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Centralized versus Decentralized Urban Water Systems

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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.



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Special Issue



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Message from the Editor-in-Chief

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