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THEME 3: WATER FOR LIVEABILITY AND RESILIENCE

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302	Austin's Water Forward: An Integrated Water Resource Plan for the Next 100 Years G. Meszaros, C. Chen. Austin Water (United States)
303	Community Vulnerability and Adaptation to the Dynamic of Water Resources in Rejoso Watershed, East Java, Indonesia N. Khasanah, L. Tanika, B. Leimona, B. Lusiana, C. Endah. World Agroforestry Centre (ICRAF) (Indonesia)
304	Comparison of Two Approaches for the Modelling of Stormwater Infrastructures J. Lhomme, S. Mudaliar, J. Klaric, D. Fortune. Innovyze (Australia)
305	Cost-Effective Flood Hazard Assessment with Remote Sensing Technology and Artificial Intelligence S. Y. Liong, D. E. Kim, Y. Sun, J. Liu. National University of Singapore (Singapore)
306	Decision Support System of SWMM for the Design and Planning of Low Impact Development Practices E. S. Chung, H. Lee. Seoul National University of Science and Technology (Korea)
307	Earth Observations as Key Elements in the Development of Water Information Systems and Decision Support Tools R. Pimentel, D. Gustafsson, C. Giardino, M. Bresciani, E. Romas, A. Tzimas, K. Schenk, I. Pechlivanidis. Swedish Meteorological and Hydrological Institute (Sweden)
308	Eco-hydraulics Study on Green Channels of Hong Kong: A Case Study of Ecological Enhancement at Lower Lam Tsuen River J. W. Y Chan, R. W. M. Leung, R. F. Shen, G. K. M. Cheng. Mott MacDonald (Hong Kong)
309	Effectiveness of "ABC Waters Design Features" For Runoff Quantity Control in Urban Singapore W. K. Yau, G. S. Ong, E. Chen, S. Y. Leong. PUB, Singapore's national water agency (Singapore)
310	Flood Protection Design for "Amaravati" a New to Be Build Capital City in India P. Dircke, J. Kabout, S. van Laarhoven, M. Blommestijn. Arcadis (The Netherlands)
311	Intelligent Systems to Enhance Polder Water and Flood Management E. Huijskes, L. Buckman, A. Smale, T. S. Tan, V. Noo, S. T. Chia, S. H. Won, Z. X. Gng, S. H. Chew. Deltares (The Netherlands)
312	Is It the Flood, or the Disclosure? The Impact of Flood Potential on Housing Market in Taipei, Taiwan L. H. Chiang Hsieh, H. Y. Lin. Chung Yuan Christian University (Taiwan)
313	Lessons Learned from Balancing Global Risks and Project Risks in NYC M. Bouw, T. J. M. Bunt. One Architecture and Urbanism (United States)
314	Lessons Learned on New Holistic Stormwater Approach M. Leth, M. W. Sørensen. VCS Denmark (Denmark)
315	Multiple-Scale Flood Resilience Strategies for Delta Cities in the Face of Uncertainty Due to Climate Change P. Dircke, A. Molenaar, E. Diestelhorst, S. Robert. Arcadis (The Netherlands)
316	Operational Use of Rain Radar T. Joseph, L. Sutherland-Stacey, K. Williams, J. Nicol, N. Brown, G. Austin, S. Couper. Mott MacDonald (New Zealand)
317	Payment for Ecosystem Services for an Urban Water Supply Watershed: A Business Case of Rejoso Kita, Indonesia B. Leimona, F. S. Negoro, B. Lusiana, N. Khasanah, L. Tanika, N. Khususiyah, S. Amaruzaman. World Agroforestry Centre (ICRAF) (Indonesia)
318	Stakeholder Engagement and Issues Management for Watershed Conservation and Restoration: Case Study of Rejoso Watershed, Pasuruan Regency, East Java Indonesia F. Kurniawan, C. Endah, J. Ramelan, P. Nugroho. Social Investment Indonesia Foundation (Indonesia)

319	<p>Test-bedding the Feasibility of Large Scale Implementation of ABC Waters Design Features in a Public Residential Precinct G. S. Ong, W. K. Yau, E. Chen, L. C. Y. Ma. PUB, Singapore's national water agency (Singapore)</p>
320	<p>Understanding Resource Conservation Campaigns: A Field Experiment L. Goette, Q. Neng. National University of Singapore (Singapore)</p>
321	<p>Utilization of Reclaimed Island as Groundwater Reservoir A. Saha, A. S. Bironne-Taisne, W. K. Lee, V. Babovic, L. Vonhögen-Peeters, E. van Baaren, P. Vermeulen, G. O. Essink, G. Lange, R. Hoogendoorn. National University of Singapore (Singapore)</p>

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401	<p>A Study of the Spatio-Temporal Flow Characteristics of Groundwater in Jeju Island's Pyoseon Watershed H. J. Koh, S. H. Moon, G. W. Koh, D. C. Moon. Jeju Special Self-governing Province Development Co. (Korea)</p>
402	<p>Analysis of Residual Iodinated X-ray Contrast Media After Ozonisation in Water Treatment Facilities by IC-ICP/MS. A. Steinbach, P. Pfundstein, C. Martin, D. Flottmann, W. Schulz, A. K. Heng. Metrohm RSC Asia (Singapore)</p>
403	<p>Automated, Rapid Microbial Detection System for On-site Testing of <i>E. coli</i> & Total Coliforms Bacteria R. S. Brown, A. Luke, L. O'Donnell, E. J. P. Marcotte, M. Miron, D. Wilton. Tecta-PDS (Canada)</p>
404	<p>Automated Sampler for Biological Samples M. Q. X. Tay, K. K. Lau, S. Y. Chang, S. W. Lam. PUB, Singapore's National Water Agency (Singapore)</p>
405	<p>Child Stunting and Cognitive Impacts of Water and Sanitation in Indonesia L. Cameron, C. Chase, G. Joseph, R. Pinto, Q. Wang, L. P. P. Weiss. The World Bank (United States)</p>
406	<p>Combining On-Site Rapid Testing and Connectivity for Better Management of <i>Legionella</i> Risk G. Rankin, P. Barela, C. Needham. Hydrosense (United Kingdom)</p>
407	<p>Detection of <i>Vibrio cholerae</i> in Environmental Water Samples: Conventional Versus Molecular Methods T. W. Ng, S. Y. Chang, C. Feng, W. L. Teng, S. W. Lam, J. Tan, A. Chen, R. R. Colwell, A. Huq. PUB, Singapore's National Water Agency (Singapore)</p>
408	<p>Determination of Three Marine Toxins (Saxitoxin, Okadaic Acid, Domoic Acid) in Water Samples by Direct Injection Combined with High Performance Liquid Chromatography Tandem Mass Spectrometry (HPLC-MS/MS) J. Wu, J. Yue, L. Zhang. PUB, Singapore's National Water Agency (Singapore)</p>
409	<p>Efficient Parallel Surrogate Framework for Parameter Estimation and Optimization of Computationally Expensive Tropical Reservoir Hydrodynamic and Water Quality Models C. A. Shoemaker, W. Xia, T. Akhtar, M. Nguyen. National University of Singapore (Singapore)</p>
410	<p>"Expand and Scale-Up the Safe Water Services for Rural Areas, Through the Provision of Loan by Financial Institutions in Indonesia" - A Collaboration Between Water.org and WASH-CSR Program of Danone AQUA on CBO Strengthening & Financing Program O. Fitrianos, R. Hidayad. Danone AQUA (Indonesia)</p>
411	<p>High Throughput Detection of Chironomid Larvae in Water Samples Using Convolutional Neural Networks M. Q. X. Tay, E. M. De Souza, Z. S. Hou, Y. L. E. Peh. PUB, Singapore's National Water Agency (Singapore)</p>
412	<p>High-throughput and High Concentration-ratio of Pre-concentration System for Bacterial Detection in Drinking Water Y. Y. Chen, S. Xiong, Z. Y. Li, L. K. Chin, J. B. Zhang, Y. Liu, M. Hill, A. Q. Liu. Nanyang Technological University (Singapore)</p>
413	<p>Improving Reservoir Water Quality Through Real-Time Monitoring and Machine Learning R. Kadiyala, T. Lee. Jacobs Engineering (United States)</p>
414	<p>Monitoring and Evaluation Surface Water Quality Using Water Quality Index for Water Supply Production in Thailand C. Horlaiad, P. Srirungruang, P. Sitthichailapa, S. Sa-nguansin, P. Chartpreechakul. Metropolitan Waterworks Authority (Thailand)</p>
415	<p>New Turbidity Measurement Technology – A Step Forward in Ensuring Drinking Water Quality V. Malkov, L. Johnson. Hach Company (United States)</p>
416	<p>On-chip Spectrometer for Rapid Phosphorus Detection for Water Quality Monitoring S. N. Zheng, Y. Y. Chen, H. Cai, A. Gu, A. Q. Liu. Nanyang Technological University (Singapore)</p>
417	<p>On-line Detection and Quantification of Total Bacteria in a Slovenian Water Utility Using a Highly Sensitive Fluorescence Technology M. Miller, G. Zupin. Mycometer AS (Denmark)</p>

418	Online SPE Method for Detection and Analysis of PFOA/ PFOS in Water Samples A. Duarah, J. Yue, L. Zhang. PUB, Singapore's National Water Agency (Singapore)
419	Optofluidic Cytometer for Single Bacteria Detection in Drinking Water Quality Monitoring S. Xiong, Y. Y. Chen, L. K. Chin, H. F. Chen, C. M. Hsieh, J. B. Zhang, A. Q. Liu. Nanyang Technological University (Singapore)
420	Rapid On-site Water Pathogen Detection System for Recreational Aquatic Facilities and Cooling Towers K. Lee, J. Chia, B. H. Tay, E. Koh, H. M. Yap, M. Lim, Y. K. Lee. Singapore Polytechnic (Singapore)
421	Remote Water Quality Monitoring Using Whole-cell Biosensors J. R. Brown, M. S. Hazell, R. Zapiain, T. S. Collings, J. P. Hallinan, R. J. Hammond. Cambridge Consultants Ltd (United Kingdom)
422	Smartphone Integrated Optoelectrowetting (SiOEW) for in situ and Real-time Monitoring of Marine and Freshwater Algae S. Lee, S. Y. Park, S. K. Thio, S. Bae. National University of Singapore (Singapore)
423	Solid-Phase Extraction Capillary Electrophoresis Determination of Lipopolysaccharides in Water F. M. Fung, S. F. Y. Li. National University of Singapore (Singapore)
424	Study On Application of Chlorophyll-a Fluorescence in Toxicity Assessment of Six Toxicants Y. C. Wang, Y. Shi, J. F. Tang, S. Hu, S. S. Chen, H. Liu. Yangtze Valley Water Environment Monitoring Center (China)
425	Unmanned Vehicle on Water Quality Monitoring in Reservoir S. J. You, Y. F. Wang, F. Kang, H. T. Lu. Chung Yuan Christian University (Taiwan)

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