

# WATER NEW ZEALAND CONFERENCE & EXPO 2022

## PRELIMINARY PROGRAMME

### MONDAY 17 OCTOBER

Pre-Conference Workshop

### TUESDAY 18 OCTOBER

7:30	REGISTRATION OPENS					
7.15-8.15	AURECON YWP BREAKFAST - BEALEY B4+B5					
8:45	CONFERENCE OPENING AND WELCOME FROM THE WATER NEW ZEALAND PRESIDENT, HELEN ATKINS – AUDITORIUM					
9:10	OPENING GUEST SPEAKER: HON NANAIA MAHUTA, MINISTER FOR LOCAL GOVERNMENT – AUDITORIUM					
9:40	CONVERSATION WITH SIR TIPENE O'REGAN AND GILLIAN BLYTHE – AUDITORIUM (PRE-RECORDED)					
10:30	MORNING TEA – EXHIBITION AREA					
	THOUGHT LEADERSHIP: TE AO MAORI – AUDITORIUM	DRINKING WATER – BEALEY B3	PIPELINES – CONWAY C3+C4	CLIMATE CHANGE – EMISSIONS – CONWAY C5	WASTEWATER TREATMENT – CONWAY C1+C2	WORKSHOP STREAM – BEALEY B4+B5
11.00	ENABLING MANA WHENUA INVOLVEMENT <b>Mahina-A-Rangi Baker – Te Wānanga o Raukawa</b>	A WAI-INU BLUEPRINT <b>Hugh Blake-Manson – Waugh Infrastructure &amp; Murray England - Selwyn District Council</b>	TAKING ON A MOUNTAIN OF INSPECTION DATA – DEVELOPING A FLEXIBLE DATA MANAGEMENT SOLUTION  <b>Oliver Modricker - ProjectMax</b>	MEASUREMENT TOWARDS MITIGATION - GHG EMISSIONS FROM NELSON WWTP <b>Ollie Whalley – Tonkin &amp; Taylor</b>	INTELLIGENT, INTEGRATED WASTE TREATMENT BY CONSOLIDATING ORGANIC WASTE STREAMS <b>Garry Macdonald &amp; Harmaan Madon - Beca</b>	IN PROCESS OF BEING CONFIRMED
11.30	TE WAIHORA LAKE ELLESMERE <b>Craig Pauling - Te Ara Kākāriki &amp; Elizabeth Brown – University of Canterbury</b>	CHRISTCHURCH FLUORIDATION: IMPLEMENTATION PLANNING FOR A 40+ FACILITY SYSTEM <b>Jack Deeley – Jacobs &amp; Michele McDonald – Christchurch City Council</b>	DEFECT LEVEL CONDITION MODELLING OF SEWER PIPES <b>Zahra Tizmaghz - University of Auckland</b>	PREDICTION OF WASTEWATER TREATMENT GREENHOUSE GAS EMISSIONS USING A REAL-TIME MODEL <b>David Hume – Mott MacDonald</b>	BIOSOLID GASIFICATION DEMONSTRATION PLANT RESULTS AND APPLICABILITY TO NEW ZEALAND'S LANDFILL LOVING PROBLEM <b>Salma Rayan – Downer New Zealand</b>	
12.00	TE MANA O TE WAI – PRACTICAL IMPLEMENTATION THOUGHTS  <b>Julian Williams - Te Huia Resources</b>	METAGENOMICS AND WHOLE GENOME SEQUENCING TO UNDERSTAND DRINKING WATER QUALITY  <b>Brent Gilpin - ESR</b>	PRESSURE PIPE CONDITION – RIGHT PIPE, RIGHT TEST <b>Aaron Prince - Assetlife Alliance</b>	NO LAUGHING MATTER – GLOBAL LESSONS FOR NITROUS OXIDE <b>Hayden Porter - Jacobs</b>	ENHANCED METHANE PRODUCTION USING AN INTEGRATED ANAEROBIC DIGESTION AND BIOELECTROCHEMICAL SYSTEM  <b>Afrooz Bayat – University of Canterbury</b>	
12:30	LUNCH – EXHIBITION AREA FROM 1.00PM – AUDITORIUM - YWPs FIRESIDE CHATS – JON LAMONTE WATERCARE SERVICES AND EMILY AFOA TEKTUS COUNSULTANTS FACILITATED BY HANNAH EDMOND MOTT MACDONALD					
	THOUGHT LEADERSHIP: POLICY – AUDITORIUM	DRINKING WATER SAFETY – BEALEY B3	PIPELINES – CONWAY C3+C4	SUSTAINABILITY – CONWAY C5	WASTEWATER TREATMENT – CONWAY C1+C2	WORKSHOP STREAM – BEALEY B4+B5

2:00	THREE WATERS REGULATION – SETTING THE NEW WATER SERVICES ENTITIES UP FOR SUCCESS <b>Petra Carey – Russell Mcveagh</b>	CHALLENGES, LESSONS AND METHODS FOR LEAVING A RESIDUAL IMPACT <b>Jess Hamilton – Jacobs &amp; Ian Baker – Christchurch City Council</b>	PIPE ALIGNMENT TOOL <b>Andrew Liese – Stantec</b>	MAKING NEW ZEALAND GREEN AGAIN – A ‘LIVING’ ROOF STORY <b>Zoë Avery &amp; Hillary Johnston – Auckland Council</b>	INNOVATIVE CHAIN DRAGGING METHOD CONTROLS MIDGES AT MĀNGERE WASTEWATER PLANT <b>Christopher Garton - Watercare</b>	
2:30	CLIMATE CHANGE AMENDMENTS – IMPLICATIONS FOR WATER PROJECTS <b>David Allen &amp; Frances Wedde – Buddle Findlay</b>	SOURCE WATER RISK MANAGEMENT AREA MODELLING FOR GROUNDWATER: ISSUES AND UNCERTAINTIES <b>Helen Rutter – Aqualinc Research Ltd</b>	KAITOKE FLUME BRIDGE REPLACEMENT: USING SEISMIC RESILIENT DUCTILE IRON PIPE <b>Hayden Pipe – Stantec &amp; Todd Randell – Hynds</b>	SHAPING OUR CITIES WITH WATER SYSTEMS IN PRECINCTS AND PLACES - HOW DOES IT WORK? <b>Robert Keessen - Aurecon</b>	INITIAL RESPONSE IN AN EMERGENCY: CHRISTCHURCH WWTP FIRE <b>Becky Macdonald - Jacobs</b>	
3:00	SHINING A LIGHT ON DRINKING WATER THROUGH DATA <b>Katy Te Amo &amp; Michael Howden – Taumata Arowai</b>	DRINKING WATER SAFETY PLANNING: A COLLABORATIVE APPROACH <b>Sadie Boersema - WSP</b>	AN UPDATE: CURRENT REVIEW OF FOUR TYPES OF SEWAGE DROP STRUCTURES <b>Anthony Margevicius – Aecom &amp; Conny Wan - Jacobs</b>	PLANNING FOR SUSTAINABILITY, QLDC'S WASTEWATER STORY <b>Reuben Bouman - Beca</b>	SUCCESSFUL RESEARCH AND DEVELOPMENT IMPLEMENTATION OF ‘ODOZONE’ ODOUR MITIGATION TECHNOLOGY AT GOULBURN VALLEY WATER SHPS21 <b>Andrew Fleming – Aquatec Fluid Systems</b>	
3:30	<b>AFTERNOON TEA – EXHIBITION AREA</b>					
	<b>THOUGHT LEADERSHIP: TRANSITION &amp; TRANSFORMATION – AUDITORIUM</b>	<b>DRINKING WATER TREATMENT – BEALEY B3</b>	<b>ASSET MANAGEMENT– CONWAY C3+C4</b>	<b>SUSTAINABILITY – CONWAY C5</b>	<b>WASTEWATER TREATMENT – CONWAY C1+C2</b>	<b>WORKSHOP STREAM – BEALEY B4+B5</b>
4:00	TRANSITION AND TRANSFORMATION - LIVED EXPERIENCES <b>Allan MacMaster – Scottish Water/Aecom</b>	GETTING TO ACCEPTABLE – DRINKING WATER SOLUTIONS FOR SMALLER WATER SUPPLIES <b>Kathryn Jessamine - Beca</b>	THE BENEFITS OF FORMALISED CONDITION ASSESSMENT PROGRAMMES FOR WATER UTILITIES BASED ON LESSONS LEARNED <b>Steve Apeldoorn – ProjectMax &amp; Robert Blakemore – Wellington Water</b>	QUANTIFYING THE POTENTIAL IMPACTS OF CLIMATE CHANGE ON AUCKLAND'S WATER RESOURCES <b>Lucy Whitelock-Bell &amp; Sarah Innes – Tonkin &amp; Taylor</b>	PILOTING A MOVING BED BIOFILM REACTOR (MBBR) TO TREAT POND EFFLUENT FOR NITROGEN REMOVAL <b>Andreas Fischer - Lutra</b>	<b>WECAN WORKSHOP</b>
4:30	THE INNOVATION FORUM: TE RERE AUHAHA O PARAWHENUAMEA (THE FLOWING CREATIVITY OF PARAWHENUAMEA) <b>Innovation pitches, Q&amp;A session plus judging panel</b>	PFAS – A CASE STUDY OF INNOVATIVE, EFFICIENT, AND EFFECTIVE TREATMENT TECHNOLOGY <b>Afroz Bayat - Aecom</b>	REMOTE MONITORING OF THE WASTEWATER NETWORK TO REDUCE OVERFLOWS IN OUT-OF-SIGHT PLACES <b>Heather Kikkert - Hamilton City Council</b>	A PATHWAY TO CIRCULAR ECONOMY – TRANSFORMING OUR WATER INFRASTRUCTURE <b>Emma Botha - GHD</b>	MEMBRANE AERATED BIOFILM REACTOR (MABR) PILOT TESTING <b>Kevan Brian - Watercare</b>	
5:00		THE DARK SIDE OF DRINKING WATER – CONSIDERING AND MANAGING RESIDUAL STREAMS <b>Scott Pearson - Beca</b>	HOW TO WATER YOUR PRECINCTS <b>Albert Ho &amp; Samantha Morris – Aurecon</b>	USING THE CIRCULAR ECONOMY-POTENTIAL PATHWAYS FOR THE GOULBURN VALLEY, VICTORIA, AUSTRALIA <b>Kevin Werksman - Aurecon</b>	AN INTEGRATED MODEL FOR WASTE STABILISATION POND PRACTITIONERS <b>Kevan Brian - Watercare</b>	
5:30	<b>INTERGROUP WELCOME RECEPTION – EXHIBITION AREA</b>					

WEDNESDAY 19 OCTOBER

7:15	WATER NEW ZEALAND AGM –BEALEY B4 + B5						
8:00	REGISTRATION OPENS						
8:30	KEYNOTE: BILL BAYFIELD, CHIEF EXECUTIVE, TAUMATA AROWAI – AUDITORIUM						
9:15	KEYNOTE: ZIENA JALIL – BE THE CHANGE YOU WANT TO BE – AUDITORIUM						
10:00	MORNING TEA – EXHIBITION AREA						
	THOUGHT LEADERSHIP: RISK, INSURANCE & FINANCE – AUDITORIUM	PROCUREMENT – BEALEY B3	TE AO MAORI – CONWAY C3+C4	IWA STREAM – CONWAY C5	SUSTAINABILITY – NET ZERO - CONWAY C1+C2	ASTT STREAM – BEALEY B2	WORKSHOP STREAM – BEALEY B4+B5
10:30	CYBERSECURITY <b>JENNIE VICKERS – Zeopardlaw</b>	6 WEEKS WORK IN 4 DAYS - THE JERVOIS QUAY EMERGENCY WORKS <b>James Matthews &amp; Paul Langedijk – GHD</b>	HE PUKENGA WAI, HE PUKENGA KŌRERO - UNDERSTANDING THE KNOWLEDGE LANDSCAPE FOR WATER IN AOTEAROA AND INTERNATIONALLY <b>Anna Lindgren - Aurecon Group, Te Wehi Wright – Te Amokura Consultants, Garrett Hall – Beca &amp; Jessica Grinter – Stantec</b>	TOTAL COLIFORMS IN PUBLIC WATER SUPPLIES: CASE STUDIES IN THE PURSUIT OF THE ELIMINATION STRATEGY <b>Colin Roxburgh - Waimakariri District Council</b>	POWERING A GREENER FUTURE <b>Damien Dupont - Watercare</b>	STREAM OPENING & CELEBRATION OF WNZ / ASTT COLLABORATION <b>Ben Crobsy – President ASTT AN Other – Water NZ</b>	<b>SWIG WORKSHOP</b>
11:00	NATURAL DISASTERS <b>Gill Jolly – GNS</b>	3WATERS DELIVERY ON THE CHATHAM ISLANDS - MAXIMISING OPPORTUNITIES <b>Andrew Wong - Stantec</b>	PARTNERING WITH IWI/HAPU IN DEVELOPING WATER PROJECTS <b>Esther Bennett &amp; Paul Beverley - Buddle Finlay</b>	HUMAN ENTERIC VIRUS REMOVAL IN POINT-OF-USE FILTERS AND SHEEP-WOOL MEDIA <b>Erin McGill - ESR</b>	FEASIBILITY STUDY: USING TREATED WASTEWATER FROM MANGERE AND ROSEDALE PLANTS FOR SPORTS-FIELDS IRRIGATION IN AUCKLAND <b>Sarisha Hurrissunker – Auckland Council</b>	NORTHERN INTERCEPTOR PIPELINE – HDD CROSSINGS <b>John Stuart-Robertson, Spiecapag/HDI Lucas</b>	
11:30	INSURANCE IN THE FACE OF EXTRAORDINARY RISKS <b>Bryce Davies - IAG</b>	CHANGING THE WAY WE MANAGE CAPITAL INVESTMENT PORTFOLIOS: URBAN UTILITIES’ PROGRAMME MANAGEMENT APPROACH <b>Robert Wilson - Kellogg Brown &amp; Root Pty</b>	IMPLEMENTING MAHINGA KAI AS A COMPULSORY MĀORI FRESHWATER VALUE UNDER THE NPS-FM 2020 <b>Ian Ruru - Maumahara Consultancy Services Ltd</b>	BIOPOLYMER MICROPARTICLES AS A POTENTIAL SURROGATE FOR LEGIONELLA PNEUMOPHILA <b>Sujani Ariyadasa - ESR</b>	BLUE CARBON – THE NEW GREEN? AN OPPORTUNITY TOWARDS NET ZERO EMISSIONS <b>Rebecca Phyland &amp; Kate Simmonds - Jacobs</b>	PUSHING THE LIMITS HUNUA 4 & SNELLS ALGIES <b>Paul Cooper, McConnell Dowell NZ</b>	
12:00	GREEN FINANCE AND IT’S ROLE IN ENCOURAGING SUSTAINABLE OUTCOMES <b>Adam Coxhead – BNZ</b>	DELIVERING THE DESIRED BENEFITS OF WATER REFORM THROUGH PROGRAMME MANAGEMENT <b>Alan Mackintosh &amp; Grant Cooper -Aecom</b>	MAANUKA-DOMINATED RIPARIAN PLANTINGS FOR RECOVERING THE MAURI OF LAKE WAIKARE <b>Maria-Jesus Gutierrez-Gines – ESR &amp; Glen Tupuhi – Waikato Tainui Marae</b>	CRYPTOSPORIDIUM SURROGATE REMOVAL IN PILOT-SCALE RAPID SAND FILTERS AND POINT-OF-USE FILTERS <b>Liping Pang - ESR</b>	THE COSTS OF DROUGHT IN URBAN WATER SUPPLY PLANNING <b>Asaad Shamseldin – University of Auckland</b>	USE OF AI (ARTIFICIAL INTELLIGENCE) IN PIPELINE CCTV INVESTIGATION AND ASSESSMENTS <b>Darren Michalski, IBAK and Alan Hill, Intergroup</b>	
12:30	LUNCH – EXHIBITION AREA POSTER PRESENTATIONS - FOYER						

	THOUGHT LEADERSHIP: PEOPLE – AUDITORIUM	SMART WATER – BEALEY B3	ASSET MANAGEMENT – CONWAY C3+C4	IWA – LAND AND NITRATES – CONWAY C5	WASTEWATER TREATMENT – CONWAY C1+C2	ASTT STREAM – BEALEY B2	WORKSHOP STREAM – BEALEY B4+B5
1:30	HOME SWEET HOME <b>Helen Tua – Mercury Energy &amp; Toitu Tahua Centre for Sustainable Finance</b>	USING REMOTE ON-LINE DATA ANALYTICS AND AI TO IDENTIFY THE RATS IN YOUR SEWER <b>Hugh Ratsey - The Wastewater Specialists &amp; Phil de Groot - Trility</b>	SUCCESSFUL IMPLEMENTATION OF ISO 55001 – PAPAKURA FRANCHISE <b>Yolanda Oosthuizen – Veolia</b>	NATIVE VEGETATION: A NEW PARADIGM FOR THE LAND APPLICATION OF WASTEWATER? <b>Alexandra Meister – ESR</b>	FIELD SCALE ASSESSMENT OF CONTAMINANT TRANSPORT FROM AN ON-SITE WASTEWATER MANAGEMENT SYSTEM: RISK TO GROUNDWATER <b>Bronwyn Humphries - ESR</b>	CHANNELINE BRISBANE CORSO CULVERT REHABILITATION PROJECT <b>Marc Ciochetto, Channeline and Cory Higgins, Interflow</b>	<b>CLIMATE CHANGE WORKSHOP</b>
2:00	WORKFORCE – MAORI WORKERS & WATER <b>Anton Matthews – Hussle Group</b>	WATER AND WASTEWATER SYSTEMS IMPROVEMENTS THROUGH DIGITAL OPERATIONS ANALYSIS <b>Jared Thorpe – Jacobs</b>	PREPARING – AND PREPARING TO DELIVER – TREATMENT PLANT MASTERPLANS <b>Julianne Martin – Lutra &amp; Asli Crawford – Horowhenua District Council</b>	MĀNUKA-DOMINATED RIPARIAN PLANTINGS FOR THE MITIGATION OF DIFFUSE AGRICULTURAL NITROGEN <b>Olivia Maria Adamson - University of Waikato</b>	CRUSHED GLASS AS A FILTER MEDIUM FOR ON-SITE WASTEWATER TREATMENT SYSTEMS <b>Marc Jensen – Tm Consultants</b>	TRENCHLESS STORMWATER CULVERT REHABILITATION <b>Jaco Griessel, PipeWorks</b>	
2:30	WATER WORKFORCE – BIG PICTURE PERSPECTIVES <b>Alan Dent – Deloitte</b>	REDUCING OPEX, SENSOR DRIFT AND EMISSIONS THROUGH DIGITAL INNOVATION <b>Thomas Joseph – Mott Macdonald</b>	TAKING LEGAL ACTION AGAINST WATER THEFT: PROTECTING CUSTOMERS, NOT REVENUE <b>Lauren Nicholson – Watercare</b>	PERMEABLE REACTIVE BARRIERS FOR REMOVAL OF NITRATE IN SHALLOW GROUNDWATER <b>Louise Weaver – ESR</b>	CHANGE OF GUARD – CAN CBOD AND TSS TAKE A BACK SEAT? <b>Ash Deshpande &amp; Emma Cross – Lutra</b>	DEVELOPMENT OF A PIPE LINING DESIGN SPECIFICATION <b>Tony Gordon, WSP NZ</b>	
3:00	<b>AFTERNOON TEA – EXHIBITION AREA</b>						
	THOUGHT LEADERSHIP: CLIMATE AND ENVIRONMENT – AUDITORIUM	SMART WATER – BEALEY B3	WORKFORCE – CONWAY C3+C4	IWA – FUTURE – CONWAY C5	WASTEWATER TREATMENT – CONWAY C1+C2	ASTT STREAM – BEALEY B2	WORKSHOP STREAM – BEALEY B4+B5
3:30	UNCONSCIOUS BIAS IN INVESTMENT DECISION MAKING <b>Adrienne Miller – Infrastructure Sustainability Council</b>	THE FUTURE OF ONLINE STAKEHOLDER ENGAGEMENT FOR THE WATER SECTOR <b>Deborah Lind – AECOM</b>	AIRING OUR DIRTY LAUNDRY – AN OPEN ACCOUNT OF OUR INCLUSION AND DIVERSITY JOURNEY <b>Kate Simmonds &amp; Becky Macdonald – Jacobs</b>	REVISITING WAIKOUAITI, WHY LEAD IS STILL IMPORTANT. <b>Belinda Cridge &amp; John McAndrew – ESR</b>	LYTTELTON HARBOUR SCHEME – REMOVING WASTEWATER DISCHARGES FROM A HARBOUR <b>Anthony Doherty &amp; Matthew Sheppard – Jacobs</b>	REUSING ASSETS TO CREATE CAPACITY AND RESILIENCE - CAN YOU TEACH AN OLD PIPE NEW TRICKS <b>Nathan Clarke, NRSBU, William Nieuwenhuis, BECA, and John Adamo, Interflow NZ</b>	<b>WSMG WORKSHOP</b>
4:00	CIRCULAR ECONOMY A PANEL DISCUSSION: <b>Facilitator – Apra Boyle-Gotla (facilitator), Debbie O’Byrne (Beca), Teina Boasa-Dean, Lucy Tukua (Mott MacDonald) and Matthew Jackson (Alimentary Systems)</b>	OPERATIONALISING SMART METER NETWORKS: BENEFITS FOR UTILITIES AND THEIR CUSTOMERS <b>Matthew Thomson - Jacobs</b>	FIGHTING THE LABOUR SHORTAGE IN THE WATER SECTOR: ATTRACTING AND RETAINING IMMIGRANTS AND WOMEN <b>Gabriela Campos Balzat &amp; Natalia Moraga – GHD</b>	THE BIOFACTORY: LIFE CYCLE SUSTAINABILITY ASSESSMENT FOR PROMOTING CIRCULAR ECONOMIES IN WASTEWATER TREATMENT <b>Madeline Furness – University of Canterbury</b>	INNOVATIVE WASTEWATER TREATMENT SYSTEMS FOR EXTREME ALPINE ENVIRONMENTS <b>Matt Savage – Apex Water</b>	ADVANCEMENTS IN STRUCTURAL CURED IN PLACE PIPE (CIPP) MATERIALS, LINER DESIGN AND MANUFACTURE <b>Darren Michalski, IBAK</b>	
4:30		INFORMED AI IN THE WATER SECTOR - THE ROADMAP FROM POSSIBLE TO PLAUSIBLE <b>Silvia Vlad - Jacobs</b>	THE JOURNEY TO BECOMING BETTER <b>Maseina Koneferenisi - Lutra</b>	PREDICTING WATER QUALITY USING MACHINE LEARNING <b>Judith Webber - ESR</b>	COMBINING THE USE OF ENGINEERED AND NATURAL PLANTS IN ACTIVATED SLUDGE SYSTEMS		

					John Koumoukelis – Hydroflux Epc		
6:00	"OUR SHOUT" - WATER NEW ZEALAND'S PRE-DINNER DRINKS						
7:00	DOWNER CONFERENCE DINNER						

THURSDAY 20 OCTOBER

8:30	REGISTRATION OPENS	
9:00	KEYNOTE: GEORGE HAWKINS, MOONSHOT MISSIONS (FORMER DC WATER CEO) – AUDITORIUM	EXHIBITION VISITORS' MORNING
9:45	KEYNOTE: TUKOROIRANGI "TUKU" MORGAN – CO-GOVERNANCE, ACCOUNTABILITY & REPRESENTATION – AUDITORIUM	
10:15	MORNING TEA	
10:45	KEYNOTE: GAIL TIPA - WATER FLOWS AND WHĀNAU PERSPECTIVES – AUDITORIUM	
11.30	CONVERSATIONS WITH GILLIAN BLYTHE, WATER NEW ZEALAND CHIEF EXECUTIVE <ul style="list-style-type: none"> <li>• Heather Shotter, Executive Director, National Transition Unit, Department of Internal Affairs</li> <li>• Andy Burgess, GM Infrastructure Regulation Commerce Commission</li> </ul>	
12:15	WATER NEW ZEALAND – THE NEXT YEAR: WATER NEW ZEALAND PRESIDENT, LORRAINE KENDRICK – AUDITORIUM	
12:30	CONFERENCE CLOSE – AUDITORIUM	