

Special Issue

Centralized versus Decentralized Urban Water Systems

Message from the Guest Editors

Aging urban water infrastructure and the obvious investment gap that hinders complete replacement is a problem but also a potential opportunity to change the face of what urban water infrastructure looks like. As more distributed solutions are becoming cost-effective and fit better in the world, the question of the balance and trade-off between centralized and decentralized urban water systems becomes an urgent one. To answer it and understand how these new infrastructures will perform and how their deployment will impact legacy centralized infrastructure, we need new types of models that can link centralized and decentralized systems and assess their combined performance, as well as new metrics of performance per se, suitable for these hybrid (central-decentral) infrastructures under uncertainty, also building on the idea of resilience. In this Special Issue, we investigate technologies, models, tools and methods able to capture, visualize and quantify the pros and cons of a new generation of infrastructure and help us balance novel decentralized systems with centralized legacy infrastructure, leveraging the strong points of both for a more circular, resilient future.

Guest Editors

Prof. Dr. Christos Makropoulos

Department of Water Resources and Environmental Engineering,
National Technical University of Athens, Athens, Greece

Prof. Dr. David Butler

Centre for Water Systems, College of Engineering, Mathematics and
Physical Sciences, University of Exeter, Exeter EX4 4QF, UK

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

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In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST

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