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Autore Ingildsen Pernille

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Sommario/riassunto

Today there is increasing pressure on the water infrastructure and although unsustainable water extraction and wastewater handling can continue for a while, at some point water needs to be managed in a way that is sustainable in the long-term. We need to handle water utilities "smarter". New and effective tools and technologies are becoming available at an affordable cost and these technologies are steadily changing water infrastructure options. The quality and robustness of sensors are increasing rapidly and their reliability makes the automatic handling of critical processes viable. Online and real-time control means safer and more effective operation. The combination of better sensors and new water treatment technologies is a strong enabler for decentralised and diversified water treatment. Plants can be run with a minimum of personnel attendance. In the future, thousands of sensors in the water utility cycle will handle all the complexity in an effective way. Smart Water Utilities: Complexity Made Simple provides a framework for Smart Water Utilities based on an M-A-D (Measurement-Analysis-Decision). This enables the organisation and implementation of "Smart" in a water utility by providing an overview of supporting technologies and methods. The book presents an introduction to

methods and tools, providing a perspective of what can and could be achieved. It provides a toolbox for all water challenges and is essential reading for the Water Utility Manager, Engineer and Director and for Consultants, Designers and Researchers.