

Location: West Basin Municipal Water District
Address: 17140 S Avalon Blvd
Carson, CA 90746
Purpose: Bi-Monthly Meeting
Date and Time: April 9, 2024 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 April 2024 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. Host Presentation: Purple Pipe – Remember Me? (Frank Fuchs; West Basin WMD)

The West Basin Municipal Water District (West Basin) has many recycled water projects that many of the West Basin customers are still investing in. West Basin serves seventeen cities, areas of unincorporated LA County, and has five different divisions. West Basin wholesales both potable and recycled water to their service area. For the West Basin Municipal Water District Recycled Water Program, the treatment process starts with secondary effluent from the Hyperion Wastewater Treatment Plant operated and owned by the City of Los Angeles. A sixty-inch (60") three (3) -mile long force main brings Hyperion effluent to the Edward C. Little Water Recycling Facility in El Segundo. The facility treats 30-40 million gallons per day (MGD) of recycled water and produces five (5) different types of recycled water to meet specific customer requirements. In addition to the Edward C. Little facility, West Basin also has satellite plants to add additional treatment for refinery customers.

The five types of recycled water West Basin produces are:

1. Irrigation water (tertiary disinfected water);
2. Cooling tower water used by refinery customers (tertiary disinfected ammonia removed);
3. Low pressure boiler feed water for refinery customers (membrane filtration and reverse osmosis);
4. High pressure boiler feed water for refinery customers (membrane filtration and twice through a reverse osmosis membrane);
5. Water also treated with membrane filtration, reverse osmosis, and disinfection for use in barrier against seawater intrusion.

Eighty percent (80%) of West Basin's distribution system distributes recycled water. West Basin's water portfolio of recycled water customers includes fifty percent (50%) refineries, thirty-five percent (35%) seawater barrier, and fifteen percent (15%) irrigation. West Basin is currently working on expanding its recycled water customer portfolio through several projects. The projects include distributing more recycled water to the LA Stadium Entertainment District in Inglewood and connecting the Inglewood Basketball and Entertainment center. The projects also include the Nash Street Extension in El Segundo, the Palos Verdes Lateral in Torrance and Palos Verdes that is going to supply additional recycled water to both cities, and the District at South Bay in Carson.

2. Sponsor presentation: Updates on DC Tillman AWPf (*Sebastian Russo, LADWP; Melanie Holmer, Jacobs*)

The Los Angeles Ground Water Replenishment (GWR) Project is driven by Mayor Gracetti's Green New Deal to have Citywide reuse targets to source seventy percent (70%) of all water locally, reduce potable water use by twenty-five percent (25%), and recycle one-hundred percent (100%) of wastewater by 2035. Additionally, GWR is driven by statewide and federal encouragement in the form of grants to develop water-recycling projects in the western states that are affected by drought to provide a sustainable water supply to people in arid regions.

There are three major pillars of GWR. The first pillar is the Donald C. Tillman Water Reclamation Plant (DCTWRP), which will be the Los Angeles Department of Water and Power's (LADWP's) source water facility. LADWP will be drawing tertiary effluent from DCTWRP, which will become the influent for the future advanced water purification facility (AWPF). The AWPF will feature full advanced treatment trains including microfiltration (MF), reverse osmosis (RO), and advanced oxidation process (AOP). The purified water will be conveyed through an existing fifty-four inch (54") pipeline to the Hansen Spreading Grounds. The water, once spread, will infiltrate to the San Fernando Groundwater Basin, which is the principal storage basin for the City of Los Angeles. The basin provides about a quarter of the Los Angeles water during dry years. By replenishing the groundwater basin LADWP is increasing the sustainability of the Los Angeles water supply. GWR will produce enough water for 250,000 Angelenos. Construction is starting at the end of 2024 with an anticipated completion in 2027. Jacobs is the progressive design builder leading the project.

The focus to date has included improving the project like maximizing flows to provide enough source water to the AWPF, correctly sizing equalization, many technical assessments, and developing a preliminary cost estimate. The initial concept was 19 MGD, but there was a lot of focus looking at all of the flows in and out of DCTWRP including all of the waste and recirculation flows within it. When looking at all of the flows, potential alternatives were identified for capturing those flows as a potential source for the AWPF. The outcome was increasing the design capacity for the AWPF to 25 MGD. Another technical issue was finding the correct equalization storage sizing to help manage diurnal variations. The original concept was a large rectangular structure. However, by changing it to two circular tanks, the volume was increased and the project became more cost effective.

Seventy percent (70%) design was delivered in April 2024 and the project will break ground in October 2024. The anticipated date of completion is in 2027. GWR represents the City of Los Angeles's first step of several steps for the City. The next step will be OpNext, paving the way for a much larger project at the Hyperion Water Reclamation Plant.

3. Technical Presentation: Benefits of Climate Action and Adaptation Planning at Las Virgenes Municipal Water District (*Joe McDermott, Las Virgenes MWD; Eric Vaughan, Rincon*)

The Las Virgenes Metropolitan Water District (LVMWD) and Triunfo Water Sanitation District (Triunfo) worked together to develop a Climate Action and Adaptation Plan (CAAP). One of the reasons the CAAP was developed was to strengthen applications and funding for the Pure Water Project Las Virgenes – Triunfo. Additionally, LVMWD and Triunfo are dedicated to providing high quality water in a cost effective and environmentally sensitive manner, and are committed to the districts' strategic plan calling for a reduction in carbon footprint, both incentives to develop the CAAP. Additionally, the CAAP helped LVMWD and Triunfo to develop solutions, actions, and measures to deal with climate change effects, like wildfire, as two-thirds of their service area burned during the Woolsey fire. Furthermore, as the districts' are state water product dependent,

they were asked to cut back seventy-three percent (73%) of their water usage during the drought, which greatly affected their customers.

The CAAP highlights LVWMD and Triunfo's pure water project, which will provide thirty percent (30%) of the districts' clean water supply starting 2028. The CAAP will help inform LVWMD and Triunfo how to develop their capital improvement program, their ten-year infrastructure investment plan, and their rate studies. Additionally, all climate action and adaptation that LVWMD and Triunfo have done in the last few decades is memorialized in the CAAP, including the construction of a 5 megawatt solar field, on the Las Virgenes – Triunfo Joint Powers Authority (JPA) property lands, the telecommuting policy for employees, and the aeration system upgrades. The CAAP also presents a strategy to reduce greenhouse gas (GHG) emissions in alignment with state goals

In regards to developing the CAAP, JPA and Las Virgenes did a baseline inventory of emissions and a vulnerability assessment where they looked at historical risks from different types of climate hazards, and looked at climate projections from California's Climate Assessment to understand how those risks are changing over time. The consultant Kennedy Jenks helped JPA and Las Virgenes develop a multidepartment workshop. The conversation and inventory informed the strategy development process looking at emissions, changes in emissions, and some of the things that are happening at the state level, and developed targets and goals to develop strategies.

Eighty percent (80%) of the JPA and Las Virgenes emissions are associated with electricity. Carbon free electricity is the largest driver of decarbonization. Reducing wastewater process emissions is in the four to five percent (4-5%) of the total emissions. In terms of climate adaptation, JPA and Las Virgenes want to try to memorialize the lessons learned from the Woolsey fire. Having better access to data, having more real time information available to help the team respond and react to how things change, and thinking about what actions can be taken to harden and protect facilities.

4. Water Recycling Legislative/Regulatory Updates *(Phillip Vander Klay)*

- Bills
 - SB 903 (Skinner) PFAS Source Control
 - Resources Bond
 - Making Conservation a Way of Life bills
- Recycled Water Fees
 - Status Quo
 - Assess surcharge for recycled water production
 - Assess surcharge for permittees without recycled water production
 - Stakeholder meeting 4/18/2024

5. Regulatory Agency Spotlight *(Adam Taing, RWQCB)*

- Salt and Nutrient Management Plan
 - Groundwater Basins in Los Angeles and Ventura Region

- 33 basins and sub-basins within Los Angeles Region (DWR Bulletin 118)
 - 11 groups by hydrographic area
- Beneficial uses generally include Municipal and Domestic Supply (MUN), Industrial Service Supply (IND), Industrial Process Supply (PROC), and Agricultural Supply (AGR)
- Salt and Nutrition Management Plans
 - In 2009, SWRCB recognizes the potential for increased salt and nutrient loading into the groundwater basins as a result of increased recycled water use
 - From 2015 to 2016, six salt and nutrient management plans were adopted as Basin Plan amendments
 - In 2018, there was a Recycled Water Policy update. There a couple new requirements, one of them being the annual reporting requirements for recycled water usage and the other was to incorporate goals for recycled water for the state to meet
 - In 2024, SNMPs were adopted as a Basin Plan amendment or accepted prior to April 8, 2019, and were evaluated in April 8, 2024
- Key Elements of a SNMP
 - Meeting water recycling and stormwater objectives
 - Scribing what the groundwater basin characteristics are
 - Source identification and loading rates (salts, nutrients, other pollutants of concern)
 - Implementation measures to manage the salt and nutrient loading
 - Antidegradation Analysis
 - CEQA Analysis
 - Stakeholder Driven
- Main Water Quality Concerns
 - **Central and West:** Seawater Intrusion
 - **San Gabriel:** Nitrate, VOC, Superfund Site
 - **San Fernando:** Nitrate, VOC, PCE, Sulfate, Metals, Superfund Site
 - **Raymond:** Nitrate, VOC, Superfund Site
 - **Santa Clara:** Salts, Nutrients
- Benefits of Salt and Nutrition Management Plans
 - Intended to expedite the review and permitting process of recycled water projects
 - SNMPs can be integrated into Groundwater Sustainability Plans (GSPs)

Additional Information:

http://www.waterboards.ca.gov/losangeles/water_issues/programs/salt_and_nutrient_management/index.shtml

6. CA State Section Update (*Rafael Villegas*)

- Last WRCA Board Meeting: February 9, 2024
- Next WRCA Board Meeting: May 3, 2024
- Appointment of WRCA Managing Director
 - Brenley McKenna
 - Chief of Subscriber Services: The Water Research Foundation in Denver Colorado
 - Served as Section President for 2016-2017 term
- Appointment of WRCA Treasurer
 - Kyle Swanson
 - CEO and General Manager for Padre Dam Municipal Water District
- Legislative and Regulatory Committee
 - State Budget and Climate Update Bond Status
 - California budget is in deficit
 - Recycled Water-Potable Reuse “Conservation is a way of Life”
 - WRCA attended the California way of life Workgroup Kickoff meeting
 - Major Provisions of California’s DPR Regulations
 - New organizational structure
 - Highest level of Operating Certifications
 - Enhanced source controls
 - Rigorous chemical and pathogen controls
 - California DPR Regulations making international news!
- Reimagining Water Together
 - 39th Annual WaterReuse Symposium
 - Over 900 Water Professionals in attendance
 - Spotlights on Colorado River, Global Water Reuse Dialogue, and 2024 Technology Showcase
- 2024 WaterReuse California Conference
 - September 15th -17th, 2024, in Garden Grove, CA

- Early Bird Registration: Mid-April
 - Hyatt Regency Orange County
- Call for abstracts: Early April

7. Chapter Updates (*Fred Gerringer*)

- Communications Chair: Oliver Slosser oslosser@lvmwd.org
- Rising Professionals Committee Chair: Seto Cherchain Scherchian@BrwnCald.com
- Technical Topics Chair: Alex Franchi alex.franchi@aecom.com
- Agricultural Committee (volunteer opportunity): Seto Cherchian Scherchian@BrwnCald.com
- Meeting Summaries – December 2023
 - Annie Chen and Karina Gonzalez (LA Sanitation and Environment)
- Ad Hoc Urban Irrigation Manual Update Committee
 - Co-chairs: Monica Sanchez/LACSD, Ericka Bensch/LACSD, Jesus Gonzalez/LADWP

8. Membership Roundtable (*Alex Waite*)

- How is your agency considering “purple pipe” programs with advancements in indirect and direct potable reuse regulations?
 - Is your agency/clients considering extending “purple pipe” distribution systems?
 - Suspending new connections?
 - Cancelling recycled water programs?
- Water Reuse California Planning Committee is looking for volunteers to review technical abstracts on the Los Angeles Chapter

9. Next Meetings

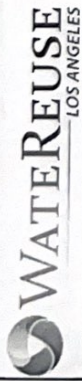
- June 18, 2024 – Host & Sponsor: Eurofins
- August 13, 2024 – Host: LA Sanitation: Sponsor: Carollo
- October 8, 2024 – Joint LA/OC Chapter Meeting at Long Beach Aquarium

10. Adjournment 1:00 p.m.

Los Angeles Chapter Officers for 2023/2024

Jared Lee, President	626-379-8443
Alex Waite, Vice President	424-399-6733
Jennifer Jacobus, Secretary/Treasurer	213-448-2586
Rafael Villegas, Chapter Trustee	213-367-1014
Fred Gerringer, Past-President	626-319-1107

JLee@burbankca.gov
alex.waite@santamonica.gov
jjacobus@rinconconsultants.com
rafael.villegas@ladwp.com
fgerringer@hazenandsawyer.com



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West Basin Municipal Water District

NAME	ORGANIZATION	INITIALS	EMAIL ADDRESS
Adam Taing	Los Angeles Regional Water Quality Control Board	AT	Adam.Taing@Waterboards.ca.gov
Alex Waite	City of Santa Monica	AW	alex.waite@santamonica.gov
Alex Zaragoza	Rowland Water District		azaragoza@rwd.org
Bob Yamaguchi	Walnut Valley Water District	B	byamaguchi@walnutvalleywater.gov
Camille Castillo	West Basin		camillec@westbasin.org
Dinaz Kureishy	City of Santa Monica		dinaz.kureishy@santamonica.gov
Earl Garcia	Brown and Caldwell		egarcia2@brwncaid.com
Everett Ferguson	WRD		eferguson@wrld.org
Farzaneh Shabani	Carollo Engineering		fshabani@carollo.com
Frank Fuchs	West Basin Municipal Water District	FF	Frankf@westbasin.org
Fred Gerring	Hazen and Sawyer	FG	fgerring@hazenandsawyer.com
Glenn van Eekhout	Santa Clarita Valley Water Agency		gvaneekhout@scvwa.org
Helia Ng	Brown & Caldwell	HN	hnq@brwncaid.com
Jared Lee	SCE	JL	jared.lee@SCE.com
Jamie Malpede	West Basin	JM	jamie@westbasin.org
Javier Martinez	Burbank Water & Power		fmartinez@burbankca.gov
Jennifer Jacobus	Rincon Consultants		jjacobus@rinconconsultants.com
Jesus Gonzalez	LADWP		jesus.gonzalez@ladwp.com
John Lockett	WaterReuse Advocates		WaterReuseAdvocates@gmail.com
Katie Beall	Eurofins		katie.beall@ET.eurofinsus.com
Kevin Cullen	West Basin Municipal Water District	KC	KevinC@westbasin.org
Kyle Fuller	Brown and Caldwell	KF	kfuller@brwncaid.com
Lee Portillo	Black & Veatch		portillolm@bv.com
Masih Bari	AtkinsRéalis	MB	masih.bari@atkinsrealis.com
Michael Gruenbaum	West Yost		mgruenbaum@westyost.com
Nicholas Lopez	Burbank Water and Power	NL	nlopez@burbankca.gov
Orlando Rodriguez	West Basin Municipal Water District		orlandor@westbasin.org

brwncaid.org

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NAME	ORGANIZATION	INITIALS	EMAIL ADDRESS
Adam Taing	Los Angeles Regional Water Quality Control Board		Adam.Taing@Waterboards.ca.gov
Alex Waite	City of Santa Monica		alex.waite@santamonica.gov
Alex Zaragoza	Rowland Water District		azaragoza@rwd.org
Bob Yamaguchi	Walnut Valley Water District		byamaguchi@walnutvalleywater.gov
Camille Castillo	West Basin		camillec@westbasin.org
Dinaz Kureishy	City of Santa Monica		dinaz.kureishy@santamonica.gov
Earl Garcia	Brown and Caldwell	EG	egarcia2@brwncauld.com
Everett Ferguson	WRD		eferguson@wrld.org
Farzaneh Shabani	Carollo Engineering		fshabani@carollo.com
Frank Fuchs	West Basin Municipal Water District		Frankf@westbasin.org
Fred Gerring	Hazen and Sawyer		fgerring@hazenandsawyer.com
Glenn van Eekhout	Santa Clarita Valley Water Agency		gvaneekhout@scvwa.org
Helia Ng	Brown & Caldwell		hng@brwncauld.com
Jared Lee	SCE		jared.lee@SCE.com
Jamie Malpede	West Basin		jamiem@westbasin.org
Javier Martinez	Burbank Water & Power		fmartinez@burbankca.gov
Jennifer Jacobus	Rincon Consultants	JJ	jjacobus@rinconconsultants.com
Jesus Gonzalez	LADWP		jesus.gonzalez@ladwp.com
John Lockett	WaterReuse Advocates		WaterReuseAdvocates@gmail.com
Katie Beall	Eurofins		katie.beall@ET.eurofinsus.com
Kevin Cullen	West Basin Municipal Water District		KevinC@westbasin.org
Kyle Fuller	Brown and Caldwell		kfuller@brwncauld.com
Lee Portillo	Black & Veatch	LP	portillolm@bv.com
Masih Bari	AtkinsRealis		masih.bari@atkinsrealis.com
Michael Gruenbaum	West Yost		mgruenbaum@westyost.com
Nicholas Lopez	Burbank Water and Power	ML	nlopez@burbankca.gov
Orlando Rodriguez	West Basin Municipal Water District	OR	orlandor@westbasin.org



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NAME	ORGANIZATION	INITIALS	EMAIL ADDRESS
Paul Chau	Kennedy Jenks		paulchau@kennedyjenks.com
Phillip Vander Klau	Los Angeles County Sanitation Districts		phillipvanderklau@lacsds.org
Rich Nagel	Jacobs	RN	rich.nagel@jacobs.com
Ryan Thacher	Rincon Consultants		rthacher@rinconconsultants.com
Samantha Miranda	Burbank Water and Power	SM	smiranda@burbankca.gov
Sarah Spano	ESA		sspano@esassoc.com
Scott Dellinger	CDM Smith		dellingeras@cdmsmith.com
Seto Cherchian	Brown and Caldwell		scherchian@brwncaid.com
Sunny Wang	City of Santa Monica		sunny.wang@santamonica.gov
Suzanne Brown	LACSD		suzannebrown@lacsds.org
Vincenzo Ciancia	LA County Sanitation Districts		vincenzociancia@lacsds.org
Zita Yu	Jacobs		zita.yu@jacobs.com