

Location: Los Angeles County Arboretum and Botanic Garden
Address: 301 N Baldwin Ave.
Arcadia, CA 91007
Purpose: Bi-Monthly Meeting
Date and Time: February 14, 2017 from 11:30 a.m. – 1:30 p.m.
Distribution: Los Angeles WaterReuse Association Chapter Members

Lunch: Sponsored by IDEXX

Below is a summary of the highlight from the February 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: Recycled Water Conversion and Conservation Projects** (*Jim Smith / Los Angeles County Dept. of Parks and Recreation*)

The speaker, Jim Smith, is with the Los Angeles County Department of Parks and Recreation and gave an overview of how the County is using recycled water at its facilities. The administration has been encouraging the use of recycled water to reduce the \$7 million annual water bill needed to supply the 1,200 irrigated acres of County's 160 parks and 20 golf courses.

Conversion to recycled water and future planning began in 2005. A recycled water master plan has been developed in collaboration with the Los Angeles County Board of Supervisors, Department of Public Works, and the local purveyors. The plan includes the parks as well as other facilities and properties that could potentially use recycled water. Conversion opportunities are prioritized based on the park's water demand and proximity to existing recycled water infrastructure. Currently there are 17 parks and 7 golf courses hooked up to recycled water. Rimgrove Park was the last County park converted in 2013.

Recycled water isn't the only area of conservation. Most parks are hooked up using smart controllers to monitor water use. There has also been a turf removal program facilitated through Metropolitan Water District's grant rebate program. Design guidelines require new projects to comply with smart controllers and use native plants and materials. When selecting plants, it is also important to choose a plant that is compatible with the type of irrigation if recycled water or an alternative water sources is used.

In 2009 there was a water conservation forum held at the arboretum which resulted in a manual on recycled water impacts to plants. The PDF of *A Conversation on the Successful Use of Recycled Water & Drought Tolerant Plants in Park Settings* is available at this link:
http://lasgrwc2.org/Files/document/Recycled%20Water%20Forum%20Proceedings_Recycled_Water_Forum_Proceedings.pdf

2. **Sponsor presentation: New Methods for Total Coliform Testing** (*Patsy Root / IDEXX*)

IDEXX produces testing kits for laboratories that conduct water quality testing. The USEPA has rules for drinking water and rules for wastewater but there are no testing rules for recycled water. Every state in the union has rules or guidance for the testing or monitoring of recycled water. Most recycled water is tested using wastewater methodology but last year the State Water Resources Control Board's Division of Drinking Water (DDW), along with the Environmental Laboratory Accreditation Program (ELAP), determined recycled water is more similar to drinking water, therefore drinking water methods may be used for testing. There are now three EPA drinking water methods (per 40 CFR Part 141), i.e., SM 9223 B, m-Colibblue 24 and EPA 1604, that have been approved for the following types of recycled water:

- Disinfected secondary-23
- Disinfected secondary-2.2
- Disinfected tertiary

There are five reasons to use drinking water methods on recycled water:

1. In moving toward direct potable reuse, recycled water should be tested and compared to potable water standards. The state is still looking into the feasibility of direct potable reuse and the standards will have to be adapted to recycled water.
2. To say that recycled water is tested using the same methods as drinking water is a powerful statement to make for public perception.
3. Some testing methods allow for simultaneous testing of total coliform and E. coli.
4. Data compatibility
5. There are easier test methods that are fast, simple, and approved by the EPA, including IDEXX's Colilert and Colisure tests.

3. **Technical Topic presentation: LA's Recycled Water in Concrete** (*Eliza Jane Whitman*)

The purpose of the One Water LA program is to understand the relationship and connections between different types of water and projects. The program began looking at the potential to connect concrete batch plants with recycled water. John Robinson found a letter from the 1990s stating that recycled water was approved by the City of Los Angeles for this purpose, under certain conditions.

The team looked to develop water quality targets based on the different codes set forth by ASTM 1602, American Concrete Institute, Greenbook, and Caltrans. There are four main water quality components the codes consider: chlorides, sulfates, alkaloids, and total solids. Based on the targets developed by these organizations, the Hyperion Water Reclamation Plant (WRP), and West Basin Municipal Water District's (WBMWD) tertiary recycled water do not have water quality suitable for concrete batch plant use; however, the City's other WRPs (Donald C. Tillman, Los Angeles Glendale and Terminal Island) do meet these standards.

A conference call with managers of the batch plants revealed that there was confusion between the terms "recycled water" and "recirculated water". This is why the term "recycled water" is typically not used for industrial purposes. "ASTM 1602 compliant" is the suggested language for use in specifications.

The team found 25 concrete suppliers are within 5 miles from a recycled water line and there are approximately 40 batch plants within the Los Angeles region. Concrete developers can save money by converting to recycled water and an estimated 1.2 billion gallons of potable water could be saved.

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

- In the legislative cycle, we are close to the end of the period that bills can be introduced. One of the next hurdles is getting through the policy committees in May.

California Legislation

- SB 5 - \$3B water bond with some funding available for recycled water and desalination
- Potable Reuse – sponsored by WaterReuse and CA Coast Keeper and amends Section 13560 of the water code to clarify potable reuse. This will eliminate the existing IPR/DPR definitions and establishes four potable reuse methods: groundwater recharge, reservoir augmentation, raw water augmentation, and treated water augmentation. It also establishes policy with a framework and a sequential approach.

Federal Legislation

- HR 23 – Gaining Responsibility on Water Act of 2017
- HR – New Water Act
- HR 448 – Water Conservation and Rebate Tax Parity
- HR 874 – USBR Water Project Streamlining 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 RW Building Standards by ~ 06/2017
- 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.

WRA Action Agenda 2017-2021

The National WRA has identified the following priorities:

- Action 1 – Develop a national vision and strategy for water
- Action 2 – Support science needed to safely increase water supplies
- Action 3 – Leverage federal funding to increase investments in water infrastructure
- Action 4 – Provide financing options for water infrastructure projects
- Action 5 – Incentivize private investment in water reuse
- Action 6 – Transform Title XVI into a competitive grant
- Action 7 – Reform the permitting process for advanced treated water
- Action 8 – Amended WaterSense program to protect WQ

5. Regulatory Agency Update:

- a. LA County Department of Public Health (*Dan Bacani*)
There was a meeting last month with the architect for the new NFL stadium in Inglewood. There was a plan to use recycled water in the bathrooms and urinals but the WBMWD water quality is challenging. In addition to the required additional treatment to use the recycled water in the toilets, West Basin may not be able to supply the water during a peak demand event.
- b. SWRCB Division of Drinking Water Programs (*Dmitriy Ginzberg*)
Surface water augmentation regulations will be posted on website in few months.

6. California State Section Update (*Monica Gasca*)

The state conference is March 19-22 in San Diego. The national conference is in September in Phoenix and there is a call for abstracts, with a deadline of February 27. The next CA Section meeting is March 19 at the conference.

7. Chapter Updates

- a. Approval of December, 2016 Member Meeting summary (*Judi Miller*)
 - December 2016 Member Meeting Summary was approved without opposition.
- b. Technical topics survey (*Mike Agbodo*)
 - A technical topics survey was emailed out to the LA Chapter membership. Please complete and submit to Mike this week as he will lead effort to compile.

8. Focus Areas

- a. Funding Opportunities (*John Robinson*)
 - A summary of funding opportunities has been prepared. One area has a near term deadline for Title 16 grants at the end of March. Encourage people to apply for funding. Funding fair put on by the state is later in the summer.

9. Other Topics

- a. Industrial Reuse Committee (Elise Goldman)
 - This a national committee meets quarterly via phone call.

- 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.

10. **Membership Roundtable** (*Fred Gerringer*)

Following is a summary of some of the comments and responses to questions from the meeting participants:

- The Terminal Island WRP is being expanded from 6MGD to 12MGD to supply the seawater barrier.
- There has been a hold on recycled water for animal use and requires DDW to go back and develop the feasibility of using recycled water in zoos for animal consumption. This has not been a high priority for DDW and Los Angeles County already has local approval. A new recycled water user’s manual is approved in California for livestock animals. There needs to be a standardization of regulations and outreach to inform others it is available.
- There is interest in hearing about small, local sewer mining projects.
- The living building challenge is a step beyond LEED platinum and strives for a net zero water use. This is the goal of the Santa Monica City Services Building. There is a county committee to develop a net zero building ordinance.

11. **Next Meetings**

- April 11, 2017 – Host: *Central Basin Municipal Water District*; Sponsor: *RMC*
- June 13, 2017 – Host: *TBD*; Sponsor: *TBD*
- August 8, 2017– Host: *TBD*; Sponsor: *TBD*

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
Leigh Adams	Adams	Los Angeles County Dept. of Parks and Recreation
Mike Agbodo	Agbodo	B&V
Carlos Aguilar	Aguilar	
Shahnawaz Ahmed	Ahmed	SA Associates

MEMBER		ORGANIZATION
Jennifer	Akashi	MNS Engineers
Walter	Alarcon	LADWP
Patrick	Alonso	LADWP
Jenny	Anderson	Valencia Water Company
Martin	Armstrong	Rain Bird
Daniel	Bacani	LA County DPH
Shadi	Bader	Castaic Lake Water Agency
Mozaffar	Bahrami	Los Angeles County Dept. of Parks and Recreation
Hélène	Baribeau	AQUALity Engineering
Richard	Bichette	RMC
Carlos	Borja	Los Angeles County Dept. of Public Health
Flor	Burrola	LASAN
Jocelyn	Carillo	LASAN
Gilbert	Chacon	Burbank Water and Power
Paul	Chau	Kennedy Jenks
Tim	Chen	LA County Waterworks Division
Kun	Cheng	DDW
Denise	Chow	LASAN
Cameron	Church	
Heather	Collins	Metropolitan Water District of Southern California
Donald	Cresse	LADWP
Bose	Dafeta	LASAN
Rishina	Dobhal	Parsons
Matt	Elsner	RMC
Kraig	Erickson	RMC
Everett	Ferguson	WRD
Katrina	Forbes	LA Bureau of Engineering
Alex	Franchi	Parsons
Jordi	Fuentes	LA County DPH
Kyle	Fuller	Parsons
Monica	Gasca	Sanitation Districts of Los Angeles County
Fred	Gerringer	Trussell Technologies

MEMBER		ORGANIZATION
Dmitriy	Ginzburg	DDW
Elise	Goldman	West Basin MWD
Clint	Granath	Forest Lawn
Charles	Guel	LADWP
Reem	Habib	Exergy Systems
Slavica	Hammond	Parsons
Earle	Hartling	LACSD
Cory	Heggtveit	Tetra Tech
Amanda	Heise	CH2M
Jose	Huerta	Valencia Water Company
Greg	Jacquez	MNS Engineers
Raymond	Jay	Metropolitan Water District of Southern California
Steven	Johnson	Heal the Bay
Donald	Jones	Central Basin MWD
Sunny	Kim	Kennedy Jenks
Crystal	Lee	LA Bureau of Engineering
Jared	Lee	Burbank Water and Power
Bill	Leveer	Brown and Caldwell
Tiffany	Lin	CDM Smith
David	Lippman	Las Virgenes
Brittany	Liu	WRD
Paul	Liu	LADWP
Maria	Luevano	LA Bureau of Engineering
Luis	Macias	LADWP
Rene	Malan	LA County DPW
Joseph	Marcos	AECOM
Christopher	Mastro	LA County DPH
Anita	Matlock	Rain Bird
Dave	Miller	Rowland Water Company
Judi	Miller	CH2M
Dusty	Moisio	Rowland Water Company
Ray	Mokhtari	Metropolitan Water District of Southern California

MEMBER		ORGANIZATION
Tom	Monk	Walnut Valley Water District
Jimmy	Moreno	Valencia Water Company
Joline	Munoz	LASAN
Stephen	Opot	LASAN
Linda	Palmquist	MNS Engineers
Mariam	Panasyan	LASAN
Gilberto	Ramirez	LA County DPH
Abraham	Razon	LA Sanitation
Nikolaus	Reppuhn	LA County Waterworks Division
Melinda	Rho	LADWP
Kate	Ricci	LA County Dept. of Parks and Recreation
Julie Ann	Robinson	Glendale Water & Power
Patsy	Root	IDEXX
Bertha	Ruiz-Hoffman	Los Angeles County Dept. of Parks and Recreation
Chris	Saenz	Valencia Water Company
Eric	Schlageter	Las Virgenes MWD
Richard	Schulhof	Los Angeles County Dept. of Parks and Recreation
Christopher	Sheppard	LA County DPW
Youn	Sim	LA County DPW
Eric	Smith	CDM Smith
Jim	Smith	Los Angeles County Dept. of Parks and Recreation
Karen	Snyder	Katz & Associates
Michael	Soussa	Norchem
Austin	Straus	LADWP
Bob	Sun	LADWP
Shieva	Taat	LASAN
Elise	Takebayashi	CDM Smith
Patsy	Tennyson	Katz & Associates
Anthony	Tew	LADWP
Christine	Tran	LADWP
Yoshiko	Tsunehara	LADWP
Tony	Umphenour	Burbank Water and Power

MEMBER		ORGANIZATION
Duong	Ung	LADWP
Jennifer	Valdez	LADWP
Joe	Walters	Purple Pipe Consulting
Eliza Jane	Whitman	EJW Consulting
Rick	Winters	IDEXX
Bob	Yamaguchi	Walnut Valley Water District
Azita	Yazdani	Exergy Systems
Jason	Yim	Castaic Lake Water Agency
Zita	Yu	Geosyntec Consultants
John	Zhao	Las Virgenes MWD

TOTAL: 110