

WaterReuse Association
Los Angeles Chapter Meeting
Carson, CA



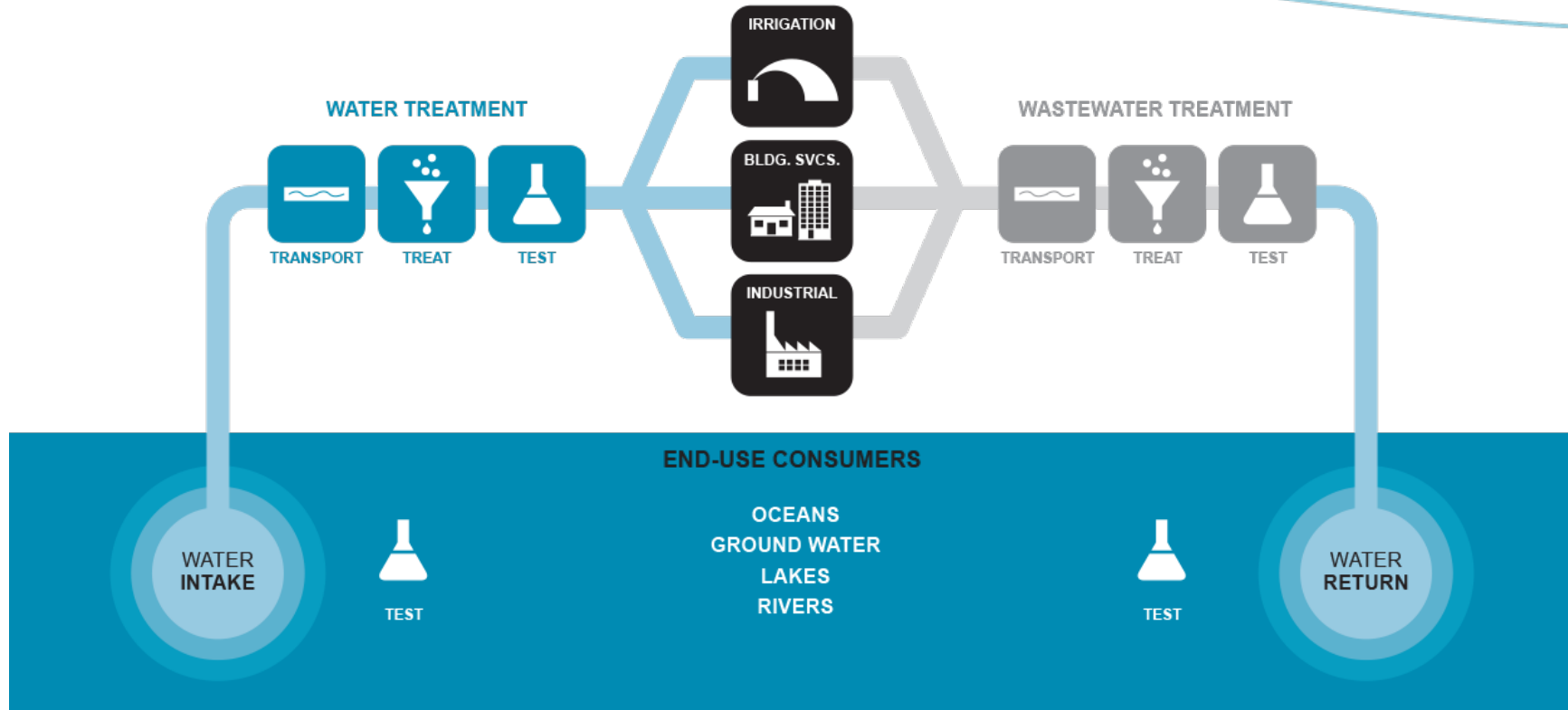
Technology & Innovation

Keel Robinson, North America Water Reuse Leader

June 14th, 2016



We Span the Entire Cycle of Water



Reuse Thought Leadership: Advancing The Cause



California Drought Summit (July 2015)



Presenting to Members of Congress on Water Reuse in D.C. (June 2015)



WaterReuse Manufacturer of the Year (September 2014)

Xylem honored by WaterReuse Research Foundation

From Singapore to Stockholm, and all over California, Xylem's water reuse technology is helping communities around the world build a secure water future. At the recent 19th Annual Water Reuse & Desalination Research Conference, the WaterReuse Research Foundation honored Xylem for its commitment to water reuse research and developing innovative water reuse solutions.



Recent Survey – Californians Support Water Reuse

DROUGHT-WEARY CALIFORNIANS ARE READY FOR RECYCLED WATER*

Residents eager for long-term solutions to water scarcity

76%

of survey respondents believe recycled water should be used as a long-term solution, regardless of drought.

87%

of respondents **SUPPORT** using recycled water as an additional source of water.



41*

SOMEWHAT WILLING

42*

VERY WILLING

83%

are willing to use recycled water in their everyday lives.

Californians believe that recycled water should be used as a

LONG-TERM SOLUTION

for a water-secure future – regardless of potential rainfall from El Niño.



NEARLY 90%

of Californians believe the state should **continue to invest** in recycled water for drinking water even if El Niño brings the expected rainfall.



12%

Only 12% will be less concerned about conserving water if El Niño brings the expected rainfall.



http://www.xylem.com/en-us/expertise/publications/Documents/drought_infographic_single_cropped_rev1.pdf

Silicon Valley Advanced Water Purification Center



UV Disinfection System (Title 22+)



- Silicon Valley Advanced Water Purification Center
- 8 MGD state-of-the-art water reuse facility
- MF-RO-UV treatment train
- High quality non-potable water for irrigation and industrial customers
- Tours available to public

Terminal Island Water Reclamation Plant



UV/Chlorine Advanced Oxidation Process



- Terminal Island Water Reclamation Plant
- 12 MGD indirect potable reuse facility (FAT)
- Groundwater recharge
- First ever full-scale UV/chlorine AOP
- Installation in 2016

Pure Water San Diego



Ozone-Enhanced Biologically Active Filter

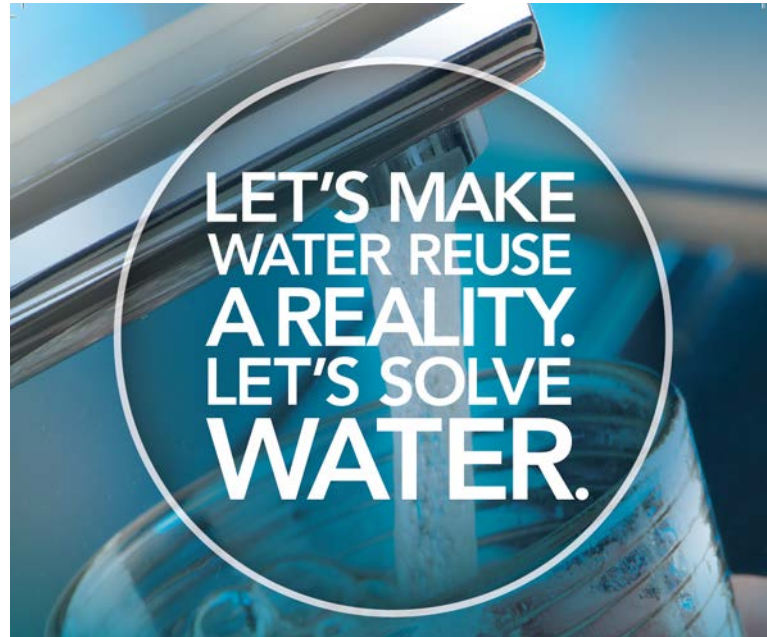
- North City Water Reclamation Plant
- 1.5 MGD Demonstration Plant
- O3 + BAC + MF + RO + AOP for Lake Miramar
- Surface water augmentation (drinking water)
- First full-scale demo of O3 + BAC for reuse in CA
- Evaluating design for 36 MGD reuse plant to address water needs

Next 5 Years: Evolving To Implementation and Optimization

- Continue to lead the regulators
- TOC of reuse water vs. TOC of drinking water
- Toxicological relevance of TORCs
- On-line Sensors**
- Data management**
- Optimize secondary biological wastewater treatment
- Resource recovery/energy efficiency/brine disposal
- Decentralized reuse
- Industrial reuse
- Operator training and experience
- Balancing safety with sustainability
- What other technologies can emerge?



Thank You



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