

and Planning in Uncertainty

| | | _ |
|--|---------|--------|
| | ICE DDC | |
| | NCE PRO | M-KAIM |
| | | M |

| | CONFERENCE PROGRAMI | | | |
|----------------------|---|---|---|--|
| | DAY ONE: | WEDNESDAY 17 AUGUST 2022 | | |
| 7.00am | YWP Networking Breakfast <i>Registration Required</i> Venue: Sails by Rydges | | Proudly sponsored by | |
| 8.30am | Registration opens | | | |
| | SESSION 1: OPENING DAY ONE | | | |
| 9.00am | Welcome to Country: Uncle Bill, Birpai Local Aboriginal Land Council NSW President Welcome: Nanda Altavilla, NSW Branch, Australian Water Association Local Welcome: Jeffery Sharp, Director Community Utilities at Port Macquarie-Hastings Council Sponsor Address: Beca Hunter H2O | | | |
| 9.30am | Official Welcome: Jim Bentley, CEO of the NSW Water Sector, NSW Department of Planning, Industry and Environment | | | |
| 9.50am | am Keynote Speaker Anika Molesworth – Agroecology Scientist and Farmer | | | |
| | 10 | .30am-11.00am Morning Tea | | |
| ROOM | PLENARY | RENAISSANCE ROOM | RUSHCUTTERS ROOM | |
| THEME | SESSION 2: OPERATING AND PLANNING THROUGH SHOCKS AND DISRUPTIONS | SESSION 3: REGIONAL WATER STRATEGIES / MANAGEMENT / WATER REFORM | SESSION 4: WATER QUALITY – COMMUNITY SAFETY IN OUR HANDS | |
| 11.00am | THE 20'S THE DECADE OF WATER – HOW DO WE SHAPE A MORE SUSTAINABLE FUTURE Peter Dennis, Beca Hunter H2O | CENTRAL COAST WATER: MAINTAINING SECURITY AND LOOKING TO THE FUTURE Sam MacKenzie, GHD, Rex Haydon & Satpal Singh, Central Coast Council | LESSONS LEARNT FROM EXTREME WATER QUALITY EVENTS OF SUMMER 19/20 Michael Carter, Hunter H2O | |
| 11.20am | FROM DROUGHT RESPONSE TO WATER RESILIENCE: A JOURNEY OF MINDSET SHIFT Nirmal Joy & Rachael Abberton, MidCoast Council | EMPOWERING PEOPLE TO ACCESS WATER: A BACKBONE PLATFORM FOR MANAGING WATER IN THE MURRAY DARLING BASIN Bill Robinson, Arup & Laurent Lambert | VISUALISING WATER QUALITY RISKS Lucy Parsons, Atom Consulting | |
| 11.40am | PILOT PLANT TESTING IN RESPONSE TO DROUGHT BREAKING FLOOD EVENTS AT WARRAGAMBA DAM Jack Budgen & Coralie Gabus, Sydney Water | DROUGHT FLOOD RISK INDEX IN WATER MANAGEMENT Mahmud Haque, Water NSW | TURNING REAL TIME DATA INTO ACTIONABLE NETWORK RESILIENCE AND WATER QUALITY SECURITY IMPROVEMENTS Rhett Tubbs, MIDCOAST Council | |
| 12.00pm | UNPRECEDENTED ALGAL SHOCKS: RESILIENT PROJECT DELIVERY THROUGH A MAJOR PIVOT IN CLARIFICATION DESIGN Michael Carter, HunterH2O & Amanda Cashion, Central Coast Council | WATER QUALITY HAZARD REPORTING Michael Easton, Sydney Water | | |
| 12.20pm-1.20pm Lunch | | | | |
| ROOM | PLENARY | RENAISSANCE ROOM | RUSHCUTTERS ROOM | |
| THEME | SESSION 5: OPERATING AND PLANNING THROUGH SHOCKS AND DISRUPTIONS | SESSION 6: REGIONAL ENGAGEMENT & WATER SOLUTIONS | SESSION 7: WATER SECURITY | |
| 1.20pm | AFFORDING DISRUPTION: ADDING PROCESS FLEXIBILITY WITHOUT OVERSPENDING Patrick Schnelle, Arup & Chris Thodey, Western Region Delivery Team | WATER LIVABILITY NEXUS: HUNTER WATER AND GHD FACILITATE COLLABORATIVE APPROACH TO DEVELOPMENT PLANNING Nathan Malcolm, GHD | PURIFIED RECYCLED WATER FOR INTEGRATED WATER AND WASTEWATER SERVICING (AND NOT JUST FOR DROUGHT) William Wu, Aurecon | |

| 1.40pm | MAINTAINING WATER & SEWER | UNDERSTANDIN | G COMPLIANCE | POSITIVE FUTURES AS DECISION- |
|--------------------------------------|--|--|---|---|
| | SERVICES DURING A MAJOR FLOOD | PERFORMANCE OF WATER USERS IN | | SUPPORT TOOLS FOR WATER REUSE |
| | Mitchell Stace & Chenxi Zeng, MidCoast | THE MURRAY DARLING BASIN NSW | | ADOPTION |
| | Council | David Thomas, Natural Resources | | Varsha Sivagurunathan, University of |
| | | Access Regulator | | New South Wales |
| 2.00pm | TOWN WATER RISK REDUCTION | INNOVATIVE TACTICS TO INCREASE | | MAPPING NSW'S WASTEWATER |
| | PROGRAM | WATER LITERACY AND LOVE OF TAP | | EMISSIONS TO 2050: WHERE DOES IT |
| | Erin Cini, Department of Planning and | WATER AMONGST NSW REGIONAL | | COME FROM, AND WHERE ARE WE |
| | Environment | HOUSEHOLDERS | OF THE FUTURE | GOING? |
| | | Chris Philpot, The Water Conservancy | | Rigo Manahan & Steve Adamthwaite, |
| | | | | Arup |
| 2.20pm | OPERATING THROUGH RECENT | | WATER INDUSTRY | IDENTIFYING CRITICAL WEIRS FOR |
| | CHALLENGES – LESSONS LEARNT FOR | WORKFORCE STU | | TOWN WATER SUPPLY SECURITY |
| | INCREASING RESILIENCE AND | Grant Leslie, Balı | moral Group | ALONG BARWON DARLING RIVER |
| | FLEXIBILITY | | | USING SOURCE MODEL |
| | Brie Jowett & Mitch Alward, Tweed | | | Hemantha Perera, WaterNSW |
| | Shire Council | 10 | | |
| | | 40pm-3.10pm Af | | |
| ROOM | PLENARY | | RENAISSANCE ROOF | M |
| THEME | SESSION 8: REGIONAL ENGAGEMENT | | _ | JALITY – COMMUNITY SAFETY IN OUR |
| | | | HANDS | |
| 3.10pm | THE GREAT REGIONAL DEBATE: SUCCESSE | ES VS FAILURES | - | SE STUDY, SUCCESS THROUGH |
| 3.10pm | THE GREAT REGIONAL DEBATE: SUCCESSE Facilitator: Dr Anika Molesworth | ES VS FAILURES | SOURCE CONTROL CAS | SE STUDY, SUCCESS THROUGH ASSETS PERFORMANCE |
| | | ES VS FAILURES | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon | ASSETS PERFORMANCE |
| 3.10pm 3.30pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastr | | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C | ASSETS PERFORMANCE HLORINE DOSING KIOSK |
| 3.30pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastro Rachael Abberton, MidCoast Council | | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne | ASSETS PERFORMANCE HLORINE DOSING KIOSK y Water |
| | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group | | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE | HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND |
| 3.30pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group Against: | ucture | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE COMPARABLE QPCR R | HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND ESULTS |
| 3.30pm 3.50pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group Against: Murray Thompson, Murray Thompson W | ucture ater Services | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE COMPARABLE QPCR R Kate Griffiths, Nationa | HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND ESULTS I Measurement Institute |
| 3.30pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group Against: Murray Thompson, Murray Thompson W Carmel Krogh, Consultant and Immediate | ucture ater Services | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE COMPARABLE QPCR R Kate Griffiths, Nationa FATE OF DECOMPOSIN | HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND ESULTS I Measurement Institute IG FISH AFTER A FISH KILL IN A RESERVOIR |
| 3.30pm 3.50pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group Against: Murray Thompson, Murray Thompson W Carmel Krogh, Consultant and Immediate Australian Water Association | ucture ater Services | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE COMPARABLE QPCR R Kate Griffiths, Nationa FATE OF DECOMPOSIN IMPLICATIONS TO WA | HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND ESULTS I Measurement Institute |
| 3.30pm 3.50pm 4.10pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group Against: Murray Thompson, Murray Thompson W Carmel Krogh, Consultant and Immediate Australian Water Association Steve Adamthwaite, Arup | ucture ater Services | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE COMPARABLE QPCR R Kate Griffiths, Nationa FATE OF DECOMPOSIN | HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND ESULTS I Measurement Institute IG FISH AFTER A FISH KILL IN A RESERVOIR |
| 3.30pm 3.50pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group Against: Murray Thompson, Murray Thompson W Carmel Krogh, Consultant and Immediate Australian Water Association Steve Adamthwaite, Arup Wrap up Day 1 | ucture ater Services | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE COMPARABLE QPCR R Kate Griffiths, Nationa FATE OF DECOMPOSIN IMPLICATIONS TO WA | HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND ESULTS I Measurement Institute IG FISH AFTER A FISH KILL IN A RESERVOIR |
| 3.30pm 3.50pm 4.10pm 4.30pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group Against: Murray Thompson, Murray Thompson W Carmel Krogh, Consultant and Immediate Australian Water Association Steve Adamthwaite, Arup Wrap up Day 1 Sponsor Address: Eire | ucture ater Services | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE COMPARABLE QPCR R Kate Griffiths, Nationa FATE OF DECOMPOSIN IMPLICATIONS TO WA | HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND ESULTS I Measurement Institute IG FISH AFTER A FISH KILL IN A RESERVOIR |
| 3.30pm 3.50pm 4.10pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group Against: Murray Thompson, Murray Thompson W Carmel Krogh, Consultant and Immediate Australian Water Association Steve Adamthwaite, Arup Wrap up Day 1 | ucture ater Services | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE COMPARABLE QPCR R Kate Griffiths, Nationa FATE OF DECOMPOSIN IMPLICATIONS TO WA | ASSETS PERFORMANCE HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND ESULTS I Measurement Institute IG FISH AFTER A FISH KILL IN A RESERVOIR TER QUALITY AND CLEANUP |
| 3.30pm 3.50pm 4.10pm 4.30pm | Facilitator: Dr Anika Molesworth For: Ivan Reolon, Abergeldie Complex Infrastri Rachael Abberton, MidCoast Council Grant Leslie, Balmoral Group Against: Murray Thompson, Murray Thompson W Carmel Krogh, Consultant and Immediate Australian Water Association Steve Adamthwaite, Arup Wrap up Day 1 Sponsor Address: Eire Conference concludes | ucture ater Services Past President, | SOURCE CONTROL CAS UNDERSTANDING AN A Ben Dunn, Aurecon DEVELOPMENT OF A C Michael Easton, Sydne PRODUCING BESPOKE COMPARABLE QPCR R Kate Griffiths, Nationa FATE OF DECOMPOSIN IMPLICATIONS TO WA | HLORINE DOSING KIOSK y Water CALIBRANTS FOR ACCURATE AND ESULTS I Measurement Institute IG FISH AFTER A FISH KILL IN A RESERVOIR TER QUALITY AND CLEANUP |

| DAY TWO: THURSDAY 18 AUGUST 2022 | | | | |
|----------------------------------|--|--|--|--|
| 8.30am | Registration opens | | | |
| 9.00am | SESSION 10: OPENING DAY TWO | | | |
| | Day Two Welcome: Corinne Cheeseman, Australian Water Association | | | |
| 9.15am | Keynote Speaker | | | |
| | Dr Paul Scully-Power - Australia's First Astronaut | | | |
| 9.40am | PANEL: THE FUTURE OF AEROSPACE WATER ANALYSIS IN MANAGING SHOCKS AND DISRUPTIONS | | | |
| | Facilitator: Shoshana Fogelman, Sydney Water | | | |
| | Panellists: | | | |
| | Dr Paul Scully-Power | | | |
| | Danielle Baker, Department of Planning, Industry and Environment | | | |
| | Brie Jowett, Tweed Shire Council | | | |
| | Corinne Cheeseman, Australian Water Association | | | |
| 10.30am-11.00am Morning Tea | | | | |
| ROOM | PLENARY | RENAISSANCE ROOM | | |
| THEME | SESSION 11: WATER REUSE / CIRCULAR ECONOMY | SESSION 12: INNOVATION & COLLABORATION | | |
| 11.00am | COMMUNITY JOURNEYS ON PURIFIED RECYCLED WATER: | HARNESSING INNOVATION AND COLLABORATION TO DRIVE | | |
| | ORANGE COUNTY CALIFORNIA, AND HUNTER WATER | WATER SECURITY, ENVIRONMENTAL SUSTAINABILITY AND | | |
| | NEWCASTLE | ASSET LONGEVITY | | |
| | Danielle Francis, WSAA & Clare Hogue, Hunter Water | Shoshana Fogelman, Sydney Water | | |

| 11.20am | FLUSHING ENERGY DOWN THE DRAIN: A FASTER PIPELINE | CRITICAL CONTROL POINTS – HOW WELL DO YOU KNOW |
|----------|---|--|
| | TO A MORE CIRCULAR ECONOMY – BUT AT WHAT RISK | YOURS? |
| | AND COST? | Annette Davison, D2K Information, Risk Edge and Bathurst |
| | Caitlyn White, AECOM | Regional Council |
| 11.40am | CIRCULAR ECONOMY TRANSITIONS IN THE WATER | PLANNING A TREATMENT PLANT UPGRADE - HOW HARD CAN IT |
| | INDUSTRY | BE? |
| | Pierre Mukheibir, Institute for Sustainable Futures, | Damon Emerson, Hunter H2O & Rachael Abberton, MidCoast |
| | University of Technology Sydney & Danielle Francis, WSAA | Council |
| 12.00pm | INTEGRATED WATER CYCLE MANAGEMENT IN AN | IOT AND CLOUD COMPUTING – THE LEGO BLOCKS OF A |
| 12.00pm | UNCERTAIN WORLD | MODERN WATER UTILITY |
| | Amir Hedjripour, RPS Group | Guenter Hauber-Davidson, WaterGroup |
| | 12.20pm-1.20p | |
| ROOM | PLENARY | RENAISSANCE ROOM |
| THEME | SESSION 13: WATER REUSE / CIRCULAR ECONOMY | SESSION 14: INNOVATION & COLLABORATION |
| 1.20pm | GREEN WATER FOR GREEN GRASS: RECYCLED WATER | THE EVOLUTION OF RURAL WATER COMPLIANCE: AN OVERVIEW |
| | RESPONSES TO PROTECT PUBLIC OPEN SPACE DURING | OF TECHNOLOGIES AND CAPABILITIES |
| | DROUGHT AND BEYOND | Nick Milton, Natural Resources Access Regulator |
| | Zena Smith-White, AECOM | |
| 1.40pm | THE ECONOMIC DRIVERS SPINNING THE CIRCULAR | THE FRAMEWORK FOR WATER QUALITY TESTING DURING |
| | ECONOMY WHEEL: HOW ECONOMIC FRAMEWORKS | EXTREME EVENTS |
| | REVEAL CIRCULAR ECONOMY VALUE IN THE WATER | Andrea Gonzalez, Atom Consulting |
| | INDUSTRY | |
| | Rosemary Jones & Alexandra Humphrey Cifuentes, Frontier Economics | |
| 2.00pm | A WAY TO IDENTIFY WATER RECYCLING OPPORTUNITIES | WORKING IN PARTNERSHIP WITH THE PRIVATE SECTOR TO |
| 2.000111 | USING LARGE DEMAND AND SUPPLY DATASETS | OPTIMISE WATER QUALITY TO OUR CUSTOMERS |
| | Kate Smith, Aurecon | Jack Budgen & Coralie Gabus, Sydney Water |
| 2.20pm | NOVEL DUAL RETICULATION COMMISSIONING | DEVASTATION TO OPPORTUNITY – SHOALHAVEN WATER |
| | Renny Chivunga, Hunter Water | RESPONSE TO BUSHFIRE DESTRUCTION OF FISHERMANS |
| | | PARADISE SEWAGE PUMP STATION |
| | | Brad Elliott, Cardno & Allan Gilkes, Shoalhaven Water |
| | Conference Closing and Best Paper Award Presentation | Proudly sponsored by THE UNIVERSITY |
| 2.40pm | | OF QUEENSLAND |
| 3.00pm | Conference Concludes | |

Program correct at 08.08.22 and subject to change.

Thank you to our Sponsors

Principal Partners







Major Sponsor



Conference Supporter



Conference Partner



YWP Breakfast Partner



Best Paper Sponsor



Networking Sponsor



Strategic Sponsor





