

# Stormwater 2023

## Te Roopu Wai Āwhātanga

23–25 May | Cordis, Tāmaki Makaurau Auckland

### PRELIMINARY PROGRAMME

TUESDAY 23 MAY 2023				
7:15am - 8:15am	Mental Health Fundraising Breakfast			
8.00am	Registrations open			
9.00am	<b>WELCOME AND CONFERENCE OPENING:</b> <b>KEYNOTE ADDRESS: HON KIERAN MCANULTY (EMERGENCY MANAGEMENT – MINISTER &amp; LOCAL GOVERNMENT – MINISTER)</b> <b>KEYNOTE ADDRESS:</b>			
10.30-11.00am	Morning Tea [Venue: Exhibition Area]			
	<b>WATER QUALITY MODELLING</b>	<b>STREAM EROSION</b>	<b>WSUD CASE STUDIES</b>	<b>WORKSHOP 1</b>
11.00am	<i>TAURANGA FRESHWATER MANAGEMENT TOOL – INTEGRATING WATERWAY PLANNING AT A CITY SCALE</i> <i>Caleb Clarke – Morphum</i>	<i>GOING GREEN: COSTS AND BENEFITS OF LIVING ROOFS ON BUS SHELTERS IN AUCKLAND</i> <i>Sue Ira - Koru Environmental Consultants Limited</i>	<i>POLITICS, THE POND AND THE PARK - THE STORMWATER JOURNEY OF TE PĀ HARAKEKE</i> <i>Avik Halder – Stantec</i>	<i>PLANNING AND DESIGNING STORMWATER INFRASTRUCTURE TOWARDS A ZERO CARBON FUTURE</i> <i>James Reddish – WSP, Konrad Heinemann - Auckland Council and Jonny Breen - Mott McDonald</i>
11.30am	<i>SAFE NETWORKS: A COLLABORATIVE PROGRAMME FOR MITIGATING WASTEWATER CONTAMINATION IN STORMWATER RUNOFF</i> <i>Jess Brooks – Auckland Council</i>	<i>CONTINUOUS SIMULATION HYDROLOGICAL AND HYDRAULIC MODELLING TO QUANTIFY STREAM EROSION ON A CATCHMENT SCALE</i> <i>Haddon Smith – Beca</i>	<i>WHERE WE PLAY: USING WSD TO HIT CARBON EMISSIONS OUT OF THE GOLF COURSE</i> <i>Linda Norman –ACH Consulting Ltd</i>	
12.00pm	<i>SAFESWIM AT A CROSSROADS: NEXT STEPS FOR NEW ZEALAND’S WORLD LEADING PROGRAMME</i> <i>Andrew Schollum – Puhoi Stour Ltd</i>	<i>TE PAIAKA – NATIVE ROOT PROJECT</i> <i>Sarah Nolan – Auckland Council</i>	<i>HYDROLOGIC IMPACTS OF RETENTION LAYERS WITHIN EXTENSIVE VEGETATED ROOF ASSEMBLIES</i> <i>Giuliana Frizzi – University Of Toronto</i>	
12.30pm	Lunch [Venue: Exhibition Area]			
1.30pm	Keynote Address: Andrew Chin			
2.00pm	Keynote Address: Ian White			
	<b>FLOOD RISK MANAGEMENT</b>	<b>STORMWATER TREATMENT</b>	<b>FUTURE FOCUS</b>	<b>FRESHWATER QUALITY</b>
2.30pm	<i>A CASCADE OF TENSIONS: FLOOD RISK MANAGEMENT UNDER CLIMATE CHANGE</i> <i>Fiona Macdonald – Auckland Council</i>	<i>ANNUAL PERFORMANCE OF A DOWNPIPE STORMWATER TREATMENT SYSTEM REMOVING DISSOLVED METALS IN RUNOFF FROM DIFFERENT METAL ROOF TYPES</i> <i>Jessika Carvalho – University Of Canterbury</i>	<i>CREATE MORE RESILIENT COMMUNITIES ANTICIPATING IMPACTS OF CLIMATE CHANGE</i> <i>Simran Bassan – Woods</i>	<i>A METAL ISOTOPE TOOLKIT FOR TRACING HEAVY METALS IN THE ENVIRONMENT</i> <i>Jennifer Gadd – NIWA</i>
3.00pm	<i>"GRAB YOUR UMBRELLA!" OR, INVESTIGATING AN EARLY WARNING SYSTEM FOR URBAN FLOODING</i> <i>Warren Bird – WSP and Fiona McDonald - Auckland Council</i>	<i>IMPROVING STORMWATER QUALITY FOR MICROPLASTICS (25 - 106 MICRONS) USING A BIORETENTION CELL</i> <i>Kelsey Smyth – University Of Toronto</i>	<i>TACKLING OUR SKILLS SHORTAGE: THE SEVEN ELEMENTS OF SUCCESSFUL ENVIRONMENTAL TRAINING PROGRAMMES</i> <i>Clare Feeney – Environmental Communications Ltd</i>	<i>IDENTIFYING THE LIMITING NUTRIENTS IN PONDS</i> <i>Abigail Kuranchie – Stantec</i>

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3.30pm	Afternoon Tea [Venue: Exhibition Area]			
	<b>IMPROVING WSUD ASSETS</b>	<b>FISH PASSAGE</b>	<b>ROAD CONTAMINANTS</b>	<b>WORKSHOP</b>
4.00pm	<i>OUTCOME BASED SIZING OF STORMWATER TREATMENT SYSTEMS Matthew Murdock – WSP</i>	<i>MORE THAN A DRAIN; THE ECOLOGICAL SURPRISE OF HARRISONS CUT DRAIN Gareth John – Tauranga City Council</i>	<i>INTRODUCING VERSION 4 OF THE ROAD STORMWATER SCREENING MODEL Annette Semadeni-Davies – NIWA</i>	<i>NATIONAL URBAN STORMWATER MODELLING GUIDELINES Rathika Jebamony, AWA (National Stormwater Modelling Guide Project Director) &amp; Michael Arthur, Metis Consulting (Project Manager and Lead Author)</i>
4.30pm	<i>ON-LOT STORMWATER...A LOT TO LEARN Andrea Phillips – Hamilton City Council</i>	<i>INTERNATIONAL FISH PASSAGE LEARNINGS AND RETROFIT LESSONS FROM CHRISTCHURCH Mark Groves – WSP</i>	<i>ROLE OF STREET SWEEPING IN REDUCING ROAD RUNOFF POLLUTION Frances Charters – University Of Canterbury</i>	
5.00pm	<i>KEEPING OUR RAIN GARDENS SAFE – AUCKLAND TRANSPORT'S SAFETY BULLETIN Abbey Sharma - Auckland Transport</i>	<i>DESIGN METHODOLOGY FOR CULVERTS WITH FISH PASSAGE Gustaaf Kikkert – Bloxam Burnett &amp; Olliver</i>	<i>DOES PAVEMENT WEAR GENERATE MICROPLASTICS IN STORMWATER RUNOFF? Kelsey Smyth – University Of Toronto</i>	
5.30pm	InterGroup Welcome Function [Venue: Exhibition Area]			

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### PRELIMINARY PROGRAMME

WEDNESDAY 24 MAY				
8.00am	REGISTRATION OPENS			
8.30am	KEYNOTE ADDRESS: ARNOUD MOLENAAR			
9:00am	INNOVATION PRESENTATION			
10.00am	Morning Tea [Venue: Exhibition Area]			
	<b>NETWORK MANAGEMENT</b>	<b>RAINFALL AND RUNOFF</b>	<b>FLOOD MANAGEMENT CASE</b>	<b>WORKSHOP 3</b>
10.30am	<i>HOLISTIC STORMWATER CATCHMENT PLANS – JUST A PIPE DREAM? David Arseneau – Tasman District Council</i>	<i>OUR WET WORLD Cameron Oliver – XRain</i>	<i>TO STOPBANK OR NOT TO STOPBANK? A CASE STUDY Peter Christensen – Storm Environmental</i>	<i>TE AO MĀORI - PARTNERSHIPS AND TE MANA O TE WAI – Scott Speed / Sarah Nolan</i>
11.00am	<i>FRESHWATER MANAGEMENT TOOL - OUTCOMES AND LESSONS FROM TRADING COST FOR COMPLEXITY Tom Stephens – Auckland Council</i>	<i>EVIDENCE-BASED DECISION MAKING AT HEALTHY WATERS: RAINFALL FORECASTING SKILL ASSESSMENT FRAMEWORK Luke Sutherland-Stacey – Weather Radar New Zealand</i>	<i>THE VALUE OF VALUE ENGINEERING – ACHIEVING THE REQUIRED OUTCOMES IN PINEHAVEN STREAM IMPROVEMENT WORKS Kama Sliepen – GHD Ltd</i>	
11.30am	<i>AUCKLAND STORMWATER CONSENT REVIEW, A SNAPSHOT OF THE PRESENT AND FUTURE Gemma Chuah – Auckland Council</i>	<i>IS CLIMATE CHANGE EVIDENT IN WELLINGTON'S RAINFALL RECORDS? IMPLICATIONS FOR STORMWATER CATCHMENT MODELLING Deborah Maxwell – SLR</i>	<i>BORCK CREEK STORMWATER CORRIDOR – FINDING SPACE IN A CHANGING WORLD Alistair Stevens – Stantec</i>	
12.00pm	<i>WAKA KOTAHI WELLINGTON STATE HIGHWAY STORMWATER MONITORING PLAN – CHALLENGES AND PRIORITIES Claire Conwell – SLR</i>	<i>WELLINGTON REGION RUNOFF HYDROGRAPH CALCULATOR FOR STORMWATER RUNOFF CALCULATIONS Charlotte Lockyer – Stantec</i>	<i>REGENERATION OF CHRISTCHURCH STORMWATER MODELLING - AVON CITYWIDE 2.0 DELIVERED Tim Preston – GHD</i>	
12.30pm	Lunch [Venue: Exhibition Area]			
12.30pm-1.00pm	Poster Q&A session			
	<b>GREEN INFRASTRUCTURE CASE STUDIES</b>	<b>TE MANA O TE WAI</b>	<b>INDUSTRY CHANGE</b>	<b>WORKSHOP 4</b>
1.30pm	<i>TURNING THE RED ZONE GREEN – REGENERATIVE STORMWATER DESIGN IN THE ŌTĀKARO AVON RIVER CORRIDOR Hamish Cotter and Vicki Clarke – Beca</i>	<i>THE EVOLUTION OF STORMWATER MANAGEMENT PLANS – GIVING EFFECT TO TE MANA O TE WAI Sarah Dudson – WSP</i>	<i>STORMWATER DELIVERY - AN OPPORTUNITY TO RESET? Francesco Martin – WSP</i>	<i>MANUFACTURED TREATMENT DEVICE MAINTENANCE WORKSHOP Stormwater 360</i>
2.00pm	<i>PAERATA CULVERT REPLACEMENT - IMPROVING WATER QUALITY OUTCOMES THROUGH WATER SENSITIVE DESIGN Emma Grigg – Holmes NZ</i>	<i>20YEARS OF CHANGE–WATERCOURSE ASSESSMENT RESURVEY IMPLICATIONS FOR WATERWAYS MANAGEMENT UNDER TE MANA/MAURI O TE WAI Adray Minh Nguyen – Auckland Council &amp; Elizabeth Morrison - 4Sight</i>	<i>ENVIRONMENTAL IMPACT BONDS. WHAT ARE THEY, AND HOW CAN THEY FUND STORMWATER PROJECTS TO ACHIEVE REAL IMPACT AT SCALE? Brad Tiller – Tonkin Taylor</i>	

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2.30pm	REVERSING RECLAMATION TO ENHANCE TE AWARUA-O-PORIRUA AND RESTORE RESILIENCE TO ITS COMMUNITIES Kat Dever-Tod – GHD	REGENERATING TE PUHINUI APPROACH AND OUTCOMES THAT GIVE EFFECT TO TE MANA O TE WAI James Reddish – WSP	RAISING STORMWATER'S PROFILE: OUTCOMES OF THE 2022 WORKSHOP Clare Feeney – Environmental Communications Ltd	
3.00pm	Afternoon Tea [Venue: Exhibition Area]			
	FLOOD MODELLING	PUBLIC ENGAGEMENT	NETWORK UPGRADE CASE STUDIES	WORKSHOP 5
3.30pm	AUCKLAND REGIONWIDE FLOOD MODELLING Cheryl Bai – Auckland Council	DISMISSING THE PLAUSIBLE – IS HUMAN BEHAVIOUR THE PRIMARY BARRIER TO RISK REDUCTION? Alex Cartwright – Tonkin Taylor	PORTS OF AUCKLAND OUTFALL - DEEP LARGE DIAMETER SIPHON SOLUTION Paul Cooper – McConnell Dowell	STORMWATER ASSET TRANSFER WORKSHOP – DIA Phillip Eyles - DIA and Helen Shaw - Beca
4:00pm	PREDICTIVE AND OPERATIONAL CATCHMENT MODELLING - IS NEW ZEALAND READY? Matthew Piggot – Autodesk	GET FLOOD READY: RAISING PUBLIC AWARENESS OF FLOOD RISK Nancy Baines – Auckland Council	DON'T SHIFT BRICKS – A HERITAGE ASSET UPGRADE Eliza Cowey – Aecom	
4.30pm – 5:00pm	Stormwater Group Annual General Meeting			
7.00pm – 11:00pm	Stantec Conference Dinner			

### THURSDAY 25 MAY 2023

8.00am	REGISTRATION OPENS		
8.30am	OUR RECENT FLOODING PLENARY SESSION - PART 1 RESPONSE AND RECOVERY		
10.00am	Morning Tea [Venue: Exhibition Area]		
10.30am	OUR RECENT FLOODING PLENARY SESSION - PART 2 REDUCTION AND READINESS		
	SITE VISIT ONE DRURY SOUTH WETLAND AND AWAKERI WETLANDS	SITE VISIT TWO TE AUAUNGA OAKLEY CREEK	SITE VISIT THREE GREENSLADE AND TE AWATAHA GREENWAY