












8:30am-10:00am	OPENING CEREMONY KEYNOTE ADDRESS								
10:00am-10:45am	MORNING TEA								
10:45am-12:15pm	STREAM 1	STREAM 2	STREAM 3	STREAM 4	STREAM 5	STREAM 6	STREAM 7	STREAM 8	STREAM 9
	EXCELLENCE IN OPERATIONS	ASSET MANAGEMENT & PROJECT DELIVERY	EXCELLENCE IN OPERATIONS	RESILIENCE & WATER SECURITY	SAFEGUARDING COMMUNITY & ENVIRONMENTAL HEALTH	ACHIEVING A CIRCULAR ECONOMY	PEOPLE & CULTURE, DIVERSITY, INCLUSION & EQUITY	STUDENT WATER PRIZE	WATER LEADERS FORUM INVITE ONLY (10:00am-1:00pm)
	DATA DRIVEN WATER MANAGEMENT	MASTER PLANNING <small>session sponsor:</small> wood.	WASTEWATER TREATMENT	CURATED WORKSHOP	NATURE BASED & OTHER SOLUTIONS	RECYCLED WATER	ORGANISATION & CULTURE		
10:50am-10:55am	340	154	185	Water Recycling Specialist Network presents: AVOIDING DAY ZERO SCENARIO WORKSHOP - WHAT ROLE CAN RECYCLED WATER PLAY IN WATER SECURITY AND RESILIENCE PLANNING?	388	363	92		
	EFFICIENCY GAINS FROM DIGITAL DESIGN FOR THE NET ZERO PATHWAY <i>Jorja Strack Mott MacDonald</i>	AUGMENTATION OF INDUSTRIAL WATER SUPPLY TO BELL BAY <i>Carlo Loubser WSP</i>	TWENTY YEARS OF MBR DESIGN AND OPERATION: WHAT HAVE WE LEARNT FROM DELIVERING 25 MBR PROJECTS? <i>Dr Brenton Gibbs Downer Group</i>		INDICATORS OF WATER-RELATED LIVEABILITY OUTCOMES <i>Beata Sochacka ACWEB/The University of Queensland</i>	WATER INDUSTRY CALL TO ARMS: FIGHTING PFAS ON THE FRONT-LINE <i>Katie Macintosh City of Gold Coast</i>	CULTURAL TRANSFORMATION THROUGH DESIGN THINKING FOR INFRASTRUCTURE PLANNING <i>Nichole Kelly and Anita Parr Urban Utilities</i>		
10:55am-11:20am	84	347			286	410	440	SWP01	
	PREDICTING WATER DEMAND FROM PLANTS USING ARTIFICIAL INTELLIGENCE <i>Dr Quentin Bechet Veolia</i>	OPTIMISING SEWER NETWORKS AS A BUILDING BLOCK TO NAVIGATING FUTURE SERVICING COMPLEXITIES <i>Subha Balasubramanian Aurecon Caitlin Launt and Tim Elliot Icon Water</i>			VALUING THE ECONOMIC, SOCIAL & ENVIRONMENTAL BENEFITS OF BLUE, GREEN & GREY INFRASTRUCTURE <i>Alexandra Humphrey Cifuentes and Rosemary Jones Frontier Economics</i>	UNITYWATER'S WAMURAN IRRIGATION SCHEME - NUTRIENT DIVERSION FOR ECONOMIC BENEFIT <i>Marco van Winden AECOM</i>	STRENGTHENING A CUSTOMER-FOCUSED CULTURE <i>Shipra Sareen SA Water</i>	TOWARDS NET-ZERO EMISSION AND ENERGY NEUTRALITY, A NOVEL TECHNOLOGY TO UTILISE METHANE PRODUCED IN WASTEWATER TREATMENT <i>Tao Liu The University of Queensland (QLD)</i>	
11:20am-11:45am	302	249	150		389	180	320	SWP02	
	“REAL-TIME” WATER SUPPLY MODELLING: THEORY AND PRACTICE <i>Ben Wilson Urban Utilities</i>	A COLLABORATIVE JOURNEY IN MEASURING THE SOCIAL VALUE (AMENITY) OF WATERWAYS <i>Dr Frédéric Blin AECOM Michelle Slater Melbourne Water</i>	A MYSTERIOUS AERATION EFFICIENCY PROBLEM AND THE MYTH BUSTER STYLE INVESTIGATION <i>Mark Hordern Urban Utilities</i>		OPTIMISING WETLAND REMEDIATION STRATEGIES VIA PREDICTIVE HYDROGEOCHEMICAL MODELLING <i>Dr Nicolaas Unland Jacobs</i>	PARKLAND CITY SOILS AND RECYCLED WATER <i>Lyndall Pickering Sydney Water</i>	DIVERSITY & LEADERSHIP - HOW AECOM AND THE WATER SECTOR IS ON A JOURNEY <i>Laura Fluck AECOM</i>	FORMATION AND DETECTION OF BROMOPHENOLS AND THEIR CONTRIBUTION TO PLASTIC TASTE IN DRINKING WATER <i>Elkia Szczecinski Curtin University (WA)</i>	
11:45am-12:10pm	316	217	83		21	98	270	SWP03	
	ADVANCED WATER PRODUCTION SCHEDULING USING MATHEMATICAL OPTIMISATION <i>Amanda McGillivray Water Corporation Phillip Meng Water Corporation</i>	DEVELOPMENT OF AN ONLINE RECEIVING ENVIRONMENT DIGITAL TWIN TO ENHANCE LIVEABILITY <i>Cameron Jackson Urban Utilities Meven Huiban DHI</i>	REDUCTION IN NUTRIENT DISCHARGE FROM SOUTH WINDSOR SEWAGE TREATMENT PLANT <i>Omar Kabbara Hawkesbury City Council Sara De Silva University of New South Wales</i>		USING SNIFFER DOGS FOR SALTWATER INGRESS INVESTIGATION IN WASTEWATER NETWORKS <i>Nicole Harvey, Derek Cunningham and Kylee-Lee Black Sydney Water</i>	STRATEGIES FOR IMPLEMENTING SAFE, RELIABLE, AND COST-EFFECTIVE ADVANCED PURIFIED RECYCLED WATER PROJECTS <i>Dr Vijay Sundaram AECOM</i>	PROSPECT TO MACARTHUR DISTRIBUTION LINK - IMPACT OF DIVERSITY AND INCLUSION ON COMMUNICATION AND COLLABORATION <i>Wilson Xu GHD Victor Chin AECOM Anna Sands Sydney Water</i>	USE OF ARTIFICIAL NEURAL NETWORKS AND FLUID TRANSIENT WAVES FOR ACTIVE AND PASSIVE INSPECTION OF WATER PIPELINES <i>Jessica Maria Bohorquez Arevalo The University of Adelaide (SA)</i>	
12:10pm-12:15pm		170	105		119		63		
	TO BE ANNOUNCED	DELIVERING AN ADAPTIVE STRATEGY FOR REDLANDS WASTEWATER TREATMENT IN A HIGHLY CONSTRAINED REGION <i>David Solley GHD</i>	A BIOELECTRODE SENSOR FOR FEED-FORWARD DECISIONS AND CONTROL <i>Tom Williams Enebio</i>		PARK ORCHARDS ONSITE WASTEWATER SERVICING TRIAL <i>Rhys Eddy Yarra Valley Water</i>		HOW TO CREATE A GREAT TEAM: LESSONS LEARNT FROM THE SYDNEY WATER PLANNING PARTNERSHIP <i>Susan Kitching Aurecon Kate Miles Sydney Water</i>		
12:15pm-1:15pm	LUNCH								

1:15pm-3:15pm	STREAM 1	STREAM 2	STREAM 3	STREAM 4	STREAM 5	STREAM 6	STREAM 7	STREAM 8	STREAM 9
	EXCELLENCE IN OPERATIONS	ASSET MANAGEMENT & PROJECT DELIVERY	ASSET MANAGEMENT & PROJECT DELIVERY	RESILIENCE & WATER SECURITY	SAFEGUARDING COMMUNITY & ENVIRONMENTAL HEALTH	DELIVERING EXCELLENCE IN CUSTOMER EXPERIENCE	CLIMATE CHANGE & EXTREME EVENTS	STUDENT WATER PRIZE	DIRECTORS PROGRAM (1:15pm-5:30pm)
	DATA DRIVEN WATER MANAGEMENT	MASTER PLANNING	PROJECT DESIGN AND DELIVERY	WATER RECYCLING	PLANNING AND SAFE SYSTEMS	PUTTING THE ENGAGING BACK IN ENGAGEMENT <small>session sponsor:   </small>	EXTREME EVENTS		
1:20pm-1:25pm	457	262	229	222	404	109	108		
	ENTERPRISE LOW-CODE APPLICATION PLATFORMS (LCAP) - EARLY LEARNINGS Inderjit Batra and Amit Bahuguna <i>Sydney Water</i>	INTEGRATED EFFECTS BASED PLANNING FOR REGIONAL SEWERAGE SYSTEMS Ben Baillie <i>Urban Utilities</i> Daniel Starrenburg <i>Jacobs</i> Hugo Salmon <i>Aurecon</i>	PLANNING A SEWAGE TREATMENT UPGRADE: HOW HARD CAN IT BE? Damon Emerson <i>Hunter H2O</i> Rachael Abberton <i>MidCoast Council</i>	A DEMONSTRATION THAT PURIFIED RECYCLED WATER CAN BE ECONOMICAL Naomi Schipanski <i>Tamworth Regional Council</i>	BEHAVIOR OF ILLICIT AND PSYCHOACTIVE DRUGS IN WASTEWATER TREATMENT Luis Restrepo Vieira <i>Curtin University</i>	A BETTER PRACTICE CUSTOMER SUPPORT FRAMEWORK Jo Murdoch <i>North East Water</i> Evelyn Rodrigues <i>Water Services Association of Australia</i>	COMMUNICATING IN EXTREME EVENTS: WHAT COMMUNITIES EXPECT DURING DAM FAILURE Aimee Tutticci <i>Seqwater</i>		
1:25pm-1:50pm	284		42	46	147	230	145	SWP04	
	NEXT GENERATION ASSET INTELLIGENCE PLATFORM DRIVING STEP CHANGE IN PRODUCTIVITY AND WATER INDUSTRY COLLABORATION Charles Moscato <i>Yarra Valley Water</i> John Draper and Daniel Hoevenaars <i>KPMG</i>	TO BE ANNOUNCED	DELIVERING THE REVOLUTIONARY DESIGN FOR THE LOGANHOLME BIOSOLIDS GASIFICATION FACILITY Cameron McDonald <i>Logan Water Partnership (WSP)</i> Mark Thomas <i>City of Logan</i>	MODELLING PURIFIED RECYCLED WATER INPUTS TO LAKE WIVENHOE Dr Songyan Yu <i>Griffith University</i>	BALANCING WATER SECURITY AND FISH CONSERVATION IN MANAGED FRESHWATER SYSTEMS Michael Harrison and Tim Chaseling <i>Icon Water</i>	RESPECT THE THRONE; FLUSHING OUT PROBLEM BEHAVIOURS FROM THE BOTTOM UP Alicia Fry and Keiran Smith <i>Hunter Water Corporation</i>	EXTREME EVENTS IN WARRAGAMBA DAM AND A PILOT SCALE RESILIENT TREATMENT STUDY FOR CLIMATE CHANGE ASM Mohiuddin and Karen Chia <i>Sydney Water</i> Coralie Gabus <i>Sydney Water</i>	A CLOSED-LOOP TECHNOLOGY BENEFITS THE WASTEWATER TREATMENT PLANTS THROUGH SLUDGE TREATMENT Huan Liu <i>University of Technology Sydney (NSW)</i>	
1:50pm-2:15pm	90	202	34	36	162	15	444	SWP05	
	DATA-DRIVEN DIGITAL TOOL FOR SMART RO MEMBRANE MANAGEMENT IN A LARGE SCALE SEAWATER DESALINATION PLANT Marie Gaveriaux <i>Veolia</i>	UTILISATION OF CLOUD COMPUTING TO QUANTIFY THE CONSEQUENCE OF PIPE FAILURE ALLOWING FOR PRIORITISED INVESTMENT Thomas Moore <i>Urban Utilities</i> Andrew Faulkner <i>WCS Engineering</i>	OVERCOMING CHALLENGES OF THE CROSS RIVER RAIL PROJECT TO PROTECT URBAN UTILITIES ASSETS SERVICING BRISBANE Chris Baxendell <i>Urban Utilities</i>	PROVIDING LONG TERM WATER SUPPLY RELIABILITY TO SYDNEY USING PURIFIED RECYCLED WATER William Wu <i>Aurecon</i> Priyani Madan <i>Arup</i> Chris Moore <i>Sydney Water</i>	IMPROVING WATER QUALITY IN THE MILE HIGH CITY: DENVER WATER'S LEAD REDUCTION PROGRAM Tom Reynolds and Jennine Finlayson <i>Mott MacDonald</i>	URBAN UTILITIES SCHOOLS EDUCATION PROGRAM: INNOVATIVE AND FUN ENGAGEMENT BUILDS WATER LITERACY Helen Tew <i>Urban Utilities</i> Victoria Zdraveski <i>Urban Utilities</i>	CLIMATE EFFECT ON CHLORINE DEMAND AND TRIHALOMETHANE IN WATER SUPPLY SYSTEMS Prof Arumugam Sathasivan <i>Western Sydney University</i>	WOMEN'S EMPOWERMENT THROUGH LEARNING AND WORKING TOGETHER Gowri Pincombe <i>GHD (ACT)</i>	
2:15pm-2:40pm	140	291	207	133	283	78	417	SWP06	
	USING BIG DATA TO MANAGE DIGITAL METERS Brendan Nitschke and James Clutterbuck <i>GWMWater</i>	EXTREME EVENTS, BIG DATA AND WEIGHING COST-BENEFITS ON PROPOSED WATER INFRASTRUCTURE Dr Gareth Williams and Dr Brian Williams <i>FSA Data</i>	OFFICER SOUTH SEWER PUMP STATION Don Sirikhant and Jack O'Brien <i>Zinfra/Jaydo/WSP JV</i>	UNDERSTANDING THE AFFORDABILITY OF RECLAIMED WATER: AN AGRICULTURAL ENTERPRISE PERSPECTIVE Dr Ben van den Akker <i>SA Water</i>	QMRA AND HEALTH-BASED TARGETS FOR LEGIONELLA A/Prof Susan Petterson <i>Water & Health/Griffith University</i>	THE GRASS WHISPERERS - UNLOCKING HIDDEN WATER IN THE SECRET GARDEN Jeremy Snowdon-James <i>EKO Engineering</i> Tori Hampton <i>Power and Water</i>	MONITORING CLIMATE RESILIENCE ACTIONS - 'DON'T LET THE PERFECT BE THE ENEMY OF THE GOOD' Julia Stanley <i>Barwon Water</i> Rob Turk <i>Nation Partners</i>	TO BE ANNOUNCED (VIC)	
2:40pm-3:05pm	285	330	206		39	113	189		
	THE FUTURE OF FRONTLINE OPERATIONS IN THE WATER SECTOR Sean Leyden <i>KPMG</i>	THE ONLY WAY IS UP! APPLYING EVIDENCE BASED SOLUTIONS TO GOLD COAST DENSIFICATION CHALLENGES Roger Crozier <i>Stantec</i> Anton Adina <i>City of Gold Coast</i>	WHOLE OF LIFE COST OPTIMISATION IN BOWEN STP UPGRADE Dr Bob Ma <i>Aquatec Maxcon</i>	TO BE ANNOUNCED	EXPLOSIVE ATMOSPHERES IN WASTEWATER ASSETS: A NATIONAL APPROACH Dr Ian Evanson <i>Stantec</i> James Gardner <i>Water Services Association of Australia</i>	WATERWORLD: EMPOWERING STUDENTS TO TAKE 4 MINUTE SHOWERS THROUGH GAMIFICATION Kristy Ratcliffe <i>Hunter Water Corporation</i>	EXTREME CLIMATE EVENTS AND ASSOCIATE WATER QUALITY AND ORGANIC MATTER CHANGES IN SURFACE WATER SOURCES Dr Hiua Daraei <i>University of South Australia</i>		
3:05pm-3:10pm	66	458	44	315	40	103	19		
	MINIMISING LEAKS & BREAKS IN PIPES WITH INNOVATIVE INTEGRATED DEPLOYMENT Dammika Vitanage <i>Sydney Water</i>	INTEGRATED CATCHMENT PLANNING APPROACH IMPROVES RELIABILITY, PERFORMANCE AND LIVEABILITY FOR URBAN UTILITIES' CUSTOMERS Anita Parr <i>Urban Utilities</i>	THE MATRIX CONTINUES - THE POWER OF AUGMENTED REALITY ON COMPLEX CONSTRUCTION SITES Anthony Domanti <i>WSP</i> Matthew Febey and Danny Vella <i>Downer Group</i>	PURIFIED RECYCLED WATER: NOT JUST FOR DROUGHT - IMPROVED INTEGRATED WATER MANAGEMENT FOR INLAND COMMUNITIES Darren Romain <i>Aurecon</i>	WET WEATHER MANAGEMENT: A PRINCIPLES BASED SOLUTION Eva Mcloughlin and Annabel Hofstee <i>Urban Utilities</i>	CUSTOMER CENTRIC WATER ISOLATIONS; COMBINING NEW TECHNOLOGIES WITH EXISTING CONSTRUCTION TECHNIQUES TO ENHANCE CUSTOMER EXPERIENCE Liam Hynes <i>Diona</i> Clint Carlaw <i>Urban Utilities</i>	DIRECT POTABLE RE-USE PLANT TRIALED IN RESPONSE TO EMERGENCY DROUGHT PLAN Yandre Burger <i>Proxa Water</i>		
3:15pm-4:00pm	AFTERNOON TEA								

	STREAM 1	STREAM 2	STREAM 3	STREAM 4	STREAM 5	STREAM 6	STREAM 7	STREAM 8
	WORKSHOP 1	WORKSHOP 2	PANEL 3	PANEL 4	WORKSHOP 5	PANEL 6	PANEL 7	PANEL 8
4:00pm-5:30pm	Smart Water Network Forum (SWAN) presents: UNDERSTANDING THE SUCCESSES AND ROADBLOCKS IN DIGITAL WATER JOURNEY: PEOPLE, PROCESS, TECHNOLOGY	Aqwest Bunbury Water presents: QUALITY ASSET @ HANDOVER	Peter Cullen Water and Environment Trust presents: THE GREAT DEBATE: OUR WATER SECTOR NEEDS MORE LEADERS, AND LESS EXPERTS	Melbourne Water presents: PLANNING FOR LONG TERM WATER SECURITY IN AN UNCERTAIN FUTURE: HOW IT COMPARES ACROSS AUSTRALIA	Urban Utilities presents: TRADE WASTE SOURCE CONTROL FOR CONTAMINANT OF CONCERN	AWA Asset Management Specialist Network presents: BACK TO THE FUTURE	The University of Queensland presents: NET-ZERO EMISSIONS IN THE WATER INDUSTRY - WHERE WE ARE AND HOW TO GET THERE?	AWA Water Quality Monitoring and Analysis Specialist Network TAP WATER IS BAD FOR YOU - FIGHTING FICTION AND FAKE NEWS

8:30am–10:00am	OPENING CEREMONY KEYNOTE ADDRESS							
10:00am–10:45am	MORNING TEA							
10:45am–12:15pm	STREAM 1	STREAM 2	STREAM 3	STREAM 4	STREAM 5	STREAM 6	STREAM 7	STREAM 8
	EXCELLENCE IN OPERATIONS	ASSET MANAGEMENT & PROJECT DELIVERY	CLIMATE CHANGE & EXTREME EVENTS	COMMUNITIES OF THE FUTURE	PEOPLE & CULTURE, DIVERSITY, INCLUSION & EQUITY	LEADERSHIP, GOVERNANCE & PROGRESSIVE REGULATION	ACHIEVING A CIRCULAR ECONOMY	WSAA SESSION 1 
	DATA DRIVEN SEWER MANAGEMENT <small>session sponsor: </small>	PIPE FAILURE & LEAKAGE REDUCTION <small>session sponsor: </small>	CLIMATE ADAPTATION & RESPONSE	TECHNOLOGY AND INNOVATION <small>session sponsor: </small>	SAFETY & WELLBEING	EMERGING ISSUES & RESPONSE	RESOURCE RECOVERY	
10:50am–10:55am	399	318		310	303	49	158	THE RACE TO ZERO Speakers to be announced
	END OF WASTE: HOW REAL-TIME DATA HELPED URBAN UTILITIES INCREASE BIOSOLIDS PROFITABILITY & ENVIRONMENTAL PERFORMANCE David Lynch <i>Klir</i> Peter Donaghy <i>Urban Utilities</i>	ADVANCES IN THE FIELD OF ACTIVE LEAK PREVENTION WITH ACOUSTIC SENSING Dr Jaime Valls Miro <i>University of Technology Sydney</i> Dammika Vitanage <i>Sydney Water</i>	TO BE ANNOUNCED	GLOBAL APPLICATIONS OF INTERNET OF THINGS TECHNOLOGY IN THE WATER INDUSTRY Dr Ari Shammay and Alana Duncker <i>Stantec</i>	COFFEE CONNECTIONS - SOCIAL NETWORKING IN A PANDEMIC Theekshana Kodippili <i>Stantec</i>	THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS - BEYOND ANNUAL REPORTING TO GENUINE ORGANISATIONAL INTEGRATION Milena Atanassova <i>Jacobs</i>	RETHINKING WASTEWATER TREATMENT FOR A CIRCULAR ECONOMY - A PARADIGM SHIFT CAUSED BY SCOPE 1 EMISSIONS Peter Hillis <i>pH2O Consulting</i>	
10:55am–11:20am	12	326	405	17	431	243	398	
	DIGITAL TWIN DEVELOPMENT IMPLEMENTATION, AND RESULTS FOR THE CHANGI WRP, SINGAPORE Bruce Johnson <i>Jacobs</i>	DEVELOPMENT OF SYSTEM LEAKAGE MANAGEMENT PLAN USING NINE PILLARS APPROACH Ken Goraya <i>Unitywater</i>	RESILIENCE THROUGH EXTREMES - HISTORY OF SYDNEY DESALINATION PLANT AND ITS FUTURE AS PART OF A RESILIENT WATER SYSTEM Reece Karamihas <i>Sydney Desalination Plant</i>	NAVIGATING THE DIGITAL TRANSFORMATION OF WATER USE IN THE HOME USING VISUALISATIONS OF POSSIBLE FUTURES A/Prof Simon Fane and Alexandra Butler <i>Institute for Sustainable Futures/ University of Technology Sydney</i>	PARTNERING WITH CONTRACTORS TO PLAN AND DELIVER IMPROVED SAFETY PERFORMANCE Ben Ingram <i>Unitywater</i>	WORLD'S FIRST WATER MARKETS PILOT ON THE BLOCKCHAIN BUILDING INDISPUTABLE ACCOUNTABILITY BETWEEN THE WATER WE HAVE, THE WATER WE USE, AND THE WATER WE SHARE: AN INDEPENDENT SOURCE OF TRUTH Katrina Donaghy <i>Civic Ledger</i>	THE APPLICATION OF WAS-ONLY THERMAL HYDROLYSIS AT PSYTTALIA WWTP Julien Chauzy <i>CAMBI</i>	
11:20am–11:45am	86	192	100	333	343	377	401	
	HYDRAULIC CAPACITY INCREASE OF A WASTEWATER TREATMENT PLANT THROUGH ADVANCED CONTROL (DIGITAL TWIN) Thomas Debruyne <i>Veolia</i>	USING MACHINE LEARNING TO PRIORITISE ACOUSTIC LEAK-DETECTION FIELDWORK BY PREDICTING MAIN PIPE LEAKS Dr David Rawlinson and Catherine Yu <i>WSP</i>	NEW ZEALAND'S APPROACH TO ESTIMATING GREENHOUSE GAS EMISSIONS FROM WASTEWATER Dr David de Haas <i>GHD</i> Evie Wallace <i>Beca</i>	MONITORING AND ANALYSING WATER DEMAND IN AUSTRALIAN MULTI-LEVEL RESIDENTIAL BUILDINGS Brendan Josey and Dr James Gong <i>Deakin University</i>	THE NEXT FRONTIER OF SAFETY - MATURING OUR APPROACH TO PSYCHOLOGICAL SAFETY AND WELLBEING Amy Singe and Elyse Nijssse <i>Yarra Valley Water</i>	THE ECONOMICS OF DAM SAFETY REGULATION Daniel Culpitt <i>Synergies Economic Consulting</i>	NUTRIENT RECOVERY FROM HIGH STRENGTH ANAEROBIC DIGESTER DIGESTATE THROUGH PILOT SCALE ELECTRODIALYSIS Dr Andrew Ward <i>ACWEB/The University of Queensland</i>	
11:45am–12:10pm	183	242	281	253	267	151	342	
	MOATA SMART WATER: DELIVERING SMART FLOOD MANAGEMENT IN BANGKOK Graigan Panosot <i>Mott MacDonald</i>	AUSTRALIA'S FIRST RESILINE 320 SPRAYLINE TRIAL FOR WATER MAIN RENEWAL Gordon Lynch <i>Downer Group</i> Jonathan Farrell <i>Urban Utilities</i>	CLIMATE CHANGE ADAPTATION - MOVING FROM TALK TO ACTION Penny Joseph and Elliot Cichero <i>Sydney Water</i>	INTEGRATED WATER MANAGEMENT AT AQUAREVO Ninad Dharmadhikari <i>South East Water</i>	ONSITE MENTAL FITNESS PROGRAM: PRACTICAL PATHWAYS TO WORKPLACE MENTAL HEALTH AND WELLBEING FOR OPERATIONAL TEAMS Simon Johnson and Graham Willey <i>Urban Utilities</i>	A NEW LEGAL PRECEDENT TO SUPPORT BETTER MANAGEMENT OF TELECOMMUNICATIONS INSTALLATIONS ON WATER ASSETS Carmel Serratore, Joseph Meissner and Brian Hester <i>Seqwater</i>	WHAT GOES AROUND COMES AROUND: OPPORTUNITIES FOR BENEFICIAL REUSE OF DIGESTATE IN AUSTRALIA Brandon Bloom and Alister Green <i>GHD</i>	
12:10pm–12:15pm	14	300	407	168	430	314	20	
	TIME-OF-USE TARIFFS. ITS TIME FOR A CONVERSATION Dr Ian Monks <i>Griffith University</i>	SIX YEARS OF PIPELINE TESTING Amy Smith and Anton Bardak <i>SMEC</i>	COASTAL STORAGE TO ACHIEVE SDG6 Usman Khalil <i>University of Wollongong</i>	CONSTRUCTED MANGROVES AS A WASTEWATER OFFSET SOLUTION - SOUTHERN REDLAND BAY CASE STUDY Tony Mcalister <i>Water Technology</i>	TO BE ANNOUNCED	REFORMING AOTEAROA/NEW ZEALAND'S WATERS SERVICES INDUSTRY Garry Macdonald <i>Beca</i>	30,000 TONS OF HIGH GRADE SALEABLE SALT RECOVERED FROM WASTE WATER Yandre Burger <i>Proxa Water</i>	
12:15pm–1:15pm	LUNCH							

1:15pm-3:15pm	STREAM 1	STREAM 2	STREAM 3	STREAM 4	STREAM 5	STREAM 6	STREAM 7	STREAM 8
	EXCELLENCE IN OPERATIONS	ASSET MANAGEMENT & PROJECT DELIVERY	EXCELLENCE IN OPERATIONS	COMMUNITIES OF THE FUTURE	FIRST NATIONS PEOPLE KNOWLEDGE & PARTICIPATION	RESILIENCE & WATER SECURITY	ACHIEVING A CIRCULAR ECONOMY	ACHIEVING A CIRCULAR ECONOMY
	DATA DRIVEN SEWER MANAGEMENT <small>session sponsor: </small>	DATA DRIVEN DECISION MAKING <small>session sponsor: </small>	WILDCARD	EMPOWERED COMMUNITIES <small>session sponsor: </small>	JOURNEY TO INCLUSIVITY	PLANNING	RESOURCE RECOVERY	WSAA SESSION 2 
1:20pm-1:25pm	91	104	269	215	424	411		
	DETECTING BLOCKAGES IN SEWERS BY USING TREES AS SENSORS Dr Quentin Bechet <i>Veolia</i>	SUCSESSES USING INSIGHTS FROM DATA DRIVEN URBAN UTILITIES PROGRAM MANAGEMENT James Twohig <i>Mott MacDonald</i> Daniel Muir <i>Urban Utilities</i>	LOW CAPEX AND LOW DO: MELBOURNE WATER'S NEW INNOVATIVE 160S NRP WASTEWATER TREATMENT PLANT Aprilia Vellacott <i>Jacobs</i>	BUILDING DROUGHT RESILLIENCE THROUGH SOCIAL NETWORKS AND COLLECTIVE RESPONSES Anji Perera <i>University of Canberra</i>	UNDERESTIMATING THE JOURNEY IN DEVELOPING A REFLECT RECONCILIATION ACTION PLAN Caroline Kerkhof <i>TRILITY</i>	ADAPTIVE PLANNING TO ENHANCE PREPAREDNESS FOR FUTURE DROUGHTS Mark Wilton <i>Aurecon</i> Nicole Vonarx <i>Icon Water</i>	TO BE ANNOUNCED	
1:25pm-1:50pm	371	171	55	28	452	141	80	
	SOUTH EAST WATER HOLISTIC CATCHMENT BASED MONITORING AND OPERATIONAL MODELLING OF A SEWER CATCHMENT Joshua Finch <i>South East Water</i> Patrick Bonk <i>Innovyze</i>	UTILITIES SPATIAL PLATFORMS, ACCESSIBILITY AND BUSINESS IMPROVEMENT Emilio Charles and Sue Mortimer <i>Sydney Water</i>	OPERATIONALISING RECYCLED WATER IN THE NEW WORLD Kevin Page <i>City of Gold Coast</i>	JOHNSTONS CREEK NATURALISATION - ENGAGING COMMUNITIES TO DELIVER A RESILIENT STORMWATER UPGRADE Jordan Mulhearn and Cath Mullins <i>Sydney Water</i> David Crowhurst <i>Diona</i>	WORKING WITH TRADITIONAL OWNERS IN WATER RESOURCES STRATEGIC PLANNING Kate Maddy <i>Greater Western Water</i> Lisa Hocking <i>Gunaikurnai Land and Waters</i> Aboriginal Corporation (GLaWAC)	GREATER SYDNEY WATER STRATEGY - A NEW APPROACH TO DROUGHT RESILIENCE Dr Dennis Cho <i>Jacobs</i>	CHAR-GOLD: BIOCHAR AND ITS KEY ROLE IN ACHIEVING A CIRCULAR ECONOMY Johanna Johnson <i>Logan Water</i>	
1:50pm-2:15pm	195	453	164	216	295	421	416	
	USING DATA ANALYTICS TO RAPIDLY RESOLVE WASTEWATER NETWORK EMERGENCY INTRUSION INCIDENT Phillip Meng <i>Water Corporation</i>	ROOT CAUSE ANALYSIS Dr Kelly Newton <i>SA Water</i>	A NOVEL ADAPTATION OF WATERVAL PROTOCOLS TO ADDRESS CHEMICAL RISKS IN WATER RECYCLING Dr Kathy Northcott <i>Veolia Australia New Zealand</i>	URBAN UTILITIES AND TANGALOOMA ECOMARINES PARTNERSHIP: CREATING DEEP COMMUNITY CONNECTIONS AND GROWING YOUNG ENVIRONMENTAL LEADERS Billy Miceski and Penny Limbach <i>Urban Utilities</i>	MAKING INDIGENOUS ENGAGEMENT ON WATER VALUES MEANINGFUL DURING COVID 19 RESTRICTIONS Nathan Malcolm and Michael Ulph <i>GHD</i>	IMPROVING REMOTE ABORIGINAL COMMUNITY WATER SECURITY - 'TRIAGING' WATER SOURCE FAILURE RISK Kate Hyland and Shane Papworth <i>Power and Water</i>	BIOSOLIDS BIOCHAR PROPERTIES FROM AUSTRALIAN FIRST PYROLYSIS TECHNOLOGY Dr Aravind Surapaneni <i>South East Water</i>	
2:15pm-2:40pm	64	99	443	62	456	214	297	
	DETECTING WASTEWATER BLOCKAGES WITH DIGITAL WATER METERS? A SURVEY OF METHODS USED BY SYDNEY WATER Adam Drenoyanis and Dr Christoph Prackwieser <i>Sydney Water</i>	END-TO-END PIPELINE ASSET MANAGEMENT Ivan Beirne <i>Unitywater</i>	DIGITAL TRANSFORMATION: CREATING VALUE FROM OPERATIONAL DATA Elizabeth Quarrell and Mirza Baig <i>SA Water</i>	BIRREGURRA SUSTAINABLE COMMUNITIES - WATER PROGRAM Sandra Brady and Jacinta Burke <i>Barwon Water</i>	BUILDING RESPECTFUL LASTING RELATIONSHIPS THROUGH CREATING ECONOMIC OPPORTUNITY Marc Doyle and Shouwn Oosting <i>McConnell Dowell & Diona</i> Clyde Rigney <i>SA Water</i>	THE ROLE OF WATER SENSITIVE URBAN DESIGN (WSUD) TECHNOLOGIES TO IMPROVE WATER PERFORMANCE OF RESIDENTIAL INFILL Mojtaba Moravej <i>The University of Queensland</i>	LUGGAGE POINT ANITA™ MOX SIDESTREAM TREATMENT Justin Todhunter <i>Urban Utilities</i>	
2:40pm-3:05pm	274	349	30	48	287	118	304	
	OPTIMISATION ALGORITHMS IN A REGIONAL VACUUM SEWER UTILITY Kale Needham <i>Spiral Data</i> Colin Shackelford <i>Alexandrina Council</i>	FINDING EFFICIENCIES IN WATER MAIN RENEWAL REQUESTS Alana Duncker <i>Stantec</i> Paris McMullen <i>Greater Western Water</i>	SCUM ACCUMULATION REPRESENTS UNUTILISED METHANE POTENTIAL AND REVENUE OPPORTUNITY IN ANAEROBIC LAGOONS Peter Wardrop <i>Melbourne Water</i>	EVOLUTION IN ENGAGEMENT - COMMUNITY INTERACTIVE MAPPING Eamonn Flynn and Caitriona Ledgewood <i>Downer Group</i> Katelyn Venn <i>Urban Utilities</i>	TRAWOOL WALKING TRACK AND FISHING PLATFORMS, PROJECT PARTNERING WITH TAUNGURUNG Steven Nash <i>Goulburn Valley Water</i>	DRIVING WATER SECURITY AND SUSTAINABILITY THROUGH HARNESSING ORGANISATIONAL INNOVATION EFFECTIVENESS Dr Shoshana Fogelman <i>Sydney water</i>	DIGITAL TOOL FOR DRIVING CIRCULAR ECONOMY OUTCOMES IN THE AUSTRALIAN RED MEAT INDUSTRY Dr Fabiana Tessele <i>Tessele Consultants</i>	
3:05pm-3:10pm	127	176	329	280			311	
	IMPROVING THE VALUE OF CCTV INSPECTION DATA USING ARTIFICIAL INTELLIGENCE, AUTOMATION AND INTEGRATION Mark Lee <i>VAPAR</i>	SEWERAGE PUMPING STATION RATIONALISATION - LESSONS LEARNED Md Akhtaruzzaman <i>City of Gold Coast</i>	HITTING SNOOZE ON THE 3AM ALARM Peter Ketting <i>Ventia</i>	THE FUTURE OF WATER, WASTE AND ENERGY MANAGEMENT IS INTEGRATED Chris Hertle <i>GHD</i>	TO BE ANNOUNCED	TO BE ANNOUNCED	WOODMAN POINT BIOSOLIDS MASTER PLANNING - FUTURE PROOFING TO ACHIEVE A CIRCULAR ECONOMY Gokul Bharambe <i>Jacobs</i>	
3:15pm-4:00pm	AFTERNOON TEA							

	STREAM 1	STREAM 2	STREAM 4	STREAM 5	STREAM 6	STREAM 7	STREAM 8	STREAM 9
	WORKSHOP 9	PANEL 10	PANEL 11	PANEL 12	PANEL 13	WORKSHOP 14	WORKSHOP 15	WORKSHOP/PANEL 16
4:00pm-5:30pm	AWA Water Efficiency Specialist Network presents WHY IS WATER STILL WASTED? LEARNING FROM AUSTRALIA'S WATER-SAVING JOURNEY TO HELP MEET OUR WATER SECURITY AGENDA	Australian Water Partnership, International Water Centre, Griffith University and WaterAid present: PARTNERING FOR WATER CLIMATE-RESILIENT SECURITY IN ASIA PACIFIC	Monash Sustainable Development Institute presents TRANSFORMING WATER SYSTEMS FOR PEOPLE AND PLANET	SMEC presents THE OLYMPIC WATER CHALLENGE: WATER OPPORTUNITIES AND RISKS ON THE WAY TO, AND LEGACY BEYOND, BRISBANE 2032	International Water Association Australia (IWAA) presents AMPLIFYING THE INDIGENOUS VOICE IN WATER MANAGEMENT	RMIT Melbourne presents RETHINKING COMMUNITY ENGAGEMENT FOR A SHARED FUTURE	Queensland Water Directorate presents DEVELOPING SOLUTIONS TO THE WATER INDUSTRY'S TRAINING SUPPLY MARKET CRISIS	Water Services Association of Australia presents DIGITAL INNOVATION IN THE URBAN WATER INDUSTRY
5:30pm	NATIONAL WATER AWARDS AND GALA DINNER							

9:00am–10:30am	KEYNOTE ADDRESS CLOSING CEREMONY							
10:30am–11:15am	MORNING TEA							
11:15am–12:45pm	STREAM 1	STREAM 2	STREAM 3	STREAM 4	STREAM 5	STREAM 6	STREAM 7	STREAM 8
	EXCELLENCE IN OPERATIONS	ASSET MANAGEMENT & PROJECT DELIVERY	ASSET MANAGEMENT & PROJECT DELIVERY	RURAL, REMOTE & REGIONAL WATER	RESILIENCE & WATER SECURITY <small>session sponsor: AECOM</small>	RESILIENCE & WATER SECURITY	DELIVERING EXCELLENCE IN CUSTOMER EXPERIENCE	INTERNATIONAL
	BIOSOLIDS	CONDITION-BASED DECISION MAKING	PROCESSES AND SYSTEMS	TECHNOLOGY	STRATEGIC PLANNING	INNOVATION	DATA DRIVEN ENGAGEMENT & EXPERIENCE	WATER FOR DEVELOPMENT
11:20am–11:25am	397	169	335	309	451	376	306	11:15AM–12:45PM PARTNERSHIPS FOR IMPROVING RESILIENCE AND WATER MANAGEMENT CAPABILITY IN VIETNAM, CAMBODIA AND INDONESIA
	ADVANCED ANAEROBIC DIGESTION USING THERMAL HYDROLYSIS PROCESS AT XIAOHONGMEN PLANT – EXPERIENCE AND PERFORMANCES <i>Julien Chauzy CAMBI</i>	VACUUM SEWER SYSTEM CHALLENGES AND FUTURE PLANNING <i>Jack Foster WSP</i>	URBAN UTILITIES' PROGRAM MANAGEMENT APPROACH: CHANGING THE WAY WE MANAGE OUR CAPITAL INVESTMENT PORTFOLIO <i>Michael Kahler Urban Utilities Robert Wilson KBR</i>	ASSESSMENT OF GAC FILTRATION FOR THE REMOVAL/REDUCTION OF DISINFECTION BY-PRODUCTS <i>Emma Sawade SA Water</i>	COLLABORATIVE ADAPTIVE PLANNING <i>Meagan Salter Greater Western Water Madeleine Greenlee Melbourne Water</i>	ASSESSING THE POTENTIAL OF A GREYWATER REUSE SYSTEM IN BRISBANE, AUSTRALIA <i>Diana Clarisse Montano Navarro The University of Queensland</i>	USE OF “DIGITAL TWINS” WITH FAILURE MODELS TO PREDICT WATER CUSTOMER INTERRUPTION SERVICE LEVELS <i>Ben Wilson Urban Utilities</i>	
11:25am–11:50am	435	76	6	174	239	255	247	
	DEYHYDRIS TWIST, AN ADVANCED DEWATERING SYSTEM WITH A PISTON PRESS – PERFORMANCE ON THE FIRST FULL SCALE IN AUSTRALIA <i>Alice Wan SUEZ</i>	ASSESSING CONCRETE CORROSION DEPTH IN SEWER PIPES USING A LARGE-SCALE PENETRATION ROBOT <i>Dr Alex Stumpf La Trobe University</i>	BUILDING SEQWATER'S CONTROL SYSTEMS ASSET MANAGEMENT <i>Pallavi Joshi Seqwater</i>	REMOTE COMMUNITY DEPLOYMENT OF A PROTOTYPE MCDI UNIT FOR REMOVAL OF CONTAMINANTS FROM BRACKISH GROUNDWATERS <i>Prof David Waite University of New South Wales</i>	DEVELOPING A VALLEY DROUGHT STRATEGY – A CASE STUDY OF THE MACQUARIE VALLEY, NSW, AUSTRALIA <i>David Lloyd GHD Himali Samanmala Hadungoda WaterNSW</i>	WATER AND THE HYDROGEN RAINBOW <i>Katie Potts GHD</i>	WHAT GETS MEASURED GETS VALUED: GATHERING GAME- CHANGING COMMERCIAL AND SOCIAL IMPACT INSIGHTS FROM YOUR STAKEHOLDER, COMMUNITY, ENGAGEMENT, INDUSTRY AND EDUCATION PROGRAMS <i>Matthew Lane Atria Group</i>	
11:50am–12:15pm	263	419	365	235	323	153	111	
	SLUDGE PIPELINE POLYMER INJECTION TO REDUCE FRICTION AND INCREASE SLUDGE TREATMENT CAPACITY <i>Amin Malekizadeh Urban Utilities</i>	CONCRETE ASSETS UNDER THE MICROSCOPE – INVESTIGATING WATER INFRASTRUCTURE USING PETROGRAPHY <i>Dr Liam Holloway Duratec</i>	SUPPORTING THE RELIABILITY OF IRRIGATION INFRASTRUCTURE THROUGH RAPID DEPLOYMENT OF A PREDICTIVE ASSET RENEWAL STRATEGY <i>Hayden Thorp Tasmanian Irrigation Craig Roberts BetterAIM</i>	REAL-TIME ANALYSIS OF INORGANIC NITROGEN USING ELECTROCHEMICAL SENSORS FOR WATER QUALITY MONITORING <i>Fiona Jing Fang Tan Central Queensland University</i>	THE LOWER HUNTER WATER SECURITY PLAN – OUR APPROACH TO A RESILIENT AND SUSTAINABLE WATER FUTURE <i>Jordi Bates Hunter Water Corporation</i>	MAKING PFAS TREATMENT A GOOD NEIGHBOUR: EFFECTIVE GROUNDWATER TREATMENT IN A RESIDENTIAL AREA <i>Jennine Finlayson Mott MacDonald</i>	A CUSTOMER CENTRICITY MATURITY FRAMEWORK FOR THE WATER SECTOR <i>Evelyn Rodrigues Water Services Association of Australia Corrina Mercure SA Water Kerry Noonan Coliban Water</i>	
12:15pm–12:40pm	420	161	114	289	355	8	422	
	SCUM FORMATION AND CONSOLIDATION IN COVERED ANAEROBIC LAGOONS <i>Dr Anthony Stickland The University of Melbourne</i>	UNDERWOOD ROAD SEWERAGE PUMPING STATION CATCHMENT – I/I REMEDIATION PILOT TRIAL <i>Matthew Pollard WSP</i>	DIGITAL CONDITION ASSESSMENT STORYBOARD: ASSET MANAGEMENT “THOUGHTWARE” NOT SOFTWARE <i>Anette Zeman & Rob Gay Jacobs</i>	REGIONAL SEWAGE TREATMENT TRANSFORMATION: DELIVERING ROBUST GREEN TECHNOLOGY <i>Dr Jason Dwyer Urban Utilities</i>	IMPLEMENTING INTEGRATED, ADAPTIVE STRATEGIES FOR SERVICE PLANNING IN SOUTH EAST QUEENSLAND <i>Nichole Kelly and Craig Ma Urban Utilities</i>	WAIKATO R2R – ACHIEVING RESILIENCE OUTCOMES THROUGH COLLABORATION ★ <i>Rob Burchell Beca Matt Stamford Fletcher Construction Sven Harlos Watercare</i>	DATA-DRIVEN SOLUTION TO IMPROVING SCHOOLS' WATER EFFICIENCY: CHALLENGES AND INSIGHTS FROM A STATEWIDE PROGRAM ★ <i>Prof Pierre Mukheibir and Alexandra Butler Institute for Sustainable Futures/ University of Technology Sydney Ahlam El Halabi Yarra Valley Water</i>	
12:40pm–12:45pm	373	386	292		412	352	428	
	SLUDGE DEWATERING OPERATIONS OPTIMISATION, UTILITZING ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING <i>Sami Chaudhry and Patrick Bonk Innovyze</i>	A STRAIN IN THE PIPELINE <i>Antony Symons Cardno</i>	MANAGEMENT OF AC PIPES NOW AND INTO THE FUTURE <i>Steven Nash Goulburn Valley Water</i>	TO BE ANNOUNCED	WATER SECURITY AND CATCHMENT BEHAVIOUR, DRYING SURFACE CATCHMENT VERSUS RAINWATER HARVESTING <i>Michael Smit Kingspan Water and Energy</i>	THE EFFICIENCY OF COLD PLASMA ACTIVATED BUBBLES AS AN ALTERNATIVE ALGAE CONTROL METHOD <i>Xiaoran Chu University of New South Wales</i>	MINIMISING CONCEALED LEAK LOSSES WITH DIGITAL TECHNOLOGY <i>Mark McInnes Unitywater</i>	
12:45pm–1:45pm	LUNCH							

1:45pm-3:15pm	STREAM 1	STREAM 2	STREAM 3	STREAM 4	STREAM 5	STREAM 6	STREAM 7	STREAM 8
	EXCELLENCE IN OPERATIONS	ASSET MANAGEMENT & PROJECT DELIVERY	EXCELLENCE IN OPERATIONS	RURAL, REMOTE & REGIONAL WATER	SAFEGUARDING COMMUNITY & ENVIRONMENTAL HEALTH <small>session sponsor: AECOM</small>	RESILIENCE & WATER SECURITY	RESILIENCE & WATER SECURITY	INTERNATIONAL
	ODOUR	INFORMING RENEWAL DECISIONS	WATER TREATMENT	SYSTEM APPROACH	CONTAMINANTS/CATCHMENT MANAGEMENT	WATER EFFICIENCY	STRATEGY	WATER FOR DEVELOPMENT
1:50pm-1:55pm	197	29	384	110	360	211	282	1:45PM-2:35PM EMERGING WATER LEADERS SHOWCASE <