

# Stormwater 2021

12–14 May | Tauranga

## PRELIMINARY PROGRAMME

### WEDNESDAY 12 MAY 2021

<b>8.00am</b>					<b>REGISTRATIONS OPEN</b>				
<b>9.00am</b>					<b>WELCOME AND CONFERENCE OPENING</b> KEYNOTE ADDRESS: TINA POROU, POIPOIA - TE MANA O TE WAI AND 3 WATERS				
<b>10.30am</b>					<b>MORNING TEA [VENUE: EXHIBITION AREA]</b>				
		<b>ENGAGING COMMUNITIES</b>		<b>RAINFALL AND RUNOFF</b>		<b>DESIGN</b>		<b>STORMWATER MANAGEMENT</b>	
<b>11.00am</b>		OPEN-SOURCE COMMUNITY-BASED MONITORING OF FRESHWATER CATCHMENTS  Ed Clayton – University of Auckland		PEAK FLOW VS VOLUME – A PERFORMANCE REVIEW OF COMMONLY USED RAINFALL RUN-OFF MODELS  Mark Groves - WSP		SUPER-CRITICAL CONSIDERATIONS FOR STEEP STREAM DESIGN  Laura Newman-Watt – WSP		PUT A "LID" ON IT  Dorcas Adjei-Sasu – WSP & Pete Thomas – Tauranga City Council	
<b>11.30am</b>		NZFLOODPICS: ENGAGING COMMUNITIES TO SUPPORT FLOOD RESILIENCE  Jon Rix – Tonkin + Taylor		RATIONALISING THE UNIT HYDROGRAPH IN A WEB APPLICATION  Andrew Tipene - Atcon		SAFETY FACTORS FOR DESIGN OF STORMWATER PONDS?  Bill Noell – Pattle Delamore Partners Ltd		IS NO INCREASE IN FLOODING PRACTICAL?  Iain Smith & Mhiari Rademaker – Beca	
<b>12.00pm</b>		A COLLABORATIVE APPROACH TO FUTURE MANAGEMENT OF THE SEADOWN DRAIN, TIMARU  Sophie South – Davis Ogilive & Partners Ltd		ASSESSMENT OF TP108 CURVE NUMBER FOR RAINFALL DURATIONS LESS THAN 24 HOURS  Jahangir Islam – Auckland Council		PRACTICAL INSTALLATION DESIGN OPTIONS AND SAFETY IN DESIGN FOR DEEP EMBANKMENT STORMWATER CULVERTS  Americo Dos Santos – Hynds Pipe Systems Ltd		STORMWATER MANAGEMENT AND ECOLOGICAL OUTCOMES FOR AQUATIC FAUNA – THE PROBLEM OR THE SOLUTION?  Claire Webb - Beca	
<b>12.30pm</b>					<b>LUNCH [VENUE: EXHIBITION AREA]</b>				
<b>1.30pm</b>					<b>KEYNOTE ADDRESS: NICKI GREEN, BAY OF PLENTY REGIONAL COUNCIL TOI MOANA – LOCAL PERSPECTIVE</b>				
<b>2.00pm</b>					<b>KEYNOTE ADDRESS: WALLY POTTS, TAURANGA CITY COUNCIL – LOCAL PERSPECTIVE</b>				
		<b>STORMWATER MANAGEMENT</b>		<b>INTEGRATED DESIGN – FISH PASSAGE</b>		<b>WATER QUALITY - TREATMENT</b>		<b>WORKSHOP STREAM</b>	
<b>2.30pm</b>		THE CHALLENGE BEFORE US  Roger Seyb - Beca		FISH PASSAGE - DESIGN AND CONSTRUCTION CHALLENGES  Pushpaka Rabel – Tonkin + Taylor		VARIATION IN PERFORMANCE OF MEDIA BASED STORMWATER TREATMENT SYSTEMS  Forrest Bilek – University of Canterbury		MAKING AN INFORMED CHOICE WHEN USING HIRDS RAINFALL ESTIMATES  Cameron Oliver – Beca & Trevor Carey-Smith – NIWA	
<b>3.00pm</b>		URBAN WATERWAYS, WATER SENSITIVE URBAN DESIGN, AND THE LAW  Mark Christensen – Natural Resources Law Ltd		FISH PASSAGE - WHERE TO FROM HERE?  Jeremy Boxall - WSP		EVALUATION OF DIFFERENT LOW-COST FILTER MATERIALS FOR REMOVAL OF ORGANIC AND INORGANIC CONTAMINANTS FROM STORMWATER  Narges Esfandiar – Temple University			
<b>3.30pm</b>					<b>AFTERNOON TEA [VENUE: EXHIBITION AREA]</b>				

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	CLIMATE CHANGE	CASE STUDIES	STORMWATER MANAGEMENT	RAINFALL AND RUNOFF
4:00pm	<p>A FRAMEWORK TO ASSESS CLIMATE CHANGE IMPACTS AT CATCHMENT SCALE: VULNERABILITY, RISK AND ADAPTATION NEXUS</p> <p>Saleem Akhter - Aecom</p>	<p>NGĀTI MŪTUNGA – MAHINGA KAI VALUES AND ATTRIBUTES THROUGH MANA WHAKAHAERE</p> <p>Wolfgang Kanz – Gisborne District Council &amp; Ian Ruru – Maumahara Consultancy Services</p>	<p>MITIGATING FLOOD RISKS: ANALYSIS OF DIFFERENT TYPES AND QUANTITY OF GREEN INFRASTRUCTURE</p> <p>Juliana Reu Junqueira – University of Waikato</p>	<p>PERFORMANCE EVALUATION OF A DECADAL RAINFALL RADAR RECORD FOR AUCKLAND COUNCIL</p> <p>Luke Sutherland-Stacey &amp; Beatriz Rebroedo Viso – Weather Radar New Zealand</p>
4:30pm	<p>CARBON PORTAL</p> <p>Tom Mansell &amp; Cheilo Manalo – Auckland Council</p>	<p>ACHIEVING WATER QUALITY OBJECTIVES IN A FUTURE OF RISING TIDES: A CASE STUDY FROM THE 36TH AMERICA'S CUP INFRASTRUCTURE PROJECT</p> <p>Richard Wilson – Wynyard Edge Alliance</p>	<p>UPDATING TAURANGA'S FLOOD MAPS</p> <p>Kate Dawkings &amp; Claudia Hellberg– Tauranga City Council</p>	<p>ASSESSING THE ERRORS INVOLVED IN ESTIMATING RAINFALL FROM RAIN GAUGE RECORDS</p> <p>Brook Keats – Weather Radar New Zealand</p>
5.00pm-6.00pm	INTERGROUP WELCOME FUNCTION [VENUE: EXHIBITION AREA]			

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### THURSDAY 13 MAY 2021

<b>8.30am</b>					<b>REGISTRATION OPENS</b>				
<b>9.00am</b>					<b>KEYNOTE ADDRESS: HOLLY GREENING, CO-FOUNDER, COASTWISE PARTNERS</b>				
<b>9:30am</b>					<b>INNOVATION SHOWCASE</b>				
<b>10.30am</b>					<b>MORNING TEA [VENUE: EXHIBITION AREA]</b>				
	<b>WATER QUALITY- POLLUTANTS</b>		<b>RESILIENCE</b>		<b>CASE STUDIES</b>		<b>WORKSHOP STREAM</b>		
<b>11.00am</b>	<p>CALIFORNIA DREAMING. CALIFORNIA'S STORMWATER TRASH LEGISLATION - A ROAD MAP TO STOP MARINE PLASTIC</p> <p>Mike Hannah – Enviropod International</p>		<p>THE EFFECT OF HYDROLOGICAL CHARACTERISTICS OF URBAN CATCHMENTS ON RESILIENCE OF STORMWATER MANAGEMENT SYSTEMS: A QUANTITATIVE APPROACH</p> <p>Nariman Valizadeh – University of Auckland &amp; CKL Ltd</p>		<p>LEARNING TO APPRECIATE THE VIEW IN THE VALLEY: THE KARAPIRO GULLY STREAM CROSSING HDD INSTALLATION</p> <p>Josy Cooper – Waipa Civil Ltd</p>		<p>INCREASING FLOOD RESILIENCE ACROSS AOTEAROA PROJECT - HOW TO GET INVOLVED/ OPPORTUNITIES FOR ENGAGEMENT</p> <p>Dr Graeme Smart - NIWA Associate Professor Silvia Serrao-Neumann &amp; Professor Iain White - UoW Liam Foster - WSP Jon Rix – Tonkin + Taylor</p>		
<b>11.30am</b>	<p>MIND THE (DATA) GAP: MACRO- AND MICRO- PLASTIC POLLUTION IN STORMWATER</p> <p>Darren Tiddy &amp; Braden Van Leer – Stormwater360</p>		<p>TCC'S MULTI-HAZARD APPROACH TO BUILDING RESILIENCE IN STORMWATER ASSETS</p> <p>Johann Van Wyk – Stantec &amp; Steve Raynor - Tauranga City Council</p>		<p>INNOVATIVE TECHNIQUES FOR MANAGING GROUNDWATER IN PEAT</p> <p>Jesse Peeters – Auckland Council &amp; Rodolfo Piccolotto Domenico – GHD</p>				
<b>12.00pm</b>	<p>MACROPLASTICS TO MICROPLASTICS; FINE TUNING THE TREATMENT TRAIN APPROACH TO ADDRESS A CONTAMINANT OF EMERGING CONCERN</p> <p>Linda Norman – ACH Consulting Ltd</p>		<p>CLIMATE-DRIVEN IMPACTS ON FLUVIAL INUNDATION HAZARDS IN COASTAL KAIUAUA</p> <p>Jonathan Chambers – Harrison Grierson</p>		<p>THE EVOLUTION AND LESSONS LEARNED OF A 20-YEAR STORMWATER MONITORING PROGRAM IN KITCHENER, CANADA</p> <p>David Arseneau - GHD</p>				
<b>12.30pm</b>					<b>LUNCH [VENUE: EXHIBITION AREA]</b>				
	<b>MODELLING</b>		<b>STORMWATER MANAGEMENT</b>		<b>INTEGRATED DESIGN</b>		<b>WORKSHOP STREAM</b>		
<b>1.30pm</b>	<p>FWMT ADVANCES IN WATER QUALITY MANAGEMENT: FUTURE &amp; OPTIMISED SCENARIO MODELLING</p> <p>Hana Judd – Morphem Environmental</p>		<p>CREATING A TOOL TO OPTIMISE WATER QUALITY IMPROVEMENT AND SMARTER INFRASTRUCTURE INVESTMENT</p> <p>Sally Be – Auckland Council</p>		<p>GREEN TRACKING OF LIGHT RAIL: ACHIEVING ECOLOGICAL NET-GAIN MOBILITY</p> <p>Ed Clayton – University of Auckland</p>		<p>FISH PASSAGE</p> <p>Mark Groves - WSP</p>		
<b>2.00pm</b>	<p>WAIMAKARIRI DISTRICT WIDE STORMWATER MODELLING</p> <p>Greg Whyte – DHI Water &amp; Environment</p>		<p>TACKLING STREAMBANK EROSION IN AUCKLAND - YOU CAN'T MANAGE WHAT YOU DON'T MEASURE</p> <p>Hannah Brightley – Healthy Waters, Auckland Council</p>		<p>STORMWATER TREATMENT: MAINTENANCE-LED DESIGN - PUTTING THE RIGHT DEVICE IN THE RIGHT PLACE</p> <p>Cathy Bebelman – Auckland Transport</p>				

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<b>2.30pm</b>	CASE STUDY - URBAN STORMWATER MODELLING APPROACHES IN NZ AND THE UK  Michael Arthur – Metis Consultants Ltd	THE INFLUENCE OF GROUNDWATER CONDITIONS ON NUTRIENT DYNAMICS IN WATERWAYS  Fabio Cabral Silveira – Canterbury University	TE PAPA THREE WATERS INFRASTRUCTURE PLANNING  Alex Fullerton - Beca	
<b>3.00pm</b>	<b>AFTERNOON TEA [VENUE: EXHIBITION AREA]</b>			
	<b>WATER QUALITY - TREATMENT</b>	<b>INNOVATION &amp; TECHNOLOGY</b>	<b>TRAINING &amp; GUIDELINES</b>	<b>CASE STUDIES</b>
<b>3.30pm</b>	PERFORMANCE OF HIGH FLOW RATE BIOFILTRATION SYSTEM  Kevin Jonathan – Stormwater360 & Forrest Bilek – Canterbury University	CREATING DETAILED DEMS OF DEPTH USING 'OPTICAL BATHYMETRY' SURVEY TECHNIQUES  Matthew Gardner – Land River Sea Consulting Ltd	HOW TO MEASURE AND MONETISE THE OUTCOMES OF YOUR ENVIRONMENTAL TRAINING: A PORTAL INTO THE WORLD OF SUSTAINABLE PROCUREMENT AND BROADER OUTCOMES  Clare Feeney – Environmental Communications Ltd	STORMWATER POLLUTION RISK MITIGATION IN A HIGHLY INDUSTRIALISED CATCHMENT – LOWES PIT CASE STUDY  Wageed Kamish – Tonkin + Taylor
<b>4:00pm</b>		APPLICATION OF RADIO-FREQUENCY IDENTIFICATION (RFID) SENSORS FOR SEWER AND STORMWATER NETWORKS MONITORING  Sundra Tatiparthi – University of Auckland	TECHNICAL GUIDANCE DOCUMENT FOR STORMWATER SOAKAGE AND GROUNDWATER RECHARGE IN THE AUCKLAND REGION  Amir Montakhab – Auckland Council	THE JOURNEY OF INTEGRATED CATCHMENT PLANNING IN WHANGĀREI  Damian Young – Zealandia Consulting & Shelley Wharton – Whangarei District Council
<b>4.30pm – 5:00pm</b>	<b>STORMWATER GROUP ANNUAL GENERAL MEETING</b>			
<b>7.00pm – 11:00pm</b>	<b>STANTEC CONFERENCE DINNER</b>			

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## PRELIMINARY PROGRAMME

### FRIDAY 14 MAY 2021

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8.00am	REGISTRATION OPENS
9.00am	KEYNOTE ADDRESS: HON NANIA MAHUTA, MINISTER OF LOCAL GOVERNMENT
9.30am	CLOSING SPEECH WATER NEW ZEALAND
10.00am	MORNING TEA [VENUE: EXHIBITION AREA]
10.30am – 2.00pm	SITE VISITS