

Los Angeles Chapter of the WaterReuse Association MEETING SUMMARY



Location: Sanitation Districts of Los Angeles County
Address: 1955 Workman Mill Road
Whittier, CA 90601
Purpose: Bi-Monthly Meeting
Date and Time: December 1, 2015 from 11:30 a.m. – 1:30 p.m.
Distribution: Los Angeles WaterReuse Association Chapter Members

Lunch: Sponsored by Storm Water Systems, Inc.

Below is a summary of highlights from the December 2015, bimonthly member meeting of the LA Chapter of the WaterReuse Association.

1) Venue host presentation: The Sanitation Districts and Water Reuse (*Earle Hartling and Jodie Lanza*)

The Los Angeles County Sanitation Districts (LACSD) have a long history of reuse, producing a report on water reclamation in April 1949 during the post-WWII boom. Updates of that original report were produced over the following decades. The largest sewer into the Carson plant had a diameter of 12', and additional influent capacity would have needed to be added to reclaim water there. Instead, the Sanitation Districts decided to build satellite plants for water reclamation.

The first satellite plant was the Whittier-Narrows Water Reclamation Plant, which was a collaborative effort between LACSD and the Water Replenishment District (WRD) that began producing recycled water in 1962. Most of the water produced has been used for groundwater recharge or non-potable reuse. Whittier-Narrows demonstrated water reclamation could be done aesthetically, paving the way for additional water recycling facilities: Long Beach, Pomona, San Jose Creek and Los Coyotes.

Los Angeles County uses 160,000 AF of recycled water, and 63% of that comes from LACSD, which currently supplies more than 100,000 AF of recycled water to more than 800 locations. More than 50% of the recycled water is used for groundwater recharge at two sites. Montebello Forebay has been in operation since 1962 and has recharged over 1.9 million AF of tertiary effluent. Alamitos Barrier Project, which injects tertiary water into the ground to prevent seawater intrusion, is using 100% recycled water.

LACSD's ocean discharge of treated wastewater has been dropping since 1990, and declines during drought years are typically larger than during other years. In fact, LACSD discharges the same amount of treated wastewater as it did 50 years ago despite having 1.4 million more people in its service area. Water is discharged to the ocean due to diurnal

supply and demand curves. There is more supply during daytime and more demand at nighttime, creating excess recycled water available during daytime that can be mitigated by above ground storage. This type of storage will be added to San Jose Creek to make more recycled water available during the night. Fortunately, groundwater recharge does not depend on diurnal cycles. There are also seasonal variations in recycled water supply and demand, with demand being highest and supply being lowest in the summer.

The Groundwater Replenishment Improvement Program of WRD will provide treated water from San Jose Creek at an advanced treatment facility in Pico Rivera. A project by the Upper San Gabriel Valley Municipal Water District will also receive water from San Jose Creek for groundwater recharge.

The Joint Plant in Carson currently discharges 300,000 AF (265 MGD) of unused water, but a reuse project with MWD is being planned. This project will include a 1 MGD demonstration plant for testing that will provide information to help inform operations decisions, produce data for regulatory approval, and evaluate treatment equipment. If this project moves forward, a full-scale facility with a potential ultimate build-out capacity of 150 MGD would be built at the Joint Plant. Water produced at that facility would be conveyed to various groundwater basins around Los Angeles County. A feasibility study and financial plan are being developed for the larger project, and the first phase is probably 7 to 8 years away from implementation.

Questions:

- How do the satellite facilities handle wastewater solids?
 - The satellite facilities discharge solids (2-3% concentration) into sewers that go to the Joint Plant. Then, the solids are separated and treated by anaerobic digestion to produce methane used to produce power for the Joint Plant. The remaining solids are sent for composting at marginal farmland to grow cotton, alfalfa, and other non-food crops.
- Has there been thought of what would happen if 100% of treated wastewater was recycled? Would there be water transfers out of the area?
 - Direct potable reuse makes more sense than seawater desalination and probably would allow us to reach 100% recycled water. Indirect potable reuse through groundwater recharge is limited by basin availability and characteristics. Water exports out of the area are unlikely.
- (Question not recorded)
 - Groundwater recharge water must be in the ground for at least 6 months. Water travels about 1000 ft per year, and people downstream of LACSD's recharge basins have been drinking 35-40% recycled water for the past 50 years.

Earle's and Jodie's presentation can be found on the LA Chapter WaterReuse website.*

2) Lunch Sponsor presentation: Storm Water Systems (Todd Barton)

Storm Water Systems provides treatment for storm water runoff mostly to industrial clients. The company is small and flexible, allowing it to customize solutions as needed. It can do the required construction for these systems and has a goal of being a 1-stop shop for stormwater treatment. United Rental is a client using the system shown in the distributed handout to treat runoff from cleaning and rinsing equipment. Storm Water Systems can help with compliance with oil and grease or metals discharge limits and creates custom systems for when it rains on sites that have runoff problems.

Questions:

- Do you make systems for carwashes?
 - We have not but could do this.
- Do you make systems for wash down stations for trucks and other equipment?
 - Yes, and those systems can be customized as needed.
- Can you handle golf cart washing and equestrian centers?
 - Yes
- Are these systems setup for storage to treat runoff?
 - For heavy rains, water is pumped from one or two areas of the site to the system for treatment.

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

3) Guest Spotlight: Caltrans-Recycled Water and Conservation (Jack Broadbent)

Landscape architects at Caltrans landscape and restore the roadside of Caltrans owned property. Caltrans has 30,000 acres of landscaping in the entire state, with most of it located in Southern California. Recycled water is used to irrigate 17% of this land. After drought was declared in 2014, irrigation was changed to be controlled by smart controllers. Caltrans was required to reduce water consumption by 50%, and the actual reduction was 62%. Approximately \$300 million of emergency money went to this landscaping program, and contractors are being incentivized or required to use recycled water for dust control, compaction, and other activities on Caltrans projects.

Public information (non-regulatory) signs have been deployed so the public knows when recycled water is being used. This should improve public relations and reduce the appearance of hypocrisy. The highway design manual (Black Book) says recycled water should be used whenever it is available, but the project development manual says to use recycled water if the cost does not exceed 125% of the cost of potable water. The Director Policy, Chief Engineer Policy Memo, and Emergency Contracts were methods of increasing the use of recycled water for Caltrans irrigation. There are currently 19 recycled water projects, 11 of which are in Southern California. In an emergency, the rules do not need to be followed, allowing for greater use of recycled water. Bringing recycled water to a project

can require working outside their own property line, but someone else needs to own the recycled water pipeline to the Caltrans property line. The goal of Caltrans is for 80% its landscape irrigation to use recycled water by 2030

Questions:

- What is the policy about irrigating during the day?
 - The current policy is to not irrigate during daytime.
- Will Caltrans' recycled water goals end if the drought ends?
 - No, Caltrans will move toward its 80% goal regardless of the drought.

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

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

- Legislative dates
 - Bills must be introduced by Feb 19, 2016 for the next legislative session.
- Notable 2015 recycled water legislation:
 - AB 606 was chaptered and is about the use of recycled water by Caltrans and state properties.
 - AB 786 was enrolled and addresses the ability of homeowners to limit the installation of artificial turf or requiring its removal at a later date.
 - AB 888 was chaptered and addresses the use of plastic microbeads in consumer products.
 - AB 1531 was chaptered and cleans up regulations with some requirements for the State Water Resources Control Board.
 - SB 163 is sponsored by Hertzberg and would declare ocean wastewater discharge a waste and an unreasonable use of wastewater effluent. Ocean discharge would be reduced by 50% by 2026 and eliminated with some exceptions by 2036. Concerns about this bill include feasibility of implementation, equity among dischargers (e.g. ocean dischargers versus other discharges) and the seasonality of recycled water demand.
 - AB 1463 is sponsored by Gatto and addresses the onsite treatment of water. Conceptually, the bill is good, but the water produced from onsite treatment needs to be distinguished from gray water and recycled water. Amendments were passed in September to address WaterReuse's concerns about some of the wording in this bill.
- State of California regulatory items
 - Reservoir augmentation rules (2016)
 - DPR feasibility (2016)
 - Recycled water use for animals (2016)
 - Title 17 and 22 changes (lower priority than the first 3 bullet items)
 - SWRCB emergency conservation regulations
 - Use more recycled water, less conservation might be required

- Operator certification requirements are being developed
- Drinking water permit fees are updated every 5 years. The State Water Resources Control Board is determining how to pay for its expenses with those fees.
- Recycled water general permit is suppose to apply to all non-potable reuse and standardize across systems. The permit will be revised to address issues raised by a subcommittee with a draft expected in March 2016.
 - Comment from Earle: LACSD is going to apply for a general permit

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

5) Regulatory Agency Update:

Los Angeles County Department of Public Health (*Robert Bueras*)

- DPH has a duty to protect potable water and will do water reuse surveys at project sites.
- When DPH leaves a site, their goal is for the potable water to be protected.
- Communication between those doing a project and DPH is important, and plans for recycled water, cisterns, gray water, and similar systems need to be provided for review.
- If there are any questions, use this phone number to contact DPH: 626-430-5290.

LARWQCB

- No update

SWRCB Division of Drinking Water Programs

- No update

6) California State Section Update (Monica Gasca)

- The dates of the 2015 Annual Conference are March 13-15.
- The LA Chapter is looking for nominees for awards. We want as many LA Chapter nominees as possible. Email potential nominees to Monica by December 15. Videos are helpful for nominees to win.

7) Chapter Updates

- Approval of October 2015 Member Meeting Summary (*Judi Miller*).
 - Motion is approved by voice vote.

8) Focus Areas

- Funding Opportunities (*John Robinson*)

- Approximately \$2 million is left from Metropolitan. The application deadline is June 30 but the money will probably be gone by March.
- State Groundwater Funding
- Prop 1 is continuing.
- Clean Water SRF loan is due Dec 2, 2015 to guarantee the 1% loan and about \$600 million in grant applications are expected. Applications will be accepted after the due date because there will probably be a second round of funding starting July 1.
- Water Smart finally came out. The funding limits are same as last year but more money is available. The application deadline is Jan 20, 2016. Even though this money implies it is for conservation, a case can be made for applying it to recycled water projects.

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

9) Membership Roundtable (Kraig Erickson)

- Cooling tower system at Redlands University using non-potable irrigation water
 - Working on a filtration package for that system to address particulates
- LA County of Public Works wants to update a GIS map showing where recycled water piping is located. Inge Wiersema has the GIS computer files and has been contacting agencies to get current information so the map can be updated. The existing map is dated 2012. Earle Hartling will provide the existing GIS map to the person who requested it.

10) Next Meetings

- February 9, 2016 – Host: *Long Beach Water Department*; Sponsor: *Rain Bird Corporation*
- April 12, 2016 – Host: *Pasadena Water and Power*; Sponsor: *RMC Water and Environment*
- June 14, 2016 – **Host: TBD**; Sponsor: *Xylem*

Los Angeles Chapter Officers for 2015

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@lacs.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
Alan Nino	LA County Dept. of Public Works
Bertha Ruiz-Hoffmann	Los Angeles County Dept. of Parks and Recreation
Bob Yamaguchi	Walnut Valley Water District
Bose Dafeta	City of Los Angeles/Bureau of Sanitation
Brian Dietrick	RMC Water and Environment
Brian Folsom	Castaic Lake Water Agency
Bridgeth Montenegro Tapia	City of Downey
Bryan Trussell	Trussell Technologies
Cathy Chang	Water Replenishment District of So. Cal.
Charles Darensbourg	LA County Flood Control District
Charles Guel	Los Angeles Dept. of Water and Power
Chris Saenz	Valencia Water Company
Christine Tran	Los Angeles Dept. of Water and Power
Clint Granath	Forest Lawn
Cory Heggveit	Tetra Tech
Dawn Taffler	Kennedy/Jenks Consultants
Denise Chow	LASAN Wastewater Engineering Services Div.
Dmitriy Ginzberg	State Water Resources Control Board, Division of Drinking Water
Dusty Moiso	Rowland Water District
Earle Hartling	Sanitation Districts of Los Angeles County
Eric Smith	CDM Smith
Frank McDonell	City of Downey
Fred Gerringer	Trussell Technologies
Gerry Filteau	Separation Processes, Inc.
Gil Crozes	Carollo Engineers
Gilbert Chacon	City of Burbank BWP
Jack Broadbent	CALTRANS
Jared Lee	City of Burbank
Jason Yim	Castaic Lake Water Agency
Jennifer Valdez	Los Angeles Dept. of Water and Power
Jim Smith	Los Angeles County Dept. of Parks and Recreation
Jodie Lanza	LA County Sanitation Districts
Joe Walters	West Basin MWD
Joe Yersky	Walnut Valley Water District
John Robinson	John Robinson Consulting, Inc.
Judi Miller	CH2M HILL
Julia Aranda	MNS Engineers
Keel Robinson	Xylem Inc.
Kraig Erickson	RMC Water and Environment
Kun Cheng	State Water Resources Control Board, Division of Drinking Water
Luis Macias	Los Angeles Dept. of Water and Power
Maria Rosales	Los Angeles County Sanitation Districts

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Monica Gasca	Sanitation Districts of Los Angeles County
Nataly Dakak	City of Los Angeles, Industrial Waste Management Div.
Ray Mokhtari	Metropolitan Water District of So. Calif.
Raymond Jay	Metropolitan Water District of So. Calif.
Robert Bueras	Los Angeles County Dept. of Public Health
Saba Saeed	Valencia Water Company
Shadi Bader	Castaic Lake Water Agency
Shieva Taat	Los Angeles/Bureau of Sanitation
Stephen Davis	Black & Veatch
Sunny Wang	Brown and Caldwell
Todd Barton	Storm Water Systems
Tom Monk	Walnut Valley Water District
Tony Moradian	EnviroAqua Inc.
Tony Umphenour	Burbank Water and Power
Viet Ha	Los Angeles County Dept. of Public Health

TOTAL ATTENDEES: 57