

Jonatan Zischg, Mariana L. R. Goncalves, Taneha Kuzniecowa Bacchin, Günther Leonhardt, Maria Viklander, Arjan van Timmeren, Wolfgang Rauch and Robert Sitzenfrei, 2017, Info-Gap robustness pathway method for transitioning of urban drainage systems under deep uncertainties, *Water Science & Technology*, 76(5): 1272–1281.

**Abstract** In the urban water cycle, there are different ways of handling stormwater runoff. Traditional systems mainly rely on underground piped, sometimes named ‘gray’ infrastructure. New and so-called ‘green/blue’ ambitions aim for treating and conveying the runoff at the surface. Such concepts are mainly based on ground infiltration and temporal storage. In this work a methodology to create and compare different planning alternatives for stormwater handling on their pathways to a desired system state is presented. Investigations are made to assess the system performance and robustness when facing the deeply uncertain spatial and temporal developments in the future urban fabric, including impacts caused by climate change, urbanization and other disruptive events, like shifts in the network layout and interactions of ‘gray’ and ‘green/blue’ structures. With the Info-Gap robustness pathway method, three planning alternatives are evaluated to identify critical performance levels at different stages over time. This novel methodology is applied to a real case study problem where a city relocation process takes place during the upcoming decades. In this case study it is shown that hybrid systems including green infrastructures are more robust with respect to future uncertainties, compared to traditional network design.

**Keywords** city transformation, green/blue infrastructure, hybrid systems, Info-Gap robustness pathway method, network transitioning, SWMM