

Location: Virtual
Address: Zoom Call
Purpose: Bi-Monthly Meeting
Date and Time: October 12, 2021 from 11:30 a.m. – 1:00 p.m.
Distribution: Los Angeles WaterReuse Association Chapter Members and Supporters

Below is a summary of the highlight from the October 2021 bimonthly member meeting of the Los Angeles Chapter of the WaterReuse Association (WRA).

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

1. Host Presentation: Firefighting with Recycled Water (*Earle Hartling/LACSD*)

Earle Hartling has been the Water Recycling Coordinator at Los Angeles County Sanitation Districts (LACSD) since 1995, specializing in water recycling and planning. Earle is a former member of Water Reuse California (WRCA) Board of Trustees and was the first President of the Los Angeles Chapter.

The presentation highlighted five users of recycled water in LA County that also have systems that are intricately linked with the firefighting system. California Code of Regulations Title 22, Section 60307, Use of Recycled Water for Other Purposes, allows recycled water to be used for firefighting. Other states that also have firefighting in their water recycling codes include Arizona, Nevada, Oregon, Utah, Texas, Florida, and Virginia. CCR Title 22 includes turbidity limits and microbiological limits for recycled water quality used for firefighting.

LACSD performed a study of 10 years of water quality data at 15 water reclamation plants (WRPs), including turbidity, coliform, enteric virus, and drinking water MCLs. The study results are posted on the LACSD web site. The research was done to determine if the use of recycled water would pose a hazard to firefighters when used for firefighting. The only other known research about this topic was done in 2004 and 2007 in Queensland, Australia. The results show that risks from pathogens and chemical hazards are low enough that their use need not be opposed, and that firefighting with recycled water is an acceptable health risk and is safe, both in Australia and in California.

LACSD also evaluated practical considerations of using recycled water for firefighting, including: the procedures that should be implemented when filling firetrucks with recycled water and refilling with potable water; whether there would be any odors associated with the use of recycled water; and the potential for corrosion inside sprinkler pipe systems and fire suppression systems. Current standards are to implement “dry” fire sprinkler systems to avoid allowing standing water inside pipes that could lead to corrosion.

An updated Protocol for Using Recycled Water for Firefighting has been prepared by LACSD for Los Angeles WaterReuse and can be found under Reports and Resources on the main page of our website, here:

<https://watereuse.org/sections/watereuse-california/chapters/los-angeles-chapter/>

2. **Technical Topic: Carbon-Based Advanced Treatment** (*Vijay Sundaram/AECOM*)

Vijay Sundaram is AECOM's National Water Reuse Technical Practice Leader. He served as the Chair for the Water Reuse Roadmap, a Water Environment Federation publication.

Why use carbon-based advanced treatment (CBAT) for potable reuse? CBAT is primarily defined as ozone and biological activated carbon processes. CBAT removes contaminants of emerging concern (CECs) and bulk organics (TOC), provides pathogen LRVs, meets primary/secondary drinking water MCLs. CBAT does not remove TDS or salinity.

CBAT Performance Summary using One Water Nevada as an example. OneWater Nevada collected data for 3 studies conducted over 12 years, including pilot studies at various wastewater treatment facilities. The study results show ozonation performs well for CEC removal and flame retardants/PFAS removal. Ozone-BAC is not the best process for removal of PFOA; rather, downstream GAC is needed for removal of PFOA. Ozone-BAC does provide consistent results for NDMA removal.

Perspectives for California DPR Projects.

NDMA: NDMA can be removed in BAC if required acclimation time is provided. An acclimation period of 120 days of 17,000 bed volumes was observed in heavily loaded BAC (EBCT=10 min).

PFAS (PFOA & PFOS): Adsorption was observed to be the dominant removal mechanism. A GAC system can be utilized for PFAS removal downstream of ozone-BAC. Lightly loaded BAC (EBCT=20 min) contained lower biomass density and demonstrated higher PFOA removal capacity than heavily loaded BAC.

CECs: Specific ozone dose of 1 to 1.5 (depending on bromate formation potential) is recommended for trace and bulk organics removal.

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

Drought

- The majority of California is in emergency drought, with exception of some southern CA counties. The state enacted 15% voluntary conservation. Metropolitan adopted a Water Supply Alert which alerts member agencies to start implementing their Drought Contingency Plans. Metropolitan's Water Supply Conditions Report is available online.
- DWR is estimating there will be an initial zero SWP allocation starting in January 2022

California Budget and Recycled Water Funding

- There is a large budget surplus
- Governor's Budget = \$262.6 billion
 - \$5.1 billion for Water & Drought Resilience
 - \$400 million for recycled water and groundwater recovery
 - \$200 million in FY 21-22; \$100 million if FY 22-23 and 23-24
 - \$100 million for PFAS support

California Legislation

- 800 bills were sent to the Governor this year. Approximately 15% were vetoed. Now is the time to be thinking about bills for next year. 2022 is the second year or the two-year legislative cycle. The following are bills from 2021 that will continue to be considered in 2022 as 2-year bills.
- SB 45 (Portantino): CECs: Wildfire Prevention, Safe Drinking Water, Drought Preparation and Flood Protection Bond Act of 2022 including a \$5.5 billion bond, and \$100 million for water recycling where WRCA requested \$1.5 billion for recycled water projects.
- AB 1500 (Garcia): Safe Drinking Water, Wildfire, Drought, Flood Protection, and Workforce Development Bond Act of 2022 including a \$6.7 billion bond and \$300 million towards water recycling.
- AB 377 (Rivas): Water Quality: impaired waters
- AB 836 (Gabriel): CBSC: recycled water: nonpotable water systems where dual plumbing is required for newly constructed nonresidential buildings by 2023 and requires SWRCB to establish a large onsite nonpotable water system by 2024 for local jurisdictions without a local onsite program and a fee schedule.
- AB 1434 (Friedman): Urban water use objectives: indoor residential water use where indoor water use requirements are lowered from the current 55 gpd by 2040.
- SB 230 (Portantino): SWRCB: Constituents of Emerging Concern Program

Regulatory Update

- Title 17 Cross Connection Control Handbook – includes use of swivel-ell; under evaluation by DDW; adoption date uncertain; second public comment and public hearing TBD
- WUE Implementation – recycled water variances and potable use credit workshop scheduled; potential variances for recycled water with >1,200 mg/l TDS (which will not be applicable for many agencies in the Los Angeles area); proposed adoption in October 2021
- DPR Draft Regulations – WRA made comments to express concerns in letter submitted on June 25, 2021; expert panel was convened August 24-25, 2021; DDW will be providing flexibility to the treatment system and for operator requirements

Federal Update

- Bipartisan infrastructure package and reconciliation package update. There is \$1Billion set aside for recycled water, for both Title 16 and large-scale grant program. WRA is pushing for another \$Billion in the reconciliation package.
- Rescission of the Maui guidance regarding discharges to groundwater– see the USEPA website for more information
- House Transportation and Infrastructure Committee Hearing on emerging contaminants

WaterReuse References

- See the WRA website for State Policy and Regulations

4. Regulatory Agency Update

a. State Water Board Division of Drinking Water Programs (*Saeed Hafeznezami*)

- SWRCB has sent out letters to facilities with old permits that need to update in accordance with Recycled Water Policy.
- SWRCB is working to fulfill mandate per AB1180 to update criteria for non-potable recycled water use by Jan 1, 2023. The update includes cross-connection handbook and updates to the regulations.
- All information regarding DPR criteria is on the DDW website and is being updated. The videos of the expert panel meetings and draft criteria are available on the website.

b. Los Angeles Regional Water Quality Control Board (*Xiaofei Cui*)

- No updates

c. LA County Department of Public Health

- No updates.

5. California State Section Update (*Rafael Villegas*)

- Last WaterReuse CA Board of Trustees Meeting on September 19, 2021 during the WaterReuse Conference
 - 1/3 of WaterReuse Conference attendees were virtual and 400 in-person attendees
 - 191 on-line attendees
 - Sponsor support increased by 38% compared to 2020; 52 sponsors
 - LA Chapter well represented
 - Leadership meeting for WRA Chapter leaders
- Financial Report
 - Open discussion by Board of Trustees on how to maintain low membership dues
 - Motion passed to reduce CA supplemental fees from 7% to 5%
- Strategic Plan Update 2021-2026
 - Vote to adopt Strategic Plan passed – 3rd update and latest update since 2014
 - Revamped Mission and Vision Statements
 - Updated Strategic Goals
 - Report will be available on the national WRA website
- Chapter Report
 - Update from WaterReuse National President
 - Association growing in the East and Midwest
- Recycled Water Funding State Budget
 - \$15 Billion Climate Resilience Package
 - WRCA advocated for \$500M for recycled water in drought package
 - \$200M dedicated to recycled water and groundwater cleanup

- Potable Reuse Bonus Incentive
 - Urban Water Efficiency Standards
 - Urban Water Use Objective Incentive for Potable Reuse
 - New WUE standards to be in place by 2022
- Save the Date for 37th Annual WaterReuse Symposium in San Antonio, Texas
 - Call for projects is out through November 1, 2021, the deadline to submit abstracts
 - Super saver registration begins October 4th, before early bird-registration.
 - Option to attend in-person or virtually

6. Chapter Updates (*Judi Miller*)

The June 2021 Member Meeting Summary was approved.

Monthly Newsletter from WRAC requires input to the section called Chapter Updates and Member News. Looking for information from LA Chapter to include in this section of the newsletter. The deadline to share is by Monday, October 19th to Judi Miller.

Announcements from the member committee included:

- Volunteer Opportunities
 - Meeting Summary Preparation
 - Virtual Lobby Networking Host
- Emerging Professionals Committee Update (*Alex Waite*)
 - Everyone is welcome to our monthly happy hour sessions! Next session is October 28th.
- Membership Committee Update (*Everett Ferguson*)
 - Working on goals and objectives
 - Stay tuned for next activities, including a contact list for the chapter
- Technical Topics Committee (*Alex Franchi*)
 - Please contact Alex with any ideas for topics and speakers

7. Membership Roundtable (*Jared Lee*)

- Seeking a lunch sponsor for the in-person LA Chapter meeting in December 2021 at the City of Santa Monica.
- Seeking hosts/sponsors for upcoming LA Chapter meetings in February and April 2022.
- The Membership Roundtable is an opportunity for agencies to share their accomplishments and challenges with, or seek input from, the LA Chapter WR members.

8. Next Meetings

- December 7, 2021 – Host: City of Santa Monica; Sponsor: TBD – In-person and Virtual
- February 8, 2022 – Host: TBD; Sponsor TBD



- April 12, 2022 – Host: TBD; Sponsor: TBD

9. **Adjournment** 1:00 p.m.

Los Angeles Chapter Officers for 2020/2022

Fred Geringer, President	626-319-1107
Jared Lee, Vice President	626-379-8443
Judi Miller, Secretary/Treasurer	213-228-8236
Rafael Villegas, Chapter Trustee	213-367-1014
Raymond Jay, Past-President	213-217-5777

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JLee@burbankca.gov
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rafael.villegas@ladwp.com
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Meeting Attendees

FIRST NAME	LAST NAME	ORGANIZATION
Shahnawaz	Ahmad	SA Associates
Mir	Ali	Los Angeles Regional Water Quality Control Board
Ginachi	Amah	Los Angeles Regional Water Quality Control Board
Jessica	Arm	Metropolitan Water District of Southern CA
Erik	Avila	Los Angeles Department of Water and Power
Elisha	Back	Woodard and Curran
Brian	Bernados	State Water Resources Control Board, Division of Drinking Water
Matt	Bequette	Los Angeles Sanitation and Environment
Camille	Castillo	West Basin Municipal Water District
Susan	Chang	LA Bureau of Engineering, Environmental Monitoring Division
Denise	Chow	Los Angeles Sanitation and Environment
Xiaofei	Cui	Los Angeles Regional Water Quality Control Board
Uzi	Daniel	West Basin Municipal Water District
Grace	David	Los Angeles Department of Water and Power
Tracey	Dinh	Los Angeles Department of Water and Power
Chris	Dorn	Woodard & Curran
Everett	Ferguson	Water Replenishment District of Southern California
Alex	Franchi	AECOM
Steve	Friedman	HDR
Fred	Gerringer	Hazen & Sawyer
Jesus	Gonzalez	Los Angeles Department of Water and Power
Saeed	Hafeznezami	State Water Resources Control Board, Division of Drinking Water
Andrew	Han	Los Angeles Department of Water and Power
Earle	Hartling	Los Angeles County Sanitation Districts
Bob	Huizenga	Burbank Water and Power
Jennifer	Jacobus	ESA
Raymond	Jay	Metropolitan Water District of Southern California
Darrell	Johnson	Las Virgenes Municipal Water District
Kawana	Key	
Laura	Lara	City of Pomona
Jared	Lee	Burbank Water & Power
Judi	Miller	Jacobs

FIRST NAME	LAST NAME	ORGANIZATION
Scott	Miller	State Water Resources Control Board, Division of Drinking Water
Monica	Morales	Jacobs
Aide	Ortiz	Los Angeles Regional Water Quality Control Board
Brianna	Plancarte	Los Angeles Department of Water and Power
Alex	Rojas	Central Basin MWD
Julie Ann	Robinson	GWP/Water Quality
Monica	Sanchez	Los Angeles County Sanitation Districts
Jeremiah	Shea	West Basin MWD
Kevin	Stewart	Los Angeles Department of Water and Power
Vijay	Sundaram	AECOM
Belal	Tabanaj	Los Angeles County Public Works
Rafael	Villegas	Los Angeles Department of Water and Power
Alex	Waite	City of Santa Monica
Bob	Yamaguchi	Walnut Valley Water District
Zita	Yu	Parsons
Zach	(Co-Host)	WaterReuse Association

TOTAL: 48