

Los Angeles Chapter of the WaterReuse Association
MEETING SUMMARY



Location: Upper San Gabriel Valley Municipal Water District
Address: 602 E. Huntington Drive, Suite B
Monrovia, CA 91016
Purpose: Bi-Monthly Meeting
Date and Time: April 8, 2014 from 11:30 a.m. – 1:30 p.m.
Distribution: Los Angeles WaterReuse Association Chapter Members

Lunch: Sponsored by AECOM

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

1) Venue host presentation: Upper District's Indirect Reuse Replenishment Project and Related Research Findings (Reymundo Trejo)

The Upper San Gabriel Valley Municipal Water District (Upper District) is a member agency of the Metropolitan Water District and provides wholesale supplemental water within its 144 square mile service area that serves roughly 200,000 acre-feet per year (afy) to 900,000 people.

Groundwater typically provides 80 percent of the Upper District's water supply, with imported water comprising the balance. With water levels in the Main San Gabriel Basin at historic lows in recent years, a predicted supply gap 33,000 afy (15% of supply) in 2025, which is expected to recur every 1 to 10 years, and the current drought conditions the State has been facing, the Upper District is moving forward with an Indirect Reuse Replenishment Project (IRRP).

Originally conceptualized during the 1987-92 drought, the current IRRP project will provide advanced treatment of 10,000 afy of recycled water from the LACSD San Jose Creek Water Reclamation Plant.

In 1991, a 16,000 afy project to spread tertiary-treated effluent at the Santa Fe Spreading Grounds was initiated (San Gabriel Valley Water Reclamation Program) but abandoned due to public perception concerns by the Miller Brewing Company. In 1996, the project was redefined to spread up to 10,000 afy of recycled water in the San Gabriel River, south of the Miller intake (San Gabriel Valley Recycled Water Demonstration Project). However, meeting the requirements of the newly promulgated California Toxics Rule would necessitate higher levels of treatment than planned and so the project was not implemented.

In 2008, the project was reconsidered in conjunction with the Water Replenishment District of Southern California to spread 25,000 afy in the Santa Fe Spreading Grounds and San Gabriel River for the Main San Gabriel Basin (Groundwater



Replenishment Improvement Project, GRIP). Alternatives were explored that spanned that ranged from spreading of tertiary-treated to full-advanced treated (MF/RO/UV/AOP) recycled water.

The Upper District decided to explore options for recycled water replenishment that considered the unique conditions of the Main San Gabriel Basin (significant diluent water) while cost-effectively meeting the requirements of the latest Draft Groundwater Replenishment Reuse Regulation. The cost differential among three initial treatment alternatives, i.e., tertiary, advanced treatment using ozone and biological activated carbon (BAC), and full advanced treatment (FAT) ranged from \$62M to \$146M and unit costs ranging from \$416 (tertiary, best case conditions) to \$2,865 (FAT, worst case conditions).

The IRRP will deliver 10,000 afy to the Santa Fe Spreading Grounds (210/605) via an 8-mile pipe with sizes ranging from 36-42 inches. Groundwater modeling has indicated that only 1 drinking water well falls within a 1-year travel time boundary, and there are plans to remove it within the next 5 years.

Bench scale testing was conducted of various treatment options, including ozonation using Foundational Actions Funding grants. Several research grants have been awarded for treatment optimization pilot testing. Side by side comparisons will be conducted of ozone, BAC, MF, RO, UV and soil aquifer treatment (SAT). The ozone/BAC pilot has indicated 30-40% TOC removal as well as contaminants of emerging concern (CEC) reduction. SAT testing will examine NDMA, CECs, TOC. Measuring TOC reduction from SAT could demonstrate greater removal that would allow higher RWC. The last step would be including advanced treatment such as ozonation.

The preferred approach seems to be tertiary treated effluent followed by SAT with a ballpark cost of \$50M (including pump station, pipeline, and right-of-way acquisition).

The Upper District is concerned about the reliability of the diluent water needed to meet the initial 20% Recycled Water Contribution requirement of the draft groundwater regulation. The recent 10-year average just barely satisfies the amount that would be needed for the IRRP's 10,000 afy of recycled water replenishment. Drier hydrologies and less imported water that may result from the effects of climate change could limit the initial flow rate of the IRRP to 8 afy.

The IRRP would reduce reliance on imported water to about 17% of the Upper District's overall supply portfolio. The Engineering Report is currently being drafted and project implementation will include agency coordination, land acquisition, regulatory assessment, research and public outreach.

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

2) Legislative/Regulatory Updates (Raymond Jay)

Raymond briefed the chapter on the following key legislative issues related to recycled water use:

- *AB 2282 Building Standards–Recycled Water Infrastructure*: Examining potential indoor and outdoor uses for recycled water; would impact new development requirements; caveats sought by Metropolitan Water District and the WateReuse Association through 6 amendments that clarify implementation timeline; only address new facilities; includes the WateReuse Research Foundation and/or AWWA Research Foundation are involved in any research; clarify terminology used; (e.g., commercial vs. industrial users); allows final decisions to be made by local agencies that will consider factors such as costs. Local agencies would then have to consider adopting these standards. The bill seems likely to move forward.
- *AB 2417 CEQA Exemption for Recycled Water Pipelines*: Not expecting much of an impact of this allowance for the LA region since there are not likely to be many environmental concerns in already developed area.
- *AB 2636 CalConserve Water Use Efficiency Revolving Fund*: This bill was started last year. It provides self-funding from Proposition 13 and other sources with SRF-type funding mechanisms that would allow funding for conservation, including recycled water projects, to help meet 20 by 2020 goals. Recycled water projects have generally been a low priority for SRF funding.
- Other Recycled Water Legislation
 - AB 2071 – Clarifies that recycled water can be used for pasture animals. Unclear whether it can be used for dairy cows. WateReuse’s position is “watch”, although generally supportive.
 - AB 2403 – Concern that pipelines should not be double-assessed
 - AB 2443 – Provides exemption for mutual water companies to work with water districts; this is currently considered a “taking” with associated compensation
 - AB 1699 – Addresses how plastic particles are handled, e.g., do they contain contaminants that sanitations districts should be concerned with handling?
 - AB 2712 – This bill could stall groundwater reuse replenishment projects
 - SB 104 – Addresses how to handle home generated pharmaceuticals
- 2014 Water Bond:
 - Expected to be on November ballot



- Rendon bill has specific set-asides for recycled water projects
- Some bills have storage components (e.g., 1370 – primarily water storage via dam height/reservoir capacity increases)
- WateReuse has not taken a position on any of the water bond bills, but intends to do so, supporting set-asides in support of recycled water use
- The Federal government is getting involved in CA drought situation and looking for ways to assist, potentially providing funding to expedite projects. This is currently in the negotiating phase.
- Move of Drinking Water Program from CDPH to SWRCB: A formal plan was released in March. While WateReuse would prefer that this shift not take place, it appears it is likely to move forward, so the focus now is to make sure that major concerns are addressed.
- The State Water Resources Control Board is developing a statewide Recycled Water General Permit for non-potable reuse. The existing Statewide Irrigation Permit has not worked very well and very few have signed up.
- Metropolitan's Onsite Retrofit program has \$3M available for property owners. The program begins July 1. Contact Ray Mokhtari for additional information at rmokhtari@mwdh2o.com

3) Los Angeles County Department of Public Health Update (Robert Bueros)

Robert reminded the chapter members of the importance of conducting inspections early in the design process so that pipeline identification and shutdown testing at project completion is successful. Inspectors frequently find cross-connection issues.

Robert also noted that LA County DPH conducts free surveys. As an example, they recently inspected the Federal Navy Base at San Clemente Island that uses recycled water.

4) California State Section Update (Monica Gasca)

- Wade Miller has recently retired from his role as Director of the National WateReuse Association. Melissa Meeker is the new Acting Director.
- SB 104 Drought Relief was passed on March 1. It requires that CDPH approve the Draft Groundwater Reuse Replenishment Regulation by June 30, 2014. It is not yet clear whether CDPH will accept the changes requested by WateReuse or adopt the regulation as currently drafted.
- Los Angeles 2015 CA Section Conference - volunteer opportunities!
 - Conference will be held at the Biltmore Hotel
 - Workshops, tours, presentation, posters to highlight what we've been doing here in LA



- Planning will begin this summer
- Leaders needed for: Poster Sessions, Pre-conference Sessions, Opening Session, Facility Tours, Plenary Session/Town Hall Session

Monica provided a handout of the Annual Conference Planning Matrix that can be found on the LA Chapter WaterReuse website.*

5) Chapter Updates

- a. Approval of February Chapter Meeting Notes - approved
- b. Chapter Newsletter Update (Matt Elsner) – Will have summary of newsletters at conference as poster presentation

6) Focus Areas

- a. Funding Opportunities (John Robinson)
 - New Metropolitan Water District program: Contractor Direct Rebate Option for “out of the norm” projects
 - Metropolitan’s Water Conservation budget doubled, from \$20 to \$40M
 - Metropolitan has a free Landscape Irrigation survey program
 - Department of Water Resources’ IRWMP – next round of funding upcoming
 - Federal Water Resources Development Act (WRDA) has started to release grants
 - US Bureau of Reclamation WaterSMART grant program is still taking applications
 - John will follow up with WRDA at a subsequent meeting regarding its purpose, how to qualify for grants, etc. WRDA covers transportation as well as water.

John provided a handout of Local, State and Federal funding opportunities that can be found on the LA Chapter WaterReuse website.*

7) Other Topics

- a. Industrial Use Committee (Elise Goldman)

The last conference held in December 2013 was very successful and another one might be put on next year.

8) Membership Roundtable - CA Section Conference Highlights (Monica Gasca)

Feedback on the recent CA Section conference was sought from the membership, particularly in light of the next conference being held in LA:

- Breakfast went too long – timing should be better kept.



- A discussion point at the roundtable with General Managers was noted. It was suggested that the industry move away from discounting recycled water but rather to price it the same as potable water recognizing that it is just as valuable as imported supplies.
- Clint Granath noted in response that as a customer that would not work since additional infrastructure is needed to address higher levels of salt in the recycled water stream. Although a reliable source, converting to the use of recycled water requires an investment. Potable water use is much easier to implement.
- Burbank has anchor customer and mandatory use ordinance – having teeth in place helps. Profit margins are much higher for recycled water since they don't have to purchase the water, but they do have to treat it.
- Regulators are listening better to explore possibilities – e.g., Felicia Markus' session – she was taking notes regarding the transition of the Drinking Water Program from CDPH to SWRCB.
- Should consider having presentations with live feedback on smartphones (e.g., Rich Nagel's presentation at San Diego conference.)
- Evelyn Cortez-Davis noted that there's not much focus on the value of recycled water reliability. How do you put cost on reliability factor?
- Terri Sfilko suggested that if the drought continues it would be an opportune time to reflect on how the regulations can be more flexible to expedite project implementation. Perhaps include venues for brainstorming ideas.
- Engaging local universities in the conference should also be encouraged, perhaps by offering small student fees and poster sessions.
- Sharona Sokolow mentioned that there is a Water Resources group at UCLA that she can coordinate with; Chris Demonbrun can also liase with Cal Poly Pomona.
- Evelyn suggested a K-12 art contest could be held to challenge young students to think about the water cycle and recycled water in particular. Winners would be honored during awards lunch.
- Invite local researchers to present.

9) Next Meetings

- June 10, 2014 – Host: Rowland Water District; Sponsor: TBD
- August 12, 2014 – Host: Metropolitan Water District; Sponsor: TBD
- October 14, 2014 –Host: City of LA, Bureau of Sanitation; Sponsor: CH2M HILL
- December 9, 2014 - Host: TBD; Sponsor: TBD

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April 08, 2014 MEETING SUMMARY



Los Angeles Chapter Officers for 2014

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 December, 2013 meeting can be found at:
<http://www.watereuse.org/sections/california/losangeles/meetings>

Meeting Attendees

Member	Organization
Bertha Ruiz-Hoffmann	Los Angeles County Dept. of Parks and Recreation
Brad Boman	Pasadena Water and Power
Bryan Trussell	Trussell Technologies
Chris Demonbrun	Los Angeles/Bureau of Sanitation
Clint Granath	Forest Lawn
Dmitriy Ginzberg	CA Dept. of Public Health - Glendale
Donald Cresse	Los Angeles Dept. of Water and Power
Elizabeth Sobczak	Castaic Lake Water Agency
Eric Smith	CDM Smith
Evelyn Cortez-Davis	Los Angeles Dept. of Water and Power
Fabiola Wells	Glendale Water and Power
Fred Gerringer	Trussell Technologies
Gary Roephe	Cannon
Jason Yim	Castaic Lake Water Agency
Jocelyn Carrillo	Los Angeles/Bureau of Sanitation
Joe Yersky	Walnut Valley Water District
John Robinson	John Robinson Consulting, Inc.
Judi Miller	CH2M HILL
Julia Aranda	MNS Engineers
Kate Martin	Golden State Water Company
Kirk Allen	Los Angeles County Dept. of Public Works
Klin Chang	CA Dept. of Public Health - Glendale
Luis Macias	Los Angeles Dept. of Water and Power
Maria Alvarez	AECOM
Mark Rincon	MNS Engineers
Matt Bequette	Los Angeles/Bureau of Sanitation
Monica Gasca	Sanitation Districts of Los Angeles County
Natalie Glover	Los Angeles County Dept. of Parks and Recreation
Paul Liu	Los Angeles Dept. of Water and Power
Ray Mokhtari	Metropolitan Water District of So. Calif.
Robert Bueras	Los Angeles County Dept. of Public Health

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Rosanna Lau	Glendale Water and Power
Roumiana Karakanova	Pasadena Water and Power
Saba Saeed	Valencia Water Company
Sergio Flores	Valencia Water Company
Seth Carr	Los Angeles/Bureau of Sanitation
Seveymath King	City of Los Angeles/Bureau of Sanitation
Shahnawaz Ahmad	SA Associates
Terri Slifko	Metropolitan Water District of So. Calif.
Tom Monk	Walnut Valley Water District
TOTAL ATTENDEES:	40