

Efficient 2023

IWA Conference on Efficient Urban Water Management

“WATER
AND CITY”

THE PROGRAMME

September 13-15, 2023 / Centre de Congrès Cité Mondiale, Bordeaux, France

Our sponsors

SUMMARY OF THE PROGRAMME

PLENARY ROOM		ROOM BRASILIA (1-2)		ROOM BRASILIA (3)		
DAY 1 - WEDNESDAY SEPTEMBER 13	8:00 - 9:00	REGISTRATION	8:00 - 9:30	REGISTRATION	8:00 - 9:30	REGISTRATION
	9:00 - 10:00	OPENING SESSION				
	10:00 - 10:30	KEYNOTE SPEECH				
	10:30 - 11:00	COFFEE BREAK	10:30 - 11:00	COFFEE BREAK	10:30 - 11:00	COFFEE BREAK
	11:00 - 12:30	S1	11:00 - 12:30	S10	11:00 - 12:30	S19
	12:30 - 14:00	LUNCH BREAK	12:30 - 14:00	LUNCH BREAK	12:30 - 14:00	LUNCH BREAK
	14:00 - 15:30	S2	14:00 - 15:30	S11	14:00 - 15:30	S20
	15:30 - 16:00	COFFEE BREAK	15:30 - 16:00	COFFEE BREAK	15:30 - 16:00	COFFEE BREAK
	16:00 - 17:30	S3	16:00 - 17:30	S12	16:00 - 17:30	WORKSHOP 1

PLENARY ROOM		ROOM BRASILIA (1-2)		ROOM BRASILIA (3)		
DAY 2 - THURSDAY SEPTEMBER 14	8:30 - 9:00	KEYNOTE SPEECH				
	9:00 - 10:30	S4	9:00 - 10:30	S13	9:00 - 10:30	WORKSHOP 2
	10:30 - 11:00	COFFEE BREAK	10:30 - 11:00	COFFEE BREAK	10:30 - 11:00	COFFEE BREAK
	11:00 - 12:30	S5	11:00 - 12:30	S14	11:00 - 12:30	WORKSHOP 3
	12:30 - 14:00	LUNCH BREAK	12:30 - 14:00	LUNCH BREAK	12:30 - 14:00	LUNCH BREAK
	14:00 - 15:30	S6	14:00 - 15:30	S15	14:00 - 15:30	S21
	15:30 - 16:00	COFFEE BREAK	15:30 - 16:00	COFFEE BREAK	15:30 - 16:00	COFFEE BREAK
	16:00 - 17:30	S7	16:00 - 17:30	S16	16:00 - 17:30	S22
	19:30	GALA DINNER				

PLENARY ROOM		ROOM BRASILIA (1-2)		ROOM BRASILIA (3)		
DAY 3 - FRIDAY SEPTEMBER 15	8:30 - 9:00	COFFEE & NETWORKING	8:30 - 9:00	COFFEE & NETWORKING	8:30 - 9:00	COFFEE & NETWORKING
	9:00 - 10:30	S8	9:00 - 10:30	S17	9:00 - 10:30	S23
	10:30 - 11:00	COFFEE BREAK	10:30 - 11:00	COFFEE BREAK	10:30 - 11:00	COFFEE BREAK
	11:00 - 12:30	S9	11:00 - 12:30	S18	11:00 - 12:30	WORKSHOP 4
	12:30 - 14:00	LUNCH BREAK	12:30 - 14:00	LUNCH BREAK	12:30 - 14:00	LUNCH BREAK
	14:00 - 14:30	CLOSING SESSION				
	14:30 - 17:00	SITE VISITS				

PROGRAMME OVERVIEW

DAY 1 – WEDNESDAY SEPTEMBER 13

	PLENARY ROOM	ROOM BRASILIA (1-2)	ROOM BRASILIA (3)	
DAY 1 – WEDNESDAY SEPTEMBER 13	<p>9:00 - 10:00</p> <p>OPENING SESSION</p> <p>Diane d'Arras - Congress President</p> <p>Vincent Edery / Roger Ben Aïm - Organizing Committee Co-Chairs</p> <p>Tom Mollenkopf - IWA President</p> <p>Stuart White - Past EUWM SG Chair - Scientific Committee Chair</p> <p>Guillaume Choisy - General Manager of the National Water Agency - South West Region</p> <p>Nicolas Gendreau - General Manager of the Bordeaux Metropole Water Authority</p>			
	<p>10:00 - 10:30</p> <p>KEYNOTE SPEECH</p> <p>Graham Alabaster - Head of the Geneva Office. UN - Habitat</p>			
	<p>11:00 - 12:30</p> <p>SESSION 1 - WATER SECURITY & CRISIS MANAGEMENT Chair : Ms. Bérengère Sixta (France)</p> <p>Mr. Bruno Nguyen (France) - Efficient Cyber-Security Management at Water Utilities</p> <p>Ms. Juliana Marcal (UK) - Urban water security assessment investigating inequalities through multi-level approach</p> <p>Dr. Wei Ma (Macao) - Combined PMA-DDPCR Technology Applied for Rapid Diagnosis of Water Safety Issues</p> <p>Ms. Alexandra Cristovao (Portugal) - Mass Gatherings - Challenges for Water Suppliers - World Youth Day Lisbon 2023</p>	<p>SESSION 10 - WATER AND ENERGY NEXUS Chair : Mr. Vincent Edery (France)</p> <p>Mr. Steve Cavanaugh (USA) - Leakage Emissions Initiative : Establishing a Standard Carbon Balance for Drinking Water Utilities</p> <p>Ms. Ana Reis (Portugal) - An optimization framework to assess the demand-side management capacity of a Water Supply System</p> <p>Ms. Erika Varga (France) - Walking on Sunshine : Innovative AI-based Aeration Control to Maximise Auto-consumption of Locally Generated Energy</p> <p>Ms. Fernanda Mendes (France) - Optimization of energy consumption and performance of stormwater treatment at the ADP Orly airport platform through dynamic quality modeling</p>	<p>SESSION 19 - NON-REVENUE WATER, LEAKAGE AND PRESSURE MANAGEMENT Chair : Ms. Justine Leadbetter (UK)</p> <p>Dr. Gyeong Sung Kim (South Korea) - Achieving Accurate Water Leak Pinpointing through Artificial Intelligence : A Case Study</p> <p>Mr. Hubert Claeysens (France) - Data-driven analytics and a software for intelligent water networks</p> <p>Ms. Aurélie Chazerain (France) - Operational efficiency for water efficiency: Challenges and Opportunities for Improving Leakage Detection in Water Networks using IoT, AI and Online Modelling</p> <p>Mr. Thomas Van Becelaere (France) - Performance and Operational Transformation for Effective Water Network Management</p>	
	<p>14:00 - 15:30</p> <p>SESSION 2 - PLANNING & IMPLEMENTATION OF WATER EFFICIENCY PROGRAMS Chair : Ms. Carmen Snowdon (UK)</p> <p>Dr. Stuart White (Australia) - Multiple streams : A history of water efficiency</p> <p>Mr. Matt Dickens (USA) - Data Driven Decision Making : Utilizing the US EPA's Energy Star Portfolio Manager Water Score Tool for Multifamily Apartments to Optimize Water Conservation Program Performance</p> <p>Dr. Nathan Richardson (UK) - Developing a new UK Water Efficiency Strategy to 2030</p> <p>Dr. Matthew Whaley (UK) - Sub-Regional Integrated Water Planning in London : A Case Study for the Lower Lee</p>	<p>SESSION 11 - WATER RECYCLING AND REUSE TO REDUCE URBAN WATER DEMAND Chair : Mr. Roger Ben Aïm (France)</p> <p>Dr. Jacqueline Diaz-Nieto (UK) - Smart Blue-Green Roof Technology that integrates plot scale drainage requirements and water efficiency</p> <p>Mr. Laurent Brunet (France) - Creating and implementing a circular scheme for sanitation and wastewater treatment</p> <p>Dr. Tarik Eljaddi (France) - The challenge of ecological transition by developing innovative processes for reuse of treated wastewater and rainwater to water vegetated spaces, Case of Agen City</p> <p>Mr. Paulo Rodrigues (Portugal) - Circular Economy : Promoting the Wastewater Reuse at Águas do Algarv Circular Economy : Promoting the Wastewater Reuse at Águas do Algarve</p>	<p>SESSION 20 - NON-REVENUE WATER, LEAKAGE AND PRESSURE MANAGEMENT Chair : Mr. Simon Fane (Australia)</p> <p>Dr. Reza Moslemi (Canada) - A Data-Driven Model for the Prediction of Pipe Break Rate in Water Mains</p> <p>Mr. Anthony Ta (France) - Best practices for leakage management in Paris</p> <p>Dr. Marie Collet (France) - A new statistical method to predict the leaking condition of pipes</p> <p>Mr. Ricardo Ferreira (Portugal) - Repair Leaks ASAP : Advanced Tool for Identifying Leaks Nests in the Water Supply System of Porto</p>	
	<p>16:00 - 17:30</p> <p>SESSION 3 - PLANNING & IMPLEMENTATION OF WATER EFFICIENCY PROGRAMS Chair : Ms. Mary Ann Dickinson (USA)</p> <p>Ms. Maureen Erbeznik (USA) - Landscape Transformation : A Multi-Year Alliance for Water Efficiency Research Project</p> <p>Ms. Laura Ferrary (USA) - From Combative to Cooperative: Albuquerque Bernalillo County Water Utility, City of Albuquerque Parks Department Come Together on Conservation</p> <p>Mr. Dewi Rogers (UK) - Inefficiencies – defining the priority interventions</p> <p>Dr. Raul Marino (Colombia) - Transition towards water-sensitive cities in Colombia : Public spaces as a platform for the recovery of ecosystem services</p>	<p>SESSION 12 - WATER RECYCLING AND REUSE TO REDUCE URBAN WATER DEMAND Chair : Mr. Mathieu De Kervenoael (France)</p> <p>Ms. Jessica Ianes (Italy) - An integrated modelling framework to assess cascade water reuse in urban areas</p> <p>Dr. Elisabeth Kvarnström (Sweden) - Greywater as a resource in a new, urban development</p> <p>Ms. Burcu Yazici (Turkey) - Stakeholders' perceptions towards reclaimed water use in agriculture : A survey in Konya Closed Basin - Turkiye</p> <p>Dr. Pascal Ginisty (France) - Stabilization and dewatering : the hubs in a sustainable sludge management system</p>	<p>WORKSHOP 1 - IWA UTILITIES</p> <p>Moderator : Ms. Marie-Pierre Whaley (France)</p>	

PROGRAMME OVERVIEW

DAY 2 – THURSDAY SEPTEMBER 14

	PLENARY ROOM	ROOM BRASILIA (1-2)	ROOM BRASILIA (3)
8:30 - 9:00	KEYNOTE SPEECH <i>Paula Kehoe - Director of Water Resources San Francisco Public Utilities Commission</i>		
9:00 - 10:30	SESSION 4 - POLICIES, LEGISLATION & REGULATORY ISSUES Chair : Mr. Stuart White (Australia) <i>Ms. Mary Ann Dickinson (USA) - Advice to the UN Members of Parliament</i> <i>Mr. Aiken Besley and Ms. Angela Wallis (UK) - Development of the Water Demand Target for England</i> <i>Dr. Liliane Manny (UK) - Actor-system networks of integrated water management</i> <i>Dr. Pol Vidal (Spain) - How Agent-Based Modelling can help urban water management : the Barcelona Metropolitan Area case study</i>	SESSION 13 - WATER EFFICIENCY LABELLING AND STANDARDS Chair : Dr. Theresa McMaugh (Australia) <i>Dr. Simon Fane (Australia) - Assessing minimum water efficiency standards for plumbing products in homes and business</i> <i>Mr. Chris Philpot (Australia) - Smart Approved WaterMark – water efficiency certification for 18 years</i> <i>Ms. Carmen Snowdon (UK) - Washing machines : a mystery needing to be unfolded</i> <i>Dr. Ricardo Cobacho (Spain) - The Hotel Water Consumption Index (HWCI)</i>	WORKSHOP 2 - OPTIMIZING ADAPTATION TO CLIMATE CHANGE : THE MEGACITIES ALLIANCE FOR WATER AND CLIMATE Moderator : Mr. Bruno Nguyen (France) <i>Daniel Marcovitch (France)</i> <i>Benjamin Gestin (France)</i> <i>Dan Hart (UK)</i> <i>Matthew Whaley (UK)</i> <i>Kuldip Kumar (USA)</i> <i>Ilan Juran (USA)</i> <i>Jean-Claude Deutsch (France)</i>
11:00 - 12:30	SESSION 5 - URBAN DRAINAGE & STORMWATER Chair : Mr. Ricardo Cobacho (Spain) <i>Mr. Julien Ardouin (France) - Impacts of extreme rainfall on the risk of stormwater management infrastructure overflow : evolution of the Montana coefficient</i> <i>Dr. Marc Boncz (Brazil) - Rainwater harvesting as a tool for reduction of stormwater impact</i> <i>Dr. Jorn de Vos (Netherlands) - RainOasis : Planning Rainwater harvesting for sustaining urban green</i> <i>Ms. Elif Okumus Oksuz (Turkey) - Assessment of Rainwater Harvesting Applications in Turkey : Gaps and Opportunities</i>	SESSION 14 - ECONOMICS OF WATER EFFICIENCY, RECYCLING AND REUSE Chair : Ms. Mary Ann Dickinson (USA) <i>Dr. Thomas Chesnutt (USA) - The Economics Of Sustainable Industrial Water Use, Reuse, and the Value of Water : Overcoming Obvious Costs and Diffuse Benefits</i> <i>Dr. David Pekelney (USA) - Lower Water Bills : The City of Los Angeles Shows How Water Conservation and Efficient Water Rates Produce Affordable and Sustainable Use</i> <i>Mr. David Mitchell (USA) - Decoupling Utility Revenue and Sales : Empirical Impacts on Customer Bills and Water Use</i> <i>Ms. Marlene Brás (Portugal) - Cost Reduction of Water Supply Systems Through Optimization Methodologies</i>	WORKSHOP 3 - EXPLORING THE POTENTIAL OF WATER LITERACY IN FUTURE WATER MANAGEMENT Moderator : Ms. Carmen Snowdon (UK) <i>Tim Wagstaff (UK)</i> <i>Chris Philpott (Australia)</i>
14:00 - 15:30	SESSION 6 - URBAN DRAINAGE & STORMWATER Chair : Mr. Ricardo Cobacho (Spain) <i>Ms. Lôide Angelini Sobrinha (Brazil) - Overcoming barriers in the Brazilian urban drainage management</i> <i>Mr. Ali Shakil (France) - Smart Sewer Network Monitoring in Marseille (France) : Drain Waste Accumulation Modelling and Analysis</i> <i>Dr. Thibaud Maruejols (France) - LIFE RUBIES Real-time pollution-based control of urban drainage and sanitation systems for protection of receiving waters</i> <i>Dr. Armando Silva-Afonso (Portugal) - Contribution of urban green infrastructure to stormwater management and a more efficient urban water use</i>	SESSION 15 - COMMUNITY ENGAGEMENT, BEHAVIOR CHANGE AND ADVICE Chair : Mr. Aaron Burton (UK) <i>Ms. Mathilde Lecourt (France) - Enhancing Domestic Water Conservation Behaviour – A Stratified Randomized Controlled Trial</i> <i>Mr. Harry Nicklin (UK) - Influencing shower behaviour using real-time feedback and goal based messaging</i> <i>Mr. Chris Philpot (Australia) - Raising water awareness through Water Night</i> <i>Mr. Martin Westerboe Soerensen (Denmark) - Citizen-driven SUDS projects, made easy and cost-efficient</i>	SESSION 21 - MODELING TOOLS Chair : Mr. Francisco Cubillo (Spain) <i>Mr. Ricardo Ferreira (Portugal) - Gradient boosting classifier-based approach on wastewater network age prediction for critical assets identification</i> <i>Dr. Najim Bouhafa (France) - Hybrid modeling of karstic springs : a forecasting tool for the planning of water supply in Bordeaux Metropole (France)</i> <i>Mr. Tiago Pereira (Portugal) - Smart Predictive Digital Twin for Water Supply Systems with uncertainties control</i> <i>Ms. Charlotte Sakarovitch (France) - Evolution of drinking water consumption : A long term forecasting model in the context of climate change</i>
16:00 - 17:30	SESSION 7 - CLIMATE CHANGE AND DROUGHT ADAPTATION Chair : Mr. Benjamin Gestin (France) <i>Ms. Juliette Eulerink (Netherlands) - Assessing urban climate impacts, vulnerabilities and effects through GIS-based scoring methods : examples from Dutch municipalities</i> <i>Dr. Bénédicte Rulleau (France) - Vulnerability of Walloon drinking water consumers to droughts and willingness to pay to mitigate their consequences</i> <i>Dr. Manon Viviere (France) - The experience of drought : user appropriation and management by water stakeholders in 2022</i> <i>Dr. Philippe Sauvignet (France) - Microsand ballasted clarification: a resilient drinking water treatment process to face impacts of climate change</i>	SESSION 16 - COMMUNITY ENGAGEMENT, BEHAVIOR CHANGE AND ADVICE Chair : Ms. Diane d'Arras (France) <i>Mr. Carlos Povoá (Portugal) - Efficiency Improvement and Cost Recovery Implementation – A Case Study on How CRM Can Help</i> <i>Mr. Matt Dickens (USA) - Reaching the Next Tier : Crafting Effective Water Conservation Communications Amidst a Changing Environment, Expanding Audience, and Demonstrated Crises Fatigue</i> <i>Ms. Lina Khattab (UK) - Enhancing perceived significance of the water situation : Insights from Households in Egypt and the UK</i> <i>Ms. Cláudia Machado de Sousa (Brazil) - A systematic review on household water consumption behavior in times of water availability uncertainties</i>	SESSION 22 - WATER NEUTRALITY AND OFFSETTING APPROACHES FOR NEW URBAN DEVELOPMENT Chair : Mr. Steve Cavanaugh (USA) <i>Ms. Mary Ann Dickinson (USA) - Planning for Water Neutral Development Using Efficiency as a Tool</i> <i>Dr. Nathan Richardson (UK) - Water neutrality and new development</i> <i>Dr. António Andrade-Campos (Portugal) - Efficient starting conditions for periodic and seasonal operations: the case of water supply systems</i> <i>Mr. François-Xavier Imbert (France) - Basin-connected cities : Connecting urban stakeholders with their watersheds</i>
19:30	GALA DINNER		

PROGRAMME OVERVIEW

DAY 3 – FRIDAY SEPTEMBER 15

	PLENARY ROOM	ROOM BRASILIA (1-2)	ROOM BRASILIA (3)
DAY 3 - FRIDAY SEPTEMBER 15	<p>SESSION 8 - BEST MANAGEMENT PRACTICES Chair : Mr. Dewi Rogers (UK)</p> <p>Mr. Francisco Cubillo (Spain) - Assessing Business Continuity in water utilities</p> <p>Dr. Simon Fane (Australia) - A Framework for Planning, Implementing and Reviewing Best Practice Water Efficiency Programs</p> <p>Ms. Rennie Jordan and Dr. Pablo Pina (Canada) - Enhancing Water Efficiency Programming in Urban Municipalities : A Case Study of the City of Calgary</p> <p>Dr. Antonio Lastra de la Rubia (Spain) - Anticipating risk : How to prioritise infrastructures that are not comparable ?</p>	<p>SESSION 17 - INNOVATION, TECHNOLOGY AND DATA MANAGEMENT FOR WATER EFFICIENCY Chair : Mr. James Lees (UK)</p> <p>Dr. Thomas Chesnutt (USA) - SIPs and SLURPs of Water : Probability Management Approaches to Sustainability</p> <p>Ms. Yoojin Oh (South Korea) - Machine Learning Based Predictive Maintenance Optimization for Water Distribution Network</p> <p>Mr. Nicolas Rodriguez (France) - Improving data for the asset management of the water supply network of the Walloon Water Company</p> <p>Dr. Ana Luis Sousa (Portugal) - Water supply systems: an analytical sensitivity analysis and optimization approach for an efficient operation</p>	<p>SESSION 23 - BEST MANAGEMENT PRACTICES Chair : Mr. Amit Chanan (Australia)</p> <p>Ms. Thalita Fagundes (Portugal) - The Impact of Brazilian New Water Losses Goals on Affordability</p> <p>Dr. Andreza Kalbusch (Brazil) - The impact of billing based on individual water meters in a social housing complex in Southern Brazil</p> <p>Mr. Pierre Pieronne (France) - Recycling of filter backwash effluents within a drinking water production plant: a professional guidebook to facilitate projects</p> <p>Ms. Fernanda Mendes (France) - An integrated urban wastewater model as a tool to explore strategies in search of improving water bodies quality</p>
	<p>SESSION 9 - BEST MANAGEMENT PRACTICES Chair : Mr. Chris Philpot (Australia)</p> <p>Mr. Dorian Hervé (France) - Identify pollution events in the sewerage system using a Sequential Likelihood Ratio Approach</p> <p>Dr. Philippe Sauvignet (France) - Innovative process using micro grain activated carbon and membrane enabling waste water reuse to face impacts of climate change</p> <p>Ms. Susana Garcia (Portugal) - CIL PRESSURE : Digital Tool for Pressure Optimization in Each Customer of Porto</p> <p>Mr. Andres Ardila (Canada) - Optimization of water quality degradation monitoring in distribution networks : Spatio-temporal representativeness vs citizens' risk</p>	<p>SESSION 18 - INNOVATION, TECHNOLOGY AND DATA MANAGEMENT FOR WATER EFFICIENCY Chair : Mr. Thomas Chesnutt (USA)</p> <p>Dr. Stuart White (Australia) - Smart meters to smart devices : the continual digital transformation of water in buildings</p> <p>Mr. Pierre Bonardet (France) - Leveraging Remote Meter Reading and Digital Solutions for Improved Water Utility Management : A Case Study in Béziers, France</p> <p>Mr. Loïc Bar (Belgium) - Use of Meter Data Management and a Data Hub to optimize water conservation</p> <p>Ms Tracy Quinn and Ms Maureen Erbeznik (USA) - Demand Monitoring in Southern California : Data Analytics in Real Time</p>	<p>WORKSHOP 4 - ADAPTATION OF CYBER-RESILIENCE TO CURRENT THREATS Moderator : Mr. Bruno Nguyen (France)</p> <p>Katarina Krcunovic (France) Jeroen Gaiser (The Netherlands) Oliver Grievson (UK) Udi Roth (Israel) Ilan Juran (USA) Amit Chanan (Fidji)</p>
	<p>CLOSING SESSION</p> <p>Diane d'Arras - Conference President Aaron Burton - EUWM SG Chair</p>		
	<p>SITE VISITS</p>		
	9:00 - 10:30		
	11:00 - 12:30		
	14:00 - 14:30		
	14:30 - 17:00		