

# DEMONSTRATION PLANTS AROUND THE WORLD: HOW THEY PROVE PUBLIC HEALTH



## SESSION 1

Thursday, 11 March, 11.00am–12.30pm AEST

As purified recycled water has expanded in recent decades, demonstration projects have played a key role in that journey. In this webinar hosted by WSAA's Adam Lovell and Danielle Francis, engineering firm Carollo will outline their objectives, and the risk assessment process through which they prove the public health goals of the technology. We will take a look inside a fixed and a mobile demonstration plant. Australian health regulator David Cunliffe will also share his experience in developing the US and Australian guidelines relating to purified recycled water.



### ANDREW SALVESON

*Water Reuse Chief Technologist, Carollo (US)*

Andy has led more than 60 advanced treatment designs, pilot tested more than 100 systems, and conducted more than \$10M in applied research. He has been awarded the WaterReuse Association Person of the Year and been part of teams honoured with the CWEA Research Achievement Award, the WaterReuse Association Innovative Project Award, and the International Water Association Market Changing Water Technology Award. Andy serves on a number of expert panels with National Water Research Institute and the Water Research Foundation and has published guidance documents on potable reuse and disinfection for the World Health Organization, the National Water Research Institute, the International Ultraviolet Light Association, and the Water Environment Foundation.



### JOHN REHRING

*Senior Project Manager, Carollo (US)*

For 30 years John has focused on water supply and water reuse planning and implementation across the Southwest US. A Past President of WaterReuse Colorado and the Rocky Mountain Water Environment Association, he has been awarded the WaterReuse Association's President's Award and WaterReuse Colorado's Person of the Year award. He helped develop Colorado's regulations for non-potable reuse in the late 1990s, and has been on the forefront of Colorado potable reuse regulatory development in recent years. He managed the PureWater Colorado direct potable reuse demonstration project in Denver in 2018 and is managing a current project with Colorado Springs Utilities to design and build a mobile direct potable reuse demonstration facility.



### DAVID CUNLIFFE

*Principal Water Quality Adviser, SA Health (AUS)*

David is the Principal Water Quality Adviser at SA Health in South Australia. He is an internationally esteemed water quality regulator, invited by the World Health Organization to be the Lead Editor and Adviser for its 2017 publication Potable reuse: Guidance for producing safe drinking-water. David was also the Chair of the Working Group that produced the Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2) – Augmentation of Drinking Water Supplies.

# A JOURNEY WITH THE COMMUNITY: VISITOR CENTRES AND ENGAGEMENT



## SESSION 2

Tuesday, 27 April, 11.00am-12.30pm AEST

Visitor experiences are an integral part of demonstration projects. Singapore's NEWater visitor centre is the global flagship and saw a unique approach to education, that has been echoed in many cities since. Linda Macpherson and Ian Law designed the NEWater centre, and will outline the education approach taken. Diane Taniguchi-Dennis pioneered one of the first mobile demonstration units as a forward-thinking engagement tool for stakeholders and the community. We will hear about some of the principles employed to change the conversation.



### LINDA MACPHERSON

*New Water ReSources (US)*

Linda is an expert strategist on building understanding and acceptance of water reuse and desalination as part of an integrated approach to sustainable water management. She calls for a new paradigm that involves thinking of water as nature's amazing reusable resource and viewing wastewater treatment plants as resource recovery facilities. The WaterReuse Association, Water Environment Federation, and America's Clean Water Foundation have honoured Linda with awards.



### DIANE TANIGUCHI-DENNIS

*CEO, Clean Water Services (US)*

Diane leads Clean Water Services, the water resources management utility that provides wastewater, stormwater, flow management, water supply planning and ecological enhancement services for more than 600,000 customers in urban Washington County, Oregon, and the Tualatin River Watershed. A leader and innovator in environmental sustainability, water resources management, research and development of new technology and digital solutions, Clean Water Services is a member of the Leading Utility of the World Network and has been recognised as a Utility of the Future.



### IAN LAW

*Adjunct Professor, University of QLD (AUS)*

Ian is the Principal of IBL Solutions, Adjunct Professor at the University of Queensland and a Fellow of the Singapore Water Academy. Ian has more than 40 years experience in advanced wastewater and water reuse projects in Southern Africa, Brazil, Canada, Asia, New Zealand and Australia, and research projects in the US. He designed Singapore's NEWater Demonstration Plant and was Project Director for the NEWater Visitor Centre, while at CH2M Hill. He was the inaugural Independent Chair of the Research Advisory Committee of the Australian Water Recycling Centre of Excellence. He is co-convenor of the independent OneWater Advocates Group.

# SAN DIEGO: A CITY THAT TURNED OPPOSITION AROUND



## SESSION 3

Thursday, 20 May, 10.00am-11.30am AEST

*Like some Australian cities, San Diego is largely dependent on surface water and suffers water shortages. The city famously overcame a public rejection of reuse in the 1990s, but is now building a scheme that will supply one third of the city's water. At the City of San Diego, Jeffery Pasek steered the project from its early days. We will look at the scheme, how public perceptions turned around, and Jeffery will answer questions.*



### JEFFERY PASEK

*City of San Diego (US)*

In Jeffery's time with the Pure Water San Diego Program at the City's Public Utilities Department he has guided the program's regulatory compliance, conducted public outreach, and led studies of Miramar, San Vicente, and Otay Reservoirs. He has been involved in San Diego's potable reuse projects for 25 years. Jeffery's work with San Diego's water system spans more than 40 years. He served as Watershed Manager, was the Senior Biologist in the City's Water Quality Laboratory, and has worked as a reservoir biologist, lake ranger, and resident reservoir keeper.

# ARE WE ALONE ON THIS ROAD?



## SESSION 4

Thursday, 10 June, 4.00pm-5.30pm AEST

Over 35 cities world-wide have adopted purified recycled water for drinking already, especially in the US. In Australia, this includes Perth's groundwater replenishment scheme, Orange NSW's stormwater scheme, and the Western Corridor drought scheme in South-East Queensland. The UK and Africa also have existing schemes, with more under consideration. We will hear about new initiatives in London, Hampshire and Cape Town (following Day Zero), including how OFWAT has spearheaded looking at new approaches in the UK.



### MICHAEL KILLICK

*City of Cape Town (SA)*

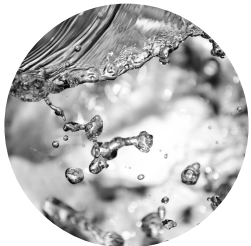
Mike is the Director of Bulk Services - Water and Sanitation Department, Water and Waste Directorate of Cape Town. Having working as the Global Water Markets Leader for Aurecon (now known as Zutari in South Africa), Mike moved to a role in the city of Cape Town to oversee the City's water reuse program and drive the reuse project.



### BRENDON THEUNISSEN

*Zutari (SA)*

Brendon has focused on water and wastewater treatment as a consulting engineer for 25 years. He thrives in planning and conceptualising projects, partnering with clients to understand their challenges and objectives, bringing together perspectives of various disciplines to provide an optimum outcome. Brendon leads the team appointed by the City of Cape Town to undertake the project management, planning, design, and owner's engineer role, and to support the City's community engagement process, for a new direct potable water reuse project. The team also assisted with implementing the City's reuse demonstration plant. He has a passion to see potable water reuse relied on more, as a means of stewarding scarce water resources and as one of the suite of options employed to supply water to growing cities.



### UK SPEAKER/S

*To be confirmed*

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