

Programme

TUESDAY 17 SEPTEMBER 2019

Pre-Conference Workshops

Full Day:

Water Sector Regulation – *What You Need to Know* (Jim Graham/Noel Roberts, Water New Zealand)

Half Day PM:

Wastewater – *Addressing Today's Challenges for Tomorrow's Quality of Life – Technology Approaches from a Global Perspective* (Dr. Art Umble, Stantec)



WEDNESDAY 18 SEPTEMBER 2019

7:30 REGISTRATION OPENS

8:45 CONFERENCE OPENING AND WELCOME FROM THE WATER NEW ZEALAND PRESIDENT [HEAPHY 1 & 2]

9:10 OPENING GUEST SPEAKER: HON DAVID PARKER, MINISTER FOR THE ENVIRONMENT [HEAPHY 1 & 2]

9:40 KEYNOTE 1: KEVIN BIGGAR, MOTIVATIONAL SPEAKER [HEAPHY 1 & 2]

10:30 MORNING TEA [EXHIBITION AREA]

	THOUGHT LEADERSHIP [HEAPHY 1]	SMART WATER INFRASTRUCTURE [HEAPHY 2]	PIPES & PUMPS [HEAPHY 3]	WATER SUPPLY & TREATMENT [BROOKLYN 1]	GROUND WATER [BROOKLYN 2]	BIOSOLIDS [ARENA LOUNGE]
11:00	POSTER PRESENTATIONS	POSTER PRESENTATION LISTENING TO THE REFLECTIONS IN THE DARK Hugh Blake-Manson – Citycare Water	POSTER PRESENTATION WATER INDUSTRY AOTEAROA – ELEVATING THE NEED FOR DIVERSITY Liam Foster – WSP Opus	POSTER PRESENTATION WATER SAFETY PLANS – WHAT CAN WE LEARN FROM OVERSEAS? Carly Price – The Questioning Engineer	POSTER PRESENTATION EMERGING ORGANIC CONTAMINANTS AND ANTIMICROBIAL RESISTANCE Louis Tremblay – Cawthron Institute	POSTER PRESENTATION A REGIONAL BIOSOLIDS STRATEGY -ACHIEVING SUSTAINABLE USE THROUGH COLLECTIVE MANAGEMENT Jennifer Prosser – Lowe Environmental Impact
11:05	LOCAL GOVERNMENT FUNDING REVIEW Murray Sherwin – Productivity Commission	USING TECHNOLOGY TO ENHANCE HUMAN PERFORMANCE Russell Byfield – Yokogawa	WATERNZ - PRESSURE SEWER GOOD PRACTICE GUIDELINES – AN UPDATE Robert White – GHD	USING INDIGENOUS HYDROGENOTROPHIC DENITRIFIERS FOR IN-SITU GROUNDWATER NITRATE REMOVAL Yashika De Costa – The University of Auckland	SHALLOW GROUNDWATER: MONITORING, INTERPRETING, AND USING HIGH RESOLUTION DATA IN AN URBAN SETTING Dr Helen Rutter – Aqualinc Research	THE VALUE OF BIOSOLIDS IN NZ – AN INDUSTRY ASSESSMENT Rob Tinholt Watercare Services
11:30	THREE WATERS REFORMS – PLANNING AND PROCUREMENT IMPLICATIONS Mei Fern Johnson & Allison Arthur-Young – Russell McVeagh	CHRISTCHURCH IMPLEMENTS WORLD CLASS SMART WASTEWATER NETWORK Matthew Cooper & Ruatara Paapu – Mott MacDonald	DEVELOPMENT OF A CORROSION STRATEGY TO PROTECT NEW ZEALAND'S LARGEST WATER ASSET Stephen Grace – Watercare Services	AMMONIA – WATER TREATMENT CHALLENGES Nicky Smalberger – Harrison Grierson	SEA LEVEL RISE IMPACT ON UNDERGROUND FRESHWATER LENS – AN ENVIRONMENTAL STUDY FOR TARAWA Dr Babar Mahmood – Unitec	THE BIOBOOST® FERTILISER STORY – SUCCESSFUL BIOSOLID BENEFICIAL REUSE Graham Morris – New Plymouth District Council
12:00	REBRANDING 3 WATERS FOR THE 21ST CENTURY Deborah Lind – Harrison Grierson	HOW TO CREATE A DIGITAL TWIN OF WATER IN AOTEAROA NEW ZEALAND Michael Howden – Beca	INNOVATING WITH SEGMENTAL CAISSON CONSTRUCTION TO BUILD A NEW PUMP STATION IN WELLINGTON'S CBD Callum Allison – GHD & Caroline Anderson – Brian Perry Civil	INTELLIGENT WATER TREATMENT PROCESS SELECTION Andrew Wong – Stantec New Zealand	WELLINGTON HARBOUR BORES – EXPLORATORY DRILLING FINDINGS Hayden Pipe & Rowan Oliver – Stantec	BIOSOLIDS FROM CO-DIGESTION – THE CRITICAL SUCCESS FACTORS Gokul Bharambe – Jacobs Asia Pacific, Middle East

12:30 LUNCH [EXHIBITION AREA]

1:30 GUEST SPEAKER: HON NANAIA MAHUTA, MINISTER OF LOCAL GOVERNMENT [HEAPHY 1 & 2]

2:10 NETWORKING [EXHIBITION AREA]

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WEDNESDAY 18 SEPTEMBER 2019 (continued)

	THOUGHT LEADERSHIP [HEAPHY 1]	SMART WATER INFRASTRUCTURE [HEAPHY 2]	PIPES & PUMPS [HEAPHY 3]	CHEMICALS & RESIDUALS [BROOKLYN 1]	REAL WORLD SOLUTIONS [BROOKLYN 2]	BIOSOLIDS WORKSHOP [ARENA LOUNGE]
2:25	POSTER PRESENTATION MANUKA AND KANUKA JOIN NEW ZEALAND'S FRESHWATER QUALITY IMPROVEMENT BATTLE Sian Cass – Lowe Environmental Impact	POSTER PRESENTATION ADVANCED BLOKAIID® – DETECTING PARTIAL BLOCKAGES AND ENABLING PROACTIVE MAINTENANCE Jason Morris –IOTA	POSTER PRESENTATION BIOSOLIDS TO GROW SEEDLINGS – A POTENTIAL NEW MARKET Dr Jacqui Horswell – Massey University	POSTER PRESENTATION EXAMPLES OF RISK IN NEIGHBOURHOOD AND SELF-SUPPLY DRINKING WATER SUPPLIES Kathryn Russell – CDHB	POSTER PRESENTATION THE BROKEN STREAMS THEORY Brent Condon Downer New Zealand	CLICK HERE FOR DETAILS
2:30	REFRESHING WATER: FRESHWATER MANAGEMENT THROUGH AN ETS STYLE SCHEME Dr Eric Crampton – The NZ Initiative	SMART WATER SOLUTIONS – BEYOND INFRASTRUCTURE Amir Peleg – TaKaDu <i>By Zoom Presentation</i>	USE OF MODIFIED CEMENTITIOUS COATINGS TO RE LINE MANHOLES AND SEWERAGE INFRASTRUCTURE FROM (H2S) ATTACK David Johnstone – Akzo Nobel Pty	IT WAS OK LAST MONTH: RESULTS OF A CHLORATE SURVEY Dr Chris Nokes –ESR	CULTURAL DRIVERS TOWARD LAND BASED DISPOSAL AND APPLICATIONS WHICH CAN ENABLE THIS Kate Simmonds – Jacobs	
3:00	FRESHWATER ISSUES Mike Joy – Victoria University	DASHBOARDS: MANAGING WATER AND WASTEWATER DATA TO REDUCE ENERGY COST Evan Atkinson –Suez Smart Solutions (New Zealand)	PRESSURE-BASED LEAKAGE CHARACTERISATION OF BULK WATER PIPELINES Prof Kobus Van Zyl – University of Auckland	DISINFECTION BY-PRODUCT CONTROL STRATEGIES David Pernitsky – Stantec	ARMY BAY WWTP OUTFALL PROJECT – RECORD BREAKING INNOVATION Stuart Anderson – Mcconnell Dowell	
3:30	AFTERNOON TEA [EXHIBITION AREA]					
	THOUGHT LEADERSHIP [HEAPHY 1]	SMART WATER INFRASTRUCTURE [HEAPHY 2]	PLANNING TO AVOID CRISES [HEAPHY 3]	SUSTAINABLE WATER [BROOKLYN 1]	IWA / LEADING EDGE [BROOKLYN 2]	BIOSOLIDS WORKSHOP [ARENA LOUNGE]
4:00	CLEAN WATER PROJECTS IN THE PACIFIC Rosie Wheen – Water Aid	REGULATORY COMPLIANCE DATA MANAGEMENT Jonathan Cuff – Neo Engineering Consultancy	TOWARDS A CLASSIFICATION METHOD FOR GRAVITY PIPELINE FAILURES Dr. Mark Milke – Dept. Civil and Natural Resources Eng., Univ. Canterbury	DEFINING GROUNDWATER PROTECTION ZONES FOR WELLINGTON WATER IN HUTT VALLEY AQUIFER Aslan Perwick – Pattle Delamore Partners & Geoff Williams – Wellington Water	INDICATORS AND PATHOGENS IN OUR WATER: WHERE THEY COME FROM AND WHAT THEY DO Dr Brent Gilpin – Institute of Environmental Science	CLICK HERE FOR DETAILS
4:30	WATER MANAGEMENT IN THE COOKS Brent Manning/Brian Mason – To Tatou Vai, Cook Islands	SECURITY CONSIDERATIONS FOR WATER SYSTEM SUPERVISORY, CONTROL, AND DATA ACQUISITION (SCADA) RADIO SYSTEMS John Yaldwyn – 4rf Limited	DESIGNING PIPE SYSTEMS FOR LOW WASTEWATER GENERATION Caitlin Cairncross – Tonkin + Taylor	ADDRESSING AFFORDABILITY FOR WATER INFRASTRUCTURE – IS THERE A "SILVER BULLET" Duncan Southwell – Beca	ELECTROCOAGULATION: IS IT COST-EFFECTIVE FOR WASTEWATER TREATMENT Dr Rupert Craggs – Niwa	
5:00	[Brooklyn 3] Water New Zealand AGM All members welcome		IS THIS CLIMATE CHANGE? –RECENT EXPERIENCES THAT ARE INCREASING OUR RESILIENCE Nathan Clarke – Nelson Regional Sewerage, Business Unit	DISINFECTION RESIDUAL EFFECTS ON WATER DISTRIBUTION SYSTEM MATERIALS Robert Lehunt – Lehunt & Associates Pty	IWA/SCIENCE ANNUAL MEETING	
5:30	ASSETLIFE ALLIANCE WELCOME RECEPTION [EXHIBITION AREA]					

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THURSDAY 19 SEPTEMBER 2019

8:00 REGISTRATION OPENS

8:30 KEYNOTE 2: DR ART UMBLE, STANTEC , USA – THE CIRCULAR ECONOMY [HEAPHY 1 & 2]

9:15 KEYNOTE 3: MARK GOBBIE, ACTING CHIEF EXECUTIVE, SOUTH AUSTRALIA WATER [HEAPHY 1 & 2]

10:00 MORNING TEA [EXHIBITION AREA]

	THOUGHT LEADERSHIP [HEAPHY 1]	TREATMENT TECHNOLOGY [HEAPHY 2]	SLUDGE MANAGEMENT [HEAPHY 3]	WATER HEALTH & EFFICIENCY [BROOKLYN 1]	PIPELINE DESIGN [BROOKLYN 2]	YOUNG WATER PROFESSIONALS [ARENA LOUNGE]
10:30	John Penno – Chair, Freshwater Leaders Group	LIVING THROUGH AN ALGAL INFECTION PANDEMIC Allan Jones Nelmac PROUDLY SUPPORTED BY WIOG	TE MAUNGA WWTP SLUDGE DEWATERING – PILOT TRIALS TO FULL SCALE Gareth Hall & Jessica Daly – Beca	GOING REAL TIME IN WATER CONSERVATION – OUR EXPERIENCE Sean Cohen – SUEZ Australia & New Zealand	CONSIDERATIONS FOR SELECTION OF ENERGY DISSIPATION VALVES Langford Sue – Beca	CLICK HERE FOR DETAILS
11:00	BOTTLED WATER Bruce Sherman – NZ Beverage Council	OPTIMISING THE TREATMENT PERFORMANCE OF OTOROHANGA OXIDATION POND SYSTEM Clifford Boy	NEXT GENERATION ANAEROBIC DIGESTION Dave Parry – Jacobs	SUPPRESSION OF HARMFUL ALGAE BLOOMS IN RESERVOIRS: LESSONS LEARNED FROM PROJECTS David Austin – Jacobs	CONVEYING RAW WASTEWATER OVER LONG DISTANCES – TECHNICAL ISSUES, CHALLENGES AND SOLUTIONS Kip Cooper – Beca & Tom Scott – Black & Veatch	
11:30	FUTURE WATER UTILITIES AND SKILLS NEEDS Mark Pascoe – CEO, International Water Centre Australia	UNDERSTANDING OXIDATION PONDS. IS DISSOLVED OXYGEN PROFILING THE KEY? Hugh Ratsey – The Wastewater Specialists	AD 101 - ANAEROBIC DIGESTION SYSTEM SELECTION CONSIDERATIONS Nathan Clarke – Beca	TECHNOLOGY ENABLED COLLABORATION FOR WATER NETWORK CUSTOMER IMPROVEMENTS Zoran Pilipovic & Mike Dunstone – Watercare	THE HAMNAK PIPELINE – NEW ZEALAND'S LONGEST MOLECULARLY ORIENTED PVC WATER TRANSMISSION PIPELINE. Jay Roy – Iplex Pipelines New Zealand	
12:00	SMART WATER INFRASTRUCTURE Oliver Hawes – Mott MacDonald, UK	MATAMATA TERTIARY MEMBRANE PLANT UPGRADE Sean Pathmanathan, Matamata – Piako District Council & Nadine Oschmann SUEZ Australia & New Zealand	BUILDING TECHNOLOGY ENABLED PLANNING CAPABILITY Brendon Harkness – Watercare Services	WINNER – WATERWAYS CONFERENCE PRESENTATION 2018 CAN FRESHWATER MUSSELS (ECHYRIDELLA SP.) FUNCTION EFFECTIVELY AS A BIOLOGICAL TOOL FOR STREAM RESTORATION? Channell Thoms – PhD Candidate, University of Canterbury	PRACTICALITIES WHEN APPLYING AS/ NZS 4853:2012 FOR AC LOW FREQUENCY INDUCTION RISK ASSESSMENTS Dr Tony Auditore – Voltoni Limited	

12:30 LUNCH [EXHIBITION AREA]

	THOUGHT LEADERSHIP [HEAPHY 1]	HEALTH WATERWAYS [HEAPHY 2]	BIG DATA [HEAPHY 3]	ENERGY & CARBON EFFICIENCY [BROOKLYN 1]	GROWTH & SERVICE IMPROVEMENT [BROOKLYN 2]	WATER SERVICE MANAGER'S GROUP [ARENA LOUNGE]
1:30	MATAURANGA MAORI – CONNECTING WITH OUR WATER Troy Brockbank – WSP-Opus	NATURAL CHANNEL DESIGN IN THE TASMAN REGION Bryn Quilter – Tonkin + Taylor	DATA VISUALISATION FOR IMPROVED UNDERSTANDING OF LARGE WATER QUALITY DATASETS Lisa Mace – Beca	TAURANGA WASTEWATER - ENERGY AND CARBON FOOTPRINTING Sarah Burges – CH2M Beca	ACCELERATING FOR GROWTH: DELIVERING WARKWORTH TO SNELLS WASTEWATER INFRASTRUCTURE Jacob Whitford – Watercare	CLICK HERE FOR DETAILS
2:00	ENGAGING WITH IWI ON 3 WATERS PROJECTS Frances Curtis	WAIOHINE RIVER – GEOMORPHIC TRENDS ASSESSMENT AND ITS APPLICATION TO RIVER MANAGEMENT Selene Conn – Tonkin + Taylor	USING MURKY DATA TO CLEAN UP WASTEWATER FLOODING Richard Parkinson – Stantec	MOVING TOWARDS A X ZERO ENVIRONMENTAL FOOTPRINT DAIRY FACTORY Katrina Bukauskas – Jacobs	REDUCING WASTEWATER OVERFLOWS: A PRAGMATIC APPROACH TO OPTIMISE CAPITAL INVESTMENT IN CHRISTCHURCH Joel Wilson – Wcs Engineering	
2:30	TRULY EMBRACING DIVERSITY AND INCLUSION Kaylarnee Meleisea-Murray – Arup	DREDGING TO RESTORE RESILIENCE TO A CRITICAL CHRISTCHURCH WATERWAY Alex Park – Stantec	DATA ANALYTICS TO DETERMINE PUMP PERFORMANCE Evan Atkinson Suez Smart Solutions (New Zealand)	BLOWER TECHNOLOGIES AND ENERGY EFFICIENCY OPPORTUNITIES Tony Long – Kaeser Compressors NZ	ŌPŌTIKI DISTRICT COUNCIL FUNDED WORK ON PRIVATE LATERALS Sarah Millar – WSP-Opus	

THURSDAY 19 SEPTEMBER 2019 (continued)

3:00 AFTERNOON TEA [EXHIBITION AREA]						
	THOUGHT LEADERSHIP [HEAPHY 1]	DIGITAL TECHNOLOGY [HEAPHY 2]	THE WIDE WORLD [HEAPHY 3]	ENVIRONMENTAL / CULTURAL [BROOKLYN 1]	FUTURE LOOKING [BROOKLYN 2]	POT POURI [ARENA LOUNGE]
3:30	ARGIS PLATFORM FOR DRINKING WATER SOURCE PROTECTION Tony Cussins & Brett Chapman	HARNESSING INNOVATIVE 3-DIMENSIONAL DIGITAL DESIGN TO REDUCE SEWAGE OVERFLOWS Margaret Cobeldick – Aurecon New Zealand	CAPACITY BUILDING AND WATER SECURITY FOR KIRIBATI – SCOPING SOLAR DISTILLATION IN TARAWA Miss India Eiloart – Engineers Without Borders NZ	FULL SCALE MABR EXPERIENCE: INTENSIFICATION OF NUTRIENT REMOVAL & ENERGY REDUCTION Jeff Peeters – SUEZ Water, Technologies & Solutions	PROGRESS AND FUTURE PERSPECTIVES ON USE OF DYE STUDIES IN WASTEWATER DISCHARGE IMPACT ASSESSMENTS Dr Carlos Campos Cawthron Institute	NZS 3916: GAME OF CONTRACTS Gabriela Campos Balzat & Natalie Yeh – Harrison Grierson
4:00	NON-CHLORINATED DRINKING WATER SUPPLIES Henrik Bjorn – VIA University College, Denmark	BUILDING TECHNOLOGY ENABLED DESIGN AND CONSTRUCTION CAPABILITY Andrew Mercer – Watercare Services	RAETIHI WATER SUPPLY UPGRADE – JOURNEY TO SUCCESS Chunlong Wang – Veolia Water Services (ANZ) Pty & Anne-Marie Westcott – Ruapehu District Council	SHOTOVER DELTA DOSE AND DRAIN LAND DISPERSAL SYSTEM Lane Vermaas – Queenstown Lakes District Council	A 'HOW TO GUIDE' FOR SECURING 35 YEAR DISCHARGE CONSENTS Mark Bourne – Watercare & Pdraig McNamara – Simpson Grierson	MODELLING FIREFIGHTERS - USING YOUR WATER NETWORK MODEL TO KEEP PEOPLE SAFE Ben Davies – Stantec Dan Johnson, WSP Opus – Iman Aghamohammadi, Wellington Water & Keith Pedley – Stantec
4:30	THE DANGERS OF INFECTION FROM WASTEWATER TREATMENT PLANT Tara Okan – Aquaero New Zealand	EXTENDING SAP FROM FINANCIAL REPORTING TO AN OPERATIONAL TOOL Adam Twose Christchurch City Council & Dr Becky Macdonald Jacobs NZ Ltd	THE IMPACTS OF CLIMATE CHANGE ON WASTEWATER AND STORMWATER SYSTEMS James Hughes – Tonkin + Taylor	USING WASTEWATER UPGRADES TO EMPOWER CULTURAL AND ECOLOGICAL VISIONS Tanvir Bhamji – Watercare, Brendon Green – Kaitiaki Advisory Limited & Garrett Hall – Beca Ltd	PROTECTING PLANT PERFORMANCE - WHANGANUI TRADE WASTE STRATEGY Brett Eaton – Cardno	DIGITAL PUMP MONITORING: STRIVING FOR PREVENTATIVE MAINTENANCE James Curtis – Cardno
6:00	"OUR SHOUT" – WATER NEW ZEALAND'S PRE-DINNER DRINKS					
7:00	DOWNER CONFERENCE DINNER					

FRIDAY SEPTEMBER 2019

8:30	REGISTRATION OPENS	
9:00	KEYNOTE 4: TONY WONG, CRC FOR WATER SENSITIVE CITIES, MELBOURNE [HEAPHY 1 & 2]	EXHIBITION VISITORS' MORNING
9:45	KEYNOTE 5: AUCKLAND CENTRAL INTERCEPTOR PROJECT PRESENTATION BY WATERCARE [HEAPHY 1 & 2]	
10:15	MORNING TEA [EXHIBITION AREA]	
10:45	NEW ZEALAND YOUNG WATER PROFESSIONALS PRESENTATIONS [HEAPHY 1 & 2]	
11:15	WATER NEW ZEALAND – THE NEXT YEAR: WATER NEW ZEALAND PRESIDENT, KELVIN HILL [HEAPHY 1 & 2]	
12:00	CONFERENCE CLOSES	