approach with an inclusive and holistic perspective: this kind of deeper understanding of urban issues could be obtained through the lens of critical realism. In summary, the book provides a good introduction to the theory of critical realism and its methodological implications in the social sciences. Since it is jargon-free and understandable, it is valuable for preliminary readers of philosophy of social science. In particular, the introduction of this book to researchers dealing with urban issues, such as urban planners, could provide them with a meaningful grounding in critical realism, thus promoting interdisciplinary study and so enhancing urban research.

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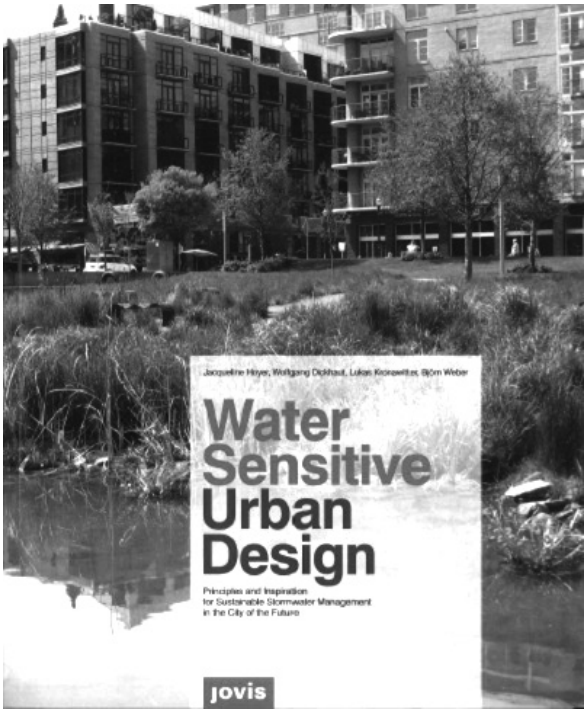
Water Sensitive Urban Design – Principles and Inspiration for Sustainable Stormwater Management in the City of the Future

Hoyer, J., Dickhaut, W., Kronawitter, L., Weber, B. (2011)
Berlin: Jovis
144 pp.

One of the essential challenges of contemporary sustainable design is to allow humans and nature to coexist in mutual respect, combining the best aspects of the built landscape with the dynamism and beauty of the environment. Integrating the functionality of stormwater management with urban and landscape design is, therefore, a good example.

Over many years, climate change, urban growth and a lack of public space have made the handling of stormwater in cities an urgent issue that needs to be addressed in more intelligent ways than merely through engineering solutions. One approach to this problem is Water Sensitive Urban Design (WSUD). Originally developed in Australia, WSUD focuses on smarter stormwater management for the city of the future. Its central principle is the integration of water management, architecture, urban design and



landscape architecture in order to create a healthy ecosystem, sustainable lifestyles and attractive livelihoods.

In contrast to the conventional centralized city stormwater management that has predominated in the past, WSUD argues for decentralized smarter stormwater management applied throughout all stages of the urban water cycle. The proposed methods include techniques for water usage, treatment, detention and infiltration, conveyance, and evapotranspiration.

The book "Water Sensitive Urban Design – Principles and Inspiration for Sustainable Stormwater Management in the City of the Future" is the manual developed by the HafenCity University of Hamburg within the European SWITCH research project. It gives an overview of the WSUD approach and how its principles can be applied.

The first two chapters provide an overview of sustainable stormwater management as well as a comparison of water cycles in natural systems and urban areas. The problems with conventional stormwater management, such as reduction of ground water infiltration, negatives effects on local climate, and increased risk of flooding, are also discussed briefly.

The third chapter defines water-sensitive urban design and sustainable stormwater management. It also provides a list of technical solutions as well as examples of applications in Europe, Australia, and the USA.

The fourth chapter sets out the principles for successful water sensitive urban design, highlighting five topics including water sensitivity, aesthetics, functionality, usability, as well as the public perception and acceptance of sustainable stormwater management.

The last chapter presents a selection of small-, medium- and large-scale examples that demonstrate successful applications of WSUD. Each case study outlines the main problems in the study area and its primary aims to demonstrate the principles of successful water-sensitive urban design.

The book is illustrated with a series of images and diagrams that explain the issues clearly. This should inspire a fresh approach to sustainable stormwater management and design not only among engineers, architects, urban designers and landscape architects, but also policy makers and developers.

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