

## 2021 WATER NEW ZEALAND CONFERENCE & EXPO PRELIMINARY PROGRAMME

### TUESDAY 22 FEBRUARY 2022

Pre-Conference workshop: Focusing on the three pou (pillars) of three waters reform – Taumata Arowai and Department of Internal Affairs  
(Full day workshop from 9.30am – 4.30pm)

### WEDNESDAY 23 FEBRUARY 2022

7:30	Registration Opens					
7:30	Aurecon Young Water Professionals Breakfast [ARENA LOUNGE]					
8:30	Conference Opening and Welcome from the Water New Zealand President [PLENARY]					
9:10	Opening Guest Speaker: Hon Nanaia Mahuta, Minister of Local Government [PLENARY]					
9:40	Keynote: Bill Bayfield - Chief Executive - Taumata Arowai [PLENARY]					
10:30	Morning Tea [EXHIBITION AREA]					
	Thought Leadership [HEAPHY 1]	Three Waters Reform [HEAPHY 2]	Drinking Water Quality and Source Water Management [HEAPHY 3]	Pipelines - New and Renew [BROOKLYN 1]	Wastewater Operations [BROOKLYN 2]	Workshop Stream [ARENA LOUNGE]
11.00	UTILITY OF THE FUTURE  David Ehrhardt, Andreas Heuser & Shannon Riley – Castalia Advisors	USING EVIDENCE BASED DECISION MAKING TO PREPARE FOR WATER REFORM  Neil Jorgensen – Rationale & Tom Dyer – Dunedin City Council	LAB WORK, PILOT TRIALS AND BRAINS TRUST DELIVERING FRESH SUPPLY FOR THRIVING TOWNS  Will Jacobson - Stantec	STAYING AHEAD OF THE CURVE – COST-EFFECTIVE AND ENVIRONMENTALLY CONSCIOUS INNOVATION  Courtney Pratt – Fulton Hogan	A PROACTIVE APPROACH TO MANAGING A SMELLY AFTERTHOUGHT  Becky Macdonald – Jacobs	Young Professionals Workshop “YWP(ub) Quiz – Hosted by Young Water Professionals”
11.30	THREE WATERS SERVICE DELIVERY REFORM  Brian Hanna - Department of Internal Affairs	A DECADE OF INSTITUTIONAL REFORMS IN SOUTH EAST QUEENSLAND’S WATER SECTOR – LESSONS AND CONSIDERATIONS  Abel Immaraj & Kate Lanskey – Aurecon	SMALL AND RURAL WATER SUPPLIES RISK AND OPTIONS ASSESSMENT  Rachael Casey – Rata & Shaun Hodson – AMBI	WHEN THE PROBLEM IS SO BIG, WHERE DO YOU START? RENEWALS TO MEET YOUR BUDGET  Nicola Whelan-Henderson & Rico Parkinson – Stantec	STABILITY AND SUSTAINABILITY: OPTIONS ASSESSMENT FOR WELLINGTON’S SLUDGE MINIMISATION FACILITY  Leah Agustin – Beca & Steve Hutchison – Wellington Water	
12.00	RESHAPING WATER BUSINESSES AROUND THE CIRCULAR ECONOMY/SUSTAINABLE DEVELOPMENT GOALS  Danielle Francis – WSAA	WASTEWATER DISPOSAL AND THE NPS-FM 2020: WHAT DOES THE FUTURE LOOK LIKE??  Oliver Hunt & Kate Walker – Pattle Delamore Partners	MANAGING FUTURE UNCERTAINTIES USING IWM AND THE ADAPTIVE PLANNING APPROACH  Vijesh Chandra - GHD	SUPPLY PIPE FAILURE CORRELATION WITH PRESSURE AND GROUND MOVEMENT  Kobus Van Zyl – University of Auckland	DEVELOPMENT OF A LOW-COST SEWER SAMPLING SYSTEM  Cassandra Trent – Watercare Services Ltd	
12:30	Lunch [EXHIBITION AREA] Poster Q&A Session [HEAPHY FOYER]					

	Thought Leadership: Te Ao Maori [HEAPHY 1]	Three Waters Reform [HEAPHY 2]	Drinking Water Quality and Source Water Management [HEAPHY 3]	Pipelines - New and Renew [BROOKLYN 1]	Science [BROOKLYN 2]	Workshop Stream [ARENA LOUNGE]
2:00	A MĀORI PERSPECTIVE ON THE FRESHWATER DEBATE  Tina Ngata – Wai Māori	LESSONS ON GREEN INFRASTRUCTURE MANAGEMENT AND THEIR APPLICATION TO THREE WATERS REFORM  Francis Leniston – Wellington Water	WHAT IF ALLOWABLE DRINKING-WATER NITRATE LIMITS ARE REDUCED TO ADDRESS POSSIBLE CHRONIC HEALTH EFFECTS?  Bridget O’Brien – WSP & Timothy Chambers – University of Otago	GET THOSE TURD TAXIS OFF OUR STREETS! A STORY OF SLUDGE PIPELINE REPAIR IN WELLINGTON  Elliot Altham - Stantec	MICROPLASTICS IN THE WATER ENVIRONMENT – SHOULD WE BE WORRIED AND WHAT CAN WE DO?  Bridget Rule & Garry Macdonald – Beca	<b>WeCan/SWIG Workshop</b> “Smart water metering solutions: it's not just about the meter”
2:30	INDIGENOUS WATER REFLECTIONS FROM COP26  Tui Shortland – Awatea Organics	INCORPORATING CULTURAL CONTEXT INTO WATER MANAGEMENT: INDIA EXCHANGE  Shannon Davies – AECOM	MOVING TOWARDS A PROACTIVE WAY OF PREDICTING WATER QUALITY  Louise Weaver – ESR	DALDY STREET OUTFALL  David Pattinson – McConnell Dowell	MICROPLASTICS IN WASTEWATER IN NEW ZEALAND: CURRENT DATA AND KNOWLEDGE GAPS  Helena Ruffell – University of Canterbury	
3:00	ENABLING MANA WHENUA INVOLVEMENT  Mahina-A-Rangi Baker – Te Wānanga o Raukawa	MEASURING DROUGHT RESILIENCE: WATER SUPPLY SECURITY IN THE REFORM PROCESS  Jonathan Reed – Beca & Charlotte Reed – Tonkin + Taylor	NITRATE TRENDS IN GROUNDWATER: FROM KNOWN KNOWNS TO KNOWN UNKNOWNNS  Helen Rutter – Aqualinc Research Ltd	PUMP EFFICIENCY MONITORING - GIVING UP THE CARBS  James Curtis – Cardno & Paul Winstanley – Wellington Water	EMERGING CONTAMINANTS – CURRENT STATUS IN NEW ZEALAND  Becky Macdonald & Claire Conwell – Jacobs	
3:30	<b>Afternoon Tea [EXHIBITION AREA]</b>					
	Thought Leadership [HEAPHY 1]	Sustainability [HEAPHY 2]	Drinking Water Quality and Source Water Management [HEAPHY 3]	IWA Science [BROOKLYN 1]	Wastewater Operations [BROOKLYN 2]	Workshop Stream [ARENA LOUNGE]
4:00	NEW ZEALAND’S CARBON BUDGETS  Jo Hendy - Climate Change Commission	WHAT ABOUT A ZERO ENVIRONMENTAL FOOTPRINT WASTE WATER TREATMENT PLANT  Richard Greenwood, Becky Macdonald & Grace Stumbles – Jacobs	THE SOLUTIONS TO THE HAVELOCK NORTH WATER CONTAMINATION EVENT  Richard Parkinson - Stantec	MICROBIAL SOURCE IDENTIFICATION AND APPORTIONMENT FOR POLLUTION REDUCTION  Carlos Campos – Cawthron Institute	INCREASING WATER RETAINING STRUCTURES LIFE AND SAFETY WITH HYDROGEL TECHNOLOGY  Douglas Hamlin – Markham	
4:30	ECONOMIC REGULATION PANEL  Kevin Counsell – NERA, Richard Fletcher – Aurora & Michael Arthur – Metis Consultants	POWERING A GREENER FUTURE – ASSESSING THE REAL WORLD BENEFITS OF SOLAR PV FOR WATER UTILITIES  Laurence Jenner – Watercare Services Ltd	FROM CATCHMENT TO CONSUMER - A WATER SAFETY JOURNEY  Jessica Hamilton & Marcia Jones – Jacobs	THE IMPACT OF ATMOSPHERIC RIVERS ON RAINFALL IN NEW ZEALAND  Jingxiang Shu – University of Auckland	A CASE STUDY ON THE SEISMIC PERFORMANCE OF WASTEWATER PIPELINES FOLLOWING THE VALENTINE’S DAY EARTHQUAKE  Melanie Liu – Beca	
5:00		HOW TO REDUCE POTABLE WATER DEMAND FOR A SPORTS PARK BY 100%  Elizabeth Garner - Jacobs	GROUNDTRUTHING A PFAS MODEL  Aslan Perwick – Pattle Delamore Partners	IWA Annual General Meeting	A LESSON IN RESILIENCE PREPAREDNESS - RETICULATION CRITICAL SPARES  Tracey Mitchell – New Plymouth District Council	
5:30	<b>Intergroup Welcome Reception [EXHIBITION AREA]</b>					

## THURSDAY 24 FEBRUARY 2022

8:00	Registration Opens					
8:30	Guest Speaker: Dr Siouxsie Wiles [PLENARY]					
9:15	Keynote: Donna Flavell, Waikato Tainui – A Waikato-Tainui Perspective [PLENARY]					
10:00	Morning Tea [EXHIBITION AREA]					
	Thought Leadership [HEAPHY 1]	Climate Change - Adaptation and Mitigation [HEAPHY 2]	Smart Water - Digital and Data [HEAPHY 3]	Procurement and Project Delivery [BROOKLYN 1]	Asset Management [BROOKLYN 2]	Workshop Stream [ARENA LOUNGE]
10:30	TAUMATA AROWAI WATER SERVICES REGULATOR – OUR REGULATORY APPROACH Ray McMillan, Katy Te Amo & Jim Graham – Taumata Arowai	CLIMATE CHANGE PRESSURES IN THE WASTEWATER SECTOR AND ADAPTIVE PLANNING  Emily Diack – GHD	BACKFLOW PREVENTION - FROM OLD ANALOGUE TO FULLY DIGITAL TESTING SYSTEM  Wojtek Dziubek – Hastings District Council	WHAT IS SO EXCITING ABOUT THE DELIVERY OF A 60MLD FLOATING PUMP STATION? DURING A DROUGHT & PANDEMIC? WITHIN 12 MONTHS?  Greg Cameron & Holger Zipfel – MTL	THREE WATERS GROWTH PLANNING TO SUPPORT INTEGRATED INVESTMENT AND LAND USE PLANNING  Katrina Murison & Olena Chan – Wellington Water	“Stories from the coal face” presented by WSMG in conjunction with Young Water Professionals
11:00		MEASURING YOUR EMISSIONS ON A PATHWAY TO NET ZERO  Glenn Conley & Chris Thurston – Watercare Services Ltd	OPERATIONALISING SMART METER NETWORKS: BENEFITS FOR UTILITIES AND THEIR CUSTOMERS  Tony Wise - Jacobs	RENEWALS – TURNING PROJECTS INTO PROGRAMMES  Susannah Cullen – Wellington Water & Stantec	WASTEWATER PER CAPITA LOADING RATES, DESIGN STANDARDS & HOUSING GROWTH  Teresa Scott - GHD	
11:30	ONE WATER, TOO MANY CHALLENGES: PRIORITISING INVESTMENT WHEN THERE IS TOO MUCH TO DO  Fraser Clark – Wellington Water	DRINKING WATER TREATMENT IN A CLIMATE OF CHANGE  Sally Williamson – Aurecon	APPLICATION OF DIGITAL ENGINEERING IN THE WATER SECTOR  Farzam Farzadi – Beca, Sven Harlos – Watercare Services Ltd & Matt Stanford – Fletcher Construction	CITY RAIL LINK STORMWATER DROP STRUCTURES  Renier Els – AECOM & Warren Bird - WSP	NANAKO STREAM: DEVELOPING A COMPREHENSIVE STORMWATER SOLUTION  Robert Kelly – Aurecon & Josh Hudson – Tonkin + Taylor	
12:00	INSPIRING A WATER SECTOR FUTURE  Dina Demiri & Dee Young – Tertiary Education Commission	TARAWA WATER SUPPLY SOLAR DISTILLATION PROJECT – COMMUNITY WATER SECURITY  India Eiloart – Engineers Without Borders New Zealand	LEVERAGING DATA TO OPTIMIZE WATER NETWORK OPERATIONS  Diana Galindo & Heather Kikkert – Mott Macdonald	IT IS WATER CONSERVATION OR UNIVERSAL WATER METERING – APPLYING THE KÜBLER ROSS CHANGE CURVE  David Taylor & Maria Buzzella – New Plymouth District Council	OVERFLOW CONSENTING AND DESIGN STORM SELECTION BASED ON HISTORICAL RAINFALL  Joel Wilson – WCS	
12:30	Lunch [EXHIBITION AREA]					

	Thought Leadership: Transforming Water – Infrastructure & Workforce [HEAPHY 1]	Wastewater Treatment [HEAPHY 2]	Smart Water - Digital and Data [HEAPHY 3]	Procurement and Project Delivery [BROOKLYN 1]	Asset Management [BROOKLYN 2]	Workshop Stream [ARENA LOUNGE]
1:30	INFRASTRUCTURE COMMISSION: OUR STRATEGY  Ross Copland - InfraCom	OPTIMISATION OF WASTEWATER IRRIGATION  Neeraj Pratap – Pattle Delamore Partners	UTILISING INTELLIGENT ALGORITHMS TO OPTIMISE CAPITAL INVESTMENTS AND ASSET REHABILITATION  Joel Wilson – WCS	SNELLS BEACH WWTP: COLLABORATIVE WORKING FOR COST AND CARBON SAVINGS  Douglas Bale – Mott Macdonald	OUR HIGHLY CRITICAL ASSETS – WHAT IS UNDER THE BONNET?  Robert Blakemore & Aidan Crimp – Wellington Water	Climate Change Workshop
2:00	RMA REFORM IMPLICATIONS FOR 3 WATERS  Simon Pilkinton – Russell McVeagh	THE HUMBLE WETLAND – A CARBON SUPERHERO?  Kate Simmonds & Lucy Ferris – Jacobs	UNLOCKING THE BANGKOK RAIN RADAR NETWORK  Luke Sutherland-Stacey – Weather Radar NZ & Nasrine Tomasi – Mott Macdonald	MODULAR TREATMENT SOLUTION EFFICIENCIES FOR HASTINGS DISTRICT COUNCIL  Ryan Hunt & Steve Cave - Filtec Ltd	DYNAMIC ADAPTIVE PATHWAY PLANNING – ADDING FLEXIBILITY IN AN UNCERTAIN FUTURE  Ian Ho – GHD & Apra Boyle-Gotla – Watercare Services Ltd	
2:30	BRIDGING THE SKILLS GAP: TRAINING TOMORROW'S WORKFORCE TODAY  Clare Feeney – Environmental Communications Ltd	EFFECTIVE POND-BASED, LONG-CHANNEL WASTEWATER TREATMENT AT OTOROHANGA  Cliff Boyt – Cliff Boyt Consulting	EARLY-WARNING NETWORKS FOR RAINWATER-DEPENDENT COMMUNITIES  Zach Preston – Engineers Without Borders New Zealand	SMALL COMMUNITY WIN BY SMART PROCUREMENT THAT SAVES TIME AND PUTS MONEY BACK INTO THE LOCAL ECONOMY  Simon Cartwright – Southern Cross Consulting	WAIPA DISTRICT METER AREA DESIGN  Haiming Li – WSP	
3:00	Afternoon Tea [EXHIBITION AREA]					
	Thought Leadership Community & the Customer [HEAPHY 1]	Thought Leadership: Climate Change [HEAPHY 2]	Workforce - Development, Capability & Training [HEAPHY 3]	Wastewater Treatment [BROOKLYN 1]	Sustainability [BROOKLYN 2]	Workshop Stream [ARENA LOUNGE]
3:30	ENGAGING WITH ACTIVISTS  Eugene Doyle – Owhiro Bay Conservation Group	INSURING RESILIENT AND SUSTAINABLE COMMUNITIES INTO THE FUTURE  Wendy Saunders – EQC	FUTURE PROOFING NEW ZEALAND - A GUIDE TO KNOWLEDGE SHARING  Benjamin Bowden – Far North District Council & Garrett Hall – Beca	SUPERCritical UV: A NEW DISINFECTION TECHNOLOGY FOR HARD TO TREAT LIQUIDS  Matthew Sells – Novolabs (A Massey Ventures Company)	BIOGAS PRODUCTION WITH HIGH CALORIC VALUE FROM WASTEWATER VIA HYDROGEN ASSISTED ANAEROBIC DIGESTION  Afrooz Bayat – University of Canterbury	
4:00	GIVING CUSTOMERS A VOICE IN SHAPING THE FUTURE  Amanda Singleton – Watercare Services Ltd	CLIMATE ADAPTION  Catherine Iorns Magallenes – Victoria University of Wellington	HOW TO RECRUIT STAFF IN A TIGHT LABOUR MARKET  Greg Steele - Downer	PAIHIA WWTP, INNOVATIVE IN POND REMOVAL OF AMMONIA USING BIOSHELLS  Andrew Springer – WSP & William Down – Far North District Council	FROM CONCEPT TO REALITY: CENTRAL INTERCEPTORS INFRASTRUCTURE SUSTAINABILITY JOURNEY  Olivia Philpott – Watercare Services Ltd	
4:30	GOOD CUSTOMER SERVICE DOESN'T EXIST WITHOUT COMPLAINTS  Mary Olliver – Utilities Disputes Ltd	NET ZERO 2030 ROUTEMAP  Maria Manidaki – Mott Macdonald	DEVELOPING ENGINEERING AS A CAREER PATH FOR MĀORI  Jodie Hurley - Aurecon & Awhina Ngātuerere – Toi Kai Rawa	CONTAINERISED WASTEWATER TREATMENT PLANTS HELP KEEP AUCKLAND'S GROWTH SUSTAINABLE  Thomas Board & Matt Savage – Apex Environmental	A SOCIAL VALUE BLUEPRINT FOR OUR AOTEAROA WATER SECTOR  David Lin & Kylee Dewis – Jacobs	
6:00	"Our Shout" - Water New Zealand's Pre-dinner Drinks [ARENA FOYER]					
7:00	Downer Conference Dinner [ARENA]					

## FRIDAY 25 FEBRUARY 2022

8:30	Registration Opens	
9:00	Keynote: Associate Professor Huhana Smith – Massey University [PLENARY]	Exhibition Visitors' Morning
9:45	Keynote: [PLENARY]	
10:15	Morning Tea [EXHIBITION AREA]	
10:45	Keynote: Jon Lamonte, Chief Executive – Watercare Services Ltd [PLENARY]	
11:15	WATER NEW ZEALAND SESSION [PLENARY]	
12:15	Water New Zealand – The Next Year: Water New Zealand President Helen Atkins [PLENARY]	
12:30	Conference Close	