultural businesses that sought to replace depleted groundwater. The City of Orlando and County of Orange partnered to build a large water reuse facility to treat up to 50 MGD, supplying one of the largest distribution systems of purple pipe in the country. It became the first reuse project in Florida to deliver recycled water to crops for human consumption. This facility is operated by Woodard & Curran.

The Victorville membrane bioreactor (MBR) Plant was designed and is now operated by Woodard & Curran. Victorville wanted to expand and were exclusively reliant on groundwater. They sought to develop a second, reliable source of water supply and constructed a 2.5-MGD treatment facility using upflow anaerobic sludge blanket (UASB) with activated sludge, MBR, and UV. The facility began operating in 2010 and provides water to desert energy facilities.

Oceanside is a coastal area near San Diego and is highly reliant on imported water. Adding advanced wastewater treatment facilities to their existing treatment plant will enable them to recharge their local groundwater basin.

The Las Virgenes Pure Water Program includes the design and construction of an advanced water treatment facility for reservoir augmentation. There is a pilot program underway to demonstrate this technology to the public and regulators. Woodard & Curran is involved with the siting analysis to determine the preferred sites for the facility.

The Water Replenishment District's (WRD) Leo J. Vander Lans Optimization project is a very complex project with a lot of parts and partners. The project gets the tertiary supply from Los Angeles County Sanitation Districts' Long Beach Water Reclamation Plant which is then treated by the WRD's adjacent Leo J. Vander Lans Advanced Water Treatment Facility and blended with MWD water before being conveyed through the Long Beach Water Department's distribution system to the Alamitos Gap Barrier operated by Los Angeles County Department of Public Works and Orange County Water District. The facility was recently expanded to a capacity of 8 MGD, but there is not enough supply to the plant nor enough demand downstream. Woodard & Curran is looking at several alternatives upstream and downstream to allow 8 MGD to move through the plant consistently.

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

- April 28 is the last day for policy committees to hear and report on fiscal bills to fiscal committees. There are still a couple big steps for bills to take over the next couple months before they make it to the Governor's desk.

California Legislation

- AB 574: Potable Reuse is sponsored by WaterReuse and Coast Keeper. This bill deletes the references to Direct and Indirect Potable Reuse and specifies four different types of potable reuse: groundwater augmentation, reservoir augmentation, raw water augmentation, and treated water augmentation. It recommends that the State Water Resources Control Board (SWRCB) establish a framework for regulating potable reuse by 6/1/18 and requires SWRCB to adopt uniform water recycling criteria for raw water augmentation by 12/31/21. The bill is proposed to be adopted under emergency regulations to help it move through the administrative process but will still have a formal public comment period. There is no formal opposition and has broad support.

MWD has submitted an amendment to clarify reservoir augmentation. There was a discharge to one of the aqueducts that was regulated not as recycled water but as a wastewater discharge, which caused some concern. MWD is seeking to broaden the category to include any infrastructure leading to the reservoir.

- SB 740: Onsite Treated Water is sponsored by San Francisco Public Utilities Commission to allow for cities and municipalities to capture and reuse local water onsite. There was a previous bill last year that WaterReuse had objected to because of a misunderstanding of what onsite treated water was versus recycled water. Bill SB 740 requires SWRCB to adopt framework for oversight and management of Onsite Treated Water before 12/1/18. This bill does not address gray water systems which is already allowed for local irrigation. The bill is moving forward and WaterReuse is leaning toward a support position.
- AB 869: Sustainable Water Use – This bill aims to make sure that recycled water is not impacted by conservation goals and how they are calculated. Recycled water should be a credit and not included as part of the per capita water use.
- AB 554: Desalination Statewide Goal

- AB 640: Recycled Water
- AB 967 Human Remains Disposal - allows for a cremation service through dissolving the body to be discharged to a wastewater treatment plant. WaterReuse has not taken a position but was concerned when a similar bill was introduced several years ago. The bill has not received much traction but may go through; there are several other states that allow it.
- AB 968: Urban Water Use Efficiency Targets - also to ensure that recycled water is not used against agencies to meet water reductions.

Federal Legislation

- HR 875: Bureau of Reclamation Water Project Streamlining Act is intended to improve upon Title 16 and provide funding for feasibility studies. There has not been much action since February.
- HR 434: New Water Act
- HR 465: Water Quality Improvement Act of 2017
- HR 1579: Secure and Resilient Water Systems Act
- HR 1663: Water Resources Research Amendments Act
- S 216: Bureau of Reclamation Transparency Act
- S 880: Use of American Iron & Steel in Public Water Systems
- S 692: Water Infrastructure Flexibility Act

2017 Regulatory Actions

- Non-Potable Uses General Order – Revised 06/07/2016
- DPR feasibility study to legislature by 12/31/16
- Surface Water Augmentation regulations by 12/31/16
 - Adoption delayed until 1st quarter of 2017
- Evaluate recycled water use for animals by 12/31/16
 - Adoption delayed
- Recycled Water Policy Update by 2019
 - SWRCB Board Meeting – 12/06/16
- Mandatory Recycled Water Building Standards– by 06/2017; from the 2014 legislation AB 2282 which required agencies to consider mandating recycled water use in new buildings. BSC, HCD, and DWR have all provided comments and the comment period is up at the end of the month.
- Onsite Wastewater Treatment Systems Policy –TBD

Recycled Water Policy Update

- The SWRCB adopted a resolution in December 2016 to amend the existing Recycled Water Policy by December 2018. Looking to make sure contaminants of emerging concern (CECs) are still being addressed. They are also looking at salt and nutrient management plans which have not been consistent throughout the state.

4. Regulatory Agency Update:

a. Los Angeles County Department of Public Health (LACDPH) (Robert Bueras)

- The sooner the County gets involved the easier it is to protect domestic water supply and getting recycled water to the site. Paul Kim from Liberty Utilities was driving by Yvonne Burke-John Ham Park in the City of Lynwood and saw construction going on and called Robert who was not aware of the project. They visited the site and found recycled water was being used for toilets inside the building and caught them as they were putting the drywall in which had to be removed and redone. Later found out this was a 9-year, 2-phase project and was handled by another inspector. There is a 12-inch domestic water main with new recycled water lines above it and the backflow protector was over 100 feet from the meter which raised a great deal of concern. Several agencies were involved and converged at the site to check plans and try to get the park open. They got proper protection for the water main, moved the backflow protector and the park opened within a day of the original opening.

b. Los Angeles Regional Water Quality Control Board (LARWQCB) (Cris Morris)

- The Water Replenishment District's GRIP Project's NPDES permit will go to the Board hearing in September. The LARWQCB was waiting for the SWRCB to come out with a template to use for the Whittier Narrows Water Recycling Requirements (WRR) application, but will move forward without the template. Also, working on another Notice of Intent (NOI) for Simi Valley. The Whittier Narrows and Simi Valley project proponents are both petitioning to use the new General Permit. They recently received an application for IPR from the City of Oxnard which is moving ahead with an injection project.
- Engineering reports for new recycled water projects must submitted to LACDPH must also be submitted and approved the regional board.
- Water rights is becoming an issue with expanding the recycled water programs. In the Burbank WRR the Regional Board required the city to get water rights approval before they could expand the use of recycled water for cooling towers. Make sure you have the water availability before moving too far ahead.
- If someone does want to expand the use of a permit and you need to renew the permit, submit it 3-6 months in advance.

5. California State Section Update (Raymond Jay)

The state conference was March 19-22 in San Diego. Monica will provide an update at the next meeting.

6. Chapter Updates

a. Approval of February 2017 Member Meeting summary (Judi Miller)

- February 2017 Member Meeting Summary was approved without opposition.

7. Focus Areas

a. Funding Opportunities (*Raymond Jay*)

- A summary of funding opportunities has been prepared. The Water and Infrastructure Finance and Innovation Act (WIFFIA) funding from the USEPA is new to the list and is like the SRF for \$20M or greater. The application deadline was April 10.
- WaterReuse had a meeting with the SWRCB regarding their concerns about funding that is nearly fully allocated. Get your project on the list soon if not already there. They are trying to get additional bond money authorization.
- There is \$9M available through MWD's onsite retrofit program. The program is operated on a 2-year budget cycle and the last cycle ends this July. The focus of the program is to connect individual properties to the nearest recycled water distribution line.

8. Other Topics

a. Industrial Reuse Committee (*Elise Goldman*)

- Upcoming conference is May 22-23 in Atlanta and is focused on the food and beverage sectors and heavy manufacturing. Emory University is hosting hands on workshops. Program and registration is online.
- This national committee meets quarterly via conference call.

9. Membership Roundtable (*Fred Gerringer*)

- The CA Section conference in San Diego had great beer tasting with beer brewed from purified water.
- Question: What was the strategy for Central Basin for selling recycled water?
- Answer: Recycled water does not always sell itself. Central Basin is always open to new strategies and a customer-minded approach is always important in understanding their needs. Some customers prioritize price and others look at needs and availability. Industrial clients are usually more concerned with availability. In general, recycled water has a lot of good benefits and can be a public relations benefit the customer.

10. Next Meetings

- June 13, 2017 – Host: Las Virgenes MWD; Sponsor: TBD
- August 8, 2017– Host: Glendale Water & Power; Sponsor: TBD
- October 10, 2017 – Host: City of Los Angeles; Sponsor: CH2M

Los Angeles Chapter Officers for 2016

Raymond Jay, President	213-217-5777	rjay@mwdh2o.com
Fred Gerringer, Vice President	626-463-0390	fredg@trusselltech.com
Judi Miller, Secretary/Treasurer	213-228-8236	judi.miller@ch2m.com
Monica Gasca, Chapter Trustee	562-908-4288 x2838	mgasca@lacs.org
John Robinson, Past-President	626-375-9389	jrobinson@johnrobinsonconsulting.com

Meeting Attendees

MEMBER		ORGANIZATION
Michael	Adelman	MWH/Stantec
Shahnawaz	Ahmed	SA Associates
Kira	Alonzo	Metropolitan Water District of Southern California
Maria	Alvarez	AECOM
Jenny	Anderson	Valencia Water Company
Dan	Bacani	LA County DPH
Shadi	Bader	Castaic Lake Water Agency
Robert	Bueras	Los Angeles County Dept. of Public Health
Simon	Calvet	MWH/Stantec
Rita	Chang	CDM Smith
Run	Chen	Burbank Water and Power
Cecille	Coronel	LADWP
Brian	Dietrick	RMC/Woodward & Curran
Matt	Elsner	RMC/Woodward & Curran
Kraig	Erickson	RMC/Woodward & Curran
Everett	Ferguson	WRD
Katrina	Forbes	LA Bureau of Engineering
Steven	Friedman	HDR
Jordi	Fuentes	LA County DPH
Fred	Gerringer	Trussell Technologies
Nadia	Hardjadinata	Metropolitan Water District of Southern California
Corty	Heggtveit	Tetra Tech
Amanda	Heise	CH2M
Raymond	Jay	Metropolitan Water District of Southern California
Steven	Johnson	Heal the Bay
Donald	Jones	Central Basin MWD
Bruce	Lazenby	Rose Hills Memorial Park
Crystal	Lee	LA Bureau of Engineering
Jared	Lee	Burbank Water and Power
David	Lippman	Las Virgenes

Los Angeles Chapter of the WaterReuse Association
 April 11, 2017 MEETING SUMMARY



MEMBER		ORGANIZATION
John	Lockett	LADWP
Maria	Luevano	LA Bureau of Engineering
Joseph	Marcos	AECOM
Chris	Mastro	LA County DPH
Enayef	Miah	LADWP
Dave	Miller	Rowland Water Company
Judi	Miller	CH2M
Dusty	Moisio	Rowland Water Company
Ray	Mokhtari	Metropolitan Water District of Southern California
Cris	Morris	LA Regional Water Quality Control Board
Joline	Munoz	LASAN
Stephen	Opot	LASAN
Mariam	Panasyan	LASAN
Julie Ann	Robinson	Glendale Water & Power
Eric	Schlageter	Las Virgenes MWD
Romy	Sharafi	RMC/Woodward & Curran
Sharona	Sokolow	UCLA
Austin	Straus	LADWP
Shieva	Taat	LASAN
Dawn	Taffler	Kennedy Jenks
Elise	Takebayashi	CDM Smith
Bridgeth	Tapia	City of Downey
Tony	Umphenour	Burbank Water and Power
Joe	Walters	Purple Pipe Consulting
Eric	Wood	LA County DPH
Hirani	Zakir	MWH/Stantec
John	Zhao	Las Virgenes MWD

Total count: 57