



water

an Open Access Journal by MDPI



Stormwater Management in Sponge Cities

Guest Editor:

Dr. Cristina Matos

Escola de Ciências e Tecnologia,
Universidade de Trás-os-Montes
e Alto Douro, Quinta de Prados,
5000-801 Vila Real, Portugal

Deadline for manuscript
submissions:

25 September 2024

Message from the Guest Editor

Sponge cities are urban areas designed to absorb, capture, and manage stormwater runoff in a sustainable manner, mimicking the natural hydrological cycle. Some key aspects of stormwater management in sponge cities include the permeable surfaces such as permeable pavements, green roofs, and porous sidewalks. These surfaces allow rainwater to infiltrate into the ground rather than running off into storm drains. Incorporating green infrastructure elements like rain gardens, bioswales, and vegetated swales helps to capture and absorb stormwater. These features not only manage stormwater but also provide additional benefits such as improving air quality, enhancing biodiversity, and reducing urban heat island effect. Water Harvesting and Reuse is another key aspect to promote the harvesting and reuse of stormwater for various purposes such as irrigation, toilet flushing, and groundwater recharge. By implementing these strategies and technologies, sponge cities aim to mitigate the adverse impacts of urbanization on water resources, improve urban resilience to climate change, and create healthier and more sustainable urban environments.



mdpi.com/si/197057

Special Issue



water



an Open Access Journal by MDPI

Editor-in-Chief

Dr. Jean-Luc PROBST

Laboratory of Functional Ecology
and Environment, Centre
National de la Recherche
Scientifique (CNRS), University of
Toulouse, Campus ENSAT,
Auzeville Tolosane, France

Message from the Editor-in-Chief

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Water Resources*) / CiteScore - Q1 (*Water Science and Technology*)

Contact Us

Water Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/water
water@mdpi.com
[X@Water_MDPI](https://twitter.com/Water_MDPI)