

*Handout*

*Agenda Item* 8.8  
*Date* March 28, 2019

WaterReuse Annual Conference Report  
March 2019  
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**Key Takeaways:**

- Rising SL projections in Hawaii scuttled tidally influenced water scalping project for RW due to poor ROI with future increasing salt water intrusions
- CA SB 966 mandating onsite water recycling in large new buildings; setting regulatory requirements for safety
- Need for better coordination between local building agencies and water utilities for RW potential; including incorporating new CA plumbing codes into local planning/inspections
- New funding process for CA SRF—have to get on Funding List; must apply by Dec. 31, 2019; using new Priority Scoring system. New accounting system FisCAL delaying disbursements.
- Public acceptance to DPR remains the biggest obstacle; has taken a lot of successes to build current acceptance but only one mistake to make it all go away. Environmental group which opposed the “Toxic to Tap” (treating Superfund site water) was NOT b/c of questions on the tech, which is doable, but that the public perception hurdle was too much of a risk which could have scuttled the whole RW project. Better to take it slow.
- San Louis Obispo may have overallocated their RW, so the hired CalPoly students to develop a supply/demand analysis tool which confirmed that they had enough IF they managed their timing—eg, not all town sprinklers can go on at the same time.
- LA passed Measure W: Increased funding for water supply via parcel tax on impervious surfaces. Experimenting with removable/inflatable dams in river (concrete channel) for infiltration (where bottom is broken out) and temporary storage for RW supply during gentle rains. Small storms go to sewers for treatment. Will be less urban runoff in future.
- Running into Peak Water Limits; no more cheap and easy water. GW tapped; dams not useful due to changing hydrology, enviro needs, climate change. Can’t build our way out of this one.
- Learning to talk ReUse—when someone hands you the phrase, Toilet to Tap, say “It’s Toilet to Treatment to Treatment to Treatment to Tap.”
- Single heaviest thing they lift to the Space Station is water.
- Advances in decentralized systems make it a growing part of the urban portfolio. Maximizing already in place infrastructure necessary.
- EBMUD: Evaluated multiple projects and decided bigger projects cost more and produced more than what was actually needed so better to pursue smaller non-potable projects that can be phased in over time. Potable reuse in future makes sense; not now for multiple reasons. Will re-eval of potable reuse in 5 years, so pushing those projects out.
- CUWA coordinating w/Green Building council—GBC wants the tech/input from water agencies re:biosolids etc. Taking a distributed Systems Approach; an integrated approach to energy, water, credits structure. On CUWA site: <https://www.cuwa.org>

- DWR is starting a new update to Plumbing Code and looking for input. Need for new codes to be distributed to water purveyors/local regulators and planning departments better.
- UC Davis Center for Water-Energy efficiency study on Onsite implementation challenges. Found that Regulators are not reading the resource docs, even those targeting regulators. Systems people (us) are reading them more often. Conferences and webinars are main info sources; regulators not tapping into them. 3 potential solutions: 1)onsite nonpotable **dedicated** organization/website that holds the information for all.; 2)Regulatory training w/CEUs; 3)highlighting positive examples to create acceptance.
- Onsite non-potable operator training/certification a must for future
- High dose UV very effective at microbial log reductions. Low dose UV has significant risks. Important to characterize true pathogen levels in raw WW.
- UC Irvine South Coast Research and Extension Center—acreage in production; most are still on potable in greenhouses but rest converted to RW. Unique; only one to be researching ag w/reuse water. Lots of research in strawberries, avocados (both sensitive to salts) and specialty (high value) crops.
- Orange County branch of CA CoastKeeper a partner in education; focus on protection of water for fishing, swimming and drinking. Helped w/permitting, GW replenishment regs. Helps residents redesign gardens w/native plants.
- Water conservation as way of life; need to accelerate the clean up of contaminated aquifers. And stop contaminating them. All water is potential DW so keep it clean.
- Concern re: greywater removing flows for RW.
- Carbon footprint—when will that start to be an inhibitor to RW? In one area, they are reducing energy demand by 50% b/c less pumped water imports; in SF, the system is gravity fed, so anything they do will cost more energetically, increasing carbon footprint.
- Microplastics: why are they more difficult to remove than pathogens, etc. Theoretically microfiltration should remove them. Maybe some are being generated inside the system. Plastics being used for o-rings, etc and over time they can shed. Microplastics found in food industry.
- Retrofitting 1200 acres of SF Urban parks via Westside Enhanced water recycling project for GG Park and Lincoln Park Golf Course. Project conceptualized in 1990. Using RO for lake fill w/aquatic species. Concerns re: cross-connects being handled with Signage; isolation valves; purple caps to ID valves; potable water meters w/backflow prevention and no overspray of RW onto drinking fountains. Night irrigation only. Will increase storage in middle of park w/another reservoir. Had been using GW reservoir; project with save 1.4MGD.

The PowerPoint Presentations are all available here:

<https://www.dropbox.com/sh/g9etg9vkdvb4lmp/AABKggqZo7hb8YQSTZmNnNjVea?dl=0>  
and the conference program is here: <https://watereuse.org/news-events/conferences/2019-watereuse-california-annual-conference/conference-program/>